SITE #738001
POLLUTION ABATEMENT SERVICES

Standby Work Assignment Contract D002340-8
w/URS Company
Monthly Progress Reports for O&M
[redacted]1997

URS
AN INTERNATIONAL PROFESSIONAL SERVICES ORGANIZATION

URS CONSULTANTS, INC.
282 DELAWARE AVENUE
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SEATTLE
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WASHINGTON, DC

August 15, 1997

Mr. Ronnie Lee, P.E., Project Manager
Bureau of Western Remedial Action
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

RE: NYSDEC STANDBY CONTRACT
WORK ASSIGNMENT D002340-8 MONTHLY REPORT
POLLUTION ABATEMENT SERVICES - O & M

Dear Mr. Lee:

Enclosed is a copy of the Progress Report for the month of July 1997 for Work Assignment D002340-8, Pollution Abatement Services - O&M. At the Department's direction, Progress Reports and Payment Requests are submitted only when the cumulative work effort and associated costs exceed the minimum level.

Very truly yours,

URS CONSULTANTS, INC.

Dharmarajan R. Iyer, Ph.D., P.E.
Task Manager

Enclosure

cc: Mr. John Gorton - URS
File: 35236.00 (1005)

J\35236\WP\COR\PROGRESS.#43

MONTHLY REPORT NO. 43
POLLUTION ABATEMENT SERVICES - O & M
JULY 199&

CONTRACT NO.	D002340
W.A. NO.:	D002340-8
DEC SITE NO.:	7-38-001
DEC PROJECT MANAGER:	Ronnie Lee, P.E.
TELEPHONE NO.:	(518) 457-4254
URS TASK MANAGER:	Dharmarajan R. Iyer, Ph.D., P.E.
TELEPHONE NO.:	(716) 856-5636

PROGRESS FOR PERIOD

- Submitted the Summary Report for the Spring 1997 Environmental Monitoring.

OUTSTANDING ISSUES AND POTENTIAL PROBLEM AREAS

- None.

ANTICIPATED ACTIVITIES DURING THE FOLLOWING MONTHS

- Perform the Fall 1996 environmental monitoring.
- Prepare and submit a Comprehensive Site Monitoring Report at the end of this work Assignment.
- Provide overlap training for continuation of site monitoring, if necessary.
- Closeout the payment issues with Environmental Products & Services for leachate disposal.

LABORATORY SUMMARY

- None

DELIVERABLE SCHEDULE

	ACTIVITY	SCHEDULED DATE	ACTUAL DATE
1.	Submission of Draft Work Plan (Task 1)	06/25/90	08/01/90[1]
	Submission of Final Work Plan	07/17/90	09/28/90[1]
	Work Plan Approval/Notice to Proceed	07/24/90	10/10/90[1]
2.	a. Evaluation Report of Leachate System (Task 2)	11/30/90	11/30/90
	b. Evaluation Report of Containment Cell (Task 3)	11/30/90	11/30/90
3.	Task 4 - Monitoring of Site		
	a) Laboratory Subcontract Quotes	07/23/90	09/30/90[2]
	b) Revised Monitoring Plan	09/17/92	03/04/92[5]
	c) Letter Report	2/98[6]	
4.	Task 5 - Construction Plans and Specifications		
	a) Submit Draft Plans/Specs.	Within 60 days of direction to prepare plans and specs.	
	b) Submit Final Plans/Specs.	Within 30 days of Department comments on draft plans and specs.	
5.	Task 6 - Operation and maintenance (O&M) Plan		
	a) Submit Draft O&M Plan and O&M Manual	02/01/91	02/01/91
	Comments on Draft O&M Plan and O&M Manual	02/15/91	03/20/91[4]
	b) Submit Final O&M Plan and O&M Manual	03/01/91	04/05/91[4]
	c) Submit Subcontract/Subcontractors Available		
	Leachate Collection/Disposal	11/10/90	12/20/90[3]
	All Other Subcontracts	02/10/91	12/20/90
	d) Review and Modify O&M Plan and O&M Manual	09/17/92	03/04/92[4]
	e) Provide Overlap Training	2/98[6]	

NOTES: 1, 2 and 3) See Monthly Progress Report No. 6.
4) See Monthly Progress Report No. 11.
5) Monitoring program was revised effective Spring 1992. The O&M for this site will be further reviewed near the end of this Work Assignment.
6) Schedule revised due to fourth extension of environmental monitoring.

FINANCIAL STATUS REPORT

- For task details, see Cost Control Report for this reporting period.
- URS's current re-budget request to the Department increases the Task 4 (Monitoring) budget for one more year of monitoring, and correspondingly reduces the Task 6 (Leachate Management) budget.
- Task 4, Site Monitoring is proceeding within the requested budget. There has been no activity on other tasks under this Work Assignment.

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WASHINGTON, DC

July 10, 1997

Mr. Ronnie Lee, P.E., Project Manager
Bureau of Western Remedial Action
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

RE: NYSDEC STANDBY CONTRACT
WORK ASSIGNMENT D002340-8 MONTHLY REPORT
POLLUTION ABATEMENT SERVICES - O & M

Dear Mr. Lee:

Enclosed is a copy of the Progress Report for the month of June 1996 for Work Assignment D002340-8, Pollution Abatement Services - O&M. At the Department's direction, Progress Reports and Payment Requests are submitted only when the cumulative work effort and associated costs exceed the minimum level.

Very truly yours,

URS CONSULTANTS, INC.

Dharmarajan R. Iyer, Ph.D., P.E.
Task Manager

Enclosure

cc: Mr. John Gorton - URS
File: 35236.00 (1005)

J\35236\WP\COR\PROGRESS.#40 na

MONTHLY REPORT NO. 42
POLLUTION ABATEMENT SERVICES - O & M
JUNE 1996

CONTRACT NO.	D002340
W.A. NO.:	D002340-8
DEC SITE NO.:	7-38-001
DEC PROJECT MANAGER:	Ronnie Lee, P.E.
TELEPHONE NO.:	(518) 457-4254
URS TASK MANAGER:	Dharmarajan R. Iyer, Ph.D., P.E.
TELEPHONE NO.:	(716) 856-5636

PROGRESS FOR PERIOD

- Validated the analytical data for the Spring 1997 sampling.
- Develop the Summary Report for the Spring 1997 Environmental Monitoring.

OUTSTANDING ISSUES AND POTENTIAL PROBLEM AREAS

- None.

ANTICIPATED ACTIVITIES DURING THE FOLLOWING MONTHS

- Submit the Summary Report for the Spring 1997 Environmental Monitoring.
- Perform the Fall 1996 environmental monitoring.
- Prepare and submit a Comprehensive Site Monitoring Report at the end of this work Assignment.
- Provide overlap training for continuation of site monitoring, if necessary.
- Closeout the payment issues with Environmental Products & Services for leachate disposal.

LABORATORY SUMMARY

- None

DELIVERABLE SCHEDULE

	ACTIVITY	SCHEDULED DATE	ACTUAL DATE
1.	Submission of Draft Work Plan (Task 1)	06/25/90	08/01/90[1]
	Submission of Final Work Plan	07/17/90	09/28/90[1]
	Work Plan Approval/Notice to Proceed	07/24/90	10/10/90[1]
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4.	Task 5 - Construction Plans and Specifications		
	a) Submit Draft Plans/Specs.	Within 60 days of direction to prepare plans and specs.	
	b) Submit Final Plans/Specs.	Within 30 days of Department comments on draft plans and specs.	
5.	Task 6 - Operation and maintenance (O&M) Plan		
	a) Submit Draft O&M Plan and O&M Manual	02/01/91	02/01/91
	Comments on Draft O&M Plan and O&M Manual	02/15/91	03/20/91[4]
	b) Submit Final O&M Plan and O&M Manual	03/01/91	04/05/91[4]
	c) Submit Subcontract/Subcontractors Available		
	Leachate Collection/Disposal	11/10/90	12/20/90[3]
	All Other Subcontracts	02/10/91	12/20/90
	d) Review and Modify O&M Plan and O&M Manual	09/17/92	03/04/92[4]
	e) Provide Overlap Training	2/98[6]	

NOTES: 1, 2 and 3) See Monthly Progress Report No. 6.
4) See Monthly Progress Report No. 11.
5) Monitoring program was revised effective Spring 1992. The O&M for this site will be further reviewed near the end of this Work Assignment.
6) Schedule revised due to fourth extension of environmental monitoring.

FINANCIAL STATUS REPORT

- For task details, see Cost Control Report for this reporting period.
- URS's current re-budget request to the Department increases the Task 4 (Monitoring) budget for one more year of monitoring, and correspondingly reduces the Task 6 (Leachate Management) budget.
- Task 4, Site Monitoring is proceeding within the requested budget. There has been no activity on other tasks under this Work Assignment.

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URS Greiner

July 8, 1997

Mr. Ronnie E. Lee, P.E., Project Manager
Bureau of Hazardous Site Control
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

RE: PAS SITE O&M SITE NO. 7-38-001 (W.A. D002340-8)
SPRING 1997 ENVIRONMENTAL MONITORING REPORT

Dear Mr. Lee:

We are pleased to submit five (5) copies of this Report for the Spring (May 1997) Environmental Monitoring in accordance with the Work Plan, the revised Analytical Program, and modifications by the Department (letter dated January 29, 1993).

If you have any questions, please do not hesitate to call us.

Very truly yours,

URS Consultants, Inc.

Dharmarajan R. Iyer, Ph.D., P.E.
Task Manager

Enc.

cc: R. Lupe - NYSDEC
J. Gorton - URS
File 35236.00 (1000)

SUMMARY REPORT

SPRING 1997 ENVIRONMENTAL MONITORING

PAS SITE O&M (W.A. D002340-8)

SITE ID # 7-38-001

JULY 1997

Prepared by:

URS CONSULTANTS, INC.
BUFFALO, NEW YORK

for:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
ALBANY, NEW YORK

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   PAS 3, MONTHLY MONITORING WELL LEVELS
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D. ANALYTICAL DATA FROM ALL EVENTS (11/89 - 5/97)

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PAS SITE O&M (W.A. D002340-8)

SITE #7-38-001

SPRING 1997 ENVIRONMENTAL MONITORING

SUMMARY REPORT

1. INTRODUCTION

During the week of May 12, 1997, URS Consultants, Inc. (URS) completed the Spring 1997 Environmental Monitoring in accordance with the Work Plan (inclusive of addenda) for the Operations and Maintenance (O&M) at the Pollution Abatement Services (PAS) site. This is the fourteenth (14) sampling event performed by URS as part of the O & M work assignment, which is extended the fourth time for one year to a total of seven years. As summarized in Table 1, fifteen previous rounds of sampling conducted at the site include two by NYSDEC (11/89 and 5/90), and thirteen by URS (11/96, 5/96, 11/95, 5/95, 11/94, 5/94, 11/93, 5/93, 11/92, 5/92, 11/91, 5/91, and 11/90). Field activities, measurements, and analytical results are summarized in this report.

As of February 1992, the NYSDEC turned over the monthly leachate removal to the Responsible Parties (RPs); also the NYSDEC is performing the groundwater level measurements. Since Spring 1992, the environmental monitoring by URS has consisted of only groundwater, surface water, and sediment sampling and analysis at the NYSDEC's direction. Beginning in Spring 1996 and per the NYSDEC's request, URS also began sampling M-Series wells installed by the responsible parties. Wells LS-2, LD-3, and LR-3 were substituted by wells M-21, M-25, and M-26.

2. ONSITE ACTIVITIES

Field activities began on May 2, 1997 and ended on May 15, 1997. A chronological summary of the field activities is included in Attachment A, along with the field activities log and sample chain-of-custody records. During the Spring of 1997, the L-Series, and M-Series groundwater monitoring wells locations were sampled in accordance with the revised analytical program included in the O & M Manual for this site. Consistent with the NYSDEC practice at other sites, disposable bailers were used to purge and sample the L-Series and M-Series wells. Groundwater level measurements were taken in all wells.

TABLE 1
PAS SITE O&M
SUMMARY OF SAMPLING AND ANALYSIS

Matrix	Sampling Schedule	Sample ID	Analytical Schedule				
			VOA	BNA	PEST/PCB	Metals	Wet Chemistry
Groundwater - L-series wells (S - Shallow, D - Deep, R - Bedrock)	Fall & Spring	LS-2, LD-2, LR-2 LD-3, LR-3, LD-4, LD-5, LS-6, LD-6, LR-6, LR-8 (MS/MSD), LD-8, AND LS-9	X	X	--	X (only 11/89)	--
Groundwater - M-Series wells (Substituted for LS-2, LD-3 and LR-3)	Spring & Fall 1996 Spring 1997	M-21, M-25, M-26	X	X	--	-	--
Groundwater - Slurry Wall Wells	Fall	SWW-1,SWW-4, SWW-6, SWW-8, SWW-10, SWW-12	X	X	--	X (only 11/89)	--
Surface Water	Fall	SW-1, SW-2, SW-3, SW-4 (11/89 only), SW-4A (11/90 through 11/96), SW-4B (11/90 only), SW-5 (11/92 through 11/96)	X	X	--	--	--
Stream Sediment	Fall [aa] [excl. Fall 1995] [aaa]	SS-1[a], SS-2[a], SS-3[a], SS-4[a] (replaced with SS-4A,11/90), SS-4A (11/90 through 11/96), SS-4B (11/90 only), SS-5 (started 11/91)	X	X	X	X	X
Leachate (Not sampled by URS since 11/91)	Fall - 1990 and 1991 Spring 1991	LCW-1 (11/90)					X
		LCW-2 (11/89, 5/91, and 11/91)	X	X	X	X	X
		LCW-4 (11/90, 5/91, and 11/91)					X

(1) [a] SS-1,SS-2,SS-3, and SS-4 were re-analyzed (5/91) for Pest/PCB and hexavalent chromium
(2) [aa] Fall 1993 sediment samples were resampled in Spring 1994
(3) [aaa] Fall 1995 sediments were not sampled due to high water levels.
(4) Monitoring wells LS-2, LD-3 and LR-3 were substituted by M-21, M-25 and M-26 for the Spring 1996 sampling event

Notes: The bi-annual monitoring program was initiated by the NYSDEC in November 1989;
URS has been performing the monitoring program since November 1990.
Leachate sampling and disposal was turned over to the Responsible Parties in November 1991.
Three M-Series wells installed by the Responsible Parties were added to this program beginning Spring 1996.

3. FIELD SAMPLING AND MEASUREMENTS

Groundwater from ten (10) L-Series, and three (3) M-Series wells were sampled for Schedule A parameters (volatile and semivolatile organic compounds). The locations of the L-Series groundwater monitoring wells are shown on Figure 1. The M-series wells are shown in a figure from the RPs included in Attachment C. Boring logs provided by the NYSDEC for the M-Series wells are also included in Attachment C. Form PAS-1, Sampling Event Summary (Attachment B) presents a summary of all field samples collected during this sampling event.

Field measurements taken in all wells included water level, specific conductivity, pH, and temperature. These field measurements are summarized on Form PAS-2, Well Data Summary (Attachment B). Water level measurements taken in the monitoring wells are tabulated on Form PAS-3, Monthly Monitoring Well Levels (Attachment B). Form PAS-5, Routine Inspection Checklist also is included (Attachment B).

4. ANALYTICAL DATA AND RESULTS

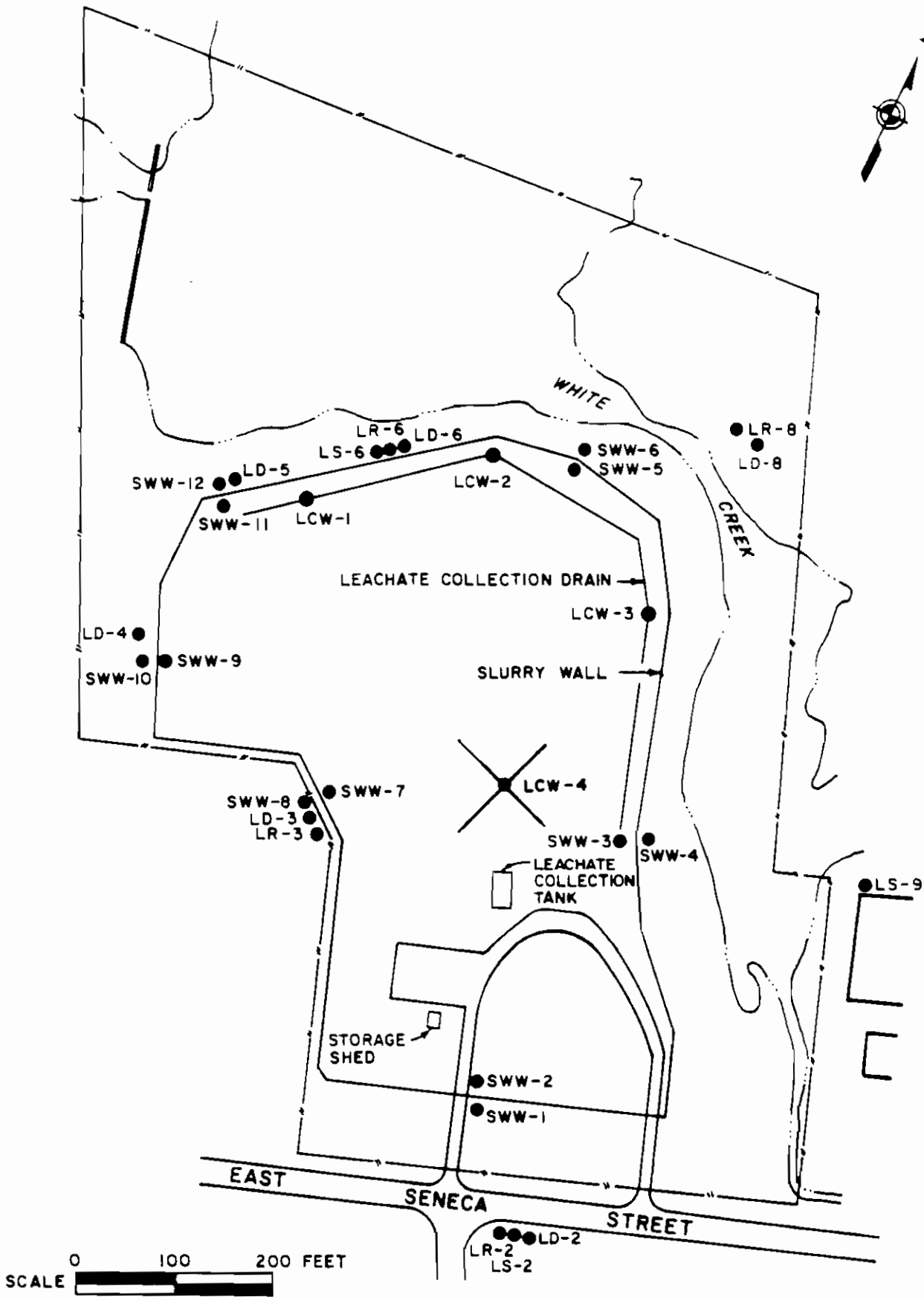
A. Data Validation

Thirteen (13) groundwater samples and a volatile trip blank were analyzed by Recra Environmental, Inc. (aka Recra LabNet) of Amherst, New York as part of this monitoring event. The groundwater samples were analyzed for Schedule A parameters following the methods in the revised analytical program. The deliverable data package consisted of analytical results and quality control data.

The data was validated against the appropriate methods and the deliverables were reviewed for completeness. The data presented in the Analytical Results section are usable as reported. No qualifications due to quality control exceedances were required.

B. Analytical Results

The analytical data received from Recra Environmental, Inc. are summarized in Attachment D and briefly discussed below.



URS CONSULTANTS, INC.	MONITORING WELL LOCATIONS	FIGURE 1

A-3619/B

VOLATILE ORGANICS: Volatile organic analytes (VOAs) were detected in three (3) of the ten (10) L-Series wells (LD-5, LR-6 and LR-8). VOAs were present at relatively low parts per billion (ppb) levels (less than 35 ppb). Volatiles were detected in two (2) of the three (3) M-Series wells, M-21 and M-25 (less than 15 ppb). Table 2 summarizes the volatile organic compounds detected in monitoring well samples.

SEMIVOLATILE ORGANICS: Semivolatile compounds (SVOCs) were detected in one of the L-Series well groundwater samples (LR-8). 2,4-Dimethylphenol and 4-chloroaniline were found at levels of 4 ppb and 1 ppb respectively, below the CRQL of 10 ppb. Bis(2-ethylhexyl) phthalate was present in M-21 at 4 ppb, and is below the CRQL of 10 ppb.

C. Comparative Data

The data received from this sampling event (May 1997) were compared to previous data from sampling conducted by URS (November and May 1996, May and November 1995, May and November 1994, May and November 1993, May and November 1992, May and November 1991, and November 1990), and NYSDEC (May 1990 and November 1989). Analytical data from previous sampling are included for reference as Attachment D. Results from this comparison are summarized below. It should be noted that samples from the NYSDEC monitoring events were analyzed by a different laboratory than the one used by URS (Recra Environmental, Inc., Amherst, New York).

VOLATILE ORGANICS: Volatile organics continue to be absent in the L-series wells at locations up- and side-gradient to the predominant groundwater flow, which is north-northwest towards White Creek (see Figure 1).

L - Series Wells - The number of L-series wells with detectable VOC concentrations decreased from five in the last round to three. Groundwater at LD-5, located across the downgradient slurry wall from leachate collection well LCW-1, had the same relatively low level of 1,1-dichloroethane as the last four sampling events. Benzene was detected. Vinyl chloride, chlorobenzene and 1,2-dichloroethene were not detected in this round. Volatile organics which were in the double-digit ppb range in well LS-6 through the fall

TABLE 2
PAS SITE O&M
VOCs DETECTED IN MONITORING WELLS

	LD-5	LR-6	LR-8
Benzene	3	ND	33
Chlorobenzene	ND	ND	6
Chloroethane	ND	ND	17
1,1-Dichloroethane	8	5	ND
Xylenes (Total)	ND	ND	3

	M-21	M-25
Benzene	9	12
Chlorobenzene	4	6
Chloroethane	4	3
Xylenes (Total)	1	ND

All results reported in ug/l (ppb).

of 1994, and below CRQL in 1995, were not detected this time. Well LR-6 had one compound detected again (1,1-dichloroethane), as compared to high concentrations that were detected during the first half of this O&M (i.e., 1990 through 1994) and at trace levels in the last few rounds.

The most significant concentrations of volatile organics continues to occur at LR-8 across White Creek, north of the slurry wall, showing a slight increase in detected concentrations.

- Xylene, which was previously detected at higher concentrations than any of the other compounds and which was not detected for the first time in the spring of 1996 since monitoring began, was again detected below the CRQL. As illustrated by Figure 2, xylene dropped significantly in 1993, and has continually decreased over the last six monitoring events, except for this recent slight increase.

- Benzene has averaged 35 ppb with minor fluctuations over the previous seven events. For four events (11/91 to 5/93) prior to that, benzene remained steady at about 83 ppb. The current level (33 ppb), while showing a 50% increase over the Fall 1996 sampling, is still near the average of the previous seven events.

- Ethylbenzene follows a pattern similar to benzene, but with one difference. It initially was detected at concentrations higher (69 to 150 ppb) than benzene during the first four (11/89-5/91) events and dropped to trace levels (i.e., less than the CRQL of 5 ppb) by the fall of 1993. It has not been detected during the last five events.

- Chloroethane and Chlorobenzene, the other two compounds of significance in LR-8, were both below 20 ppb with no obvious trend since 1992.

M-Series Wells - Previous analytical data for the M-series wells (5/96 and 11/96) is consistent with this monitoring event. VOAs were present in M-21 and M-25, the most significant being benzene at 9 ppb and 12 ppb, respectively. Trace levels of chlorobenzene (4 ppb and 6 ppb), chloroethane (4 ppb and 3 ppb), and xylenes (1 ppb and not detected) were found in M-21 and M-25, respectively. Trace levels of bromodichloroethane, chloroform and dibromochloromethane were not detected in M-25 for this round of sampling.

SEMIVOLATILES ORGANICS: The only semivolatile compounds detected in wells for the Spring 1997 sampling event were bis(2-ethylhexyl) phthalate in well M-21 (less than the CRQL). Bis(2-ethylhexyl) phthalate is a common laboratory contaminant, although none was detected in any QC blanks. 2,4-Dimethylphenol (4 ppb) and 4-chloroaniline (1 ppb) were detected (both less than the CRQL) in well LR-8. These compounds have not been detected in the previous 3 sampling events for 2,4-dimethylphenol and the previous 8 sampling events for 4-chloroaniline.

No other semivolatile organic compounds were detected in any of the surface water samples, consistent with the previous sampling event.

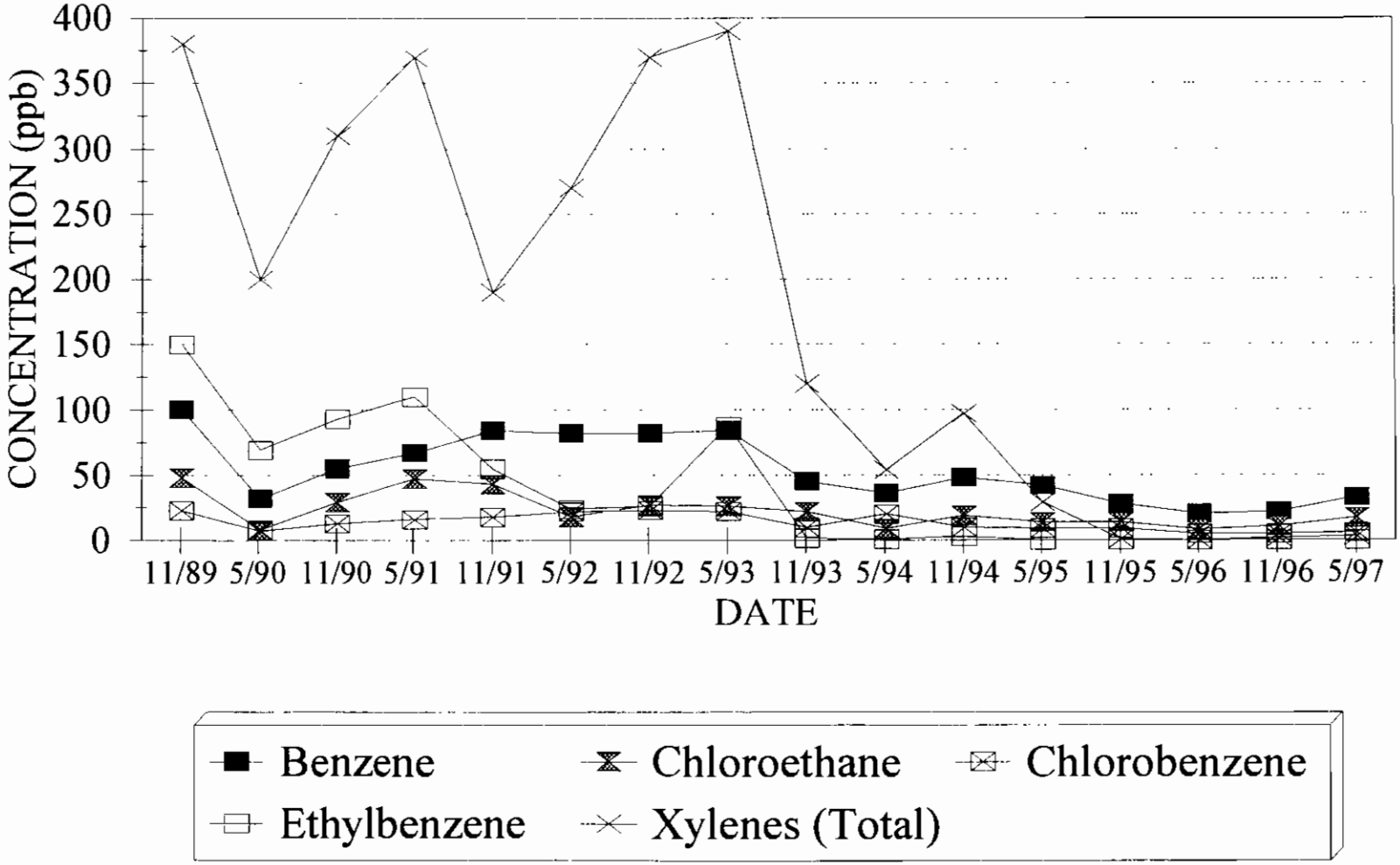
5. MONITORING WELL ELEVATION MEASUREMENTS

Six pairs of monitoring wells are located around the slurry wall boundary of the PAS site. One well of each pair (SWW-2, 3, 5, 7, 9, and 11) is located inside the slurry wall perimeter and a second nearby well (SWW-1, 4, 6, 8, 10, and 12) is located on the opposite side of the slurry wall. These well pairs are designed to compare groundwater chemical data and groundwater elevation differences across the slurry wall boundary at the PAS site.

Water level readings taken by URS and the RPs are tabulated and charted in Attachment E. On the average, four of the six wells inside the slurry wall are lower in elevation than the corresponding outside well. In particular, the three SWW well pairs across the downgradient slurry wall (SWW-3, 4, 5, 6, 11, and 12) have had at least a foot of inward gradient.

FIGURE 2

VOC CONCENTRATIONS IN WELL LR-8



Groundwater outside the slurry wall flows to the northwest toward White Creek. Groundwater contours within the slurry wall boundary show a 3 foot deep groundwater surface depression located near the center of the site around well LCW-4. This well is an automatic pumping well which operates on an intermittent basis.

The water level readings taken on the six pairs of monitoring wells located around the slurry wall boundary are affected by the intermittent pumping of the four leachate collection wells. The historical monitoring well elevation data thus confirm that the slurry wall acts as a hydrologic barrier to groundwater flow.

ATTACHMENT A

DAILY EVENTS SUMMARY
FIELD ACTIVITIES LOG
AND
SAMPLE CHAIN-OF-CUSTODY RECORDS

PAS SITE NO. 7-38-001

(W.A. D002340-8)

SPRING 1997 ENVIRONMENTAL MONITORING

MAY 12, 1997 TO MAY 15, 1997

EVENT SUMMARY

May 12, 1997

- Rental vehicle loaded with equipment (0730)
- K. Kearney and C. Scher departed from Buffalo to Oswego (0930)
- Arrived at Syracuse hotel and check-in (1215)
- Arrived at Airborne Express, E. Syracuse to pick up rental HNU (1245)
- Arrived on site (1350)
- Performed site inspection and water level monitoring (1350-1630)
- Secured site and depart (1630)
- Check-in at office with D. Iyer (1635)
- Purchased field sampling supplies (1640-1730)
- Arrived at Airborne Express - return HNU to Response Rental (1815)

May 13, 1997

- Departed for PAS Oswego (0630). Arrived on site (0730)
- Calibrated instruments and prepared equipment (0730-0800)
- Purged wells LS-9, LD-2, LR-2, LD-4, LD-5, LR-8, LD-8 (0800-1200)
- Offsite to check in at office with D. Iyer and purchase ice for samples (1230)
- Sampled wells LS-9, LD-2, LR-2, LD-4, LD-5, LR-8, LD-8 (1300-1520)
- Packed cooler, picked up ice, iced samples (1530-1615)
- Secured site and departed (1615)
- Arrived at Airborne Express (1700)

May 14, 1997

- Departed for PAS Oswego (0630). Arrived on site at (0730)
- Calibrated instruments and prepared for purge (0730-0750)
- Purged LS-6, LD-6, and LR-6 (0750)
- Purged and sampled M-21, M-25 and M-26 (0855-1440)
- C. Scher offsite to check in at office with J. Lehnen (1045)
- K. Kearney offsite to check in at office with D. Iyer and purchase ice for samples (1415)
- Sampled LS-6, LD-6 and LR-6 (1530)
- Packed cooler, iced samples and secured site (1600)
- Return to hotel (1700)

May 15, 1997

- Departed for Buffalo with samples (0645)
- Arrived Recra and delivered samples (0950)
- Clean and return rental vehicle (1100)

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PROJECT '95 OSWEGO (Spring) Notebook No. _____
Continued From Page _____

5/12/97 ACTIVITY / CALIBRATION LOG

WEATHER 62°F / Sunny (>12 in DM)
PERSONNEL K. Kearney C. Scher
water Level #176
HNU Response Rental S/N# 401158
Calibrated w/ 100ppm Isobutylene Reading 57ppm w/span of 9.8 & 10.2 eV lamp

0800 Pick up vehicle truck motors. Load Windsteer w/ Equipment
Drop off C. Scher vehicle in Amherst
0930 Leave BFLO FOR OSWEGO
1215 Arrive Syracuse. Check in Hotel → TO Airborne Express
1245 Pick up HNU @ airborne → TO OSWEGO
1330 Arrive OSWEGO - Break for LUNCH 1345
1350 Start Inspection of water Level monitoring.
1630 Completed well Survey/Inspection of Site. - TO Store TO Purchase Supplies. (**1600 K. Kearney call office left Progress Report for Dave via e-mail)
1730 Pick up Supplies from town twine etc + Return E. Syracuse
Ship HNU Back TO (via Airborne) Response Rentals.
Complete NOTES - End Day 1830 - 10 HR DAY

No more C&

Continued on Page

Read and Understood By

5/12/97

Water Level / Well Inspection 5-12-97

ID	Time	DTB	DTW	HNW	Comments
LS-2	1352	20.15	5.42	ND	NO RISER CAP
LR-2	1354	58.42	13.54	ND	
LD-2	1357	36.05	6.94	ND	
LR-3	1418	66.45	8.74	ND	
LD-3	1420	30.30	4.13	ND	
LD-4	1516	33.15	11.18	ND	
LD-5	1511	29.70	9.08	ND	
LS-6	1510	20.73	10.42	ND	
LR-6	1508	60.35	10.87	ND	
LD-6	1507	33.15	10.75	ND	
LR-8	1435	43.05	10.45	ND	
LD-8	1437	25.28	7.81	ND	
LS-9	1405	15.95	8.55	ND	
SWW-1	1550	22.10	9.72	ND	OK
SWW 2	1547	20.90	15.47	ND	OK
SWW 3	1500	20.80	16.92	ND	OK
SWW 4	1453	26.20	15.59	ND	OK
SWW 5	1502	22.50	14.60	ND	NO RISER CAP
SWW 6	1530	18.96	8.88	ND	OK
SWW 7	1520	22.00	7.10	ND	NO RISER CAP
SWW 8	1416	22.20	3.75	ND	
SWW 9	1518	30.26	16.75	ND	
SWW 10	1517	25.28	11.92	ND	
SWW 11	1515	23.15	10.13	ND	
SWW 12	1513	21.50	8.80	ND	
M-22	1503	53.00	10.76	ND	OK THICK ORANGE ORGANIC MATTER ON WATER SURFACE - HEAVIEST ON M-25
M-25	1455	35.10	7.22	ND	OK
M-26	1443	44.40	10.41	ND	OK
LCW-1	1510	12.15	12.30	ND	OK
LCW-2	1504	15.52	15.72	20ppm	OK
LCW-3	1456	19.17	19.22	ND	OK
LCW-4	1525	22.51	22.70	ND	OK
Tank House	1545	~~39.95~~	N/A	ND	1" oil Bottom - Recent Pump oil
M-21	1430	39.95	9.91	ND	DAMAGE TO TOP COLLAR - CRACKED UP

Continued on Page

C. [signature] — Signed

5/12/97 — Date

Read and Understood By

Signed — Date

PROJECT PAS OSWEGO

Notebook No. ________

Continued From Page ________

5/12/97 Site Conditions

Containment Cell

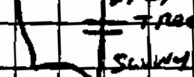
Landscape - Badly overgrown 10"-18" High

Roadways - No Trash - Appear Good Condition

Drainage Trough - Heavily overgrown w/ 1" water flowing in all trough

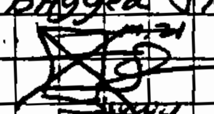
French Drains - Heavily overgrown

FENCE - Generally in Good condition - Front Gate still offcenter (unplumb) from over year ago. Fence section near LS-9 has Gap (Erosion). 3 Trees down on Fence near



Garbage behind 8 series wells.

STORAGE Shed - Front Doors continue wood decay - Structurally unsecure. Clean inside w/ bagged Trash from other Contractors, PPE, Cement & Salt.



Wells:

Risers - Continual rusting of protective casings
Locks & Locks still Good ~~Condition~~ Condition
Re-numbering of wells needed. Well # are wearing off
Near well M-25 has been graded w/ graveled Area ≈ 20'x40' directly behind this well

Stream Guages		TIME
SS/SW 1 -	1' Deep Flow - Steady Flow	1555
SS/SW 2 -	10' Deep Flow Good Flow	1605
SS/SW 3 -	8" Deep (Guage in place) Fast Flow	1610
SS/SW 4A -	12" Deep (Guage in place) Steady Flow	1615
SS/SW 5 -	Out of Water Steady Flow	1620

Guages # 1, 2, - Long Gone Missing prior to 1995

Continued on Page

[signature] 5/12/97

Signed Date

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Signed

Continued From Page

PROJECT

5/13/97 Activity / Calibration Log

Weather 50°/ Clear

Personnel K Kearney C. Scher

pH # 165 7 = 7.01 4 = 4.01 10 = 9.96

Cond # 130 4415 = 450 3900 = 3300

Turbidity # 148 0-10 = 5.15 10-100 = 50.3 100-1000 = 517

water level # 176

* ALL Wells Purged w/ Dedicated HDPE Bailer & nylon cord - UNLESS OTHER NOTE.

* ALL Wells Sampled w/ DEDICATED HDPE Bailer

0630 Leave Oswego & E. Syracuse for Oswego

0730 Arrive Site. Calibrate meters Start well purge LD-4 LD-5 ~~LR-8~~ LR-2 LD-2 LS-9, LR-8, LD-8

1200 Completed well Purge *(Checked in w/ office ~~K~~ K. Kearney left message for D. Iyer Progress Report) Called D. Iyer - Gave Progress Report Picked up Ice for Samples, Labeled bottles.

1300 START Sampling of Wells Purged This AM

1530 Wells Sampled - LD-2, LR-2, LS-9, LD-4, LD-5, LD-8, LR-8

1 Package Coolers For Shipment, Prep COC Clean up for Day. Leave Site for airport 1615

1700 Arrive Airborne Ship Samples - Day End 10 hr day

NO More

Continued on Page

C. Scher 5/13/97

Signed Date

Read and Understood By

Signed Date

PROJECT PAS OSWEGO

NOTEBOOK NO.

Continued From Page

5/13/97 PURGE Log / Sample Log

Location PAS LD-2 START 0800
DTB 36.05 END 0825
DTW 6.95 Diameter 2"
IV/3V 4.95/14.84 Actual purge 15 Gallons

Field Parameters - Initial	Final	Sample	
pH 8.33	7.34	7.58	DTW 7.32
Ω 230	340	750	Time 1300
°C 10.7	13.7	10.2	
NTU 13.6	9.60	7.17	
Appear Clear	Clear	Clear	

Location PAS-LR-2 START 0805
DTB 58.42 END 0840
DTW 13.57 DIA 2"
IV/3V 7.62/22.87 Actual purge 23 Gallons

Field Parameters - Initial	Final	Sample	
pH 9.95	7.95	8.13	DTW 15.60
Ω 200	400	530	Time 1320
°C 10.9	13.8	11.2	
NTU 3.31	5.59	6.62	
Appear clear	clear	Clear	

Location PAS-LS9 START 0905
DTB 15.95 END 0915
DTW 8.50 DIA 2"
IV/3V 1.26/3.79 Actual purge 4 Gallons (to dryness)

Field Parameters - Initial	Final	Sample	
pH 7.47	6.76	6.31	DTW 8.52
Ω 200	400	420	Time 1350
°C 18.9	20.3	13.5	
NTU 22.5	>1000 ntu	190	
Appear light yellow tint	Turbid light brown	light brown tint	

Continued on Page

Read and Understood By

C. [illegible] — Signed
5/13/97 — Date
Signed — Date

Continued From Page

PROJECT

5/13/97 Purge Log / Sample Log

LOCATION PAS-LR8
DTB 43.05
DTW 10.50
IV/3V 5.53 / 16.6
Field Parameters - Initial
pH 7.27
Ω 510
°C 16.5
NTU 10.0
Appear Clear

START ~~1030~~ K.K 1010
END 1030
DIA 2"
Actual purge 17 gallons.

Final		Sample 1400
7.14	7.28	DTW 10.58
830	770	TIME 1400
12.5	11.5	QC 115/MSD
7.50	5.19	
clear	clear	

~~Chart~~ K.K

LOCATION PAS-LD8
DTB 25.28
DTW 7.85
IV/3V 2.96 / 8.88
Field Parameters
pH 7.57
Ω 230
°C 12.6
NTU 14.8
Appear Clear

START 1020
END 1045
DIA 2"
Actual purge 9 gallons

Final	Sample 1	
7.16	7.37	DTW 7.97
200	420	Time 1430
12.2	12.2	
633	94.7	
light brown tint	light tint	

LOCATION PAS-LD4
DTB 33.15
DTW 11.25
IV/3V 3.72 / 11.17
Field Parameters
pH 7.35
Ω 470
°C 13.7
NTU 23.5
Appear Clear

START 1120
END 1150
DIA 2"
Actual purge 7 Gallons - DR4

Final	Sample	
7.40	7.47	DTW 13.15'
450	350	Time 1500
13.5	12.1	
>1000	24.9	
LT Brown Turbid	Clear	

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C. [signature] 5/13/97

Signed Date Signed Date

PROJECT PAS Oswego

Notebook No.

Continued From Page

5/13/97 Purge Log / Sample Log

LOCATION PAS-LD5 — START 1150

DTB 29.70 — End 1200

DTW 9.09 — DIA 2"

1v/3v 3.50/10.51 — Actual purge 7 Gallons - DRY

Field Paramaters	Initial	final	Sample		
pH	7.33	7.34	7.40	DTW	9.20
Ω	640	610	580	Time	1520
°C	13.0	13.8	10.1		
NTU	183	>1000	44.1		
appear	Clear w/ Red floc	grey Turbid	Clear		

Trip Blank - TB1-051397

ALL wells - Sample Paramaters TCL VOA + 10 TIC
TCL SVOA + 20 TIC

NO more

CS

Continued on Page

Read and Understood By

C. Scher — Signed — 5/13/97 — Date

Signed — Date

PROJECT NAS Oswego — Continued From Page

5-14-97 Instrument Calibration / Activity Log

Weather 48°/ Clear - AM

Personnel K Kearney C Schaa

PH #165 7=7.00 4=4.01 10=9.96

Cond #130 445=450 3900=3990

Turbidity #145 0-10=5.10 10-100=50.7 - 100-1000 = 517

Water Level #176

ISCO #43

Wells #6R, 60, 65 Purged w/ Dedicated HDPE Bailer & Nylon Cord (all wells sampled w/ Dedicated Bailers & Nylon Cord)

Wells M-21 25 26 Purged w/ ISCO & Dedicated 5/8 HDPE Tubing

~~0630 Leave Hotel for Oswego~~

0630 Leave Hotel for Oswego Job Site

0730 Arrive Site Calibrate Meters, begin Sampling.

0750 Start ~~Sampling~~ LS-6, LR-6, LD-6, M-26

1045 Called Nelson to Check on Bottles from 5-13 - Will Call back - No Answer from Lab

1100 M-26 Complete Purge & Sampled N20 Start Purge M-25

1245 Sample M-25 1300 START Purge M-21

1415 K. Kearney Called Office w/ Progress Report

1440 Sample M-21 Prep Samples for Shipment and Label bottles for LS6, LR6, LD6

1530 Sample LS-6, LR-6 & LD6 Clean up Site

Complete Final Inspection of Site Lock up OFFSITE - 1600

1700 Return Hotel End Day 10 HRS

5/15/97 RETURN BFLO Demob Cleanup Equip / Rental vehicle

Continued on Page

Read and Understood By

C Schaa — Signed — 5/14/97 — Date

Signed — Date

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PROJECT PAS Oswego

Notebook No. _____
Continued From Page _____

5/14/97 Purge & Sample Log

Location LS-6 START 0755
DTB 20.73 END 0800
DTW ~~60.38~~ 10.55 DIA 2"
IV/3V 1.73/5.19 Actual Purge 2 Gal - DIRT

Field Parameters	Initial	Final		Sample
pH	7.30	7.17	/ 7.70	
Ω	390	450	/ 410	DTW 10.65
°C	16.2	11.2	/ 10.2	TIME 1530
~~DO~~	5.37	>1000	/ 21.3	
Appear	Clear	light gray	/ Clear	

Location PAS-LR-6 START 0800
DTB 60.35 END 0830
DTW 10.97 DIA 2"
IV/3V 8.39/25.18 Actual Purge 25.5 Gal

Field Parameters	Initial	Final		Sample
pH	7.67	7.54	/ 7.76	
Ω	220	460	/ 440	DTW 11.10
°C	16.0	15.5	/ 10.2	TIME 1540
NTU	215	7.41	/ 6.47	
APPEAR	light brown tint	Clear	/ clear	

Location PAS-LD-6 START 0805
DTB 33.15 END 0815
DTW 10.75 DIA 2"
IV/3V 3.50/11.40 Actual Purge 6 Gallons - DIRT

Field Parameters	Initial	Final		Sample
pH	7.62	7.65	/ 8.17	
Ω	220	190	/ 450	DTW 27.03
°C	13.6	14.5	/ 11.7	TIME 1550
NTU	3.81	425	/ 20.5	
APPEAR	Clear	light tan	/ Clear	

Continued on Page

Read and Understood By

C-Sutton 5/14/97

PROJECT Pas Oswego

5/14/97 Purge & Sample Log

Location ? -26 START 0855
DTB 44.40 END 1100
DTW 10.60 Diam 6"
1V/3V 50.7/152.1 Actual purge 153 Gallons

Field Parameters	Initial	Final	Sample	
pH	7.90	7.87	7.89	DTW 10.76
Ω	110	110	110	Time 1100
°C	10.6	12.7	12.6	
NTU	295	78	84	
appear	Hazy w/Red Floc	Clear	Clear	

Location M-25 START 1120
DTB 35.10 END 1245
DTW 7.39 DIA 6"
1V/3V 41.56/124.69 Actual purge 125 Gallons

Field Parameters	Initial	Final	Sample	
pH	7.52	7.62	7.62	DTW 7.54
Ω	580	560	560	Time 1245
°C	14.6	14.6	14.7	
NTU	16.7	28.8	26.5	
APPEAR	Clear	Clear	Clear	

Location M-21 START 1300
DTB 39.95 END 1440
DTW 10.10 DIA 6"
1V/3V 44.78/134.32 Actual Purge 135 Gallons

Field Parameters	Initial		Final	Sample
pH	7.84	8.10	8.11	DTW 10.69
Ω	600	600	600	Time 1440
°C	9.0	10.0	10.0	
NTU	14.9	34.9	25.4	
APPEAR	Clear w/ floating organic material	Clear w/ Floating organic matter	Clear orange silt w/ Floating organic material	

Continued on Page ______

Read and Understood By

C. [signature] Signed 5/14/97 Date ______ Signed ______ Date

G.W. Samples Day 2

CHAIN OF CUSTODY RECORD

URS CONSULTANTS, INC.

PROJECT NO. 35236

SITE NAME PAS Oswego

SAMPLERS (PRINT/SIGNATURE) Cheryl Scher [signature]

DELIVERY SERVICE: ~~Airborne~~ Hand Deliver AIRBILL NO.: ~~[illegible]~~

LAB RecRA

COOLER ____ of ____

PAGE 1 of 1

TESTS: 8240, 8270

BOTTLE TYPE AND PRESERVATIVE: 8240 – 40ml Glass HCL; 8270 – 1L Amber Glass 4°C

LOCATION IDENTIFIER	DATE	TIME	COMP/GRAB	SAMPLE ID	MATRIX	TOTAL NO.# OF CONTAINERS	8240 (40ml Glass HCL)	8270 (1L Amber Glass 4°C)	REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO.# (IRPIMS ONLY)
									Samples @ 4°C				
LS-6	5/14/97	1530	grab	PAS-LS6	WG	4	2	2		N1	0	0	
LR-6	↓	1540	grab	PAS-LR6	WG	4	2	2		N1	0	0	
LD-6	↓	1550	grab	PAS-LD6	WG	4	2	2		N1	0	0	
M-21	↓	1440	grab	PAS-M-21	WG	4	2	2		N1	0	0	
M-25	↓	1245	grab	PAS-M-25	WG	4	2	2		N1	0	0	
M-26	↓	1100	grab	PAS-M-26	WG	4	2	2		N1	0	0	

NO MORE CS

MATRIX CODES
AA - AMBIENT AIR; SE - SEDIMENT; SH - HAZARDOUS SOLID WASTE; SL - SLUDGE; WP - DRINKING WATER; WW - WASTE WATER; WG - GROUND WATER; SO - SOIL; DC - DRILL CUTTINGS; WL - LEACHATE; GS - SOIL GAS; WC - DRILLING WATER; WO - OCEAN WATER; WS - SURFACE WATER; WO - WATER FIELD QC; LH - HAZARDOUS LIQUID WASTE; LF - FLOATING/FREE PRODUCT ON GW TABLE

SAMPLE TYPE CODES
TB# - TRIP BLANK; SD# - MATRIX SPIKE DUPLICATE; RB# - RINSE BLANK; FR# - FIELD REPLICATE; N# - NORMAL ENVIRONMENTAL SAMPLE; MS# - MATRIX SPIKE
(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
Cheryl Scher	~~[illegible]~~	~~1905~~	CS		

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME
	5/15/97	0950	D. Brean	5/15/97	0950

SPECIAL INSTRUCTIONS
Schedule A
TCL Volatiles +10 TIC
TCL Semivolatiles +20 TIC

Distribution: Original accompanies shipment, copy to coordinator field files Coolers = 6/5°C

URSF-075C/1 OF JCR/GM

000126

NYIA2135

G.W. Sampling Day (1)

CHAIN OF CUSTODY RECORD

URS CONSULTANTS, INC

PROJECT NO. 35936.00

SITE NAME PAS OSWEGO

SAMPLERS (PRINT/SIGNATURE) Cheryl Sicker Cheryl Sicker

LAB Recra

COOLER 3 Coolers of

PAGE 1 of 1

DELIVERY SERVICE: AIRBORNE AIRBILL NO.: 874843046O

LOCATION IDENTIFIER	DATE	TIME	COMP/ GRAB	SAMPLE ID	MATRIX	TOTAL NO.# OF CONTAINERS	TESTS: 8340	TESTS: 8270	BOTTLE TYPE AND PRESERVATIVE: 40ml VOA Glass HCl	BOTTLE TYPE AND PRESERVATIVE: 1L Amber Glass 4°C	REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO.# (IRPIMS ONLY)
LD-2	5/13/97	1300	grab	PAS-LD2	WG	4			2	2	all Samples @ 4°C	N1	0	0	
LR-2		1320	grab	PAS-LR2	WG	4			2	2		N1	0	0	
LS-9		1350	grab	PAS-LS9	WG	4			2	2		N1	0	0	
LD-4		1500	grab	PAS-LD4	WG	4			2	2		N1	0	0	
LD-5		1520	grab	PAS-LD5	WG	4			2	2		N1	0	0	
LD-8		1430	grab	PAS-LD8	WG	4			2	2		N1	0	0	
LR-8		1400	grab	PAS-LR8	WG	4			2	2		N1	0	0	
LR-8		1400	grab	PAS-LR8 MS	WG	4			2	2	matrix spike	MS	0	0	
LR-8		1400	grab	PAS-LR8 MSD	WG	4			2	2	matrix spike dup	SD	0	0	
Field QC		-	-	TB1-051397	WQ	2			2		Trip Blank	TB1	0	0	

No more

MATRIX CODES
AA - AMBIENT AIR; SE - SEDIMENT; SH - HAZARDOUS SOLID WASTE; SL - SLUDGE; WP - DRINKING WATER; WW - WASTE WATER; WG - GROUND WATER; SO - SOIL; DC - DRILL CUTTINGS; WL - LEACHATE; GS - SOIL GAS; WC - DRILLING WATER; WO - OCEAN WATER; WS - SURFACE WATER; WO - WATER FIELD QC; LH - HAZARDOUS LIQUID WASTE; LF - FLOATING/FREE PRODUCT ON GW TABLE

SAMPLE TYPE CODES
TB# - TRIP BLANK; SD# - MATRIX SPIKE DUPLICATE; RB# - RINSE BLANK; FR# - FIELD REPLICATE; N# - NORMAL ENVIRONMENTAL SAMPLE; MS# - MATRIX SPIKE; (# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
Cheryl Sicker	5/13/97	1900			
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME
			D Breau	5/14/97	0900

Distribution: Original accompanies shipment, copy to coordinator field files Coolers = 4/4°

SPECIAL INSTRUCTIONS
Schedule A
TCL Volatiles + 10 T.I.C
TCL Semivolatiles + 20 T.I.C

000125

URSF-075C/1 OF 1/ColCR/GM

165

ATTACHMENT B

FIELD/ANALYTICAL DATA FORMS

FORMS:
PAS-1, Sampling Event Summary
PAS-2, Well Data Summary
PAS-3, Monthly Monitoring Well Levels
PAS-5, Routine Inspection Checklist

SAMPLING EVENT SUMMARY

Pollution Abatement Services

URS Greiner
282 Delaware Avenue
Buffalo, New York 14202
(716) 856-5636

ARRIVAL:

DATE: 5-12-97 TIME: 1350

Personnel Onsite: KEVIN KEARNEY
CHERYL SCHER

Site Conditions on Arrival: GOOD - See PAGE PAS-5

Weather:
Date: 5-12-97 62°F SUNNY
Date: 5-13-97 50°F CLEAR
Date: 5-14-97 48°F CLEAR
Date:

DEPARTURE:

DATE: 5-14-97 TIME: 1600

POST SAMPLING CHECKLIST:

YES Wells Locked
YES Tank Secured
YES Site Cleanup / Walk Through
YES Site Secured

SURFACE WATER SAMPLES

Sample Number	Sample Date	Sample Time	Analytical Schedule
PAS-SW-1		FALL ONLY	
PAS-SW-2			
PAS-SW-3			
PAS-SW-4A			
PAS-SW-5			

STREAM SEDIMENT SAMPLES

Sample Number	Sample Date	Sample Time	Analytical Schedule
PAS-SS-1		FALL ONLY	
PAS-SS-2			
PAS-SS-3			
PAS-SS-4A			
PAS-SS-5			

GROUNDWATER SAMPLES

Sample Number	Sample Date	Sample Time	Analytical Schedule
PAS-LS-2	—	—	—
PAS-LR-2	5-13-97	1320	A
PAS-LD-2	5-13-97	1300	A
PAS-LR-3	—	—	—
PAS-LD-3	—	—	—
PAS-LD-4	5-13-97	1500	A
PAS-LD-5	5-13-97	1520	A
PAS-LS-6	5-14-97	1530	A
PAS-LR-6	5-14-97	1540	A
PAS-LD-6	5-14-97	1550	A
PAS-LR-8	5-13-97	1400	A
PAS-LD-8	5-13-97	1430	A
PAS-LS-9	5-13-97	1350	A
PAS-SWW-1		FALL ONLY	
PAS-SWW-4			
PAS-SWW-6			
PAS-SWW-8			
PAS-SWW-10			
PAS-SWW-12			
PAS-M-21	5-14-97	1440	A
PAS-M-25	5-14-97	1245	A
PAS-M-26	5-14-97	1100	A
Trip Blank	5-13-97	NA	A
MS/MSD (LR-8)	5-13-97	1400	A

TANK LEVEL MEASUREMENTS

Date	Time	Level from Bottom	Remarks
5-12-97	1545	1"	TANK APPEARS TO HAVE BEEN
			PUMPED OUT RECENTLY.

NOTES: WELLS M-21, M-25, M-26 ARE REPLACEMENT WELLS FOR LS-2, LR-3 AND LD-3.

By: Cheryl Scher Firm: URS Greiner, Inc. Telephone #: (716) 856-5636

SAMPLING EVENT SUMMARY

URS Greiner

Pollution Abatement Services
Semiannual

Month: MAY Year: 1997

Date	Time	Well Number	Well Bottom Elevation (feet)	Water Elevation (feet)	Water Height From Bottom (feet)	Volume of Casing (gal)	Volume Purged (gal)	Specific Conduct. (µmhos/cm)	pH (S.U.)	Temp. (deg. C)	Remarks
REPLACED		LS-2	289.5	—	—	—	—	—	—	—	
5-13-97	1320	LR-2	231.5	276.31	44.81	7.62	23.0	530	8.13	11.2	
5-13-97	1300	LD-2	251.1	282.79	31.69	4.95	15.0	750	7.58	10.2	
REPLACED		LR-3	211.7	—	—	—	—	—	—	—	
REPLACED		LD-3	248.6	—	—	—	—	—	—	—	
5-13-97	1500	LD-4	246.3	268.07	21.77	3.72	7.0	380	7.47	12.1	Purged DRY
5-13-97	1520	LD-5	243.2	263.86	20.66	3.50	7.0	580	7.40	10.1	PURGED DRY
5-14-97	1530	LS-6	253.4	263.72	10.32	1.73	2.0	410	7.20	10.2	Purged DRY
5-14-97	1540	LR-8	213.6	263.52	49.92	8.39	25.5	440	7.76	10.2	
5-14-97	1550	LD-6	240.9	263.28	22.38	3.80	6.0	450	8.17	11.7	PURGED DRY
5-13-97	1400	LR-8	230.3	262.97	32.67	5.53	17.0	770	7.28	11.5	
5-13-97	1430	LD-8	248.1	265.02	16.92	2.96	9.0	420	7.37	12.2	
5-13-97	1350	LS-9	260.9	268.17	7.27	1.26	4.0	420	6.81	13.5	PURGED DRY
FALL	ONLY	SWW-1	267.1								
		SWW-2	268.2								
		SWW-3	265.8								
		SWW-4	257.5								
		SWW-5	254.5								
		SWW-6	254.0								
		SWW-7	250.3								
		SWW-8	256.2								
		SWW-9	256.1								
		SWW-10	256.3								
		SWW-11	250.7								
		SWW-12	251.5								
5-14-97	1440	M-21	231.3	262.57	31.27	44.78	135.0	600	8.11	10.0	
5-14-97	1245	M-25	*234.2	262.28	28.08	41.56	125.0	560	7.62	14.7	
5-14-97	1100	M-26	*228.3	263.29	34.99	50.70	153.0	110	7.89	12.6	

Casing Volume = water height from botton of well(ft.) X π r² (inaldde Radiue of casing in ft.) X 7.48 gal/ft^3

NOTES: * ELEVATIONS ARE ESTIMATED, NOT Surveyed AS IN Well Construction Logs.

By: Cheryl Scher

Firm: URS Greiner, Inc. Telephone #: (716) 856-5636

URSF-106/1 OF 1/WDS/

PAS-2

MONTHLY MONITORING WELL LEVELS

URS Greiner

282 Delaware Avenue
Buffalo, New York 14202
(716) 856-5636

Pollution Abatement Services Date: 5-12-97

Well Number	Riser Elevation (feet)	Ground Elevation (feet)	Water Depth to Level of		Water Elevation (feet)
			Top of Riser (feet)	Ground Level (feet)	
LS2	289.81	287.5	5.42	3.11	284.39
LR2	289.85	287.5	13.54	11.19	276.31
LD2	289.73	287.1	6.94	4.31	282.79
LR3	278.06	275.5	8.74	6.18	269.32
LD3	278.62	275.8	4.13	1.31	274.49
LD4	279.25	276.3	11.18	8.23	268.07
LD5	272.94	270.2	9.08	6.34	263.86
LS6	274.14	271.4	10.42	7.68	263.72
LR6	274.39	270.9	10.87	7.38	263.52
LD6	274.03	270.9	10.75	7.62	263.28
LR8	273.42	270.0	10.45	7.03	262.97
LD8	272.83	269.9	7.81	4.88	265.02
LS9	276.72	274.0	8.55	5.83	268.17
SWW1	289.33	286.2	9.72	6.59	279.61
SWW2	289.37	286.3	15.47	12.40	273.90
SWW3	286.50	286.0	16.92	16.42	269.58
SWW4	283.60	282.9	15.59	14.89	268.01
SWW5	277.02	275.9	14.60	13.48	262.42
SWW6	273.06	270.9	8.88	6.72	264.18
SWW7	277.93	273.3	7.10	2.47	270.83
SWW8	278.24	275.7	3.75	1.21	274.49
SWW9	285.55	283.3	16.75	14.50	268.80
SWW10	280.43	279.3	11.92	10.79	268.51
SWW11	273.50	271.0	10.13	7.63	263.37
SWW12	272.82	270.2	8.80	6.18	264.02
M-21	* 272.48	270.3	9.91	7.73	262.57
M-25	* 269.50	* 268.0	7.22	5.72	262.28
M-26	* 273.70	* 272.0	10.41	8.71	263.29

Remarks: * ELEVATIONS ARE ESTIMATED, NOT SURVEYED AS IN WELL CONSTRUCTION LOGS.

By: Cheryl Baker Firm: URS Greiner, Inc. Telephone #: (716) 856-5636

ROUTINE INSPECTION CHECKLIST

Pollution Abatement Services

URS Greiner
282 Delaware Avenue
Buffalo, New York 14202
(716) 856-563E

Item	Date Inspection Performed	Remarks
CONTAINMENT CELL CAP	5/12/97	Multiple TIRE RUTS ON Containment Cell CAP
Landscaping	5/12/97	VERY badly OVERgrown - Approx 10"-18" HIGH NEEDS TO be CUT
Roadways	5/12/97	Clean - Free of Debris
- General Condition	5/12/97	GOOD
- Snow Removal	5/12/97	NON APPLICAPLE
Concrete Drainage Trough	5/12/97	BADLY OVERgrown With 1" High Water Flow IN Trough. OTherwise GOOD Condition
Debris	5/12/97	NONE
French Drains	5/12/97	GOOD Condition - OVERgrown With grass
FENCE	5/12/97	EAST Fence Line HAS FALLEN TREES ON FENCE ALSO EROSION OF SOIL (Large gap) UNDER SECTION NEAR LS-9. FRONT GATE STILL UNREPAIRED (OFF CENTER)
MONITORING WELLS	5/12/97	OVERALL Good Condition
Risers	5/12/97	CONTINUAL RUSTING - OTherwise Good Condition. DAMAGE TO TOP COLLAR OF M-21 observed
Locks	5/12/97	Good Condition

Remarks: STORAGE Shed - Continued decay, STRUCTURALLY UNSOUND, Should be REINFORCED OR REPLACED.
WORK being PERFORMED behind M-25 - AREA HAS been graded with gravel Approx AREA 20'x40'- Protective POSTS Recommended AROUND WELL

By: Cheryl Scher Firm: URS Greiner, Inc. Telephone #: (716) 856-5636

URSF-109/1 OF 1/RICKCM

ATTACHMENT C

LOCATION MAP AND BORING LOGS FOR M-SERIES WELLS

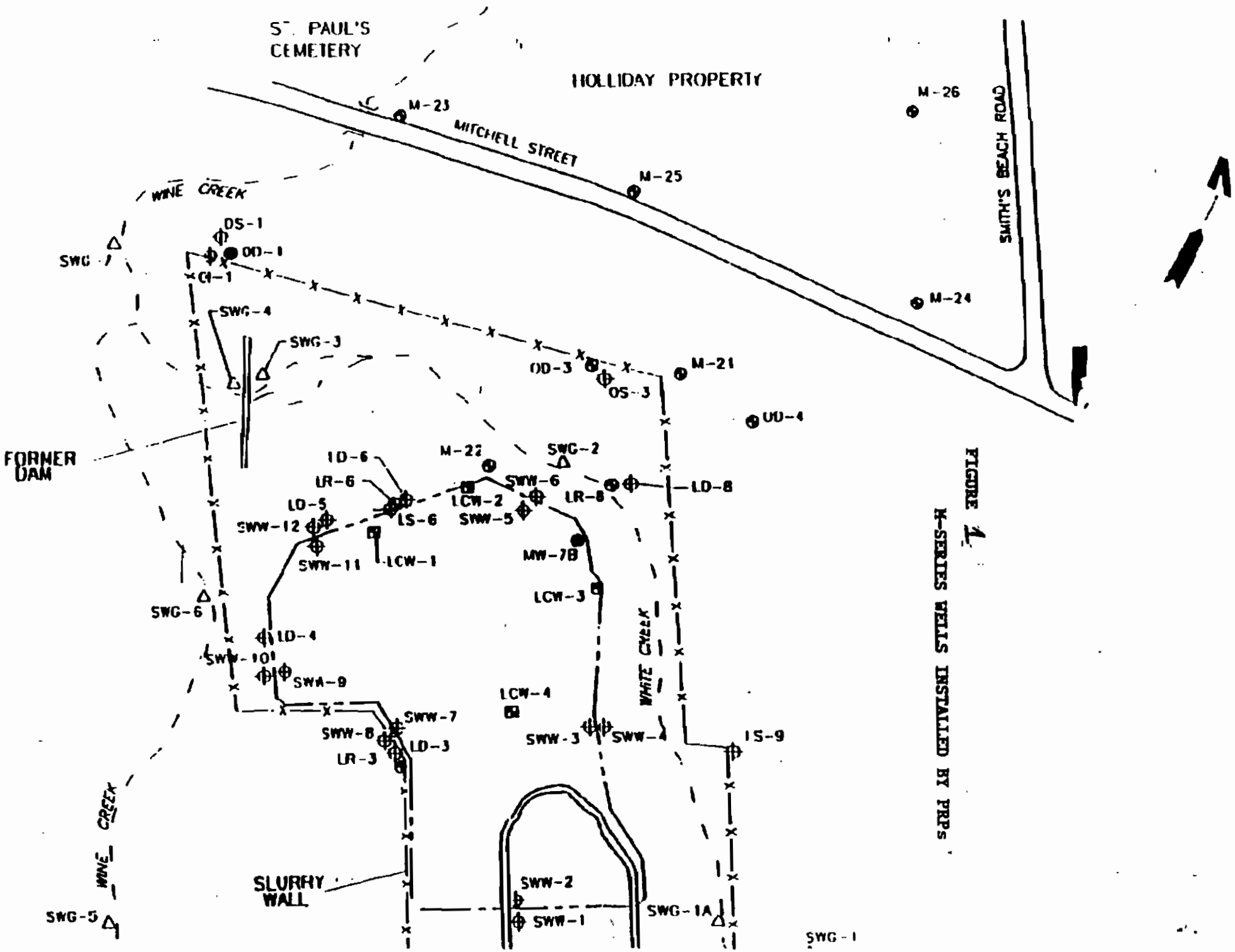
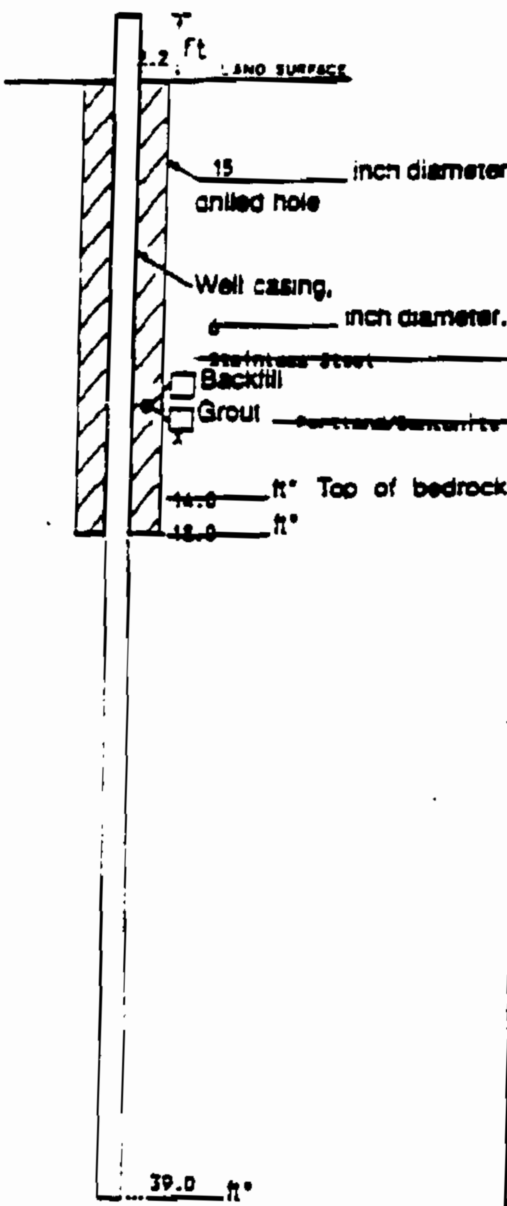


FIGURE 1
M-SERIES WELLS INSTALLED BY PRPs

GERAGHTY & MILLER, INC.
Environmental Services

WELL CONSTRUCTION LOG
(BEDROCK)



Project PAS - NY30402 Well M-21

Town/City Oswego

County Oswego State New York

Permit No. ____

Land-Surface Elevation and Datum 270.28 feet mean sea level

☒ Surveyed

☐ Estimated

Installation Date(s) 9/9/91 - 9/17/91

Drilling Method 4 1/4" 8 1/4" [illegible]

Drilling Contractor [illegible], Inc.

Drilling Fluid Water

Development Technique(s) and Date(s)

Submersible Pump for 2.0 hours on 9/17/91

Centrifugal Pump (Rig) for 1.0 hours on 9/18/91

Fluid Loss During Drilling 30 - 40 gallons

Water Removed During Development Approximately 1,400 gallons

Static Depth to Water 11.21 feet below M.P.

Pumping Depth to Water 34 feet below M.P.

Pumping Duration 3.0 hours

Yield 10.0 - 11.5 gpm Date 9/17, 9/18/91

Specific Capacity ____ gpm/ft

Well Purpose Bedrock Ground Water Monitoring

Fracture Zones Horizontal/Annular: 18.6, 19.8, 20.0-22.0, 22.3, 26.6, 29.8, 33.0-34.0, 34.8, 38.1

Remarks

Vertical Fracture Zones: 15.2-16.8, 22.3-24.3, 38.1-38.6

~~Strong odor to water~~

Measuring Point is Top of Well Casing Unless Otherwise Noted.

*Depth Below Land Surface

Prepared by S. [illegible]

GERAGHTY & MILLER, INC.
Environmental Services

SAMPLE/CORE LOG

Boring/Well M-21 Project/No. PAS - NY50402 Page 1 of 2

Site Location Oswego, New York Drilling Started 9/9/91 Drilling Completed 9/17/91

Total Depth Drilled 39.0 feet Hole Diameter 15 inches Type of Sample/Coring Device Split Spoon

Length and Diameter of Coring Device 2' x 2" Sampling Interval 2 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used None 0 - 14.0'; Water 14.0 - 39.0' Drilling Method 4 1/4", 8 1/4", HX, P

Drilling Contractor Parratt Wolff, Inc. Driller Rice Helper Lansing/Eaves

Prepared By S. Beames Hammer Weight 140# Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Blows/Increment: Pressure or Blows per 6 inches	SAMPLE ID	Sample/Core Description
0	2	1.5	3-4-6-8	no lab	SAND (80%) brown, coarse to medium, trace fine; Top Soil (10%)
				samples	organics, silt; Silt (5%) brown; Gravel (5%) fine, subround,
				taken	trace medium to coarse; poorly sorted, damp.
2	4	1.5	8-7-7-10		SAND (70%) brown, medium to fine, trace coarse; Silt (30%)
					brown; trace fine gravel, trace organics, moist.
4	6	0.0	50/0.1		Cobbles/Boulders 4.1 - 6.0'
6	8	1.4	17-27-		SAND (60%) brown, coarse to medium, trace fine; Gravel (40%)
			50/0.4		coarse to fine, subangular (fragmented) to subround; poorly
					sorted, cobbles present, moderately cemented, moist.
7.5	9.1				Boulder/Cobbles
10	12	0.8	32-50/0.3		Same as above (moist - wet).
12	14	1.8	49-61		Same as above (wet).
14		0.0	50/0.0		Rock.
14.3	19.3	5.0ft	(100%)		Bedrock - SANDSTONE, green, fine, medium hard to hard,
HX-1	BED	4.8/5	(96%)		competent, trace green siltstone gravel/fragments throughout
					(dropstones?), very little weathering, horizontal bedding, trace
					crossbedding (18.0'), trace fine gravel (18.4'), wet.
					Horizontal fractures: well developed, 18.6';
					Vertical: 15.2 - 16.8', healed 18.6 - 19.3'.

GERAGHTY & MILLER, INC.
Environmental Services

SAMPLE/CORE LOG (Cont.d)

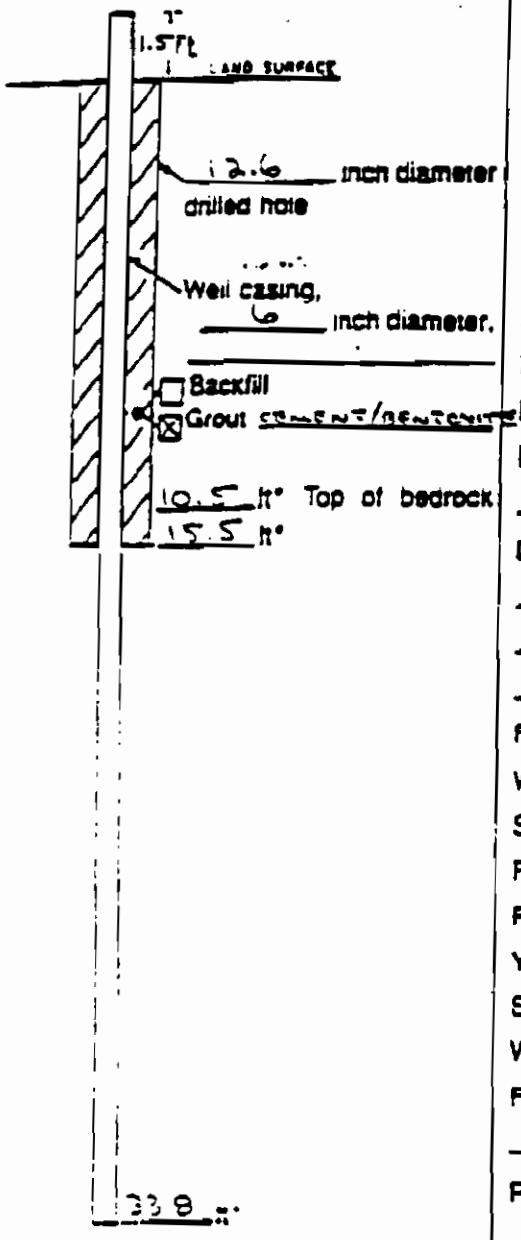
Boring/Well M-21

Prepared By S. [illegible]

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	SAMPLE ID	Sample/Core Description
19.3	24.3	4.9/5	(98%)		SANDSTONE - same as above. Varying amounts of silt
NX-2	RQD	4.0/4.9	(81%)		(ie silty fine sandstone at 21.3', 22.3 - 22.6'). Horizontal
					fractures: 19.8', 22.3'. Fractured at angle: 20.1', 20.6',
					20.7', 20.8', 20.9', 21.9'. Vertical fractures: 22.3 - 24.3'
24.0	29.0	4.5	(89%)		SANDSTONE - same as above.
P-1	RQD	2.92/4.5	(65%)		Well developed horizontal fractures 24.25', 24.6', 25.8'.
29.0	34.0	4.7	(96%)		SANDSTONE - same as above.
P-2	RQD	3.0/4.7	(64%)		Trace coarse sand, siltstones 29.0 - 29.2', black
					staining 30.25'.
34.0	39.0	4.8	(96%)		SANDSTONE - same as above.
P-3	RQD	3.94/4.8	(82%)	-	Upper 3" fractured. At 34.8' fracture and gravel zone
					approximately 0.04' thick. Healed vertical fracture/crack
					38.1 - 38.8'. Horizontal fracture 38.1'.
39.0					End of coring.
					Water at 11.21'
	-				

DRAFT

WELL CONSTRUCTION LOG
(BEDROCK)



Measuring Point is Top of Well Casing Unless Otherwise Noted.

*Depth Below Land Surface

Project SPDES / DMS SITE Well M-25

Town/City OSWEGO

County _____ State NEW YORK

Permit No. _____

Land-Surface Elevation and Datum 268 feet ☐ Surveyed ☒ Estimated

Installation Date(s) 7/13/94 - 7/21/94

Drilling Method _____

Drilling Contractor _____

Drilling Fluid _____

Development Technique(s) and Date(s)

Fluid Loss During Drilling _____ gallons

Water Removed During Development _____ gallons

Static Depth to Water _____ feet below M.P.

Pumping Depth to Water _____ feet below M.P.

Pumping Duration _____ hours

Yield _____ gpm Date _____

Specific Capacity _____ gpm/ft

Well Purpose _____

Fracture Zones _____

Remarks _____

Prepared by _____

ROUX

DRAFT

Project: SPRDS
PAS Site, Oswego, New York

Log of Well No. M-25

Date Started: 7/13/94 Completed: 7/21/94

Measuring Point Elevation: Total Depth: 33.8 ft

Logged By: J. Makowski Checked By: L. McTiern

Water Level During Drilling: 8.5 ft Post-Development: 8.6 ft

Drilling Co: Parratt-Wolff Driller: Mark Eaves

Casing: 6-Inch Stainless Steel Drill Bit Diameter: 5.4 in.

Drilling Method: Water Rotary

Perforations: from to

Pack: from to

Drilling Equipment: Mobile Drill B-57 DRAFT

Seal: from to

Sampler: 2-Inch Split Spoon

Cement/Bentonite Grout from 0.0 to 15.5

Depth (feet)	LITHOLOGIC DESCRIPTION	Lithology	Monitoring Well Construction	Sampler Blows per 6"	PID (ppm)	REMARKS
	Light and dark brown SILT, little fine Gravel, trace fine Sand, roots throughout; angular gravel; slight plasticity; dry.	SILT		4 5 5 11	0.0	Casing stick-up is 1.5' above land surface. Split-spoon sample contained 1.2' of recovery.
		SAND				
						Hard drilling from 4'-5' bls.
5	Light brown fine SAND, little fine Gravel, trace Silt; angular gravel; slight plasticity; moist.			8 26 50/4"	0.0	Split-spoon sample contained 0.5' of recovery.
		SILT				Hard drilling from 7'-8' bls.
						Soil cuttings appear wet at 8.5' bls.
10	Light gray SILT, little fine Gravel; angular gravel; wet.			12 50/3"	0.0 0.0	Split-spoon sample contained 0.3' of recovery. Hard drilling at 10' bls.
		SANDSTON				
	Gray SANDSTONE.					Core from 10.5'-15.5' bls: Recovery 4.8', RQD 69%. Vertical fracturing from 10.83'-11.65' bls.
15	Gray SANDSTONE.				0.0	Bottom of steel casing 15.5' bls.
						Core from 15.5'-18.0' bls: Recovery 2.1', RQD 30%.
	Gray SANDSTONE, trace green Shale fragments.				0.0	Core from 18.0'-21.0' bls: Recovery 2.76', RQD 29%.
20						
	Gray SANDSTONE, trace green Shale fragments.				0.0	Core from 21.0'-21.8' bls: Recovery 1.6' (broken rock), RQD 47%.
	Gray SANDSTONE.				0.0	Core from 21.8'-23.0' bls: Recovery 1.95', RQD 86%. Iron staining noted approximately 22.6' bls.
	Gray SANDSTONE.				0.0	Core from 23.0'-28.0' bls: Recovery 5.16', RQD 98%.
25						

Continued Next Page

ROUX

Project: SPRDS
PAS Site. Oswego, New York

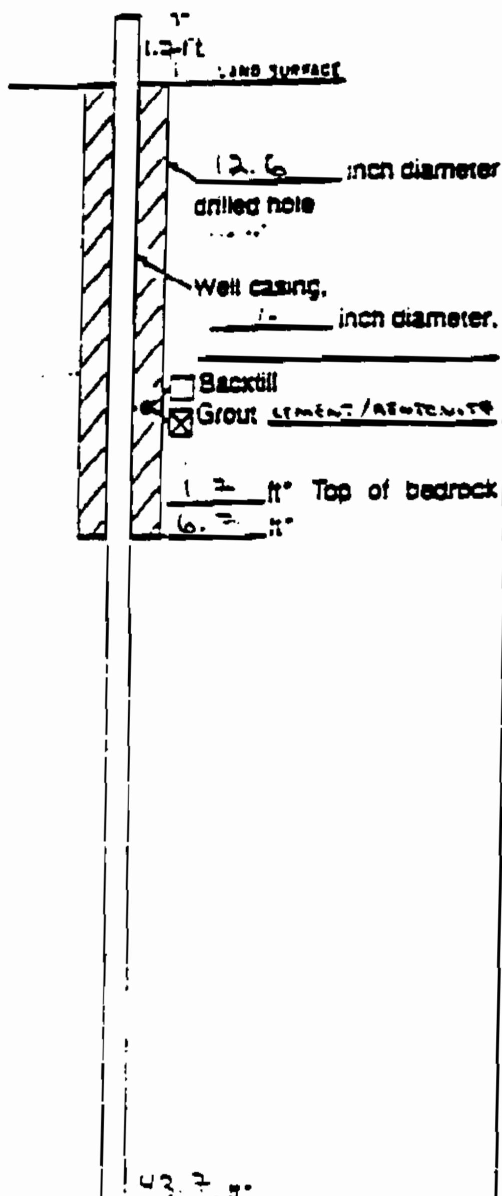
Log of Well No. M-25

DRAFT

Depth (feet)	LITHOLOGIC DESCRIPTION	Lithology	Monitoring Well Construction	Sampler Blows per 6"	PID (ppm)	REMARKS
30	Gray SANDSTONE.				0.0	Core from 28.0'-33.0' bls: Recovery 5.03'. RQD 82%. Vertical fracturing from 28.4'-30.05' bls.
						Bottom of measured borehole at 33.79' bls.
35	DRAFT					
40						
45						
50						

DRAFT

WELL CONSTRUCTION LOG
(BEDROCK)



Project SPRDS / PAS SITE Well M-26

Town/City OSWEGO

County ____ State NEW YORK

Permit No. ____

Land-Surface Elevation and Datum 272 feet ☐ Surveyed ☒ Estimated

Installation Date(s) 7/14/94 - 7/26/94

Drilling Method ____

Drilling Contractor ____

Drilling Fluid ____

Development Technique(s) and Date(s) ____

Fluid Loss During Drilling ____ gallons

Water Removed During Development ____ gallons

Static Depth to Water ____ feet below M.P.

Pumping Depth to Water ____ feet below M.P.

Pumping Duration ____ hours

Yield ____ gpm Date ____

Specific Capacity ____ gpm/ft

Well Purpose ____

Fracture Zones ____

Remarks ____

Measuring Point is Top of Well Casing Unless Otherwise Noted.

*Depth Below Land Surface

Prepared by ____

ROUX

Project: SPRDS PAS Site, Oswego, New York	Log of Well No. M-26 DRAFT
Date Started: 7/14/94 Completed: 7/26/94	Measuring Point Elevation: Total Depth: 43.7 ft
Logged By: J. Makowski Checked By: L. McTiern	Water Level During Drilling: 12.2 ft Post-Development: 13.0 ft
Drilling Co: Parratt-Wolff Driller: Mark Eaves	Casing: 6-Inch Stainless Steel Drill Bit Diameter: 5.4 in.
Drilling Method: Water Rotary	Perforations: from to
Drilling Equipment: Mobile Drill B-57	Pack: from to
Sampler: 2-Inch Split Spoon	Seal: from to
	Cement/Bentonite Grout from 0.0 to 0.5

Depth (feet)	LITHOLOGIC DESCRIPTION	Lithology	Monitoring Well Construction	Sampler Blows per 6"	PID (ppm)	REMARKS
	Light brown SILT, little fine Gravel, trace fine Sand, roots throughout; slight plasticity; dry.	SILT		4 9 25/3"	0.0	Casing stick-up is 1.7' above land surface. Split-spoon sample contained 1.0' of recovery.
		SANDSTON			0.0	Hard drilling at 1.5' bls.
	Gray SANDSTONE (weathered).					Core from 1.7'-6.7' bls: Recovery 5.0', RQD 35%.
5	DRAFT					
						Bottom of steel casing 6.5' bls.
	Gray SANDSTONE (weathered).				0.0	Core from 6.7'-8.7' bls: Recovery 2.2', RQD 34%.
	Gray SANDSTONE.				0.0	Core from 8.7'-13.7' bls: Recovery 5.1', RQD 75%. Iron staining noted approximately 13.25' bls.
10						
	Gray SANDSTONE, trace gray Shale fragments.				0.0	Core from 13.7'-18.7' bls: Recovery 4.8', RQD 69%.
15						
	Gray SANDSTONE, trace gray Shale fragments.				0.0	Core from 18.7'-23.7' bls: Recovery 4.9', RQD 72%.
20						
	Gray SANDSTONE.				0.0	Core from 23.7'-28.7' bls: Recovery 4.85', RQD 68%. Vertical fracture noted approximately 24.9' bls.
25						

Continued Next Page

Project: SPRDS
PAS Site, Oswego, New York

Log of Well No. M-26 DRAFT

Depth (feet)	LITHOLOGIC DESCRIPTION	Lithology	Monitoring Well Construction	Sampler Blows per 6"	PID (ppm)	REMARKS
30	Gray SANDSTONE.				0.0	Core from 28.7'-33.7' bls: Recovery 4.75', RQD 94%.
	DRAFT					
35	Gray SANDSTONE, trace blue-green Shale fragments.				0.0	Core from 33.7'-38.7' bls: Recovery 5.0', RQD 87%.
40	Gray SANDSTONE, trace blue-green Shale fragments.				0.0	Core from 38.7'-43.7' bls: Recovery 5.15', RQD 85%.
						Bottom of measured borehole at 43.7' bls.
45						
50						

ATTACHMENT D

ANALYTICAL DATA FROM ALL SAMPLING EVENTS (11/89 - 11/96)

- **MONITORING WELLS (L-Series, SWW-Series, and M-Series)**
- **SURFACE WATER (SW-series)**
- **SEDIMENTS (SS-series)**
- **LEACHATE (LCW-series)**

Note: See Table 1 of Report for a summary of sampling and analysis preformed to date.

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LD-2

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	11/96	5/97
Compound																
VOLATILE (ppb)																
Acetone		15 B														
Benzene																
2-Butanone																
Chloroethane																
Chlorobenzene																
Carbon disulfide	7	9														
Chloroform																
1,1-Dichloroethane																
1,2-Dichloroethane																
1,1-Dichloroethylene																
1,2-Dichloroethene (Total)																
Ethylbenzene																
4-Methyl-2-pentanone																
Methylene chloride		2 BJ														
Toluene																
1,1,1-Trichloroethane																
Trichloroethylene											2 BJ					
Vinyl acetate																
Vinyl chloride																
Xylenes (Total)																
SEMIVOLATILE (ppb)																
Phenol																
1,2-Dichlorobenzene																
2-Methylphenol																
4-Methylphenol																
2,4-Dimethylphenol																
Benzoic acid																
Naphthalene																
Isophorone																
4-Chloroaniline																
2-Methylnaphthalene																
N-Nitrosodiphenylamine																
Di-n-butylphthalate			51													
Butylbenzyl phthalate			46													
bis (2-Ethylhexyl) phthalate			3 J								4 J					
Di-n-octyl phthalate																
METALS (ppb)																
Aluminum	268															
Antimony																
Arsenic	2.4 B															
Barium	225															
Beryllium																
Calcium	118000															
Chromium																
Cobalt																
Copper																
Iron	1210															
Lead																
Magnesium	55300															
Manganese	258															
Nickel																
Potassium	1360 B															
Sodium	4700															
Vanadium																
Zinc	17 B															

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LR-2

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	11/96	5/97
Compound																
VOLATILE (ppb)																
Acetone																
Benzene											2 J					
2-Butanone																
Chloroethane																
Chlorobenzene																
Carbon disulfide	1 J											12				
Chloroform																
1,1-Dichloroethane																
1,2-Dichloroethane																
1,1-Dichloroethylene																
1,2-Dichloroethene (Total)																
Ethylbenzene																
4-Methyl-2-pentanone																
Methylene chloride																
Toluene																
1,1,1-Trichloroethane																
Trichloroethylene											3 BJ					
Vinyl acetate																
Vinyl chloride																
Xylenes (Total)																
SEMIVOLATILE (ppb)																
Phenol																
1,2-Dichlorobenzene																
2-Methylphenol																
4-Methylphenol																
2,4-Dimethylphenol																
Benzoic acid																
Naphthalene																
Isophorone																
4-Chloroaniline																
2-Methylnaphthalene																
N-Nitrosodiphenylamine																
Di-n-butylphthalate																
Butylbenzyl phthalate																
bis (2-Ethylhexyl) phthalate					0.5 BJ	0.6 J					22 J		2 J		2 J	
Di-n-octyl phthalate																
METALS (ppb)																
Aluminum	605															
Antimony																
Arsenic																
Barium	432															
Beryllium																
Calcium	42500															
Chromium																
Cobalt																
Copper																
Iron	977															
Lead	3															
Magnesium	22300															
Manganese	45.5															
Nickel																
Potassium	3190															
Sodium	21900															
Vanadium																
Zinc	56															

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LS-2

Date / ompound	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	11/96	5/97
VOLATILE (ppb)																
Acetone																
Benzene																
2-Butanone																
Chloroethane																
Chlorobenzene																
Carbon disulfide																
Chloroform																
1,1-Dichloroethane																
1,2-Dichloroethane																
1,1-Dichloroethylene																
1,2-Dichloroethene (Total)																
Ethylbenzene																
4-Methyl-2-pentanone																
Methylene chloride		2 BJ														
Toluene																
1,1,1-Trichloroethane																
Trichloroethylene											2 BJ					
Vinyl acetate																
Vinyl chloride																
Xylenes (Total)																
SEMIVOLATILE (ppb)																
Phenol																
1,2-Dichlorobenzene																
2-Methylphenol																
4-Methylphenol																
2,4-Dimethylphenol																
Benzoic acid																
Naphthalene																
Isophorone																
4-Chloroaniline																
2-Methylnaphthalene																
Nitrosodiphenylamine																
-n-butylphthalate																
Butylbenzyl phthalate									2 J							
bis (2-Ethylhexyl) phthalate					3 BJ											
Di-n-octyl phthalate																
METALS (ppb)																
Aluminum	986															
Antimony																
Arsenic																
Barium	105 B															
Beryllium																
Calcium	175000															
Chromium	475															
Cobalt	9.2 B															
Copper																
Iron	3060															
Lead	2.6 B															
Magnesium	51220															
Manganese	121															
Nickel	92.2															
Potassium	2560 B															
Sodium	68400															
Vanadium																
Zinc	49.1															

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero.

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LD-3

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	11/96	5/97
Compound																
VOLATILE (ppb)																
Acetone	280 E	17	22	13 B	9 J											
Benzene	9	45	5	3 J	3 J	2 J	3 J		2 J		2 J		1 J			
2-Butanone	40															
Chloroethane					2 J											
Chlorobenzene																
Carbon disulfide		9														
Chloroform																
1,1-Dichloroethane	8		4 J	2 J	2 J	2 J							1 J			
1,2-Dichloroethane	3 J															
1,1-Dichloroethylene																
1,2-Dichloroethene (Total)	10		2 J	0.7 J												
Ethylbenzene																
4-Methyl-2-pentanone	49	3 J	2 J													
Methylene chloride	430 E	23 B	4 J				4 J		1 J							
Toluene	6		0.5 BJ													
1,1,1-Trichloroethane																
Trichloroethylene	30	3 J	2 J	0.2 J			0.7 J				2 BJ					
Vinyl acetate																
Vinyl chloride					1 J											
Xylenes (Total)	1 J															
SEMIVOLATILE (ppb)																
Phenol	120															
1,2-Dichlorobenzene																
2-Methylphenol	13															
4-Methylphenol	53															
2,4-Dimethylphenol	4 J															
Benzoic acid	960 E															
Naphthalene																
Isophorone	3 J															
4-Chloroaniline																
2-Methylnaphthalene																
N-Nitrosodiphenylamine																
Di-n-butylphthalate																
Butylbenzyl phthalate																
bis (2-Ethylhexyl) phthalate		1 J			2 BJ											
Di-n-octyl phthalate																
METALS (ppb)																
Aluminum	2210															
Antimony																
Arsenic	41.2															
Barium	1030															
Beryllium																
Calcium	414000															
Chromium																
Cobalt	20.9 B															
Copper																
Iron	24400															
Lead	24 B															
Magnesium	159000															
Manganese	2930															
Nickel	1220															
Potassium	4400 B															
Sodium	12600 B															
Vanadium																
Zinc	126															

Only detected results reported

B - Compound detected in associated blank (organic). compound < contract required detection limits (CRDL) (metals).

E - Response of the analyte is greater than the upper level of the calibration range.

J - Concentration < sample quantitation limit (SQL) but > zero.

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LR-3

Date / Compound	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	11/96	5/97
VOLATILE (ppb)																
Acetone		13 B														
Benzene					43											
2-Butanone																
Chloroethane																
Chlorobenzene																
Carbon disulfide																
Chloroform																
1,1-Dichloroethane																
1,2-Dichloroethane																
1,1-Dichloroethylene																
1,2-Dichloroethene (Total)																
Ethylbenzene																
4-Methyl-2-pentanone																
Methylene chloride																
Toluene																
1,1,1-Trichloroethane																
Trichloroethylene											1 BJ					
Vinyl acetate																
Vinyl chloride																
Xylenes (Total)																
SEMIVOLATILE (ppb)																
Phenol																
1,2-Dichlorobenzene																
2-Methylphenol																
4-Methylphenol																
2,4-Dimethylphenol																
Benzoic acid																
Naphthalene																
Isophorone																
4-Chloroaniline																
2-Methylnaphthalene																
N-Nitrosodiphenylamine																
Di-n-butylphthalate			76		1 J											
Butylbenzyl phthalate			16		2 J											
bis (2-Ethylhexyl) phthalate					11 B											
Di-n-octyl phthalate					3 J											
METALS (ppb)																
Aluminum	3240															
Antimony																
Arsenic																
Barium	527															
Beryllium																
Calcium	191000															
Chromium	15.1															
Cobalt	13 B															
Copper	24 B															
Iron	5080															
Lead	2.3 B															
Magnesium	67500															
Manganese	872															
Nickel																
Potassium	4700 B															
Sodium	12100															
Vanadium																
Zinc	29.7															

Only detected results reported

B - Compound detected in associated blank (organic); compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero.

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LD-4

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	11/96	5/97
Compound																
VOLATILE (ppb)																
Acetone		18 B	3 J	4 BJ				24								
Benzene				0.6 J												
2-Butanone																
Chloroethane																
Chlorobenzene					0.8 J											
Carbon disulfide																
Chloroform																
1,1-Dichloroethane													1 J		1 J	
1,2-Dichloroethane																
1,1-Dichloroethylene																
1,2-Dichloroethene (Total)																
Ethylbenzene					1 J											
4-Methyl-2-pentanone																
Methylene chloride																
Toluene																
1,1,1-Trichloroethane																
Trichloroethylene															0.7 J	
Vinyl acetate																
Vinyl chloride																
Xylenes (Total)											2 J					
SEMIVOLATILE (ppb)																
Phenol	2 J															
1,2-Dichlorobenzene																
2-Methylphenol																
4-Methylphenol																
2,4-Dimethylphenol																
Benzoic acid																
Naphthalene																
Isophorone																
4-Chloroaniline																
2-Methylnaphthalene																
N-Nitrosodiphenylamine																
Di-n-butylphthalate																
Butylbenzyl phthalate					0.9 J											
bis (2-Ethylhexyl) phthalate			0.8 J		2 BJ						1 J					
Di-n-octyl phthalate																
METALS (ppb)																
Aluminum	5770															
Antimony																
Arsenic																
Barium	95 B															
Beryllium																
Calcium	59100															
Chromium	17.7															
Cobalt	10 B															
Copper	28.4															
Iron	9740															
Lead	3.6															
Magnesium	18700															
Manganese	678															
Nickel	60.4															
Potassium	3060															
Sodium	11200															
Vanadium	12 B															
Zinc	59.5															

Only detected results reported.

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LD-5

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	11/96	5/97
ompound																
VOLATILE (ppb)																
Acetone			4 J	4 BJ												
Benzene	12	19	21	21	20	8	18	5	7	4 J	5		3 J	2 J	3 J	3 J
2-Butanone																
Chloroethane		3 J	10	12	8 J	3 J	8 J		2 J				2 J			
Chlorobenzene		5	6	5	5	3 J	5	2 J	2 J	1 J	1 J				0.8 J	
Carbon disulfide		3 J														
Chloroform																
1,1-Dichloroethane	42	50	52	44	38	32	47	24	26	20	22	17	20	18	16	18
1,2-Dichloroethane	6	6		4 J	5				2 J				2 J			
1,1-Dichloroethylene																
1,2-Dichloroethene (Total)			2 J	15	1 J	0.8 J	0.8 J								1 J	
Ethylbenzene	8	8	13	8	4 J	1 J	2 J									
4-Methyl-2-pentanone																
Methylene chloride		48 J	0.5 J													
Toluene																
1,1,1-Trichloroethane	1 J															
Trichloroethylene																
Vinyl acetate																
Vinyl chloride			1 J			0.7 J				1 J			1 J		1 J	
Xylenes (Total)																
SEMIVOLATILE (ppb)																
Phenol																
1,2-Dichlorobenzene																
2-Methylphenol																
4-Methylphenol																
2,4-Dimethylphenol																
Benzoic acid				1 J												
Naphthalene																
Isophorone																
4-Chloroaniline																
2-Methylnaphthalene																
N-Nitrosodiphenylamine																
Di-n-butylphthalate																
Butylbenzyl phthalate									5 J							
bis (2-Ethylhexyl) phthalate			4 J		0.7 BJ											
-n-octyl phthalate			2 J													
METALS (ppb)																
Aluminum	2080															
Antimony																
Arsenic	8.7 B															
Barium	276															
Beryllium																
Calcium	128000															
Chromium																
Cobalt	13 B															
Copper	30.8															
Iron	4310															
Lead	1.5 B															
Magnesium	62700															
Manganese	636															
Nickel	73.7															
Potassium	7430															
Sodium	31300															
Vanadium	2.2 B															
Zinc	41.5															

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LD-6

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	11/96	5/97
Compound																
VOLATILE (ppb)																
Acetone			9 J	18										7		
Benzene																
2-Butanone																
Chloroethane																
Chlorobenzene																
Carbon disulfide																
Chloroform																
1,1-Dichloroethane																
1,2-Dichloroethane																
1,1-Dichloroethylene																
1,2-Dichloroethene (Total)																
Ethylbenzene																
4-Methyl-2-pentanone																
Methylene chloride		2 BJ														
Toluene																
1,1,1-Trichloroethane																
Trichloroethylene																
Vinyl acetate																
Vinyl chloride																
Xylenes (Total)																
SEMIVOLATILE (ppb)																
Phenol																
1,2-Dichlorobenzene																
2-Methylphenol																
4-Methylphenol																
2,4-Dimethylphenol	4 J															
Benzoic acid		3 J														
Naphthalene																
Isophorone																
4-Chloroaniline																
2-Methylnaphthalene																
N-Nitrosodiphenylamine																
Di-n-butylphthalate																
Butylbenzyl phthalate																
bis (2-Ethylhexyl) phthalate																
Di-n-octyl phthalate																
METALS (ppb)																
Aluminum	152 B															
Antimony																
Arsenic																
Barium	75.3 B															
Beryllium																
Calcium	48300															
Chromium																
Cobalt	6.9 B															
Copper																
Iron	43 B															
Lead	1.1 B															
Magnesium	15700															
Manganese	202															
Nickel	80.9															
Potassium	12500															
Sodium	49000															
Vanadium																
Zinc	30.1															

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LR-6

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	11/96	5/97
ompound																
VOLATILE (ppb)																
Acetone			2 J	4 BJ												
Benzene	2 J		1 J													
2-Butanone																
Chloroethane			2 J													
Chlorobenzene																
Carbon disulfide		14														
Chloroform																
1,1-Dichloroethane	48	67	49	34	33	14	12	8	10	8	13	7	8		8	5
1,2-Dichloroethane	4 J		4 J													
1,1-Dichloroethylene	2 J	25	0.8 J													
1,2-Dichloroethene (Total)	9	10	8	0.9 J	2 J											
Ethylbenzene	1 J		1 J	0.3 J												
4-Methyl-2-pentanone																
Methylene chloride		3 BJ														
Toluene	2 J	2 J	2 J													
1,1,1-Trichloroethane	160	200	130	81	98	17	11	6	11	3 J	8		2 J			
Trichloroethylene	2 J	2 J	2 J													
Vinyl acetate																
Vinyl chloride	36	3 B	32	30	23	3 J	3 J		2 J	1 J	2 J		2 J			
Xylenes (Total)	1 J		3 J													
SEMIVOLATILE (ppb)																
Phenol																
1,2-Dichlorobenzene																
2-Methylphenol																
4-Methylphenol																
2,4-Dimethylphenol																
Benzoic acid	4 J															
Naphthalene	6 J	9 J	3 J	5 J	5 J											
Isophorone																
4-Chloroaniline																
2-Methylnaphthalene																
N-Nitrosodiphenylamine																
Di-n-butylphthalate																
ıtylbenzyl phthalate																
s (2-Ethylhexyl) phthalate		2 J				6 J					3 J					
Di-n-octyl phthalate																
METALS (ppb)																
Aluminum	3440															
Antimony																
Arsenic	62 B															
Barium	504															
Beryllium																
Calcium	159000															
Chromium	9.8 B															
Cobalt	142 B															
Copper	213 B															
Iron	6060															
Lead	2 B															
Magnesium	47800															
Manganese	2930															
Nickel																
Potassium	2700 B															
Sodium	68700															
Vanadium	4.9 B															
Zinc	27.6															

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LS-6

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	11/96	5/97
Compound																
VOLATILE (ppb)																
Acetone	2 J		4 J	7 BJ												
Benzene	1 J		2 J	2 J	4 J	2 J	2 J		2 J	0.6 J						
2-Butanone																
Chloroethane	9 J	7 J	22	31	14	6 J	9 J	3 J	5 J							
Chlorobenzene																
Carbon disulfide																
Chloroform								4 J								
1,1-Dichloroethane	5		10	11	17	11	21	7	26	4 J	11		3 J		1 J	
1,2-Dichloroethane	2 J		4 J	3 J	8				8	1 J	3 J					
1,1-Dichloroethylene		4 J														
1,2-Dichloroethene (Total)	4 J		14	14	28	7	10		35	3 J	14	3 J	3 J		2 J	
Ethylbenzene																
4-Methyl-2-pentanone																
Methylene chloride	1 BJ	3 BJ	1 J	0.1 J		0.6 J										
Toluene																
1,1,1-Trichloroethane																
Trichloroethylene			0.9 J	0.6 J					0.8 J							
Vinyl acetate																
Vinyl chloride	55	9 J	25	33	20	5 J	9 J	2 J	15	1 J	3 J					
Xylenes (Total)																
SEMIVOLATILE (ppb)																
Phenol																
1,2-Dichlorobenzene																
2-Methylphenol																
4-Methylphenol																
2,4-Dimethylphenol																
Benzoic acid		2 J														
Naphthalene																
Isophorone																
4-Chloroaniline																
2-Methylnaphthalene																
N-Nitrosodiphenylamine		2 J														
Di-n-butylphthalate			0.8 J	1 J												
Butylbenzyl phthalate																
bis (2-Ethylhexyl) phthalate					0.7 BJ											
Di-n-octyl phthalate																
METALS (ppb)																
Aluminum	24600															
Antimony	31 B															
Arsenic	13.4															
Barium	268															
Beryllium	3.2 B															
Calcium	262000															
Chromium	74.9															
Cobalt	51.4															
Copper	117															
Iron	39900															
Lead	17															
Magnesium	81900															
Manganese	4850															
Nickel	371															
Potassium	10100															
Sodium	65400															
Vanadium	57.1															
Zinc	165															

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LD-8

Date / ompound	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	11/96	5/97
VOLATILE (ppb)																
Acetone													7 J			
Benzene																
2-Butanone																
Chloroethane																
Chlorobenzene																
Carbon disulfide																
Chloroform																
1,1-Dichloroethane																
1,2-Dichloroethane																
1,1-Dichloroethylene																
1,2-Dichloroethene (Total)																
Ethylbenzene																
4-Methyl-2-pentanone																
Methylene chloride		8 BJ														
Toluene			0.7 BJ													
1,1,1-Trichloroethane																
Trichloroethylene																
Vinyl acetate																
Vinyl chloride																
Xylenes (Total)										0.4 J						
SEMIVOLATILE (ppb)																
Phenol																
1,2-Dichlorobenzene																
2-Methylphenol																
4-Methylphenol																
2,4-Dimethylphenol																
Benzoic acid																
Naphthalene																
Isophorone																
4-Chloroaniline																
2-Methylnaphthalene																
N-Nitrosodiphenylamine																
Di-n-butylphthalate																
ıtylbenzyl phthalate																
.s (2-Ethylhexyl) phthalate											0.9 J					
Di-n-octyl phthalate																
METALS (ppb)																
Aluminum	14300															
Antimony																
Arsenic																
Barium	136 B															
Beryllium																
Calcium	102000															
Chromium	37.1															
Cobalt	24.7 B															
Copper	91.1															
Iron	29300															
Lead	6.5															
Magnesium	36000															
Manganese	4230															
Nickel	43.2															
Potassium	4410															
Sodium	66200															
Vanadium	27 B															
Zinc	100															

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LR-8

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	11/96	5/97
Compound																
VOLATILE (ppb)																
Acetone			15 BJ											9 J		
Benzene	100	32	55	67	84	82	82	84	45	36	48	42	29	20 J	22	33
2-Butanone																
Chloroethane	48	8 J	29	47	43	18	27	26	22	9	19	14	14	8 J	11	17
Chlorobenzene	23	7	13	16	18	22	23	22 B	10	20	10	9	9	5	5	6
Carbon disulfide	17															
Chloroform																
1,1-Dichloroethane																
1,2-Dichloroethane																
1,1-Dichloroethylene																
1,2-Dichloroethene (Total)																
Ethylbenzene	150	69	93	110	55	24	26	87	2 J	0.8 J	3 J					
4-Methyl-2-pentanone																
Methylene chloride	3 J	8 BJ	1 J		0.7 J	0.6 J										
Toluene	12	11	13 B	9 J	3 J	1 BJ	2 J	7	0.6 J	0.7 J					0.5 J	
1,1,1-Trichloroethane																
Trichloroethylene																
Vinyl acetate		8 J														
Vinyl chloride																
Xylenes (Total)	380	200	310	370	190 D	270 D	370	390 D	120	54	97	29	1 J		2 J	3 J
SEMIVOLATILE (ppb)																
Phenol	130															
1,2-Dichlorobenzene		4 J	0.8 J		1 J	1 J										
2-Methylphenol		7 J														
4-Methylphenol																
2,4-Dimethylphenol	6 J	11		23	18	29	82	15	12	8 J	9 J	6 J				4 J
Benzoic acid																
Naphthalene	3 J	16	3 J	4 J	2 J	2 J	6 J				1 J					
Isophorone																
4-Chloroaniline		4 J	1 J	2 J	3 J	3 J	11									1 J
2-Methylnaphthalene		2 J		0.8 J												
N-Nitrosodiphenylamine																
Di-n-butylphthalate												0.5 J				
Butylbenzyl phthalate																
bis (2-Ethylhexyl) phthalate											3 J		5 J			
Di-n-octyl phthalate																
METALS (ppb)																
Aluminum																
Antimony																
Arsenic	11.4															
Barium	1330															
Beryllium																
Calcium	260000															
Chromium																
Cobalt	58 B															
Copper																
Iron	13000															
Lead																
Magnesium	78100															
Manganese	3720															
Nickel	193															
Potassium	5540															
Sodium	20300															
Vanadium																
Zinc	8.6 B															

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

D - Concentration determined from secondary dilution

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LS-9

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	11/96	5/97
ompound																
VOLATILE (ppb)																
Acetone																
Benzene																
2-Butanone																
Chloroethane																
Chlorobenzene																
Carbon disulfide																
Chloroform																
1,1-Dichloroethane																
1,2-Dichloroethane																
1,1-Dichloroethylene																
1,2-Dichloroethene (Total)																
Ethylbenzene																
4-Methyl-2-pentanone																
Methylene chloride		3 BJ														
Toluene																
1,1,1-Trichloroethane																
Trichloroethylene																
Vinyl acetate																
Vinyl chloride																
Xylenes (Total)																
SEMIVOLATILE (ppb)																
Phenol																
1,2-Dichlorobenzene																
2-Methylphenol																
4-Methylphenol																
2,4-Dimethylphenol																
Benzoic acid																
Naphthalene																
Isophorone																
4-Chloroaniline																
2-Methylnaphthalene																
N-Nitrosodiphenylamine																
Di-n-butylphthalate																
ıtylbenzyl phthalate																
bis (2-Ethylhexyl) phthalate																
Di-n-octyl phthalate																
METALS (ppb)																
Aluminum	2700															
Antimony																
Arsenic	7 B															
Barium	281															
Beryllium																
Calcium	99800															
Chromium																
Cobalt	104 B															
Copper	11.8 B															
Iron	6460															
Lead	4.1															
Magnesium	29200															
Manganese	8300															
Nickel																
Potassium	5270															
Sodium	31800															
Vanadium	8.3 B															
Zinc	74.4															

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: M-21

Date / Compound	05/96	11/96	5/97
VOLATILE (ppb)			
Acetone			
Benzene	5	7	9
2-Butanone			
Chloroethane	2 J	3 J	4 J
Chlorobenzene	2 J	2 J	4 J
Carbon disulfide			
Chloroform			
1,1-Dichloroethane			
1,2-Dichloroethane			
1,1-Dichloroethylene			
1,2-Dichloroethene (Total)			
Ethylbenzene			
4-Methyl-2-pentanone			
Methylene chloride			
Toluene			
1,1,1-Trichloroethane			
Trichloroethylene			
Vinyl acetate			
Vinyl chloride			
Xylenes (Total)		0.6 J	1 J
SEMIVOLATILE (ppb)			
Phenol			
1,2-Dichlorobenzene			
2-Methylphenol			
4-Methylphenol			
2,4-Dimethylphenol			
Benzoic acid			
Naphthalene			
Isophorone			
4-Chloroaniline			
2-Methylnaphthalene			
N-Nitrosodiphenylamine			
Di-n-butylphthalate			
Butylbenzyl phthalate			
bis (2-Ethylhexyl) phthalate			4 J
Di-n-octyl phthalate			
METALS (ppb)			
Aluminum			
Antimony			
Arsenic			
Barium			
Beryllium			
Calcium			
Chromium			
Cobalt			
Copper			
Iron			
Lead			
Magnesium			
Manganese			
Nickel			
Potassium			
Sodium			
Vanadium			
Zinc			

Only detected results reported.

B - Compound detected in associated blank (organic); compound < contract required detection limits (CRDL) (metals).

J - Concentration < sample quantitation limit (SQL) but > zero.

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: M-25

Date / Compound	05/96	11/96	5/97
VOLATILE (ppb)			
Acetone			
Benzene	9		12
2-Butanone			
Chloroethane			3 J
Chlorobenzene	3 J		6
Carbon disulfide			
Chloroform	3 J	7	
Bromodichloromethane	2 J	4 J	
Dibromochloromethane	0.9 J	2 J	
1,1-Dichloroethylene			
1,2-Dichloroethene (Total)			
Ethylbenzene			
4-Methyl-2-pentanone			
Methylene chloride			
Toluene			
1,1,1-Trichloroethane			
Trichloroethylene			
Vinyl acetate			
Vinyl chloride			
Xylenes (Total)			
SEMIVOLATILE (ppb)			
Phenol			
1,2-Dichlorobenzene			
2-Methylphenol			
4-Methylphenol			
2,4-Dimethylphenol			
Benzoic acid			
Naphthalene			
Isophorone			
4-Chloroaniline			
2-Methylnaphthalene			
N-Nitrosodiphenylamine			
Di-n-butylphthalate			
Butylbenzyl phthalate			
bis (2-Ethylhexyl) phthalate			
Di-n-octyl phthalate			
METALS (ppb)			
Aluminum			
Antimony			
Arsenic			
Barium			
Beryllium			
Calcium			
Chromium			
Cobalt			
Copper			
Iron			
Lead			
Magnesium			
Manganese			
Nickel			
Potassium			
Sodium			
Vanadium			
Zinc			

Only detected results reported

B - Compound detected in associated blank (organic); compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero.

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: M-26

Date	05/96	11/96	5/97
Compound			
VOLATILE (ppb)			
Acetone			
Benzene			
2-Butanone			
Chloroethane			
Chlorobenzene			
Carbon disulfide			
Chloroform			
1,1-Dichloroethane			
1,2-Dichloroethane			
1,1-Dichloroethylene			
1,2-Dichloroethene (Total)			
Ethylbenzene			
4-Methyl-2-pentanone			
Methylene chloride			
Toluene			
1,1,1-Trichloroethane			
Trichloroethylene			
Vinyl acetate			
Vinyl chloride			
Xylenes (Total)			
SEMIVOLATILE (ppb)			
Phenol			
1,2-Dichlorobenzene			
2-Methylphenol			
4-Methylphenol			
2,4-Dimethylphenol			
Benzoic acid			
Naphthalene			
Isophorone			
4-Chloroaniline			
2-Methylnaphthalene			
N-Nitrosodiphenylamine			
Di-n-butylphthalate			
Butylbenzyl phthalate			
bis (2-Ethylhexyl) phthalate			
Di-n-octyl phthalate			
METALS (ppb)			
Aluminum			
Antimony			
Arsenic			
Barium			
Beryllium			
Calcium			
Chromium			
Cobalt			
Copper			
Iron			
Lead			
Magnesium			
Manganese			
Nickel			
Potassium			
Sodium			
Vanadium			
Zinc			

Only detected results reported.

B - Compound detected in associated blank (organic); compound < contract required detection limits (CRDL) (metals).

J - Concentration < sample quantitation limit (SQL) but > zero.

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: SWW-1

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone								
Benzene								
Chloroethane								
Chlorobenzene								
Carbon disulfide	3 J							
1,1-Dichloroethane								
1,2-Dichloroethane								
1,1-Dichloroethylene								
1,2-Dichloroethene (Total)								
Ethylbenzene								
Methylene chloride	4 J							
Toluene								
1,1,1-Trichloroethane								
Trichloroethylene						1 BJ		
Vinyl chloride								
Xylenes (Total)								
SEMIVOLATILE (ppb)								
1,2-Dichlorobenzene								
2-Methylphenol								
4-Methylphenol								
2,4-Dimethylphenol								
Benzoic acid								
Naphthalene								
2-Methylnaphthalene								
Di-n-butylphthalate		89						
Butylbenzyl phthalate		39						
bis (2-Ethylhexyl) phthalate		1 J	1 BJ			1 J		
4-Chloroaniline								
METALS (ppb)								
Aluminum	422							
Antimony	27 B							
Arsenic	6.1 B							
Barium	141 B							
Beryllium	3.2 B							
Calcium	99800							
Chromium								
Cobalt	11.6 B							
Copper	8 1 B							
Iron	681							
Lead	2 5 B							
Magnesium	29300							
Manganese	230							
Nickel								
Potassium	8330							
Sodium	43100							
Vanadium	8 4 B							
Zinc	17 8 B							

Notes:

Only detected results reported from annual monitoring, performed in November of each year since 1989.
B - Compound detected in associated blank (organic);
compound < contract required detection limits (CRDL) (metals)
J - Concentration < sample quantitation limit (SQL) but > zero
- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: SWW-4

Date / Compound	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
VOLATILE (ppb)								
Acetone		6 J						
Benzene		8	64	1 J	63	2 J		
Chloroethane		16	16	5 J	7 J			
Chlorobenzene		4 J	16	0.9 J	17			
Carbon disulfide								
1,1-Dichloroethane		8	6	4 J		3 J		
1,2-Dichloroethane								
1,1-Dichloroethylene								
1,2-Dichloroethene (Total)			0.6 J		0.5 J			
Ethylbenzene		32	100	2 J	52	1 J		
Methylene chloride		0.5 J	0.6 J					
Toluene			0.9 J		0.5 J			
1,1,1-Trichloroethane								
Trichloroethylene								
Vinyl chloride								
Xylenes (Total)		5	41		17	2 J		
SEMIVOLATILE (ppb)								
1,2-Dichlorobenzene								
2-Methylphenol								
4-Methylphenol					3 J			
2,4-Dimethylphenol			3 J					
Benzoic acid								
Naphthalene								
2-Methylnaphthalene								
Di-n-butylphthalate								
Butylbenzyl phthalate								
bis (2-Ethylhexyl) phthalate						2 J		
4-Chloroaniline								
METALS (ppb)								
Aluminum	141 B							
Antimony								
Arsenic	2.8 B							
Barium	108 B							
Beryllium								
Calcium	70300							
Chromium								
Cobalt	9.9 B							
Copper								
Iron	896							
Lead	1.7 B							
Magnesium	16200							
Manganese	442							
Nickel								
Potassium	11000							
Sodium	65300							
Vanadium	3.03							
Zinc	1.53							

Notes:

Only detected results reported from annual monitoring, performed in November of each year since 1989.
B - Compound detected in associated blank (organic);
compound < contract required detection limits (CRDL) (metals).
J - Concentration < sample quantitation limit (SQL) but > zero.
- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: SWW-6

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone		92 BJ						9 J
Benzene	10	680	430	660	570	550	570	500 D
Chloroethane	95	180	85 J	85	73	49 J	58 J	42
Chlorobenzene		9 J	10 J	69	78	140	190	220 D
Carbon disulfide								
1,1-Dichloroethane								1 J
1,2-Dichloroethane								
1,1-Dichloroethylene								
1,2-Dichloroethene (Total)								
Ethylbenzene	250	640	340	580	490	550	690	620 D
Methylene chloride	7 BJ	17 BJ	8 J	10 J	7 J	6 J		4 J
Toluene	550	910 B	160	390	50	25 J	18 J	11
1,1,1-Trichloroethane								
Trichloroethylene								
Vinyl chloride								
Xylenes (Total)	620	1900	860	2200	1400	2000	2600	2000 D
SEMIVOLATILE (ppb)								
Phenol								510 D
1,2-Dichlorobenzene	17 J				31 J			12
2-Methylphenol	130							1 J
4-Methylphenol	600	33		14	48 J		3 J	2 J
2,4-Dimethylphenol	1200		69 J	1800 D	640 D	610 D	4 J	510 D
Benzoic acid								
Naphthalene				23			10	9 J
2-Methylnaphthalene		2 J			2 J			3 J
Di-n-butylphthalate								
Butylbenzyl phthalate								
bis (2-Ethylhexyl) phthalate							2 J	
4-Chloroaniline						13	49	30
METALS (ppb)								
Aluminum	1000							
Antimony								
Arsenic	34							
Barium	102							
Beryllium								
Calcium	232000							
Chromium	8.3 B							
Cobalt	53.9							
Copper	15.5 B							
Iron	8010							
Lead	3							
Magnesium	58400							
Manganese	2170							
Nickel	507							
Potassium	20000							
Sodium	152000							
Vanadium	4.8 B							
Zinc	22.6							

Notes:

Only detected results reported from annual monitoring, performed in November of each year since 1989.
B - Compound detected in associated blank (organic);
compound < contract required detection limits (CRDL) (metals).
D - The reported concentration was determined bya secondary concentration.
J - Concentration < sample quantitation limit (SQL) but > zero.
- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: SWW-8

Date / Compound	11/89	11/90	11/91	11/92	11/93	11/93	11/95	11/96
VOLATILE (ppb)								
Acetone								
Benzene	7	5	2 J	2 J	1 J	1 J		0.9 J
Chloroethane								
Chlorobenzene	2 J							
Carbon disulfide								
1,1-Dichloroethane		3 J	2 J					
1,2-Dichloroethane	3 J							
1,1-Dichloroethylene								
1,2-Dichloroethene (Total)		0.9 J						
Ethylbenzene								
Methylene chloride								
Toluene								
1,1,1-Trichloroethane								
Trichloroethylene		0.6 J				2 BJ		
Vinyl chloride								
Xylenes (Total)								
SEMIVOLATILE (ppb)								
1,2-Dichlorobenzene								
2-Methylphenol								
4-Methylphenol								
2,4-Dimethylphenol								
Benzoic acid								
Naphthalene								
2-Methylnaphthalene								
Di-n-butylphthalate								
Butylbenzyl phthalate					4 J			
bis (2-Ethylhexyl) phthalate			3 BJ					
4-Chloroaniline								
METALS (ppb)								
Aluminum	2600							
Antimony	32 B							
Arsenic	21.1							
Barium	826							
Beryllium								
Calcium	335000							
Chromium	8.5 B							
Cobalt	27 B							
Copper	10 B							
Iron	25500							
Lead	3.8							
Magnesium	116000							
Manganese	12600							
Nickel	546							
Potassium	3070 B							
Sodium	110000							
Vanadium								
Zinc	60.4							

Notes:

Only detected results reported from annual monitoring, performed in November of each year since 1989.
B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals).
J - Concentration < sample quantitation limit (SQL) but > zero
- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: SWW-10

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone		8 BJ						
Benzene								
Chloroethane								
Chlorobenzene								
Carbon disulfide								
1,1-Dichloroethane	1 J	2 J		3 J		4 J	2 J	2 J
1,2-Dichloroethane								
1,1-Dichloroethylene					3 J			
1,2-Dichloroethene (Total)								
Ethylbenzene								
Methylene chloride	2 BJ							
Toluene		0.1 BJ						
1,1,1-Trichloroethane		2 J		1 J			1 J	
Trichloroethylene	3 J	9		4 J	5	5	3 J	3 J
Vinyl chloride								
Xylenes (Total)								
SEMIVOLATILE (ppb)								
1,2-Dichlorobenzene								
2-Methylphenol								
4-Methylphenol								
2,4-Dimethylphenol								
Benzoic acid								
Naphthalene								
2-Methylnaphthalene								
Di-n-butylphthalate								
Butylbenzyl phthalate					4 J			
bis (2-Ethylhexyl) phthalate						2 J		
4-Chloroaniline								
METALS (ppb)								
Aluminum	979							
Antimony								
Arsenic	2.8 B							
Barium	67 3 B							
Beryllium								
Calcium	117000							
Chromium	12.1							
Cobalt	16 B							
Copper	142 B							
Iron	3600							
Lead								
Magnesium	26300							
Manganese	2170							
Nickel								
Potassium	990 B							
Sodium	11700							
Vanadium								
Zinc	23.4							

Notes:

Only detected results reported from annual monitoring, performed in November of each year since 1989
B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)
J - Concentration < sample quantitation limit (SQL) but > zero.
- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: SWW-12

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone		2 J						
Benzene	2 J	2 J	1 J	0 9 J	0.6 J			0.7 J
Chloroethane		4 J	3 J	1 J				
Chlorobenzene								
Carbon disulfide								
1,1-Dichloroethane	32	56	48	42	31	25	20	18
1,2-Dichloroethane	3 J				3 J		2 J	
1,1-Dichloroethylene								
1,2-Dichloroethene (Total)	3 J	1 J	0.8 J					1 J
Ethylbenzene								
Methylene chloride								
Toluene								
1,1,1-Trichloroethane	5	1 J						
Trichloroethylene								
Vinyl chloride		0.8 J						
Xylenes (Total)								
SEMIVOLATILE (ppb)								
1,2-Dichlorobenzene								
2-Methylphenol								
4-Methylphenol								
2,4-Dimethylphenol								
Benzoic acid	18 J							
Naphthalene								
2-Methylnaphthalene								
Di-n-butylphthalate								
Butylbenzyl phthalate								
bis (2-Ethylhexyl) phthalate						0.8 J		
4-Chloroaniline								
METALS (ppb)								
Aluminum	2910							
Antimony								
Arsenic	4 B							
Barium	162 B							
Beryllium								
Calcium	101000							
Chromium	8.9 B							
Cobalt	12 6 B							
Copper	33.2							
Iron	5390							
Lead	3.2							
Magnesium	37500							
Manganese	3300							
Nickel								
Potassium	4500 B							
Sodium	19500							
Vanadium	6.1 B							
Zinc	29.4							

Notes:

Only detected results reported from annual monitoring, performed in November of each year since 1989.
B - Compound detected in associated blank (organic);
compound < contract required detection limits (CRDL) (metals)
J - Concentration < sample quantitation limit (SQL) but > zero.
- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
SURFACE WATER: SW-1

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone		7 BJ						
Ethylbenzene								0.7 J
Toluene		0.6 BJ						
Xylenes								2 J

SURFACE WATER: SW-2

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone								
Toluene								
Xylenes								0.3 J
SEMIVOLATILE (ppb)								
Bis(2-ethylhexyl) phthalate							5 J	

SURFACE WATER: SW-3

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone		3 BJ						
Toluene		0.6 BJ						
SEMIVOLATILE (ppb)								
Acenaphthene							0 6 J	

SURFACE WATER: SW-4

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone								
Toluene								

SURFACE WATER: SW-4A

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone								
Toluene		0.6 BJ						
SEMIVOLATILE (ppb)								
Acenaphthene							0 4 J	

SURFACE WATER: SW-4B

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone		6 BJ						
Toluene		0 7 BJ						

SURFACE WATER: SW-5

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone								
Toluene								
SEMIVOLATILE (ppb)								
Bis(2-ethylhexyl) phthalate							6 J	

Only detected results reported.
B - Compound detected in associated blank (organic); compound < contract required detection limits (CRDL) (metals).
J - Concentration < sample quantitation limit (SQL) but > zero.
- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
SEDIMENT: SS-1

Date	11/89	11/90	5/91	11/91	11/92	11/93	05/94	11/94	11/95	11/96 *
Compound										
VOLATILE (ppb)										
Acetone	20 B	22 B				15				
Benzene										
2-Butanone										
Chloroform	8 J									
Methylene chloride	24 B									
Tetrachloroethene								6 BJ		
Toluene										
SEMIVOLATILE (ppb)										
Phenol										
Benzyl Alcohol										
4-Methylphenol	69 J						160 J			
2,4-Dimethylphenol										
Benzoic acid					67 J		27 J			
Acenaphthylene										
Acenaphthene										
Diethylphthalate		240 J								
Fluorene					160 J					1300
Phenanthrene	120 J			400 J	1400	230 J		190 J		430 J
Anthracene					360 J					82 J
Fluoranthene	240 J			730	1900	340 J		360 J		
Pyrene	220 J			650	8000 E	280 J		320 J		1300
Butylbenzyl phthalate										
Benzo (a) anthracene	120 J			360 J	970	180 J		170 J		940
Chrysene	130 J			350 J	3600	170 J		160 J		830
bis (2-Ethylhexyl) phthalate	460 J	85 J		120 BJ	670	91 J	390 J			
Di-n-octyl phthalate										
Benzo (b) fluoranthene	200 J			360 J	1700	230 J		230 J		880
Benzo (k) fluoranthene	200 J			180 J	1900	140 J		130 J		550
Benzo (a) pyrene	110 J			250 J	820					840
Indeno (1,2,3-cd) pyrene	59 J			110 J		100 J				340 J
Dibenzo (a,h) anthracene										
Benzo (g,h,i) perylene	575			85 J		87 J				270 J
PEST/PCB (ppb)										
beta-BHC										
gamma-BHC					1 4 J					
Aldrin		10 R			11			4 4 J		
Heptachlor epoxide					1 8 J					
Endosulfan I					3.2 J					
Endosulfan II					2 6 J					
Endosulfan sulfate							10 J			
Dieldrin					7 6 J					
4,4'-DDE			8 3 J*		1 1 J					
Endrin										
4,4'-DDD					2 J		11 J			
4,4'-DDT			8 8 J*	2.6 J	4 4 J					
Methoxychlor			6.3 J*							
Endrin Ketone			6 3 J*							
Aroclor - 1248										32 J
Aroclor - 1254										42
METALS (ppm)										
Aluminum	5730	9630		6330	4610		7750	5960		5370
Antimony					3 1 B					
Arsenic	5 9	1 3		2 0	2 1		2 9 N	3 5		2 5
Barium	85	65		71 7	62 5		79 4	124		51 6
Beryllium										0.25 B
Cadmium		<0 71								0 99
Calcium	4710	1770		4850 B	3400		1970	7750		8920
Chromium	6 2	10		12 3	6 1		12 1	7 5		9 5
Cobalt	6 4 B	5 7		3 2	3 9 B		6 4	2.7 B		3 1 B
Copper	30 9	14		10 7	15 7		6 1	4.3 B		23 2
Iron	10200	10500		15200	16400		14500	38400		12600
Lead	25 6	88		18 7	10 3		8 1	48 4		19 2 J
Magnesium	2570	2050		1370	1580		2960	2640		2190
Manganese	674	386		222	426 N		313	1650		646
Mercury		0 15								
Nickel		11		10 4	7 8		12.8	14.2		7 7
Potassium	1370 B	622		697	505 B		1050	493 B		1080
Selenium								4 0		
Silver					10 6 BN					
Sodium	602 B	304		463 B	297 B		302 B	580 B		1380
Vanadium	17 7	18		11 1	10 1		17 2	19 1		13 4
Zinc	73 8	46		37 6	53 1		32 3	106		69 1
Total Phenol							0 9			10 4
Hexavalent Chromium		0 18 R	0 26	0 31	0 16 N		0 46 N*			1 3

Only detected results reported

B - Compound deteeted in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

E - Response of the analyte is greater than the upper level of the calibration range

J - (Organic) Concentration < sample quantitation limit (SQL) but > zero

J - (Inorganic) Concentration reported as estimated because quality control criteria was not met

N - Spike sample recovery not within control limits

R - Data rejected due to holding time violation

* - Concentration detected from sample reanalysis

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
SEDIMENT: SS-2

Date	11/89	11/90	5/91	11/91	11/92	11/93	05/94	11/94	11/95	11/96
Compound										
VOLATILE (ppb)										
Acetone	11 J					9 J				
Benzene										
2-Butanone										
Chloroform										
Methylene chloride	41 B							4 BJ		
Tetrachloroethene										
Toluene										
SEMIVOLATILE (ppb)										
Phenol										
Benzyl Alcohol										
4-Methylphenol										
2,4-Dimethylphenol										
Benzoic acid										
Acenaphthylene						47 J	19 J			
Acenaphthene							29 J			
Diethylphthalate										
Fluorene							61 J			
Phenanthrene	360 J				71 J	550	84 J	120 J		260 J
Anthracene										
Fluoranthene	690 J				94 J	920	840 J	200 J		570
Pyrene	540 J				110 J	660	1000 J	150 J		560
Butylbenzyl phthalate										
Benzo (a) anthracene	270 J					390 J	480 J	70 J		280 J
Chrysene	330 J					340 J	360 J	84 J		350 J
bis (2-Ethylhexyl) phthalate	1000			75 BJ	130 J	180 J	170 J			200 J
Dibenzofuran							21 J			
Di-n-octyl phthalate										
Benzo (b) fluoranthene	470 J				62 J	400	320 J	120 J		350 J
Benzo (k) fluoranthene	470 J				23 J	180 J	320 J	52 J		160 J
Benzo (a) pyrene	260 J						140 J			280 J
Indeno (1,2,3-cd) pyrene	150 J						120 J			
Dibenzo (a,h) anthracene							59 J			
Benzo (g,h,i) perylene							29 J			
PEST/PCB (ppb)										
beta-BHC					1 4 J					
gamma-BHC					1 3 J					
Aldrin										14
Heptachlor epoxide										
Endosulfan I										
Endosulfan II										
Endosulfan Sulfate										2 5 J
Dieldrin				8 7 J	16 J					14 J
4,4'-DDE					3 2 J					4 1 J
Endrin					2.5 J					
4,4'-DDD					3 2 J					3.1 J
4,4'-DDT					4 1 J					
Methoxychlor										
Endrin Ketone										
Aroclor - 1248										
Aroclor - 1254			570							
METALS (ppm)										
Aluminum	6790			4750	4920		5310	4740		6740
Antimony					0 96 B					
Arsenic	2.2 B			5 3	3 2		2 5 N	3 5		3 2
Barium	204			51 7	78.3		70 6	49 9		93 7
Beryllium										0 19 B
Cadmium					0 82					0 97
Calcium	6340			6580 B	13400		4430	47800		8250
Chromium	4 2			6	8 9		7 1	5.2		10 8
Cobalt	4 7 B			3 9 B	4 7 B		3 6 B	3 4 B		4 1 B
Copper	27 2			12 1	25 6		3 3 B	6 1		23 4
Iron	47200			6260	17700		16400	7550		8540
Lead	18 6			11	96		20 2	13 4		26 5 J
Magnesium	2580			1760	3830		2960	2550		3000
Manganese	2080			262	978 N		501	533		1030
Mercury										
Nickel				11 2	14 9		9 9	7 9		10 1
Potassium	1610 B			686 B	746 B		561 B	448 B		1230
Selenium								1 1		
Silver					0 06 BN					
Sodium	1260 B				322 B		257 B	294 B		568 B
Vanadium	45 7			7 4 B	10.3		10 7	9 2		15 7
Zinc	112			36 9	70 8		67 1	48 9		105
Total Phenol							2.8			
Hexavalent Chromium			0 33	0 42	0 1 N			1 5 N*		0 94

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

E - Response of the analyte is greater than the upper level of the calibration range

J - (Organic) Concentration < sample quantitation limit (SQL) but > zero

J - (Inorganic) Concentration reported as estimated because quality control criteria was not met

N - Spike sample recovery not within control limits

R - Data rejected due to holding time violation

* - Concentration detected from sample reanalysis

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
SEDIMENT: SS-3

Date	11/89	11/90	5/91	11/91	11/92	11/93	05/94	11/94	11/95	11/96 *
Compound										
VOLATILE (ppb)										
Acetone	27 B				110	170		94		
Benzene										
2-Butanone						27				
Chloroform	3 J					21				
Methylene chloride	69 B									
Tetrachloroethene								10 BJ		
Toluene		0 9 BJ								
SEMIVOLATILE (ppb)										
Phenol	270 J									
Benzyl Alcohol		32 J								
4-Methylphenol	86 J	35 J					760 J			
2,4-Dimethylphenol	97 J									
Benzoic acid	67 J	120 J				38 J	17 J			
Acenaphthylene						76 J				
Acenaphthene										
Diethylphthalate		49 J								
Fluorene										
Phenanthrene					160 J	270 J	190 J	190 J		
Anthracene								37 J		
Fluoranthene	65 J						440 J	320 J		
Pyrene	69 J					890 J		350 J		
Butylbenzyl phthalate										
Benzo (a) anthracene							190 J			
Chrysene						270 J	170 J			
bis (2-Ethylhexyl) phthalate	1200	96 J		200 BJ	690 J	230 J	1600			
Di-n-octyl phthalate										
Benzo (b) fluoranthene						500 J	270 J	270 J		
Benzo (k) fluoranthene								140 J		
Benzo (a) pyrene										
Indeno (1,2,3-cd) pyrene										
Dibenzo (a,h) anthracene										
Benzo (g,h,i) perylene										
PEST/PCB (ppb)										
beta-BHC							42 J			
gamma-BHC										
Aldrin		32 R	730 *							
Heptachlor epoxide	26									
Endosulfan I										
Endosulfan II										
Dieldrin										
4,4'-DDE										
Endrin										
4,4'-DDD					14 J					
4,4'-DDT										
Methoxychlor					46 J					
Endrin Ketone										
Aroclor - 1248				1900 D	720		1400 J	500		350
Aroclor - 1254		450 R	3700 *					240		190
METALS (ppm)										
Aluminum	7520	6430		6110	12100		10400	5240		13600
Antimony					5 3 B					
Arsenic	2 8 B	1 6		2.5	7 8		5 8 N	2 0 B		5 5
Barium	82 9	48		60	345		199	105		161
Beryllium										0 43 B
Cadmium		0 61								2 5
Calcium	3430	5450		7110	14800		7360	5230		4600
Chromium	0 7	6 7		10 7	18 1		14 3	7 7		173
Cobalt	6 B	4 9		4 9 B	9 0 B		7 5 B			6 4 B
Copper	54 3	24		33 9	52 7		14 1	6 4		27 9
Iron	13500	9890		10100	61200		41400	25200		19700
Lead	13 2	66		16.3	66 9		78	38 5		23 9 J
Magnesium	2170	2900		2580	4200		3220	2000		3060
Manganese	402	445		392	3290 N		2380	978		1620
Mercury		0 21								
Nickel		12		16	22 9		21 4	10 8		13 2
Potassium	259 B	724		733	1170 B		1060 8	506 B		1540
Selenium								2 6		
Silver					0.25 BN					
Sodium		144		298 B	938 B		804 B	785 B		978 B
Vanadium	22.6	12		13 6	38 5		29 4	13.6		28 5
Zinc	57 6	35		13 9	205		154	69 5		120
Total Phenol				0.61						10 3
Hexavalent Chromium		0 13 R	1 10	0.27			1 2 N*	4 3 N*		1 8

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals).

E - Response of the analyte is greater than the upper level of the calibration range

J - (Organic) Concentration < sample quantitation limit (SQL) but > zero

J - (Inorganic) Concentration reported as estimated because quality control criteria was not met

N - Spike sample recovery not within control limits

R - Data rejected due to holding time violation

* - Concentration detected from sample reanalysis

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
SEDIMENT: SS-4

Date	11/89	11/90	5/91	11/91	11/92	11/93	05/94	11/94	11/95	11/96
Compound										
VOLATILE (ppb)										
Acetone	47 B									
Benzene										
2-Butanone										
Chloroform	3 J									
Methylene chloride	69 B									
Tetrachloroethene										
Toluene										
SEMIVOLATILE (ppb)										
Phenol										
Benzyl Alcohol										
4-Methylphenol										
2,4-Dimethylphenol										
Benzoic acid										
Acenaphthylene										
Acenaphthene										
Diethylphthalate										
Fluorene										
Phenanthrene	86 J									
Anthracene										
Fluoranthene	170 J									
Pyrene	130 J									
Butylbenzyl phthalate										
Benzo (a) anthracene	78 J									
Chrysene	100 J									
bis (2-Ethylhexyl) phthalate	130 J									
Di-n-octyl phthalate										
Benzo (b) fluoranthene	96 J									
Benzo (k) fluoranthene										
Benzo (a) pyrene	87 J									
Indeno (1,2,3-cd) pyrene	55 J									
Dibenzo (a,h) anthracene										
Benzo (g,h,i) perylene										
PEST/PCB (ppb)										
beta-BHC										
gamma-BHC										
Aldrin										
Heptachlor epoxide			35							
Endosulfan I										
Endosulfan II										
Dieldrin										
4,4'-DDE			19							
Endrin										
4,4'-DDD										
4,4'-DDT										
Methoxychlor										
Endrin Ketone										
Aroclor - 1248										
Aroclor - 1254	410									
METALS (ppm)										
Aluminum	4990	10200								
Antimony										
Arsenic	4 3	2 6								
Barium	160	82								
Cadmium										
Calcium	3620	6900								
Chromium	6 8	12								
Cobalt	6 3 B	6 1								
Copper	25 7	24								
Iron	12900	16500								
Lead	22	88								
Magnesium	1980	2520								
Manganese	712	240								
Mercury										
Nickel		12								
Potassium	1140 B	1300								
Selenium										
Silver										
Sodium	634 B	511								
Vanadium	22 3	19								
Zinc	97	41								
Total Phenol										
Hexavalent Chromium		0 13 R	0 9							

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

E - Response of the analyte is greater than the upper level of the calibration range

J - (Organic) Concentration < sample quantitation limit (SQL) but > zero

J - (Inorganic) Concentration reported as estimated because quality control criteria was not met

N - Spike sample recovery not within control limits

R - Data rejected due to holding time violation

* - Concentration detected from sample reanalysis

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
SEDIMENT: SS-4A

Date	11/89	11/90	11/91	11/92	11/93	05/94	11/94	11/95	11/96
Compound									
VOLATILE (ppb)									
Acetone		11 BJ		41		11 J	28		
Benzene									
2-Butanone									
Chloroform				1 J					
Methylene chloride									
Tetrachloroethene							4 BJ		
Toluene		1 BJ							
SEMIVOLATILE (ppb)									
Phenol									
Benzyl Alcohol									
4-Methylphenol									
2,4-Dimethylphenol									
Benzoic acid		49 J							
Acenaphthylene									
Acenaphthene		58 J							
Diethylphthalate									
Fluorene									
Phenanthrene		510 J			70 J	89 J			
Anthracene		110 J							
Di-n-butylphthalate			1300 B	460 BJ					
Fluoranthene		2000				220 J	120 J		160 J
Pyrene		2500			120 J	200 J	110 J		
Butylbenzyl phthalate		40 J							
Benzo (a) anthracene		1400			84 J	110 J			
Chrysene		1100			80 J	120 J			
bis (2-Ethylhexyl) phthalate		100 J	260 BJ	510 J	210 J	460 J			
Di-n-octyl phthalate									
Benzo (b) fluoranthene		1900	47 J		100 J	160 J	120 J		
Benzo (k) fluoranthene		730					47 J		
Benzo (a) pyrene		1200			63 J		290 J		
Indeno (1,2,3-cd) pyrene		290 J			29 J				
Dibenzo (a,h) anthracene		73 J							
Benzo (g,h,i) perylene		220 J			23 J				
PEST/PCB (ppb)									
beta-BHC									
gamma-BHC									
Aldrin									
Heptachlor epoxide									
Endosulfan I									
Endosulfan II									
Dieldrin									
4,4'-DDE									
Endrin									
4,4'-DDD				7 J					
4,4'-DDT									
Methoxychlor									
Endrin Ketone									
Aroclor - 1248			1400 D	140 J			39 J		80
Aroclor - 1254									79
METALS (ppm)									
Aluminum		10200	9440	7110		13800	4120		6440
Antimony				1 3 B					
Arsenic		2 6	6 4	6 4		10 5 N	2 4		3 5
Barium		82	172	165		196	68 9		94 3
Beryllium									0 14 B
Cadmium		<0 67							0 95
Calcium		6900	14700	5100		5500	2880		5090
Chromium		12	15 1	11 3		15 9	5 3		9 6
Cobalt		6 1	7 7 B	5 2 B		8 4 B	2 9 B		3 5 B
Copper		24	41 6	35		18 7	2 9 B		16 9
Iron		16500	18700	14600		18900	8550		7710
Lead		88	53 5	32 1		54 2	18 7		24 6 J
Magnesium		2520	3960	2860		3720	1690		2240
Manganese		240	837	907 N		394	448		1190
Mercury							1 4		
Nickel		12	28 8	16 1		17 4	6 6		7 4
Potassium		1300	1180 B	755 B		1080 B	302 B		1230
Selenium							1 4		
Silver				0 11 BN		1 3			
Sodium		511		413 B		450 B	270 B		723 B
Thallium						0.77 BN			
Vanadium		19	21 7	18 8		26 7	8 5		14 4
Zinc		41	185	108		180	45 5		91 2
Total Phenol				4 7					6 4
Hexavalent Chromium		0 13 R	0 59	0 29 N		1 4 N*	0 46 N*		1 3

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

E - Response of the analyte is greater than the upper level of the calibration range

J - (Organic) Concentration < sample quantitation limit (SQL) but > zero

J - (Inorganic) Concentration reported as estimated because quality control criteria was not met

N - Spike sample recovery not within control limits

R - Data rejected due to holding time violation

* - Concentration detected from sample reanalysis

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
SEDIMENT: SS-4B

Date	11/89	11/90	11/91	11/92	11/93	05/94	11/94	11/95	11/96
Compound									
VOLATILE (ppb)									
Acetone		16 B							
Benzene		0.09 J							
2-Butanone									
Chloroform									
Methylene chloride									
Tetrachloroethene									
Toluene		1 BJ							
SEMIVOLATILE (ppb)									
Phenol		51 J							
Benzyl Alcohol									
4-Methylphenol		110 J							
2,4-Dimethylphenol									
Benzoic acid		88 J							
Acenaphthylene									
Acenaphthene									
Diethylphthalate									
Fluorene									
Phenanthrene		59 J							
Anthracene									
Fluoranthene		110 BJ							
Pyrene		110 J							
Butylbenzyl phthalate									
Benzo (a) anthracene		69 J							
Chrysene		57 J							
bis (2-Ethylhexyl) phthalate		100 BJ							
Di-n-octyl phthalate									
Benzo (b) fluoranthene		56 J							
Benzo (k) fluoranthene		39 J							
Benzo (a) pyrene		45 J							
Indeno (1,2,3-cd) pyrene									
Dibenzo (a,h) anthracene									
Benzo (g,h,i) perylene									
PEST/PCB (ppb)									
beta-BHC									
gamma-BHC									
Aldrin									
Heptachlor epoxide									
Endosulfan I									
Endosulfan II									
Dieldrin									
4,4'-DDE		41 R							
Endrin									
4,4'-DDD									
4,4'-DDT									
Methoxychlor									
Endrin Ketone									
Aroclor - 1248									
Aroclor - 1254									
METALS (ppm)									
Aluminum		5000							
Antimony									
Arsenic		5.6							
Barium		94							
Cadmium		0 62							
Calcium		5220							
Chromium		4.7							
Cobalt		3 9							
Copper		15							
Iron		89							
Lead		74							
Magnesium		2010							
Manganese		733							
Mercury		0 27							
Nickel		11							
Potassium		666							
Selenium									
Silver									
Sodium		301							
Vanadium		13							
Zinc		51							
Total Phenol									
Hexavalent Chromium		0 2 R							

Only detected results reported

B - Compound detected in associated blank (organic); compound < contract required detection limits (CRDL) (metals)

E - Response of the analyte is greater than the upper level of the calibration range.

J - (Organic) Concentration < sample quantitation limit (SQL) but > zero

J - (Inorganic) Concentration reported as estimated because quality control criteria was not met.

N - Spike sample recovery not within control limits.

R - Data rejected due to holding time violation

* - Concentration detected from sample reanalysis.

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
SEDIMENT: SS-5

Date	11/89	11/90	11/91	11/92	11/93	05/94	11/94	11/95	11/96
Compound									
VOLATILE (ppb)									
Acetone					110				
Benzene									
2-Butanone					0.8 J				
Chloroform					9				
Methylene chloride									
Tetrachloroethene							5 BJ		
Toluene									
SEMIVOLATILE (ppb)									
Phenol									
Benzyl Alcohol									
4-Methylphenol						190 J			
2,4-Dimethylphenol									
Benzoic acid						30 J			
Acenaphthylene					90 J				
Acenaphthene									
Diethylphthalate									
Fluorene									
Phenanthrene			130 J	97 J	320 J	240 J			140 J
Anthracene									
Fluoranthene			260 J		720	660 J	80 J		330 J
Pyrene			250 J		390 J	670 J	75 J		370 J
Butylbenzyl phthalate									
Benzo (a) anthracene			150 J		350 J	330 J			
Chrysene			130 J		390 J	390 J			
bis (2-Ethylhexyl) phthalate			790 B		330 J	370 J			170 J
Di-n-octyl phthalate									
Benzo (b) fluoranthene					430 J	690 J			250 J
Benzo (k) fluoranthene					180 J				93 J
Benzo (a) pyrene			110 J		310 J		380 J		
Indeno (1,2,3-cd) pyrene					140 J				
Dibenzo (a,h) anthracene					32 J				
Benzo (g,h,i) perylene					99 J				
PEST/PCB (ppb)									
beta-BHC									
gamma-BHC									
Aldrin									
Heptachlor epoxide									
Endosulfan I			15 J						
Endosulfan II						95 J			
Dieldrin			40				3.3 J		5.7 J
4,4'-DDE			9.5 J						4.2 J
Endrin						23 J			
4,4'-DDD						31 J			5.3 J
4,4'-DDT									
Methoxychlor									4.1 J
Endrin Ketone									
Aroclor - 1248				360					
Aroclor - 1254				280					
METALS (ppm)									
Aluminum			11000	6370		6230	6820		6820
Antimony				1.8 B					
Arsenic			6.8	2.8		4.2 N	5.2		12.2
Barium			2470	95.8		138	83.8		135
Beryllium									0.17 B
Cadmium									1.2
Calcium			18300 B	7240		9430	3520		5260
Chromium			17.8	8.8		11	8.3		9.8
Cobalt			7.3 B	6.7 B		4.7 B	4.5 B		4 B
Copper			54.2	28		28.6	9.1		23
Iron			17200	14600		12400	10800		8420
Lead			74.1	20.7		39.4	24.6		30.5 J
Magnesium			4410	3330		3740	2430		2160
Manganese			947	975 N		1440	332		1160
Mercury									0.07
Nickel			28.3	11.7		18.2	8.0		8.3
Potassium			1030	782 B		867 B	544 B		986
Selenium							2.1		
Silver				0.11 BN					
Sodium			564 B	255 B		398 B	288 B		870
Vanadium			24.4	14.6		15.2	12.9		14.8
Zinc			207	92		139	66.5		114
Total Phenol									6.6
Hexavalent Chromium			0.74	0.31 N		1.7 N*			0.58

Only detected results reported.

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

E - Response of the analyte is greater than the upper level of the calibration range.

J - (Organic) Concentration < sample quantitation limit (SQL) but > zero.

J - (Inorganic) Concentration reported as estimated because quality control criteria was not met.

N - Spike sample recovery not within control limits.

R - Data rejected due to holding time violation.

* - Concentration detected from sample reanalysis

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
LEACHATE: LCW-2

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	11/96	5/97
Compound																
VOLATILE (ppb)																
Acetone	5000			5100 BD	5800											
Benzene	1400			700 D	470 J											
2-Butanone	810			370 DJ												
Chlorobenzene	2900			1200 D	1000											
Chloroform	87 J			30 DJ	3900											
1,2-Dichloroethane	470			210 DJ												
1,1-Dichloroethylene					7500											
1,2-Dichloroethene (Total)	18000 E			12000 D												
Ethylbenzene	14000 E			8300 D												
Methylene chloride	1200 B															
Toluene	11000 E			8400 D												
Vinyl chloride	4000			980 DJ	500 J											
Xylenes (Total)	19000 E			17000 D	16000											
SEMIVOLATILE (ppb)																
Phenol	650				290											
1,2-Dichlorobenzene	120			110	69 J											
2-Methylphenol	60															
4-Methylphenol					1600											
2,4-Dimethylphenol	50			100												
Naphthalene	71			110	58 J											
N-Nitrosodiphenylamine				23												
Di-n-butylphthalate				0 65												
METALS (ppm)																
Aluminum	6812															
Arsenic	0.047															
Barium	0 849															
Calcium	259															
Iron	328															
Lead	0 035															
Magnesium	49.5															
Manganese	23 3															
Nickel	0.57															
Potassium	60.9															
Sodium	121															
Vanadium	0 019 B															
Zinc	0 033															

Only detected results reported
B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals).
D - Concentration determined from secondary dilution
E - The value exceeds the linear range of calibration
J - Concentration < sample quantitation limit (SQL) but > zero
- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
LEACHATE RESULTS

	LCW-1	LCW-2		LCW-4			SWW-3			SWW-3D*	SWW-11		
Date	11/90	5/91	11/91	11/90	5/91	11/91	11/90	5/91	11/91	5/91	11/90	5/91	11/91
Compound													
BOD	303	290	265	1850	2050	2040	2	9	18	3.7	29		2.1
COD	556	681	590	3210	3590	3460	50	130	171	132	305	19	35
TKN	31	60	60	170	2140	330	1.5	110	220	94	88	4	1.4
Total Phosphorus	0.024			0.52	0.18	0.26	0.26	0.1	0.19	0.31	2.6		0.27
TOC	218	272	278	1080	1530	1340	7.4	57	72	60	112	9.9	10
TSS	156	70	39	548	176	120	1480	122	520	299	4880	54	253
TDS	1970	2650	1570	6500	8300	6860	672	940	1120	900	1570	794	882

All results reported in ppm.

Only detected results reported.

* Duplicate

ATTACHMENT E

HISTORICAL MONITORING WELL ELEVATION DATA

SOURCES:

Summary Reports (5/90-5/96) Environmental Monitoring, PAS Site O&M (W.A. D002340-8), Site ID #7-38-001, URS Consultants, Inc.

Monthly Progress Report, PAS Site-Oswego, N.Y. - Interim Groundwater Removal, January 1997, de maximus, Inc.

URS Consultants, Inc.

PAS Site O & M

Historical Monitoring Well Elevation Data

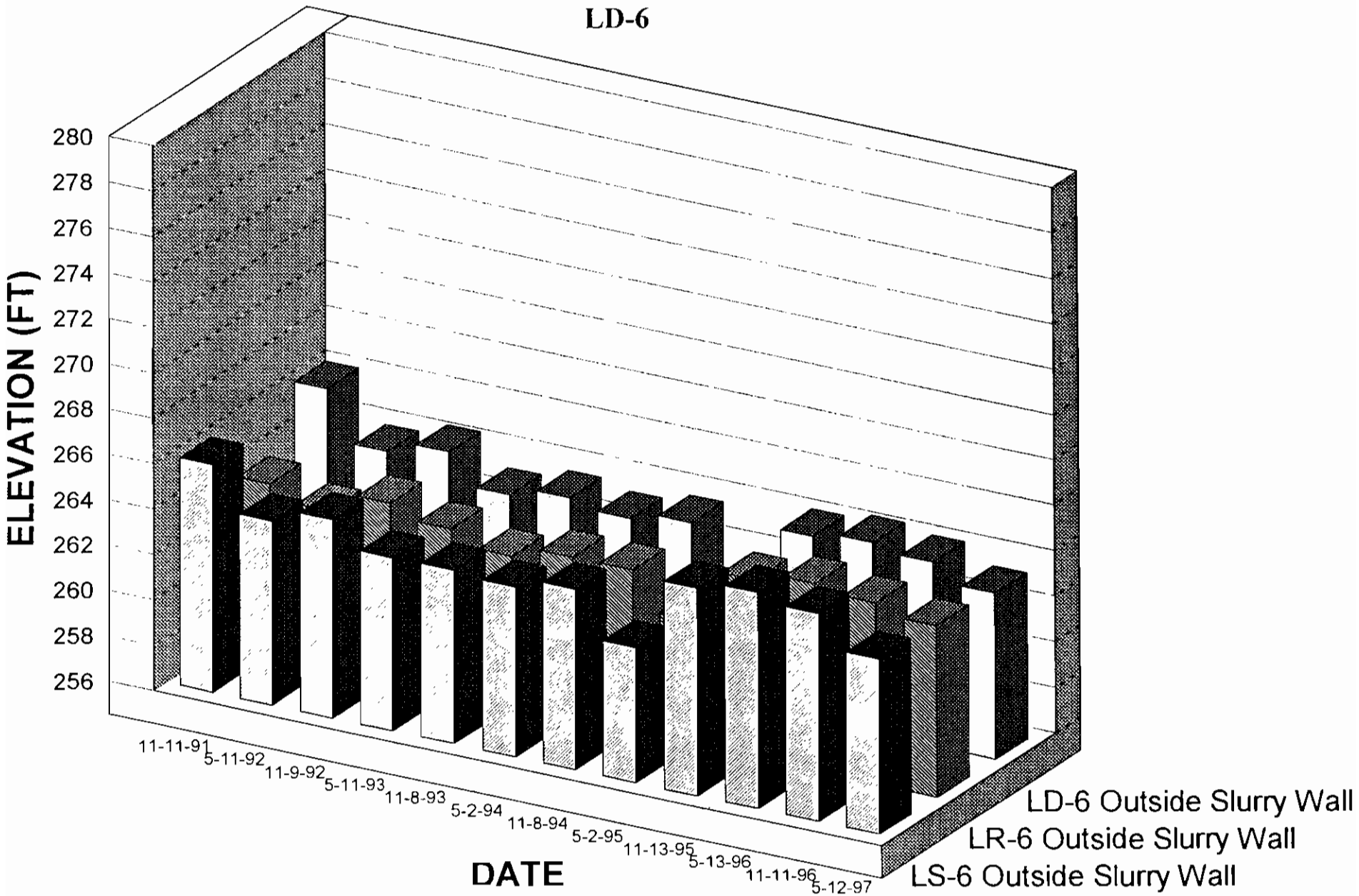
DATE	LS-6	LR-6	LD-6	SWW-3	SWW-4	SWW-5	SWW-6	SWW-11	SWW-12	LCW-1	LCW-2	LCW-3
11-11-91	266.00	263.49	266.03	269.84	268.85	267.03	266.64	262.08	265.99	N/M	267.00	N/M
5-11-92	264.08	262.88	263.82	271.46	268.93	264.53	264.70	N/M	N/M	N/M	N/M	N/M
11-9-92	264.72	263.79	264.38	271.65	269.60	264.47	264.92	265.23	264.37	N/M	N/M	N/M
5-11-93	263.60	263.22	263.05	270.21	268.10	265.42	264.38	265.52	264.07	N/M	N/M	N/M
11-8-93	263.63	262.61	263.49	269.51	268.57	262.87	264.15	263.20	263.22	N/M	N/M	N/M
5-2-94	263.46	263.14	263.16	269.69	268.01	262.61	263.94	263.44	263.90	259.15	258.35	265.28
11-8-94	263.91	263.13	263.53	269.18	269.38	264.49	265.06	263.36	263.30	N/M	N/M	N/M
5-2-95	261.92	261.51	261.55	267.92	266.28	261.14	262.58	261.98	262.48	N/M	N/M	N/M
11-13-95	265.11	263.85	264.06	269.22	271.34	262.32	265.08	262.54	264.26	N/M	N/M	N/M
5-13-96	265.51	264.23	264.35	269.70	271.45	262.37	265.04	263.25	264.50	N/M	N/M	N/M
11-11-96	265.14	263.94	264.06	269.17	270.80	262.19	265.06	262.56	264.03	N/M	N/M	N/M
5-12-97	263.72	263.52	263.28	269.58	268.01	262.42	264.18	263.37	264.02	N/M	N/M	N/M

N/M = Not Measured

URS Consultants, Inc.

PAS Site O & M

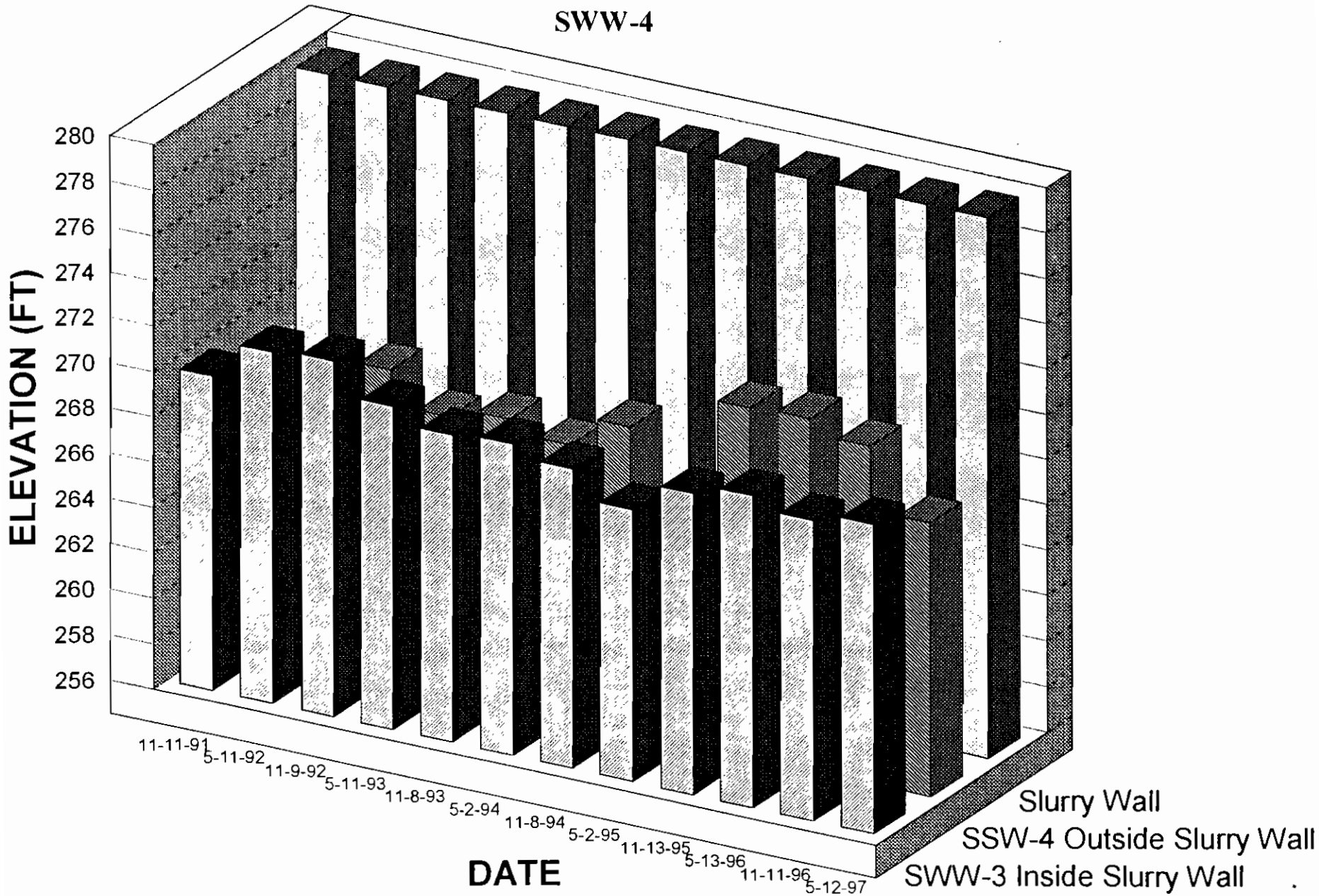
Historical Biannual Groundwater Elevation Data for LS-6, LR-6, & LD-6



URS Consultants, Inc.

PAS Site O & M

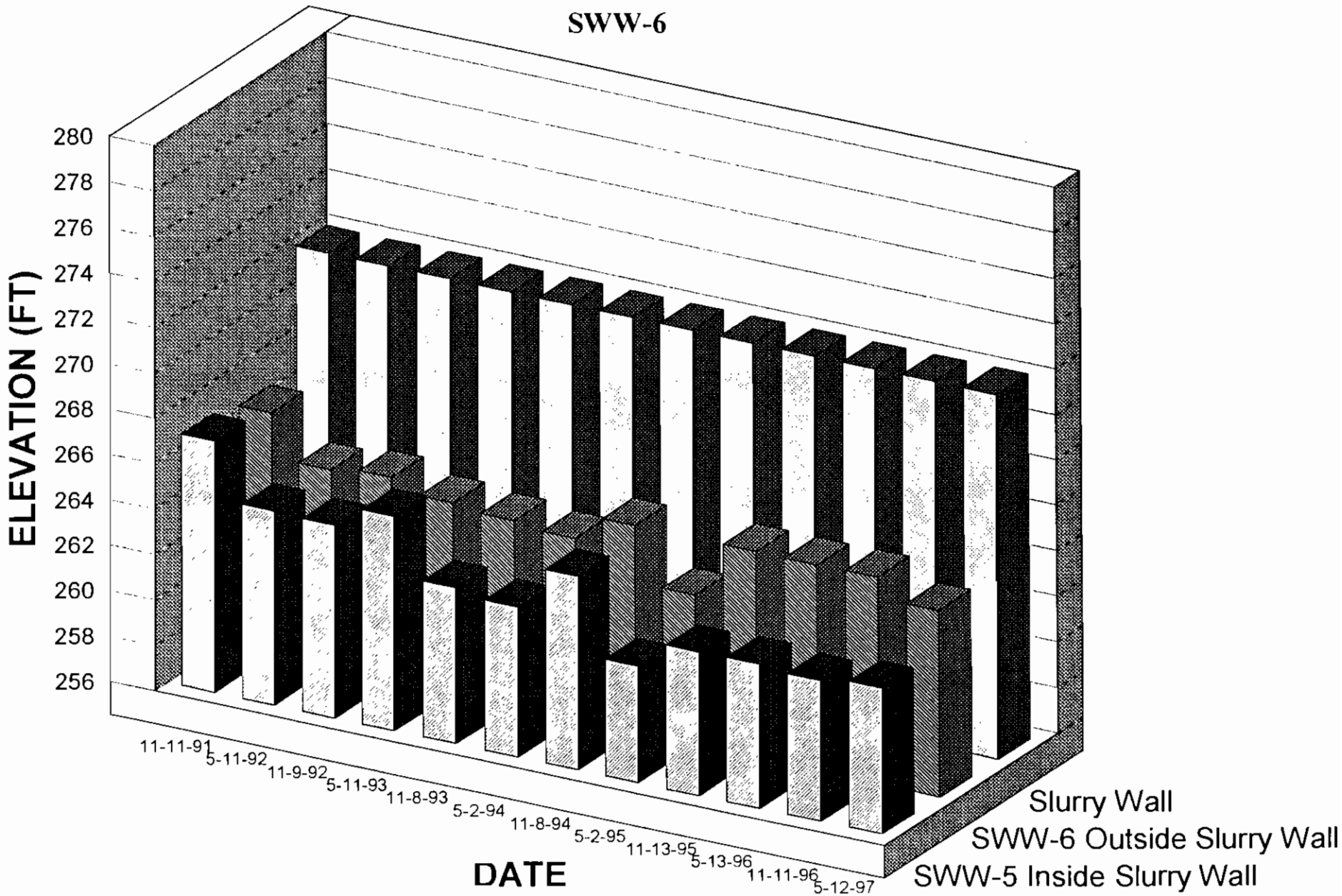
Historical Biannual Groundwater Elevation Data for SWW-3 & SWW-4



URS Consultants, Inc.

PAS Site O & M

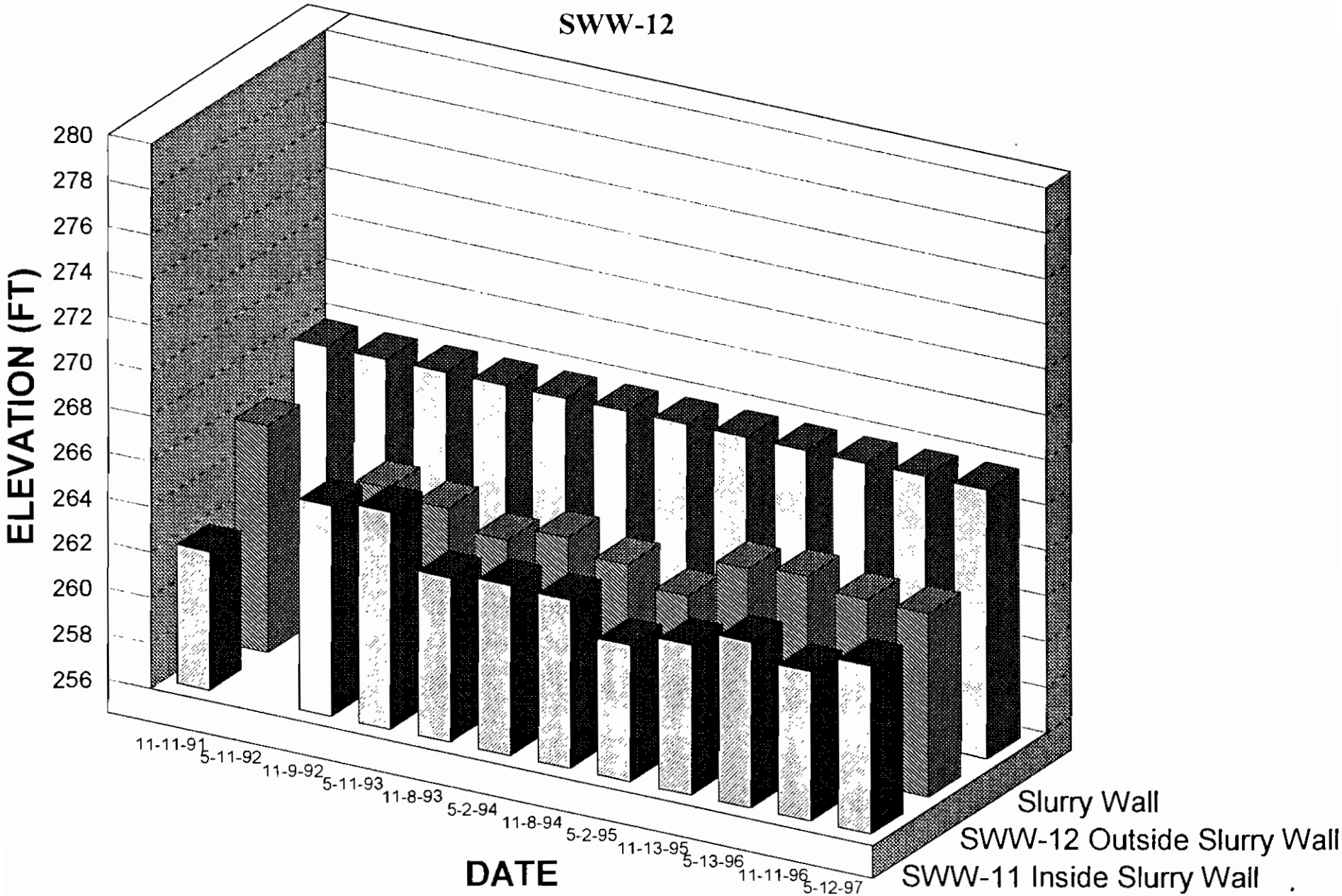
Historical Biannual Groundwater Elevation Data for SWW-5 & SWW-6



URS Consultants, Inc.

PAS Site O & M

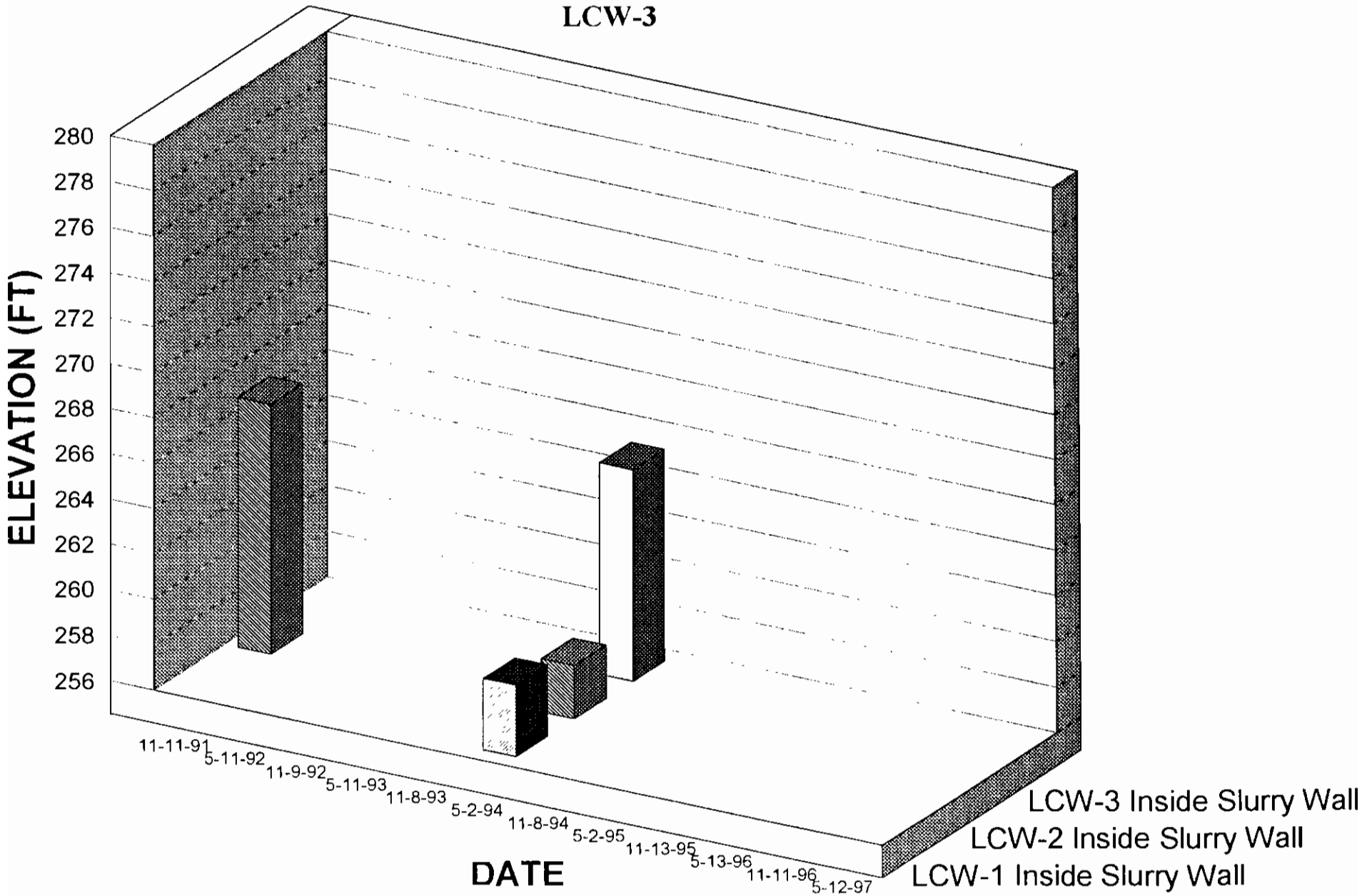
Historical Biannual Groundwater Elevation Data for SWW-11 & SWW-12



URS Consultants, Inc.

PAS Site O & M

Historical Biannual Groundwater Elevation Data for LCW-1, LCW-2, & LCW-3



Attachment 1E
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	SWW1	SWW2	SWW3	SWW4	SWW5	SWW6	SWW7	SWW8	SWW9	SWW10	SWW11	SWW12
11/21/94	12:00 PM	279.44	273.30	269.19	267.99	263.01	264.08	270.40	274.26	267.20	268.08	263.24	263.26
11/28/94	09:40 AM	279.46	273.36	269.19	267.92	263.04	264.41	270.59	274.54	267.29	267.97	263.17	263.66
12/05/94	10:00 AM	279.59	273.34	269.14	268.16	262.89	264.16	270.38	274.60	267.35	268.51	263.17	263.81
12/09/94	09:30 AM	279.94	273.32	269.17	269.39	262.71	264.58	270.39	274.37	267.52	269.97	263.01	263.96
12/19/94	09:50 AM	280.20	273.43	269.23	269.26	262.66	264.51	270.29	274.35	267.69	270.08	263.02	264.04
12/23/94	07:30 AM	280.20	273.51	269.29	269.06	262.75	264.47	270.47	274.22	267.79	269.85	263.04	263.90
01/03/95	07:30 AM	279.80	273.49	269.19	267.90	262.62	263.91	270.30	274.13	267.78	268.73	263.07	263.74
01/06/95	09:00 AM	279.66	273.49	269.18	267.82	262.61	263.89	270.37	274.08	267.81	268.64	262.96	263.65
01/16/95	09:50 AM	279.86	273.51	269.15	268.76	262.61	264.47	270.54	274.41	267.89	269.67	263.06	264.10
01/20/95	08:00 AM	280.05	273.61	269.23	269.22	262.75	264.71	270.82	274.40	268.01	270.12	263.14	264.09
02/06/95	10:15 AM	279.84	273.65	269.24	267.97	262.62	263.98	270.47	274.09	268.00	268.93	263.22	263.69
02/21/95	10:15 AM	279.55	273.55	269.15	267.61	262.61	264.10	270.58	274.26	267.93	268.33	263.15	263.91
02/24/95	08:00 AM	279.69	273.58	269.13	267.65	262.56	264.05	270.61	274.32	267.95	268.64	263.05	263.95
03/06/95	09:30 AM	279.81	273.54	269.10	268.14	262.56	264.41	270.66	274.54	268.02	269.69	263.15	264.21
03/10/95	08:30 AM	280.55	273.50	269.14	269.98	262.35	264.71	270.53	274.44	268.09	270.18	262.95	264.23
03/20/95	06:00 AM	280.72	273.72	269.42	269.67	262.71	264.77	271.01	274.46	268.30	270.11	263.27	264.19
03/24/95	06:30 AM	280.60	273.69	269.41	269.15	262.55	264.39	270.83	274.31	268.30	269.84	263.11	264.03
04/03/95	08:25 AM	280.02	273.74	269.35	268.04	262.45	263.96	270.65	274.08	268.32	268.80	263.20	263.82
04/07/95	05:00 PM	279.72	273.62	269.26	267.57	262.24	263.72	270.43	274.18	268.24	268.23	263.02	263.80
04/17/95	11:15 AM	279.94	273.77	269.30	268.44	262.42	264.19	270.72	274.23	268.38	269.43	263.20	264.00
04/21/95	09:55 AM	279.85	273.87	269.37	268.26	262.57	264.22	270.93	274.28	268.45	269.28	263.26	264.01
05/15/95	08:00 AM	278.90	273.47	269.08	266.81	262.25	263.26	270.14	273.45	267.78	266.56	262.91	262.15
06/05/95	03:00 PM	278.99	273.55	269.14	267.10	262.50	263.64	270.44	273.81	267.90	266.79	263.24	262.70
06/09/95	06:30 AM	278.90	273.47	269.08	266.81	262.25	263.26	270.14	273.45	267.78	266.56	262.91	262.15
06/19/95	07:30 AM	278.87	273.43	269.10	266.77	262.43	263.43	270.18	272.69	267.70	266.20	262.94	261.50
06/23/95	08:15 AM	278.78	273.34	269.04	266.61	262.29	263.20	270.02	272.20	267.57	265.97	262.72	261.03
07/03/95	07:40 AM	278.58	273.20	268.99	266.49	262.26	263.15	269.82	271.36	267.36	265.44	262.61	260.08

Attachment 1E
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	SWW1	SWW2	SWW3	SWW4	SWW5	SWW6	SWW7	SWW8	SWW9	SWW10	SWW11	SWW12
07/07/95	06:55 AM	278.57	273.16	268.99	266.50	262.30	263.21	269.82	271.10	267.30	265.28	262.50	259.73
07/17/95	09:30 AM	278.43	273.03	269.00	266.53	262.31	263.21	269.72	270.50	267.07	264.75	262.39	259.12
07/21/95	07:00 AM	278.34	272.96	268.98	266.44	262.21	263.09	269.58	270.26	266.95	264.53	262.25	258.83
08/07/95	09:00 AM	278.41	272.83	269.05	266.65	262.36	263.21	269.50	269.87	266.71	263.98	262.49	258.90
08/11/95	07:20 AM	278.33	272.82	269.05	266.46	262.46	263.26	269.41	269.76	266.57	263.83	262.10	258.59
08/21/95	06:00 AM	278.20	272.72	268.92	266.42	262.32	263.15	269.30	270.08	266.33	263.43	261.90	258.19
08/25/95	07:35 AM	278.13	272.66	268.89	266.22	262.10	262.52	269.16	269.24	266.23	263.19	261.95	257.96
09/05/95	07:30 AM	278.07	272.57	268.93	266.36	262.14	262.88	269.06	268.73	266.00	262.75	261.82	258.00
09/08/95	07:00 AM	278.13	272.56	269.00	266.39	262.08	262.86	269.03	268.79	265.94	262.69	261.88	257.97
09/18/95	07:30 AM	278.21	272.44	268.83	266.37	262.10	262.96	268.92	268.68	265.81	262.60	261.74	258.41
09/22/95	07:50 AM	278.31	272.45	268.88	266.69	262.33	263.32	269.04	268.67	265.76	262.59	261.74	258.48
10/09/95	08:00 AM	278.93	272.26	268.77	267.40	262.11	263.89	269.09	271.68	265.61	263.43	261.77	259.62
10/13/95	08:00 AM	278.90	272.43	268.95	267.58	262.47	263.73	269.23	271.24	265.63	264.13	261.80	260.37
10/23/95	10:30 AM	280.17	272.57	268.96	270.46	262.17	264.88	269.83	274.14	266.10	268.83	262.17	263.67
10/27/95	08:00 AM	280.17	272.72	269.11	269.50	262.48	264.78	270.03	274.45	266.40	269.02	262.31	263.54
11/06/95	08:00 AM	279.98	272.92	269.02	268.85	262.30	264.50	269.97	274.30	266.72	269.32	262.50	263.83
11/10/95	08:30 AM	280.23	272.99	269.27	269.77	262.47	264.81	270.05	274.43	266.91	270.18	262.50	264.06
11/20/95	06:40 AM	281.20	273.22	269.50	270.95	262.57	265.06	270.25	275.36	267.41	270.73	262.74	264.37
11/24/95	07:30 AM	281.33	273.21	269.50	271.30	262.46	264.96	270.10	274.41	267.55	270.61	262.55	264.05
12/04/95	07:30 AM	280.93	273.42	269.56	269.79	262.60	264.63	270.19	274.41	267.83	270.28	262.77	264.00
12/08/95	07:40 AM	280.71	273.32	269.56	269.29	262.38	264.46	269.96	274.12	267.77	269.65	262.60	263.72
12/18/95	07:30 AM	280.28	273.32	269.42	268.36	262.37	264.38	270.22	274.35	267.93	269.19	262.77	263.95
12/22/95	07:30 AM	280.24	273.47	269.32	268.39	262.52	264.24	270.21	274.61	268.03	269.08	262.74	263.76
01/08/96	07:50 AM	279.84	273.43	269.30	268.13	262.60	264.30	270.38	274.24	268.16	268.92	263.01	263.92
01/12/96	07:50 AM	279.74	273.44	269.50	268.04	262.54	264.16	270.33	274.28	268.15	268.83	262.86	263.82
01/22/96	07:30 AM	281.43	273.44	269.50	271.15	262.49	265.06	270.38	274.51	268.22	270.75	262.95	264.28
01/26/96	07:55 AM	281.31	273.49	269.58	271.17	262.46	265.06	270.43	274.40	268.44	270.85	262.82	264.25

Attachment 1E
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	SWW1	SWW2	SWW3	SWW4	SWW5	SWW6	SWW7	SWW8	SWW9	SWW10	SWW11	SWW12
02/05/96	09:05 AM	280.53	273.54	269.50	268.70	262.52	264.31	270.35	274.51	268.35	269.41	262.97	263.92
02/09/96	09:40 AM	280.47	273.67	269.50	268.77	262.57	264.56	270.68	274.85	268.55	269.50	262.96	264.24
02/19/96	09:10 AM	280.24	273.52	269.48	268.47	262.27	264.01	270.22	274.04	268.42	269.25	262.87	263.66
02/23/96	08:40 AM	280.90	273.61	269.54	270.26	262.49	265.01	270.54	274.73	268.62	270.62	262.97	264.37
03/11/96	07:30 AM	280.08	273.48	269.41	268.15	262.27	264.06	270.36	274.12	268.55	269.1	263.04	263.72
03/15/96	08:00 AM	280.19	273.72	269.61	268.3	262.59	264.4	270.69	274.77	268.71	269.35	263.12	264.27
03/25/96	09:05 AM	280.80	273.77	269.60	269.27	262.62	264.60	270.82	274.66	268.83	270.08	263.22	264.34
03/29/96	09:00 AM	280.76	273.72	269.48	269.37	262.42	264.45	270.72	274.41	268.81	270.14	263.1	264.05
04/08/96	09:00 AM	280.15	273.76	269.46	268.42	262.36	264.01	270.58	274.28	268.76	268.94	263.14	263.91
04/12/96	08:30 AM	280.11	273.81	269.46	268.55	262.51	264.31	270.73	274.44	268.78	269.07	263.07	263.95
04/22/96	10:15 AM	280.50	273.89	269.70	269.33	262.40	264.44	270.75	274.47	268.89	270.19	263.16	264.17
04/26/96	09:30 AM	280.90	274.07	269.82	270.55	262.69	265.10	270.96	274.63	268.99	270.83	263.30	264.40
05/06/96	09:10 AM	280.71	274.05	269.55	269.28	262.48	264.51	270.70	274.41	268.94	270.09	263.26	264.07
05/10/96	09:00 AM	280.46	274.14	269.71	268.75	262.63	264.40	270.91	274.57	268.98	269.65	263.29	264.07
05/20/96	08:40 AM	280.61	274.25	269.85	269.03	262.60	264.60	271.03	274.48	269.10	269.69	263.36	263.87
05/24/96	09:05 AM	280.70	274.08	269.75	269.27	262.45	264.58	270.81	274.45	269.04	270.38	263.20	264.20
06/03/96	08:50 AM	280.13	274.07	269.76	268.00	262.61	264.11	270.63	273.97	269.02	268.67	263.34	263.30
06/07/96	08:20 AM	280.13	274.08	269.88	267.70	262.56	263.96	270.65	274.16	268.99	268.29	263.25	262.92
06/17/96	09:00 AM	279.69	274.06	269.95	267.49	262.54	264.05	270.54	273.82	268.79	267.96	263.24	262.97
06/21/96	09:30 AM	279.62	274.00	269.70	267.60	262.47	264.10	270.73	274.56	268.77	267.91	263.23	263.13
07/08/96	07:30 AM	279.39	273.95	269.56	268.19	262.60	263.96	270.70	273.91	268.72	267.65	263.36	262.27
07/12/96	09:00 AM	279.25	273.82	269.52	267.20	262.39	263.69	270.39	273.58	268.52	267.40	263.05	261.77
07/22/96	09:50 AM	279.41	273.83	269.60	268.20	262.61	264.03	271.01	274.76	268.50	267.54	263.13	262.55
07/26/96	08:30 AM	279.28	273.81	269.67	268.05	262.52	263.83	270.40	273.92	268.40	267.52	262.96	261.96
08/05/96	08:50 AM	279.17	273.71	269.50	267.20	262.62	263.56	270.18	273.73	268.17	267.58	262.92	261.30
08/09/96	09:00 AM	279.16	273.72	269.43	267.36	262.44	263.83	270.40	274.31	268.33	266.77	262.83	261.32
08/19/96	09:15 AM	278.99	273.58	269.47	267.05	262.35	263.44	270.06	273.49	267.94	266.46	262.72	260.52

Attachment 1E
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	SWW1	SWW2	SWW3	SWW4	SWW5	SWW6	SWW7	SWW8	SWW9	SWW10	SWW11	SWW12
08/23/96	08:50 AM	279.03	273.60	269.45	266.91	262.41	263.53	270.66	273.00	267.95	266.24	262.65	260.22
09/03/96	09:00 AM	278.85	273.45	269.40	266.70	261.21	263.33	269.93	272.01	267.70	266.09	262.52	259.39
09/06/96	09:30 AM	278.80	273.37	269.39	267.17	262.20	263.44	269.88	272.09	267.63	265.71	262.39	259.32
09/16/96	09:00 AM	278.77	273.30	269.34	266.87	262.20	263.43	269.89	272.13	267.36	265.48	262.34	259.63
09/20/96	08:50 AM	278.80	273.24	269.25	266.86	262.39	263.45	269.79	272.19	267.41	265.36	262.25	259.62
10/07/96	09:00 AM	278.99	273.21	269.19	266.93	262.53	263.66	269.86	272.81	267.07	265.23	262.44	260.56
10/11/96	07:50 AM	278.89	273.10	269.06	266.81	262.16	263.26	269.76	272.94	266.94	265.25	262.12	260.36
10/21/96	09:00 AM	279.42	273.12	269.02	267.65	262.10	264.07	269.83	274.34	266.83	265.87	262.24	261.32
10/25/96	07:55 AM	279.49	273.14	269.07	267.97	262.20	264.16	269.95	274.24	266.92	267.28	262.23	261.82
11/04/96	08:50 AM	279.19	273.11	269.05	267.58	262.15	263.57	269.78	274.11	267.00	267.35	262.36	262.05
11/08/96	09:00 AM	279.33	273.22	269.24	267.73	262.27	263.91	270.07	274.78	267.44	267.44	262.48	262.64
11/18/96	09:15 AM	280.69	273.30	269.39	269.66	262.50	264.88	270.27	274.58	267.70	270.22	262.82	264.08
11/22/96	09:00 AM	280.78	273.25	269.45	270.20	262.48	264.75	270.19	274.54	267.81	270.43	262.67	264.10
12/02/96	09:00 AM	280.91	273.40	269.44	270.88	262.57	265.16	270.29	274.86	268.07	270.87	262.87	264.53
12/06/96	09:15 AM	280.87	273.42	269.52	270.09	262.67	264.91	270.39	274.71	268.17	270.58	262.86	264.17
12/16/96	09:15 AM	280.93	273.46	269.50	270.40	262.54	265.01	270.43	274.64	268.46	270.83	263.09	264.30
12/20/96	09:00 AM	280.55	273.47	269.58	269.22	262.50	264.38	270.29	274.61	268.27	270.06	262.83	263.85
01/06/97	07:30 AM	280.76	273.64	269.63	269.97	262.67	264.83	270.79	274.70	268.60	270.64	263.13	264.32
01/10/97	08:00 AM	280.62	273.74	269.66	269.49	262.82	264.91	270.71	274.73	268.65	270.31	263.20	264.25
01/20/97	07:30 AM	280.04	273.62	269.45	268.26	262.49	264.19	270.48	274.33	268.60	269.08	263.09	263.92
01/24/97	07:45 AM	280.28	273.48	269.50	269.22	262.29	264.56	270.35	274.66	268.47	269.97	262.93	264.41

Notes:
1. Monitoring well elevations in feet above mean sea level.

Attachment 1F
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	LCW1	LCW2	LCW3	LCW4
11/21/94	12:00 PM	261.45	261.44	265.96	265.37
11/28/94	09:40 AM	260.59	260.58	266.30	264.77
12/05/94	10:00 AM	261.31	261.30	266.06	265.28
12/09/94	09:30 AM	259.94	258.53	265.80	263.97
12/19/94	09:50 AM	260.80	260.78	265.71	264.89
12/23/94	07:30 AM	259.94	258.94	265.66	264.09
01/03/95	07:30 AM	260.93	260.94	265.55	265.07
01/06/95	09:00 AM	259.63	258.01	265.97	262.94
01/16/95	09:50 AM	260.51	260.50	265.73	264.17
01/20/95	08:00 AM	259.69	258.21	265.40	263.40
02/06/95	10:00 AM	261.23	261.25	265.37	265.07
02/10/95	09:00 AM	259.69	258.13	265.31	263.29
02/21/95	10:15 AM	260.66	260.65	265.27	264.51
02/24/95	08:00 AM	259.76	258.24	265.25	263.58
03/06/95	09:30 AM	260.57	260.56	265.18	264.59
03/10/95	08:30 AM	259.55	257.92	265.24	262.68
03/20/95	06:00 AM	260.51	260.50	265.27	264.03
03/24/95	06:30 AM	259.66	258.09	265.26	263.23
04/03/95	08:25 AM	260.55	260.54	265.23	264.38
04/07/95	05:00 PM	260.03	258.88	265.32	263.47
04/17/95	11:15 AM	260.51	260.49	265.26	264.28
04/21/95	09:15 AM	259.69	258.17	265.46	263.37
05/01/95	02:30 PM	260.54	260.52	265.26	264.44
05/05/95	09:15 AM	259.77	257.89	265.81	262.52
05/15/95	12:30 PM	260.54	260.53	265.55	263.96
05/19/95	08:00 AM	259.61	257.99	265.25	262.89
06/05/95	03:00 PM	261.15	261.13	265.10	264.76
06/09/95	06:30 AM	259.62	258.14	265.22	263.20
06/19/95	07:30 AM	260.46	260.44	265.11	264.30
06/23/95	08:15 AM	259.82	258.68	265.40	263.63
07/03/95	07:40 AM	260.51	260.52	265.21	264.60
07/07/95	06:55 AM	259.37	257.84	265.11	262.68
07/17/95	09:30 AM	260.19	260.16	265.02	263.97
07/21/95	07:00 AM	259.41	258.00	265.15	263.05
08/07/95	09:00 AM	260.76	260.84	264.98	264.79
08/11/95	07:20 AM	259.46	258.00	265.12	262.93
08/21/95	06:00 AM	260.10	260.08	264.96	264.02
08/25/95	07:35 AM	259.28	257.79	264.99	262.76
09/05/95	07:30 AM	260.03	260.03	264.91	264.10

Attachment-1F
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	LCW1	LCW2	LCW3	LCW4
09/08/95	07:00 AM	259.34	257.87	265.10	263.51
09/18/95	07:30 AM	259.99	259.98	264.93	263.70
09/22/95	07:50 AM	259.24	257.81	265.11	262.78
10/09/95	08:00 AM	260.47	260.46	264.89	264.32
10/13/95	08:00 AM	259.25	257.79	265.12	262.25
10/23/95	10:30 AM	260.08	260.05	265.03	263.70
10/27/95	08:00 AM	259.26	257.79	265.15	262.14
11/06/95	08:00 AM	260.11	260.14	265.12	263.55
11/10/95	08:30 AM	259.37	257.94	265.15	262.26
11/20/95	06:40 AM	260.30	260.26	265.20	263.54
11/24/95	07:30 AM	259.52	257.87	265.42	262.57
12/04/95	07:30 AM	260.33	260.33	265.39	263.70
12/08/95	07:40 AM	259.34	257.77	264.97	262.46
12/18/95	07:30 AM	260.15	260.22	265.10	263.52
12/22/95	07:30 AM	259.50	257.95	265.00	262.02
01/08/96	07:50 AM	261.01	260.89	265.16	264.22
01/12/96	07:50 AM	259.41	257.79	265.16	262.09
01/22/96	07:30 AM	260.42	260.44	265.15	263.80
01/26/96	07:55 AM	259.47	257.87	265.36	262.32
02/05/96	09:05 AM	260.36	260.03	265.29	263.52
02/09/96	09:40 AM	259.57	257.67	264.96	261.78
02/19/96	09:10 AM	260.27	260.25	265.06	263.42
02/23/96	08:40 AM	259.61	257.85	265.22	262.34
03/11/96	07:30 AM	260.10	260.99	265.22	264.34
03/15/96	08:00 AM	259.62	258.04	265.21	262.60
03/25/96	09:05 AM	260.52	260.46	265.16	263.96
03/29/96	09:00 AM	259.58	257.92	265.36	262.89
04/08/96	09:00 AM	260.41	260.40	265.22	264.10
04/12/96	08:30 AM	257.93	255.56	265.05	260.47
04/22/96	10:15 AM	260.08	259.95	265.20	263.02
04/26/96	09:30 AM	259.86	258.67	265.57	262.89
05/06/96	09:10 AM	260.51	260.50	265.42	264.06
05/10/96	09:00 AM	259.56	257.95	265.42	263.09
05/20/96	08:40 AM	260.40	260.44	265.41	263.94
05/24/96	09:05 AM	259.71	258.27	265.17	263.36
06/03/96	08:50 AM	260.63	260.60	265.45	264.46
06/07/96	08:20 AM	259.55	257.99	265.14	262.90
06/17/96	09:00 AM	260.36	260.49	265.14	264.19
06/21/96	09:30 AM	259.64	258.20	265.26	263.29

Attachment 1F
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	LCW1	LCW2	LCW3	LCW4
07/08/96	07:30 AM	260.25	261.27	265.08	265.02
07/12/96	09:00 AM	259.70	258.33	265.45	263.42
07/22/96	09:50 AM	260.60	260.59	265.29	264.67
07/26/96	08:30 AM	260.20	258.65	265.27	263.87
08/05/96	08:50 AM	260.63	260.56	265.19	264.85
08/09/96	09:00 AM	259.45	257.88	265.11	262.76
08/19/96	09:15 AM	260.30	260.28	265.03	264.11
08/23/96	08:50 AM	260.18	257.90	265.21	263.47
09/03/96	09:00 AM	260.41	260.29	265.07	264.32
09/06/96	09:30 AM	259.34	257.79	264.89	262.58
09/16/96	09:00 AM	260.08	260.08	264.79	264.04
09/20/96	08:50 AM	259.37	257.80	265.12	262.82
10/07/96	09:00 AM	260.66	260.64	264.87	264.62
10/11/96	07:50 AM	259.26	257.70	265.26	262.46
10/21/96	09:00 AM	260.05	260.04	265.02	263.70
10/25/96	07:55 AM	259.31	257.83	265.21	262.41
11/04/96	08:50 AM	260.16	260.14	265.08	263.76
11/08/96	09:00 AM	259.37	257.81	265.04	262.38
11/18/96	09:15 AM	260.28	260.28	265.21	263.54
11/22/96	09:00 AM	259.46	257.96	265.29	262.62
12/02/96	09:00 AM	260.35	260.35	265.22	264.00
12/06/96	09:15 AM	259.58	257.84	264.83	262.26
12/16/96	09:15 AM	260.31	260.28	265.09	263.79
12/20/96	09:00 AM	259.87	257.89	265.33	262.55
01/06/97	07:30 AM	261.08	261.05	265.29	264.52
01/10/97	08:00 AM	259.61	257.94	265.46	262.70
01/20/97	07:30 AM	260.44	260.40	265.31	263.93
01/24/97	07:45 AM	259.57	263.99	265.45	262.96

Notes:

1. Monitoring well elevations in feet above mean sea level.

Attachment 1G
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	M-21	M-22	M-23	M-24	M-25	M-26
11/21/94	12:00 PM	260.99	262.14	257.84	260.71	257.14	259.50
11/28/94	09:40 AM	261.04	262.30	258.12	260.79	257.28	256.54
12/05/94	10:00 AM	261.15	262.38	258.42	261.05	257.52	261.20
12/09/94	09:30 AM	261.71	262.64	258.47	261.86	258.19	263.28
12/19/94	09:50 AM	261.55	262.73	258.46	261.60	258.00	263.08
12/23/94	07:30 AM	261.63	262.65	258.23	261.61	257.84	262.95
01/03/95	07:30 AM	261.19	262.42	257.91	261.12	257.31	260.98
01/06/95	09:00 AM	261.16	262.27	257.76	261.01	257.21	260.81
01/16/95	09:50 AM	261.62	262.78	258.62	261.52	257.98	262.69
01/20/95	08:00 AM	261.88	262.78	258.39	261.78	257.99	263.12
02/06/95	10:00 AM	261.61	262.58	258.02	261.53	257.50	262.02
02/10/95	09:00 AM	261.50	262.47	257.95	261.40	257.36	261.35
02/21/95	10:15 AM	261.52	262.68	258.41	261.61	257.95	260.71
02/24/95	08:00 AM	261.62	262.69	258.47	261.72	258.24	261.15
03/06/95	09:30 AM	261.94	262.90	258.83	262.24	258.89	262.48
03/10/95	08:30 AM	263.64	263.46	259.37	264.97	260.47	266.44
03/20/95	06:00 AM	262.86	263.21	258.81	263.94	259.48	264.54
03/24/95	06:30 AM	262.57	263.06	258.65	263.42	259.13	263.95
04/03/95	08:25 AM	262.00	262.63	258.15	262.88	258.49	262.37
04/07/95	05:00 PM	261.67	262.57	258.17	262.25	258.31	261.13
04/17/95	11:15 AM	262.06	262.75	258.35	262.68	258.67	262.87
04/21/95	09:15 AM	262.05	262.70	258.21	262.76	258.50	262.48
05/01/95	02:30 PM	261.62	262.44	257.95	262.41	258.19	260.88
05/05/95	09:15 AM	261.55	262.38	257.86	262.24	258.11	260.37
05/15/95	12:30 PM	261.35	262.34	---	---	---	---
05/19/95	08:00 AM	261.33	262.28	---	---	---	---
06/05/95	03:00 PM	261.12	262.16	---	---	---	---
06/09/95	06:30 AM	260.94	261.97	---	---	---	---
06/19/95	07:30 AM	260.84	261.61	257.79	261.23	257.94	257.97
06/23/95	08:15 AM	260.70	261.33	257.75	261.23	257.87	257.75
07/03/95	07:40 AM	260.53	261.25	257.69	261.05	257.71	257.62
07/07/95	06:55 AM	260.47	261.11	257.68	261.05	257.67	257.56
07/17/95	09:30 AM	260.46	261.15	257.96	261.06	257.71	257.36
07/21/95	07:00 AM	260.39	260.93	257.86	261.01	257.71	257.22
08/07/95	09:00 AM	260.42	261.38	258.13	261.06	257.94	257.75
08/11/95	07:20 AM	260.39	261.03	258.09	261.06	257.89	257.75
08/21/95	06:00 AM	260.29	260.95	258.04	260.94	257.64	257.51
08/25/95	07:35 AM	260.11	260.55	257.89	260.92	257.57	257.38
09/05/95	07:30 AM	260.31	260.92	258.36	260.94	257.93	257.72

Attachment 1G
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	M-21	M-22	M-23	M-24	M-25	M-26
09/08/95	07:00 AM	260.31	261.10	258.49	260.97	257.99	257.60
09/18/95	07:30 AM	260.34	261.17	258.69	260.99	258.19	257.96
09/22/95	07:50 AM	260.45	261.22	258.72	261.05	258.22	257.95
10/09/95	08:00 AM	260.96	261.95	259.25	261.59	258.93	260.79
10/13/95	08:00 AM	260.92	261.88	259.14	261.33	258.84	259.27
10/23/95	10:30 AM	262.57	263.11	259.97	264.78	260.47	265.65
10/27/95	08:00 AM	262.19	262.88	259.52	263.04	259.55	264.13
11/06/95	08:00 AM	262.14	262.97	259.79	262.81	259.74	263.43
11/10/95	08:30 AM	262.57	263.14	259.88	263.84	260.01	264.38
11/20/95	06:40 AM	263.84	263.63	260.39	265.19	260.90	266.64
11/24/95	07:30 AM	263.68	263.54	260.27	265.11	260.71	266.38
12/04/95	07:30 AM	263.14	263.35	260.01	264.43	260.05	264.98
12/08/95	07:40 AM	262.77	263.11	259.72	263.79	259.74	264.28
12/18/95	07:30 AM	262.48	263.15	259.71	263.01	259.55	263.08
12/22/95	07:30 AM	262.47	263.17	259.60	263.03	259.48	263.07
01/08/96	07:50 AM	262.27	262.97	259.51	262.73	259.38	262.25
01/12/96	07:50 AM	262.21	262.88	259.58	262.64	259.35	262.03
01/22/96	07:30 AM	264.42	263.71	260.09	268.31	261.49	268.21
01/26/96	07:55 AM	264.20	263.63	259.97	267.83	261.12	267.55
02/05/96	09:05 AM	262.74	263.02	259.11	263.59	259.54	264.45
02/09/96	09:40 AM	262.75	263.28	259.63	263.63	259.77	263.98
02/19/96	09:10 AM	262.46	263.02	258.96	263.45	259.28	263.68
02/23/96	08:40 AM	263.64	263.66	259.88	265.21	260.49	265.98
03/11/96	07:30 AM	262.37	262.91	259.00	263.22	259.27	263.02
03/15/96	08:00 AM	262.61	263.21	259.49	263.50	259.62	263.08
03/25/96	09:05 AM	263.16	263.38	259.59	264.58	260.01	264.88
03/29/96	09:00 AM	263.02	263.32	259.44	264.15	259.82	264.36
04/08/96	09:00 AM	262.43	263.15	259.16	263.23	259.31	262.79
04/12/96	08:30 AM	262.39	263.15	259.18	263.17	259.27	262.59
04/22/96	10:15 AM	262.90	263.31	259.34	264.13	259.69	264.40
04/26/96	09:30 AM	263.80	263.67	259.87	265.64	260.36	266.07
05/06/96	09:10 AM	263.18	263.43	259.40	263.88	259.83	265.01
05/10/96	09:00 AM	262.86	263.31	259.32	263.42	259.49	264.04
05/20/96	08:40 AM	263.08	263.55	259.19	263.99	259.68	264.73
05/24/96	09:05 AM	263.51	263.45	259.54	265.33	260.09	265.53
06/03/96	08:50 AM	262.41	262.88	258.64	262.80	258.97	263.03
06/07/96	08:20 AM	262.22	262.79	258.78	262.54	258.86	262.36
06/17/96	09:00 AM	261.87	262.53	258.67	262.27	258.80	261.16
06/21/96	09:30 AM	261.96	263.00	258.89	262.23	258.84	260.93

Attachment 1G
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	M-21	M-22	M-23	M-24	M-25	M-26
07/08/96	07:30 AM	261.67	262.48	258.15	262.10	258.43	260.54
07/12/96	09:00 AM	261.45	262.18	257.80	261.94	258.08	259.93
07/22/96	09:50 AM	261.80	262.95	258.35	262.16	259.48	261.69
07/26/96	08:30 AM	261.61	262.44	257.98	262.10	258.08	260.53
08/05/96	08:50 AM	261.33	262.21	257.73	261.87	257.90	259.77
08/09/96	09:00 AM	261.42	262.54	258.24	261.85	258.28	259.80
08/19/96	09:15 AM	261.09	262.03	257.44	261.53	257.60	259.08
08/23/96	08:50 AM	261.09	261.83	257.38	261.46	257.51	258.89
09/03/96	09:00 AM	260.92	261.61	257.29	261.38	257.42	259.38
09/06/96	09:30 AM	260.84	261.51	257.17	261.29	257.29	259.04
09/16/96	09:00 AM	260.85	261.82	257.53	261.20	257.49	258.74
09/20/96	08:50 AM	260.84	261.86	257.44	261.17	257.49	258.69
10/07/96	09:00 AM	261.04	261.96	257.57	261.35	257.69	258.96
10/11/96	07:50 AM	260.84	262.11	257.69	261.14	257.66	258.79
10/21/96	09:00 AM	261.50	262.60	258.72	261.83	258.73	262.33
10/25/96	07:55 AM	261.48	262.65	258.28	261.87	258.33	262.05
11/04/96	08:50 AM	261.31	262.38	257.82	261.46	257.95	259.68
11/08/96	09:00 AM	261.50	262.80	258.90	261.63	258.41	260.04
11/18/96	09:15 AM	262.81	263.37	258.95	263.27	259.36	264.73
11/22/96	09:00 AM	262.95	263.38	259.01	263.92	259.43	265.06
12/02/96	09:00 AM	263.42	263.73	259.86	265.32	260.39	265.57
12/06/96	09:15 AM	263.32	263.52	259.12	264.65	259.79	265.48
12/16/96	09:15 AM	263.43	263.65	259.20	265.11	259.81	265.38
12/20/96	09:00 AM	262.94	263.28	258.76	263.79	259.23	264.75
01/06/97	07:30 AM	263.18	263.60	259.18	264.37	259.67	264.95
01/10/97	08:00 AM	263.12	263.55	258.88	263.80	259.29	264.70
01/20/97	07:30 AM	262.49	263.16	258.44	263.14	258.76	263.14
01/24/97	07:45 AM	262.94	263.48	259.22	264.81	259.65	264.83

Notes:
1. Monitoring well elevations in feet above mean sea level.
2. (---) indicates no measurements taken.

Attachment III
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	LS-2*	LR-2	LD-2*	LR-3	LD-3	LD-4*	LD-5*	LS-6	LR-6	LD-6	LR-8	LD-8*	LS-9*
11/21/94	12:00 PM	---	276.50	---	268.22	274.29	---	---	262.86	262.52	262.10	261.68	---	---
11/28/94	09:40 AM	---	276.58	---	268.35	274.55	---	---	263.16	262.68	262.66	261.75	---	---
12/05/94	10:00 AM	---	276.38	---	268.44	274.61	---	---	263.47	262.75	262.76	261.84	---	---
12/09/94	09:30 AM	---	276.40	---	268.64	274.38	---	---	264.55	263.01	263.27	262.37	---	---
12/19/94	09:50 AM	---	276.47	---	268.79	274.36	---	---	264.89	263.10	263.48	262.28	---	---
12/23/94	07:30 AM	---	276.44	---	268.71	274.23	---	---	264.31	263.02	263.57	262.37	---	---
01/03/95	07:30 AM	284.51	276.13	282.75	268.54	274.14	268.27	263.64	263.39	262.79	263.05	261.91	264.40	268.07
01/06/95	09:00 AM	---	276.02	---	268.43	274.09	---	---	263.26	262.65	262.95	261.86	---	---
01/16/95	09:50 AM	---	276.31	---	268.80	274.42	---	---	264.90	263.14	263.38	262.31	---	---
01/20/95	08:00 AM	---	276.46	---	268.84	274.41	---	---	264.71	263.15	263.59	262.59	---	---
02/06/95	10:00 AM	---	276.29	---	268.75	274.09	---	---	263.45	262.95	263.08	262.27	---	---
02/10/95	09:00 AM	---	276.07	---	268.65	274.14	---	---	263.27	262.84	262.89	262.15	---	---
02/21/95	10:15 AM	---	276.20	---	268.80	274.27	---	---	263.27	263.05	262.88	262.15	---	---
02/24/95	08:00 AM	---	276.31	---	268.84	274.33	---	---	263.39	263.06	262.97	262.25	---	---
03/06/95	09:30 AM	---	276.34	---	268.94	274.55	---	---	264.54	263.26	263.30	262.57	---	---
03/10/95	08:30 AM	---	276.57	---	269.34	274.46	---	---	265.07	263.81	264.11	264.25	---	---
03/20/95	06:00 AM	---	276.84	---	269.32	274.46	---	---	264.62	263.58	263.94	263.52	---	---
03/24/95	06:30 AM	---	276.72	---	269.25	274.33	---	---	264.41	263.41	263.75	263.20	---	---
04/03/95	08:25 AM	283.82	276.11	282.54	268.86	274.09	268.38	263.71	263.47	263.00	263.03	262.61	264.93	268.08
04/07/95	05:00 PM	---	275.91	---	268.81	274.19	---	---	263.23	263.30	262.58	262.29	---	---
04/17/95	11:15 AM	---	276.16	---	268.97	274.24	---	---	264.32	263.12	263.61	262.69	---	---
04/21/95	09:15 AM	---	276.14	---	268.91	274.29	---	---	263.87	263.07	263.29	262.69	---	---
05/01/95	02:30 PM	283.18	275.75	282.30	268.68	273.50	267.87	263.62	263.24	262.83	262.85	262.24	264.56	267.99
05/05/95	09:15 AM	282.66	276.34	281.97	268.56	274.00	267.45	263.47	263.02	262.78	251.82	262.15	264.55	267.96
05/15/95	12:30 PM	---	276.31	---	268.53	274.00	---	---	262.87	262.72	262.15	261.95	---	---
05/19/95	08:00 AM	---	276.18	---	268.48	273.97	---	---	262.70	262.65	262.22	261.94	---	---

Attachment III
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	LS-2*	LR-2	LD-2*	LR-3	LD-3	LD-4*	LD-5*	LS-6	LR-6	LD-6	LR-8	LD-8*	LS-9*
06/05/95	03:00 PM	---	275.41	---	268.27	273.83	---	---	262.30	262.53	262.35	261.73	---	---
06/09/95	06:30 AM	---	275.18	---	268.06	273.46	---	---	261.79	262.26	262.11	261.52	---	---
06/19/95	07:30 AM	---	274.98	---	267.66	272.70	---	---	261.20	261.98	261.45	261.40	---	---
06/23/95	08:15 AM	---	274.84	---	267.38	272.21	---	---	260.83	261.71	261.19	261.26	---	---
07/03/95	07:40 AM	---	274.65	---	267.05	271.38	---	---	260.33	261.61	260.78	261.11	---	---
07/07/95	06:55 AM	---	274.59	---	266.91	271.12	---	---	260.14	261.47	260.65	261.07	---	---
07/17/95	09:30 AM	---	274.59	---	266.71	270.51	---	---	259.76	261.50	260.42	261.04	---	---
07/21/95	07:00 AM	---	274.46	---	266.56	270.27	---	---	259.64	261.30	260.34	260.96	---	---
08/07/95	09:00 AM	279.93	274.49	281.46	267.19	269.87	263.82	258.99	259.93	261.61	260.73	261.12	262.45	266.31
08/11/95	07:20 AM	280.01	274.49	281.13	266.56	269.77	263.82	258.54	259.62	261.39	260.67	262.07	262.39	267.27
08/21/95	06:00 AM	---	274.42	---	266.24	269.12	---	---	259.40	261.24	260.31	261.27	---	---
08/25/95	07:35 AM	---	274.17	---	266.11	269.37	---	---	259.21	260.79	260.03	262.08	---	---
09/05/95	07:30 AM	---	274.25	---	266.06	268.90	---	---	258.94	261.26	259.59	260.97	---	---
09/08/95	07:00 AM	---	274.22	---	266.06	268.81	---	---	258.94	261.39	259.72	260.85	---	---
09/18/95	07:30 AM	---	274.58	---	266.21	268.71	---	---	259.40	261.52	260.22	260.92	---	---
09/22/95	07:50 AM	---	274.62	---	266.24	268.69	---	---	259.47	261.57	260.29	261.01	---	---
10/09/95	08:00 AM	284.81	275.35	282.73	267.33	271.82	263.83	259.94	261.97	262.29	261.45	261.53	262.71	267.98
10/13/95	08:00 AM	284.26	275.45	282.62	267.39	271.22	264.00	260.24	261.39	262.19	261.91	261.60	262.61	267.72
10/23/95	10:30 AM	---	276.16	---	268.88	274.18	---	---	264.63	263.48	263.51	263.15	---	---
10/27/95	08:00 AM	---	276.45	---	268.82	274.08	---	---	263.74	263.22	263.42	262.84	---	---
11/06/95	08:00 AM	---	276.45	---	268.87	274.31	---	---	264.22	263.33	263.37	262.74	---	---
11/10/95	08:30 AM	---	276.56	---	269.06	274.61	---	---	264.87	263.50	263.80	263.17	---	---
11/20/95	06:40 AM	---	278.12	---	269.50	274.62	---	---	265.35	263.99	261.82	264.44	---	---
11/24/95	07:30 AM	---	278.11	---	269.48	274.42	---	---	264.88	263.87	263.38	264.42	---	---
12/04/95	07:30 AM	---	277.85	---	269.33	274.42	---	---	264.54	263.70	263.42	263.88	---	---
12/08/95	07:40 AM	---	277.32	---	269.12	274.14	---	---	264.10	263.43	263.37	263.37	---	---

Attachment III
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	LS-2*	LR-2	LD-2*	LR-3	LD-3	LD-4*	LD-5*	LS-6	LR-6	LD-6	LR-8	LD-8*	LS-9*
12/18/95	07:30 AM	---	276.81	---	269.06	274.35	---	---	264.14	263.52	263.21	263.11	---	---
12/22/95	07:30 AM	---	276.90	---	269.06	274.18	---	---	264.14	263.39	263.40	263.08	---	---
01/08/96	07:50 AM	285.72	276.31	282.70	268.91	274.25	268.15	263.78	263.71	263.32	263.11	263.21	264.84	268.11
01/12/96	07:50 AM	285.76	276.20	282.73	268.90	274.28	268.10	263.82	263.56	263.24	263.08	262.78	264.83	268.07
01/22/96	07:30 AM	---	276.80	---	269.53	274.53	---	---	265.04	264.09	264.16	264.99	---	---
01/26/96	07:55 AM	---	277.00	---	269.53	274.42	---	---	265.17	263.99	264.01	264.77	---	---
02/05/96	09:05 AM	---	276.58	---	269.56	274.54	---	---	263.81	263.36	263.28	263.33	---	---
02/09/96	09:40 AM	---	276.70	---	269.28	274.85	---	---	264.56	263.66	263.36	263.4	---	---
02/19/96	09:10 AM	---	276.46	---	268.96	274.16	---	---	263.78	263.24	263.28	263.04	---	---
02/23/96	08:40 AM	---	276.73	---	269.40	274.60	---	---	265.23	263.84	263.97	264.2	---	---
03/11/96	07:30 AM	---	276.25	---	268.92	274.27	---	---	263.51	263.26	263.09	262.96	---	---
03/15/96	08:00 AM	---	276.71	---	269.41	275.18	---	---	263.92	263.58	263.33	263.22	---	---
03/25/96	09:05 AM	---	276.81	---	269.47	274.64	---	---	264.39	263.75	263.55	263.72	---	---
03/29/96	09:00 AM	---	276.83	---	269.31	274.41	---	---	264.31	263.68	263.59	263.59	---	---
04/08/96	09:00 AM	285.22	276.40	282.95	269.18	274.41	268.52	263.89	263.6	263.52	263.15	263.00	265.04	268.27
04/12/96	08:30 AM	285.31	276.56	282.94	269.63	274.45	268.52	263.81	263.88	263.51	263.37	263.09	265.05	268.19
04/22/96	10:15 AM	---	276.66	---	269.33	274.59	---	---	264.53	263.67	263.74	263.59	---	---
04/26/96	09:30 AM	---	277.05	---	270.13	274.64	---	---	265.23	264.02	264.33	264.34	---	---
05/06/96	09:10 AM	---	276.66	---	270.35	274.50	---	---	264.36	263.76	263.82	263.7	---	---
05/10/96	09:00 AM	---	276.70	---	269.38	274.59	---	---	264.01	263.67	263.49	263.44	---	---
05/20/96	08:40 AM	---	277.51	---	269.84	275.28	---.	---	263.86	263.65	262.76	263.69	---	---
05/24/96	09:05 AM	---	277.39	---	269.59	274.49	---	---	264.63	263.9	263.28	264.18	---	---
06/03/96	08:50 AM	---	276.67	---	269.10	274.12	---	---	263.01	263.2	262.79	262.94	---	---
06/07/96	08:20 AM	---	276.49	---	269.01	274.25	---	---	262.6	263.12	262.48	262.78	---	---
06/17/96	09:00 AM	---	276.19	---	268.90	274.15	---	---	262.46	263.06	262.59	262.5	---	---
06/21/96	09:30 AM	---	276.23	---	269.22	274.59	---	---	262.59	263.24	262.55	262.57	---	---

Attachment III
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	LS-2*	LR-2	LD-2*	LR-3	LD-3	LD-4*	LD-5*	LS-6	LR-6	LD-6	LR-8	LD-8*	LS-9*
07/08/96	07:30 AM	280.84	275.81	282.21	268.73	274.12	267.16	262.15	262.03	262.83	262.33	262.35	263.94	267.72
07/12/96	09:00 AM	281.85	275.44	281.92	268.34	273.59	266.95	261.53	261.48	262.49	261.96	262.10	263.86	267.61
07/22/96	09:50 AM	---	275.80	---	268.95	274.59	---	---	262.64	263.05	262.70	262.62	---	---
07/26/96	08:30 AM	---	275.78	---	268.97	273.97	---	---	261.79	262.76	262.30	262.22	---	---
08/05/96	08:50 AM	---	275.55	---	268.36	273.62	---	---	261.25	262.56	261.83	261.99	---	---
08/09/96	09:00 AM	---	275.57	---	268.62	274.32	---	---	261.24	262.81	261.66	261.71	---	---
08/19/96	09:15 AM	---	275.31	---	270.91	273.13	---	---	260.70	262.26	261.38	261.86	---	---
08/23/96	08:50 AM	---	275.34	---	268.06	273.02	---	---	260.49	262.24	261.09	261.81	---	---
09/03/96	09:00 AM	---	275.21	---	267.70	272.39	---	---	259.91	261.86	260.59	261.50	---	---
09/06/96	09:30 AM	---	275.05	---	267.68	271.88	---	---	259.75	261.79	260.46	261.53	---	---
09/16/96	09:00 AM	---	275.28	---	268.02	272.26	---	---	260.19	262.21	260.96	261.52	---	---
09/20/96	08:50 AM	---	275.21	---	267.72	272.22	---	---	260.29	262.14	261.20	261.55	---	---
10/07/96	09:00 AM	283.70	275.38	282.23	268.15	272.82	265.13	260.53	260.88	262.36	261.58	261.72	262.79	267.72
10/11/96	07:50 AM	284.79	275.27	282.53	268.66	272.95	264.88	260.29	260.80	262.36	261.52	261.53	262.58	267.91
10/21/96	09:00 AM	---	275.59	---	268.71	274.36	---	---	262.45	263.02	262.10	262.43	---	---
10/25/96	07:55 AM	---	275.77	---	268.92	274.14	---	---	262.21	262.96	262.76	262.14	---	---
11/04/96	08:50 AM	289.81	275.46	289.73	268.71	274.00	279.25	272.94	261.81	262.80	262.40	262.42	272.83	276.72
11/08/96	09:00 AM	289.81	275.69	289.73	268.94	274.95	279.25	272.94	262.13	263.18	262.42	262.45	272.83	276.72
11/18/96	09:15 AM	---	277.44	---	269.42	274.60	---	---	264.55	263.73	259.53	263.44	---	---
11/22/96	09:00 AM	---	277.46	---	270.01	275.45	---	---	264.86	263.70	262.99	263.62	---	---
12/02/96	09:00 AM	---	277.40	---	269.90	275.50	---	---	265.46	264.07	263.41	264.12	---	---
12/06/96	09:15 AM	---	277.27	---	269.73	274.70	---	---	264.81	263.95	263.78	263.92	---	---
12/16/96	09:15 AM	---	277.02	---	269.68	275.17	---	---	265.17	263.94	263.70	264.13	---	---
12/20/96	09:00 AM	---	276.91	---	269.58	274.87	---	---	264.26	263.64	263.64	263.51	---	---
01/06/97	07:30 AM	285.99	277.04	283.59	269.92	274.59	270.05	264.30	265.39	264.06	263.93	263.77	266.38	268.54
01/10/97	08:00 AM	285.75	277.17	283.30	269.78	274.95	269.80	264.19	264.76	263.86	263.86	263.78	265.93	268.22

Attachment III
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	LS-2*	LR-2	LD-2*	LR-3	LD-3	LD-4*	LD-5*	LS-6	LR-6	LD-6	LR-8	LD-8*	LS-9*
01/20/97	07:30 AM	---	276.61	---	269.46	274.34	---	---	263.91	263.54	263.36	263.05	---	---
01/24/97	07:45 AM	---	276.65	---	269.62	274.65	---	---	265.33	263.84	263.71	263.66	---	---

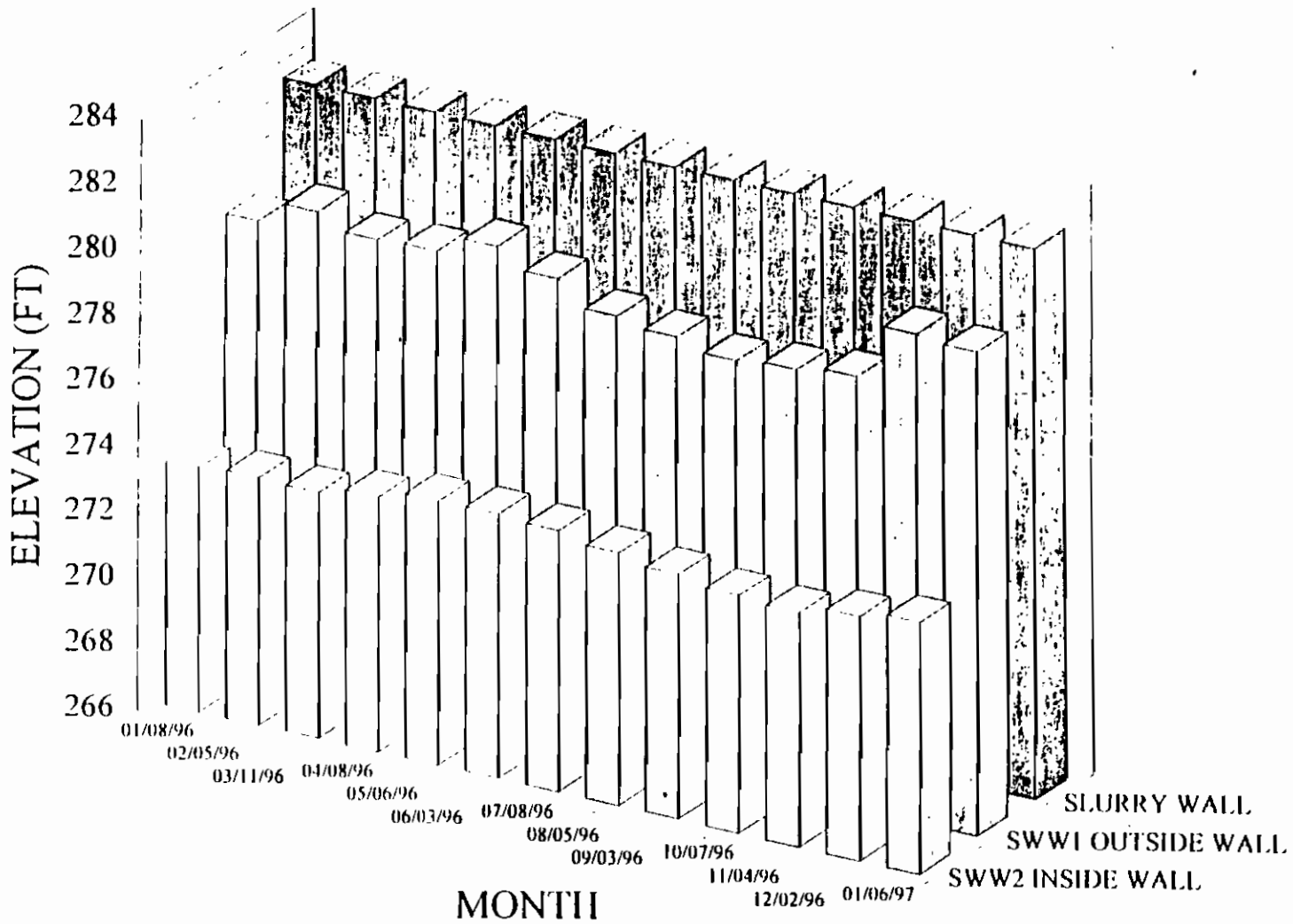
Notes:
1. Monitoring well elevations in feet above mean sea level.

Attachment II
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Surface Water Elevation Data

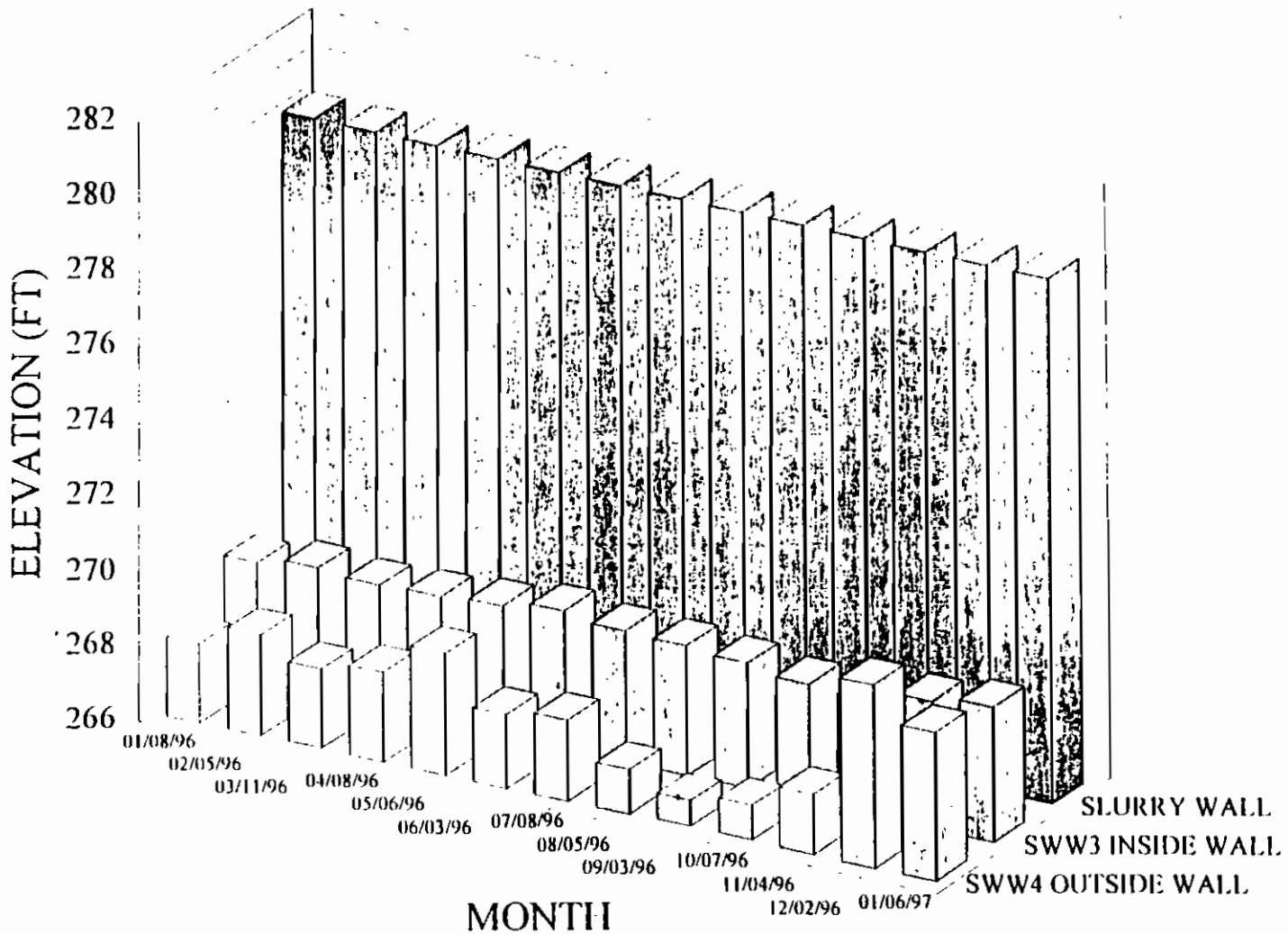
Stream Gauge	Top of Gauge Elevation (ft)	1/3/95	4/8/95	5/1/95	5/5/95	10/9/95	10/13/95	01/08/96	04/08/96	07/08/96	10/07/96	01/06/97
SWG-1	275.17	272.44	272.32	272.59	272.58	272.62	272.55	*	**	**	**	**
SWG-1A	273.92	271.70	271.66	271.62	271.51	271.47	271.39	*	271.89	271.42	271.34	272.22
SWG-1	275.17	272.44	272.32	272.59	272.58	272.62	272.55	*	**	**	**	**
SWG-1A	273.92	271.70	271.66	271.62	271.51	271.47	271.39	*	271.89	271.42	271.34	272.22
SWG-2	267.83	264.76	264.52	264.52	264.55	264.60	264.48	265.01	264.71	264.56	264.38	265.32
SWG-3	263.98	261.75	261.57	261.77	261.76	261.41	261.30	262.18	262.88	***	***	262.27
SWG-4	262.96	261.02	261.06	261.26	261.21	261.16	261.08	261.96	261.72	***	***	261.72
SWG-5	270.52	266.36	266.30	266.30	266.26	266.33	266.23	*	**	**	**	**
SWG-6	264.97	262.69	262.64	262.56	262.50	262.52	262.42	*	262.83	***	***	263.10
SWG-7	261.80	259.63	259.49	259.38	259.32	259.80	259.65	260.49	259.97	***	***	260.31

Notes:
1. Surface water elevations in feet above mean sea level.
2. Stream gauges marked with an (*) were measured to the top of frozen stream surface.
3. Stream gauges marked with (**) were bent or removed at time of measurement.
4. Stream gauges marked with an (***) were dry at time of reading.

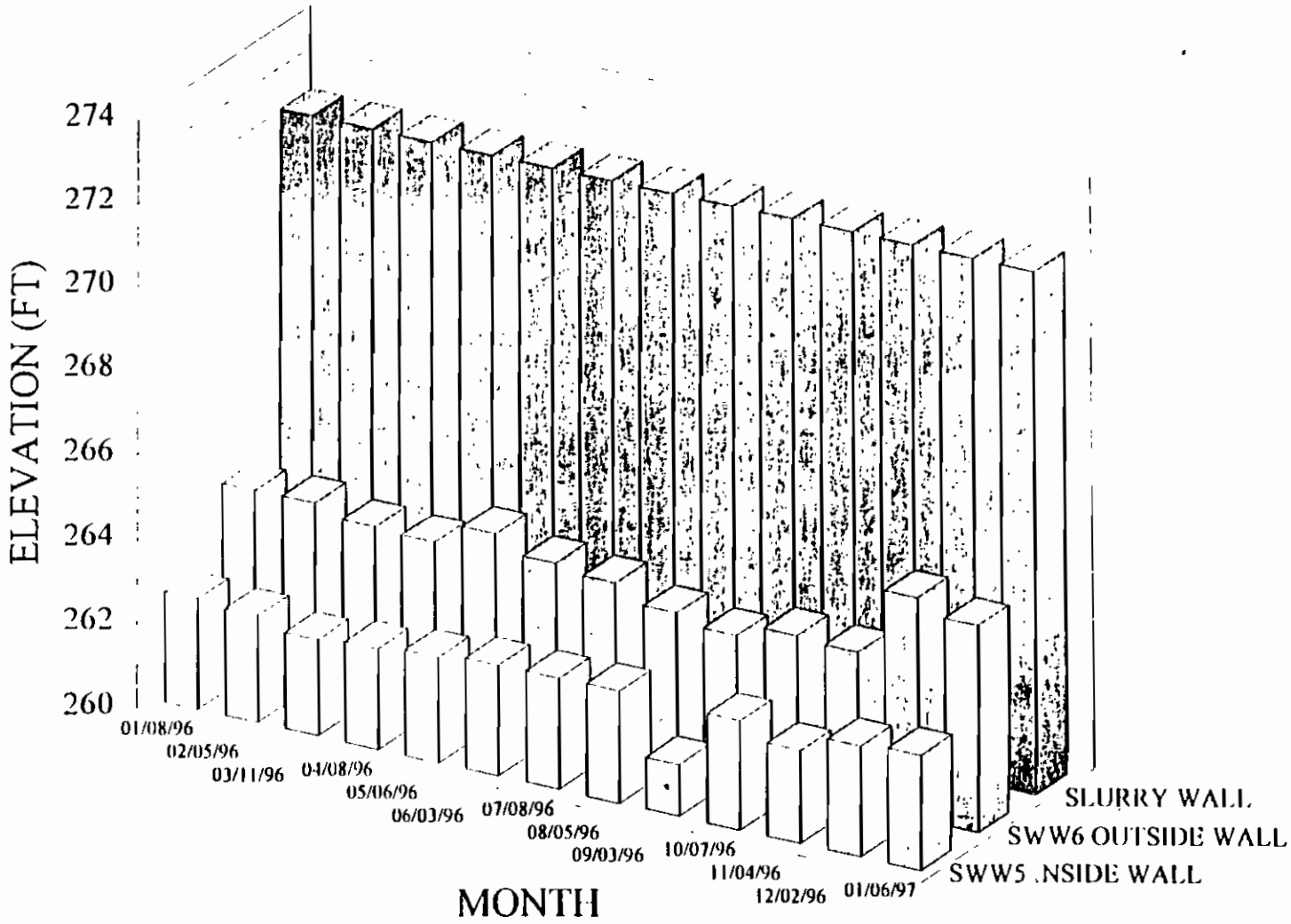
PAS SITE - OSWEGO, NY
SWW1 & SWW2
PRE-PUMPING MONTHLY GROUND WATER ELEVATION DATA



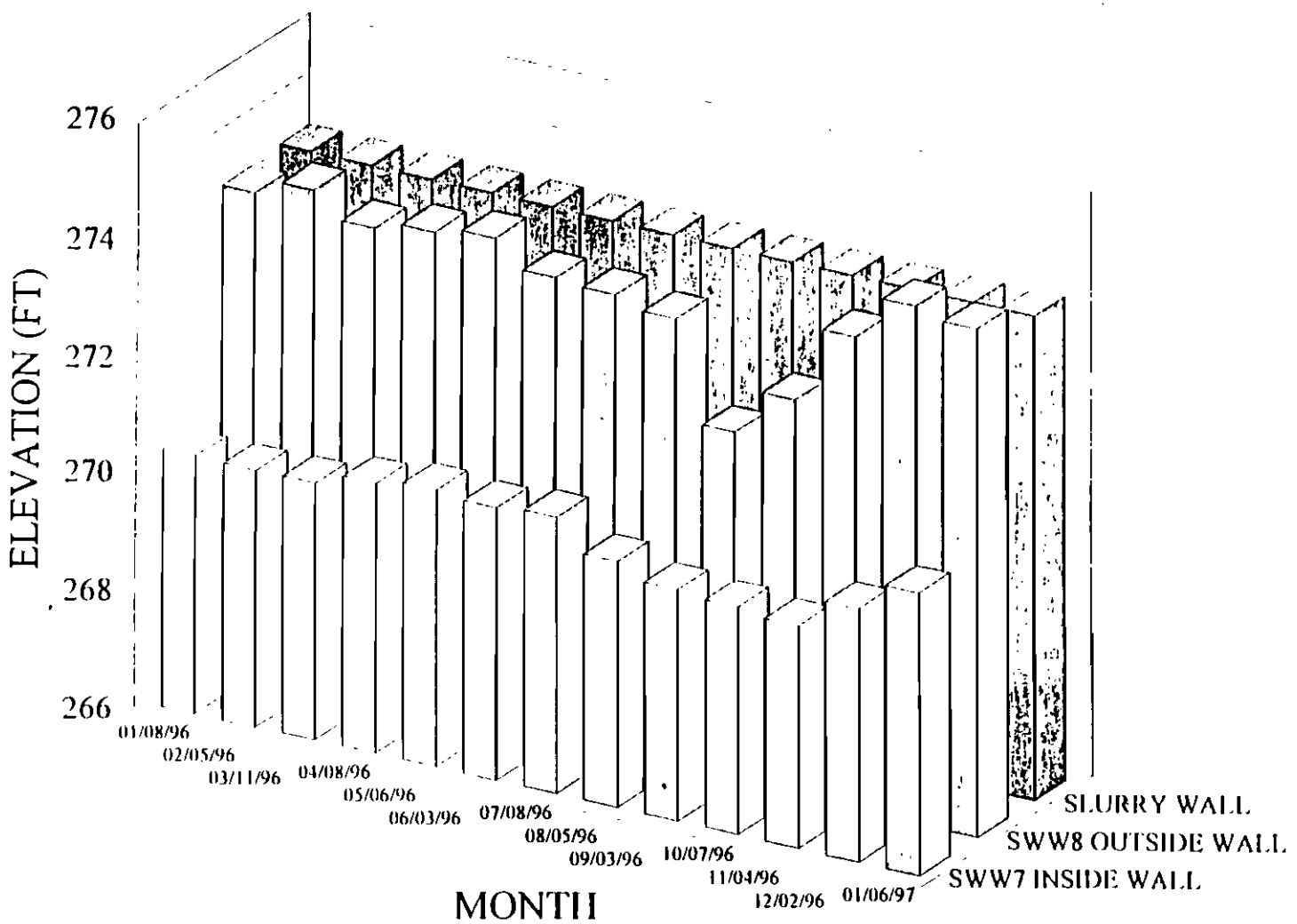
PAS SITE - OSWEGO, NY
SWW3 & SWW4
PRE-PUMPING MONTHLY GROUND WATER ELEVATION DATA



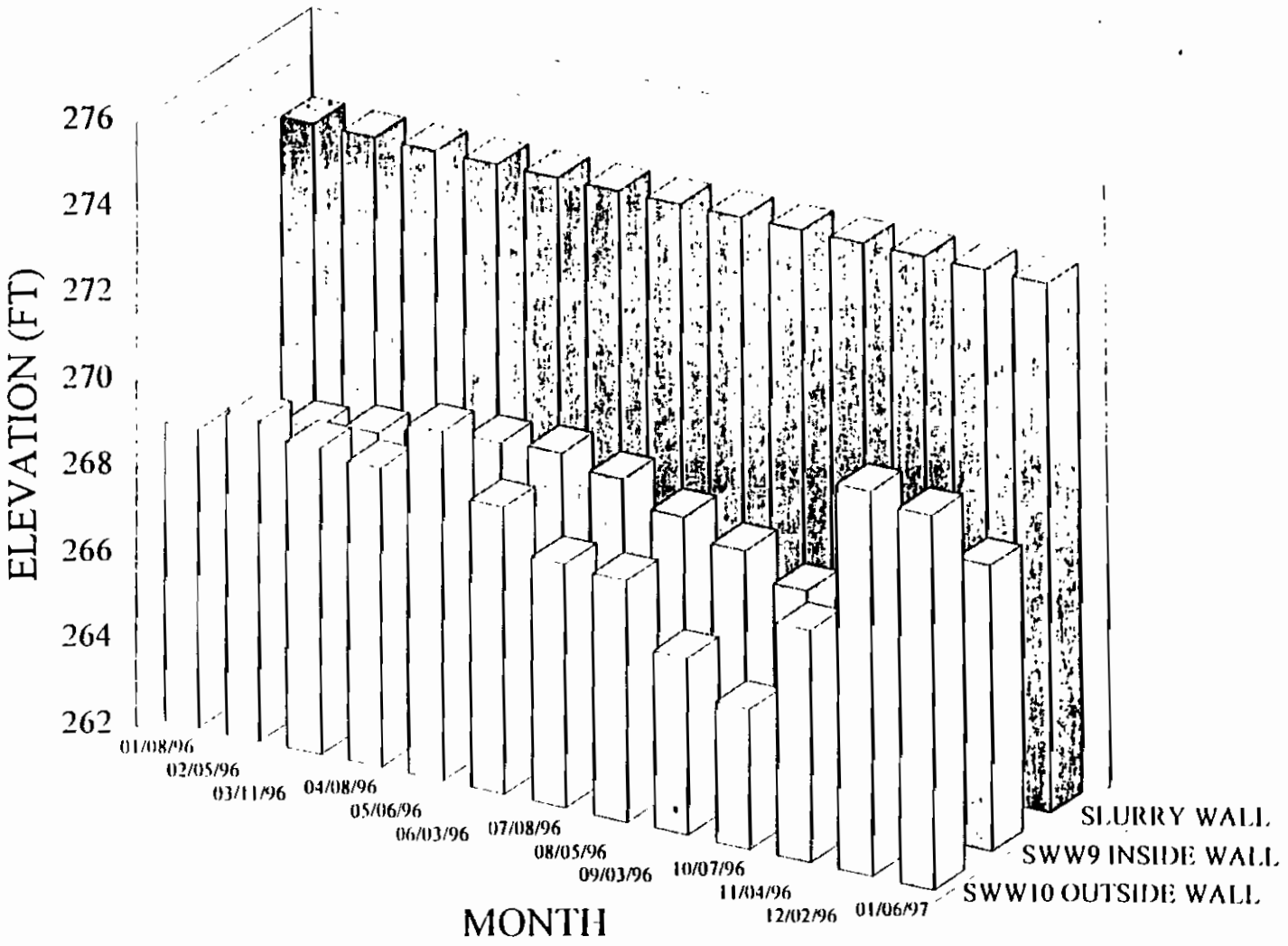
PAS SITE - OSWEGO, NY
SWW5 & SWW6
PRE-PUMPING MONTHLY GROUND WATER ELEVATION DATA



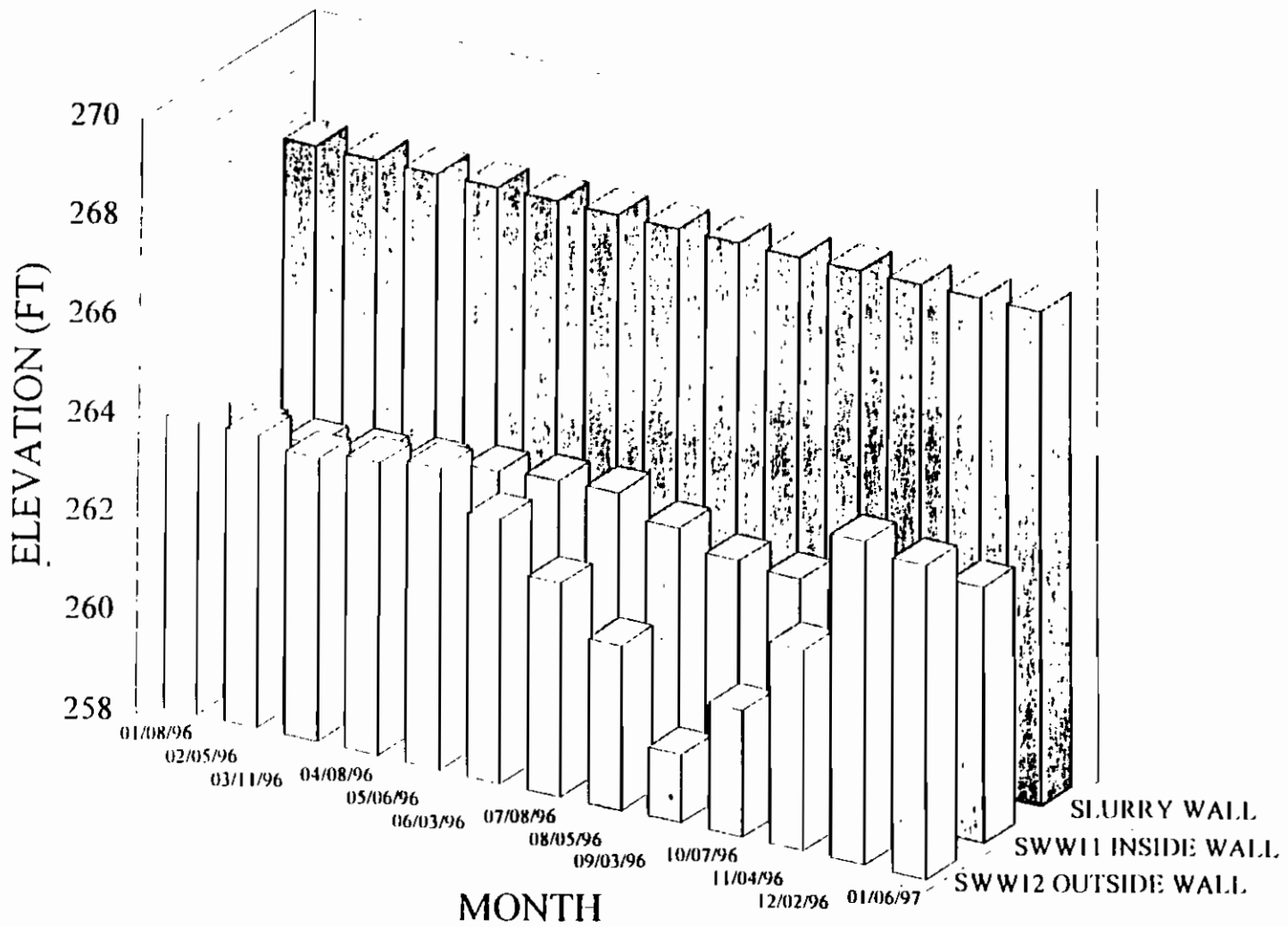
PAS SITE - OSWEGO, NY
SWW7 & SWW8
PRE-PUMPING MONTHLY GROUND WATER ELEVATION DATA



PAS SITE - OSWEGO, NY
SWW9 & SWW10
PRE-PUMPING MONTHLY GROUND WATER ELEVATION DATA



PAS SITE - OSWEGO, NY
SWW11 & SWW12
PRE-PUMPING MONTHLY GROUND WATER ELEVATION DATA



URS
INTERNATIONAL PROFESSIONAL SERVICES ORGANIZATION

URS CONSULTANTS, INC.
282 DELAWARE AVENUE
BUFFALO, NEW YORK 14202-1805
(716) 856-5636
FAX: (716) 856-2545

June 6, 1997

Mr. Ronnie Lee, P.E., Project Manager
Bureau of Western Remedial Action
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

JUN 16 '97

RE: NYSDEC STANDBY CONTRACT
WORK ASSIGNMENT D002340-8 MONTHLY REPORT
POLLUTION ABATEMENT SERVICES - O & M

Dear Mr. Lee:

Enclosed is a copy of the Progress Report for the month of May 1996 for Work Assignment D002340-8, Pollution Abatement Services - O&M. At the Department's direction, Progress Reports and Payment Requests are submitted only when the cumulative work effort and associated costs exceed the minimum level.

Very truly yours,

URS CONSULTANTS, INC.

Dharmarajan R. Iyer, Ph.D., P.E.
Task Manager

Enclosure

cc: Mr. John Gorton - URS
File: 35236.00 (1005)

J\35236\WP\COR\PROGRESS.#40 na

MONTHLY REPORT NO. 41
POLLUTION ABATEMENT SERVICES - O & M
MAY 1996

CONTRACT NO.	D002340
W.A. NO.:	D002340-8
DEC SITE NO.:	7-38-001
DEC PROJECT MANAGER:	Ronnie Lee, P.E.
TELEPHONE NO.:	(518) 457-4254
URS TASK MANAGER:	Dharmarajan R. Iyer, Ph.D., P.E.
TELEPHONE NO.:	(716) 856-5636

PROGRESS FOR PERIOD

- Completed the field sampling for the Spring 1997 Environmental Monitoring. Complied the field data and submitted the Field Summary Report.
- Revised and submitted the Re-budget request to include one more year of environmental monitoring through December 1997.

OUTSTANDING ISSUES AND POTENTIAL PROBLEM AREAS

- None.

ANTICIPATED ACTIVITIES DURING THE FOLLOWING MONTHS

- Validate the analytical data for the Spring 1997 sampling.
- Develop and submit the Summary Report for the Spring 1997 Environmental Monitoring.
- Perform the Fall 1996 environmental monitoring.
- Prepare and submit a Comprehensive Site Monitoring Report at the end of this work Assignment.
- Provide overlap training for continuation of site monitoring, if necessary.
- Closeout the payment issues with Environmental Products & Services for leachate disposal.

LABORATORY SUMMARY

- None

DELIVERABLE SCHEDULE

	ACTIVITY	SCHEDULED DATE	ACTUAL DATE
1.	Submission of Draft Work Plan (Task 1)	06/25/90	08/01/90[1]
	Submission of Final Work Plan	07/17/90	09/28/90[1]
	Work Plan Approval/Notice to Proceed	07/24/90	10/10/90[1]
2.	a. Evaluation Report of Leachate System (Task 2)	11/30/90	11/30/90
	b. Evaluation Report of Containment Cell (Task 3)	11/30/90	11/30/90
3.	Task 4 - Monitoring of Site		
	a) Laboratory Subcontract Quotes	07/23/90	09/30/90[2]
	b) Revised Monitoring Plan	09/17/92	03/04/92[5]
	c) Letter Report	2/98[6]	
4.	Task 5 - Construction Plans and Specifications		
	a) Submit Draft Plans/Specs.	Within 60 days of direction to prepare plans and specs.	
	b) Submit Final Plans/Specs.	Within 30 days of Department comments on draft plans and specs.	
5.	Task 6 - Operation and maintenance (O&M) Plan		
	a) Submit Draft O&M Plan and O&M Manual	02/01/91	02/01/91
	Comments on Draft O&M Plan and O&M Manual	02/15/91	03/20/91[4]
	b) Submit Final O&M Plan and O&M Manual	03/01/91	04/05/91[4]
	c) Submit Subcontract/Subcontractors Available		
	Leachate Collection/Disposal	11/10/90	12/20/90[3]
	All Other Subcontracts	02/10/91	12/20/90
	d) Review and Modify O&M Plan and O&M Manual	09/17/92	03/04/92[4]
	e) Provide Overlap Training	2/98[6]	

NOTES:

1, 2 and 3) See Monthly Progress Report No. 6.

4) See Monthly Progress Report No. 11.

5) Monitoring program was revised effective Spring 1992. The O&M for this site will be further reviewed near the end of this Work Assignment.

6) Schedule revised due to fourth extension of environmental monitoring.

FINANCIAL STATUS REPORT

- For task details, see Cost Control Report for this reporting period.

- URS's current re-budget request to the Department increases the Task 4 (Monitoring) budget for one more year of monitoring, and correspondingly reduces the Task 6 (Leachate Management) budget.

URS Greiner, Inc.
282 Delaware Avenue
Buffalo, New York 14202-1805
Telephone. (716) 856-5636
Facsimile (716) 856-2545
Offices in Principal Cities Nationwide

URS Greiner

May 20, 1997

Mr. Ronnie Lee, P.E., Project Manager
Bureau of Western Remedial Action
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

RE: NYSDEC STANDBY CONTRACT
WORK ASSIGNMENT D002340-8 MONTHLY REPORT
POLLUTION ABATEMENT SERVICES - O & M

Dear Mr. Lee:

Enclosed is a copy of the Progress Report for the months of March and April 1996 for Work Assignment D002340-8, Pollution Abatement Services - O&M. At the Department's direction, Progress Reports and Payment Requests are submitted only when the cumulative work effort and associated costs exceed the minimum level.

Very truly yours,

URS CONSULTANTS, INC.

Dharmarajan R. Iyer, Ph.D., P.E.
Task Manager

Enclosure

cc: Mr. John Gorton - URS
File: 35236.00 (1005)

MONTHLY REPORT NO. 40
POLLUTION ABATEMENT SERVICES - O & M
MARCH/APRIL 1996

CONTRACT NO.	D002340
W.A. NO.:	D002340-8
DEC SITE NO.:	7-38-001
DEC PROJECT MANAGER:	Ronnie Lee, P.E.
TELEPHONE NO.:	(518) 457-4254
URS TASK MANAGER:	Dharmarajan R. Iyer, Ph.D., P.E.
TELEPHONE NO.:	(716) 856-5636

PROGRESS FOR PERIOD

- Developed and submitted the Fall 1996 Summary Report incorporating data collected by the Responsible Parties from groundwater level measurements and leachate management.
- Submitted a request for Re-budget to include one more year of environmental monitoring through December 1997.

OUTSTANDING ISSUES AND POTENTIAL PROBLEM AREAS

- None.

ANTICIPATED ACTIVITIES DURING THE FOLLOWING MONTHS

- Perform the Spring 1996 and Fall 1996 site monitoring.
- Prepare and submit a Comprehensive Site Monitoring Report at the end of this work Assignment.
- Provide overlap training for continuation of site monitoring, if necessary.
- Closeout the payment issues with Environmental Products & Services for leachate disposal.

LABORATORY SUMMARY

- None

DELIVERABLE SCHEDULE

	ACTIVITY	SCHEDULED DATE	ACTUAL DATE
1.	Submission of Draft Work Plan (Task 1)	06/25/90	08/01/90[1]
	Submission of Final Work Plan	07/17/90	09/28/90[1]
	Work Plan Approval/Notice to Proceed	07/24/90	10/10/90[1]
2.	a. Evaluation Report of Leachate System (Task 2)	11/30/90	11/30/90
	b. Evaluation Report of Containment Cell (Task 3)	11/30/90	11/30/90
3.	Task 4 - Monitoring of Site		
	a) Laboratory Subcontract Quotes	07/23/90	09/30/90[2]
	b) Revised Monitoring Plan	09/17/92	03/04/92[5]
	c) Letter Report	2/98[6]	
4.	Task 5 - Construction Plans and Specifications		
	a) Submit Draft Plans/Specs.	Within 60 days of direction to prepare plans and specs.	
	b) Submit Final Plans/Specs.	Within 30 days of Department comments on draft plans and specs.	
5.	Task 6 - Operation and maintenance (O&M) Plan		
	a) Submit Draft O&M Plan and O&M Manual	02/01/91	02/01/91
	Comments on Draft O&M Plan and O&M Manual	02/15/91	03/20/91[4]
	b) Submit Final O&M Plan and O&M Manual	03/01/91	04/05/91[4]
	c) Submit Subcontract/Subcontractors Available		
	Leachate Collection/Disposal	11/10/90	12/20/90[3]
	All Other Subcontracts	02/10/91	12/20/90
	d) Review and Modify O&M Plan and O&M Manual	09/17/92	03/04/92[4]
	e) Provide Overlap Training	2/98[6]	

NOTES:

1, 2 and 3) See Monthly Progress Report No. 6.

4) See Monthly Progress Report No. 11.

5) Monitoring program was revised effective Spring 1992. The O&M for this site will be further reviewed near the end of this Work Assignment.

6) Schedule revised due to fourth extension of environmental monitoring.

FINANCIAL STATUS REPORT

- For task details, see Cost Control Report for this reporting period.

- URS's current re-budget request to the Department increases the Task 4 (Monitoring) budget for one more year of monitoring, and correspondingly reduces the Task 6 (Leachate Management) budget.

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282 Delaware Avenue
Buffalo, New York 14202-1805
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Offices in Principal Cities Nationwide

URS Greiner

May 16, 1997

Mr. Ronnie Lee, P.E., Project Manager
Bureau of Western Remedial Action
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road, Room 208
Albany, New York 12233-7010

RE: PAS SITE O&M (WA D00234-8)
SPRING 1997 ENVIRONMENTAL SAMPLING

Dear Mr. Lee:

During the week of May 12, 1997, URS completed the Spring 1997 environmental sampling, in accordance with the Work Plan for the site, the revised analytical program per the Department's letter dated March 4, 1992, and the substitution of three wells (M-21, 25 and 26 for LS-2, LD-3, LR-3) per the Department's April 15, 1996 letter. Field activities and measurements are summarized in the attached O&M forms, Field Activities Summary and field notes.

Two items of concern were observed during the site inspection.

1. The storage shed where equipment and drums are stored has weakened over the past few years from the environment. Reinforcement of this structure should be considered.

2. There appears to be work being performed behind well M-25. An area of approximately 20' x 40' has been graded with gravel behing this well. Protective posts for the well should be considered to protect the well from any equipment being operated in this area.

All samples were sent to Recra Environmental for analysis. Analytical results will be submitted in a letter report after they are reviewed and validated by URS.

The next environmental sampling (Fall 1997) at the site is tentatively scheduled for the week of November 10, 1997.

If you have any questions, please do not hesitate to call me.

Very truly yours,
URS Greiner, Inc.

Dharmarajan R. Iyer, Ph.D., P.E.
Task Manager
Enclosure

cc: R. Lupe - NYSDEC
J. Gorton - URS
J. Lehnen - URS

35236\wp\Spring.97\cp
5/97

PAS SITE NO. 7-38-001
(W.A. D002340-8)

SPRING 1997 ENVIRONMENTAL MONITORING
MAY 12, 1997 TO MAY 15, 1997

EVENT SUMMARY

May 12, 1997

- Rental vehicle loaded with equipment (0730)
- K. Kearney and C. Scher departed from Buffalo to Oswego (0930)
- Arrived at Syracuse hotel and check-in (1215)
- Arrived at Airborne Express, E. Syracuse to pick up rental HNU (1245)
- Arrived on site (1350)
- Performed site inspection and water level monitoring (1350-1630)
- Secured site and depart (1630)
- Check-in at office with D. Iyer (1635)
- Purchased field sampling supplies (1640-1730)
- Arrived at Airborne Express - return HNU to Response Rental (1815)

May 13, 1997

- Departed for PAS Oswego (0630). Arrived on site (0730)
- Calibrated instruments and prepared equipment (0730-0800)
- Purged wells LS-9, LD-2, LR-2, LD-4, LD-5, LR-8, LD-8 (0800-1200)
- Offsite to check in at office with D. Iyer and purchase ice for samples (1230)
- Sampled wells LS-9, LD-2, LR-2, LD-4, LD-5, LR-8, LD-8 (1300-1520)
- Packed cooler, picked up ice, iced samples (1530-1615)
- Secured site and departed (1615)
- Arrived at Airborne Express (1700)

May 14, 1997

- Departed for PAS Oswego (0630). Arrived on site at (0730)
- Calibrated instruments and prepared for purge (0730-0750)
- Purged LS-6, LD-6, and LR-6 (0750)
- Purged and sampled M-21, M-25 and M-26 (0855-1440)
- C. Scher offsite to check in at office with J. Lehnen (1045)
- K. Kearney offsite to check in at office with D. Iyer and purchase ice for samples (1415)
- Sampled LS-6, LD-6 and LR-6 (1530)
- Packed cooler, iced samples and secured site (1600)
- Return to hotel (1700)

May 15, 1997

- Departed for Buffalo with samples (0645)
- Arrived Recra and delivered samples (0950)
- Clean and return rental vehicle (1100)

ROUTINE INSPECTION CHECKLIST

Pollution Abatement Services

URS Greiner
282 Delaware Avenue
Buffalo, New York 14202
(716) 856-5636

Item	Date Inspection Performed	Remarks
CONTAINMENT CELL CAP	5/12/97	MULTIPLE TIRE RUTS ON CONTAINMENT CELL CAP
Landscaping	5/12/97	VERY BADLY OVERGROWN - APPROX 10"-18" HIGH NEEDS TO BE CUT
Roadways	5/12/97	CLEAN - FREE OF DEBRIS
- General Condition	5/12/97	GOOD
- Snow Removal	5/12/97	NON APPLICABLE
Concrete Drainage Trough	5/12/97	BADLY OVERGROWN WITH 1" HIGH WATER FLOW IN TROUGH. OTHERWISE GOOD CONDITION
Debris	5/12/97	NONE
French Drains	5/12/97	GOOD CONDITION - OVERGROWN WITH GRASS
FENCE	5/12/97	EAST FENCE LINE HAS FALLEN TREES ON FENCE ALSO EROSION OF SOIL (LARGE GAP) UNDER SECTION NEAR LS-9. FRONT GATE STILL UNREPAIRED (OFF CENTER)
MONITORING WELLS	5/12/97	OVERALL GOOD CONDITION
Risers	5/12/97	CONTINUAL RUSTING - OTHERWISE GOOD CONDITION. DAMAGE TO TOP COLLAR OF M-21 OBSERVED
Locks	5/12/97	GOOD CONDITION

Remarks: STORAGE SHED - CONTINUED DECAY, STRUCTURALLY UNSOUND, SHOULD BE REINFORCED OR REPLACED.
WORK BEING PERFORMED BEHIND M-25 - AREA HAS BEEN GRADED WITH GRAVEL APPROX AREA 20'x40'- PROTECTIVE POSES RECOMMENDED AROUND WELL

By: Cheryl Seher Firm: URS Greiner, Inc. Telephone #: (716) 856-5636

SAMPLING EVENT SUMMARY

Pollution Abatement Services

URS Greiner
282 Delaware Avenue
Buffalo, New York 14202
(716) 856-5636

ARRIVAL:

DATE: 5-12-97 TIME: 1350

Personnel Onsite: KEVIN KEARNEY
CHERYL SCHER

Site Conditions on Arrival: GOOD - SEE PAGE PAS-5

Weather:
Date: 5-12-97 62°F SUNNY
Date: 5-13-97 50°F CLEAR
Date: 5-14-97 48°F CLEAR
Date:

DEPARTURE:

DATE: 5-14-97 TIME: 1600

POST SAMPLING CHECKLIST:

YES Wells Locked
YES Tank Secured
YES Site Cleanup / Walk Through
YES Site Secured

SURFACE WATER SAMPLES

Sample Number	Sample Date	Sample Time	Analytical Schedule
PAS-SW-1		FALL ONLY	
PAS-SW-2			
PAS-SW-3			
PAS-SW-4A			
PAS-SW-5			

STREAM SEDIMENT SAMPLES

Sample Number	Sample Date	Sample Time	Analytical Schedule
PAS-SS-1		FALL ONLY	
PAS-SS-2			
PAS-SS-3			
PAS-SS-4A			
PAS-SS-5			

GROUNDWATER SAMPLES

Sample Number	Sample Date	Sample Time	Analytical Schedule
PAS-LS-2	—	—	—
PAS-LR-2	5-13-97	1320	A
PAS-LD-2	5-13-97	1300	A
PAS-LR-3	—	—	—
PAS-LD-3	—	—	—
PAS-LD-4	5-13-97	1500	A
PAS-LD-5	5-13-97	1520	A
PAS-LS-6	5-14-97	1530	A
PAS-LR-6	5-14-97	1540	A
PAS-LD-6	5-14-97	1550	A
PAS-LR-8	5-13-97	1400	A
PAS-LD-8	5-13-97	1430	A
PAS-LS-9	5-13-97	1350	A
PAS-SWW-1		FALL ONLY	
PAS-SWW-4			
PAS-SWW-6			
PAS-SWW-8			
PAS-SWW-10			
PAS-SWW-12			
PAS-M-21	5-14-97	1440	A
PAS-M-25	5-14-97	1245	A
PAS-M-26	5-14-97	1100	A
Trip Blank	5-13-97	NA	A
MS/MSD (LR-8)	5-13-97	1400	A

TANK LEVEL MEASUREMENTS

Date	Time	Level from Bottom	Remarks
5-12-97	1545	1"	TANK APPEARS TO HAVE BEEN
			PUMPED OUT RECENTLY.

NOTES: WELLS M-21, M-25, M-26 ARE REPLACEMENT WELLS FOR LS-2, LR-3 AND LD-3.

By: Cheryl Scher Firm: URS Greiner, Inc. Telephone #: (716) 856-5636

SAMPLING EVENT SUMMARY

URS Greiner

Pollution Abatement Services
Semiannual

Month: MAY Year: 1997

Date	Time	Well Number	Well Bottom Elevation (feet)	Water Elevation (feet)	Water Height From Bottom (feet)	Volume of Casing (gal)	Volume Purged (gal)	Specific Conduct. (µmhos/cm)	pH (S.U.)	Temp. (deg. C)	Remarks
REPLACED		LS-2	269.5	—	—	—	—	—	—	—	
5-13-97	1320	LR-2	231.5	276.31	44.81	7.62	23.0	530	8.13	11.2	
5-13-97	1300	LD-2	251.1	282.79	31.69	4.95	15.0	750	7.58	10.2	
REPLACED		LR-3	211.7	—	—	—	—	—	—	—	
REPLACED		LD-3	248.6	—	—	—	—	—	—	—	
5-13-97	1500	LD-4	246.3	268.07	21.77	3.72	7.0	380	7.47	12.1	Purged DRY
5-13-97	1520	LD-5	243.2	263.86	20.66	3.50	7.0	580	7.40	10.1	Purged DRY
5-14-97	1530	LS-6	253.4	263.72	10.32	1.73	2.0	410	7.20	10.2	Purged DRY
5-14-97	1540	LR-6	213.6	263.52	49.92	8.39	25.5	440	7.76	10.2	
5-14-97	1550	LD-6	240.9	263.28	22.38	3.80	6.0	450	8.17	11.7	Purged DRY
5-13-97	1400	LR-8	230.3	262.97	32.67	5.53	17.0	770	7.28	11.5	
5-13-97	1430	LD-8	248.1	265.02	16.92	2.96	9.0	420	7.37	12.2	
5-13-97	1350	LS-9	260.9	268.17	7.27	1.26	4.0	420	6.81	13.5	Purged DRY
FALL	ONLY	SWW-1	267.1								
		SWW-2	268.2								
		SWW-3	265.8								
		SWW-4	257.5								
		SWW-5	254.5								
		SWW-6	254.0								
		SWW-7	250.3								
		SWW-8	256.2								
		SWW-9	256.1								
		SWW-10	256.3								
		SWW-11	250.7								
		SWW-12	251.5								
5-14-97	1440	M-21	231.3	262.57	31.27	44.78	135.0	600	8.11	10.0	
5-14-97	1245	M-25	*234.2	262.28	28.08	41.56	125.0	560	7.62	14.7	
5-14-97	1100	M-26	*228.3	263.29	34.99	50.70	153.0	110	7.89	12.6	

Casing Volume = water height from botton of well(ft.) X π r² (Insidde Radius of casing in ft.) X 7.48 gal/ft^3

NOTES: * ELEVATIONS ARE ESTIMATED, NOT SURVEYED AS IN WELL CONSTRUCTION LOGS.

By: Cheryl Scher

Firm: URS Greiner, Inc. Telephone #: (716) 856-5636

URSF-106/1 OF 1/WDS/GCM

PAS-2

MONTHLY MONITORING WELL LEVELS

URS Greiner

282 Delaware Avenue
Buffalo, New York 14202
(716) 856-5636

Pollution Abatement Services **Date:** 5-12-97

Well Number	Riser Elevation (feet)	Ground Elevation (feet)	Water Depth to Level of		Water Elevation (feet)
			Top of Riser (feet)	Ground Level (feet)	
LS2	289.81	287.5	5.42	3.11	284.39
LR2	289.85	287.5	13.54	11.19	276.31
LD2	289.73	287.1	6.94	4.31	282.79
LR3	276.06	275.5	8.74	6.18	269.32
LD3	278.62	275.8	4.13	1.31	274.49
LD4	279.25	276.3	11.18	8.23	268.07
LD5	272.94	270.2	9.08	6.34	263.86
LS6	274.14	271.4	10.42	7.68	263.72
LR6	274.39	270.9	10.87	7.38	263.52
LD6	274.03	270.9	10.75	7.62	263.28
LR8	273.42	270.0	10.45	7.03	262.97
LD8	272.83	269.9	7.81	4.88	265.02
LS9	276.72	274.0	8.55	5.83	268.11
SWW1	289.33	286.2	9.72	6.59	279.61
SWW2	289.37	286.3	15.47	12.40	273.90
SWW3	286.50	286.0	16.92	16.42	269.58
SWW4	283.60	282.9	15.59	14.89	268.01
SWW5	277.02	275.9	14.60	13.48	262.42
SWW6	273.06	270.9	8.88	6.72	264.18
SWW7	277.93	273.3	7.10	2.47	270.83
SWW8	278.24	275.7	3.75	1.21	274.49
SWW9	285.55	283.3	16.75	14.50	268.80
SWW10	280.43	279.3	11.92	10.79	268.51
SWW11	273.50	271.0	10.13	7.63	263.37
SWW12	272.82	270.2	8.80	6.18	264.02
M-21	* 272.48	270.3	9.91	7.73	262.57
M-25	* 269.50	* 268.0	7.22	5.72	262.28
M-26	* 273.70	* 272.0	10.41	8.71	263.29

Remarks: * ELEVATIONS ARE ESTIMATED, NOT SURVEYED AS IN WELL CONSTRUCTION LOGS.

By: Cheryl Baker Firm: URS Greiner, Inc. Telephone #: (716) 856-5636

PROJECT ?AS OSWEGO (Spring)

Notebook No.
Continued From Page

5/12/97 ACTIVITY / CALIBRATION LOG

WEATHER 62° / SUNNY (>12 in pm)
PERSONNEL K. KEARNEY C. SCHER
water level #176
HNU - RESPONSE RENTAL S/N# 401158
Calibrated w/ 100ppm Isobutylene reading 57ppm w/span of 9.8 ; 10.2ev lamp

0730 Pick up vehicle Muck Motors. Local Windstar w/ Equipment
DROP off C. Scher vehicle in Amherst
0930 Leave BFLO FOR OSWEGO
1215 Arrive Syracuse. Check in Hotel → to airborne Express
1245 Pick up HNU @ airborne → TO OSWEGO
1330 Arrive OSWEGO - Break for LUNCH 1345
1350 Start Inspection & water level monitoring.
1630 Completed well Survey/Inspection @ site. - TO STORE TO purchase Supplies. (**1690 K. Kearney call office left progress Report for D. STEER voice mail)
1730 Pick up Supplies TAPE TOWEL Twine etc + Return E. Syracuse
Ship HNU Back to (VIA Airborne) RESPONSE Rental.
Complete NOTES - End Day 1830 - 10 HR DAY

No more CS

Continued on Page

Signed: CS Date: 5/12/97

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Signed Date

PROJECT [illegible] (Spring) Continued From Page

Water Levels/well Inspection 5-12-97

ID	Time	DTB	DTW	HNV	Comments
LS-2	1352	20.15	5.42	ND	NO RISER CAP
LR-2	1354	58.42	13.54	ND	
LD-2	1357	36.05	6.94	ND	
LR-3	1415	66.45	8.74	ND	
LD-3	1420	30.30	4.13	ND	
LD-4	1516	33.15	11.18	ND	
LD-5	1511	29.70	9.08	ND	
LS-6	1510	20.73	10.42	ND	
LR-6	1508	60.35	10.87	ND	
LD-6	1507	33.15	10.75	ND	
LR-8	1435	43.05	10.45	ND	
LD-8	1437	25.28	7.81	ND	
LS-9	1405	15.95	8.55	ND	
SWW 1	1550	22.10	9.72	ND	OK
SWW 2	1547	20.90	15.47	ND	OK
SWW 3	1500	20.80	16.92	ND	OK
SWW 4	1453	26.20	15.59	ND	OK
SWW 5	1502	22.50	14.60	ND	NO RISER CAP
SWW 6	1530	18.96	8.88	ND	OK
SWW 7	1520	22.00	7.10	ND	NO RISER CAP
SWW 8	1416	22.20	3.75	ND	
SWW 9	1518	30.26	16.75	ND	
SWW 10	1517	25.28	11.92	ND	
SWW 11	1515	23.15	10.13	ND	
SWW 12	1513	21.50	8.80	ND	
M-22	1503	53.00	10.76	ND	OK THICK
M-25	1425	35.10	7.22	ND	OK ORANGE ORGANIC MATTER ON Water SURFACE - Heaviest on M-25
M-26	1443	44.40	10.41	ND	OK
LCW-1	1510	12.15	12.30	ND	OK
LCW-2	1504	15.52	15.72	2ppm	OK
LCW-3	1456	19.17	19.22	ND	OK
LCW-4	1525	22.51	22.70	ND	OK
Tank House	1545	~~39.95~~	N/A	ND	1" oil Bottom - Recent Pump oil
M-21	1430	39.95	9.91	ND	DAMAGE TO TOP CULLAR - CRACKED UP

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PROJECT PAS OSWEGO

Notebook No. _____
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5/12/97 Site Conditions

Containment Cell

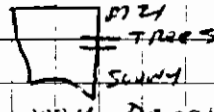
Landscape - Badly overgrown 10"-15" High

Roadways - NO TRASH - Appear Good Condition

Drainage Trough - Heavily overgrown w/ 1" water flowing in all Trough

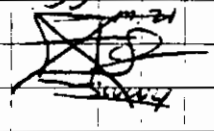
French Drains - Heavily overgrown

Fence - Generally in Good condition - Front Gate still off center (unplumb) From over year ago. Fence section near LS-9 has gap (Erosion) 3 Trees down on Fence near



Garbage behind 8 Series wells

Storage Shed - Front Doors Continue wood Decay - Structurally UNSecure Clean Inside w/ bagged Trash From other Contractors, PVC cement & Salt.



Wells:

Risers } Continual Rusting of Protective Casings
Locks } Locks still Good ~~Condition~~ CONDITION
Re-Numbering of wells needed. Well # are wearing off
Near Well M-25 has been graded w/ graveled Area 20'x40' Directly behind this well

Stream Guages		Time
SS/SW 1	- 1' Deep Flow - Steady Flow	1555
SS/SW 2	- 10" Deep Flow Good Flow	1605
SS/SW 3	- 8" Deep (Guage in place) Fast Flow	1610
SS/SW 4A	- 12" Deep (Guage in place) Steady Flow	1615
SS/SW 5	- Out of Water Steady Flow	1620

Guages # 1, 2, - Long Gone missing Prior to 1995

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PROJECT [illegible]

Continued From Page 03

5/13/97 Activity/Calibration Log

Weather 50°/ Clear

Personnel K Kearney C Sefer

pH# 165 7 = 7.01 4 = 4.01 10 = 9.96

COND# 130 445 = 450 3900 = 3300

Turbidity# 148 0-10 = 5.15 10-100 = 50.3 100-1000 = 517

water level# 176

* ALL Wells Purged w/ Dedicated HDPE Bailer & nylon cord - UNLESS OTHER NOTE.

* ALL Wells Sampled w/ DEDICATED HDPE Bailer

0630 ~~Leave Oswego~~ & E. Syracuse for Oswego

0730 Arrive Site. Calibrate meters Start well Purge LD-4 LD-5 ~~LR-8~~ LR-3 LD-2 LS-9, LR-8, LD-8

1300 Computer will purge *(Checked in w/ office ~~1000~~ K. Kearney left message for D. IYER Progress Report) Called D. IYER - Gave Progress Report Picked up Ice for Samples Labeled bottles.

1300 START Sampling of Wells Purged this AM

1530 Wells Sampled - LD-2 LR-2 LS-9 LD-4 LD-5 LD-8 LR-3

1 Package Coolers For Shipment, Prep COC Clean up for Day. Leave Site for airborn 1615

1700 Arrive Airborne Ship Samples - Day End 10 hr day

NO More

Continued on Page

C. Sefer — Signed

5/13/97 — Date

Read and Understood By

Signed

Date

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PROJECT PAS OSWEGO

Notebook No. _____

Continued From Page _____

5/13/97 PURGE Log / Sample Log

Location PAS LD-2 START 0800

OTB 36.05 END 0825

DTW 6.95 DIAmeter 2"

V/3V 4.95/14.84 ACTUAL purge 15 Gallons

FIELD PARAMATERS - INITIAL		FINAL	Sample	
PH	8.33	7.34	7.58	DTW 7.32
Ω	230	340	750	TIME 1300
°C	10.7	13.7	10.2	
NTU	13.6	9.60	7.17	
APPEAR	Clear	Clear	Clear	

Location PAS-LR-2 START 0805

OTB 58.42 END 0840

DTW 13.57 DIA 2"

V/3V 7.63/22.87 ACTUAL purge 23 Gallons

FIELD PARAMATERS - INITIAL		FINAL	Sample	
PH	9.95	7.95	8.13	DTW 1560
Ω	200	400	530	TIME 1320
°C	10.9	13.8	11.2	
NTU	3.31	5.59	6.62	
APPEAR	clear	clear	Clear	

Location PAS-LS9 START 0905

OTB 15.95 END 0915

DTW 8.50 DIA 2"

V/3V 1.26/3.79 ACTUAL purge 4 Gallons (TO DRYNESS)

FIELD PARAMATERS - Initial		Final	Sample	
PH	7.47	6.76	6.31	DTW 8.52
Ω	200	400	420	TIME 1350
°C	18.9	20.3	13.5	
NTU	22.5	>1000 ntu	190	
APPEAR	light yellow tint	Turbid light brown	light brown tint	

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5/13/97

PROJECT NAS OSWEGO

Continued From Page

5/13/97 PURGE LOG / Sample Log

LOCATION PAS-LR8
DTB 43.05
DTW 10.50
IV/3V 5.53 / 16.6

START ~~1030~~ KK 1010
END 1030
DIA 2"
Actual purge 17 gallons

Field Parameters - Initial	Final		Sample MW03
pH 7.77	7.14	7.28	DTW 10.58
Ω 510	830	770	TIME 1400
°C 16.5	12.5	11.5	QC 115/MSD
NTU 10.0	7.50	5.19	
Appear Clear	clear	clear	

~~Start~~ KK

LOCATION PAS-LD8
DTB 25.28
DTW 7.85
IV/3V 2.96 / 8.88

START 1020
END 1045
DIA 2"
Actual purge 9 gallons

Field Parameters	Final	Sample 1	
pH 7.57	7.16	7.37	DTW 7.97
Ω 230	200	420	TIME 1430
°C 12.6	12.2	12.2	
NTU 14.8	633	94.7	
Appear Clear	light brown tint	light tint	

LOCATION PAS-LD4
DTB 33.15
DTW 11.25
IV/3V 3.72 / 11.17

START 1120
END 1150
DIA 2"
Actual purge 7 Gallons — DR4

Field Parameters	Final	Sample	
pH 7.35	7.40	7.47	DTW 13.15
Ω 470	450	350	TIME 1500
°C 13.7	13.5	12.1	
NTU 23.5	>1000	24.9	
Appear Clear	LT Brown Turbid	Clear	

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PROJECT PAS Oswego

Notebook No. ________
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5/13/97 Purge Log / Sample Log

Location	PAS-LD5	Start 1130		
DTB	29.70	End 1200		
DTW	9.09	Dia 2"		
1V/3V	3.50/10.51	Actual Purge 7 Gallons - DRY		
Field Paramaters	Initial	Final	Sample	
pH	7.33	7.34	7.40	DTW 9.20'
Ω	640	610	580	Time 1520
°C	13.0	13.8	10.1	
NTU	183	>1000	44.1	
Appear	Clear w/ Red Floc	grey Turbid	Clear	

Trip Blank - TB1-051397
ALL wells - Sample Paramaters TCL VOA + 10 TIC
TCL SVOA + 20 TIC

No More
CS

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[signature] 5/13/97

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PROJECT PAS Oswego NOTEBOOK NO. _____ Continued From Page _____

5-14-97 Instrument Calibration / Activity Log

Weather 48°/ Clear - AM

Personnel K Kearney C Scher

pH #165 7=7.00 4=4.01 10=9.96

Cond #130 445=450 3900=3330

Turbidity #145 0-10=5.10 10-100=50.7 100-1000 = 517

water level #176

ISCO #43

wells #6R, 6D, 65 Purged w/ Dedicated HDPE Bailer; Nylon CORD } all wells Sampled w/ Dedicated Bailers; Nylon CORD

Wells M-31 35 36 Purged w/ ISCO & Dedicated 5/8 HDPE Tubing }

~~0630 Leave Hotel for oswego~~

0630 Leave Hotel for oswego Job Site

0730 Arrive Site Calibrate Meters, begin Sampling.

0750 Start ~~Sampling~~ LS-6, LR-6, LD-6, M-26

1045 Called Dlethen to Check on Bottles from 5-13 - Will Call back - No Answer from Lab

1100 M-26 Complete Purge & Sampled 1120 Start Purge M-25

1245 Sample M-25 1300 START Purge M-31

1415 K. Kearney Called DIER w/ Progress Report

1440 Sample M-31 Prep Samples for Shipment and Label bottles for LS, LR, LD,

1530 Sample LS-6, LR-6 & LD6 Clean up Site

Complete Final Inspection of Site Lock up OFFSITE - 1600

1700 Return Hotel END Day 10 HRS

5/15/97 RETURN BFLO Demob Cleanup Equip / Rental vehicle

Continued on Page

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C Scher 5/14/97

Signed Date Signed Date

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PROJECT PAS Oswego

Notebook No. _____
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5/14/97 Purge & Sample Log

Location LS-6 START 0755
DTB 20.73 END 0800
DTW ~~60.38~~ 10.55 DIA 2"
IV/3V 1.73/5.19 Actual Purge 2 Gal - Dirt

Field Parameters	Initial	Final		Sample
pH	7.30	7.17	7.70	
S.C.	370	450	410	DTW 10.65
°C	16.2	11.2	10.2	Time 1530
~~ORP~~	5.37	>1000	21.3	
Appear	Clear	light gray	Clear	

Location PAS-LR-6 START 0800
DTB 60.35 END 0830
DTW 10.97 DIA 2"
IV/3V 5.39/25.18 Actual Purge 25.5 Gal

Field Parameters	Initial	Final		Sample
pH	7.67	7.54	7.76	
Ω	220	460	440	DTW 11.10
°C	16.0	15.5	10.2	Time 1540
NTU	215	7.41	6.47	
Appear	light brown tint	Clear	clear	

Location PAS-LD-6 START 0805
DTB 33.15 END 0815
DTW 10.75 DIA 2"
IV/3V 3.50/11.40 Actual Purge 6 Gallons - Dry

Field Parameters	Initial	Final		Sample
pH	7.62	7.65	8.17	
Ω	220	170	450	DTW 27.03
°C	13.6	14.5	11.7	Time 1550
NTU	3.81	425	20.5	
Appear	Clear	light tan	Clear	

Continued on Page

C-Smith 5/14/97
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5/14/97 Purge & Sample Log

Section Y-26 START 0855
DTB 44.40 END 1100
DTW 10.60 Diam 6"
IV/3V 50.7 / 152.1 Actual Purge 153 Gallons

Field Parameters	Initial	Final	Sample #8
pH	7.90	7.89	DTW 10.76
Ω	110	110	Time 1100
°C	10.6	12.6	
NTU	295	84	
Appear	Slight Haze w/ Red Floc	Clear	Clear

Section M-25 START 1120
DTB 35.10 END 1245
DTW 7.39 DIA 6"
IV/3V 41.56 / 124.69 Actual Purge 125 Gallons

Field Parameters	Initial	Final	Sample
pH	7.52	7.62	7.62 DTW 7.54
Ω	580	560	560 Time 1245
°C	14.6	14.6	14.7
NTU	16.7	28.8	26.5
APPEAR	Clear	Clear	Clear

Section M-21 START 1300
DTB 39.95 END 1440
DTW 10.10 DIA 6"
IV/3V 44.78 / 134.32 Actual Purge 135 Gallons

Field Parameters	Initial	Final	Sample #4
pH	7.54	8.10	8.11 DTW 10.69
Ω	600	600	600 Time 1440
°C	9.0	10.0	10.0
NTU	14.9	34.9	25.4
APPEAR	Clear w/ Floating organic material	Clear w/ Floating organic material	Clear orange tint w/ Floating organic material

Continued on Page

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Signed 5/14/97 Date Signed Date

URS Greiner, Inc.
282 Delaware Avenue
Buffalo New York 14202-1805
Telephone. (716) 856-5636
Facsimile (716) 856-2545
Offices in Principal Cities Nationwide

URS Greiner

March 5, 1997

Mr. Ronnie E. Lee, P.E., Project Manager
Bureau of Hazardous Site Control
Division of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

RE: PAS SITE O&M SITE NO. 7-38-001 (W.A. D002340-8)
FALL 1996 ENVIRONMENTAL MONITORING REPORT

Dear Mr. Lee:

We are pleased to submit five (5) copies of this Report for the Fall (November 1996) Environmental Monitoring in accordance with the Work Plan, the revised Analytical Program, and modifications by the Department (letter dated January 29, 1993).

This report incorporates other leachate/groundwater level data provided by the responsible parties currently removing the leachate for off-site disposal.

If you have any questions, please do not hesitate to call us.

Very truly yours,

URS Consultants, Inc.

Dharmarajan R. Iyer, Ph.D., P.E.
Task Manager

Enc.

cc: R. Lupe - NYSDEC
J. Gorton - URS
File 35236.00 (1000)

35236\2-14-97.L:mm(ta)

SUMMARY REPORT

FALL 1996 ENVIRONMENTAL MONITORING

PAS SITE O&M (W.A. D002340-8)

SITE ID # 7-38-001

MARCH 1997

Prepared by:

URS CONSULTANTS, INC.

for:

NEW YORK STATE DEC
ALBANY, NEW YORK

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   FIELD ACTIVITIES LOG
   SAMPLE CHAIN-OF-CUSTODY RECORDS

B. PAS-1, SAMPLING EVENT SUMMARY
   PAS-2, WELL DATA SUMMARY
   PAS 3, MONTHLY MONITORING WELL LEVELS
   PAS-5, ROUTINE INSPECTION CHECKLIST

C. LOCATION MAP AND BORING LOGS FOR M-SERIES WELLS

D. ANALYTICAL DATA FROM ALL EVENTS (11/89 - 11/96)

E. HISTORICAL MONITORING WELL ELEVATION DATA

PAS SITE O&M (W.A. D002340-8)

SITE #7-38-001

FALL 1996 ENVIRONMENTAL MONITORING

SUMMARY REPORT

1. INTRODUCTION

During the week of November 11, 1996, URS Consultants, Inc. (URS) completed the Fall 1996 Environmental Monitoring in accordance with the Work Plan (inclusive of addenda) for the Operations and Maintenance (O&M) at the Pollution Abatement Services (PAS) site. This is the final of thirteen (13) sampling events currently scheduled to be performed by URS as part of the O & M work assignment, which was extended the third time for one year to a total of six years. As summarized in Table 1, fourteen previous rounds of sampling conducted at the site include two by NYSDEC (11/89 and 5/90), and twelve by URS (5/96, 11/95, 5/95, 11/94, 5/94, 11/93, 5/93, 11/92, 5/92, 11/91, 5/91, and 11/90). Field activities, measurements, and analytical results are summarized in this report.

As of February 1992, the NYSDEC turned over the monthly leachate removal to the Responsible Parties (RPs); also the NYSDEC is performing the groundwater level measurements. Since Spring 1992, the environmental monitoring by URS has consisted of only groundwater, surface water, and sediment sampling and analysis at the NYSDEC's direction. Beginning in Spring 1996 and per the NYSDEC's request, URS also began sampling M-Series wells installed by the responsible parties. Wells LS-2, LD-3, and LR-3 were substituted by wells M-21, M-25, and M-26.

2. ONSITE ACTIVITIES

Field activities began on November 11, 1996 and ended on November 15, 1996. A chronological summary of the field activities is included in Attachment A, along with the field activities log and sample chain-of-custody records. During the fall of 1996, the L-Series, S-Series, and M-Series, groundwater monitoring wells locations were sampled in accordance with the revised analytical program included in the O & M Manual for this site. Consistent with the NYSDEC practice at other sites, disposable bailers were used to purge and sample the L-Series, S-Series, and M-Series wells. Groundwater level measurements were taken in all wells.

TABLE 1
PAS SITE O&M
SUMMARY OF SAMPLING AND ANALYSIS

Matrix	Sampling Schedule	Sample ID	Analytical Schedule				
			VOA	BNA	PEST/PCB	Metals	Wet Chemistry
Groundwater - L-series wells (S - Shallow, D - Deep, R - Bedrock)	Fall & Spring	LS-2, LD-2, LR-2 LD-3, LR-3, LD-4, LD-5, LS-6, LD-6, LR-6, LR-8 (MS/MSD), LD-8, AND LS-9	X	X	--	X (only 11/89)	--
Groundwater - M-Series wells	Spring 1996 Fall 1996	M-21, M-25, M-26	X	X	--	-	--
Groundwater - Slurry Wall Wells	Fall	SWW-1,SWW-4, SWW-6, SWW-8, SWW-10, SWW-12	X	X	--	X (only 11/89)	--
Surface Water	Fall	SW-1, SW-2, SW-3, SW-4 (11/89 only), SW-4A (11/90 through 11/96), SW-4B (11/90 only), SW-5 (11/92 through 11/96)	X	X	--	--	--
Stream Sediment	Fall [aa] [excl. Fall 1995] [aaa]	SS-1[a], SS-2[a], SS-3[a], SS-4[a] (replaced with SS-4A,11/90), SS-4A (11/90 through 11/96), SS-4B (11/90 only), SS-5 (started 11/91)	X	X	X	X	X
Leachate (Not sampled by URS since 11/91)	Fall - 1990 and 1991 Spring 1991	LCW-1 (11/90)					X
		LCW-2 (11/89, 5/91, and 11/91)	X	X	X	X	X
		LCW-4 (11/90, 5/91, and 11/91)					X

(1) [a] SS-1,SS-2,SS-3, and SS-4 were re-analyzed (5/91) for Pest/PCB and hexavalent chromium.
(2) [aa] Fall 1993 sediment samples were resampled in Spring 1994.
(3) [aaa] Fall 1995 sediments were not sampled due to high water levels.
(4) Monitoring wells LS-2, LD-3 and LR-3 were subsituted by M-21, M-25 and M-26 for the Spring 1996 sampling event

Notes: The bi-annual monitoring program was initiated by the NYSDEC in November 1989;
URS has been performing the monitoring program since November 1990.
Leachate sampling and disposal was turned over to the Responsible Parties in November 1991.
Three M-Series wells installed by the Responsible Parties were added to this program beginning Spring 1996.

3. FIELD SAMPLING AND MEASUREMENTS

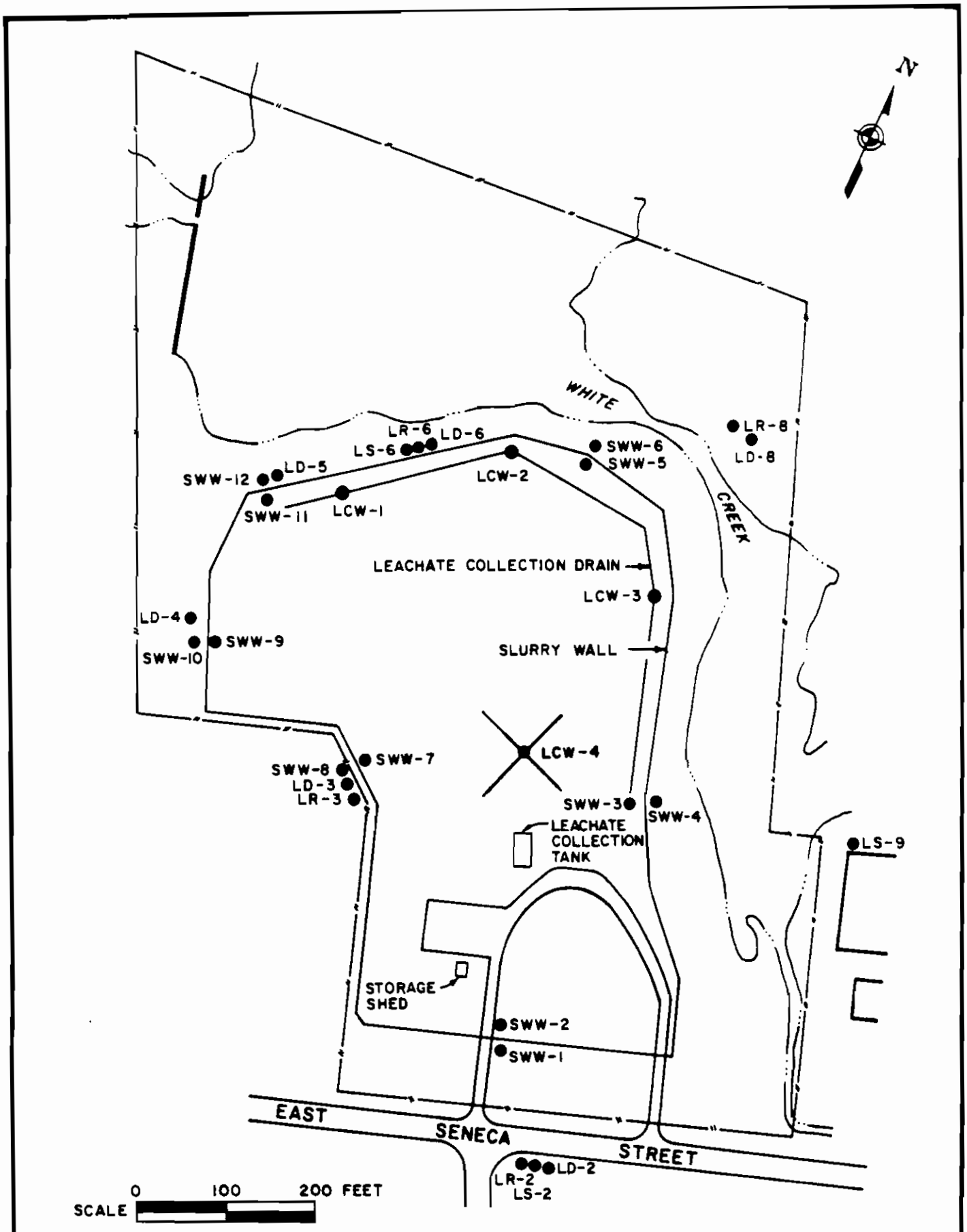
Groundwater from ten (10) L-Series, six (6) S-Series, and three (3) M-Series wells were sampled for Schedule A parameters (volatile and semivolatile organic compounds). The locations of the L-Series and S-Series groundwater monitoring wells are shown on Figure 1. The M-series wells are shown in a figure from the RPs included in Attachment C. Boring logs provided by the NYSDEC for the M-Series wells are also included in Attachment C. Surface water and sediment samples were collected from five (5) locations. Surface waters were analyzed for Schedule A parameters and stream sediments were analyzed for Schedule C parameters (volatile and semivolatile organic compounds, pesticides/PCBs, total phenol, total cyanide, and hexavalent chromium). The locations of these surface water and sediment samples are shown on Figure 2. Form PAS-1, Sampling Event Summary (Attachment B) presents a summary of all field samples collected during this sampling event.

Field measurements taken in all wells included water level, specific conductivity, pH, and temperature. These field measurements are summarized on Form PAS-2, Well Data Summary (Attachment B). Water level measurements taken in the monitoring wells are tabulated on Form PAS-3, Monthly Monitoring Well Levels (Attachment B). Form PAS-5, Routine Inspection Checklist also is included (Attachment B).

4. ANALYTICAL DATA AND RESULTS

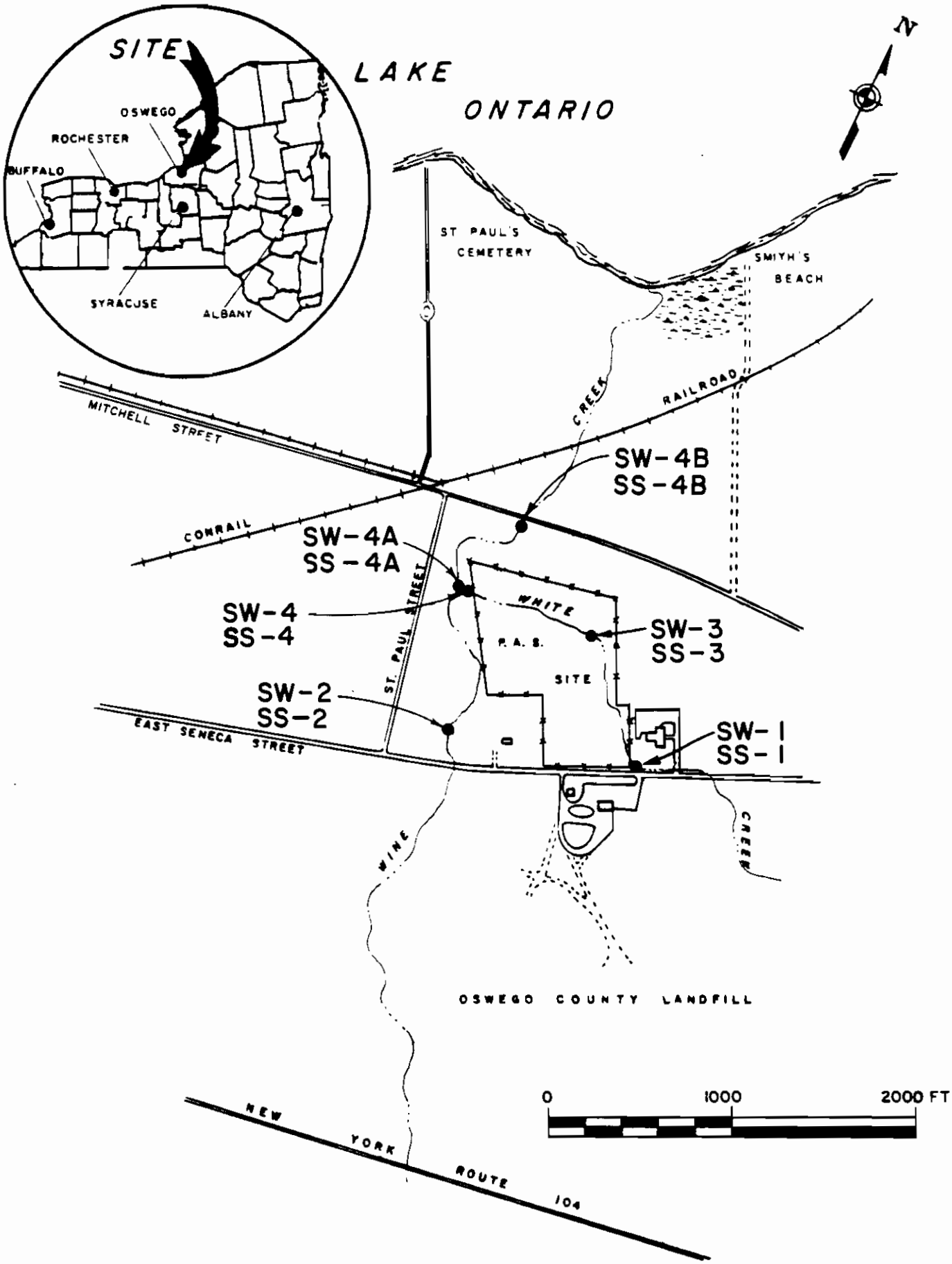
A. Data Validation

Nineteen (19) groundwater samples, five (5) surface water samples, five (5) sediment samples, and a volatile trip blank were analyzed by Recra Environmental, Inc. of Amherst, New York as part of this monitoring event. The groundwater and surface water samples were analyzed for Schedule A parameters and the sediment samples were analyzed for Schedule C parameters following the methods in the revised analytical program. The deliverable data package consisted of analytical results and quality control data.



URS CONSULTANTS, INC.	MONITORING WELL LOCATIONS	FIGURE 1

A-3619/B



DWG NO. A-3618A

URS CONSULTANTS, INC.	SURFACE WATER AND SEDIMENT SAMPLING LOCATIONS	FIGURE 2

The volatile method blank associated with the surface soil samples contained 2 ppb of chlorobenzene. Surface soil sample SS-02 contained 4 ppb of chlorobenzene. This concentration is considered blank contamination and is not reported in the Analytical Results tables.

Semivolatile sample LD-06 was initially sampled on November 13, however, the bottles were received by the laboratory broken. This sample was recollected on November 15. One surrogate recovery was low in sample LD-06 and SW-04. No qualifiers were required.

The matrix spike in the metals analysis had a low recovery for antimony. This element was not detected in any of the samples. No qualifiers were required. The serial dilution result for lead was outside quality control limits. Surface soil samples SS-1, SS-2, SS-3, SS-4A, and SS-5 were qualified as estimated (J) due to this deficiency.

The data was validated against the appropriate methods and the deliverables were reviewed for completeness. The data presented in the Analytical Results section are usable as reported with qualifications due to quality control exceedances in the metals analyses.

B. Analytical Results

The analytical data received from Recra Environmental, Inc. are summarized in Attachment D and briefly discussed below.

VOLATILE ORGANICS: Volatile organic analytes (VOAs) were detected in five (5) of the ten (10) L-Series wells (LD-4, LD-5, LR-6, LS-6, and LR-8). VOAs were present at relatively low parts per billion (ppb) levels (less than 25 ppb). Volatile organic analytes were detected in four (4) of the six (6) S-Series wells (SWW-6, SWW-8, SWW-10, and SWW-12). The detection of fuel-related compounds remains most significant in SWW-6. VOAs were present at relatively low ppb levels (less than 20 ppb) in three (3) wells. Volatiles were detected in two (2) of the three (3) M-Series wells, M-21 and M-25. Table 2 summarizes the volatile organic compounds detected in monitoring well samples.

TABLE 2
PAS SITE O&M
VOCs DETECTED IN MONITORING WELLS

	LD-4	LD-5	LS-6	LR-6	LR-8
Benzene	ND	3	ND	ND	22
Chlorobenzene	ND	0.8	ND	ND	5
Chloroethane	ND	ND	ND	ND	11
1,1-Dichloroethane	1	16	1	8	ND
1,2-Dichloroethene (Total)	ND	1	2	ND	ND
Toluene	ND	ND	ND	ND	0.5
Trichloroethylene	0.7	ND	ND	ND	ND
Vinyl Chloride	ND	1	ND	ND	ND
Xylenes (Total)	ND	ND	ND	ND	2

	SWW-6	SWW-8	SWW-10	SWW-12	M-21	M-25
Acetone	9	ND	ND	ND	ND	ND
Benzene	500	0.9	ND	0.7	7	ND
Bromodichloromethane	ND	ND	ND	ND	ND	4
Chlorobenzene	220	ND	ND	ND	2	ND
Chloroethane	42	ND	ND	ND	3	ND
Chloroform	ND	ND	ND	ND	ND	7
Dibromochloromethane	ND	ND	ND	ND	ND	2
1,1-Dichloroethane	1	ND	2	18	ND	ND
1,2-Dichloroethene (Total)	ND	ND	ND	1	ND	ND
Ethylbenzene	620	ND	ND	ND	ND	ND
Methylene Chloride	4	ND	ND	ND	ND	ND
Toluene	11	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	3	ND	ND	ND
Xylenes (Total)	2000	ND	ND	ND	0.6	ND

All results reported in ug/l (ppb).

Two (2) of the seven (7) surface water samples were found to contain volatile organics. Fuel-related VOAs were present in SW-1 and SW-2 at extremely low parts per billion (ppb) levels (less than 3 ppb) and below the contract required quantitation limit (CRQL).

No volatile organic compounds were detected in any of the sediment samples.

SEMIVOLATILE ORGANICS: The only semivolatile compound (SVOC) detected in any of the L-Series well groundwater samples was bis(2-ethylhexyl) phthalate. This compound was present in LR-2 at 2 ppb and is below the CRQL of 10 ppb.

No semivolatile compounds were found in any of the S-Series wells except for SWW-6 which has the following analytes present: phenol (510 ppb), 1,2-dichlorobenzene (12 ppb), 2-methylphenol (1 ppb), 4-methylphenol (2 ppb), 2,4-dimethylphenol (510 ppb), naphthalene (9 ppb), 2-methylnaphthalene (3 ppb), and 4-chloroaniline (30 ppb).

No semivolatile compounds were detected in any of the surface water samples.

Semivolatile analytes were detected in four (4) of the five (5) sediment samples. SS-1 had the greatest number of detected compounds, most of them being polynuclear aromatic hydrocarbons. The total semivolatile organic compound concentration is the highest in SS-1 (7,762 ppb). SS-3 has the second highest total SVOC concentration (3,010 ppb) followed by SS-5 (1,353 ppb). Only one (1) SVOC was detected in SS-4A, fluoranthene (160 ppb). Table 3 summarizes the semivolatile organic compounds detected in sediment samples.

C. Comparative Data

The data received from this sampling event (November 1996) were compared to previous data from sampling conducted by URS (May 1996, May and November 1995, May and November 1994, May and November 1993, May and November 1992, May and November 1991, and November 1990), and NYSDEC (May 1990 and November 1989). Analytical data from previous

TABLE 3
PAS SITE O & M
SVOCs DETECTED IN SEDIMENTS

	SS-1	SS-2	SS-4A	SS-5
Fluorene	1300	ND	ND	ND
Phenanthrene	430	260	ND	140
Anthracene	82	ND	ND	ND
Fluoranthene	ND	570	160	330
Pyrene	1300	560	ND	370
Benzo(a)anthracene	940	280	ND	ND
Chrysene	830	350	ND	ND
bis(2-Ethylhexyl) phthalate	ND	200	ND	170
Benzo(b)fluoranthene	880	350	ND	250
Benzo(k)fluoranthene	550	160	ND	93
Benzo(a)pyrene	840	280	ND	ND
Indeno(1,2,3-cd)pyrene	340	ND	ND	ND
Benzo(g,h,i)perylene	270	ND	ND	ND

All results reported in ug/kg (ppb).

sampling are included for reference as Attachment D. Results from this comparison are summarized below. It should be noted that samples from the NYSDEC monitoring events were analyzed by a different laboratory than the one used by URS (Recra Environmental, Inc., Buffalo, New York).

VOLATILE ORGANICS: Volatile organics continue to be absent in the L-series wells at locations up- and side-gradient to the predominant groundwater flow, which is north-northwest towards White Creek (see Figure 1).

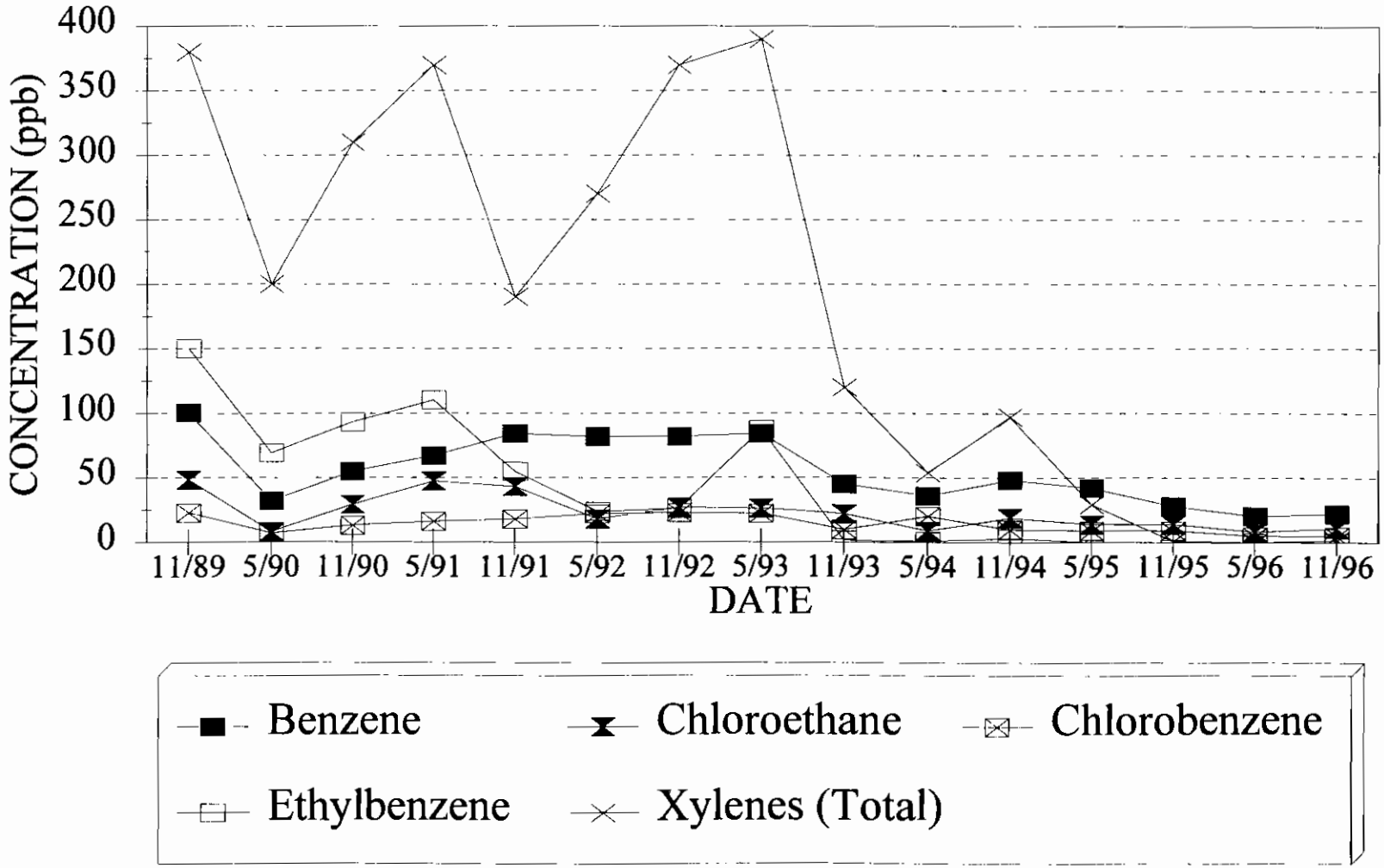
L - Series Wells - The number of L-series wells with detectable VOC concentrations increased from three in the last round to five. Groundwater at LD-5, located across the downgradient slurry wall from leachate collection well LCW-1, had the same relatively low level of 1,1-dichloroethane as the last four sampling events. Benzene and vinyl chloride were detected and chlorobenzene and 1,2-dichloroethene reappeared at levels similar to sampling events prior to 5/95, and still below the CRQL. Volatile organics which were in the double-digit ppb range in well LS-6 through the fall of 1994, and below CRQL in 1995, were not detected this time. Well LR-6 had far fewer compounds detected as compared to high concentrations that were detected during the first half of this O&M (i.e., 1990 through 1993) and at trace levels in the last few rounds. The most significant concentrations of volatile organics occurred at LR-8 across White Creek, north of the slurry wall.

- Xylene, which was previously detected at higher concentrations than any of the other compounds and which was not detected for the first time in the Spring 1996 since monitoring began, was detected in one well below the CRQL. As illustrated by Figure 3, xylene dropped significantly in 1993, and has continually decreased over the last six monitoring events, except for this recent slight increase.

- Benzene has averaged 35 ppb with minor fluctuations over the last seven events. For four events (11/91 to 5/93) prior to that, benzene remained steady at about 83 ppb. The current level represents over a 70% drop from the

FIGURE 3

VOC CONCENTRATIONS IN WELL LR-8



benzene level (100 ppb) at the beginning (11/89) of this program, and more than a 50% decrease from 1994/1995.

- Ethylbenzene follows a pattern similar to benzene, but with one difference. It initially was detected at concentrations higher (69 to 150 ppb) than benzene during the first four (11/89-5/91) events and dropped to trace levels (i.e., less than the CRQL of 5 ppb) during the last five events. It was not detected during the last three events.

- Chloroethane and Chlorobenzene, the other two compounds of significance in LR-8, were both below 20 ppb with no obvious trend since 1992.

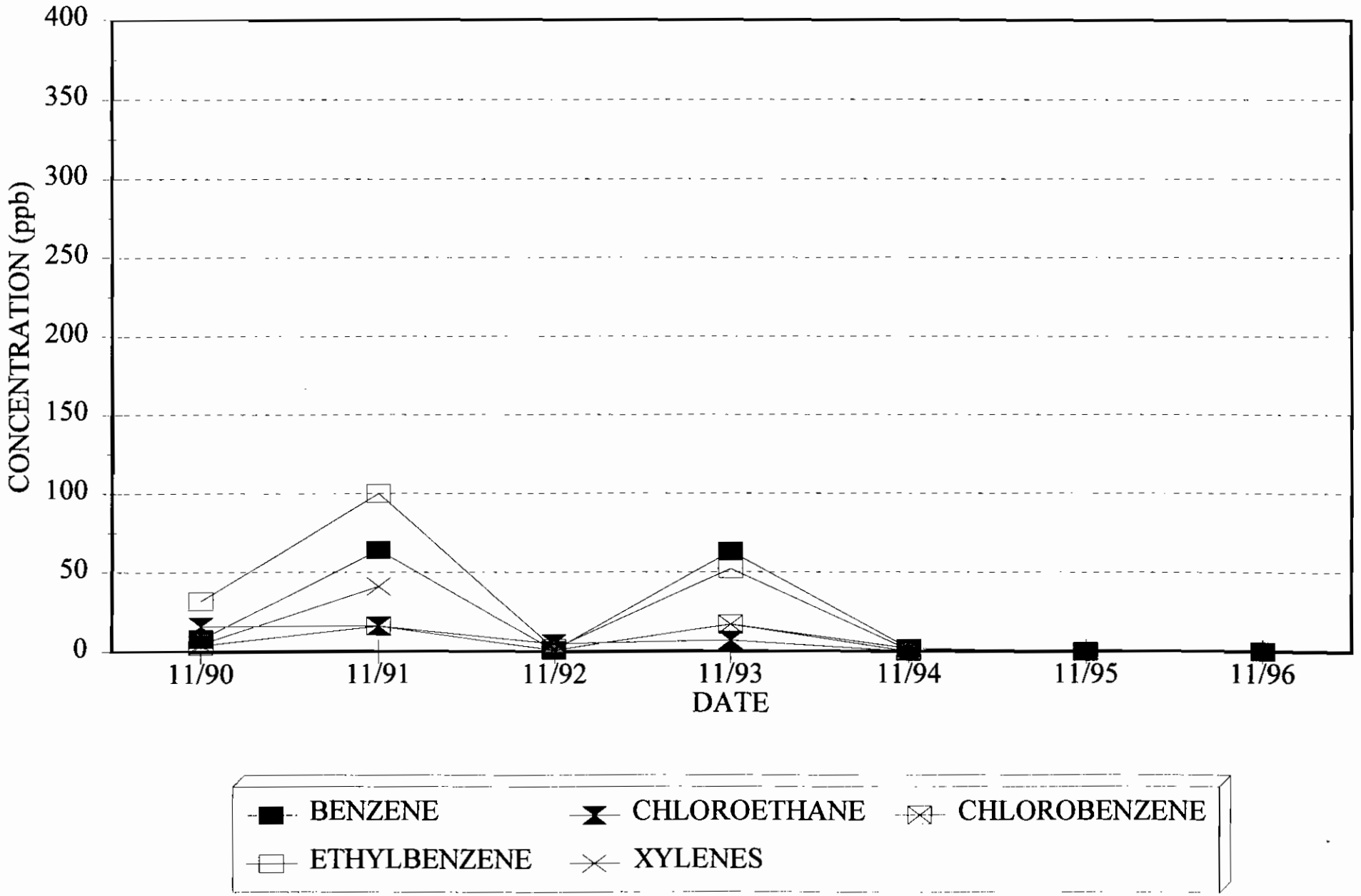
SWW-Series Wells - Volatile organics continue to be non-detected in the S-Series wells SWW-1 and SWW-4. SWW-8 showed only one detectable VOC in this sampling event, benzene at 0.9 ppb. Most notable are the fuel-related compounds (benzene, chlorobenzene, ethylbenzene, and xylenes) which dropped to trace levels in SWW-4 in 1994 from double-digit concentrations in previous years (see Figure 4A). SWW-10 and SWW-12 continued to show low levels of contamination consistent with previous events.

Only the chlorobenzene concentration in SWW-6 increased, albeit slightly, from the previous event (see Figure 4B). Benzene, chloroethane, and ethylbenzene show minor fluctuations over the last five years while xylene continues its wide swings in concentrations. Chlorobenzene is at its highest concentrations since the start of the environmental monitoring at the site. It is noted that the groundwater in this well was at the same level as observed in November 1994 and May 1995.

M-Series Wells - Previous analytical data for the M-series wells (5/96) is consistent with this monitoring event. VOAs were present in M-21 and M-25, the most significant being benzene at 7 ppb and not detected, respectively. Trace levels of chlorobenzene (2 ppb), chloroethane (3 ppb), and xylenes (0.6 ppb) were found in M-

FIGURE 4A

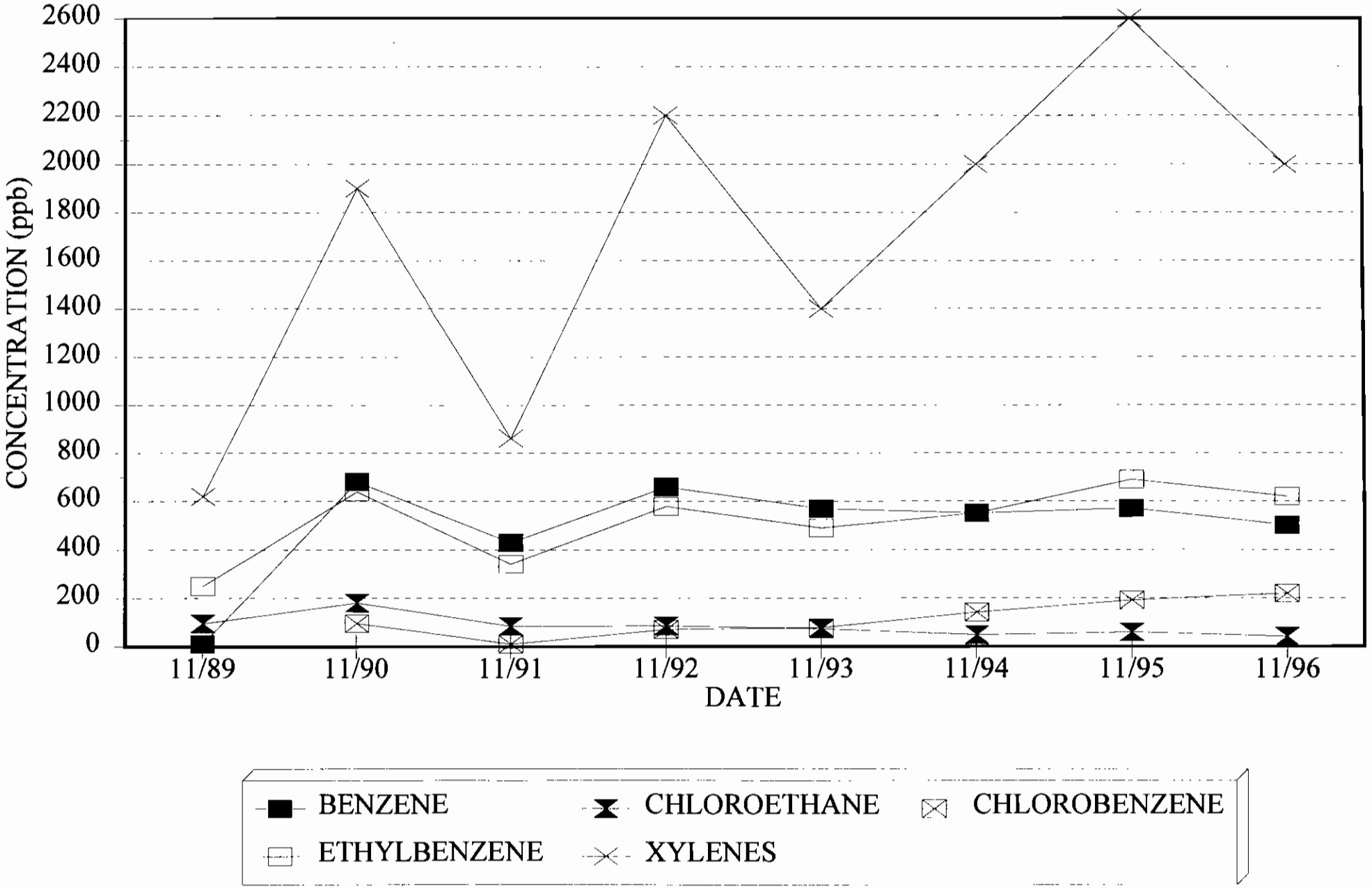
VOC CONCENTRATIONS IN WELL SWW-4



J:\35236\QPRO\CHART1.WB1\gk 13-Feb-97D

FIGURE 4B

VOC CONCENTRATIONS IN WELL SWW-6



21. Trace levels of bromodichloroethane (4 ppb), chloroform (7 ppb) and dibromochloromethane (2 ppb) were found in M-25.

Surface Water - No volatiles had been detected in any of the surface water samples over the previous five sampling events. During the 11/96 event however, trace levels of ethylbenzene (0.7 ppb), and xylenes (2 ppb) were detected in SW-1 and xylenes (0.3 ppb) in SW-2.

Sediments - No volatiles were detected in any of the sediment samples, consistent with the previous sampling event.

SEMIVOLATILES ORGANICS: The only semivolatile compound detected in wells for the fall 1996 sampling event was bis(2-ethylhexyl) phthalate in well LR-2 (less than the CRQL) except in SWW-6. Bis(2-ethylhexyl) phthalate is a common laboratory contaminant, although none was detected in any QC blanks.

Phenol was detected for the first time during the O&M monitoring at 510 ppb. This concentration was determined by a secondary dilution. Additionally, 2,4-dimethylphenol was detected at 510 ppb, a concentration similar to that found in 11/93 and 11/94. The 2,4-dimethylphenol level had deereased to 4 ppb during the 11/95 sampling event. Naphthalene was present as it was in 11/95, after initially being detected in 11/92. 4-chloroaniline decreased slightly after being on the increase since it first appeared 11/94.

No semivolatile organic compounds were detected in any of the surface water samples, consistent with the previous sampling event.

Some of the semivolatile organics detected in SS-1 in 11/96 had not been detected since 11/93 or earlier, such as fluorene and anthracene detected for only the second time during this O&M monitoring and benzo(a)pyrene, indeno(1,2,3-cd)pyrene, and benzo(g,h,i) perylene detected for only the fourth time. The total SVOC concentration in SS-1 is higher than it has been since 11/92. In SS-2, bis(2-Ethylhexyl) phthalate and

benzo(a)pyrene was again detected (below the CRQL) the first time since 5/94. The total SVOC concentration is the highest since 5/94. In SS-5, semivolatile compounds that had not been detected since 5/94 reappeared such as phenanthrene, bis(2-Ethylhexyl) phthalate, benzo(b)fluoranthene, and benzo(k) fluoranthene. The total SVOC concentration in SS-5 is higher than the previous sampling event.

5. MONITORING WELL ELEVATION MEASUREMENTS

Six pairs of monitoring wells are located around the slurry wall boundary of the PAS site. One well of each pair (SWW-2, 3, 5, 7, 9, and 11) is located inside the slurry wall perimeter and a second nearby well (SWW-1, 4, 6, 8, 10, and 12) is located on the opposite side of the slurry wall. These well pairs are designed to compare groundwater chemical data and groundwater elevation differences across the slurry wall boundary at the PAS site.

Water level readings taken by URS and the RPs are tabulated and charted in Attachment E. On the average, four of the six wells inside the slurry wall are lower in elevation than the corresponding outside well. In partieular, the three SWW well pairs across the downgradient slurry wall (SWW-3, 4, 5, 6, 11, and 12) have had at least a foot of inward gradient.

Groundwater outside the slurry wall flows to the northwest toward White Creek. Groundwater contours within the slurry wall boundary show a 3 foot deep groundwater surface depression located near the center of the site around well LCW-4. This well is an automatic pumping well which operates on an intermittent basis.

The water level readings taken on the six pairs of monitoring wells located around the slurry wall boundary are affected by the intermittent pumping of the four leachate collection wells. The historical monitoring well elevation data thus confirm that the slurry wall acts as a hydrologic barrier to groundwater flow.

ATTACHMENT A

DAILY EVENTS SUMMARY
FIELD ACTIVITIES LOG
AND
SAMPLE CHAIN-OF-CUSTODY RECORDS

PAS SITE NO. 7-38-001
(W.A. D002340-8)

FALL 1996 ENVIRONMENTAL MONITORING
NOVEMBER 11, 1996 TO NOVEMBER 15, 1996

EVENT SUMMARY

November 11, 1996

- Rental vehicle loaded with equipment (0730)
- K. Kearney and C. Scher departed from Buffalo to Oswego (0825)
- Arrived at Airborne Express, E. Syracuse to pick up rental HNU (1120)
- Arrived at Oswego to purchase additional field sampling supplies (1200)
- Arrived on site (1230)
- Performed site inspection and water level monitoring (1230-1500)
- Check-in at office with D. Iyer (1500)
- Calibrated instruments and purged wells (LR-2, LD-2, SWW-1, LS-9)
- Secured site and depart (1730)
- Arrived at Airborne Express - return HNU to Response Rental (1830)
- Arrived at Syracuse hotel and check-in (1900)

November 12, 1996

- Departed for PAS Oswego (0630). Arrived on site (0740)
- Calibrated instruments and prepared equipment (0740-0800)
- Sampled wells (LS-9, LD-2, LR-2 SWW-1) (0800-0830)
- Purged wells SWW-10, LD-4, SWW-12, LD-5, SWW-4, SWW-6 (0900-1130)
- Offsite to check in at office with D. Iyer (1215)
- Purged wells LS-6, LD-6, LR-6 (1230-1330)
- Sampled wells SWW-10, LD-4, SWW-12, LD-5, SWW-4, SWW-6 (1350-1515)
- Packed cooler, picked up ice, iced samples (1515-1630)
- Secured site and departed (1630)
- Arrived at Airborne Express (1730)

November 13, 1996

- Departed for PAS Oswego (0630). Arrived on site at (0715)
- Calibrated instruments and prepared for sample (0720-0800)
- Sampled wells LS-6, LD-6, LR-6 (0800)
- Purged and sampled SWW8 (0850-0945)
- Check in at office with S. Nowak, D. Iyer, and fax chain-of-custodies (0945-1050)
- Purged wells LD-8 and LR-8 (1100-1140)
- Purged and sample M-21 (1200-1530)
- Sampled wells LD-8 and LR-8 (1330)
- Packed cooler, picked up ice, iced cooler and offsite (1600)
- Arrived at Airborne Express (1700)

November 14, 1996

- Departed for PAS Oswego (0700). Arrived on site (0735)
- Calibrated instruments and purged M-26 (0740-1145)
- Sampled M-26 (1200)
- K. Kearney offsite to check in with D. Iyer and S. Nowak also fax of COC's to office (1130)
- Collected surface water/sediment SS/SW3 and repurged LD-6 (1230-1330)
- Purged of M-25 and collected remaining surface water/sediment samples (1330-1640)
- Sampled M-25 (1645)
- Offsite, purchase ice, pack cooler (1715)
- Returned to hotel (1800)

November 15, 1996

- Departed for PAS Oswego (0630). Arrived onsite (0710)
- Calibrated meters and collected resample of LD-06 SVOC only. Completed final site inspection. Secure site (0715-0900)
- Checked in at office with S. Nowak and D. Iyer (0900)
- Departed for Buffalo (0930)
- Arrived RECRA drop off samples for 11/14/96 and 11/15/96 (1240)
- Returned to Buffalo office, dropped off equipment, returned rental van (1430)

PROJECT FAA OSWEGO

Continued From Page

11/11/96 Activities / Calibration Log

Weather: 30-35° Snow, Cloudy
Personnel: C. Scher K. Kearny

pH # 172	7 = 7.01	4 = 4.03	10 = 9.96
Cond # 15	445 = 410	3900 = 3390	
Turbidity # 147	0-10 = 5.61	10-100 = 56.1	100-1000 = 547

HNu P1101 (Response Reverse) - Calibrated w/ 100ppm isobutylene in air Reading 57ppm 10.2ev lamp Span
Solinest H_2O Level # 176

0730 Loaded vehicle for sampling - Left BPLO For Syracuse 0825
1100 Arrive Syracuse Check in Hotel
1120 Arrive Airborn pick up HNu → To Site 1200 arrive Oswego Stop at Ames for Sampling Supplies - Tape, towels, twine, Baggies, markers etc
1330 onsite @ PAS start of Inspection / water levels Complete @ 1500
1500 offsite to call progress report to D. Iyer - message left on voice mail
1515 Return Site Calibrate meters start well purge - purge LR-2, LD-2, SWW-1, LS-4
1700 Complete purge - cleanup for day offsite 1730 - to airborn to return PID
1815 Arrive airborne - Ship meter return hotel unload meters Complete notes
Day End 1930 - 12hr day

No More
CS

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C. Scher — Signed | 11/11/96 — Date | Read and Understood By — Signed | Date

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PROJECT PAS OSWEGO 11/11/96

Notes / No. _____

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WATER Levels / Well Inspection

Well ID	TIME	PID	DTB	DTW	COMMENTS
LS-2	1248	ND	20.15	3.65	No Riser cap } Risers painted white
LR-2	1251	ND	58.42	13.78	No Riser cap }
LD-2	1253	ND	36.05	6.17	No Riser cap }
LR-3	1258	ND	66.45	8.59	No Riser cap
LD-3	1300	ND	30.30	3.03	No Riser cap
LD-4	1322	ND	33.15	9.49	No Riser cap
LD-5	1330	ND	29.70	9.03	No riser cap
LS-6	1335	ND	20.73	9.00	No riser cap
LR-6	1337	ND	60.34	10.45	No Riser Cap
LD-6	1339	ND	33.15	9.97	No Riser Cap
LR-8	1422	ND	43.05	9.57	No Riser Cap
LD-8	1424	ND	25.28	7.06	No Riser Cap
LS-9	1407	ND	15.95	7.90	No Riser Cap
SWW 1	1307	ND	22.10	8.75	OK
SWW 2	1308	ND	20.90	16.20	OK
SWW 3	1359	ND	20.80	17.33	OK
SWW 4	1401	ND	26.20	12.80	OK
SWW 5	1351	ND	22.50	14.83	OK
SWW 6	1353	3.1	18.96	8.00	OK
SWW 7	1314	ND	22.00	7.90	No Riser Cap
SWW 8	1302	ND	22.20	3.33	No Riser Cap
SWW 9	1318	ND	30.26	18.18	No Riser Cap
SWW 10	1320	ND	25.28	10.00	No Riser Cap
SWW 11	1335	ND	23.15	10.94	No Riser Cap
SWW 12	1325	ND	21.30	8.79	No Riser Cap
M-21	1420	ND	39.95	9.03	OK
M-22S	1430	ND	35.10	5.44	OK
M-23	1437	ND	44.40	7.33	OK
M-22D	1347	ND	53.00	10.30	OK
LCW-1	1332	0.3	-	12.30	OK
LCW-2	1342	0.2	-	15.72	OK
LCW-3	1355	ND	-	19.22	OK
LCW-4	1403	ND	-	22.70	OK
TANK HOUSE	1405	ND	-	-	.25" off Bottom - Recently Emptied?

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11/11/96 — Date

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Notebook No. ______

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PROJECT Rao Oswego

11/12/96 Calibration / activity Log

weather 25°/-30°/ Snowy wind 10mph NNW

Personnel K. Kearney C Scher

PH #172 7 = 7.04 4 = 4.02 10 = 9.87

Cond #15 445 = 440 3920 = 3370

Turbidity #147 0-10 = 5.67 10-100 = 56.1 100-1000 = 564

Solinst H2O level #176

0630 load van drive to site - Heavy Snow whiteout on Highway
0740 arrive Oswego - onsite calibrate meters set up for sampling
0800 Sample LR-2, LD-2, LS-9, SWW-1
0900 Purge of SWW-10, LD-4. 0930 Completed
0940 offsite call D. Dyer left message on voice mail return site.
1000 Purge of SWW 12, LD-5, SWW-4, SWW-6, Complete @ 1130
Label / prep Bottles for Sampling.
1315 offsite call progress report to D DYER return site and continue purge
1330 Purge of LS-6 LR-6 & LD-6 Complete @ 1330
1350 Start sampling of wells purged in a.m. - SWW10, LD-4, SWW12, LD-5
SWW-4, SWW-6
1515 Sampling for day complete to store for Ice - prepare Cooler
Shipment, Packaging & COC.
1630 OFFsite for day - to Airborne
1730 arrive Airborne - Ship Samples 11hr day

Trip Blank TB1-11-12-96 Sent

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C Scher 11/12/96

Signed Date Signed Date

PROJECT PAS Oswego

Notebook No. _____

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11/11/96 G.W. Purge

Location	LR-2	Start 1530	Location	LD-2	Start 1530
DTB	58.42	End 1630	DTB	36.05	End 1615
DTW	13.78	Dia: 2"	DTW	6.17	Dia 2"
Vol/3 Vol	7.58/22.76	Actual: 23 gal	Vol/3 Vol	5.08/15.23	Actual 16 gal
	Field Parameters			Field Parameters	
pH	11.68	8.15		8.76	7.45
Ω	722	538		445	1049
°C	10.5	8.9		10.5	6.3
NTU	6.48	9.92		7.8	8.40
Appear	Clear	Clear		Clear	Clear
	Initial	Final		Initial	Final

Location	LS-9	Start 1645	Location	SWW1	Start 1625
DTB	15.95	End 1655	DTB	25.98	End 1640
DTW	7.90	Dia 2"	DTW	10.00	Dia 2"
Vol/3 Vol	1.36/4.10	Actual 4.5	Vol/3 Vol	2.60/7.79	actual 8 Gallons
	Field Parameters			Field Parameter	
pH	6.80	7.03		7.46	7.24
Ω	384	676 Purged dry @ 4.5 gal		721	1611 w/ Med Brown Flocc
°C	12.2	11.3		7.2	8.7
NTU	18.6	>1000 Turbid Brown		29.7	164
Appear	Clear			Clear	3/4 Turbid
	Initial	Final		Initial	Final

* Wells Purged w/ Dedicated HDPE Bailer & NYLON CORD
Water Containerized and disposed of in Leachate Tank

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C. [illegible] 11/11/96

Signed Date

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·PROJECT PAS OSWEGO

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11/1/96

Site Conditions

Containment Cell - Fully Snow covered ≈ 6 to 8" snow on cap

Landscape - very Bushy overgrown 8"-18" snow c

- Roadway - Good no trash present

Drainage Trough - Badly overgrown has standing water present

French Drains - Badly overgrown

Fence — Fence appears to be generally in Good Condition

Storage Shed - Front doors - Decay of wood structurally unsound / unsecure would recommend Locking Equip inside.

Monitoring Well - Locks/risers continue rusting - LS2 LR2 LD2 Have been painted white - possible to blend in w/ snow may be subject for damage by snowplow - not visible

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Signed _____ Date 11/15/96

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Signed _____ Date _____

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PROJECT Pas Oswego Sampling — Continued From Page ______

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11-18-96

all Sampled w/ Dedicated HDPE Bailers & Nylon Twine

well ID/Sample ID PAS-LR2	PH 9.01
Sample Time 0800	COND 686
DTW 13.65	NTU 5.19
Sample by: CS/KK	TEMP 9.5
Paramaters: VOC SVOC	Appear Clear

Well ID/Sample ID PAS-LD2	PH 7.71
Sample Time 0810	COND 1786
DTW 6.15	NTU 8.75
Sample by CS/KK	TEMP 9.7
Paramater: VOC SVOC	Appear Clear

Well ID/Sample ID PAS-SWW1	PH 7.38
Sample Time 0820	COND 268
DTW 8.70	NTU 32.4
Sample by CS/KK	TEMP 8.9
Paramaters VOC SVOC	appear Clear

Well ID/Sample ID PAS-LS-9	PH 7.08
Sample Time 0830	COND 634
DTW 8.00	NTU 536
Sample by CS/KK	TEMP 10.0
Paramaters VOC SVOC	appear Clear LT Tan Tint

* Sampled w/ Dedicated HDPE Bailer/NYLON CORD

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[signature] 11/12/96

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PROJECT Pas OSWEGO Purge

11/12/96

all Purged w/ Dedicated HDPE Bailers & nylon [illegible]

Location	SWW-10	Start 0900		Location	LD-4		Start [illegible]
DTB	25.38	End 0930		DTB	33.15		End [illegible]
DTW	10.17	Dia 2"		DTW	9.52		Dia 2"
vol/3vol	2.57/7.70	Actual 4gal-Dry		vol/3vol	4.01/12.05		actual 7gal
	Field Parameter				Field Parameter		
pH	7.44	7.48			7.74	7.79	
Ω	316	291			348	316	
°C	9.6	9.8			9.3	9.6	
NTU	4.04	935			7.95	>1000	
appear	Clear	Brown			Clear	Brown	
	Initial	Final			Initial	Final	

Location	SWW-12	Start 1000		Location	LD-5		Start 1[illegible]
DTB	21.50	End 1030		DTB	29.70		End 1[illegible]
DTW	8.85	Dia 2"		DTW	9.13		Dia 2"
vol/3vol	2.15/6.45	actual 2gal-DRY		vol/3vol	3.49/10.49		actual [illegible]
	Field Parameter				Field Parameter		
pH	7.64	7.56			8.03	7.74	
Ω	258	256			256	260	
°C	9.1	9.7			9.0	9.5	
NTU	16.1	>1000			51.1	>1000	
appear	Clear	Turbid Brown			Clear	Brown	
	Initial	Final			Initial	Final	

Location	SWW-4	Start 1100		Location	SWW-6		Start [illegible]
DTB	26.20	End 1110		DTB	18.76		End [illegible]
DTW	12.83	Dia 2"		DTW	8.07		Dia 2"
vol/3vol	2.27/6.82	actual 7 Gal		vol/3vol	1.85/5.55		actual 6 gal
	Field Parameter				Field Parameter		
pH	7.12	6.96			7.04	7.07	
Ω	193	202			284	304	
°C	9.1	9.0			9.0	9.4	
NTU	13.4	21.3			13.6	272	
appear	Clear	Clear w/ Red Blk Floc			Clear Yellow tint	Lt Tan	
	Initial	Final			Initial	Final	

Continued To Page

Read and Understood By

C. [signature] 11/12/96

Signed Date Signed

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PROJECT Rae Oswego

Notebook No. _____

Continued From Page _____

11-12-96 Sampling - Sampled w/ Disposable HDPE Bailers & Nylon Twine

well/sample ID	PAS-SWW-10	pH	7.52
Sample time	1400	Cond	388
DTW	10.30	Temp	9.5
Sampled	KK/CS	NTU	14.1
Parameters	VOC SVOC	appear	Clear
well/sample ID	PAS-LD-4	pH	7.65
Time	1410	Cond	197
DTW	10.52	Temp	9.7
Sampled by	KK/CS	NTU	7.76
Parameters	VOC SVOC	appear	Clear
well/sample ID	PAS-SWW-12	pH	7.61
Time	1430	Cond	354
DTW	9.13	Temp	9.6
Sampled by	KK/CS	NTU	135
Parameter	VOC SVOC	appear	Clear
well/sample ID	PAS-LD-5	pH	7.63
Time	1440	Cond	303
DTW	9.14	Temp	9.3
Sampled by	KK/CS	NTU	20.4
Parameter	VOC SVOC	appear	~~Clear~~ Turbid
well/sample ID	PAS-SWW-4	pH	6.51
Time	1450	Cond	350
DTW	13.03	Temp	9.6
Sampled by	KK/CS	NTU	35.2
Parameter	VOC SVOC	appear	Clear
well/sample ID	PAS-SWW-6	pH	7.16
Time	1500	Cond	348
DTW	11.40	Temp	9.5
Sampled by	KK/CS	NTU	670
Parameters	VOC SVOC	appear	Lt Yellow

Continued on Page

Signed	Date	Read and Understood By	
	11/12/96		
Signed	Date	Signed	Date

Notebook No.

Continued From Page

PROJECT Rae Oswego

11-12-96 Purge

Location	LS-6	Start	1330
DTB	20.73	End	1345
DTW	9.03	Dia	2"
Vol/3Vol	1.99/5.97	actual	4 gal DRY
Field Parameters			
PH	7.41	7.54	
Ω	340	295	
°C	4.4	4.1	
NTU	7.64	584	
Appear	Clear	Grey Tint	

Location	LR-6	Start	1330
DTB	60.34	End	1320
DTW	10.45	Dia	2"
Vol/3Vol	8.48/25.44	Actual	26 Gal
FIELD Parameters			
PH	7.41	7.30	~~Start~~
Ω	332	334	~~End~~
°C	4.6	4.5	
NTU	68.8	6.27	
Appear	Clear	Clear	

Location	LD-6	Start	1345
DTB	33.15	End	1300
DTW	9.99	Dia	2"
Vol/3Vol	3.84/11.51	actual	5 gal - DRY
FIELD Parameters			
PH	7.83	7.74	
Ω	297	259	
°C	5.5	6.7	
NTU	6.57	> 1000	
Appear	Clear	Turbid Brown	

All wells Purged w/ Dedicated HDPE Bailers [illegible]

Continued on Page

Signed: [signature] Date: 11/12/96

Read and Understood By

Signed

PROJECT PAS OSWEGO

Notebook No.

Continued From Page

11/13/96 Calibration/activity Log

Weather 30-35°/ Snow wind 5mph NNW

PERSONNAL C. Scher K Keaney

pH # 172 7 = 7.05 4 = 4.03 10 = 9.97

COND # 15 445 = 439 3900 = 3390

NTU # 147 0-10 = 5.27 10-100 = 53.9 100-1000 = 527

Solinest H_2O level # 176 Generator # 127 Isco # 43

0630 - leave Syracuse for PAS - arrive 0715 onsite

0730 - Calibrate meters & Label bottles for Sampling

0800 Sample LS-6, LR-6, LD-6

0850 Purge and Sample of SWW-8

0945 offsite to Fox CoC, check In w/ S. Nowak and leave message for D Iyer

1100 Purge LR-8, LD-8 Label bottle sets and Set up for M-series wells

1200 Start Purge of M-21

1330 Sample LR-8 and LD-8 cont w/ purge M-21

Prep coolers, Start COC's

1530 Sample M-21 Clean up for Day pack coolers ~~w/ Ice~~ to Store for Ice for Samples

1600 offsite to Airborne to Ship Samples.

1700 arrive airborne - send samples clean van End day 1730 11hr Day

No more

CS

Continued on Page

C. Scher 11/13/96

Signed Date

Read and Understood By

Signed Date

Notebook No. ______

Continued From Page ______

PROJECT PAS OSWEGO

11/13/96 Sampling - G.W

Well/Sample ID	PAS-LS06	PH	6.85
Time	0810	COND	2020
DTW	9.10	NTU	95.2
Sample by	CS/KK	Temp	9.4
Parameters	VOA SVOC	Appear	LT Tan Tint

Well/Sample ID	PAS-LR-06	PH	7.21
Time	0820	COND	3150
DTW	10.57	NTU	3.05
Sample by	CS/KK	Temp	9.9
Parameter	SVOC VOC	appear	Clear

Well/Sample ID	PAS-LD-6	PH	7.69
Time	0830	COND	2440
DTW	23.37	NTU	393
Sample by	CS/KK	Temp	9.2
Parameter	SVOC VOC	appear	LT Tan Tint

G.W. Purge/Sample

Location	SWW-8	Start	0850
DTB	22.20	End	0920
DTW	3.68	Dia	2"
1V/3V	3.14/9.44	actual	10 Gal

Field Parameters

	Initial	Final	Sample
PH	7.47	7.29	7.19
COND	4600	5050	4060
NTU	16.6	79.7	36.0
Temp	9.0	9.5	9.1
appear	Clear	LT Tan Tint	Clear

Sample ID PAS-S...
Time 093...
DTW 4.17
BY CS/KK
Parameters S...

all purging/sampling done w/ Dedicated HDPE Bailer & nylon Cord Continued on Page

Signed: C. [signature] Date: 11/13/96

Read and Understood By

Signed ______ Date ______

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PROJECT PAS OSWEGO

Notebook No. _____

Continued From Page _____

11/13/96 G.W. Purge/Sample

Location LR-8 Start 1100

DTB 43.05 End 1140

DTW 10.70 Dia 2"

IV/3V 5.49/16.50 actual 17 Gal

Field Parameters

				Sample Time 1930
pH	8.62	7.36	8.52	ID PAS-LR-8
S	3030	3850	3400	DTW 10.70
°C	9.0	9.6	9.5	by CS/KK
NTU	36.0	6.36	34.7	Parameters VOC/SVOC
appear	Clear	Clear	Yellow tint	& MS MSD
	Initial	Final	Sample	

Location LD-8 Start 1100

DTB 25.38 End 1125

DTW 7.02 DIA 2"

IV/3V 3.10/9.34 Actual 10 Gallons

Field Parameters

pH	7.88	7.74	7.91	Sample Time 1945
S	2000	1920	1940	ID PAS LD-03
°C	9.2	9.1	9.1	DTW 7.02
NTU	8.61	238	21.4	by CS/KK
Appear	Clear	Turbid Beige	Clear	Parameters VOC/SVOC
	Initial	Final	Sample	

* all Purge/Sampling done w/ Dedicated HDPE Bailer and Nylon Cord

Continued on Page

Read and Understood By

C. S. 11/13/96

Signed Date Signed Date

Notebook No.

Continued From Page

PROJECT PAS Oswego

11/13/96 G.W. Purge / Sample

well ID	M-21	Start 1200		Sample Time 153[illegible]	
DTB	37.95	End 1520		DTW: 9.97	
DTW	9.13	Actual: 139 Gallons			
W/3V	46.23 / 138.7	DIA - 6" well (1.50)			
Field Parameters					
pH	8.02	8.27		8.24	
Ω	2580	3390		3360	
°C	9.1	9.3		9.2	
NTU	33.9	41.3		37.6	
Appear	Clear w/ Rust particles	Clear w/ Rust Parts		Clear w/ Rust Parts	
	Initial	Final		Sample	

Purged w/ Dedicated 5/8 OD Tubing + ISKO pump
Sampled w/ Dedicated HDPE Bailer + Nylon Twine

No more

CS

Continued on Page

Signed: [signature] Date: 11/13/96

Read and Understood By

Signed Date

PROJECT PAS OSWEGO

Notebook No. ______
Continued From Page ______

11/14/96 Calibration/Activities Log

Weather 25°F some snow/sun
Personnel C. Scher E. Kenny

pH #172 4= 4.04 7= 7.01 10= 9.94
COND #15 445= 438 3900= 3100
NEU #147 0-10= 4.68 10-100= 47.1 100-1000= 504
Solinest H_2O level #176 Generator #127 ISCO #43
D.O. # [illegible] 810 Calibration to atmospheric pressure/ambient air

0700 leave E. Syracuse for Oswego - arrive 0735 Calibrate meters
set up for days Sampling/purge
0800 start purge M-26 label Bottles for sample
Continue w/ inspection of site fence areas.
1130 EK Call office for check in w/ Chemist - svoc from LD-6
broke - Have to repurge + Resample message left for D. IYER.
1200 Sample of M-26 Set up for Surface water/Sediments
1230 SWSS-03 and purge of LD-6. 1300 SWSS-01
1330 Start purge of M-25 and SWSS-02 (MS/MSD)
1400 Collect SWSS-04A and 1500 SWSS-05. during
purge of M-25
1645 Collect Sample M-25 Pack up Samples for pickup, Complete COC
1715 To Store for Ice - will Hand Deliver Samples tomorrow AM. Clean up
Return Hotel arrive 1800 - End day 11 HR

No more
CS

Continued on Page

C. Scher (signature) 11/14/96

Signed Date

Read and Understood By

Signed Date

Notebook No. ______

Continued From Page ______

PROJECT PAS Oswego

11/14/96 Purge/sample

well ID	M-26	Start time	0800	Sample time	12
DTB	44.40	End time	1145	DTW	7.74
DTW	7.70	actual amt	166 Gallons	By	CS/KF
1vol/3vol	53.05/165.15	Diameter	6" well		

Field Parameters

pH	8.30	7.70	7.74
Ω	89	57	51
°C	8.7	8.4	8.3
NTU	12.5	2.73	3.01
Appear	Clear	Clear	Clear
	Initial	final	Sample

well ID	M-25	Start time	~~1330~~ 1330	Sample Time	1645
DTB	35.10	End time	1640	DTW	6.01
DTW	5.97	Actual Purge	131 gallons	by	CS
1vol/3vol	43.6/130.8	Diameter	6"		

field Parameters

pH	8.51	8.23	8.37
Ω	111	194	191
°C	5.4	5.4	5.3
NTU	3.11	4.26	3.78
appear	Clear	Clear	Clear
	Initial	final	Sample

wells Purged w/ 3/8 OD Tubing (Dedicated) and ISCO Pump

wells Sampled w/ Dedicated HDPE Bailer + NYLON cord

Continued on Page

C. S[signature]

Signed

11/14/96

Date

Read and Understood By

Signed

Date

PROJECT Pas Oswego

Notebook No. _____

Continued From Page _____

11/4/96 — Surface water / Sediments

Loc ID (water)	PAS-SW-01	PAS-SW-02	PAS-SW-03	PAS-SW-04A	PAS-SW-05
Time	1300	1330	1230	1440	1500
Flow / Depth	12" Fast	12" FAST	10" Deep-Fast	18" FAST	18" Fast
C/L Parameters	A / C	A / C	A / C	A / C	A / C
pH	8.35	8.37	8.05	8.52	8.38
COND	101	137	77	140	164
°C	3.7	3.9	5.4	3.7	3.9
NTU	4.12	7.18	3.59	15.9	14.9
Appear	Clear	Clear	Clear	Clear	Clear
Comments	~~PAS/MSD~~	MS/MSD	-	-	-
D.O.	9.17	9.99	13.91	9.84	10.79
ID (Sed)	PAS-SS-01	PAS-SS-02	PAS-SS-03	PAS-SS-04A	PAS SS-05
	Dk Brown Silty Sand w/ organic matter	Dk Brown Silty Sand w/ organic matter	Dk Brown Silty Sand w/ organic matter	Dk Brown Silty Sad w/ organic matter	Dk Brown Silty Sand w/ organic matter

Stream Guages

SSSW 1 Guage Gone 12" Deep Swift Flow

SSSW 2 Guage Gone Measured w/ Branch = 12" Deep

SSSW 3 9" Deep Guage in place Fast Flow (Stream) - No flow by Guage

SSSW 4A 18" Deep - Fast Flow

SSSW 5 18" water in Stream but Guage in out of water DRY

Continued on Page

Signed — Date 11/4/96 — Read and Understood By — Signed — Date

PROJECT PAS - Oswego 11/14/96 & 11/15/96 Notebook No. _____

Continued From Page _____

11/14/96 Purge/Sample

11/15/96

Location PAS-LD-06 Start 1230 Sample Time C

DTB 33.15 End 1240 BY CS/KK

DTW 19.78 Liner 2" Parameter - SVOC

LNAPL/DNAPL 2.35/7.07 Recovered 2Gal - DRY DTW 23.98

Resample for Lab/Airborn Breakage - SVOC only

pH	7.92	7.79	7.81
Ω	301	270	290
°C	8.1	8.3	7.7
NTU	12.6	>1000	14.9
appear	Clear	Turbid Brown	Clear
	Initial	Final	Sample

Day End - 111496

Activity Log / Calibration

Weather 35°

Personnel C. Scher K. Keary

pH# 172 7 = 7.02 4 = 4.03 10 = 7.86

Cond# 15 445 = 437 3900 = 3310

ORP# 147 0-10 = 4.79 10-100 = 49.1 100-1000 = 52

Water level# 176

0800 Final Tank level between DRY + .25" - same as 11-11

0630 - leave Syracuse for PAS - arrive 0710 Calibrate meters

0715 Collects Resample of LD-06 SVOC only -

Final Site Walk / Inspection Clean up Site / Secure -

0900 Off Site Final Check in @ office - message left for D. INGR / check in

Project Chemist

0930 Leave Oswego for BFLD arrive ≈ 1000 - Ship Equip @ Airborn 12

1240 Arrive Reese Sign off Samples. 1300 Pick up C.S. Car → to BFLD

Demob, Clean out, Jay Returns vehicle to Hertz and drive K.

Home Day End 1430 8 Hr day

Continued on Page

Read and Understood By

Signed Date Signed Date

11/15/96

[illegible] ONLY (?)

TO Steve Nowak
From C. Scher / K. Kearney

CHAIN OF CUSTODY RECORD

URS CONSULTANTS, INC

PROJECT NO. 35036
SITE NAME PAS OSWEGO
SAMPLERS (PRINT/SIGNATURE) C. Scher / K. Kearney

LAB Recra
COOLER 2 Coolers of ____
PAGE 1 of 1

DELIVERY SERVICE: Airborne AIRBILL NO.: 7804364632

LOCATION IDENTIFIER	DATE	TIME	COMP/GRAB	SAMPLE ID	MATRIX	TOTAL NO.# OF CONTAINERS	TESTS / BOTTLE TYPE AND PRESERVATIVE: VOA+ TOTAL / 40ml glass 1:1 HCl	TESTS / BOTTLE TYPE AND PRESERVATIVE: SVOA+ TOTAL / 1L Amber glass 4°C						REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO.# (IRPIMS ONLY)
														Schedule A				
LR-2	11/12/96	0800	grab	PAS-LR-02	WG	4	2	2							N1	0	0	
LD-2		0810	grab	PAS-LD-02	WG	4	2	2							N1	0	0	
LS-9		0820	grab	PAS-LS-09	WG	4	2	2						[illegible]	N1	0	0	
SWW-1		0830	grab	PAS-SWW-01	WG	4	2	2						[illegible]	N1	0	0	
SWW10		1400	grab	PAS-SWW-10	WG	4	2	2							N1	0	0	
LD-4		1410	grab	PAS-LD-04	WG	4	2	2							N1	0	0	
SWW-12		1430	grab	PAS-SWW-12	WG	4	2	2							N1	0	0	
LD-5		1440	grab	PAS-LD-05	WG	4	2	2							N1	0	0	
SWW-4		1450	grab	PAS-SWW-04	WG	4	2	2							N1	0	0	
SWW-6		[illegible]	grab	PAS-SWW-06	WG	4	2	2							N1	0	0	
Field QC	↓	-	-	TB1-111296	WG	2	2							Trip Blank	TB1	0	0	

MATRIX CODES					
AA - AMBIENT AIR SE - SEDIMENT SH - HAZARDOUS SOLID WASTE	SL - SLUDGE WP - DRINKING WATER WW - WASTE WATER	WG - GROUND WATER SO - SOIL DC - DRILL CUTTINGS	WL - LEACHATE GS - SOIL GAS WC - DRILLING WATER	WO - OCEAN WATER WS - SURFACE WATER WQ - WATER FIELD QC	LH - HAZARDOUS LIQUID WASTE LF - FLOATING/FREE PRODUCT ON GW TABLE

SAMPLE TYPE CODES: TB# - TRIP BLANK; SD# - MATRIX SPIKE DUPLICATE; RB# - RINSE BLANK; FR# - FIELD REPLICATE; N# - NORMAL ENVIRONMENTAL SAMPLE; MS# - MATRIX SPIKE (# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
[illegible signature]	11/12/96	1700			
RELINQUISHED BY (SIGNATURE)	**DATE**	**TIME**	**RECEIVED FOR LAB BY (SIGNATURE)**	**DATE**	**TIME**

SPECIAL INSTRUCTIONS
Samples @ 4°C
Analytical Schedule Enclosed

Distribution: Original accompanies shipment, copy to coordinator field files

GW Sampling Day (2) — 36 Bottles

CHAIN OF CUSTODY RECORD

URS CONSULTANTS, INC

PROJECT NO. 35236
SITE NAME PAS OSWEGO
SAMPLERS (PRINT/SIGNATURE) C. Schen K Kearney

LAB Recra
COOLER ___ of ___
PAGE 1 of 1

DELIVERY SERVICE: Air Borne
AIRBILL NO.: 7804364735

TESTS: [illegible] + HCl; [illegible] 4°C

BOTTLE TYPE AND PRESERVATIVE: 40ml VOA Glass HCl; 1L Amber Glass 4°C

LOCATION IDENTIFIER	DATE	TIME	COMP/GRAB	SAMPLE ID	MATRIX	TOTAL NO.# OF CONTAINERS	40ml VOA Glass HCl	1L Amber Glass 4°C	REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO.# (IRPIMS ONLY)
LS-6	11/13/96	0810	Grab	PAS-LS-06	WG	4	2	2	Schedule A	N1	0	0	
LR-6		0820	Grab	PAS-LR-06	WG	4	2	2		N1	0	0	
LD-6		0830	Grab	PAS-LD-06	WG	4	2	2		N1	0	0	
SWW-8		0730	Grab	PAS-SWW-08	WG	4	2	2		N1	0	0	
LD-8		1345	Grab	PAS-LD-08	WG	4	2	2		N1	0	0	
LR-8		1330	Grab	PAS-LR-08	WG	4	2	2		N1	0	0	
LR-8		1330	Grab	PAS-LR-08MS	WG	4	2	2		MS	0	0	
LR-8		1330	Grab	PAS-LR-08MSD	WG	4	2	2		SD	0	0	
M-21	↓	1530	Grab	PAS-M 21	WG	4	2	2		N1	0	0	

Change by [illegible]11596

MATRIX CODES
AA - AMBIENT AIR; SE - SEDIMENT; SH - HAZARDOUS SOLID WASTE; SL - SLUDGE; WP - DRINKING WATER; WW - WASTE WATER; WG - GROUND WATER; SO - SOIL; DC - DRILL CUTTINGS; WL - LEACHATE; GS - SOIL GAS; WC - DRILLING WATER; WO - OCEAN WATER; WS - SURFACE WATER; WO - WATER FIELD QC; LH - HAZARDOUS LIQUID WASTE; LF - FLOATING/FREE PRODUCT ON GW TABLE

SAMPLE TYPE CODES
TB# - TRIP BLANK; SD# - MATRIX SPIKE DUPLICATE; RB# - RINSE BLANK; FR# - FIELD REPLICATE; N# - NORMAL ENVIRONMENTAL SAMPLE; MS# - MATRIX SPIKE
(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
[signature]	11/13/96	1800			

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME

SPECIAL INSTRUCTIONS
Samples @ 4°C
Analytical Schedule Enclosed

Distribution: Original accompanies shipment, copy to coordinator field files

URSF-075C/1 OF 1/CofCR/GM

Surfacewater/Sediments 11-14-96 Day 3 - Final

CHAIN OF CUSTODY RECORD

URS CONSULTANTS, INC

PROJECT NO. 35236

SITE NAME PAS Oswego

SAMPLERS (PRINT/SIGNATURE) C. Scher K. Kearney

LAB Rec-A

COOLER ____ of ____

PAGE 1 of 2

DELIVERY SERVICE: HAND Deliver AIRBILL NO.: —

LOCATION IDENTIFIER	DATE	TIME	COMP/ GRAB	SAMPLE ID	MATRIX	TOTAL NO.# OF CONTAINERS	TCL VOA + 10TIC (4oz glass Jar 4°C)	TCL SVOA + 20TIC, PPCB, T.AL METALS, PHENOL, CN, HEX CR (16oz glass Jar 4°C)	TCL VOA + 10TIC (40ml glass vial HCL)	TCL SVOA + 20TIC (1L Amber Glass 4°C)					REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO.# (IRPIMS ONLY)
SW-1	11/14/96	1300	Grab	PAS-SW-01	WS	4			2	2					Schedule C for Sediments	N1	0	0	
SW-2		1330	Grab	PAS-SW-02	WS	4			2	2						N1	0	0	
SW-3		1230	Grab	PAS-SW-03	WS	4			2	2					Schedule A	N1	0	0	
SW-4A		1400	Grab	PAS-SW-04	WS	4			2	2					for waters	N1	0	0	
SW-5		1500	Grab	PAS-SW-05	WS	4			2	2						N1	0	0	
SS-1		1300	Grab	PAS-SS-01	SE	2	1	1								N1	0	0	
SS-2		1330	Grab	PAS-SS-02	SE	2	1	1								N1	0	0	
SS-3		1230	Grab	PAS-SS-03	SE	2	1	1								N1	0	0	
SS-4A		1400	Grab	PAS-SS-04A	SE	2	1	1								N1	0	0	
SS-5		1500	Grab	PAS-SS-05	SE	2	1	1								N1	0	0	
SS-02		1330	Grab	PAS-SS-02 MS	SE	2	1	1							matrix spike	MS	0	0	
SS-02		1330	Grab	PAS-SS-02 MSD	SE	2	1	1							matrix spike Duplicate	SD	0	0	

MATRIX CODES
AA - AMBIENT AIR
SE - SEDIMENT
SH - HAZARDOUS SOLID WASTE
SL - SLUDGE
WP - DRINKING WATER
WW - WASTE WATER
WG - GROUND WATER
SO - SOIL
DC - DRILL CUTTINGS
WL - LEACHATE
GS - SOIL GAS
WC - DRILLING WATER
WO - OCEAN WATER
WS - SURFACE WATER
WQ - WATER FIELD QC
LH - HAZARDOUS LIQUID WASTE
LF - FLOATING/FREE PRODUCT ON GW TABLE

SAMPLE TYPE CODES
TB# - TRIP BLANK
SD# - MATRIX SPIKE DUPLICATE
RB# - RINSE BLANK
FR# - FIELD REPLICATE
N# - NORMAL ENVIRONMENTAL SAMPLE
MS# - MATRIX SPIKE
(# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)	DATE/	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
Cheryl Scher	11/15/96	1240			

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME
			[signature]	11/15/96	[illegible]

SPECIAL INSTRUCTIONS
Samples @ 4°C
Analytical Schedule Enclosed

Distribution: Original accompanies shipment, copy to coordinator field files

URSF-075C/ CofCR/GM

G.W. Sampling Day (3)

CHAIN OF CUSTODY RECORD

URS
CONSULTANTS, INC

PROJECT NO. 35236

SITE NAME PAS OSWEGO

SAMPLERS (PRINT/SIGNATURE) Cheryl Schon
Cheryl Schon Kevin Kearney

LAB Recra

COOLER ____ of ____

PAGE 1 of 1

DELIVERY SERVICE: Hand Delivered AIRBILL NO.: ____

TESTS

BOTTLE TYPE AND PRESERVATIVE

LOCATION IDENTIFIER	DATE	TIME	COMP/ GRAB	SAMPLE ID	MATRIX	TOTAL NO.# OF CONTAINERS	40ml Glass Vial HCl VOA + 10 TIC	1L Amber Glass 4°C SVOC 90 TIC	REMARKS	SAMPLE TYPE	BEGINNING DEPTH (IN FEET)	ENDING DEPTH (IN FEET)	FIELD LOT NO.# (IRPIMS ONLY)
M-26	11/14/96	1200	Grab	PAS-M-26	WG	4	2	2	Schedule A	N1	0	0	
M-25	11/14/96	1645	Grab	PAS-M-25	WG	4	2	2		N1	0	0	
LD-06	11/15/96	0715	Grab	PAS-LD-06 RS	WG	2		2	Resample For Breakage	N1	0	0	

No more

MATRIX CODES
AA - AMBIENT AIR; SE - SEDIMENT; SH - HAZARDOUS SOLID WASTE; SL - SLUDGE; WP - DRINKING WATER; WW - WASTE WATER; WG - GROUND WATER; SO - SOIL; DC - DRILL CUTTINGS; WL - LEACHATE; GS - SOIL GAS; WC - DRILLING WATER; WO - OCEAN WATER; WS - SURFACE WATER; WQ - WATER FIELD QC; LH - HAZARDOUS LIQUID WASTE; LF - FLOATING/FREE PRODUCT ON GW TABLE

SAMPLE TYPE CODES
TB# - TRIP BLANK; SD# - MATRIX SPIKE DUPLICATE; RB# - RINSE BLANK; FR# - FIELD REPLICATE; N# - NORMAL ENVIRONMENTAL SAMPLE; MS# - MATRIX SPIKE; (# - SEQUENTIAL NUMBER (FROM 1 TO 9) TO ACCOMMODATE MULTIPLE SAMPLES IN A SINGLE DAY)

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY (SIGNATURE)	DATE	TIME
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY (SIGNATURE)	DATE	TIME
	11/15/96	1240		11/15/96	1240

SPECIAL INSTRUCTIONS
Samples @ 4°C
Analytical Schedule Enclosed

Distribution: Original accompanies shipment, copy to coordinator field files

URSF-075C/1 OF 1/CofCR/GM

ATTACHMENT B

FIELD/ANALYTICAL DATA FORMS

FORMS:
PAS-1, Sampling Event Summary
PAS-2, Well Data Summary
PAS-3, Monthly Monitoring Well Levels
PAS-5, Routine Inspection Checklist

SAMPLING EVENT SUMMARY

Pollution Abatement Services

URS Greiner
282 Delaware Avenue
Buffalo, New York 14202
(716) 856-5636

ARRIVAL:
DATE: 11/11/96 TIME: 1230

Personnel Onsite: Kevin Kearney
Cheryl Scher

Site Conditions on Arrival: _____

Weather: Date: 11/11/96
Date: 11/12/96
Date: 11/13/96
Date: 11/14/96
DATE: 11/15/96

DEPARTURE:
DATE: 11/15/96 TIME: 0930

POST SAMPLING CHECKLIST:

Yes Wells Locked
Yes Tank Secured
Yes Site Cleanup / Walk Through
Yes Site Secured

SURFACE WATER SAMPLES

Sample Number	Sample Date	Sample Time	Analytical Schedule
PAS-SW-1	11/14/96	1300	A
PAS-SW-2	11/14/96	1330	A
PAS-SW-3	11/14/96	1230	A
PAS-SW-4A	11/14/96	1400	A
PAS-SW-5	11/14/96	1500	A

STREAM SEDIMENT SAMPLES

Sample Number	Sample Date	Sample Time	Analytical Schedule
PAS-SS-1	11/14/96	1300	C
PAS-SS-2	11/14/96	1330	C
PAS-SS-3	11/14/96	1230	C
PAS-SS-4A	11/14/96	1400	C
PAS-SS-5	11/14/96	1500	C
MS/MSD (SS-3)	11/14/96	1330	C

GROUNDWATER SAMPLES

Sample Number	Sample Date	Sample Time	Analytical Schedule
PAS-LS-2	NOT SAMPLED	–	–
PAS-LR-2	11/12/96	0800	A
PAS-LD-2	11/12/96	0810	A
PAS-LR-3	NOT SAMPLED	–	–
PAS-LD-3	NOT SAMPLED	–	–
PAS-LD-4	11/13/96	1410	A
PAS-LD-5	11/12/96	1440	A
PAS-LS-6	11/13/96	0810	A
PAS-LR-6	11/13/96	0820	A
PAS-LD-6	11/13/96	0830	A
PAS-LR-8	11/13/96	1330	A
PAS-LD-8	11/13/96	1345	A
PAS-LS-9	11/12/96	0830	A
PAS-SWW-1	11/12/96	0820	A
PAS-SWW-4	11/12/96	1450	A
PAS-SWW-6	11/12/96	1500	A
PAS-SWW-8	11/13/96	0930	A
PAS-SWW-10	11/12/96	1400	A
PAS-SWW-12	11/13/96	1430	A
PAS-M-21	11/13/96	1530	A
PAS-M-25	11/14/96	1645	A
PAS-M-26	11/14/96	1200	A
Trip Blank	11/12/96	–	A VOC ONLY
MS/MSD (LR-8)	11/13/96	1330	A

TANK LEVEL MEASUREMENTS

Date	Time	Level from Bottom	Remarks
11/11/96	1405	≈ .25"	Tank appears to have been pumped out
11/15/96	0800	≈ .25"	Recently some sections of Tank are DRY
			Some read ≈ .25"

NOTES: LD-06 was Resampled For SVOC on 11/15/96 to Replace Broken Bottles

By: Cheryl Scher Firm: URS Greiner, Inc. Telephone #: (716) 856-5636

SAMPLING EVENT SUMMARY

URS Greiner

Pollution Abatement Services
Semiannual

Month: NOVEMBER Year: 1996

Date	Time	Well Number	Well Bottom Elevation (feet)	Water Elevation (feet)	Water Height From Bottom (feet)	Volume of Casing (gal)	Volume Purged (gal)	Specific Conduct. (µmhos/cm)	pH (S.U.)	Temp. (deg. C)	Remarks
REPLACED		LS-2	269.5	—	—	—	—	—	—	—	—
11/12/96	0800	LR-2	231.5	276.07	44.57	7.58	23.0	686	9.01	9.5	
11/10/96	0810	LD-2	251.1	283.56	32.46	5.08	16.0	1786	7.71	9.7	
REPLACED		LR-3	211.7	—	—	—	—	—	—	—	—
REPLACED		LD-3	248.6	—	—	—	—	—	—	—	—
11/12/96	1410	LD-4	246.3	269.76	23.46	4.01	7.00	197	7.68	9.7	PURGED DRY
11/12/96	1440	LD-5	243.2	263.91	20.70	3.49	8.00	303	7.63	9.3	PURGED DRY
11/13/96	0810	LS-6	253.4	265.14	11.74	1.99	4.00	2020	6.85	9.4	PURGED DRY
11/13/96	0820	LR-6	213.6	263.94	50.34	8.48	26.00	3180	7.21	9.9	
11/13/96	0830	LD-6	240.9	264.06	23.16	3.94	5.00	2440	7.69	9.2	PURGED DRY
11/13/96	1330	LR-8	230.3	263.85	33.55	5.49	17.00	3400	8.52	9.5	
11/13/96	1345	LD-8	248.1	265.77	17.67	3.10	10.00	1940	7.81	9.1	
11/12/96	0830	LS-9	260.9	268.82	7.92	1.36	4.50	624	7.08	10.0	PURGED DRY
11/12/96	0820	SWW-1	267.1	280.58	13.48	2.60	7.79	268	7.38	8.9	
NOT SAMPLED		SWW-2	266.2	—	—	—	—	—	—	—	—
NOT SAMPLED		SWW-3	265.8	—	—	—	—	—	—	—	—
11/12/96	1450	SWW-4	257.5	270.80	13.30	2.27	7.00	250	6.81	9.6	
NOT SAMPLED		SWW-5	254.5	—	—	—	—	—	—	—	—
11/12/96	1500	SWW-6	254.0	265.06	11.06	1.85	6.00	348	7.16	9.5	
NOT SAMPLED		SWW-7	250.3	—	—	—	—	—	—	—	—
11/13/96	0930	SWW-8	256.2	274.91	18.71	3.14	10.00	4060	7.19	9.1	
NOT SAMPLED		SWW-9	256.1	—	—	—	—	—	—	—	—
11/12/96	1400	SWW-10	256.3	270.43	14.13	2.57	4.00	288	7.52	9.5	PURGED DRY
NOT SAMPLED		SWW-11	250.7	—	—	—	—	—	—	—	—
11/12/96	1430	SWW-12	251.5	264.03	12.53	2.15	2.00	254	7.61	9.6	PURGED DRY
11/13/96	1530	M-21	231.3	263.45	32.15	46.23	139.0	3360	8.24	9.2	
11/14/96	1645	M-25	*234.2	264.06	29.86	43.60	131.0	191	8.27	5.3	
11/17/96	1200	M-26	*228.3	266.37	38.07	55.05	166.0	51	7.74	8.3	

Casing Volume = water height from botton of well(ft.) X π r² (Insidde Radius of casing in ft.) X 7.48 gal/ft^3

NOTES: * ELEVATIONS ARE ESTIMATED - NOT SURVEYED AS SHOWN ON WELL CONSTRUCTION LOG

By: Cheryl Scher

Firm: URS Greiner, Inc. Telephone #: (716) 856-5636

URSF-101 1/WDS/GCM

MONTHL' MONITORING WELL LEVELS

URS Greiner

282 Delaware Avenue
Buffalo, New York 14202
(716) 856-5636

Pollution Abatement Services **Date:** NOV 11 1996

Well Number	Riser Elevation (feet)	Ground Elevation (feet)	Water Depth to Level of		Water Elevation (feet)
			Top of Riser (feet)	Ground Level (feet)	
LS2	289.81	287.5	3.65	1.34	286.16
LR2	289.85	287.5	13.78	11.44	276.07
LD2	289.73	287.1	6.17	3.54	283.56
LR3	278.06	275.5	8.59	6.03	269.47
LD3	278.62	275.8	3.03	0.21	275.59
LD4	279.25	276.3	9.49	6.54	269.76
LD5	272.94	270.2	9.03	6.29	263.91
LS6	274.14	271.4	9.00	6.26	265.14
LR6	274.39	270.9	10.45	6.96	263.94
LD6	274.03	270.9	9.97	6.84	264.06
LR8	273.42	270.0	9.57	6.15	263.85
LD8	272.83	269.9	7.06	4.13	265.77
LS9	278.72	274.0	7.90	5.18	268.82
SWW1	289.33	286.2	8.75	5.62	280.58
SWW2	289.37	286.3	16.20	13.13	273.17
SWW3	286.50	286.0	17.33	16.83	269.17
SWW4	283.80	282.9	12.80	12.10	270.80
SWW5	277.02	275.9	14.83	13.71	262.19
SWW6	273.06	270.9	8.00	5.84	265.06
SWW7	277.93	273.3	7.90	3.27	270.03
SWW8	278.24	275.7	3.33	0.79	274.91
SWW9	285.55	283.3	18.18	15.93	267.37
SWW10	280.43	279.3	10.00	8.87	270.43
SWW11	273.50	271.0	10.94	8.44	262.56
SWW12	272.82	270.2	8.79	6.17	264.03
M-21	* 272.48	270.3	9.03	6.85	263.45
M-25	* 269.50	* 268.0	5.44	3.94	264.06
M-26	* 273.70	* 272.0	7.33	5.63	266.37

Remarks: * Elevations are Estimated, NOT Surveyed AS IN Well Construction Log

By: Cheryl Scher

Firm: URS Greiner, Inc. Telephone #: (716) 856-5636

ROUTINE INSPECTION CHECKLIST

Pollution Abatement Services

URS Greiner
282 Delaware Avenue
Buffalo, New York 14202
(716) 856-5636

Item	Date Inspection Performed	Remarks
CONTAINMENT CELL CAP	11/11/96	FULLY SNOW COVERED 6-8" SNOW ON CAP
Landscaping	11/11/96	VERY BADLY OVERGROWN OVER 12" IN MANY AREAS. SNOW COVERED
Roadways	11/11/96	CLEAN - FREE OF DEBRIS
- General Condition	11/11/96	GOOD
- Snow Removal	11/11/96	NON APPLICAPLE
Concrete Drainage Trough	11/11/96	BADLY OVERGROWN STEADY FLOW OF WATER IN ALL TROUGHS
Debris	11/11/96	NONE
French Drains	11/11/96	GOOD CONDITION - OVERGROWN W/GRASS
FENCE	11/11/96	FENCE APPEARS TO BE IN OVERALL GOOD CONDITION. LOCK USED TO SECURE MIDDLE SECTION MISSING - NEED TO BETTER SECURE THIS AREA
MONITORING WELLS		
Risers	11/11/96	LS2, LR2, LD2 APPEAR TO HAVE BEEN RECENTLY PAINTED WHITE. DIFFICULT TO SEE IN SNOW CONDITIONS - COULD BE EASILY HIT BY PLOW - ALL OTHERS OK
Locks	11/11/96	GOOD CONDITION

Remarks: STORAGE SHED - FALLING APART STRUCTURALLY WEAK, DOOR CAME OFF WHEN SHED INITIALLY OPENED AND HAD TO BE REPLACED ON HINGES

By: Cheryl Seiler

Firm: URS Greiner, Inc. Telephone #: (716) 856-5636

ATTACHMENT C

LOCATION MAP AND BORING LOGS FOR M-SERIES WELLS

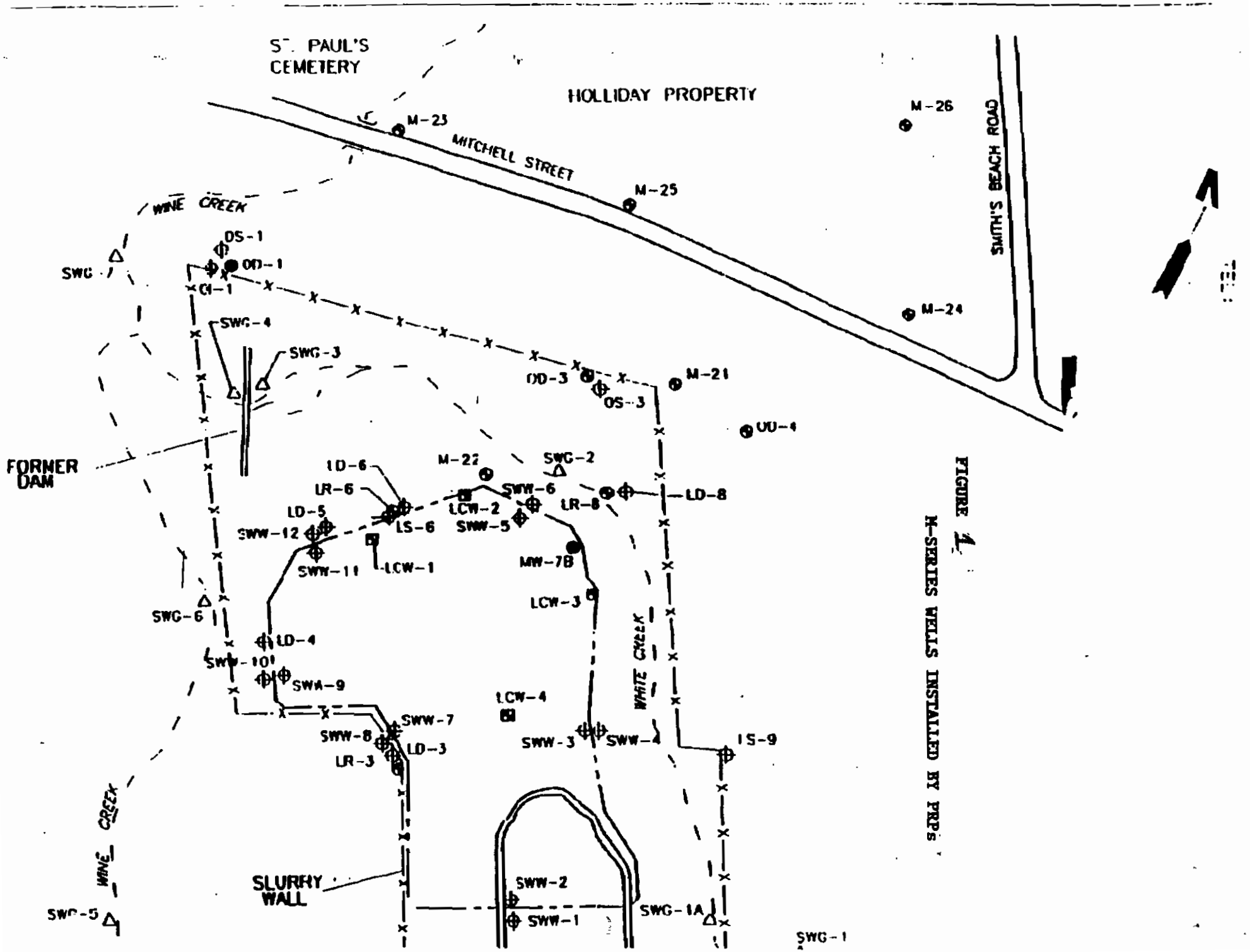
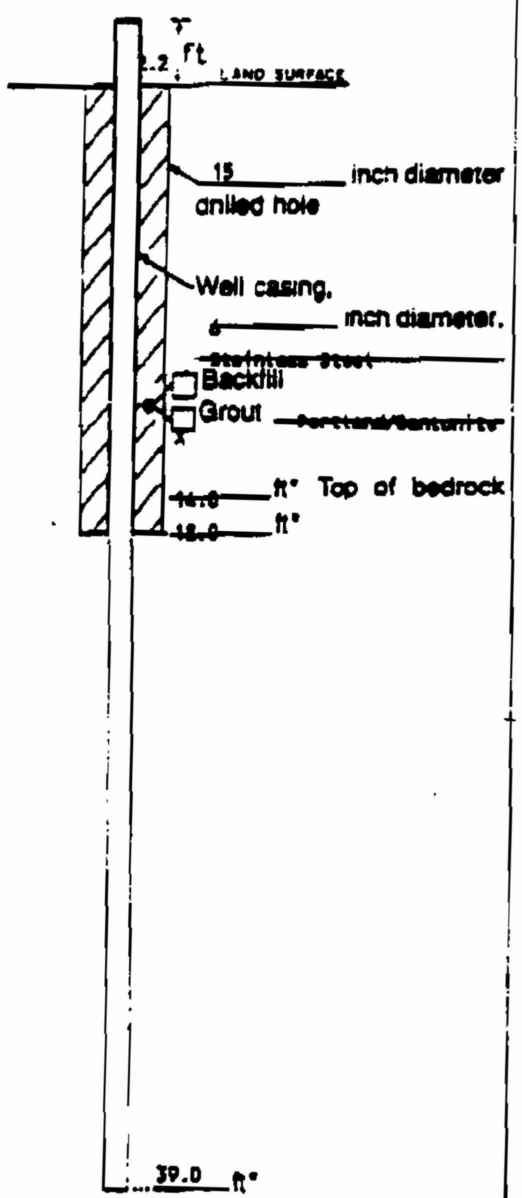


FIGURE 1

M-SERIES WELLS INSTALLED BY PRPs

GERAGHTY & MILLER, INC.
Environmental Services

WELL CONSTRUCTION LOG
(BEDROCK)



Project PAS - NY50402 Well M-21

Town/City Oswego

County Oswego State New York

Permit No. ______

Land-Surface Elevation and Datum 270.28 feet mean sea level

☒ Surveyed
☐ Estimated

Installation Date(s) 9/9/91 - 9/17/91

Drilling Method 6 1/4", 8 1/4", NX, [illegible]

Drilling Contractor Parratt Wolff, Inc.

Drilling Fluid Water

Development Technique(s) and Date(s)

Submersible Pump for 2.0 hours on 9/17/91

Centrifugal Pump (Rig) for 1.0 hours on 9/18/91

Fluid Loss During Drilling 30 - 40 gallons

Water Removed During Development Approximately 1,400 gallons

Static Depth to Water 11.21 feet below M.P.

Pumping Depth to Water 34 feet below M.P.

Pumping Duration 3.0 hours

Yield 10.8 - 11.5 gpm Date 9/17, 9/18/91

Specific Capacity ______ gpm/ft

Well Purpose Bedrock Ground Water Monitoring

Fracture Zones Horizontal/Annular: 18.6, 19.8, 20.0-22.0, 22.3, 26.6, 29.8, 33.0-34.0, 34.8, 38.1

Remarks

Vertical Fracture Zones: 15.2-16.8, 22.3-24.3, 38.1-38.8

Strong odor to water

Measuring Point is Top of Well Casing Unless Otherwise Noted.

*Depth Below Land Surface

Prepared by S. [illegible]

GERAGHTY & MILLER, INC.
Environmental Services

SAMPLE/CORE LOG

Boring/Well M-21 Project/No. PAS - NY50402 Page 1 of 2

Site Location Oswego, New York Drilling Started 9/9/91 Drilling Completed 9/17/91

Total Depth Drilled 39.0 feet Hole Diameter 15 inches Type of Sample/ Coring Device Split Spoon

Length and Diameter of Coring Device 2' x 2" Sampling Interval 2 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Drilling Fluid Used None 0 - 14.0'; Water 14.0 - 39.0' Drilling Method 4 1/4", 8 1/4", HX, P

Drilling Contractor Parratt Wolff, Inc. Driller Rice Helper Lansing/Eaves

Prepared By S. Beenes Hammer Weight 140# Hammer Drop 30 inches

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	SAMPLE ID	Sample/Core Description
0	2	1.5	3-4-6-8	No lab	SAND (80%) brown, coarse to medium, trace fine; Top Soil (10%)
				samples	organics, silt; Silt (5%) brown; Gravel (5%) fine, subround,
				taken	trace medium to coarse; poorly sorted, damp.
2	4	1.5	8-7-7-10		SAND (70%) brown, medium to fine, trace coarse; Silt (30%)
					brown; trace fine gravel, trace organics, moist.
4	4	0.0	50/0.1		Cobbles/Boulders 4.1 - 6.0'
6	8	1.4	17-27-		SAND (60%) brown, coarse to medium, trace fine; Gravel (40%)
			50/0.4		coarse to fine, subangular (fragmented) to subround; poorly
					sorted, cobbles present, moderately compacted, moist.
7.5	9.1				Boulder/Cobbles
10	12	0.8	32-50/0.3		Same as above (moist - wet).
12	14	1.0	49-61		Same as above (wet).
14		0.0	50/0.0		Rock.
14.3	19.3	5.0S	(100%)		Bedrock - SANDSTONE, green, fine, medium hard to hard,
HX-1	BED	4.8/5	(96%)		competent, trace green siltstone gravel/fragments throughout
					(dropstones?), very little weathering, horizontal bedding, trace
					crossbedding (18.0'), trace fine gravel (18.4'), wet.
					Horizontal fractures: well developed, 18.6';
					Vertical: 15.2 - 16.8', healed 18.6 - 19.3'.

GERAGHTY & MILLER, INC.
Environmental Services

SAMPLE/CORE LOG (Cont.d)

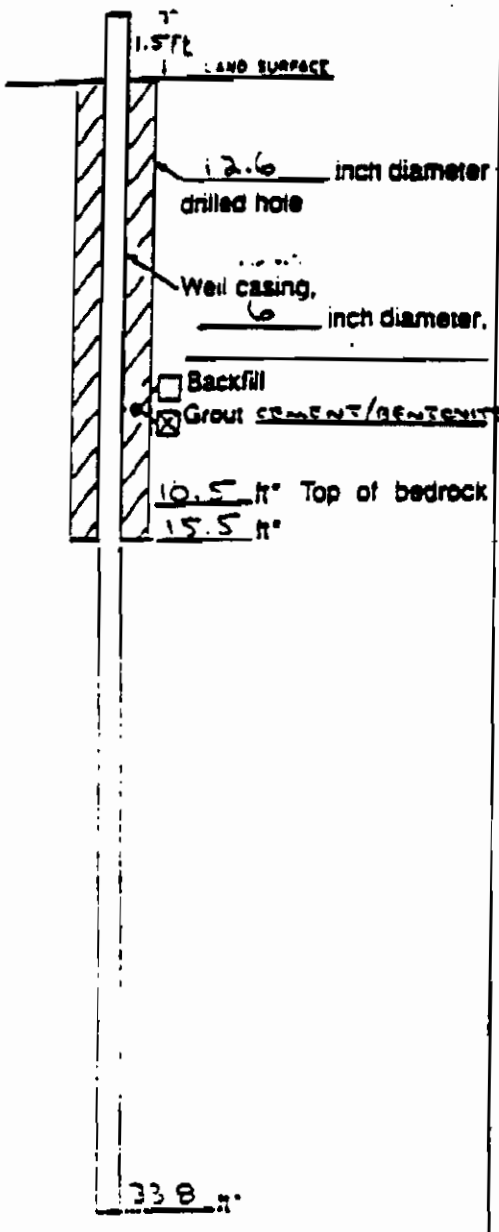
Boring/Well MW-21

Prepared By: S. Seamon

Sample/Core Depth (feet below land surface) From	To	Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 inches	SAMPLE ID	Sample/Core Description
19.3	24.3	4.9/5	(98%)		SANDSTONE - same as above. Varying amounts of silt
MW-2	RQD	4.0/4.9	(81%)		(ie silty fine sandstone at 21.3', 22.3 - 22.6'). Horizontal
					fractures: 19.8', 22.3'. Fractured at angle: 20.1', 20.6',
					20.7', 20.8', 20.9', 21.9'. Vertical fractures: 22.3 - 24.3'
24.0	29.0	4.5	(89%)		SANDSTONE - same as above.
P-1	RQD	2.92/4.5	(65%)		Well developed horizontal fractures 24.25', 24.6', 25.8'.
29.0	34.0	4.7	(94%)		SANDSTONE - same as above.
P-2	RQD	3.0/4.7	(64%)		Trace coarse sand, siltstones 29.0 - 29.2', black
					staining 30.25'.
34.0	39.0	4.8	(96%)		SANDSTONE - same as above.
P-3	RQD	3.94/4.8	(82%)		Upper 3" fractured. At 34.8' fracture and gravel zone
					approximately 0.04' thick. Healed vertical fracture/crack
					38.1 - 38.8'. Horizontal fracture 38.1'.
39.0					End of coring.
					Water at 11.21'

DRAFT

WELL CONSTRUCTION LOG
(BEDROCK)



Measuring Point is Top of Well Casing Unless Otherwise Noted.

*Depth Below Land Surface

Project SPRDS / OAS SITE Well M-25

Town/City OSWEGO

County _____ State NEW YORK

Permit No. _____

Land-Surface Elevation and Datum 268 feet ☐ Surveyed ☒ Estimated

Installation Date(s) 3/13/94 - 3/21/94

Drilling Method _____

Drilling Contractor _____

Drilling Fluid _____

Development Technique(s) and Date(s)

Fluid Loss During Drilling _____ gallons

Water Removed During Development _____ gallons

Static Depth to Water _____ feet below M.P.

Pumping Depth to Water _____ feet below M.P.

Pumping Duration _____ hours

Yield _____ gpm Date _____

Specific Capacity _____ gpm/ft

Well Purpose _____

Fracture Zones _____

Remarks _____

Prepared by _____

ROUX

DRAFT

Project: SPRDS PAS Site, Oswego, New York	Log of Well No. M-25
Date Started: 7/13/94 Completed: 7/21/94	Measuring Point Elevation: Total Depth: 33.8 ft
Logged By: J. Makowski Checked By: L. McTiern	Water Level During Drilling: 8.5 ft Post-Development: 8.6 ft
Drilling Co: Parratt-Wolff Driller: Mark Eaves	Casing: 6-Inch Stainless Steel Drill Bit Diameter: 5.4 in.
Drilling Method: Water Rotary	Perforations: from to
Drilling Equipment: Mobile Drill B-57	Pack: from to
Sampler: 2-Inch Split Spoon	Seal: from to
	Cement/Bentonite Grout from 0.0 to 15.5

DRAFT

Depth (feet)	LITHOLOGIC DESCRIPTION	Lithology	Monitoring Well Construction	Sampler Blows per 6"	PID (ppm)	REMARKS
	Light and dark brown SILT, little fine Gravel, trace fine Sand, roots throughout; angular gravel; slight plasticity; dry.	SILT		4 5 5 11	0.0	Casing stick-up is 1.5' above land surface. Split-spoon sample contained 1.2' of recovery.
		SAND				Hard drilling from 4'-5' bls.
5	Light brown fine SAND, little fine Gravel, trace Silt; angular gravel; slight plasticity; moist.			8 26 50/4"	0.0	Split-spoon sample contained 0.5' of recovery.
		SILT				Hard drilling from 7'-8' bls.
						Soil cuttings appear wet at 8.5' bls.
10	Light gray SILT, little fine Gravel; angular gravel; wet.	SANDSTON		12 50/3"	0.0 0.0	Split-spoon sample contained 0.3' of recovery. Hard drilling at 10' bls.
	Gray SANDSTONE.					Core from 10.5'-15.5' bls: Recovery 4.8', RQD 69%. Vertical fracturing from 10.83'-11.65' bls.
15	Gray SANDSTONE.				0.0	Bottom of steel casing 15.5' bls.
						Core from 15.5'-18.0' bls: Recovery 2.1', RQD 30%.
	Gray SANDSTONE, trace green Shale fragments.				0.0	Core from 18.0'-21.0' bls: Recovery 2.76', RQD 29%.
20						
	Gray SANDSTONE, trace green Shale fragments.				0.0	Core from 21.0'-21.8' bls: Recovery 1.6' (broken rock), RQD 47%.
	Gray SANDSTONE.				0.0	Core from 21.8'-23.0' bls: Recovery 1.95', RQD 86%. Iron staining noted approximately 22.6' bls.
	Gray SANDSTONE.				0.0	Core from 23.0'-28.0' bls: Recovery 5.16', RQD 98%.
25						

Continued Next Page

ROUX

Project: SPRDS
PAS Site, Oswego, New York

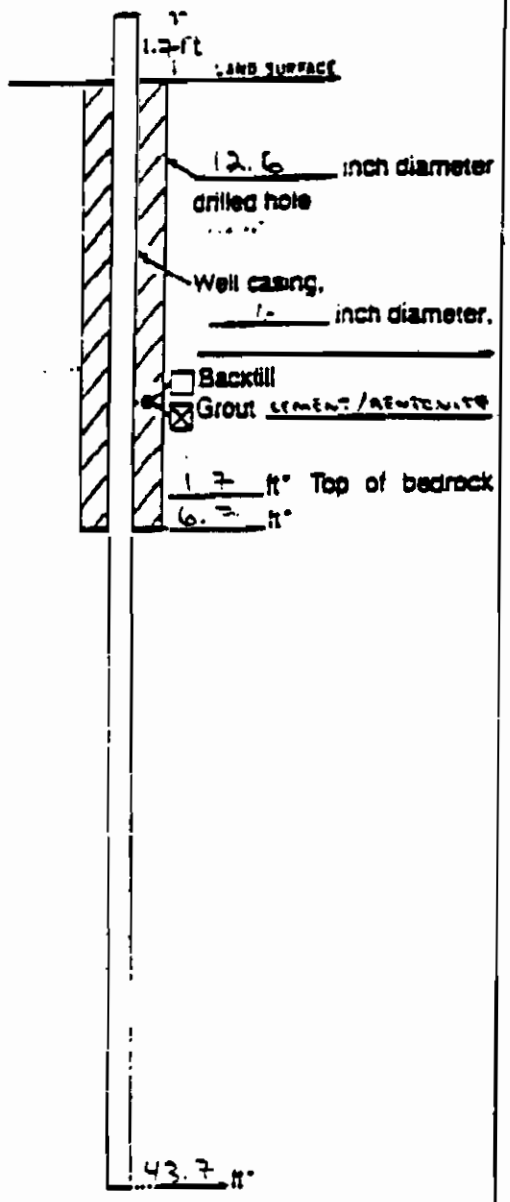
Log of Well No. M-25 DRAFT

Depth (feet)	LITHOLOGIC DESCRIPTION	Lithology	Monitoring Well Construction	Sampler Blows per 6"	PID (ppm)	REMARKS
30	Gray SANDSTONE.				0.0	Core from 28.0'-33.0' bls: Recovery 5.03', RQD 82%. Vertical fracturing from 28.4'-30.05' bls.
35						Bottom of measured borehole at 33.79' bls.
40						
45						
50						

DRAFT

DRAFT

WELL CONSTRUCTION LOG
(BEDROCK)



Measuring Point is Top of Well Casing Unless Otherwise Noted.

*Depth Below Land Surface

Project SPADS / PAS SITE Well M-26

Town/City OSWEGO

County _____ State NEW YORK

Permit No. _____

Land-Surface Elevation and Datum 272 feet ☐ Surveyed ☒ Estimated

Installation Date(s) 7/14/94 - 7/26/94

Drilling Method _____

Drilling Contractor _____

Drilling Fluid _____

Development Technique(s) and Date(s)

Fluid Loss During Drilling _____ gallons

Water Removed During Development _____ gallons

Static Depth to Water _____ feet below M.P.

Pumping Depth to Water _____ feet below M.P.

Pumping Duration _____ hours

Yield _____ gpm Date _____

Specific Capacity _____ gpm/ft

Well Purpose _____

Fracture Zones _____

Remarks _____

Prepared by _____

ROUX

Project: SPRDS PAS Site, Oswego, New York	Log of Well No. M-26 DRAFT
Date Started: 7/14/94 Completed: 7/26/94	Measuring Point Elevation: Total Depth: 43.7 ft
Logged By: J. Makowski Checked By: L. McTiern	Water Level During Drilling: 12.2 ft Post-Development: 13.0 ft
Drilling Co: Parratt-Wolff Driller: Mark Eaves	Casing: 6-Inch Stainless Steel Drill Bit Diameter: 5.4 in.
Drilling Method: Water Rotary	Perforation: from to
Drilling Equipment: Mobile Drill B-57	Pack: from to
Sampler: 2-Inch Split Spoon	Seal: from to
	Cement/Bentonite Grout from 0.0 to 6.5

Depth (feet)	LITHOLOGIC DESCRIPTION	Lithology	Monitoring Well Construction	Sampler	Blows per 6"	PID (ppm)	REMARKS
	Light brown SILT, little fine Gravel, trace fine Sand, roots throughout; slight plasticity; dry.	SILT			4 9 25/3"	0.0	Casing stick-up is 1.7' above land surface. Split-spoon sample contained 1.0' of recovery.
		SANDSTON				0.0	Hard drilling at 1.5' bls.
	Gray SANDSTONE (weathered).						Core from 1.7'-6.7' bls: Recovery 5.0', RQD 35%.
5	DRAFT						
							Bottom of steel casing 6.5' bls.
	Gray SANDSTONE (weathered).					0.0	Core from 6.7'-8.7' bls: Recovery 2.2', RQD 34%.
	Gray SANDSTONE.					0.0	Core from 8.7'-13.7' bls: Recovery 5.1', RQD 75%. Iron staining noted approximately 13.25' bls.
10							
	Gray SANDSTONE, trace gray Shale fragments.					0.0	Core from 13.7'-18.7' bls: Recovery 4.8', RQD 69%.
15							
	Gray SANDSTONE, trace gray Shale fragments.					0.0	Core from 18.7'-23.7' bls: Recovery 4.9', RQD 72%.
20							
	Gray SANDSTONE.					0.0	Core from 23.7'-28.7' bls: Recovery 4.85', RQD 68%. Vertical fracture noted approximately 24.9' bls.
25							

Continued Next Page

ROUX

Project: SPRDS
PAS Site, Oswego, New York

Log of Well No. M-26 DRAFT

Depth (feet)	LITHOLOGIC DESCRIPTION	Lithology	Monitoring Well Construction	Sampler Blows per 6"	PID (ppm)	REMARKS
30	Gray SANDSTONE.				0.0	Core from 28.7'-33.7' bls: Recovery 4.78', RQD 94%.
35	Gray SANDSTONE, trace blue-green Shale fragments.				0.0	Core from 33.7'-38.7' bls: Recovery 5.0', RQD 87%.
40	Gray SANDSTONE, trace blue-green Shale fragments.				0.0	Core from 38.7'-43.7' bls: Recovery 5.15', RQD 85%.
45						Bottom of measured borehole at 43.7' bls.
50						

ATTACHMENT D

ANALYTICAL DATA FROM ALL SAMPLING EVENTS (11/89 - 11/96)

- **MONITORING WELLS (L-Series, SWW-Series, and M-Series)**
- **SURFACE WATER (SW-series)**
- **SEDIMENTS (SS-series)**
- **LEACHATE (LCW-series)**

Note: See Table 1 of Report for a summary of sampling and analysis preformed to date.

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LS-2

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	11/96
Compound															
VOLATILE (ppb)															
Acetone															
Benzene															
2-Butanone															
Chloroethane															
Chlorobenzene															
Carbon disulfide															
Chloroform															
1,1-Dichloroethane															
1,2-Dichloroethane															
1,1-Dichloroethylene															
1,2-Dichloroethene (Total)															
Ethylbenzene															
4-Methyl-2-pentanone															
Methylene chloride		2 BJ													
Toluene															
1,1,1-Trichloroethane															
Trichloroethylene											2 BJ				
Vinyl acetate															
Vinyl chloride															
Xylenes (Total)															
SEMIVOLATILE (ppb)															
Phenol															
1,2-Dichlorobenzene															
2-Methylphenol															
4-Methylphenol															
2,4-Dimethylphenol															
Benzoic acid															
Naphthalene															
Isophorone															
4-Chloroaniline															
2-Methylnaphthalene															
N-Nitrosodiphenylamine															
Di-n-butylphthalate															
Butylbenzyl phthalate									2 J						
bis (2-Ethylhexyl) phthalate					3 BJ										
Di-n-octyl phthalate															
METALS (ppb)															
Aluminum	986														
Antimony															
Arsenic															
Barium	105 B														
Beryllium															
Calcium	175000														
Chromium	475														
Cobalt	9.2 B														
Copper															
Iron	3060														
Lead	2.6 B														
Magnesium	51220														
Manganese	121														
Nickel	92.2														
Potassium	2560 B														
Sodium	68400														
Vanadium															
Zinc	49.1														

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LR-2

Date / Compound	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	05/96	
VOLATILE (ppb)															
Acetone															
Benzene											2 J				
2-Butanone															
Chloroethane															
Chlorobenzene															
Carbon disulfide	1 J											12			
Chloroform															
1,1-Dichloroethane															
1,2-Dichloroethane															
1,1-Dichloroethylene															
1,2-Dichloroethene (Total)															
Ethylbenzene															
4-Methyl-2-pentanone															
Methylene chloride															
Toluene															
1,1,1-Trichloroethane															
Trichloroethylene											3 BJ				
Vinyl acetate															
Vinyl chloride															
Xylenes (Total)															
SEMIVOLATILE (ppb)															
Phenol															
1,2-Dichlorobenzene															
2-Methylphenol															
4-Methylphenol															
2,4-Dimethylphenol															
Benzoic acid															
Naphthalene															
Isophorone															
4-Chloroaniline															
2-Methylnaphthalene															
N-Nitrosodiphenylamine															
Di-n-butylphthalate															
Butylbenzyl phthalate															
bis (2-Ethylhexyl) phthalate					0.5 BJ	0.6 J					22 J		2 J		2 J
Di-n-octyl phthalate															
METALS (ppb)															
Aluminum	605														
Antimony															
Arsenic															
Barium	432														
Beryllium															
Calcium	42500														
Chromium															
Cobalt															
Copper															
Iron	977														
Lead	3														
Magnesium	22300														
Manganese	45.5														
Nickel															
Potassium	3190														
Sodium	21900														
Vanadium															
Zinc	56														

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals).

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LD-2

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	05/96	11/96
Compound															
VOLATILE (ppb)															
Acetone		15 B													
Benzene															
2-Butanone															
Chloroethane															
Chlorobenzene															
Carbon disulfide	7	9													
Chloroform															
1,1-Dichloroethane															
1,2-Dichloroethane															
1,1-Dichloroethylene															
1,2-Dichloroethene (Total)															
Ethylbenzene															
4-Methyl-2-pentanone															
Methylene chloride		2 BJ													
Toluene															
1,1,1-Trichloroethane															
Trichloroethylene											2 BJ				
Vinyl acetate															
Vinyl chloride															
Xylenes (Total)															
SEMIVOLATILE (ppb)															
Phenol															
1,2-Dichlorobenzene															
2-Methylphenol															
4-Methylphenol															
2,4-Dimethylphenol															
Benzoic acid															
Naphthalene															
Isophorone															
4-Chloroaniline															
2-Methylnaphthalene															
N-Nitrosodiphenylamine															
Di-n-butylphthalate			51												
Butylbenzyl phthalate			46												
bis (2-Ethylhexyl) phthalate			3 J								4 J				
Di-n-octyl phthalate															
METALS (ppb)															
Aluminum	268														
Antimony															
Arsenic	2.4 B														
Barium	225														
Beryllium															
Calcium	118000														
Chromium															
Cobalt															
Copper															
Iron	1210														
Lead															
Magnesium	55300														
Manganese	258														
Nickel															
Potassium	1360 B														
Sodium	4700														
Vanadium															
Zinc	17 B														

Only detected results reported

B - Compound detected in associated blank (organic); compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LR-3

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	
Compound															
VOLATILE (ppb)															
Acetone		13 B													
Benzene					43										
2-Butanone															
Chloroethane															
Chlorobenzene															
Carbon disulfide															
Chloroform															
1,1-Dichloroethane															
1,2-Dichloroethane															
1,1-Dichloroethylene															
1,2-Dichloroethene (Total)															
Ethylbenzene															
4-Methyl-2-pentanone															
Methylene chloride															
Toluene															
1,1,1-Trichloroethane															
Trichloroethylene											1 BJ				
Vinyl acetate															
Vinyl chloride															
Xylenes (Total)															
SEMIVOLATILE (ppb)															
Phenol															
1,2-Dichlorobenzene															
2-Methylphenol															
4-Methylphenol															
2,4-Dimethylphenol															
Benzoic acid															
Naphthalene															
Isophorone															
4-Chloroaniline															
2-Methylnaphthalene															
N-Nitrosodiphenylamine															
Di-n-butylphthalate			76		1 J										
Butylbenzyl phthalate			16		2 J										
bis (2-Ethylhexyl) phthalate					11 B										
Di-n-octyl phthalate					3 J										
METALS (ppb)															
Aluminum	3240														
Antimony															
Arsenic															
Barium	527														
Beryllium															
Calcium	191000														
Chromium	15.1														
Cobalt	13 B														
Copper	24 B														
Iron	5080														
Lead	2.3 B														
Magnesium	67500														
Manganese	872														
Nickel															
Potassium	4700 B														
Sodium	12100														
Vanadium															
Zinc	29.7														

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but < zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LD-3

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	11/96
Compound															
VOLATILE (ppb)															
Acetone	280 E	17	22	13 B	9 J										
Benzene	9	45	5	3 J	3 J	2 J	3 J		2 J		2 J		1 J		
2-Butanone	40														
Chloroethane					2 J										
Chlorobenzene															
Carbon disulfide		9													
Chloroform															
1,1-Dichloroethane	8		4 J	2 J	2 J	2 J							1 J		
1,2-Dichloroethane	3 J														
1,1-Dichloroethylene															
1,2-Dichloroethene (Total)	10		2 J	0.7 J											
Ethylbenzene															
4-Methyl-2-pentanone	49	3 J	2 J												
Methylene chloride	430 E	23 B	4 J				4 J		1 J						
Toluene	6		0.5 BJ												
1,1,1-Trichloroethane															
Trichloroethylene	30	3 J	2 J	0.2 J			0.7 J				2 BJ				
Vinyl acetate															
Vinyl chloride					1 J										
Xylenes (Total)	1 J														
SEMIVOLATILE (ppb)															
Phenol	120														
1,2-Dichlorobenzene															
2-Methylphenol	13														
4-Methylphenol	53														
2,4-Dimethylphenol	4 J														
Benzoic acid	960 E														
Naphthalene															
Isophorone	3 J														
4-Chloroaniline															
2-Methylnaphthalene															
N-Nitrosodiphenylamine															
Di-n-butylphthalate															
Butylbenzyl phthalate															
bis (2-Ethylhexyl) phthalate		1 J			2 BJ										
Di-n-octyl phthalate															
METALS (ppb)															
Aluminum	2210														
Antimony															
Arsenic	41.2														
Barium	1030														
Beryllium															
Calcium	414000														
Chromium															
Cobalt	20.9 B														
Copper															
Iron	24400														
Lead	24 B														
Magnesium	159000														
Manganese	2930														
Nickel	1220														
Potassium	4400 B														
Sodium	12600 B														
Vanadium															
Zinc	126														

Only detected results reported

B - Compound detected in associated blank (organic), compound · contract required detection limits (CRDL) (metals)

E - Response of the analyte is greater than the upper level of the calibration range

J - Concentration · sample quantitation limit (SQL) but zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LD-4

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	05/96	1
Compound															
VOLATILE (ppb)															
Acetone		18 B	3 J	4 BJ				24							
Benzene				0.6 J											
2-Butanone															
Chloroethane															
Chlorobenzene					0.8 J										
Carbon disulfide															
Chloroform															
1,1-Dichloroethane													1 J		1 J
1,2-Dichloroethane															
1,1-Dichloroethylene															
1,2-Dichloroethene (Total)															
Ethylbenzene					1 J										
4-Methyl-2-pentanone															
Methylene chloride															
Toluene															
1,1,1-Trichloroethane															
Trichloroethylene															0.7 J
Vinyl acetate															
Vinyl chloride															
Xylenes (Total)											2 J				
SEMIVOLATILE (ppb)															
Phenol	2 J														
1,2-Dichlorobenzene															
2-Methylphenol															
4-Methylphenol															
2,4-Dimethylphenol															
Benzoic acid															
Naphthalene															
Isophorone															
4-Chloroaniline															
2-Methylnaphthalene															
N-Nitrosodiphenylamine															
Di-n-butylphthalate															
Butylbenzyl phthalate					0.9 J										
bis (2-Ethylhexyl) phthalate			0.8 J		2 BJ						1 J				
Di-n-octyl phthalate															
METALS (ppb)															
Aluminum	5770														
Antimony															
Arsenic															
Barium	95 B														
Beryllium															
Calcium	59100														
Chromium	17.7														
Cobalt	10 B														
Copper	28.4														
Iron	9740														
Lead	3.6														
Magnesium	18700														
Manganese	678														
Nickel	60.4														
Potassium	3060														
Sodium	11200														
Vanadium	12 B														
Zinc	59.5														

Only detected results reported.

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero.

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LD-5

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	05/96	11/96
Compound															
VOLATILE (ppb)															
Acetone			4 J	4 BJ											
Benzene	12	19	21	21	20	8	18	5	7	4 J	5		3 J	2 J	3 J
2-Butanone															
Chloroethane		3 J	10	12	8 J	3 J	8 J		2 J				2 J		
Chlorobenzene		5	6	5	5	3 J	5	2 J	2 J	1 J	1 J				0.8 J
Carbon disulfide		3 J													
Chloroform															
1,1-Dichloroethane	42	50	52	44	38	32	47	24	26	20	22	17	20	18	16
1,2-Dichloroethane	6	6		4 J	5				2 J				2 J		
1,1-Dichloroethylene															
1,2-Dichloroethene (Total)			2 J	15	1 J	0.8 J	0.8 J								1 J
Ethylbenzene	8	8	13	8	4 J	1 J	2 J								
4-Methyl-2-pentanone															
Methylene chloride		48 J	0.5 J												
Toluene															
1,1,1-Trichloroethane	1 J														
Trichloroethylene															
Vinyl acetate															
Vinyl chloride			1 J			0.7 J				1 J			1 J		1 J
Xylenes (Total)															
SEMIVOLATILE (ppb)															
Phenol															
1,2-Dichlorobenzene															
2-Methylphenol															
4-Methylphenol															
2,4-Dimethylphenol															
Benzoic acid				1 J											
Naphthalene															
Isophorone															
4-Chloroaniline															
2-Methylnaphthalene															
N-Nitrosodiphenylamine															
Di-n-butylphthalate															
Butylbenzyl phthalate									5 J						
bis (2-Ethylhexyl) phthalate			4 J		0.7 BJ										
Di-n-octyl phthalate			2 J												
METALS (ppb)															
Aluminum	2080														
Antimony															
Arsenic	8.7 B														
Barium	276														
Beryllium															
Calcium	128000														
Chromium															
Cobalt	13 B														
Copper	30.8														
Iron	4310														
Lead	1.5 B														
Magnesium	62700														
Manganese	636														
Nickel	73.7														
Potassium	7430														
Sodium	31300														
Vanadium	2.2 B														
Zinc	41.5														

Only detected results reported.

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LS-6

Date / Compound	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	05/96	
VOLATILE (ppb)															
Acetone	2 J		4 J	7 BJ											
Benzene	1 J		2 J	2 J	4 J	2 J	2 J		2 J	0.6 J					
2-Butanone															
Chloroethane	9 J	7 J	22	31	14	6 J	9 J	3 J	5 J						
Chlorobenzene															
Carbon disulfide															
Chloroform								4 J							
1,1-Dichloroethane	5		10	11	17	11	21	7	26	4 J	11		3 J		1 J
1,2-Dichloroethane	2 J		4 J	3 J	8				8	1 J	3 J				
1,1-Dichloroethylene		4 J													
1,2-Dichloroethene (Total)	4 J		14	14	28	7	10		35	3 J	14	3 J	3 J		2 J
Ethylbenzene															
4-Methyl-2-pentanone															
Methylene chloride	1 BJ	3 BJ	1 J	0.1 J		0.6 J									
Toluene															
1,1,1-Trichloroethane															
Trichloroethylene			0.9 J	0.6 J					0.8 J						
Vinyl acetate															
Vinyl chloride	55	9 J	25	33	20	5 J	9 J	2 J	15	1 J	3 J				
Xylenes (Total)															
SEMIVOLATILE (ppb)															
Phenol															
1,2-Dichlorobenzene															
2-Methylphenol															
4-Methylphenol															
2,4-Dimethylphenol															
Benzoic acid		2 J													
Naphthalene															
Isophorone															
4-Chloroaniline															
2-Methylnaphthalene															
N-Nitrosodiphenylamine		2 J													
Di-n-butylphthalate			0.8 J	1 J											
Butylbenzyl phthalate															
bis (2-Ethylhexyl) phthalate					0.7 BJ										
Di-n-octyl phthalate															
METALS (ppb)															
Aluminum	24600														
Antimony	31 B														
Arsenic	13.4														
Barium	268														
Beryllium	3.2 B														
Calcium	262000														
Chromium	74.9														
Cobalt	51.4														
Copper	117														
Iron	39900														
Lead	17														
Magnesium	81900														
Manganese	4850														
Nickel	371														
Potassium	10100														
Sodium	65400														
Vanadium	57.1														
Zinc	165														

Only detected results reported.

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

... - Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LR-6

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	05/96	11/96
Compound															
VOLATILE (ppb)															
Acetone			2 J	4 BJ											
Benzene	2 J		1 J												
2-Butanone															
Chloroethane			2 J												
Chlorobenzene															
Carbon disulfide		14													
Chloroform															
1,1-Dichloroethane	48	67	49	34	33	14	12	8	10	8	13	7	8		8
1,2-Dichloroethane	4 J		4 J												
1,1-Dichloroethylene	2 J	25	0.8 J												
1,2-Dichloroethene (Total)	9	10	8	0.9 J	2 J										
Ethylbenzene	1 J		1 J	0.3 J											
4-Methyl-2-pentanone															
Methylene chloride		3 BJ													
Toluene	2 J	2 J	2 J												
1,1,1-Trichloroethane	160	200	130	81	98	17	11	6	11	3 J	8		2 J		
Trichloroethylene	2 J	2 J	2 J												
Vinyl acetate															
Vinyl chloride	36	3 B	32	30	23	3 J	3 J		2 J	1 J	2 J		2 J		
Xylenes (Total)	1 J		3 J												
SEMIVOLATILE (ppb)															
Phenol															
1,2-Dichlorobenzene															
2-Methylphenol															
4-Methylphenol															
2,4-Dimethylphenol															
Benzoic acid	4 J														
Naphthalene	6 J	9 J	3 J	5 J	5 J										
Isophorone															
4-Chloroaniline															
2-Methylnaphthalene															
N-Nitrosodiphenylamine															
Di-n-butylphthalate															
Butylbenzyl phthalate															
bis (2-Ethylhexyl) phthalate		2 J				6 J					3 J				
Di-n-octyl phthalate															
METALS (ppb)															
Aluminum	3440														
Antimony															
Arsenic	62 B														
Barium	504														
Beryllium															
Calcium	159000														
Chromium	9.8 B														
Cobalt	142 B														
Copper	213 B														
Iron	6060														
Lead	2 B														
Magnesium	47800														
Manganese	2930														
Nickel															
Potassium	2700 B														
Sodium	68700														
Vanadium	4.9 B														
Zinc	27.6														

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LD-6

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	05/96	
Compound															
VOLATILE (ppb)															
Acetone			9 J	18										7	
Benzene															
2-Butanone															
Chloroethane															
Chlorobenzene															
Carbon disulfide															
Chloroform															
1,1-Dichloroethane															
1,2-Dichloroethane															
1,1-Dichloroethylene															
1,2-Dichloroethene (Total)															
Ethylbenzene															
4-Methyl-2-pentanone															
Methylene chloride		2 BJ													
Toluene															
1,1,1-Trichloroethane															
Trichloroethylene															
Vinyl acetate															
Vinyl chloride															
Xylenes (Total)															
SEMIVOLATILE (ppb)															
Phenol															
1,2-Dichlorobenzene															
2-Methylphenol															
4-Methylphenol															
2,4-Dimethylphenol	4 J														
Benzoic acid		3 J													
Naphthalene															
Isophorone															
4-Chloroaniline															
2-Methylnaphthalene															
N-Nitrosodiphenylamine															
Di-n-butylphthalate															
Butylbenzyl phthalate															
bis (2-Ethylhexyl) phthalate															
Di-n-octyl phthalate															
METALS (ppb)															
Aluminum	152 B														
Antimony															
Arsenic															
Barium	75.3 B														
Beryllium															
Calcium	48300														
Chromium															
Cobalt	6.9 B														
Copper															
Iron	43 B														
Lead	1.1 B														
Magnesium	15700														
Manganese	202														
Nickel	80.9														
Potassium	12500														
Sodium	49000														
Vanadium															
Zinc	30.1														

Only detected results reported

B - Compound detected in associated blank (organic); compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LR-8

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	05/96	11/96
Compound															
VOLATILE (ppb)															
Acetone			15 BJ											9 J	
Benzene	100	32	55	67	84	82	82	84	45	36	48	42	29	20 J	22
2-Butanone															
Chloroethane	48	8 J	29	47	43	18	27	26	22	9	19	14	14	8 J	11
Chlorobenzene	23	7	13	16	18	22	23	22 B	10	20	10	9	9	5	5
Carbon disulfide	17														
Chloroform															
1,1-Dichloroethane															
1,2-Dichloroethane															
1,1-Dichloroethylene															
1,2-Dichloroethene (Total)															
Ethylbenzene	150	69	93	110	55	24	26	87	2 J	0.8 J	3 J				
4-Methyl-2-pentanone															
Methylene chloride	3 J	8 BJ	1 J		0.7 J	0.6 J									
Toluene	12	11	13 B	9 J	3 J	1 BJ	2 J	7	0.6 J	0.7 J					0.5 J
1,1,1-Trichloroethane															
Trichloroethylene															
Vinyl acetate		8 J													
Vinyl chloride															
Xylenes (Total)	380	200	310	370	190 D	270 D	370	390 D	120	54	97	29	1 J		2 J
SEMIVOLATILE (ppb)															
Phenol	130														
1,2-Dichlorobenzene		4 J	0.8 J		1 J	1 J									
2-Methylphenol		7 J													
4-Methylphenol															
2,4-Dimethylphenol	6 J	11		23	18	29	82	15	12	8 J	9 J	6 J			
Benzoic acid															
Naphthalene	3 J	16	3 J	4 J	2 J	2 J	6 J				1 J				
Isophorone															
4-Chloroaniline		4 J	1 J	2 J	3 J	3 J	11								
2-Methylnaphthalene		2 J		0.8 J											
N-Nitrosodiphenylamine															
Di-n-butylphthalate												0.5 J			
Butylbenzyl phthalate															
bis (2-Ethylhexyl) phthalate											3 J		5 J		
Di-n-octyl phthalate															
METALS (ppb)															
Aluminum															
Antimony															
Arsenic	11.4														
Barium	1330														
Beryllium															
Calcium	260000														
Chromium															
Cobalt	58 B														
Copper															
Iron	13000														
Lead															
Magnesium	78100														
Manganese	3720														
Nickel	193														
Potassium	5540														
Sodium	20300														
Vanadium															
Zinc	8.6 B														

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

D - Concentration determined from secondary dilution

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LD-8

Date / Compound	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	05/96	1
VOLATILE (ppb)															
Acetone													7 J		
Benzene															
2-Butanone															
Chloroethane															
Chlorobenzene															
Carbon disulfide															
Chloroform															
1,1-Dichloroethane															
1,2-Dichloroethane															
1,1-Dichloroethylene															
1,2-Dichloroethene (Total)															
Ethylbenzene															
4-Methyl-2-pentanone															
Methylene chloride		8 BJ													
Toluene			0.7 BJ												
1,1,1-Trichloroethane															
Trichloroethylene															
Vinyl acetate															
Vinyl chloride															
Xylenes (Total)										0.4 J					
SEMIVOLATILE (ppb)															
Phenol															
1,2-Dichlorobenzene															
2-Methylphenol															
4-Methylphenol															
2,4-Dimethylphenol															
Benzoic acid															
Naphthalene															
Isophorone															
4-Chloroaniline															
2-Methylnaphthalene															
N-Nitrosodiphenylamine															
Di-n-butylphthalate															
Butylbenzyl phthalate															
bis (2-Ethylhexyl) phthalate											0.9 J				
Di-n-octyl phthalate															
METALS (ppb)															
Aluminum	14300														
Antimony															
Arsenic															
Barium	136 B														
Beryllium															
Calcium	102000														
Chromium	37.1														
Cobalt	24.7 B														
Copper	91.1														
Iron	29300														
Lead	6.5														
Magnesium	36000														
Manganese	4230														
Nickel	43.2														
Potassium	4410														
Sodium	66200														
Vanadium	27 B														
Zinc	100														

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: LS-9

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	5/94	11/94	5/95	11/95	5/96	11/96
Compound															
VOLATILE (ppb)															
Acetone															
Benzene															
2-Butanone															
Chloroethane															
Chlorobenzene															
Carbon disulfide															
Chloroform															
1,1-Dichloroethane															
1,2-Dichloroethane															
1,1-Dichloroethylene															
1,2-Dichloroethene (Total)															
Ethylbenzene															
4-Methyl-2-pentanone															
Methylene chloride		3 BJ													
Toluene															
1,1,1-Trichloroethane															
Trichloroethylene															
Vinyl acetate															
Vinyl chloride															
Xylenes (Total)															
SEMIVOLATILE (ppb)															
Phenol															
1,2-Dichlorobenzene															
2-Methylphenol															
4-Methylphenol															
2,4-Dimethylphenol															
Benzoic acid															
Naphthalene															
Isophorone															
4-Chloroaniline															
2-Methylnaphthalene															
N-Nitrosodiphenylamine															
Di-n-butylphthalate															
Butylbenzyl phthalate															
bis (2-Ethylhexyl) phthalate															
Di-n-octyl phthalate															
METALS (ppb)															
Aluminum	**2700**														
Antimony															
Arsenic	**7 B**														
Barium	**281**														
Beryllium															
Calcium	**99800**														
Chromium															
Cobalt	**104 B**														
Copper	**11.8 B**														
Iron	**6460**														
Lead	**4.1**														
Magnesium	**29200**														
Manganese	**8300**														
Nickel															
Potassium	**5270**														
Sodium	**31800**														
Vanadium	**8.3 B**														
Zinc	**74.4**														

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: SWW-1

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Acetone								
Benzene								
Chloroethane								
Chlorobenzene								
Carbon disulfide	3 J							
1,1-Dichloroethane								
1,2-Dichloroethane								
1,1-Dichloroethylene								
1,2-Dichloroethene (Total)								
Ethylbenzene								
Methylene chloride	4 J							
Toluene								
1,1,1-Trichloroethane								
Trichloroethylene						1 BJ		
Vinyl chloride								
Xylenes (Total)								
SEMIVOLATILE (ppb)								
1,2-Dichlorobenzene								
2-Methylphenol								
4-Methylphenol								
2,4-Dimethylphenol								
Benzoic acid								
Naphthalene								
2-Methylnaphthalene								
Di-n-butylphthalate		89						
Butylbenzyl phthalate		39						
bis (2-Ethylhexyl) phthalate		1 J	1 BJ			1 J		
4-Chloroaniline								
METALS (ppb)								
Aluminum	422							
Antimony	27 B							
Arsenic	6.1 B							
Barium	141 B							
Beryllium	3.2 B							
Calcium	99800							
Chromium								
Cobalt	11.6 B							
Copper	8.1 B							
Iron	681							
Lead	2.5 B							
Magnesium	29300							
Manganese	230							
Nickel								
Potassium	8330							
Sodium	43100							
Vanadium	8.4 B							
Zinc	17.8 B							

Notes:

Only detected results reported from annual monitoring, performed in November of each year since 1989.
B - Compound detected in associated blank (organic); compound < contract required detection limits (CRDL) (metals).
J - Concentration < sample quantitation limit (SQL) but > zero.
- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: SWW-4

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Acetone		6 J						
Benzene		8	64	1 J	63	2 J		
Chloroethane		16	16	5 J	7 J			
Chlorobenzene		4 J	16	0.9 J	17			
Carbon disulfide								
1,1-Dichloroethane		8	6	4 J		3 J		
1,2-Dichloroethane								
1,1-Dichloroethylene								
1,2-Dichloroethene (Total)			0.6 J		0.5 J			
Ethylbenzene		32	100	2 J	52	1 J		
Methylene chloride		0.5 J	0.6 J					
Toluene			0.9 J		0.5 J			
1,1,1-Trichloroethane								
Trichloroethylene								
Vinyl chloride								
Xylenes (Total)		5	41		17	2 J		
SEMIVOLATILE (ppb)								
1,2-Dichlorobenzene								
2-Methylphenol								
4-Methylphenol					3 J			
2,4-Dimethylphenol			3 J					
Benzoic acid								
Naphthalene								
2-Methylnaphthalene								
Di-n-butylphthalate								
Butylbenzyl phthalate								
bis (2-Ethylhexyl) phthalate						2 J		
4-Chloroaniline								
METALS (ppb)								
Aluminum	141 B							
Antimony								
Arsenic	2.8 B							
Barium	108 B							
Beryllium								
Calcium	70300							
Chromium								
Cobalt	9.9 B							
Copper								
Iron	896							
Lead	1.7 B							
Magnesium	16200							
Manganese	442							
Nickel								
Potassium	11000							
Sodium	65300							
Vanadium	3.03							
Zinc	1.53							

Notes:

Only detected results reported from annual monitoring, performed in November of each year since 1989.
B - Compound detected in associated blank (organic);
compound < contract required detection limits (CRDL) (metals).
J - Concentration < sample quantitation limit (SQL) but > zero.
- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: SWW-6

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Acetone		92 BJ						9 J
Benzene	10	680	430	660	570	550	570	500 D
Chloroethane	95	180	85 J	85	73	49 J	58 J	42
Chlorobenzene		9 J	10 J	69	78	140	190	220 D
Carbon disulfide								
1,1-Dichloroethane								1 J
1,2-Dichloroethane								
1,1-Dichloroethylene								
1,2-Dichloroethene (Total)								
Ethylbenzene	250	640	340	580	490	550	690	620 D
Methylene chloride	7 BJ	17 BJ	8 J	10 J	7 J	6 J		4 J
Toluene	550	910 B	160	390	50	25 J	18 J	11
1,1,1-Trichloroethane								
Trichloroethylene								
Vinyl chloride								
Xylenes (Total)	620	1900	860	2200	1400	2000	2600	2000 D
SEMIVOLATILE (ppb)								
Phenol								510 D
1,2-Dichlorobenzene	17 J				31 J			12
2-Methylphenol	130							1 J
4-Methylphenol	600	33		14	48 J		3 J	2 J
2,4-Dimethylphenol	1200		69 J	1800 D	640 D	610 D	4 J	510 D
Benzoic acid								
Naphthalene				23			10	9 J
2-Methylnaphthalene		2 J			2 J			3 J
Di-n-butylphthalate								
Butylbenzyl phthalate								
bis (2-Ethylhexyl) phthalate							2 J	
4-Chloroaniline						13	49	30
METALS (ppb)								
Aluminum	1000							
Antimony								
Arsenic	34							
Barium	102							
Beryllium								
Calcium	232000							
Chromium	8.3 B							
Cobalt	53.9							
Copper	15.5 B							
Iron	8010							
Lead	3							
Magnesium	58400							
Manganese	2170							
Nickel	507							
Potassium	20000							
Sodium	152000							
Vanadium	4.8 B							
Zinc	22.6							

Notes:

Only detected results reported from annual monitoring, performed in November of each year since 1989.
B - Compound detected in associated blank (organic);
compound < contract required detection limits (CRDL) (metals).
D - The reported concentration was determined bya secondary concentration.
J - Concentration < sample quantitation limit (SQL) but > zero.
- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: SWW-8

Date	11/89	11/90	11/91	11/92	11/93	11/93	11/95	11/96
Acetone								
Benzene	7	5	2 J	2 J	1 J	1 J		0.9 J
Chloroethane								
Chlorobenzene	2 J							
Carbon disulfide								
1,1-Dichloroethane		3 J	2 J					
1,2-Dichloroethane	3 J							
1,1-Dichloroethylene								
1,2-Dichloroethene (Total)		0.9 J						
Ethylbenzene								
Methylene chloride								
Toluene								
1,1,1-Trichloroethane								
Trichloroethylene		0.6 J				2 BJ		
Vinyl chloride								
Xylenes (Total)								
SEMIVOLATILE (ppb)								
1,2-Dichlorobenzene								
2-Methylphenol								
4-Methylphenol								
2,4-Dimethylphenol								
Benzoic acid								
Naphthalene								
2-Methylnaphthalene								
Di-n-butylphthalate								
Butylbenzyl phthalate					4 J			
bis (2-Ethylhexyl) phthalate			3 BJ					
4-Chloroaniline								
METALS (ppb)								
Aluminum	2600							
Antimony	32 B							
Arsenic	21.1							
Barium	826							
Beryllium								
Calcium	335000							
Chromium	8.5 B							
Cobalt	27 B							
Copper	10 B							
Iron	25500							
Lead	3.8							
Magnesium	116000							
Manganese	12600							
Nickel	546							
Potassium	3070 B							
Sodium	110000							
Vanadium								
Zinc	60.4							

Notes:

Only detected results reported from annual monitoring, performed in November of each year since 1989.
B - Compound detected in associated blank (organic); compound < contract required detection limits (CRDL) (metals).
J - Concentration < sample quantitation limit (SQL) but > zero.
- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: SWW-10

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Acetone		8 BJ						
Benzene								
Chloroethane								
Chlorobenzene								
Carbon disulfide								
1,1-Dichloroethane	1 J	2 J		3 J		4 J	2 J	2 J
1,2-Dichloroethane								
1,1-Dichloroethylene					3 J			
1,2-Dichloroethene (Total)								
Ethylbenzene								
Methylene chloride	2 BJ							
Toluene		0.1 BJ						
1,1,1-Trichloroethane		2 J		1 J			1 J	
Trichloroethylene	3 J	9		4 J	5	5	3 J	3 J
Vinyl chloride								
Xylenes (Total)								
SEMIVOLATILE (ppb)								
1,2-Dichlorobenzene								
2-Methylphenol								
4-Methylphenol								
2,4-Dimethylphenol								
Benzoic acid								
Naphthalene								
2-Methylnaphthalene								
Di-n-butylphthalate								
Butylbenzyl phthalate					4 J			
bis (2-Ethylhexyl) phthalate						2 J		
4-Chloroaniline								
METALS (ppb)								
Aluminum	979							
Antimony								
Arsenic	2.8 B							
Barium	67.3 B							
Beryllium								
Calcium	117000							
Chromium	12.1							
Cobalt	16 B							
Copper	142 B							
Iron	3600							
Lead								
Magnesium	26300							
Manganese	2170							
Nickel								
Potassium	990 B							
Sodium	11700							
Vanadium								
Zinc	23.4							

Notes:

Only detected results reported from annual monitoring, performed in November of each year since 1989.
B - Compound detected in associated blank (organic); compound < contract required detection limits (CRDL) (metals).
J - Concentration < sample quantitation limit (SQL) but > zero.
- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: SWW-12

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Acetone		2 J						
Benzene	2 J	2 J	1 J	0.9 J	0.6 J			0.7 J
Chloroethane		4 J	3 J	1 J				
Chlorobenzene								
Carbon disulfide								
1,1-Dichloroethane	32	56	48	42	31	25	20	18
1,2-Dichloroethane	3 J				3 J		2 J	
1,1-Dichloroethylene								
1,2-Dichloroethene (Total)	3 J	1 J	0.8 J					1 J
Ethylbenzene								
Methylene chloride								
Toluene								
1,1,1-Trichloroethane	5	1 J						
Trichloroethylene								
Vinyl chloride		0.8 J						
Xylenes (Total)								
SEMIVOLATILE (ppb)								
1,2-Dichlorobenzene								
2-Methylphenol								
4-Methylphenol								
2,4-Dimethylphenol								
Benzoic acid	18 J							
Naphthalene								
2-Methylnaphthalene								
Di-n-butylphthalate								
Butylbenzyl phthalate								
bis (2-Ethylhexyl) phthalate						0.8 J		
4-Chloroaniline								
METALS (ppb)								
Aluminum	2910							
Antimony								
Arsenic	4 B							
Barium	162 B							
Beryllium								
Calcium	101000							
Chromium	8.9 B							
Cobalt	12.6 B							
Copper	33.2							
Iron	5390							
Lead	3.2							
Magnesium	37500							
Manganese	3300							
Nickel								
Potassium	4500 B							
Sodium	19500							
Vanadium	6.1 B							
Zinc	29.4							

Notes:

Only detected results reported from annual monitoring, performed in November of each year since 1989.
B - Compound detected in associated blank (organic);
compound < contract required detection limits (CRDL) (metals).
J - Concentration < sample quantitation limit (SQL) but > zero.
- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: M-21

Date	05/96	11/96
Compound		
VOLATILE (ppb)		
Acetone		
Benzene	5	7
2-Butanone		
Chloroethane	2 J	3 J
Chlorobenzene	2 J	2 J
Carbon disulfide		
Chloroform		
1,1-Dichloroethane		
1,2-Dichloroethane		
1,1-Dichloroethylene		
1,2-Dichloroethene (Total)		
Ethylbenzene		
4-Methyl-2-pentanone		
Methylene chloride		
Toluene		
1,1,1-Trichloroethane		
Trichloroethylene		
Vinyl acetate		
Vinyl chloride		
Xylenes (Total)		0.6 J
SEMIVOLATILE (ppb)		
Phenol		
1,2-Dichlorobenzene		
2-Methylphenol		
4-Methylphenol		
2,4-Dimethylphenol		
Benzoic acid		
Naphthalene		
Isophorone		
4-Chloroaniline		
2-Methylnaphthalene		
N-Nitrosodiphenylamine		
Di-n-butylphthalate		
Butylbenzyl phthalate		
bis (2-Ethylhexyl) phthalate		
Di-n-octyl phthalate		
METALS (ppb)		
Aluminum		
Antimony		
Arsenic		
Barium		
Beryllium		
Calcium		
Chromium		
Cobalt		
Copper		
Iron		
Lead		
Magnesium		
Manganese		
Nickel		
Potassium		
Sodium		
Vanadium		
Zinc		

Only detected results reported.

B - Compound detected in associated blank (organic); compound < contract required detection limits (CRDL) (metals).

J - Concentration < sample quantitation limit (SQL) but > zero.

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: M-25

Date / Compound	05/96	11/96
VOLATILE (ppb)		
Acetone		
Benzene	9	
2-Butanone		
Chloroethane		
Chlorobenzene	3 J	
Carbon disulfide		
Chloroform	3 J	7
Bromodichloromethane	2 J	4 J
Dibromochloromethane	0.9 J	2 J
1,1-Dichloroethylene		
1,2-Dichloroethene (Total)		
Ethylbenzene		
4-Methyl-2-pentanone		
Methylene chloride		
Toluene		
1,1,1-Trichloroethane		
Trichloroethylene		
Vinyl acetate		
Vinyl chloride		
Xylenes (Total)		
SEMIVOLATILE (ppb)		
Phenol		
1,2-Dichlorobenzene		
2-Methylphenol		
4-Methylphenol		
2,4-Dimethylphenol		
Benzoic acid		
Naphthalene		
Isophorone		
4-Chloroaniline		
2-Methylnaphthalene		
N-Nitrosodiphenylamine		
Di-n-butylphthalate		
Butylbenzyl phthalate		
bis (2-Ethylhexyl) phthalate		
Di-n-octyl phthalate		
METALS (ppb)		
Aluminum		
Antimony		
Arsenic		
Barium		
Beryllium		
Calcium		
Chromium		
Cobalt		
Copper		
Iron		
Lead		
Magnesium		
Manganese		
Nickel		
Potassium		
Sodium		
Vanadium		
Zinc		

Only detected results reported.

B - Compound detected in associated blank (organic); compound < contract required detection limits (CRDL) (metals).

J - Concentration < sample quantitation limit (SQL) but > zero.

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
MONITORING WELL: M-26

Date	05/96	11/96
Compound		
VOLATILE (ppb)		
Acetone		
Benzene		
2-Butanone		
Chloroethane		
Chlorobenzene		
Carbon disulfide		
Chloroform		
1,1-Dichloroethane		
1,2-Dichloroethane		
1,1-Dichloroethylene		
1,2-Dichloroethene (Total)		
Ethylbenzene		
4-Methyl-2-pentanone		
Methylene chloride		
Toluene		
1,1,1-Trichloroethane		
Trichloroethylene		
Vinyl acetate		
Vinyl chloride		
Xylenes (Total)		
SEMIVOLATILE (ppb)		
Phenol		
1,2-Dichlorobenzene		
2-Methylphenol		
4-Methylphenol		
2,4-Dimethylphenol		
Benzoic acid		
Naphthalene		
Isophorone		
4-Chloroaniline		
2-Methylnaphthalene		
N-Nitrosodiphenylamine		
Di-n-butylphthalate		
Butylbenzyl phthalate		
bis (2-Ethylhexyl) phthalate		
Di-n-octyl phthalate		
METALS (ppb)		
Aluminum		
Antimony		
Arsenic		
Barium		
Beryllium		
Calcium		
Chromium		
Cobalt		
Copper		
Iron		
Lead		
Magnesium		
Manganese		
Nickel		
Potassium		
Sodium		
Vanadium		
Zinc		

Only detected results reported.

B - Compound detected in associated blank (organic); compound < contract required detection limits (CRDL) (metals).

J - Concentration < sample quantitation limit (SQL) but > zero.

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
SURFACE WATER: SW-1

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone		7 BJ						
Ethylbenzene								0 7 J
Toluene		0 6 BJ						
Xylenes								2 J

SURFACE WATER: SW-2

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone								
Toluene								
Xylenes								0.3 J
SEMIVOLATILE (ppb)								
Bis(2-ethylhexyl) phthalate							5 J	

SURFACE WATER: SW-3

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone		3 BJ						
Toluene		0 6 BJ						
SEMIVOLATILE (ppb)								
Acenaphthene							0.6 J	

SURFACE WATER: SW-4

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone								
Toluene								

SURFACE WATER: SW-4A

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone								
Toluene		0 6 BJ						
SEMIVOLATILE (ppb)								
Acenaphthene							0 4 J	

SURFACE WATER: SW-4B

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone		6 BJ						
Toluene		0 7 BJ						

SURFACE WATER: SW-5

Date	11/89	11/90	11/91	11/92	11/93	11/94	11/95	11/96
Compound								
VOLATILE (ppb)								
Acetone								
Toluene								
SEMIVOLATILE (ppb)								
Bis(2-ethylhexyl) phthalate							6 J	

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

J - Concentration < sample quantitation limit (SQL) but > zero

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
SEDIMENT: SS-1

Date	11/89	11/90	5/91	11/91	11/92	11/93	05/94	11/94	11/95	11/96
Compound										
VOLATILE (ppb)										
Acetone	20 B	22 B				15				
Benzene										
2-Butanone										
Chloroform	8 J									
Methylene chloride	24 B									
Tetrachloroethene								6 BJ		
Toluene										
SEMIVOLATILE (ppb)										
Phenol										
Benzyl Alcohol										
4-Methylphenol	69 J						160 J			
2,4-Dimethylphenol										
Benzoic acid					67 J		27 J			
Acenaphthylene										
Acenaphthene										
Diethylphthalate		240 J								
Fluorene					160 J					1300
Phenanthrene	120 J			400 J	1400	230 J		190 J		430 J
Anthracene					360 J					82 J
Fluoranthene	240 J			730	1900	340 J		360 J		
Pyrene	220 J			650	8000 E	280 J		320 J		1300
Butylbenzyl phthalate										
Benzo (a) anthracene	120 J			360 J	970	180 J		170 J		940
Chrysene	130 J			350 J	3600	170 J		160 J		830
bis (2-Ethylhexyl) phthalate	460 J	85 J		120 BJ	670	91 J	390 J			
Di-n-octyl phthalate										
Benzo (b) fluoranthene	200 J			360 J	1700	230 J		230 J		880
Benzo (k) fluoranthene	200 J			180 J	1900	140 J		130 J		550
Benzo (a) pyrene	110 J			250 J	820					840
Indeno (1,2,3-cd) pyrene	59 J			110 J		100 J				340 J
Dibenzo (a,h) anthracene										
Benzo (g,h,i) perylene	575			85 J		87 J				270 J
PEST/PCB (ppb)										
beta-BHC										
gamma-BHC					1.4 J					
Aldrin		10 R			11			4 4 J		
Heptachlor epoxide					1.8 J					
Endosulfan I					3 2 J					
Endosulfan II					2.6 J					
Endosulfan sulfate							10 J			
Dieldrin					7.6 J					
4,4'-DDE			8.3 J*		1 1 J					
Endrin										
4,4'-DDD					2 J		11 J			
4,4'-DDT			8.8 J*	2 6 J	4 4 J					
Methoxychlor			6.3 J*							
Endrin Ketone			6.3 J*							
Aroclor - 1248										32 J
Aroclor - 1254										42
METALS (ppm)										
Aluminum	5730	9630		6330	4610		7750	5960		5370
Antimony					3.1 B					
Arsenic	5 9	1 3		2.0	2 1		2 9 N	3 5		2.5
Barium	85	65		71 7	62.5		79.4	124		51.6
Beryllium										0.25 B
Cadmium		<0 71								0.99
Calcium	4710	1770		4850 B	3400		1970	7750		8920
Chromium	6.2	10		12.3	6.1		12 1	7 5		9.5
Cobalt	6.4 B	5 7		3.2	3.9 B		6.4	2.7 B		3.1 B
Copper	30 9	14		10 7	15.7		6 1	4.3 B		23.2
Iron	10200	10500		15200	16400		14500	38400		12600
Lead	25.6	88		18.7	10.3		8.1	48.4		19.2 J
Magnesium	2570	2050		1370	1580		2960	2640		2190
Manganese	674	386		222	426 N		313	1650		646
Mercury		0 15								
Nickel		11		10.4	7.8		12.8	14.2		7.7
Potassium	1370 B	622		697	505 B		1050	493 B		1080
Selenium								4.0		
Silver					10 6 BN					
Sodium	602 B	304		463 B	297 B		302 B	580 B		1380
Vanadium	17 7	18		11.1	10 1		17 2	19 1		13.4
Zinc	73 8	46		37 6	53 1		32.3	106		69 1
Total Phenol							0 9			10.4
Hexavalent Chromium		0 18 R	0.26	0.31	0.16 N		0.46 N*			1.3

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

E - Response of the analyte is greater than the upper level of the calibration range

J - (Organic) Concentration < sample quantitation limit (SQL) but > zero

J - (Inorganic) Concentration reported as estimated because quality control criteria was not met

N - Spike sample recovery not within control limits.

R - Data rejected due to holding time violation

* - Concentration detected from sample reanalysis

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
SEDIMENT: SS-2

Date	11/89	11/90	5/91	11/91	11/92	11/93	05/94	11/94	11/95	11/96
Compound										
VOLATILE (ppb)										
Acetone	11 J					9 J				
Benzene										
2-Butanone										
Chloroform										
Methylene chloride	41 B									
Tetrachloroethene								4 BJ		
Toluene										
SEMIVOLATILE (ppb)										
Phenol										
Benzyl Alcohol										
4-Methylphenol										
2,4-Dimethylphenol										
Benzoic acid										
Acenaphthylene						47 J	19 J			
Acenaphthene							29 J			
Diethylphthalate										
Fluorene							61 J			
Phenanthrene	360 J				71 J	550	84 J	120 J		260 J
Anthracene										
Fluoranthene	690 J				94 J	920	840 J	200 J		570
Pyrene	540 J				110 J	660	1000 J	150 J		560
Butylbenzyl phthalate										
Benzo (a) anthracene	270 J					390 J	480 J	70 J		280 J
Chrysene	330 J					340 J	360 J	84 J		350 J
bis (2-Ethylhexyl) phthalate	1000			75 BJ	130 J	180 J	170 J			200 J
Dibenzofuran							21 J			
Di-n-octyl phthalate										
Benzo (b) fluoranthene	470 J				62 J	400	320 J	120 J		350 J
Benzo (k) fluoranthene	470 J				23 J	180 J	320 J	52 J		160 J
Benzo (a) pyrene	260 J						140 J			280 J
Indeno (1,2,3-cd) pyrene	150 J						120 J			
Dibenzo (a,h) anthracene							59 J			
Benzo (g,h,i) perylene							29 J			
PEST/PCB (ppb)										
beta-BHC					1 4 J					
gamma-BHC					1.3 J					
Aldrin										14
Heptachlor epoxide										
Endosulfan I										
Endosulfan II										
Endosulfan Sulfate										2.5 J
Dieldrin				8 7 J	16 J					14 J
4,4'-DDE					3 2 J					4.1 J
Endrin					2.5 J					
4,4'-DDD					3.2 J					3.1 J
4,4'-DDT					4.1 J					
Methoxychlor										
Endrin Ketone										
Aroclor - 1248										
Aroclor - 1254			570							
METALS (ppm)										
Aluminum	6790			4750	4920		5310	4740		6740
Antimony					0.96 B					
Arsenic	2.2 B			5 3	3.2		2.5 N	3.5		3.2
Barium	204			51.7	78.3		70.6	49.9		93.7
Beryllium										0.19 B
Cadmium					0 82					0.97
Calcium	6340			6580 B	13400		4430	47800		8250
Chromium	4.2			6	8.9		7 1	5.2		10.8
Cobalt	4 7 B			3 9 B	4 7 B		3.6 B	3.4 B		4.1 B
Copper	27 2			12 1	25.6		3.3 B	6 1		23.4
Iron	47200			6260	17700		16400	7550		8540
Lead	18.6			11	96		20.2	13.4		26.5 J
Magnesium	2580			1760	3830		2960	2550		3000
Manganese	2080			262	978 N		501	533		1030
Mercury										
Nickel				11 2	14 9		9 9	7.9		10.1
Potassium	1610 B			686 B	746 B		561 B	448 B		1230
Selenium								1 1		
Silver					0.06 BN					
Sodium	1260 B				322 B		257 B	294 B		568 B
Vanadium	45 7			7 4 B	10 3		10 7	9 2		15.7
Zinc	112			36 9	70 8		67 1	48 9		105
Total Phenol							2.8			
Hexavalent Chromium			0 33	0 42	0 1 N			1 5 N*		0.94

1.25

Only detected results reported

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E - Response of the analyte is greater than the upper level of the calibration range

J - (Organic) Concentration < sample quantitation limit (SQL) but > zero

J - (Inorganic) Concentration reported as estimated because quality control criteria was not met

N - Spike sample recovery not within control limits

R - Data rejected due to holding time violation

* - Concentration detected from sample reanalysis

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
SEDIMENT: SS-3

Date	11/89	11/90	5/91	11/91	11/92	11/93	05/94	11/94	11/95	11/96
Compound										
VOLATILE (ppb)										
Acetone	27 B				110	170		94		
Benzene										
2-Butanone						27				
Chloroform	3 J					21				
Methylene chloride	69 B									
Tetrachloroethene								10 BJ		
Toluene		0.9 BJ								
SEMIVOLATILE (ppb)										
Phenol	270 J									
Benzyl Alcohol		32 J								
4-Methylphenol	86 J	35 J					760 J			
2,4-Dimethylphenol	97 J									
Benzoic acid	67 J	120 J				38 J	17 J			
Acenaphthylene						76 J				
Acenaphthene										
Diethylphthalate		49 J								
Fluorene										
Phenanthrene					160 J	270 J	190 J	190 J		
Anthracene								37 J		
Fluoranthene	65 J						440 J	320 J		
Pyrene	69 J					890 J		350 J		
Butylbenzyl phthalate										
Benzo (a) anthracene							190 J			
Chrysene						270 J	170 J			
bis (2-Ethylhexyl) phthalate	1200	96 J		200 BJ	690 J	230 J	1600			
Di-n-octyl phthalate										
Benzo (b) fluoranthene						500 J	270 J	270 J		
Benzo (k) fluoranthene								140 J		
Benzo (a) pyrene										
Indeno (1,2,3-cd) pyrene										
Dibenzo (a,h) anthracene										
Benzo (g,h,i) perylene										
PEST/PCB (ppb)										
beta-BHC							42 J			
gamma-BHC										
Aldrin		32 R	730 *							
Heptachlor epoxide	26									
Endosulfan I										
Endosulfan II										
Dieldrin										
4,4'-DDE										
Endrin										
4,4'-DDD					14 J					
4,4'-DDT										
Methoxychlor					4.6 J					
Endrin Ketone										
Aroclor - 1248				1900 D	720		1400 J	500		350
Aroclor - 1254		450 R	3700 *					240		190
METALS (ppm)										
Aluminum	7520	6430		6110	12100		10400	5240		13600
Antimony					5.3 B					
Arsenic	2.8 B	1.6		2.5	7.8		5.8 N	2.0 B		5.5
Barium	82.9	48		60	345		199	105		161
Beryllium										0.43 B
Cadmium		0.61								2.5
Calcium	3430	5450		7110	14800		7360	5230		4600
Chromium	0.7	6.7		10.7	18.1		14.3	7.7		173
Cobalt	6 B	4.9		4.9 B	9.0 B		7.5 B			6.4 B
Copper	54.3	24		33.9	52.7		14.1	6.4		27.9
Iron	13500	9890		10100	61200		41400	25200		19700
Lead	13.2	66		16.3	66.9		78	38.5		23.9 J
Magnesium	2170	2900		2580	4200		3220	2000		3060
Manganese	402	445		392	3290 N		2380	978		1620
Mercury		0.21								
Nickel		12		16	22.9		21.4	10.8		13.2
Potassium	259 B	724		733	1170 B		1060.8	506 B		1540
Selenium								2.6		
Silver					0.25 BN					
Sodium		144		298 B	938 B		804 B	785 B		978 B
Vanadium	22.6	12		13.6	38.5		29.4	13.6		28.5
Zinc	57.6	35		13.9	205		154	69.5		120
Total Phenol				0.61						10.3
Hexavalent Chromium		0.13 R	1.10	0.27			1.2 N*	4.3 N*		1.8

Only detected results reported

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E - Response of the analyte is greater than the upper level of the calibration range.

J - (Organic) Concentration < sample quantitation limit (SQL) but > zero

J - (Inorganic) Concentration reported as estimated because quality control criteria was not met

N - Spike sample recovery not within control limits

R - Data rejected due to holding time violation

* - Concentration detected from sample reanalysis

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
SEDIMENT: SS-4

Date	11/89	11/90	5/91	11/91	11/92	11/93	05/94	11/94	11/95	11/96
Compound										
VOLATILE (ppb)										
Acetone	47 B									
Benzene										
2-Butanone										
Chloroform	3 J									
Methylene chloride	69 B									
Tetrachloroethene										
Toluene										
SEMIVOLATILE (ppb)										
Phenol										
Benzyl Alcohol										
4-Methylphenol										
2,4-Dimethylphenol										
Benzoic acid										
Acenaphthylene										
Acenaphthene										
Diethylphthalate										
Fluorene										
Phenanthrene	86 J									
Anthracene										
Fluoranthene	170 J									
Pyrene	130 J									
Butylbenzyl phthalate										
Benzo (a) anthracene	78 J									
Chrysene	100 J									
bis (2-Ethylhexyl) phthalate	130 J									
Di-n-octyl phthalate										
Benzo (b) fluoranthene	96 J									
Benzo (k) fluoranthene										
Benzo (a) pyrene	87 J									
Indeno (1,2,3-cd) pyrene	55 J									
Dibenzo (a,h) anthracene										
Benzo (g,h,i) perylene										
PEST/PCB (ppb)										
beta-BHC										
gamma-BHC										
Aldrin										
Heptachlor epoxide			35							
Endosulfan I										
Endosulfan II										
Dieldrin										
4,4'-DDE			19							
Endrin										
4,4'-DDD										
4,4'-DDT										
Methoxychlor										
Endrin Ketone										
Aroclor - 1248										
Aroclor - 1254	410									
METALS (ppm)										
Aluminum	4990	10200								
Antimony										
Arsenic	4.3	2.6								
Barium	160	82								
Cadmium										
Calcium	3620	6900								
Chromium	6.8	12								
Cobalt	6.3 B	6.1								
Copper	25.7	24								
Iron	12900	16500								
Lead	22	88								
Magnesium	1980	2520								
Manganese	712	240								
Mercury										
Nickel		12								
Potassium	1140 B	1300								
Selenium										
Silver										
Sodium	634 B	511								
Vanadium	22.3	19								
Zinc	97	41								
Total Phenol										
Hexavalent Chromium		0.13 R	0.9							

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

E - Response of the analyte is greater than the upper level of the calibration range

J - (Organic) Concentration < sample quantitation limit (SQL) but > zero

J - (Inorganic) Concentration reported as estimated because quality control criteria was not met

N - Spike sample recovery not within control limits

R - Data rejected due to holding time violation

* - Concentration detected from sample reanalysis.

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
SEDIMENT: SS-4A

Date	11/89	11/90	11/91	11/92	11/93	05/94	11/94	11/95	11/96
Compound									
VOLATILE (ppb)									
Acetone		11 BJ		41		11 J	28		
Benzene									
2-Butanone									
Chloroform				1 J					
Methylene chloride									
Tetrachloroethene							4 BJ		
Toluene		1 BJ							
SEMIVOLATILE (ppb)									
Phenol									
Benzyl Alcohol									
4-Methylphenol									
2,4-Dimethylphenol									
Benzoic acid		49 J							
Acenaphthylene									
Acenaphthene		58 J							
Diethylphthalate									
Fluorene									
Phenanthrene		510 J			70 J	89 J			
Anthracene		110 J							
Di-n-butylphthalate			1300 B	460 BJ					
Fluoranthene		2000				220 J	120 J		160 J
Pyrene		2500			120 J	200 J	110 J		
Butylbenzyl phthalate		40 J							
Benzo (a) anthracene		1400			84 J	110 J			
Chrysene		1100			80 J	120 J			
bis (2-Ethylhexyl) phthalate		100 J	260 BJ	510 J	210 J	460 J			
Di-n-octyl phthalate									
Benzo (b) fluoranthene		1900	47 J		100 J	160 J	120 J		
Benzo (k) fluoranthene		730					47 J		
Benzo (a) pyrene		1200			63 J		290 J		
Indeno (1,2,3-cd) pyrene		290 J			29 J				
Dibenzo (a,h) anthracene		73 J							
Benzo (g,h,i) perylene		220 J			23 J				
PEST/PCB (ppb)									
beta-BHC									
gamma-BHC									
Aldrin									
Heptachlor epoxide									
Endosulfan I									
Endosulfan II									
Dieldrin									
4,4'-DDE									
Endrin									
4,4'-DDD				7 J					
4,4'-DDT									
Methoxychlor									
Endrin Ketone									
Aroclor - 1248			1400 D	140 J			39 J		80
Aroclor - 1254									79
METALS (ppm)									
Aluminum		10200	9440	7110		13800	4120		6440
Antimony				1 3 B					
Arsenic		2.6	6 4	6.4		10.5 N	2.4		3.5
Barium		82	172	165		196	68.9		94.3
Beryllium									0.14 B
Cadmium		<0.67							0.95
Calcium		6900	14700	5100		5500	2880		5090
Chromium		12	15 1	11.3		15 9	5.3		9.6
Cobalt		6.1	7 7 B	5 2 B		8.4 B	2.9 B		3.5 B
Copper		24	41.6	35		18.7	2.9 B		16.9
Iron		16500	18700	14600		18900	8550		7710
Lead		88	53 5	32.1		54.2	18 7		24.6 J
Magnesium		2520	3960	2860		3720	1690		2240
Manganese		240	837	907 N		394	448		1190
Mercury							1 4		
Nickel		12	28.8	16 1		17 4	6.6		7.4
Potassium		1300	1180 B	755 B		1080 B	302 B		1230
Selenium							1 4		
Silver				0 11 BN		1 3			
Sodium		511		413 B		450 B	270 B		723 B
Thallium						0 77 BN			
Vanadium		19	21 7	18.8		26.7	8.5		14.4
Zinc		41	185	108		180	45.5		91.2
Total Phenol				4.7					6.4
Hexavalent Chromium		0 13 R	0 59	0.29 N		1 4 N*	0.46 N*		1.3

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals).

E - Response of the analyte is greater than the upper level of the calibration range

J - (Organic) Concentration < sample quantitation limit (SQL) but > zero

J - (Inorganic) Concentration reported as estimated because quality control criteria was not met.

N - Spike sample recovery not within control limits

R - Data rejected due to holding time violation

* - Concentration detected from sample reanalysis

Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
SEDIMENT: SS-4B

Date	11/89	11/90	11/91	11/92	11/93	05/94	11/94	11/95	11/96
Compound									
VOLATILE (ppb)									
Acetone		16 B							
Benzene		0.09 J							
2-Butanone									
Chloroform									
Methylene chloride									
Tetrachloroethene									
Toluene		1 BJ							
SEMIVOLATILE (ppb)									
Phenol		51 J							
Benzyl Alcohol									
4-Methylphenol		110 J							
2,4-Dimethylphenol									
Benzoic acid		88 J							
Acenaphthylene									
Acenaphthene									
Diethylphthalate									
Fluorene									
Phenanthrene		59 J							
Anthracene									
Fluoranthene		110 BJ							
Pyrene		110 J							
Butylbenzyl phthalate									
Benzo (a) anthracene		69 J							
Chrysene		57 J							
bis (2-Ethylhexyl) phthalate		100 BJ							
Di-n-octyl phthalate									
Benzo (b) fluoranthene		56 J							
Benzo (k) fluoranthene		39 J							
Benzo (a) pyrene		45 J							
Indeno (1,2,3-cd) pyrene									
Dibenzo (a,h) anthracene									
Benzo (g,h,i) perylene									
PEST/PCB (ppb)									
beta-BHC									
gamma-BHC									
Aldrin									
Heptachlor epoxide									
Endosulfan I									
Endosulfan II									
Dieldrin									
4,4'-DDE		41 R							
Endrin									
4,4'-DDD									
4,4'-DDT									
Methoxychlor									
Endrin Ketone									
Aroclor - 1248									
Aroclor - 1254									
METALS (ppm)									
Aluminum		5000							
Antimony									
Arsenic		5 6							
Barium		94							
Cadmium		0 62							
Calcium		5220							
Chromium		4 7							
Cobalt		3 9							
Copper		15							
Iron		89							
Lead		74							
Magnesium		2010							
Manganese		733							
Mercury		0 27							
Nickel		11							
Potassium		666							
Selenium									
Silver									
Sodium		301							
Vanadium		13							
Zinc		51							
Total Phenol									
Hexavalent Chromium		0.2 R							

Only detected results reported.

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

E - Response of the analyte is greater than the upper level of the calibration range.

J - (Organic) Concentration < sample quantitation limit (SQL) but > zero

J - (Inorganic) Concentration reported as estimated because quality control criteria was not met

N - Spike sample recovery not within control limits

R - Data rejected due to holding time violation.

* - Concentration detected from sample reanalysis

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
SEDIMENT: SS-5

Date	11/89	11/90	11/91	11/92	11/93	05/94	11/94	11/95	11/96
Compound									
VOLATILE (ppb)									
Acetone					110				
Benzene									
2-Butanone					0.8 J				
Chloroform					9				
Methylene chloride									
Tetrachloroethene							5 BJ		
Toluene									
SEMIVOLATILE (ppb)									
Phenol									
Benzyl Alcohol									
4-Methylphenol						190 J			
2,4-Dimethylphenol									
Benzoic acid						30 J			
Acenaphthylene					90 J				
Acenaphthene									
Diethylphthalate									
Fluorene									
Phenanthrene			130 J	97 J	320 J	240 J			140 J
Anthracene									
Fluoranthene			260 J		720	660 J	80 J		330 J
Pyrene			250 J		390 J	670 J	75 J		370 J
Butylbenzyl phthalate									
Benzo (a) anthracene			150 J		350 J	330 J			
Chrysene			130 J		390 J	390 J			
bis (2-Ethylhexyl) phthalate			790 B		330 J	370 J			170 J
Di-n-octyl phthalate									
Benzo (b) fluoranthene					430 J	690 J			250 J
Benzo (k) fluoranthene					180 J				93 J
Benzo (a) pyrene			110 J		310 J		380 J		
Indeno (1,2,3-cd) pyrene					140 J				
Dibenzo (a,h) anthracene					32 J				
Benzo (g,h,i) perylene					99 J				
PEST/PCB (ppb)									
beta-BHC									
gamma-BHC									
Aldrin									
Heptachlor epoxide									
Endosulfan I			15 J						
Endosulfan II						95 J			
Dieldrin			40				3.3 J		5.7 J
4,4'-DDE			9.5 J						4.2 J
Endrin						23 J			
4,4'-DDD						31 J			5.3 J
4,4'-DDT									
Methoxychlor									4.1 J
Endrin Ketone									
Aroclor - 1248				360					
Aroclor - 1254				280					
METALS (ppm)									
Aluminum			11000	6370		6230	6820		6820
Antimony				1.8 B					
Arsenic			6.8	2.8		4.2 N	5.2		12.2
Barium			2470	95.8		138	83.8		135
Beryllium									0.17 B
Cadmium									1.2
Calcium			18300 B	7240		9430	3520		5260
Chromium			17.8	8.8		11	8.3		9.8
Cobalt			7.3 B	6.7 B		4.7 B	4.5 B		4 B
Copper			54.2	28		28.6	9.1		23
Iron			17200	14600		12400	10800		8420
Lead			74.1	20.7		39.4	24.6		30.5 J
Magnesium			4410	3330		3740	2430		2160
Manganese			947	975 N		1440	332		1160
Mercury									0.07
Nickel			28.3	11.7		18.2	8.0		8.3
Potassium			1030	782 B		867 B	544 B		986
Selenium							2.1		
Silver				0.11 BN					
Sodium			564 B	255 B		398 B	288 B		870
Vanadium			24.4	14.6		15.2	12.9		14.8
Zinc			207	92		139	66.5		114
Total Phenol									6.6
Hexavalent Chromium			0.74	0.31 N		1.7 N*			0.58

Only detected results reported

B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)

E - Response of the analyte is greater than the upper level of the calibration range

J - (Organic) Concentration < sample quantitation limit (SQL) but > zero

J - (Inorganic) Concentration reported as estimated because quality control criteria was not met.

N - Spike sample recovery not within control limits

R - Data rejected due to holding time violation

* - Concentration detected from sample reanalysis

- Not Analyzed

PAS SITE O&M - ANALYTICAL RESULTS
LEACHATE: LCW-2

Date	11/89	5/90	11/90	5/91	11/91	5/92	11/92	5/93	11/93	05/94	11/94	05/95	11/95	5/96	11/96
Compound															
VOLATILE (ppb)															
Acetone	5000			5100 BD	5800										
Benzene	1400			700 D	470 J										
2-Butanone	810			370 DJ											
Chlorobenzene	2900			1200 D	1000										
Chloroform	87 J			30 DJ	3900										
1,2-Dichloroethane	470			210 DJ											
1,1-Dichloroethylene					7500										
1,2-Dichloroethene (Total)	18000 E			12000 D											
Ethylbenzene	14000 E			8300 D											
Methylene chloride	1200 B														
Toluene	11000 E			8400 D											
Vinyl chloride	4000			980 DJ	500 J										
Xylenes (Total)	19000 E			17000 D	16000										
SEMIVOLATILE (ppb)															
Phenol	650				290										
1,2-Dichlorobenzene	120			110	69 J										
2-Methylphenol	60														
4-Methylphenol					1600										
2,4-Dimethylphenol	50			100											
Naphthalene	71			110	58 J										
N-Nitrosodiphenylamine				23											
Di-n-butylphthalate				0.65											
METALS (ppm)															
Aluminum	6812														
Arsenic	0.047														
Barium	0.849														
Calcium	259														
Iron	328														
Lead	0.035														
Magnesium	49.5														
Manganese	23.3														
Nickel	0.57														
Potassium	60.9														
Sodium	121														
Vanadium	0.019 B														
Zinc	0.033														

Only detected results reported
B - Compound detected in associated blank (organic), compound < contract required detection limits (CRDL) (metals)
D - Concentration determined from secondary dilution
E - The value exceeds the linear range of calibration
J - Concentration < sample quantitation limit (SQL) but > zero
- Not Analyzed

ATTACHMENT E

HISTORICAL MONITORING WELL ELEVATION DATA

SOURCES:

Summary Reports (5/90-5/96) Environmental Monitoring, PAS Site O&M (W.A. D002340-8), Site ID #7-38-001, URS Consultants, Inc.

Monthly Progress Report, PAS Site-Oswego, N.Y. - Interim Groundwater Removal, January 1997, de maximus, Inc.

URS Consultants, Inc.

PAS Site O & M

Historical Monitoring Well Elevation Data

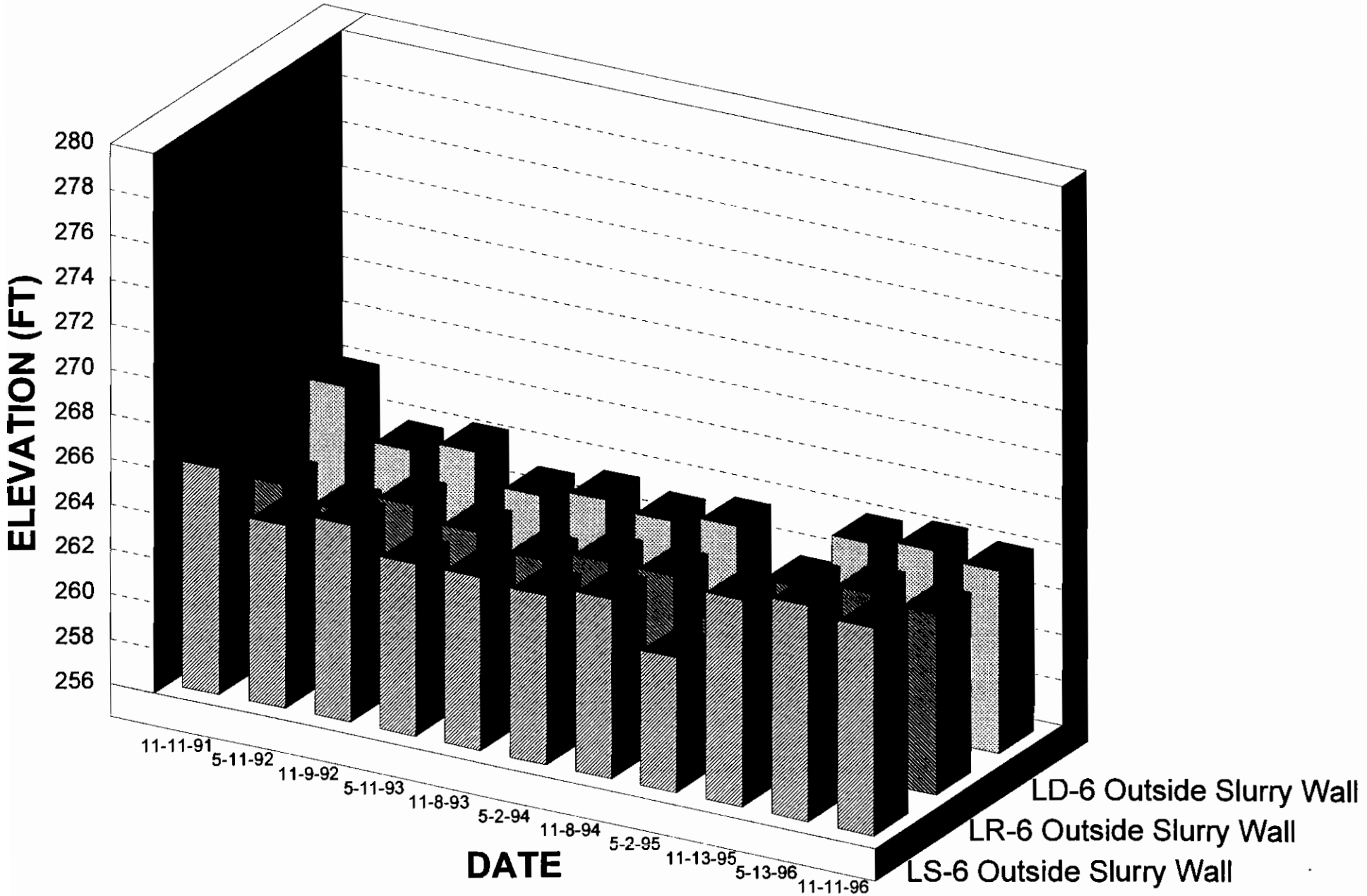
DATE	LS-6	LR-6	LD-6	SWW-3	SWW-4	SWW-5	SWW-6	SWW-11	SWW-12	LCW-1	LCW-2	LCW-3
11-11-91	266.00	263.49	266.03	269.84	268.85	267.03	266.64	262.08	265.99	N/M	267.00	N/M
5-11-92	264.08	262.88	263.82	271.46	268.93	264.53	264.70	N/M	N/M	N/M	N/M	N/M
11-9-92	264.72	263.79	264.38	271.65	269.60	264.47	264.92	265.23	264.37	N/M	N/M	N/M
5-11-93	263.60	263.22	263.05	270.21	268.10	265.42	264.38	265.52	264.07	N/M	N/M	N/M
11-8-93	263.63	262.61	263.49	269.51	268.57	262.87	264.15	263.20	263.22	N/M	N/M	N/M
5-2-94	263.46	263.14	263.16	269.69	268.01	262.61	263.94	263.44	263.90	259.15	258.35	265.28
11-8-94	263.91	263.13	263.53	269.18	269.38	264.49	265.06	263.36	263.30	N/M	N/M	N/M
5-2-95	261.92	261.51	261.55	267.92	266.28	261.14	262.58	261.98	262.48	N/M	N/M	N/M
11-13-95	265.11	263.85	264.06	269.22	271.34	262.32	265.08	262.54	264.26	N/M	N/M	N/M
5-13-96	265.51	264.23	264.35	269.70	271.45	262.37	265.04	263.25	264.50	N/M	N/M	N/M
11-11-96	265.14	263.94	264.06	269.17	270.80	262.19	265.06	262.56	264.03	N/M	N/M	N/M

N/M = Not Measured

URS Consultants, Inc.

PAS Site O & M

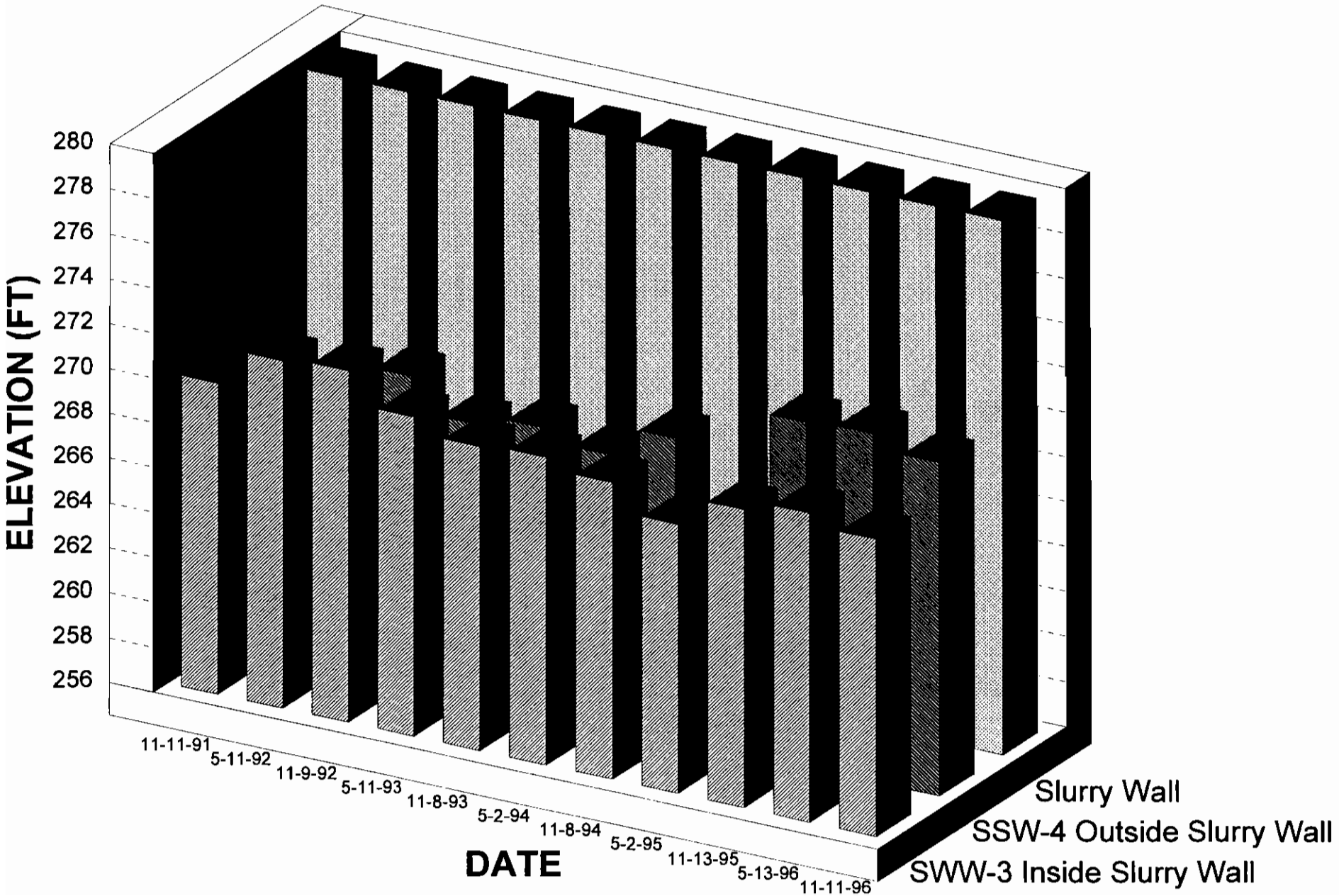
Historical Biannual Groundwater Elevation Data for LS-6, LR-6, & LD-6



URS Cons. tants, Inc.

PAS Site O & M

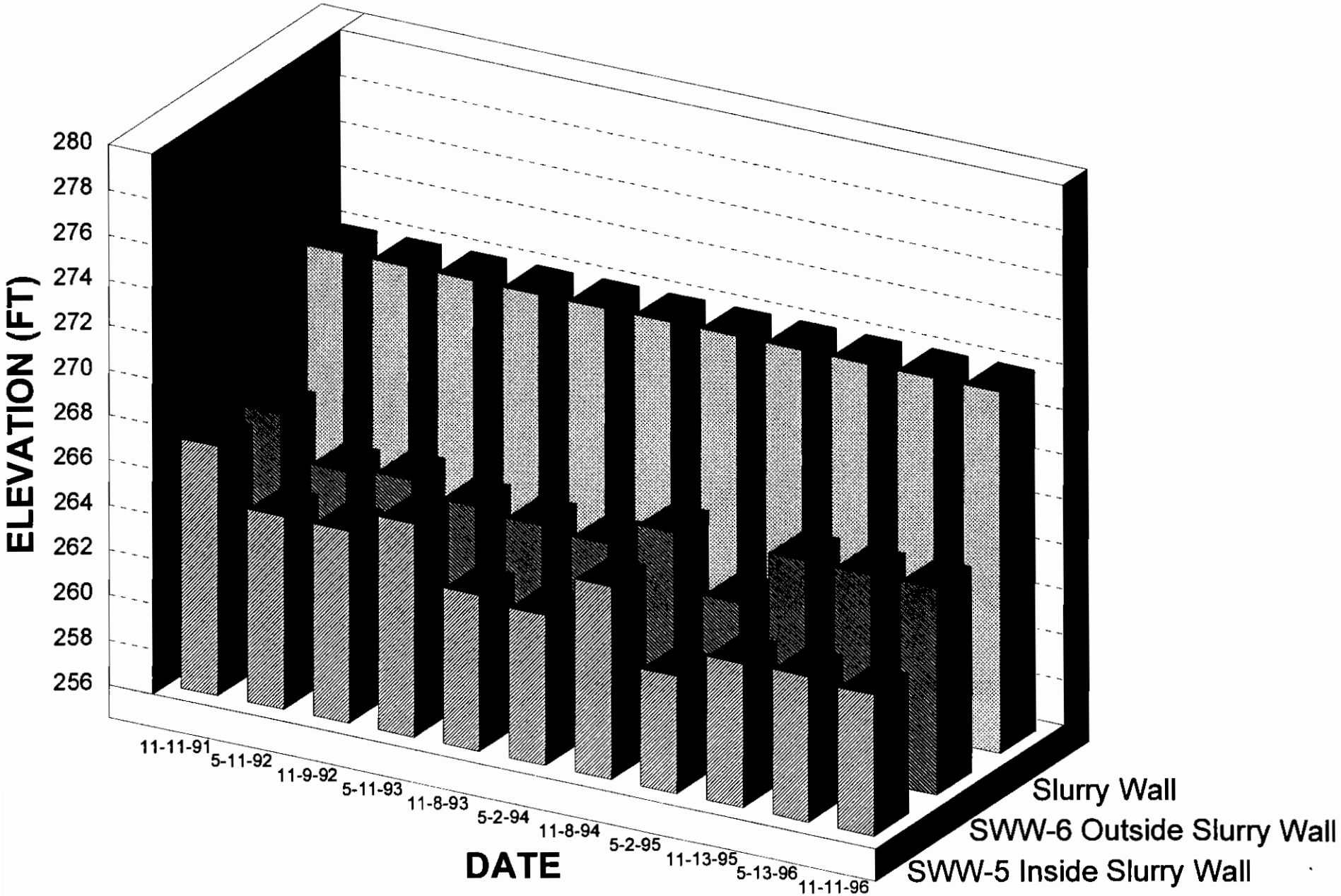
Historical Biannual Groundwater Elevation Data for SWW-3 & SWW-4



URS Consultants, Inc.

PAS Site O & M

Historical Biannual Groundwater Elevation Data for SWW-5 & SWW-6



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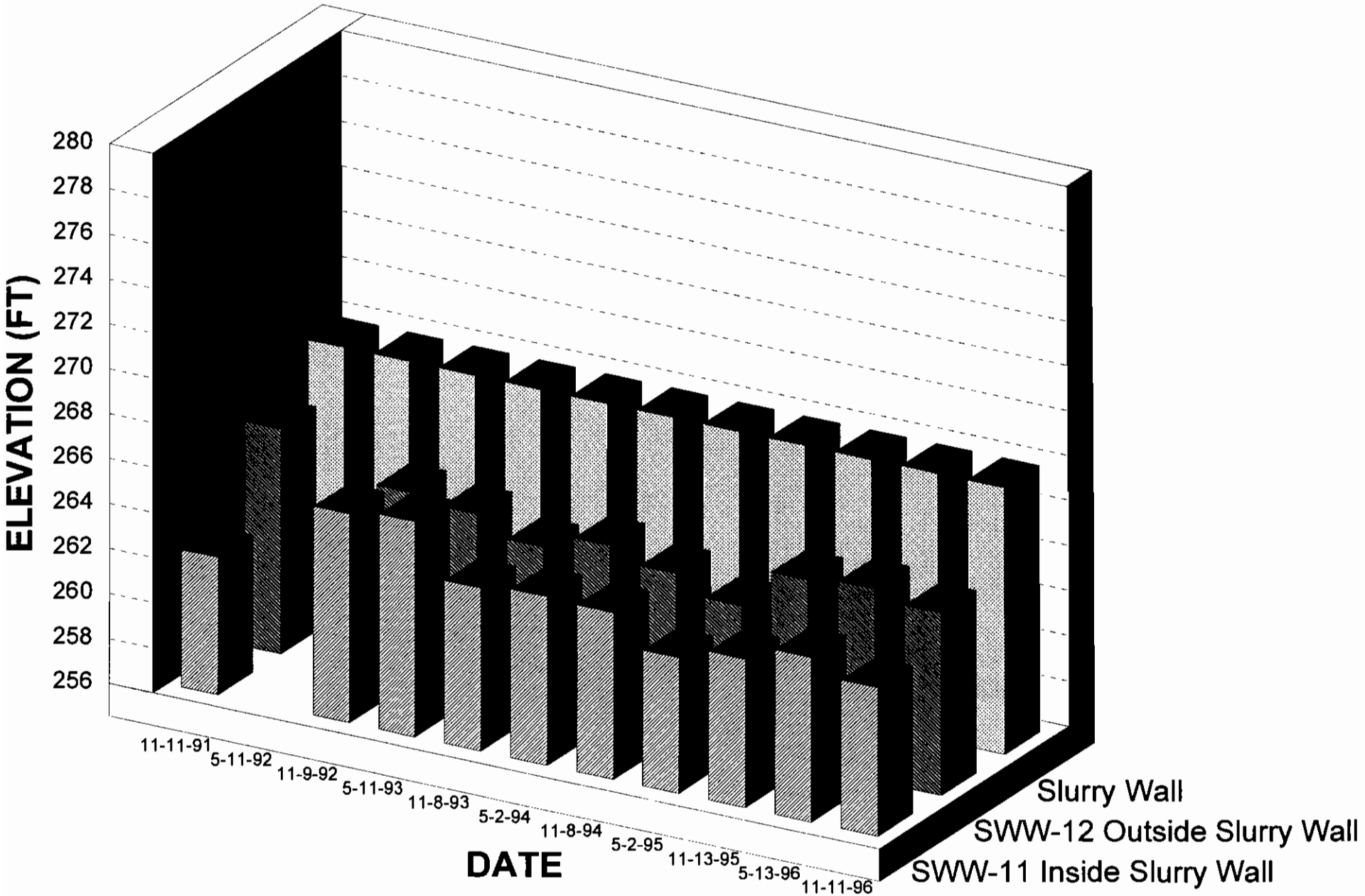
PAS Site O & M

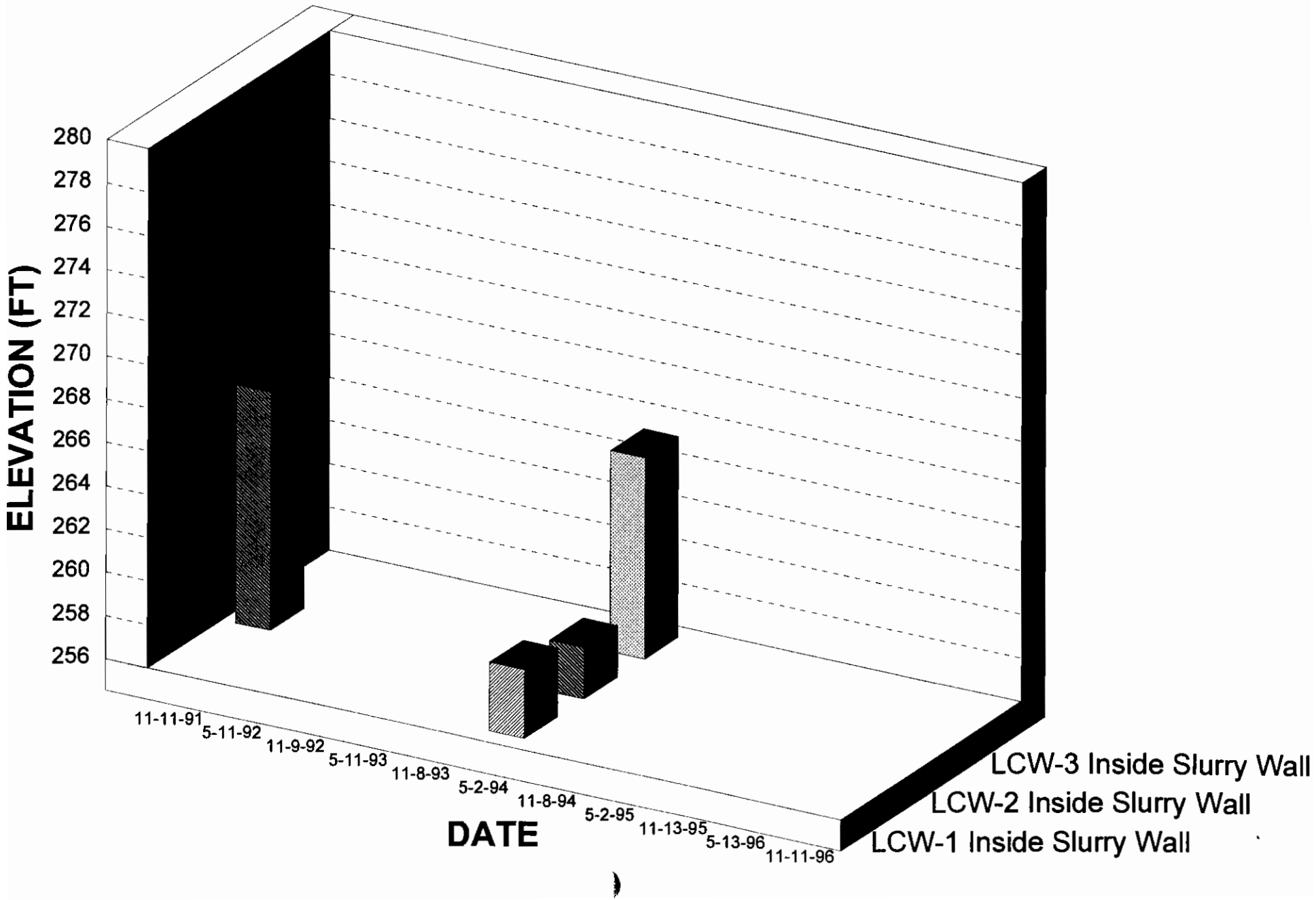
Historical Biannual Groundwater Elevation Data for SWW-11 & SWW-12



URS Consultants, Inc.

PAS Site O & M

Historical Biannual Groundwater Elevation Data for LCW-1, LCW-2, & LCW-3



Attachment 1E
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	SWW1	SWW2	SWW3	SWW4	SWW5	SWW6	SWW7	SWW8	SWW9	SWW10	SWW11	SWW12
11/21/94	12:00 PM	279.44	273.30	269.19	267.99	263.01	264.08	270.40	274.26	267.20	268.08	263.24	263.26
11/28/94	09:40 AM	279.46	273.36	269.19	267.92	263.04	264.41	270.59	274.54	267.29	267.97	263.17	263.66
12/05/94	10:00 AM	279.59	273.34	269.14	268.16	262.89	264.16	270.38	274.60	267.35	268.51	263.17	263.81
12/09/94	09:30 AM	279.94	273.32	269.17	269.39	262.71	264.58	270.39	274.37	267.52	269.97	263.01	263.96
12/19/94	09:50 AM	280.20	273.43	269.23	269.26	262.66	264.51	270.29	274.35	267.69	270.08	263.02	264.04
12/23/94	07:30 AM	280.20	273.51	269.29	269.06	262.75	264.47	270.47	274.22	267.79	269.85	263.04	263.90
01/03/95	07:30 AM	279.80	273.49	269.19	267.90	262.62	263.91	270.30	274.13	267.78	268.73	263.07	263.74
01/06/95	09:00 AM	279.66	273.49	269.18	267.82	262.61	263.89	270.37	274.08	267.81	268.64	262.96	263.65
01/16/95	09:50 AM	279.86	273.51	269.15	268.76	262.61	264.47	270.54	274.41	267.89	269.67	263.06	264.10
01/20/95	08:00 AM	280.05	273.61	269.23	269.22	262.75	264.71	270.82	274.40	268.01	270.12	263.14	264.09
02/06/95	10:15 AM	279.84	273.65	269.24	267.97	262.62	263.98	270.47	274.09	268.00	268.93	263.22	263.69
02/21/95	10:15 AM	279.55	273.55	269.15	267.61	262.61	264.10	270.58	274.26	267.93	268.33	263.15	263.91
02/24/95	08:00 AM	279.69	273.58	269.13	267.65	262.56	264.05	270.61	274.32	267.95	268.64	263.05	263.95
03/06/95	09:30 AM	279.81	273.54	269.10	268.14	262.56	264.41	270.66	274.54	268.02	269.69	263.15	264.21
03/10/95	08:30 AM	280.55	273.50	269.14	269.98	262.35	264.71	270.53	274.44	268.09	270.18	262.95	264.23
03/20/95	06:00 AM	280.72	273.72	269.42	269.67	262.71	264.77	271.01	274.46	268.30	270.11	263.27	264.19
03/24/95	06:30 AM	280.60	273.69	269.41	269.15	262.55	264.39	270.83	274.31	268.30	269.84	263.11	264.03
04/03/95	08:25 AM	280.02	273.74	269.35	268.04	262.45	263.96	270.65	274.08	268.32	268.80	263.20	263.82
04/07/95	05:00 PM	279.72	273.62	269.26	267.57	262.24	263.72	270.43	274.18	268.24	268.23	263.02	263.80
04/17/95	11:15 AM	279.94	273.77	269.30	268.44	262.42	264.19	270.72	274.23	268.38	269.43	263.20	264.00
04/21/95	09:55 AM	279.85	273.87	269.37	268.26	262.57	264.22	270.93	274.28	268.45	269.28	263.26	264.01
05/15/95	08:00 AM	278.90	273.47	269.08	266.81	262.25	263.26	270.14	273.45	267.78	266.56	262.91	262.15
06/05/95	03:00 PM	278.99	273.55	269.14	267.10	262.50	263.64	270.44	273.81	267.90	266.79	263.24	262.70
06/09/95	06:30 AM	278.90	273.47	269.08	266.81	262.25	263.26	270.14	273.45	267.78	266.56	262.91	262.15
06/19/95	07:30 AM	278.87	273.43	269.10	266.77	262.43	263.43	270.18	272.69	267.70	266.20	262.94	261.50
06/23/95	08:15 AM	278.78	273.34	269.04	266.61	262.29	263.20	270.02	272.20	267.57	265.97	262.72	261.03
07/03/95	07:40 AM	278.58	273.20	268.99	266.49	262.26	263.15	269.82	271.36	267.36	265.44	262.61	260.08

Attachment IE
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	SWW1	SWW2	SWW3	SWW4	SWW5	SWW6	SWW7	SWW8	SWW9	SWW10	SWW11	SWW12
07/07/95	06:55 AM	278.57	273.16	268.99	266.50	262.30	263.21	269.82	271.10	267.30	265.28	262.50	259.73
07/17/95	09:30 AM	278.43	273.03	269.00	266.53	262.31	263.21	269.72	270.50	267.07	264.75	262.39	259.12
07/21/95	07:00 AM	278.34	272.96	268.98	266.44	262.21	263.09	269.58	270.26	266.95	264.53	262.25	258.83
08/07/95	09:00 AM	278.41	272.83	269.05	266.65	262.36	263.21	269.50	269.87	266.71	263.98	262.49	258.90
08/11/95	07:20 AM	278.33	272.82	269.05	266.46	262.46	263.26	269.41	269.76	266.57	263.83	262.10	258.59
08/21/95	06:00 AM	278.20	272.72	268.92	266.42	262.32	263.15	269.30	270.08	266.33	263.43	261.90	258.19
08/25/95	07:35 AM	278.13	272.66	268.89	266.22	262.10	262.52	269.16	269.24	266.23	263.19	261.95	257.96
09/05/95	07:30 AM	278.07	272.57	268.93	266.36	262.14	262.88	269.06	268.73	266.00	262.75	261.82	258.00
09/08/95	07:00 AM	278.13	272.56	269.00	266.39	262.08	262.86	269.03	268.79	265.94	262.69	261.88	257.97
09/18/95	07:30 AM	278.21	272.44	268.83	266.37	262.10	262.96	268.92	268.68	265.81	262.60	261.74	258.41
09/22/95	07:50 AM	278.31	272.45	268.88	266.69	262.33	263.32	269.04	268.67	265.76	262.59	261.74	258.48
10/09/95	08:00 AM	278.93	272.26	268.77	267.40	262.11	263.89	269.09	271.68	265.61	263.43	261.77	259.62
10/13/95	08:00 AM	278.90	272.43	268.95	267.58	262.47	263.73	269.23	271.24	265.63	264.13	261.80	260.37
10/23/95	10:30 AM	280.17	272.57	268.96	270.46	262.17	264.88	269.83	274.14	266.10	268.83	262.17	263.67
10/27/95	08:00 AM	280.17	272.72	269.11	269.50	262.48	264.78	270.03	274.45	266.40	269.02	262.31	263.54
11/06/95	08:00 AM	279.98	272.92	269.02	268.85	262.30	264.50	269.97	274.30	266.72	269.32	262.50	263.83
11/10/95	08:30 AM	280.23	272.99	269.27	269.77	262.47	264.81	270.05	274.43	266.91	270.18	262.50	264.06
11/20/95	06:40 AM	281.20	273.22	269.50	270.95	262.57	265.06	270.25	275.36	267.41	270.73	262.74	264.37
11/24/95	07:30 AM	281.33	273.21	269.50	271.30	262.46	264.96	270.10	274.41	267.55	270.61	262.55	264.05
12/04/95	07:30 AM	280.93	273.42	269.56	269.79	262.60	264.63	270.19	274.41	267.83	270.28	262.77	264.00
12/08/95	07:40 AM	280.71	273.32	269.56	269.29	262.38	264.46	269.96	274.12	267.77	269.65	262.60	263.72
12/18/95	07:30 AM	280.28	273.32	269.42	268.36	262.37	264.38	270.22	274.35	267.93	269.19	262.77	263.95
12/22/95	07:30 AM	280.24	273.47	269.32	268.39	262.52	264.24	270.21	274.61	268.03	269.08	262.74	263.76
01/08/96	07:50 AM	279.84	273.43	269.30	268.13	262.60	264.30	270.38	274.24	268.16	268.92	263.01	263.92
01/12/96	07:50 AM	279.74	273.44	269.50	268.04	262.54	264.16	270.33	274.28	268.15	268.83	262.86	263.82
01/22/96	07:30 AM	281.43	273.44	269.50	271.15	262.49	265.06	270.38	274.51	268.22	270.75	262.95	264.28
01/26/96	07:55 AM	281.31	273.49	269.58	271.17	262.46	265.06	270.43	274.40	268.44	270.85	262.82	264.25

Attachment 1E
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	SWW1	SWW2	SWW3	SWW4	SWW5	SWW6	SWW7	SWW8	SWW9	SWW10	SWW11	SWW12
02/05/96	09:05 AM	280.53	273.54	269.50	268.70	262.52	264.31	270.35	274.51	268.35	269.41	262.97	263.92
02/09/96	09:40 AM	280.47	273.67	269.50	268.77	262.57	264.56	270.68	274.85	268.55	269.50	262.96	264.24
02/19/96	09:10 AM	280.24	273.52	269.48	268.47	262.27	264.01	270.22	274.04	268.42	269.25	262.87	263.66
02/23/96	08:40 AM	280.90	273.61	269.54	270.26	262.49	265.01	270.54	274.73	268.62	270.62	262.97	264.37
03/11/96	07:30 AM	280.08	273.48	269.41	268.15	262.27	264.06	270.36	274.12	268.55	269.1	263.04	263.72
03/15/96	08:00 AM	280.19	273.72	269.61	268.3	262.59	264.4	270.69	274.77	268.71	269.35	263.12	264.27
03/25/96	09:05 AM	280.80	273.77	269.60	269.27	262.62	264.60	270.82	274.66	268.83	270.08	263.22	264.34
03/29/96	09:00 AM	280.76	273.72	269.48	269.37	262.42	264.45	270.72	274.41	268.81	270.14	263.1	264.05
04/08/96	09:00 AM	280.15	273.76	269.46	268.42	262.36	264.01	270.58	274.28	268.76	268.94	263.14	263.91
04/12/96	08:30 AM	280.11	273.81	269.46	268.55	262.51	264.31	270.73	274.44	268.78	269.07	263.07	263.95
04/22/96	10:15 AM	280.50	273.89	269.70	269.33	262.40	264.44	270.75	274.47	268.89	270.19	263.16	264.17
04/26/96	09:30 AM	280.90	274.07	269.82	270.55	262.69	265.10	270.96	274.63	268.99	270.83	263.30	264.40
05/06/96	09:10 AM	280.71	274.05	269.55	269.28	262.48	264.51	270.70	274.41	268.94	270.09	263.26	264.07
05/10/96	09:00 AM	280.46	274.14	269.71	268.75	262.63	264.40	270.91	274.57	268.98	269.65	263.29	264.07
05/20/96	08:40 AM	280.61	274.25	269.85	269.03	262.60	264.60	271.03	274.48	269.10	269.69	263.36	263.87
05/24/96	09:05 AM	280.70	274.08	269.75	269.27	262.45	264.58	270.81	274.45	269.04	270.38	263.20	264.20
06/03/96	08:50 AM	280.13	274.07	269.76	268.00	262.61	264.11	270.63	273.97	269.02	268.67	263.34	263.30
06/07/96	08:20 AM	280.13	274.08	269.88	267.70	262.56	263.96	270.65	274.16	268.99	268.29	263.25	262.92
06/17/96	09:00 AM	279.69	274.06	269.95	267.49	262.54	264.05	270.54	273.82	268.79	267.96	263.24	262.97
06/21/96	09:30 AM	279.62	274.00	269.70	267.60	262.47	264.10	270.73	274.56	268.77	267.91	263.23	263.13
07/08/96	07:30 AM	279.39	273.95	269.56	268.19	262.60	263.96	270.70	273.91	268.72	267.65	263.36	262.27
07/12/96	09:00 AM	279.25	273.82	269.52	267.20	262.39	263.69	270.39	273.58	268.52	267.40	263.05	261.77
07/22/96	09:50 AM	279.41	273.83	269.60	268.20	262.61	264.03	271.01	274.76	268.50	267.54	263.13	262.55
07/26/96	08:30 AM	279.28	273.81	269.67	268.05	262.52	263.83	270.40	273.92	268.40	267.52	262.96	261.96
08/05/96	08:50 AM	279.17	273.71	269.50	267.20	262.62	263.56	270.18	273.73	268.17	267.58	262.92	261.30
08/09/96	09:00 AM	279.16	273.72	269.43	267.36	262.44	263.83	270.40	274.31	268.33	266.77	262.83	261.32
08/19/96	09:15 AM	278.99	273.58	269.47	267.05	262.35	263.44	270.06	273.49	267.94	266.46	262.72	260.52

Attachment 1E
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	SWW1	SWW2	SWW3	SWW4	SWW5	SWW6	SWW7	SWW8	SWW9	SWW10	SWW11	SWW12
08/23/96	08:50 AM	279.03	273.60	269.45	266.91	262.41	263.53	270.66	273.00	267.95	266.24	262.65	260.22
09/03/96	09:00 AM	278.85	273.45	269.40	266.70	261.21	263.33	269.93	272.01	267.70	266.09	262.52	259.39
09/06/96	09:30 AM	278.80	273.37	269.39	267.17	262.20	263.44	269.88	272.09	267.63	265.71	262.39	259.32
09/16/96	09:00 AM	278.77	273.30	269.34	266.87	262.20	263.43	269.89	272.13	267.36	265.48	262.34	259.63
09/20/96	08:50 AM	278.80	273.24	269.25	266.86	262.39	263.45	269.79	272.19	267.41	265.36	262.25	259.62
10/07/96	09:00 AM	278.99	273.21	269.19	266.93	262.53	263.66	269.86	272.81	267.07	265.23	262.44	260.56
10/11/96	07:50 AM	278.89	273.10	269.06	266.81	262.16	263.26	269.76	272.94	266.94	265.25	262.12	260.36
10/21/96	09:00 AM	279.42	273.12	269.02	267.65	262.10	264.07	269.83	274.34	266.83	265.87	262.24	261.32
10/25/96	07:55 AM	279.49	273.14	269.07	267.97	262.20	264.16	269.95	274.24	266.92	267.28	262.23	261.82
11/04/96	08:50 AM	279.19	273.11	269.05	267.58	262.15	263.57	269.78	274.11	267.00	267.35	262.36	262.05
11/08/96	09:00 AM	279.33	273.22	269.24	267.73	262.27	263.91	270.07	274.78	267.44	267.44	262.48	262.64
11/18/96	09:15 AM	280.69	273.30	269.39	269.66	262.50	264.88	270.27	274.58	267.70	270.22	262.82	264.08
11/22/96	09:00 AM	280.78	273.25	269.45	270.20	262.48	264.75	270.19	274.54	267.81	270.43	262.67	264.10
12/02/96	09:00 AM	280.91	273.40	269.44	270.88	262.57	265.16	270.29	274.86	268.07	270.87	262.87	264.53
12/06/96	09:15 AM	280.87	273.42	269.52	270.09	262.67	264.91	270.39	274.71	268.17	270.58	262.86	264.17
12/16/96	09:15 AM	280.93	273.46	269.50	270.40	262.54	265.01	270.43	274.64	268.46	270.83	263.09	264.30
12/20/96	09:00 AM	280.55	273.47	269.58	269.22	262.50	264.38	270.29	274.61	268.27	270.06	262.83	263.85
01/06/97	07:30 AM	280.76	273.64	269.63	269.97	262.67	264.83	270.79	274.70	268.60	270.64	263.13	264.32
01/10/97	08:00 AM	280.62	273.74	269.66	269.49	262.82	264.91	270.71	274.73	268.65	270.31	263.20	264.25
01/20/97	07:30 AM	280.04	273.62	269.45	268.26	262.49	264.19	270.48	274.33	268.60	269.08	263.09	263.92
01/24/97	07:45 AM	280.28	273.48	269.50	269.22	262.29	264.56	270.35	274.66	268.47	269.97	262.93	264.41

Notes:
1. Monitoring well elevations in feet above mean sea level.

Attachment 1F
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	LCW1	LCW2	LCW3	LCW4
11/21/94	12:00 PM	261.45	261.44	265.96	265.37
11/28/94	09:40 AM	260.59	260.58	266.30	264.77
12/05/94	10:00 AM	261.31	261.30	266.06	265.28
12/09/94	09:30 AM	259.94	258.53	265.80	263.97
12/19/94	09:50 AM	260.80	260.78	265.71	264.89
12/23/94	07:30 AM	259.94	258.94	265.66	264.09
01/03/95	07:30 AM	260.93	260.94	265.55	265.07
01/06/95	09:00 AM	259.63	258.01	265.97	262.94
01/16/95	09:50 AM	260.51	260.50	265.73	264.17
01/20/95	08:00 AM	259.69	258.21	265.40	263.40
02/06/95	10:00 AM	261.23	261.25	265.37	265.07
02/10/95	09:00 AM	259.69	258.13	265.31	263.29
02/21/95	10:15 AM	260.66	260.65	265.27	264.51
02/24/95	08:00 AM	259.76	258.24	265.25	263.58
03/06/95	09:30 AM	260.57	260.56	265.18	264.59
03/10/95	08:30 AM	259.55	257.92	265.24	262.68
03/20/95	06:00 AM	260.51	260.50	265.27	264.03
03/24/95	06:30 AM	259.66	258.09	265.26	263.23
04/03/95	08:25 AM	260.55	260.54	265.23	264.38
04/07/95	05:00 PM	260.03	258.88	265.32	263.47
04/17/95	11:15 AM	260.51	260.49	265.26	264.28
04/21/95	09:15 AM	259.69	258.17	265.46	263.37
05/01/95	02:30 PM	260.54	260.52	265.26	264.44
05/05/95	09:15 AM	259.77	257.89	265.81	262.52
05/15/95	12:30 PM	260.54	260.53	265.55	263.96
05/19/95	08:00 AM	259.61	257.99	265.25	262.89
06/05/95	03:00 PM	261.15	261.13	265.10	264.76
06/09/95	06:30 AM	259.62	258.14	265.22	263.20
06/19/95	07:30 AM	260.46	260.44	265.11	264.30
06/23/95	08:15 AM	259.82	258.68	265.40	263.63
07/03/95	07:40 AM	260.51	260.52	265.21	264.60
07/07/95	06:55 AM	259.37	257.84	265.11	262.68
07/17/95	09:30 AM	260.19	260.16	265.02	263.97
07/21/95	07:00 AM	259.41	258.00	265.15	263.05
08/07/95	09:00 AM	260.76	260.84	264.98	264.79
08/11/95	07:20 AM	259.46	258.00	265.12	262.93
08/21/95	06:00 AM	260.10	260.08	264.96	264.02
08/25/95	07:35 AM	259.28	257.79	264.99	262.76
09/05/95	07:30 AM	260.03	260.03	264.91	264.10

Attachment-1F
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	LCW1	LCW2	LCW3	LCW4
09/08/95	07:00 AM	259.34	257.87	265.10	263.51
09/18/95	07:30 AM	259.99	259.98	264.93	263.70
09/22/95	07:50 AM	259.24	257.81	265.11	262.78
10/09/95	08:00 AM	260.47	260.46	264.89	264.32
10/13/95	08:00 AM	259.25	257.79	265.12	262.25
10/23/95	10:30 AM	260.08	260.05	265.03	263.70
10/27/95	08:00 AM	259.26	257.79	265.15	262.14
11/06/95	08:00 AM	260.11	260.14	265.12	263.55
11/10/95	08:30 AM	259.37	257.94	265.15	262.26
11/20/95	06:40 AM	260.30	260.26	265.20	263.54
11/24/95	07:30 AM	259.52	257.87	265.42	262.57
12/04/95	07:30 AM	260.33	260.33	265.39	263.70
12/08/95	07:40 AM	259.34	257.77	264.97	262.46
12/18/95	07:30 AM	260.15	260.22	265.10	263.52
12/22/95	07:30 AM	259.50	257.95	265.00	262.02
01/08/96	07:50 AM	261.01	260.89	265.16	264.22
01/12/96	07:50 AM	259.41	257.79	265.16	262.09
01/22/96	07:30 AM	260.42	260.44	265.15	263.80
01/26/96	07:55 AM	259.47	257.87	265.36	262.32
02/05/96	09:05 AM	260.36	260.03	265.29	263.52
02/09/96	09:40 AM	259.57	257.67	264.96	261.78
02/19/96	09:10 AM	260.27	260.25	265.06	263.42
02/23/96	08:40 AM	259.61	257.85	265.22	262.34
03/11/96	07:30 AM	260.10	260.99	265.22	264.34
03/15/96	08:00 AM	259.62	258.04	265.21	262.60
03/25/96	09:05 AM	260.52	260.46	265.16	263.96
03/29/96	09:00 AM	259.58	257.92	265.36	262.89
04/08/96	09:00 AM	260.41	260.40	265.22	264.10
04/12/96	08:30 AM	257.93	255.56	265.05	260.47
04/22/96	10:15 AM	260.08	259.95	265.20	263.02
04/26/96	09:30 AM	259.86	258.67	265.57	262.89
05/06/96	09:10 AM	260.51	260.50	265.42	264.06
05/10/96	09:00 AM	259.56	257.95	265.42	263.09
05/20/96	08:40 AM	260.40	260.44	265.41	263.94
05/24/96	09:05 AM	259.71	258.27	265.17	263.36
06/03/96	08:50 AM	260.63	260.60	265.45	264.46
06/07/96	08:20 AM	259.55	257.99	265.14	262.90
06/17/96	09:00 AM	260.36	260.49	265.14	264.19
06/21/96	09:30 AM	259.64	258.20	265.26	263.29

Attachment 1F
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	LCW1	LCW2	LCW3	LCW4
07/08/96	07:30 AM	260.25	261.27	265.08	265.02
07/12/96	09:00 AM	259.70	258.33	265.45	263.42
07/22/96	09:50 AM	260.60	260.59	265.29	264.67
07/26/96	08:30 AM	260.20	258.65	265.27	263.87
08/05/96	08:50 AM	260.63	260.56	265.19	264.85
08/09/96	09:00 AM	259.45	257.88	265.11	262.76
08/19/96	09:15 AM	260.30	260.28	265.03	264.11
08/23/96	08:50 AM	260.18	257.90	265.21	263.47
09/03/96	09:00 AM	260.41	260.29	265.07	264.32
09/06/96	09:30 AM	259.34	257.79	264.89	262.58
09/16/96	09:00 AM	260.08	260.08	264.79	264.04
09/20/96	08:50 AM	259.37	257.80	265.12	262.82
10/07/96	09:00 AM	260.66	260.64	264.87	264.62
10/11/96	07:50 AM	259.26	257.70	265.26	262.46
10/21/96	09:00 AM	260.05	260.04	265.02	263.70
10/25/96	07:55 AM	259.31	257.83	265.21	262.41
11/04/96	08:50 AM	260.16	260.14	265.08	263.76
11/08/96	09:00 AM	259.37	257.81	265.04	262.38
11/18/96	09:15 AM	260.28	260.28	265.21	263.54
11/22/96	09:00 AM	259.46	257.96	265.29	262.62
12/02/96	09:00 AM	260.35	260.35	265.22	264.00
12/06/96	09:15 AM	259.58	257.84	264.83	262.26
12/16/96	09:15 AM	260.31	260.28	265.09	263.79
12/20/96	09:00 AM	259.87	257.89	265.33	262.55
01/06/97	07:30 AM	261.08	261.05	265.29	264.52
01/10/97	08:00 AM	259.61	257.94	265.46	262.70
01/20/97	07:30 AM	260.44	260.40	265.31	263.93
01/24/97	07:45 AM	259.57	263.99	265.45	262.96

Notes:

1. Monitoring well elevations in feet above mean sea level.

Attachment 1G
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	M-21	M-22	M-23	M-24	M-25	M-26
11/21/94	12:00 PM	260.99	262.14	257.84	260.71	257.14	259.50
11/28/94	09:40 AM	261.04	262.30	258.12	260.79	257.28	256.54
12/05/94	10:00 AM	261.15	262.38	258.42	261.05	257.52	261.20
12/09/94	09:30 AM	261.71	262.64	258.47	261.86	258.19	263.28
12/19/94	09:50 AM	261.55	262.73	258.46	261.60	258.00	263.08
12/23/94	07:30 AM	261.63	262.65	258.23	261.61	257.84	262.95
01/03/95	07:30 AM	261.19	262.42	257.91	261.12	257.31	260.98
01/06/95	09:00 AM	261.16	262.27	257.76	261.01	257.21	260.81
01/16/95	09:50 AM	261.62	262.78	258.62	261.52	257.98	262.69
01/20/95	08:00 AM	261.88	262.78	258.39	261.78	257.99	263.12
02/06/95	10:00 AM	261.61	262.58	258.02	261.53	257.50	262.02
02/10/95	09:00 AM	261.50	262.47	257.95	261.40	257.36	261.35
02/21/95	10:15 AM	261.52	262.68	258.41	261.61	257.95	260.71
02/24/95	08:00 AM	261.62	262.69	258.47	261.72	258.24	261.15
03/06/95	09:30 AM	261.94	262.90	258.83	262.24	258.89	262.48
03/10/95	08:30 AM	263.64	263.46	259.37	264.97	260.47	266.44
03/20/95	06:00 AM	262.86	263.21	258.81	263.94	259.48	264.54
03/24/95	06:30 AM	262.57	263.06	258.65	263.42	259.13	263.95
04/03/95	08:25 AM	262.00	262.63	258.15	262.88	258.49	262.37
04/07/95	05:00 PM	261.67	262.57	258.17	262.25	258.31	261.13
04/17/95	11:15 AM	262.06	262.75	258.35	262.68	258.67	262.87
04/21/95	09:15 AM	262.05	262.70	258.21	262.76	258.50	262.48
05/01/95	02:30 PM	261.62	262.44	257.95	262.41	258.19	260.88
05/05/95	09:15 AM	261.55	262.38	257.86	262.24	258.11	260.37
05/15/95	12:30 PM	261.35	262.34	---	---	---	---
05/19/95	08:00 AM	261.33	262.28	---	---	---	---
06/05/95	03:00 PM	261.12	262.16	---	---	---	---
06/09/95	06:30 AM	260.94	261.97	---	---	---	---
06/19/95	07:30 AM	260.84	261.61	257.79	261.23	257.94	257.97
06/23/95	08:15 AM	260.70	261.33	257.75	261.23	257.87	257.75
07/03/95	07:40 AM	260.53	261.25	257.69	261.05	257.71	257.62
07/07/95	06:55 AM	260.47	261.11	257.68	261.05	257.67	257.56
07/17/95	09:30 AM	260.46	261.15	257.96	261.06	257.71	257.36
07/21/95	07:00 AM	260.39	260.93	257.86	261.01	257.71	257.22
08/07/95	09:00 AM	260.42	261.38	258.13	261.06	257.94	257.75
08/11/95	07:20 AM	260.39	261.03	258.09	261.06	257.89	257.75
08/21/95	06:00 AM	260.29	260.95	258.04	260.94	257.64	257.51
08/25/95	07:35 AM	260.11	260.55	257.89	260.92	257.57	257.38
09/05/95	07:30 AM	260.31	260.92	258.36	260.94	257.93	257.72

Attachment 1G
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	M-21	M-22	M-23	M-24	M-25	M-26
09/08/95	07:00 AM	260.31	261.10	258.49	260.97	257.99	257.60
09/18/95	07:30 AM	260.34	261.17	258.69	260.99	258.19	257.96
09/22/95	07:50 AM	260.45	261.22	258.72	261.05	258.22	257.95
10/09/95	08:00 AM	260.96	261.95	259.25	261.59	258.93	260.79
10/13/95	08:00 AM	260.92	261.88	259.14	261.33	258.84	259.27
10/23/95	10:30 AM	262.57	263.11	259.97	264.78	260.47	265.65
10/27/95	08:00 AM	262.19	262.88	259.52	263.04	259.55	264.13
11/06/95	08:00 AM	262.14	262.97	259.79	262.81	259.74	263.43
11/10/95	08:30 AM	262.57	263.14	259.88	263.84	260.01	264.38
11/20/95	06:40 AM	263.84	263.63	260.39	265.19	260.90	266.64
11/24/95	07:30 AM	263.68	263.54	260.27	265.11	260.71	266.38
12/04/95	07:30 AM	263.14	263.35	260.01	264.43	260.05	264.98
12/08/95	07:40 AM	262.77	263.11	259.72	263.79	259.74	264.28
12/18/95	07:30 AM	262.48	263.15	259.71	263.01	259.55	263.08
12/22/95	07:30 AM	262.47	263.17	259.60	263.03	259.48	263.07
01/08/96	07:50 AM	262.27	262.97	259.51	262.73	259.38	262.25
01/12/96	07:50 AM	262.21	262.88	259.58	262.64	259.35	262.03
01/22/96	07:30 AM	264.42	263.71	260.09	268.31	261.49	268.21
01/26/96	07:55 AM	264.20	263.63	259.97	267.83	261.12	267.55
02/05/96	09:05 AM	262.74	263.02	259.11	263.59	259.54	264.45
02/09/96	09:40 AM	262.75	263.28	259.63	263.63	259.77	263.98
02/19/96	09:10 AM	262.46	263.02	258.96	263.45	259.28	263.68
02/23/96	08:40 AM	263.64	263.66	259.88	265.21	260.49	265.98
03/11/96	07:30 AM	262.37	262.91	259.00	263.22	259.27	263.02
03/15/96	08:00 AM	262.61	263.21	259.49	263.50	259.62	263.08
03/25/96	09:05 AM	263.16	263.38	259.59	264.58	260.01	264.88
03/29/96	09:00 AM	263.02	263.32	259.44	264.15	259.82	264.36
04/08/96	09:00 AM	262.43	263.15	259.16	263.23	259.31	262.79
04/12/96	08:30 AM	262.39	263.15	259.18	263.17	259.27	262.59
04/22/96	10:15 AM	262.90	263.31	259.34	264.13	259.69	264.40
04/26/96	09:30 AM	263.80	263.67	259.87	265.64	260.36	266.07
05/06/96	09:10 AM	263.18	263.43	259.40	263.88	259.83	265.01
05/10/96	09:00 AM	262.86	263.31	259.32	263.42	259.49	264.04
05/20/96	08:40 AM	263.08	263.55	259.19	263.99	259.68	264.73
05/24/96	09:05 AM	263.51	263.45	259.54	265.33	260.09	265.53
06/03/96	08:50 AM	262.41	262.88	258.64	262.80	258.97	263.03
06/07/96	08:20 AM	262.22	262.79	258.78	262.54	258.86	262.36
06/17/96	09:00 AM	261.87	262.53	258.67	262.27	258.80	261.16
06/21/96	09:30 AM	261.96	263.00	258.89	262.23	258.84	260.93

Attachment 1G
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	M-21	M-22	M-23	M-24	M-25	M-26
07/08/96	07:30 AM	261.67	262.48	258.15	262.10	258.43	260.54
07/12/96	09:00 AM	261.45	262.18	257.80	261.94	258.08	259.93
07/22/96	09:50 AM	261.80	262.95	258.35	262.16	259.48	261.69
07/26/96	08:30 AM	261.61	262.44	257.98	262.10	258.08	260.53
08/05/96	08:50 AM	261.33	262.21	257.73	261.87	257.90	259.77
08/09/96	09:00 AM	261.42	262.54	258.24	261.85	258.28	259.80
08/19/96	09:15 AM	261.09	262.03	257.44	261.53	257.60	259.08
08/23/96	08:50 AM	261.09	261.83	257.38	261.46	257.51	258.89
09/03/96	09:00 AM	260.92	261.61	257.29	261.38	257.42	259.38
09/06/96	09:30 AM	260.84	261.51	257.17	261.29	257.29	259.04
09/16/96	09:00 AM	260.85	261.82	257.53	261.20	257.49	258.74
09/20/96	08:50 AM	260.84	261.86	257.44	261.17	257.49	258.69
10/07/96	09:00 AM	261.04	261.96	257.57	261.35	257.69	258.96
10/11/96	07:50 AM	260.84	262.11	257.69	261.14	257.66	258.79
10/21/96	09:00 AM	261.50	262.60	258.72	261.83	258.73	262.33
10/25/96	07:55 AM	261.48	262.65	258.28	261.87	258.33	262.05
11/04/96	08:50 AM	261.31	262.38	257.82	261.46	257.95	259.68
11/08/96	09:00 AM	261.50	262.80	258.90	261.63	258.41	260.04
11/18/96	09:15 AM	262.81	263.37	258.95	263.27	259.36	264.73
11/22/96	09:00 AM	262.95	263.38	259.01	263.92	259.43	265.06
12/02/96	09:00 AM	263.42	263.73	259.86	265.32	260.39	265.57
12/06/96	09:15 AM	263.32	263.52	259.12	264.65	259.79	265.48
12/16/96	09:15 AM	263.43	263.65	259.20	265.11	259.81	265.38
12/20/96	09:00 AM	262.94	263.28	258.76	263.79	259.23	264.75
01/06/97	07:30 AM	263.18	263.60	259.18	264.37	259.67	264.95
01/10/97	08:00 AM	263.12	263.55	258.88	263.80	259.29	264.70
01/20/97	07:30 AM	262.49	263.16	258.44	263.14	258.76	263.14
01/24/97	07:45 AM	262.94	263.48	259.22	264.81	259.65	264.83

Notes:
1. Monitoring well elevations in feet above mean sea level.
2. (---) indicates no measurements taken.

Attachment 1H
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	LS-2*	LR-2	LD-2*	LR-3	LD-3	LD-4*	LD-5*	LS-6	LR-6	LD-6	LR-8	LD-8*	LS-9*
11/21/94	12:00 PM	---	276.50	---	268.22	274.29	---	---	262.86	262.52	262.10	261.68	---	---
11/28/94	09:40 AM	---	276.58	---	268.35	274.55	---	---	263.16	262.68	262.66	261.75	---	---
12/05/94	10:00 AM	---	276.38	---	268.44	274.61	---	---	263.47	262.75	262.76	261.84	---	---
12/09/94	09:30 AM	---	276.40	---	268.64	274.38	---	---	264.55	263.01	263.27	262.37	---	---
12/19/94	09:50 AM	---	276.47	---	268.79	274.36	---	---	264.89	263.10	263.48	262.28	---	---
12/23/94	07:30 AM	---	276.44	---	268.71	274.23	---	---	264.31	263.02	263.57	262.37	---	---
01/03/95	07:30 AM	284.51	276.13	282.75	268.54	274.14	268.27	263.64	263.39	262.79	263.05	261.91	264.40	268.07
01/06/95	09:00 AM	---	276.02	---	268.43	274.09	---	---	263.26	262.65	262.95	261.86	---	---
01/16/95	09:50 AM	---	276.31	---	268.80	274.42	---	---	264.90	263.14	263.38	262.31	---	---
01/20/95	08:00 AM	---	276.46	---	268.84	274.41	---	---	264.71	263.15	263.59	262.59	---	---
02/06/95	10:00 AM	---	276.29	---	268.75	274.09	---	---	263.45	262.95	263.08	262.27	---	---
02/10/95	09:00 AM	---	276.07	---	268.65	274.14	---	---	263.27	262.84	262.89	262.15	---	---
02/21/95	10:15 AM	---	276.20	---	268.80	274.27	---	---	263.27	263.05	262.88	262.15	---	---
02/24/95	08:00 AM	---	276.31	---	268.84	274.33	---	---	263.39	263.06	262.97	262.25	---	---
03/06/95	09:30 AM	---	276.34	---	268.94	274.55	---	---	264.54	263.26	263.30	262.57	---	---
03/10/95	08:30 AM	---	276.57	---	269.34	274.46	---	---	265.07	263.81	264.11	264.25	---	---
03/20/95	06:00 AM	---	276.84	---	269.32	274.46	---	---	264.62	263.58	263.94	263.52	---	---
03/24/95	06:30 AM	---	276.72	---	269.25	274.33	---	---	264.41	263.41	263.75	263.20	---	---
04/03/95	08:25 AM	283.82	276.11	282.54	268.86	274.09	268.38	263.71	263.47	263.00	263.03	262.61	264.93	268.08
04/07/95	05:00 PM	---	275.91	---	268.81	274.19	---	---	263.23	263.30	262.58	262.29	---	---
04/17/95	11:15 AM	---	276.16	---	268.97	274.24	---	---	264.32	263.12	263.61	262.69	---	---
04/21/95	09:15 AM	---	276.14	---	268.91	274.29	---	---	263.87	263.07	263.29	262.69	---	---
05/01/95	02:30 PM	283.18	275.75	282.30	268.68	273.50	267.87	263.62	263.24	262.83	262.85	262.24	264.56	267.99
05/05/95	09:15 AM	282.66	276.34	281.97	268.56	274.00	267.45	263.47	263.02	262.78	251.82	262.15	264.55	267.96
05/15/95	12:30 PM	---	276.31	---	268.53	274.00	---	---	262.87	262.72	262.15	261.95	---	---
05/19/95	08:00 AM	---	276.18	---	268.48	273.97	---	---	262.70	262.65	262.22	261.94	---	---

Attachment 1H
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	LS-2*	LR-2	LD-2*	LR-3	LD-3	LD-4*	LD-5*	LS-6	LR-6	LD-6	LR-8	LD-8*	LS-9*
06/05/95	03:00 PM	---	275.41	---	268.27	273.83	---	---	262.30	262.53	262.35	261.73	---	---
06/09/95	06:30 AM	---	275.18	---	268.06	273.46	---	---	261.79	262.26	262.11	261.52	---	---
06/19/95	07:30 AM	---	274.98	---	267.66	272.70	---	---	261.20	261.98	261.45	261.40	---	---
06/23/95	08:15 AM	---	274.84	---	267.38	272.21	---	---	260.83	261.71	261.19	261.26	---	---
07/03/95	07:40 AM	---	274.65	---	267.05	271.38	---	---	260.33	261.61	260.78	261.11	---	---
07/07/95	06:55 AM	---	274.59	---	266.91	271.12	---	---	260.14	261.47	260.65	261.07	---	---
07/17/95	09:30 AM	---	274.59	---	266.71	270.51	---	---	259.76	261.50	260.42	261.04	---	---
07/21/95	07:00 AM	---	274.46	---	266.56	270.27	---	---	259.64	261.30	260.34	260.96	---	---
08/07/95	09:00 AM	279.93	274.49	281.46	267.19	269.87	263.82	258.99	259.93	261.61	260.73	261.12	262.45	266.31
08/11/95	07:20 AM	280.01	274.49	281.13	266.56	269.77	263.82	258.54	259.62	261.39	260.67	262.07	262.39	267.27
08/21/95	06:00 AM	---	274.42	---	266.24	269.12	---	---	259.40	261.24	260.31	261.27	---	---
08/25/95	07:35 AM	---	274.17	---	266.11	269.37	---	---	259.21	260.79	260.03	262.08	---	---
09/05/95	07:30 AM	---	274.25	---	266.06	268.90	---	---	258.94	261.26	259.59	260.97	---	---
09/08/95	07:00 AM	---	274.22	---	266.06	268.81	---	---	258.94	261.39	259.72	260.85	---	---
09/18/95	07:30 AM	---	274.58	---	266.21	268.71	---	---	259.40	261.52	260.22	260.92	---	---
09/22/95	07:50 AM	---	274.62	---	266.24	268.69	---	---	259.47	261.57	260.29	261.01	---	---
10/09/95	08:00 AM	284.81	275.35	282.73	267.33	271.82	263.83	259.94	261.97	262.29	261.45	261.53	262.71	267.98
10/13/95	08:00 AM	284.26	275.45	282.62	267.39	271.22	264.00	260.24	261.39	262.19	261.91	261.60	262.61	267.72
10/23/95	10:30 AM	---	276.16	---	268.88	274.18	---	---	264.63	263.48	263.51	263.15	---	---
10/27/95	08:00 AM	---	276.45	---	268.82	274.08	---	---	263.74	263.22	263.42	262.84	---	---
11/06/95	08:00 AM	---	276.45	---	268.87	274.31	---	---	264.22	263.33	263.37	262.74	---	---
11/10/95	08:30 AM	---	276.56	---	269.06	274.61	---	---	264.87	263.50	263.80	263.17	---	---
11/20/95	06:40 AM	---	278.12	---	269.50	274.62	---	---	265.35	263.99	261.82	264.44	---	---
11/24/95	07:30 AM	---	278.11	---	269.48	274.42	---	---	264.88	263.87	263.38	264.42	---	---
12/04/95	07:30 AM	---	277.85	---	269.33	274.42	---	---	264.54	263.70	263.42	263.88	---	---
12/08/95	07:40 AM	---	277.32	---	269.12	274.14	---	---	264.10	263.43	263.37	263.37	---	---

Attachment 1H
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	LS-2*	LR-2	LD-2*	LR-3	LD-3	LD-4*	LD-5*	LS-6	LR-6	LD-6	LR-8	LD-8*	LS-9*
12/18/95	07:30 AM	---	276.81	---	269.06	274.35	---	---	264.14	263.52	263.21	263.11	---	---
12/22/95	07:30 AM	---	276.90	---	269.06	274.18	---	---	264.14	263.39	263.40	263.08	---	---
01/08/96	07:50 AM	285.72	276.31	282.70	268.91	274.25	268.15	263.78	263.71	263.32	263.11	263.21	264.84	268.11
01/12/96	07:50 AM	285.76	276.20	282.73	268.90	274.28	268.10	263.82	263.56	263.24	263.08	262.78	264.83	268.07
01/22/96	07:30 AM	---	276.80	---	269.53	274.53	---	---	265.04	264.09	264.16	264.99	---	---
01/26/96	07:55 AM	---	277.00	---	269.53	274.42	---	---	265.17	263.99	264.01	264.77	---	---
02/05/96	09:05 AM	---	276.58	---	269.56	274.54	---	---	263.81	263.36	263.28	263.33	---	---
02/09/96	09:40 AM	---	276.70	---	269.28	274.85	---	---	264.56	263.66	263.36	263.4	---	---
02/19/96	09:10 AM	---	276.46	---	268.96	274.16	---	---	263.78	263.24	263.28	263.04	---	---
02/23/96	08:40 AM	---	276.73	---	269.40	274.60	---	---	265.23	263.84	263.97	264.2	---	---
03/11/96	07:30 AM	---	276.25	---	268.92	274.27	---	---	263.51	263.26	263.09	262.96	---	---
03/15/96	08:00 AM	---	276.71	---	269.41	275.18	---	---	263.92	263.58	263.33	263.22	---	---
03/25/96	09:05 AM	---	276.81	---	269.47	274.64	---	---	264.39	263.75	263.55	263.72	---	---
03/29/96	09:00 AM	---	276.83	---	269.31	274.41	---	---	264.31	263.68	263.59	263.59	---	---
04/08/96	09:00 AM	285.22	276.40	282.95	269.18	274.41	268.52	263.89	263.6	263.52	263.15	263.00	265.04	268.27
04/12/96	08:30 AM	285.31	276.56	282.94	269.63	274.45	268.52	263.81	263.88	263.51	263.37	263.09	265.05	268.19
04/22/96	10:15 AM	---	276.66	---	269.33	274.59	---	---	264.53	263.67	263.74	263.59	---	---
04/26/96	09:30 AM	---	277.05	---	270.13	274.64	---	---	265.23	264.02	264.33	264.34	---	---
05/06/96	09:10 AM	---	276.66	---	270.35	274.50	---	---	264.36	263.76	263.82	263.7	---	---
05/10/96	09:00 AM	---	276.70	---	269.38	274.59	---	---	264.01	263.67	263.49	263.44	---	---
05/20/96	08:40 AM	---	277.51	---	269.84	275.28	---.	---	263.86	263.65	262.76	263.69	---	---
05/24/96	09:05 AM	---	277.39	---	269.59	274.49	---	---	264.63	263.9	263.28	264.18	---	---
06/03/96	08:50 AM	---	276.67	---	269.10	274.12	---	---	263.01	263.2	262.79	262.94	---	---
06/07/96	08:20 AM	---	276.49	---	269.01	274.25	---	---	262.6	263.12	262.48	262.78	---	---
06/17/96	09:00 AM	---	276.19	---	268.90	274.15	---	---	262.46	263.06	262.59	262.5	---	---
06/21/96	09:30 AM	---	276.23	---	269.22	274.59	---	---	262.59	263.24	262.55	262.57	---	---

Attachment 1H
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	LS-2*	LR-2	LD-2*	LR-3	LD-3	LD-4*	LD-5*	LS-6	LR-6	LD-6	LR-8	LD-8*	LS-9*
07/08/96	07:30 AM	280.84	275.81	282.21	268.73	274.12	267.16	262.15	262.03	262.83	262.33	262.35	263.94	267.72
07/12/96	09:00 AM	281.85	275.44	281.92	268.34	273.59	266.95	261.53	261.48	262.49	261.96	262.10	263.86	267.61
07/22/96	09:50 AM	---	275.80	---	268.95	274.59	---	---	262.64	263.05	262.70	262.62	---	---
07/26/96	08:30 AM	---	275.78	---	268.97	273.97	---	---	261.79	262.76	262.30	262.22	---	---
08/05/96	08:50 AM	---	275.55	---	268.36	273.62	---	---	261.25	262.56	261.83	261.99	---	---
08/09/96	09:00 AM	---	275.57	---	268.62	274.32	---	---	261.24	262.81	261.66	261.71	---	---
08/19/96	09:15 AM	---	275.31	---	270.91	273.13	---	---	260.70	262.26	261.38	261.86	---	---
08/23/96	08:50 AM	---	275.34	---	268.06	273.02	---	---	260.49	262.24	261.09	261.81	---	---
09/03/96	09:00 AM	---	275.21	---	267.70	272.39	---	---	259.91	261.86	260.59	261.50	---	---
09/06/96	09:30 AM	---	275.05	---	267.68	271.88	---	---	259.75	261.79	260.46	261.53	---	---
09/16/96	09:00 AM	---	275.28	---	268.02	272.26	---	---	260.19	262.21	260.96	261.52	---	---
09/20/96	08:50 AM	---	275.21	---	267.72	272.22	---	---	260.29	262.14	261.20	261.55	---	---
10/07/96	09:00 AM	283.70	275.38	282.23	268.15	272.82	265.13	260.53	260.88	262.36	261.58	261.72	262.79	267.72
10/11/96	07:50 AM	284.79	275.27	282.53	268.66	272.95	264.88	260.29	260.80	262.36	261.52	261.53	262.58	267.91
10/21/96	09:00 AM	---	275.59	---	268.71	274.36	---	---	262.45	263.02	262.10	262.43	---	---
10/25/96	07:55 AM	---	275.77	---	268.92	274.14	---	---	262.21	262.96	262.76	262.14	---	---
11/04/96	08:50 AM	289.81	275.46	289.73	268.71	274.00	279.25	272.94	261.81	262.80	262.40	262.42	272.83	276.72
11/08/96	09:00 AM	289.81	275.69	289.73	268.94	274.95	279.25	272.94	262.13	263.18	262.42	262.45	272.83	276.72
11/18/96	09:15 AM	---	277.44	---	269.42	274.60	---	---	264.55	263.73	259.53	263.44	---	---
11/22/96	09:00 AM	---	277.46	---	270.01	275.45	---	---	264.86	263.70	262.99	263.62	---	---
12/02/96	09:00 AM	---	277.40	---	269.90	275.50	---	---	265.46	264.07	263.41	264.12	---	---
12/06/96	09:15 AM	---	277.27	---	269.73	274.70	---	---	264.81	263.95	263.78	263.92	---	---
12/16/96	09:15 AM	---	277.02	---	269.68	275.17	---	---	265.17	263.94	263.70	264.13	---	---
12/20/96	09:00 AM	---	276.91	---	269.58	274.87	---	---	264.26	263.64	263.64	263.51	---	---
01/06/97	07:30 AM	285.99	277.04	283.59	269.92	274.59	270.05	264.30	265.39	264.06	263.93	263.77	266.38	268.54
01/10/97	08:00 AM	285.75	277.17	283.30	269.78	274.95	269.80	264.19	264.76	263.86	263.86	263.78	265.93	268.22

Attachment 1H
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Monitoring Well Elevation Data

Date	Time	LS-2*	LR-2	LD-2*	LR-3	LD-3	LD-4*	LD-5*	LS-6	LR-6	LD-6	LR-8	LD-8*	LS-9*
01/20/97	07:30 AM	---	276.61	---	269.46	274.34	---	---	263.91	263.54	263.36	263.05	---	---
01/24/97	07:45 AM	---	276.65	---	269.62	274.65	---	---	265.33	263.84	263.71	263.66	---	---

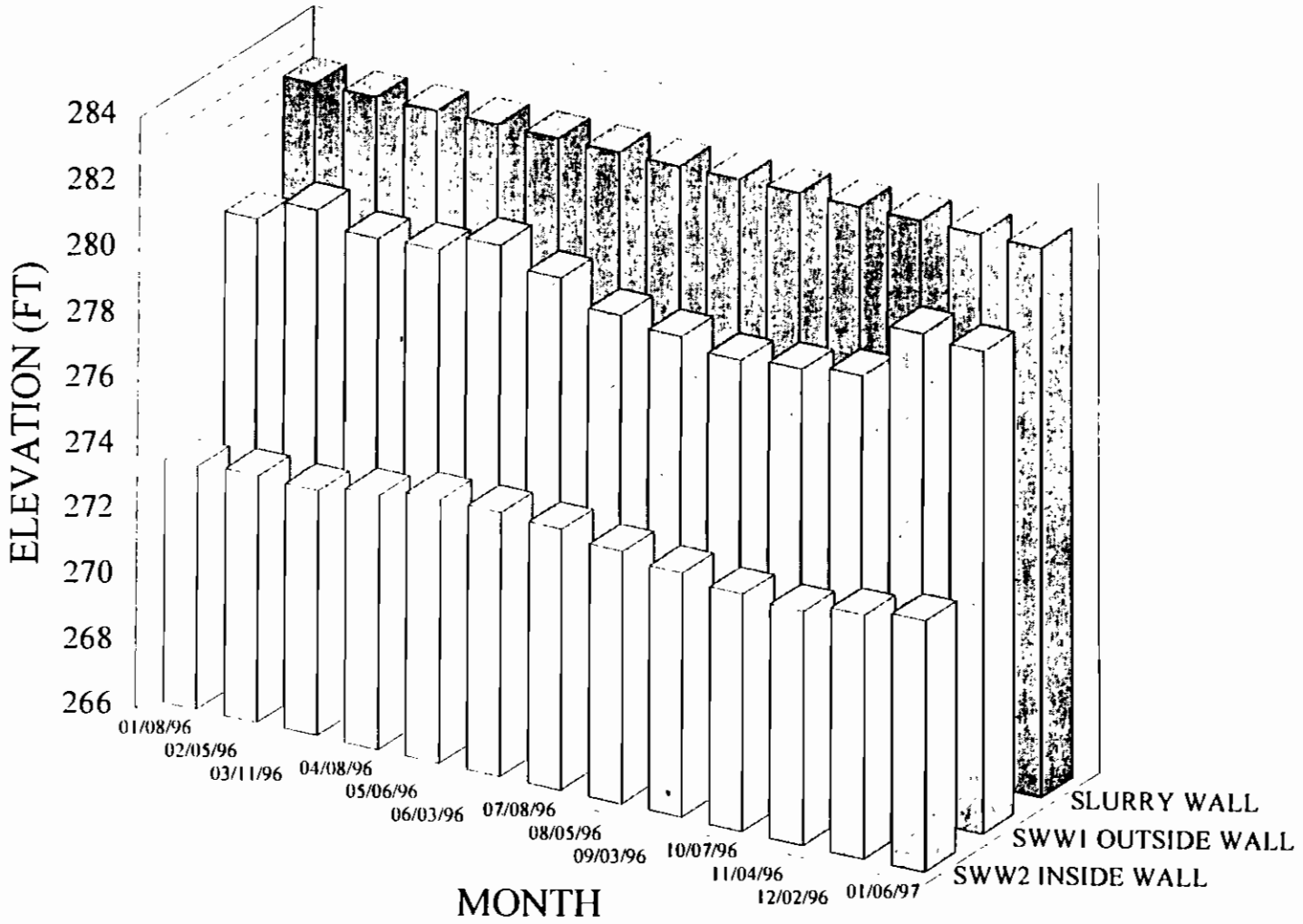
Notes:
1. Monitoring well elevations in feet above mean sea level.

Attachment 11
BBL Environmental Services, Inc.
PAS Site
Oswego, New York
Historical Surface Water Elevation Data

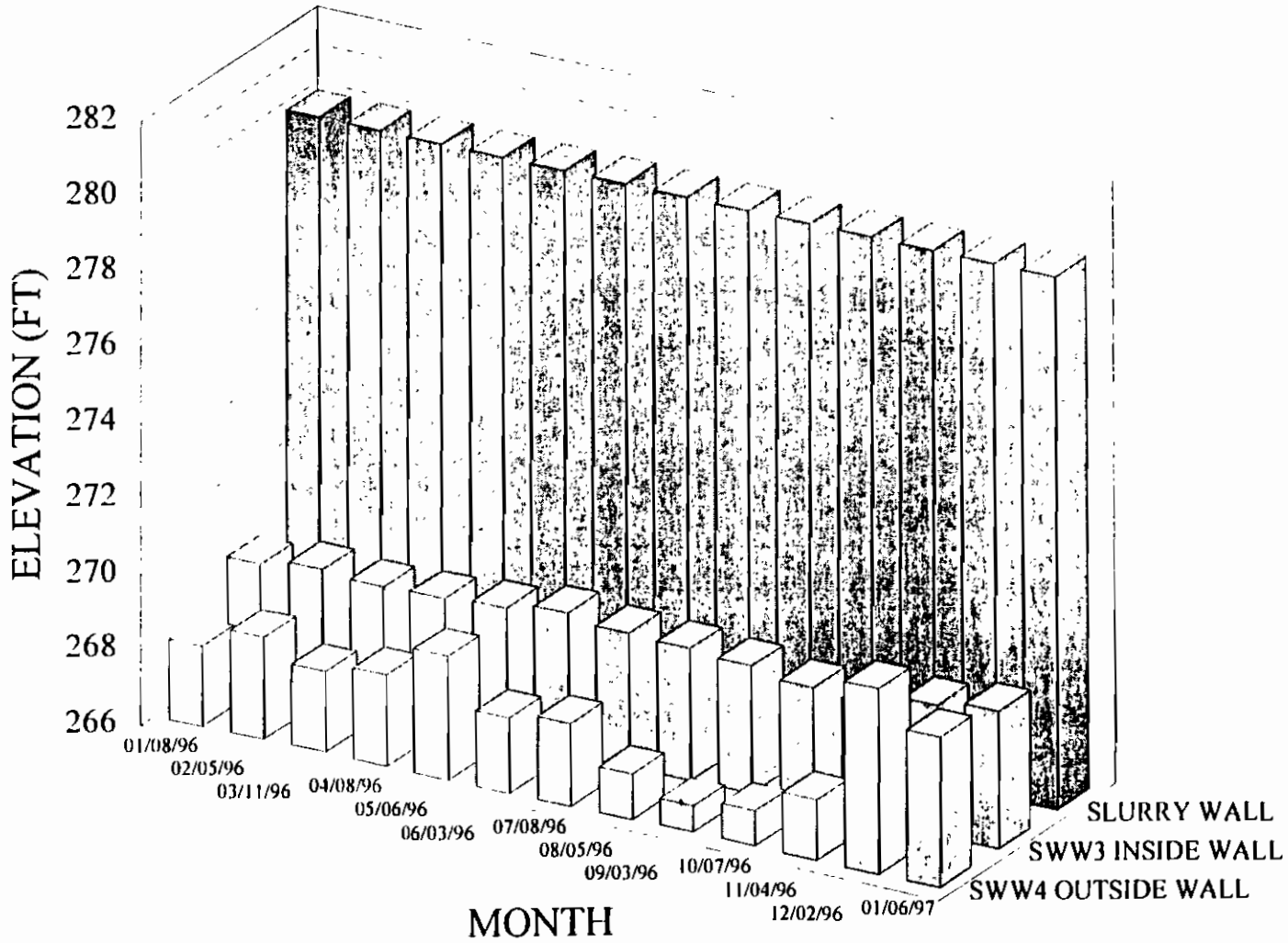
Stream Gauge	Top of Gauge Elevation (ft)	1/3/95	4/8/95	5/1/95	5/5/95	10/9/95	10/13/95	01/08/96	04/08/96	07/08/96	10/07/96	01/06/97
SWG-1	275.17	272.44	272.32	272.59	272.58	272.62	272.55	*	**	**	**	**
SWG-1A	273.92	271.70	271.66	271.62	271.51	271.47	271.39	*	271.89	271.42	271.34	272.22
SWG-1	275.17	272.44	272.32	272.59	272.58	272.62	272.55	*	**	**	**	**
SWG-1A	273.92	271.70	271.66	271.62	271.51	271.47	271.39	*	271.89	271.42	271.34	272.22
SWG-2	267.83	264.76	264.52	264.52	264.55	264.60	264.48	265.01	264.71	264.56	264.38	265.32
SWG-3	263.98	261.75	261.57	261.77	261.76	261.41	261.30	262.18	262.88	***	***	262.27
SWG-4	262.96	261.02	261.06	261.26	261.21	261.16	261.08	261.96	261.72	***	***	261.72
SWG-5	270.52	266.36	266.30	266.30	266.26	266.33	266.23	*	**	**	**	**
SWG-6	264.97	262.69	262.64	262.56	262.50	262.52	262.42	*	262.83	***	***	263.10
SWG-7	261.80	259.63	259.49	259.38	259.32	259.80	259.65	260.49	259.97	***	***	260.31

Notes:
1. Surface water elevations in feet above mean sea level.
2. Stream gauges marked with an (*) were measured to the top of frozen stream surface.
3. Stream gauges marked with (**) were bent or removed at time of measurement.
4. Stream gauges marked with an (***) were dry at time of reading.

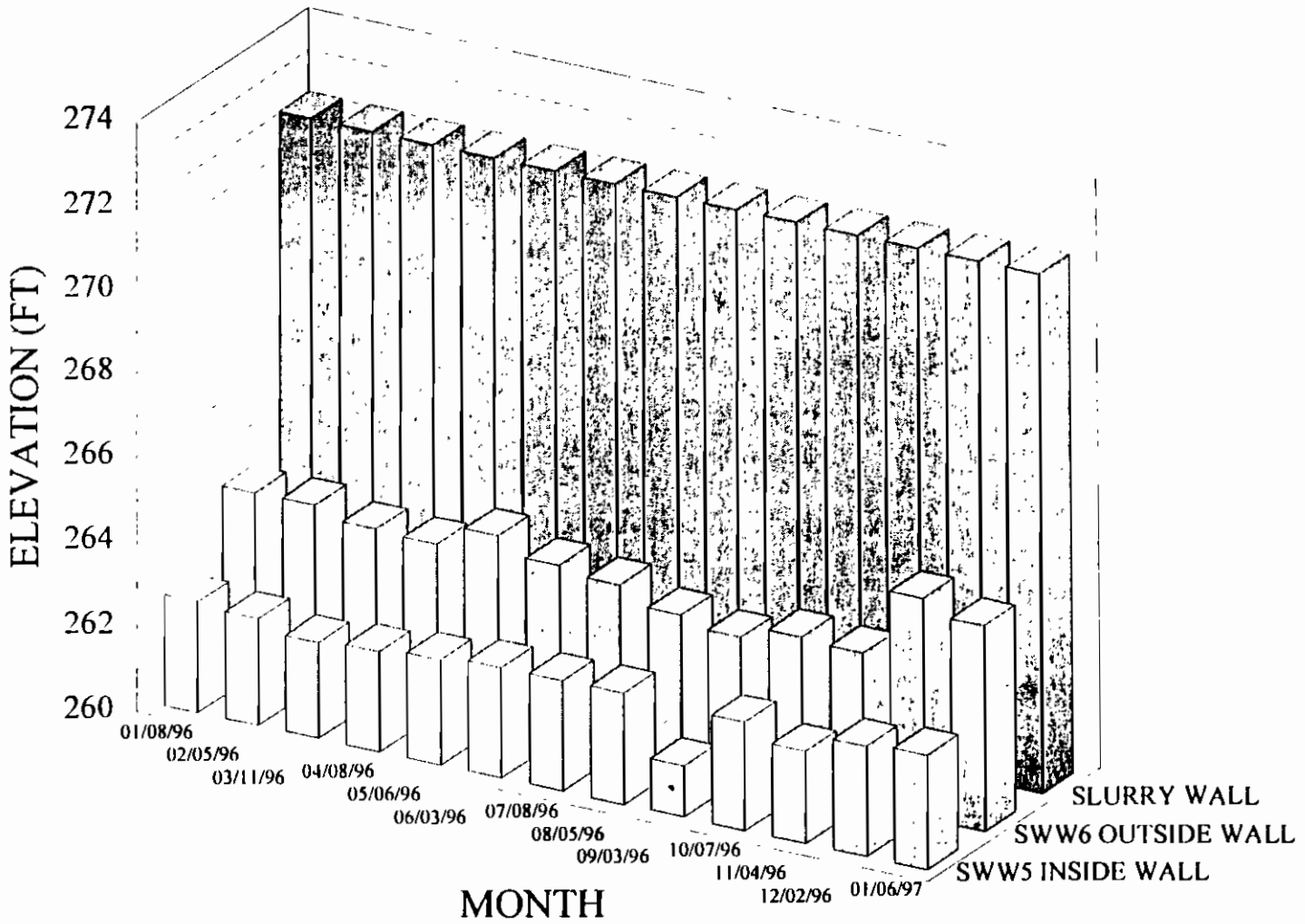
PAS SITE - OSWEGO, NY
SWW1 & SWW2
PRE-PUMPING MONTHLY GROUND WATER ELEVATION DATA



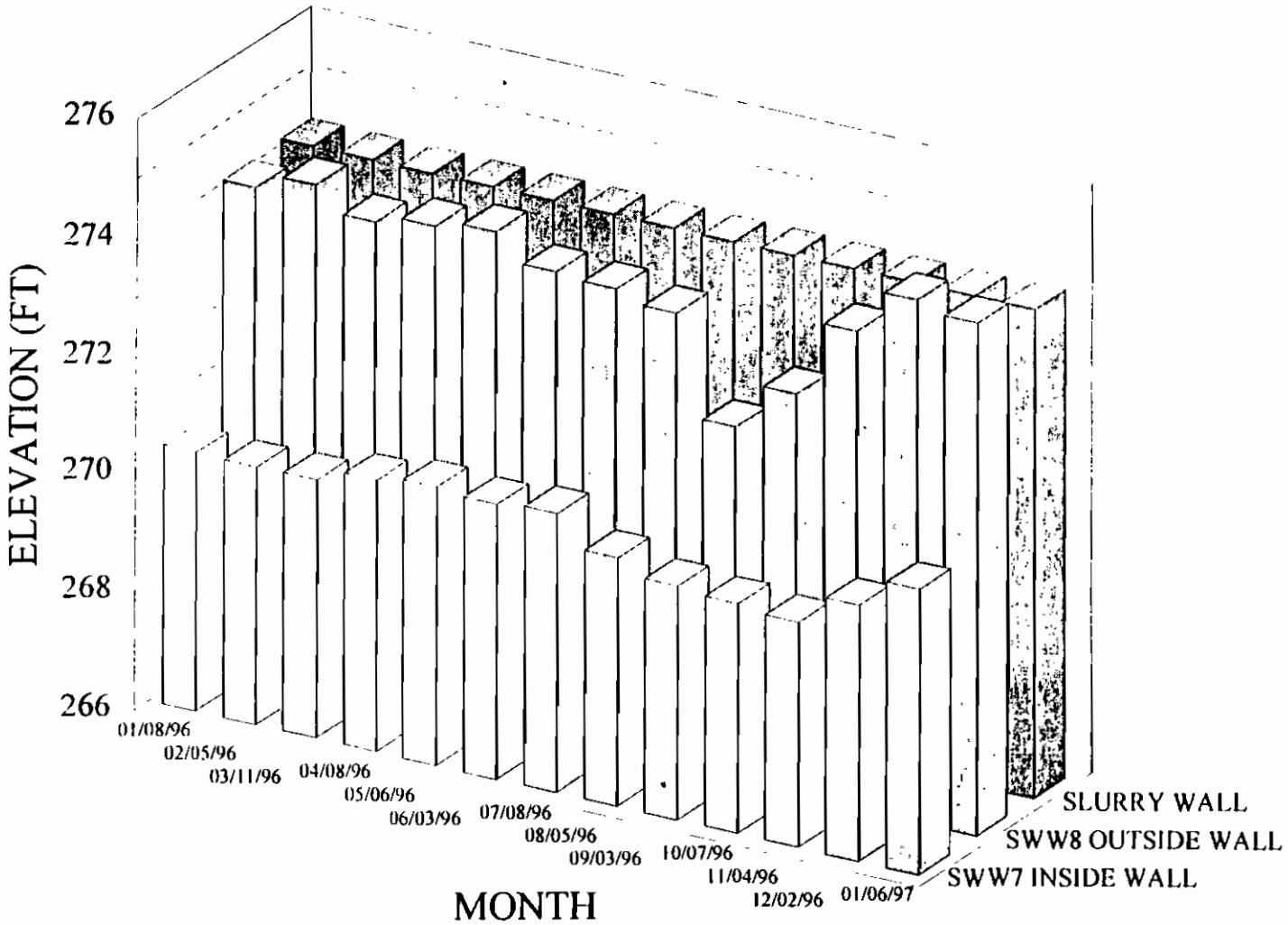
PAS SITE - OSWEGO, NY
SWW3 & SWW4
PRE-PUMPING MONTHLY GROUND WATER ELEVATION DATA



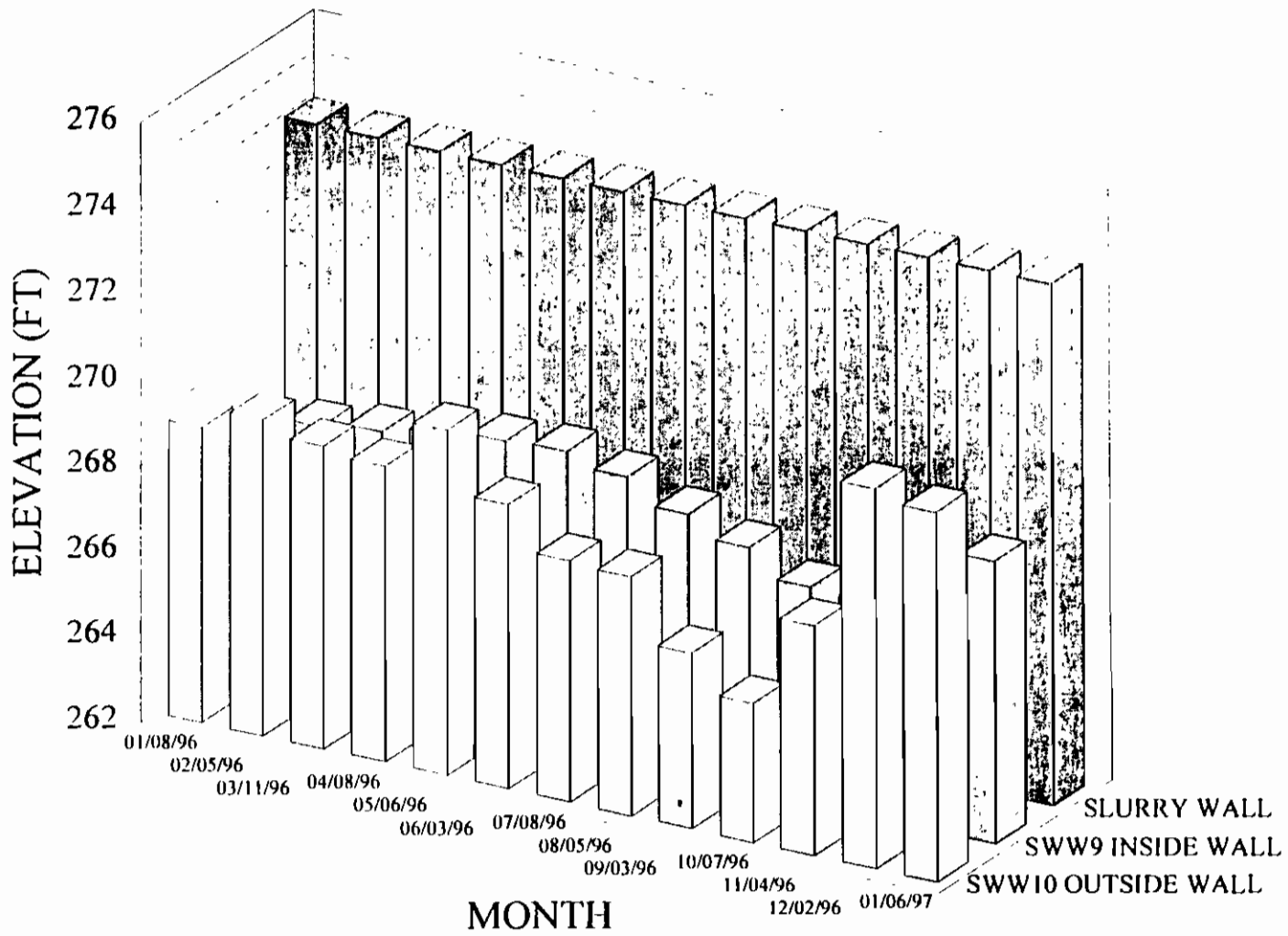
PAS SITE - OSWEGO, NY
SWW5 & SWW6
PRE-PUMPING MONTHLY GROUND WATER ELEVATION DATA



PAS SITE - OSWEGO, NY
SWW7 & SWW8
PRE-PUMPING MONTHLY GROUND WATER ELEVATION DATA



PAS SITE - OSWEGO, NY
SWW9 & SWW10
PRE-PUMPING MONTHLY GROUND WATER ELEVATION DATA



PAS SITE - OSWEGO, NY
SWW11 & SWW12
PRE-PUMPING MONTHLY GROUND WATER ELEVATION DATA