15 (12-75)

New York State Department of Environmental Conservation

MEMORANDUM

TO: Jenn Pacchiana, Contract Development Section, BPM
FROM: Ashok K. Gupta, Operation, Main. & Support Section, BHSC
SUBJECT: WA#D002340-8, O&M of Pollution Abatement Services Site #738001

A K Gupta

DATE: MAR 30 1994

As discussed, attached for your review and approval is a copy of revised submittal from URS Consultant's for the adjustment of project task budget estimates for the above mentioned project.

Please provide your comments/approval as soon as possible, so that the requested change in the individual task budget can be approved and completion date for the work assignment can be extended until December 1994.

If you have any questions, please call me, at 7-0927.

Attachment

cc:

D. Smith

15 (12-75)

New York State Department of Environmental Conservation

FILE COPY

MEMORANDUM

Originator AKG 3/4/94

Reviewer GJR 3/4/94

Reviewer _____

Reviewer _____

TO: David Smith, Chief, Contract Development Section, BPM

FROM: Gerald J. Rider, Jr., Chief, Operation, Main. & Support Section, BHSC

SUBJECT: WA#D002340-8, Operation & Maintenance of Pollution Abatement Services Site #738001

DATE:

MAR 4 1994

Attached for your review and approval is a copy of URS Consultant's submittal for the adjustment of project task budget estimates for the above mentioned project. This adjustment became necessary to extend the work assignment completion dated until December 1994.

As discussed with your staff, the revised cost estimate for the subcontractor cost for analysis by RECRA Environmental includes a 5% increase in unit rates for 1994. These increased rates are comparable with the analytical rates of the standby laboratories and, therefore, are justified.

Please provide your comments/approval by COB March 11, 1994, so that the requested change in the individual task budget can be approved and completion date for the work assignment can be extended until December 1994.

If you have any questions, please call me or A. K. Gupta, of my staff, at 7-0927.

Attachment

cc: A. K. Gupta

a:pasadjst.wp:AKG:et

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York, 12233

Langdon Marsh
Acting Commissioner

Mr. Dharmarajan R. Iyer, Ph.D
URS Consultants, Inc.
282 Delaware Avenue
Buffalo, NY 14202-1207

Dear Dr. Iyer:

RE: WA #D002340-8-2A
Pollution Abatement Service, Site #7-38-001

As discussed, your request for the adjustment to the project budget has been reviewed by the Department. We have the following comments:

1. Explanation of Itemized Changes:

Please check the numbers on explanation with the numbers on 2.11 schedules. There are several typos in these numbers.

2. Schedule 2.11(a)

i) The $16,277 for leachate handling should read $162,757.

ii) Cost for RECRA Environmental is $152,095, total unit price subcontracts is $319,852.

iii) As discussed, the total WA budget should be kept unchanged.

3. Schedule 2.11(b)

This schedule should specify the year or whether it is a summary of all years. Average salary rates corresponding to NSPE levels and total costs should be included in the table.

4. Schedule 2.11(f)

Subcontract price for RECRA Environmental is $152,095. Total price is $319,852.

5. Table 1 - Summary of Analytical Costs

Groundwater analysis costs for 1990-93 are $63,176.00, not $60,814.35 as stated. The total cost will be increased to $152,095.21.

6. Schedule 2.11(g)

i) For Task 1, item 3, the subtotal is $12,474.

ii) For Task 4, items 7, 8 and 10 should be adjusted to match the increased costs as noted in comment #5.

iii) For Task 6, item 3, the subtotal is $99,977.

iv) Project totals page (items 7, 8 and 10) should be adjusted.

v) The attached 2.11(g) - Supplemental Cost Control Report for subcontracts should be submitted.

7. The detailed cost breakdown pages provided at the end are not necessary.

Please submit the revised budget sheets as soon as possible. The Spring 1994 sampling will be due soon and the revised budget is required to be approved prior to this event.

If you have any questions please call me at 518/457-0927.

Sincerely,

A. K. Gupta, P.E.
Operation, Maintenance & Support Section
Bureau of Hazardous Site Control
Division of Hazardous Waste Remediation

a:pasbudgt.wp:AKG:et

New York State Department of Environmental Conservation

MEMORANDUM

RECEIVED
MAR - 9 1994

TO: A.K. Gupta, Operation, Maintenance & Support Section, BHSC
FROM: Jenn Pacchiana, Contract Development Section, BPM JP
SUBJECT: WA #D002340-8.2A; Comments on Rebudget
DATE: MAR 08 1994

The following comments apply to URS Consultant's adjustment of budget estimates for WA #D002340-8.2A.

General

OK 1) The 5% increase for RECRA was previously reviewed and approved.

OK 2) Both PAU and CDS should receive a copy of the rebudget (numbered - D002340-8.2A) approved by the O&M section.

3) The detailed cost breakdown pages provided at the end are not necessary. To show labor hours expended to date, a revised schedule 2.11(h) may be submitted.

Explanation of Itemized Changes

4) For Task 4, anticipated costs are $19,779.22 (not $19,898.92 as stated).

5) Total subcontractor cost is revised to $152,095.21 and total Task 4 cost is $277,540 (see comment #12).

6) For Task 6, total direct labor is adjusted to $42,725.10 (not $42,168.45 as stated).

7) Estimated project total is increased to $626,565 (see comment #12). Unless adjustments are made to keep the budget same, this would have to be processed as an amendment.

Schedule 2.11(a)

8) The $16,277 for leachate handling should read $162,757.

9) Cost for RECRA Environmental is $152,095; total unit price subcontracts is $319,852; and total WA budget is $626,565 (see comment #12).

Schedule 2.11(b)

10) This schedule should specify the year or whether it is a summary of all years. Average salary rates corresponding to NSPE levels and total costs should be included in the table.

Schedule 2.11(f)

11) Subcontract price for RECRA Environmental is $152,095. Total price is $319,852.

Table 1 - Summary of Analytical Costs

12) Groundwater analysis costs for 1990-1993 are $63,176.00, not $60,814.35 as stated. The total cost will be increased to $152,095.21.

Schedule 2.11(g)

13) For Task 1, item 3, the subtotal is $12,474.

14) For Task 4, items 7, 8 and 10 should be adjusted to match the increased costs as noted in comment #12.

15) For Task 6, item 3, the subtotal is $99,977.

16) Project totals page (items 7, 8 and 10) should be adjusted.

17) The attached 2.11(g) - Supplemental Cost Control Report for subcontracts should be submitted.

cc: S. Gupta
R. Burger

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233

Thomas C. Jorling
Commissioner

FEB 08 1994

Mr. John C. Gorton
URS Company, Inc.
282 Delaware Avenue
Buffalo, NY 14202

Dear Mr. Gorton:

RE: D002340
Subcontractor Costs

In the past, the Department has not required cost control reports detailing subcontract costs under your contract. We feel, however, that since a large portion of the work assigned to your firm (up to 40 to 50%) may be subcontracted, it is prudent to track subcontract budgets and drawdowns. Consequently, I am requiring that the enclosed 2.11(g) - Supplemental Cost Control Report for Subcontracts be submitted with future payment requests and when budgeting new work plans.

If you have any questions regarding the use of this form, please contact your NYSDEC Payment Reviewer or Contract Manager. Thank you for your cooperation in this matter.

Sincerely,

P. David Smith, P.E.
Chief, Contract Development Section
Bureau of Program Management
Div. of Hazardous Waste Remediation

Enc.

cc: E. Califano

SCHEDULE 2.11(g)

Engineer_____ Page___of___

Contract No._____ Date Prepared_____

Project Name_____ Billing Period_____

Work Assignment No._____ Invoice No._____

Task No./Name_____

Complete_____%

MONTHLY COST CONTROL REPORT
SUMMARY OF FISCAL INFORMATION

Expenditure Category	A Costs Claimed This Period	B Paid to Date	C Total Disallowed to Date	D Total Costs Incurred to Date (A+B+C)	E Estimated Costs to Completion	F Estimated Total Work Assignment Price (A+B+E)	G Approved Budget	H Estimated Under/Over (G-F)
1. Direct Salary Costs								
2. Indirect Costs___%								
3. Subtotal Direct Salary Costs and Indirect Costs								
4. Travel								
5. Other Non-Salary Costs								
6. Subtotal Direct Non-Salary Costs								
7. Subcontractors								
8. Total Work Assignment Costs								
9. Fixed Fee								
10. Total Work Assignment Price								

Project Manager(Engineer)_____ Date_____

Schedule 2.11(g) - Supplemental

COST CONTROL REPORT
SUBCONTRACTS

Engineer_____ Page _____ of _____

Contract No._____

Project Name_____ Date Prepared_____

Work Assignment No._____ Billing Period_____

Invoice No._____

Subcontract Name	A Subcontract Costs Claimed this Application Incl. Resubmittals	B Subcontract Costs Approved for Payment on Previous Applications	C Total Subcontract Costs to Date (A plus B)	D Subcontract Approved Budget
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. TOTALS				

Project Manager_____ Date_____

NOTE: Line 11, Column C should equal Line 7 (Subcontractors), Column D of Summary Cost Control Report

Thomas C. Jorling
Commissioner

TO: A K Gupta

ROOM: 212

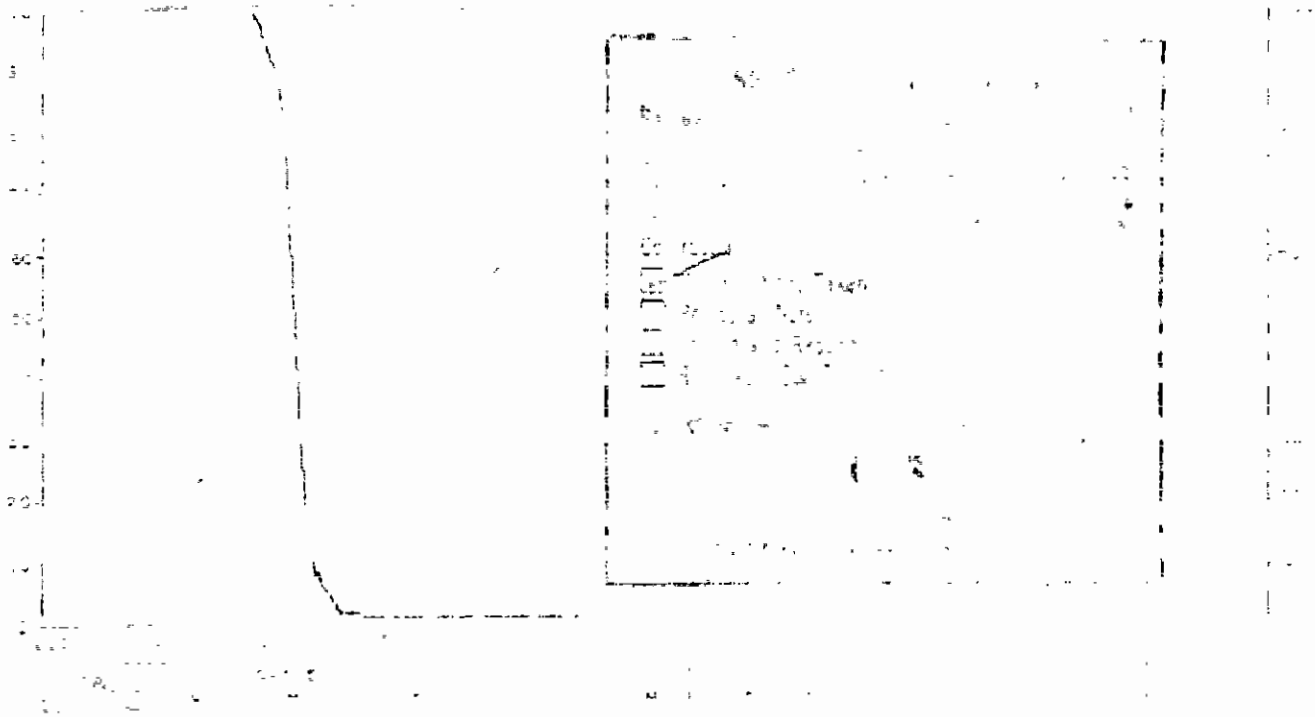
FROM: D Brandt

DATE: 1-9-91

Dick Russell
P.A.S.

GENTLEMEN

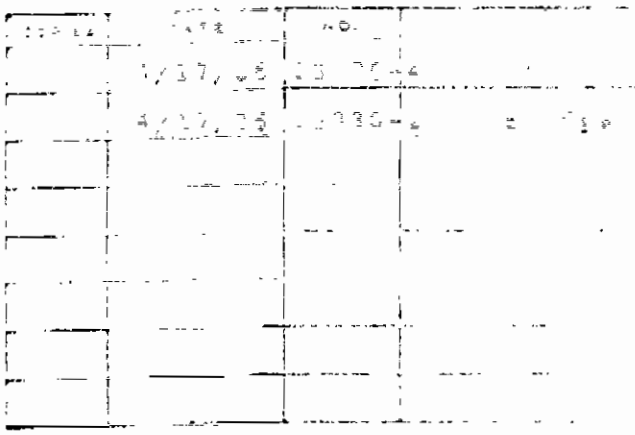
ITEM	DATE	NO.



Dick Hinsell

P.A.S.

GENTLEMEN



REMARKS

EMPIRE SOILS INVESTIGATIONS INC.

APRIL 16, 1986

SHOP DRAWING REVIEW

Review is ... of ... document ... dimensions ... with p... fab... Contractor...

Field	Value
P.O.	P.O. # 35070
CLIENT	U.R.S. Company, Inc.
DATE:	April 16, 1986
PROJECT NO.	BT-86-42
REPORT NO:	L-1

REPORT OF MATERIAL TESTING

Material: ...

Sample ...
Sample ...

Mechanical Analysis ... ASTM D ...

Sample #13320-4

Sieve Size ...

Percent Finer ...

... than #200.

Sample #13330-2

Sieve Size ...

Percent Finer ...

Uniformity Coefficient ... 1.17.

...

Reviewed ... See Remarks

...

BUFFALO, NEW YORK

ell

URS CORPORATION

625 Delaware Avenue

Dick Brazell

P.A.S.

Topsoil Pit

GENTLEMEN

REMARKS

SCC

Date 9/24/85

RECEIVED
URS COMPANY

SEP 26 1985

URS

GENTLEMEN

EMPIRE
SOILS INVESTIGATIONS INC.

RECEIVED [illegible]

OCT 18 1985

PROJECT: [illegible]

CLIENT: URS [illegible]

DATE: October 11, 198[illegible]

PROJECT NO.: BT-65-177

REPORT NO.: L-1

[illegible]

Samples [illegible]

Sample # [illegible]

Type I

[illegible]

Sample # [illegible]

[illegible]

Type I

Sample #02200-2

Project Spec.

Sample #02200-2A

Project Spec.
NYS DOT 703-06

Sample #02200-3

Project Spec

PH =

Project Spec.
NYS DOT 703-02
Type I
Type IA

Sample #07300-6

NYS DOT Item
304.02

sll

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233 - 7010

Thomas C. Jorling
Commissioner

May 13, 1991

Ms. Laine Vignona
Senior Scientist
Geraghty & Miller, Inc.
125 East Bethpage Road
Plainview, New York 11803

RE: Pollution Abatement Services Site
Oswego, New York
Site Code: 7-38-001

Dear Ms. Vignona:

Eleven groundwater monitoring wells were abandoned at the PAS site during the week of May 6, 1991. Tremie grouting from the bottom of the well screen to ground surface was completed on wells MW-1A, MW-1B, MW-3, MW-8, MW-9, MW-11A, MW-11B, OD-1, OS-2, OI-2, AND OD-2. In addition, bedrock wells OD-3 and OD-4 were grouted back to within 15 feet of the bottom of the seated casing to reduce the potential for shallow bedrock contamination from entering deeper bedrock zones; total depths are now approximately 42' and 32', respectively. Stainless steel well screens and risers will be installed in these two wells to facilitate sample collection.

I have enclosed a revised site map which shows all remaining wells with corresponding surface elevation data.

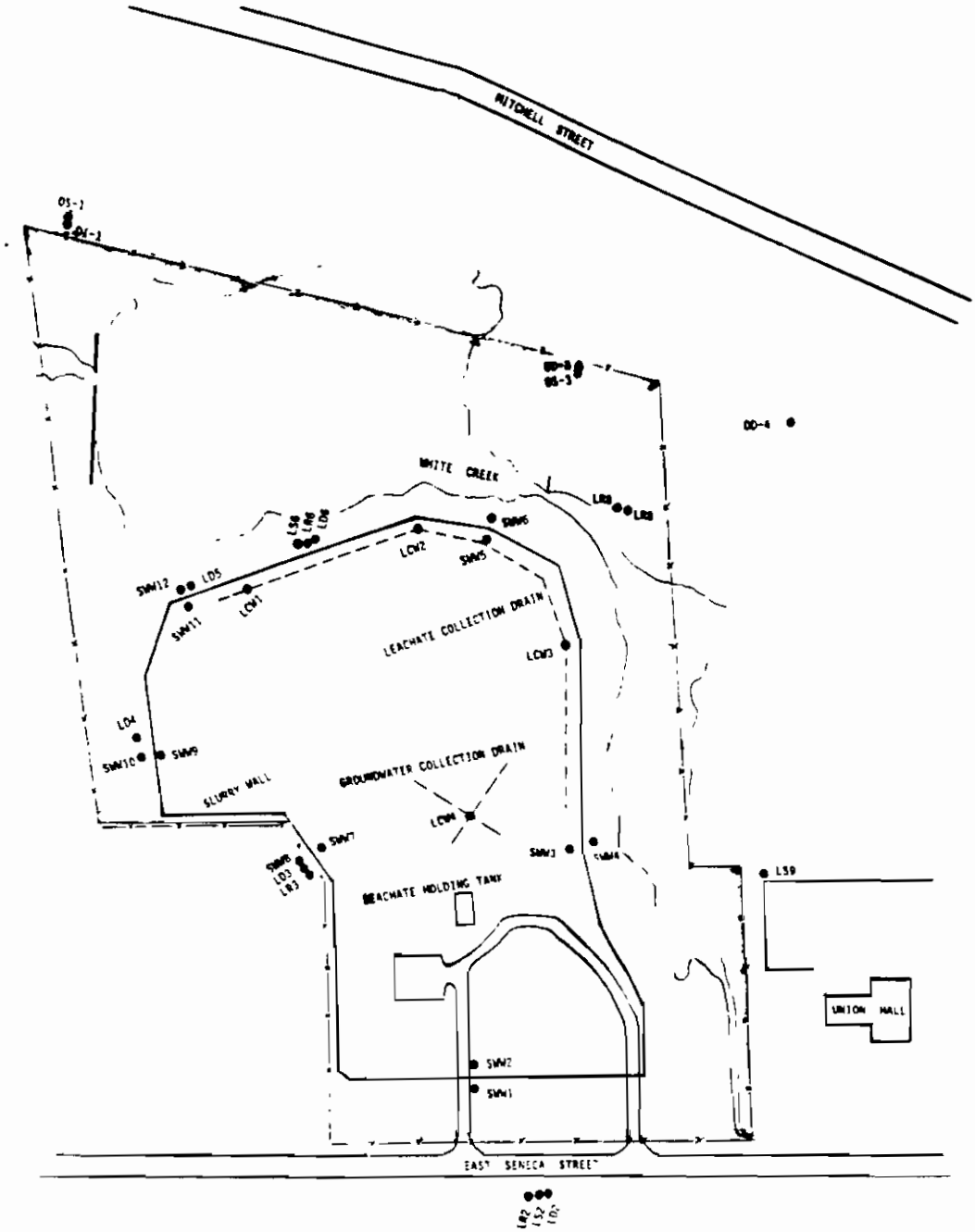
If you have any questions, please do not hesitate to call.

Sincerely,

Robert J. McNamee
Senior Engineering Geologist
Bureau of Central Remedial Action
Division of Hazardous Waste Remediation

Enclosure

cc: R. Brazell, w/enc.
M. Valentine, w/enc.
R. Ramon, w/enc.
A. K. Gupta, w/enc.



POLLUTION ABATEMENT SERVICES SITE

Oswego, New York

MONITORING WELL I.D.	GROUND SURFACE	TOP OF RISER
LS2	287.5	289.81
LD2	287.1	289.73
LR2	287.5	289.85
LD3	275.8	278.62
LR3	275.5	278.06
LD4	276.3	279.25
LD5	270.2	272.94
LS6	271.4	274.14
LD6	270.9	274.03
LR6	270.9	274.39
LD8	269.9	272.83
LR8	270.0	273.42
LS9	274.0	276.72
LCW1	271.4	272.21
LCW2	272.6	274.44
LCW3	283.3	284.36
LCW4	283.8	285.70
SMW1	286.2	289.33
SMW2	286.3	289.37
SMW3	286.0	286 50
SMW4	282.9	283.60
SMW5	275.9	277.02
SMW6	270.9	273.06
SMW7	275.3	277.93
SMW8	275.7	278.24
SMW9	283.3	285.55
SMW10	279.3	280 43
SMW11	271.0	273.50
SMW12	270.2	272.82
OS-1	269.63	272.19
OI-1	269 14	272 00
OS-3	274.63	277.89
OD-3	274 96	277.85
OD-4	271.02	274.85

Performed during wk of May 6, 1991
5/6/91

WELL ABANDONMENT AT PAS

All wells installed by Woodward Clyde were abandoned by tremie grouting the well with a cement/bentonite slurry. (MW-1A, MW-1B, MW-3, MW-8, MW-9, MW-11A, MW-11B)

Two O-series bedrock wells were abandoned because of unknown obstructions within the wells which may have been compromising groundwater quality and sample integrity. (OD-1 and OD-2) In addition, two overburden shallow wells which had been damaged or vandalized and were no longer suitable for groundwater sampling have been grouted. (OS-2 and OI-2)

The two remaining O-series bedrock wells were grouted back to lessen the length of open hole which may have been a conduit for migration of contaminants from the shallow bedrock to deeper bedrock zones. The bottom of the wells were grouted with cement/bentonite slurry with a minimum two-foot bentonite seal and a two-foot sand pack on top. (OD-3 and OD-4)

Well Number	Installed Depth	Adjusted Depth
W1A	11'7"	-0-
W1B	41'1"	-0-
W3	13'2"	-0-
W8	10'6"	-0-
W9	18'6"	-0-
W11A	17'10"	-0-
W11B	25'0"	-0-
OD-1	89'3"	-0-
OD-2	72'0"	-0-
OS-2	17'5"	-0-
OI-2	21'0"	-0-
OD-3	96'0"	42'
OD-4	92'0"	32'

RJM:5/13/91

(12-75)

New York State Department of Environmental Conservation

MEMORANDUM

TO: A.K. Gupta
FROM: Bob Edwards, Engineering Geologist 2, CPS, BCRA, DHWR B J Edwards
SUBJECT: Monthly Progress Report PAS Site - Oswego, N.Y. - Interim Groundwater Removal July 1992
DATE: AUG 26 1992

I have reviewed the above-referenced progress report from de maximis, inc. In the June 1992 progress report I noted two errors in Attachment A. These errors have not yet been corrected. I have attached a letter which I sent to the USEPA on July 17, 1992 notifying them of these errors. Perhaps you can be more effective in correcting these tables.

If you have any questions, please call me at 7-5677.

a:ak.bob

9/1/92
AK G
comment
to your
PRP contact
directly
by phone
T
S

discussed w/ Bruce Thompson on 9/3/92

DUPLICATE

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233- 7010

Thomas C. Jorling
Commissioner

July 17, 1992

Mr. Louis DiGuardia
Removal Action Branch
U.S. Environmental
Protection Agency
2890 Woodbridge Avenue
Edison, NJ 08837-3679

Dear Mr. DiGuardia:

RE: Monthly Progress Report PAS Site June 1992

I have reviewed the above-referenced progress report from de maximis inc. During this review, I have noted two errors in Attachment A. The leachate elevations in LCW-1 have been miscalculated for the dates 5/28/92 and 6/2/92.

While math or transcription errors often occur in field notes and forms (we all do that), these miscalculations have found their way into the data compilation tables. Once they are in the data tables of leachate elevations they are no longer miscalculations but anomalies which at some later date may require significant time and effort to explain. Also, the data from this area is critical because it is at the lowest elevation of the containment/collection system.

Enclosed are copies of the corrected data sheets from Attachment A for your information. If you have any questions, please call me at (518) 457-5677.

Sincerely,

Robert Edwards
Engineering Geologist 2
Bureau of Central Remedial Action
Div. of Hazardous Waste Remediation

Enclosure

a:louis.be

bcc: R. Lupe
A.K. Gupta

PAS SITE
OSWEGO, NEW YORK
COMPILATION OF GROUND WATER ELEVATION MEASUREMENTS
INTERIM GROUND WATER REMEDIAL ACTIVITIES

DATE	TIME	SWW12	LCW1	LCW2	LCW3	LCW4
1/29/92	9:30 a.m.	266.04	267.67	267.64	267.92	270.28
	8:00 a.m.	265.86	267.74	267.61	267.92	270.30
2/06/92	12:30 p.m.	265.90	266.09	266.13	267.48	270.30
	7:40 a.m.	265.65	266.70	266.67	267.31	270.31
2/10/92	9:58 a.m.	265.65	265.59	265.57	266.46	270.33
2/11/92	12:00 p.m.	265.64	265.53	265.52	266.99	270.36
3/09/92	1:47 p.m.	266.09	267.06	267.05	267.65	270.56
3/10/92	11:40 a.m.	266.04	261.94	261.98	268.47	270.59
3/11/92	9:40 a.m.	265.95	262.85	262.83	268.26	270.59
3/25/92	3:25 p.m.	265.58	265.02	263.01	267.90	270.62
4/02/92	9:45 a.m.	265.30 (1)	265.66	265.64	267.88	270.70
4/06/92	9:53 a.m.	264.94 (1)	265.90	265.88	267.85	270.71
4/07/92	11:10 a.m.	264.99 (1)	262.15	262.13	267.25	270.20
4/08/92	7:54 a.m.	264.82 (1)	262.67	262.66	267.38	270.23
4/15/92	10:25 a.m.	264.92	263.97	263.95	267.52	270.38
4/22/92	10:33 a.m.	264.90 (1)	264.66	264.69	267.59	270.52
4/29/92	10:25 a.m.	264.60 (1)	265.27	265.25	267.61	270.62
5/04/92	9:30 a.m.	265.17 (1)	265.63	265.62	267.60	270.68
5/05/92	10:45 a.m.	264.98 (1)	262.38	262.36	267.66	269.57
5/06/92	9:20 a.m.	264.80 (1)	262.84	262.81	267.65	269.70
5/14/92	11:50 a.m.	264.03 (1)	264.18	264.16	267.62	270.10
5/28/92	8:00 a.m.	263.68 (1)	269.29	265.26	267.52	269.96
6/01/92	10:30 a.m.	264.18 (1)	265.56	265.55	267.51	270.46
6/02/92	10:53 a.m.	264.15 (1)	267.77	262.75	266.29	269.71
6/03/92	9:15 a.m.	264.06 (1)	263.17	263.15	266.61	269.83
6/17/92	10:30 a.m.	262.58 (1)	264.98	264.69	266.79	270.22

CORRECTED VALUES

265.29

262.27

(1) - Ground water elevations measured with Stevens Type F continuous level recorder.

TME:bd

Form PAS - 1A

PAS SITE
OSWEGO, NEW YORK
MONTHLY MONITORING WELL LEVELS
INTERIM GROUND WATER REMOVAL ACTIVITIES

DATE: 6/2/92 MEASUREMENT BY: Timothy M Eddy

START TIME: 1053 TITLE: HYDROGEOLOGIST

COMPLETION TIME: 1154

WELL NUMBER	GROUND ELEVATION	RISER ELEVATION	DEPTH TO WATER FROM TOP OF RISER	WATER ELEVATION
SWW1	286.2	289.33	① ~~- 0.10 ft~~ 9.81	~~279.52~~ 279.4
SWW2	286.3	289.37	① - 0.07 ft 14.39	274.98
SWW3	286.0	286.50	15.15	271.35
SWW4	282.9	283.60	15.63	267.97
SWW5	275.9	277.02	① + 0.22 11.61	265.41
SWW6	270.9	273.06	① + 0.17 8.73	264.33
SWW7	273.3	277.93	① + .04 5.77	272.16
SWW8	275.7	278.24	① + .54 3.90	274.44
SWW9	283.3	285.55	15.79	269.76
SWW10	279.3	280.43	12.80	267.63
SWW11	271.0	273.50	① + .04 7.47	266.03
SWW12	270.2	272.82	① + .47 [illegible]	264.15
LCW1	271.4	272.21	9.44	~~[illegible]~~ 262.7
LCW2	272.6	274.44	11.69	262.75
LCW3	283.3	284.36	18.07	266.29
LCW4	283.8	285.70	15.99	269.71

REMARKS: ① Readings taken from STEVENS CONTINUOUS RECORDERS
~ 1 hr. after leachate removal

TME:bdm/DEMAX.3

Form PAS - 1A

PAS SITE
OSWEGO, NEW YORK
MONTHLY MONITORING WELL LEVELS
INTERIM GROUND WATER REMOVAL ACTIVITIES

DATE: 5/28/92 **MEASUREMENT BY:** Pete Loretto

START TIME: 8:00 am **TITLE:** Technician

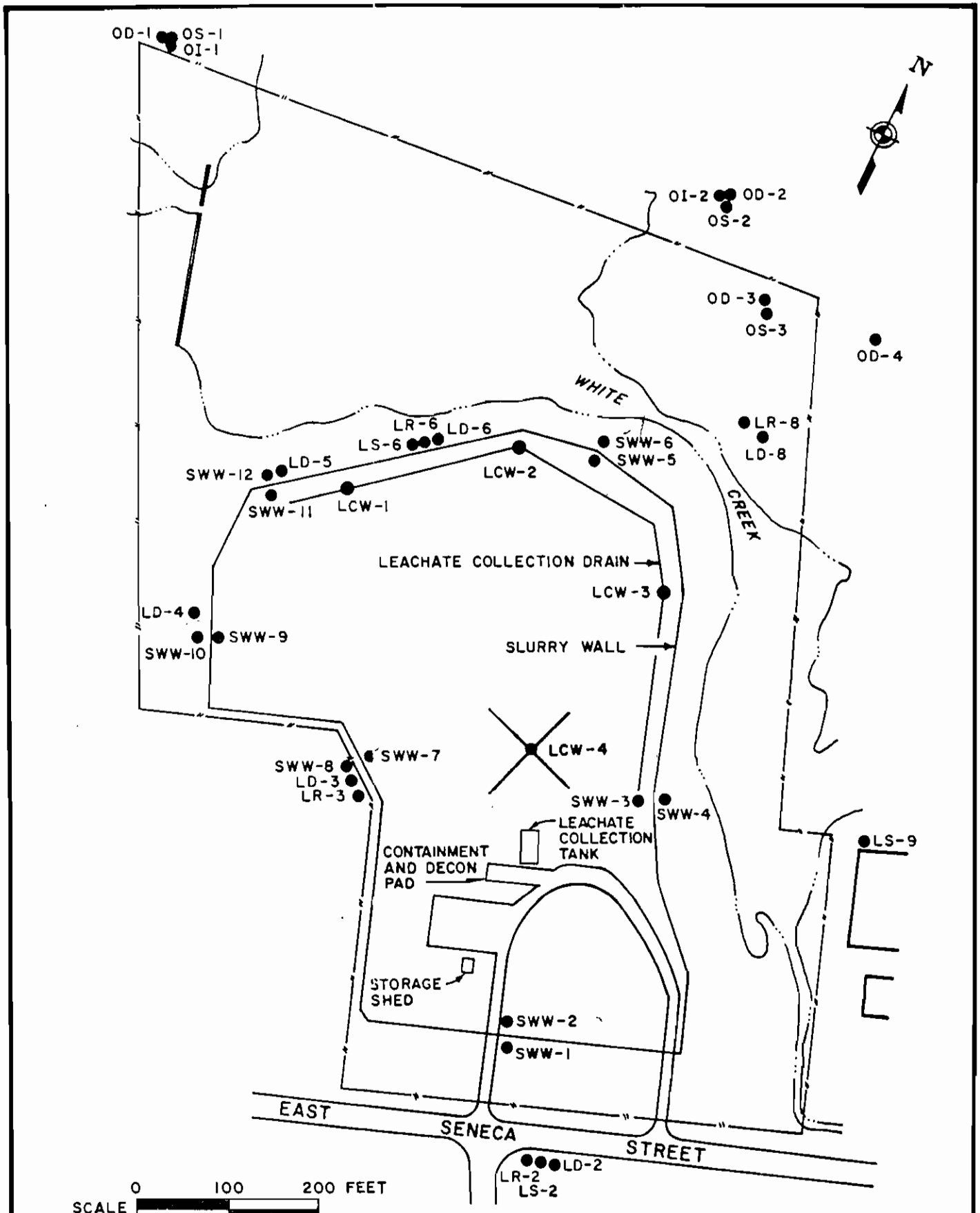
COMPLETION TIME: _____

WELL NUMBER	GROUND ELEVATION	RISER ELEVATION	DEPTH TO WATER FROM TOP OF RISER	WATER ELEVATION
SWW1	286.2	289.33	(1) 9.75	279.58
SWW2	286.3	289.37	(1) 14.35	275.02
SWW3	286.0	286.50	15.16	271.34
SWW4	282.9	283.60	15.74	267.86
SWW5	275.9	277.02	(1) 11.83	265.19
SWW6	270.9	273.06	(1) 8.90	264.16
SWW7	273.3	277.93	(1) 5.81	272.12
SWW8	275.7	278.24	(1) 4.34	273.90
SWW9	283.3	285.55	15.75	269.80
SWW10	279.3	280.43	12.73	267.70
SWW11	271.0	273.50	*	
SWW12	270.2	272.82	*	
* LCW1	271.4	272.21	6.92	~~269.29~~ 265.2
LCW2	272.6	274.44	9.18	265.26
LCW3	283.3	284.36	16.84	267.52
LCW4	283.8	285.70	15.74	269.96

REMARKS: * CONTINUOUS GROUND WATER ELEVATIONS INSTALLED

(1) Baseline G.W. ELEVATIONS OBTAINED PRIOR TO INSTALLING STEVENS TYPE F. RECORDERS INTO WELLS. G.W. ELEVATION M-22 262.32
LR-3 268.57

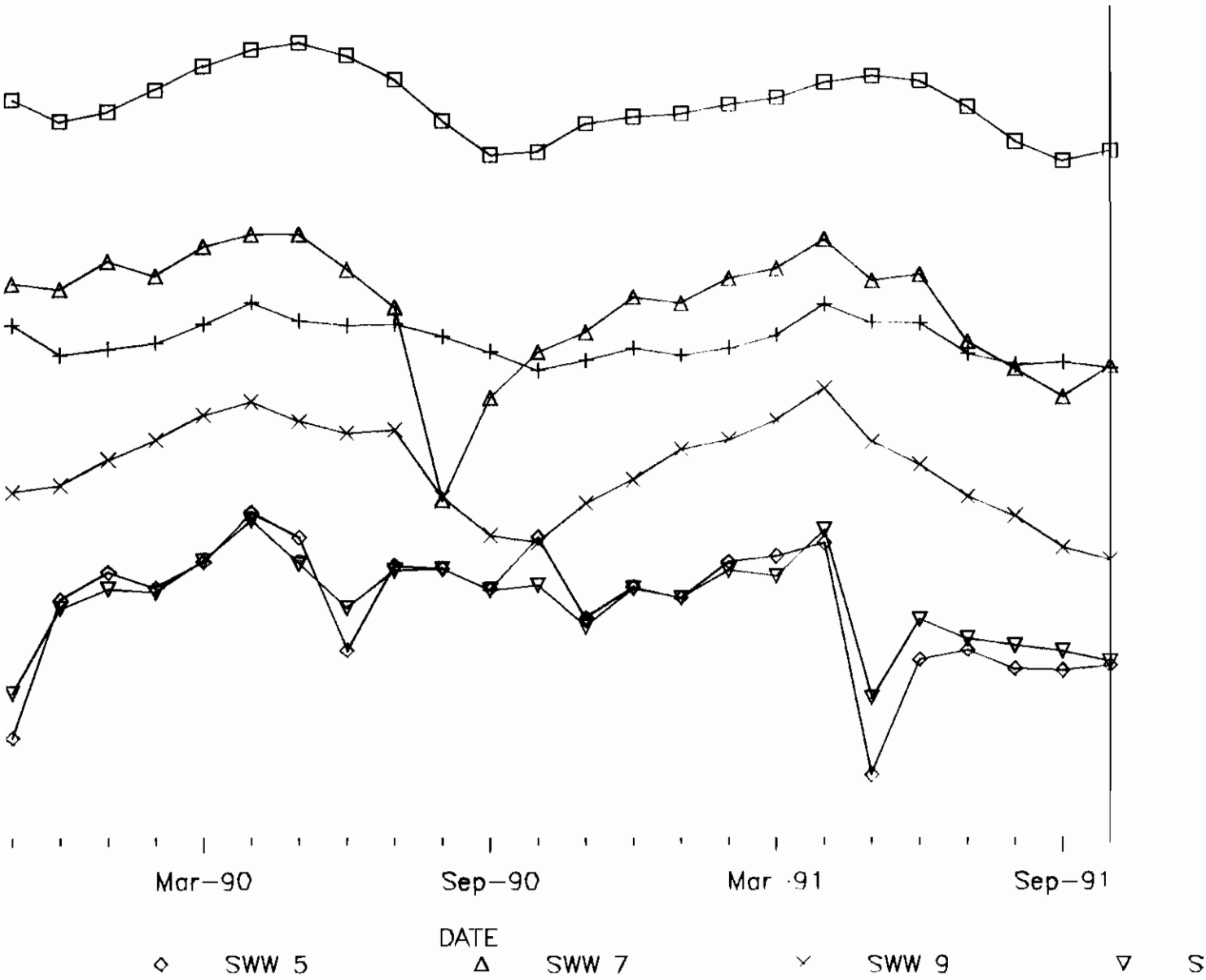
TME:bdm/DEMAX.3



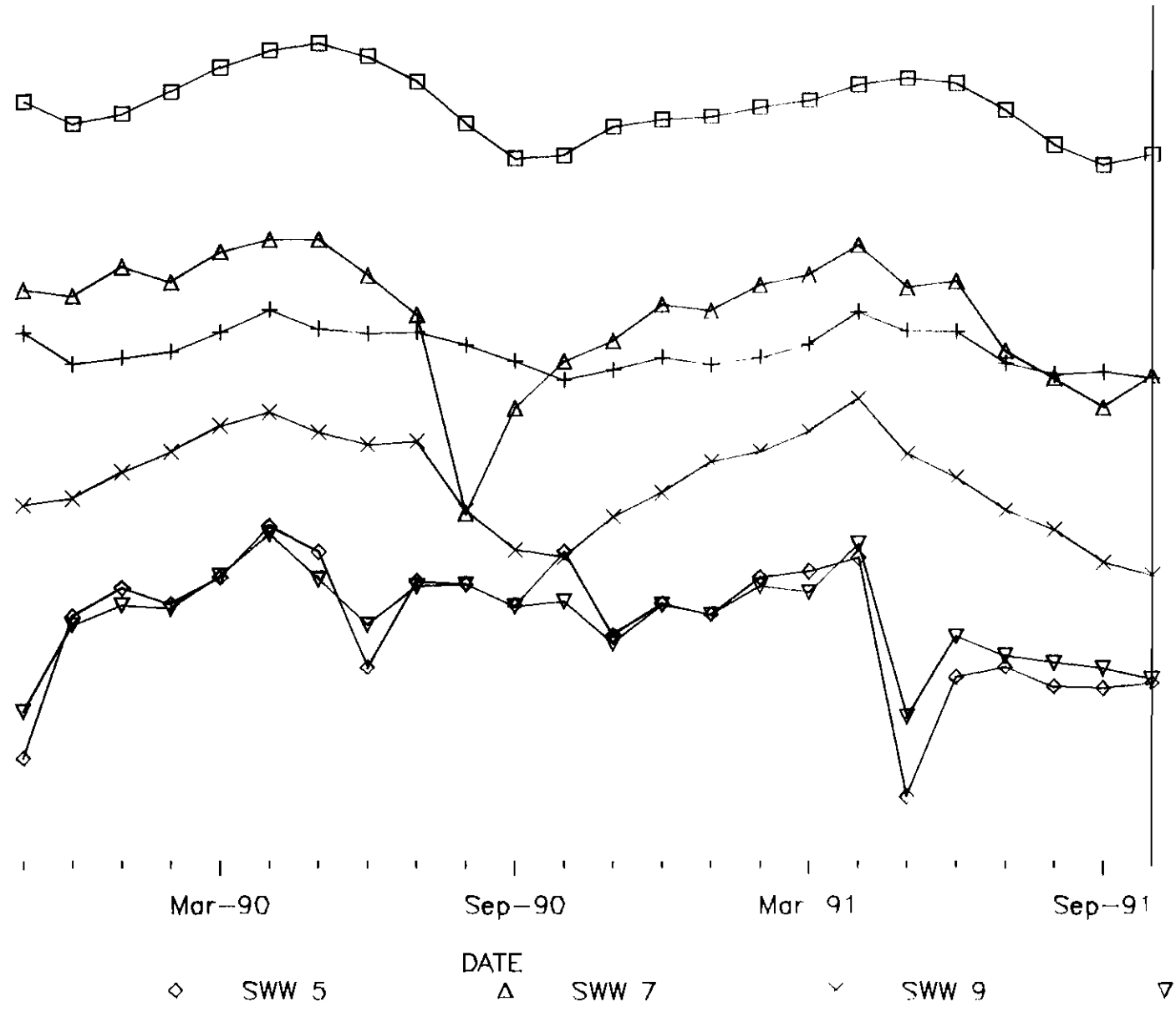
URS CONSULTANTS, INC.	MONITORING WELL LOCATIONS	FIGURE 4-1

A-3619

PAS GW ELEVATIONS



PAS GW ELEVATIONS



A K Gupta
NYSDEC

de maximis

Environmental Project
Management

From the desk of
Mark Valentine, P.E.

Date 2/7/92

Enclosed p/s find copy of Geraghty & Miller pump test report dated 6/21/91, as requested.

Conclusions?

Mark Valentine

GERAGHTY & MILLER, INC.
Environmental Services

6/24/91

June 21, 1991

VIA FEDERAL EXPRESS

Richard Ramon, P.E.
Remedial Project Manager
Western New York Superfund Section I
U.S. Environmental Protection Agency
Region II, Jacob K. Javits Federal Building
26 Federal Plaza
New York, New York 10278

RE: Leachate Collection System Pumping Test Data, Pollution Abatement Services Site, Oswego, New York

Dear Mr. Ramon:

In accordance with the approved Supplemental Remedial Investigation/Feasibility Study (SRI/FS) Work Plan, September 1990, and the approved portion of the Field Operations Plan, Geraghty & Miller, Inc. conducted a hydrogeologic (pumping) test of the Pollution Abatement Services (PAS) site slurry wall containment system and collected surface-water data from April 29 through May 23, 1991. The slurry wall containment system consists of a slurry wall, a cap and four leachate collection wells (LCW 1 through 4). The purpose of the pumping test was to qualitatively evaluate the hydraulic effectiveness of the slurry wall by measuring changes in water levels before, during, and after pumping the leachate collection wells. The test was conducted in conjunction with the New York State Department of Environmental Conservation (NYSDEC)'s scheduled pumping of the leachate collection system wells and leachate removal.

Geraghty & Miller collected water-level measurements from the slurry wall monitoring wells, the leachate collection wells, and surface water measuring points on White and Wine Creeks from April 29 through May 14, 1991. The surface water measuring points were surveyed on May 23, 1991, which completed the field activities for this test. Water levels in the slurry wall wells were measured continuously for a week or more before and after pumping, and were measured periodically by hand at the time of pumping. Water levels were measured prior to pumping to record fluctuations in the static water levels, during pumping to assess drawdown in response to the pumping, and after pumping to evaluate delayed responses.

DATA COLLECTION

LEACHATE COLLECTION WELL PUMPING

NYSDEC representatives pumped the leachate collection system on May 6, 1991. Approximately 50,000 gallons of leachate were removed from 6:00 AM to 4:30 PM. At the request of Geraghty & Miller, LCW-4 was not pumped because it is located in the center of the contained area; only LCW-1, 2 and 3 were pumped due to their locations near the slurry wall. The leachate collection wells were pumped as follows:

Well	Time Interval(s) Pumped	Total Time Pumped (Minutes)
LCW-1	07:45-08:00 am, 10:15-11:20 am, 12:00-16:30 pm	350
LCW-2	06:00-10:15 am	250
LCW-3	11:20 am-12:00 pm	40

The average pumping rate was approximately 77.5 gallons per minute (gpm), based on the total volume of leachate removed and the duration of pumping. Actual pumping rates

could not be obtained due to the physical configuration of the leachate collection system, which does not have an access point for flow measurement. Discharge from the pumping wells was collected in the on-site leachate collection tank, then transferred to tanker trucks for removal from the site by Environmental Products and Services, Inc. of Syracuse, New York under contract to the NYSDEC.

WATER-LEVEL MEASUREMENTS

Stevens automatic water-level recorders were installed on the 12 slurry wall monitoring wells 1 week prior to pumping to assess background water-level fluctuations. The Stevens recorders remained in operation 1 week after pumping to record any delayed response in water levels resulting from the pumping.

Water levels were measured before, during, and after pumping in the six pairs of slurry wall monitoring wells (SWW-1 through SWW-12), the leachate collection wells (LCW-1 through LCW-4), and the surface-water measuring points (1 through 5) on Wine and White Creeks. (Locations of wells and surface-water measuring points are shown on Figure 1.) Water levels were measured by hand, using either a steel tape or an electronic water level recorder (M-scope), on April 29 and 30, and May 6, 7, 9, and 14, 1991. Water-level elevations prior to and after pumping are provided in Table 1. Water-level elevations during the pumping are provided in Table 2.

Graphs of the ground-water elevations in the slurry wall monitoring wells over the 2 week period from April 30 through May 14 are provided in Figures 2 through 13. The figures were prepared primarily from the original Stevens Recorder Charts. Where Stevens recorder data were missing, water levels were projected based on hand measurements; these periods are presented in the figures by a dashed line. Hand measurements were also used to rectify any "drift" in the original data from the Stevens recorders.

PRECIPITATION MEASUREMENTS

Precipitation data for the period from April 29 through May 14 are provided in Table 3. These data were obtained from the *Oswego Palladium Times* and were collected by the National Weather Service.

SURFACE-WATER ELEVATIONS

Surface-water elevations were measured at five locations on White and Wine Creek (for measuring point locations, see Figure 1). These data are presented in Tables 1 and 2. Two beaver dams on White Creek at surface-water measuring point locations 2 and 3 have caused considerable ponding at both locations. Surface-water locations 1 through 4 represent elevations in upper White Creek, the upper pond, the lower pond, and lower White Creek, respectively.

On May 6, 1991, the elevation of surface water in the upper pond, at the upper beaver dam, was 268.43 feet above mean sea level and the elevation of the lower pond was 265.54 feet above mean sea level.

On May 7 and 8, 1991, NYSDEC personnel removed portions of both beaver dams, causing a lowering of the water levels in both ponds. Water-level measurements collected on May 14 indicate the elevation of water in the upper pond was lowered 1.40 feet and the elevation of water in the lower pond was lowered 0.97 foot.

If you have any questions or require clarification, please do not hesitate to call.

Sincerely,

GERAGHTY & MILLER, INC.

Richard Eby

Richard Eby
Project Scientist

Laine Vignona

Laine Vignona
Principal Scientist

RE/LV:vk (PASLCltr.rpt)

cc: Richard Ramon/USEPA (w/enclosures)
Carol Berns, Esq./USEPA (w/enclosures)
Raymond Lupe, Chief/NYSDEC (w/enclosures)
Ronald Tramontano, Chief/NYSDOH (w/enclosures)
Charles Branagh/NYSDEC Region 7 (w/enclosures)
PAS SRI/FS Trust Management Committee (w/enclosures)
Mark Valentine/de maximis, inc. (w/enclosures)

Table 1. Water-Level Elevations, Pollution Abatement Services, Oswego, New York.

Well or Measuring Point Designation	Water-Level Elevation (ft above mean sea level) 4/29/91	Water-Level Elevation (ft above mean sea level) 4/30/91	Water-Level Elevation (ft above mean sea level) 5/6/91 (Static)	Water-Level Elevation (ft above mean sea level) 5/6/91 (After Pumping)	Water-Level Elevation (ft above mean sea level) 5/7/91	Water-Level Elevation (ft above mean sea level) 5/9/91	Water-Level Elevation (ft above mean sea level) 5/14/91
SWW-1	280.53	280.48	280.13	280.12	280.05	280.95	279.66
SWW-2	275.03	275.05	275.09	275.11	275.03	275.00	275.03
SWW-3	271.73	271.78	271.90	271.90	271.73	271.33	271.75
SWW-4	270.02	269.95	269.55	269.60	269.25	268.85	268.50
SWW-5	268.84	268.97	269.22	267.48	265.95	265.25	265.38
SWW-6	266.49	266.61	266.76	266.71	266.44	265.65	265.74
SWW-7	272.74	272.80	272.93	272.93	272.58	272.43	272.57
SWW-8	274.16	274.18	274.16	274.19	274.14	274.03	273.92
SWW-9	270.56	270.61	270.80	270.60	270.28	270.27	270.18
SWW-10	269.69	269.58	268.88	268.88	268.66	268.40	268.13
SWW-11	269.10	269.25	269.43	268.02	267.00	266.51	266.61
SWW-12	265.97	265.97	266.06	265.92	265.80	264.90	265.24
LCW-1	269.03	–	269.16	258.96	262.65	263.65	264.85
LCW-2	268.99	–	269.11	261.54	262.63	263.63	264.83
LCW-3	268.93	–	269.15	267.41	268.41	266.98	267.58
LCW-4	271.25	–	271.31	271.33	271.33	271.30	271.35
S1	–	–	273.03	–	273.14	273.02	272.93
S2	–	–	268.95	–	268.43	267.63	267.55
S3	–	–	265.54	–	265.60	–	264.57
S4	–	–	260.80	–	260.92	260.68	260.87
S5	–	–	268.70	–	268.73	268.71	268.58

Table 2. Water-Level Measurements Collected During Pumping of the Leachate Collection System on May 6, 1991, Pollution Abatement Services, Oswego, New York.

Measuring Point or Well Designation	Time	Elevation of Measuring Point (feet above mean sea level)	Depth to Water (feet)	Elevation of Water Level (feet above mean sea level)
SWW-1	0550	289.33	9.20	280.13
	0730	289.33	9.21	280.12
	0915	289.33	9.21	280.12
	1055	289.33	9.20	280.13
	1235	289.33	9.26	280.07
	1335	289.33	9.20	280.13
	1430	289.33	9.21	280.12
SWW-2	0552	289.37	14.28	275.09
	0730	289.37	14.28	275.09
	0915	289.37	14.28	275.09
	1055	289.37	14.30	275.07
	1235	289.37	14.28	275.09
	1335	289.37	14.27	275.10
	1430	289.37	14.26	275.11
SWW-3	0553	286.50	14.60	271.90
	0650	286.50	14.62	271.88
	0920	286.50	14.63	271.87
	1125	286.50	14.63	271.87
	1235	286.50	14.59	271.91
	1345	286.50	14.70	271.80
	1445	286.50	14.63	271.87
	1640	286.50	14.60	271.90
SWW-4	0554	283.60	14.05	269.55
	0745	283.60	14.03	269.57
	0920	283.60	14.03	269.57
	1140	283.60	14.02	269.58
	1240	283.60	14.04	269.56
	1345	283.60	14.01	269.59
	1500	283.60	13.98	269.62
	1645	283.60	14.00	269.60
SWW-5	0555	277.02	7.80	269.22
	0700	277.02	7.87	269.15
	0745	277.02	7.90	269.12
	0925	277.02	8.23	268.79
	1150	277.02	8.75	268.27
	1250	277.02	8.95	268.07
	1350	277.02	8.88	268.14
	1515	277.02	9.37	267.65
	1625	277.02	9.54	267.48

Table 2. Water-Level Measurements Collected During Pumping of the Leachate Collection System on May 6, 1991, Pollution Abatement Services, Oswego, New York.

Measuring Point or Well Designation	Time	Elevation of Measuring Point (feet above mean sea level)	Depth to Water (feet)	Elevation of Water Level (feet above mean sea level)
SWW-6	0558	273.06	6.30	266.76
	0700	273.06	6.32	266.74
	0745	273.06	6.33	266.73
	0925	273.06	6.37	266.69
	1150	273.06	6.36	266.70
	1250	273.06	6.37	266.69
	1350	273.06	6.35	266.71
	1510	273.06	6.35	266.71
SWW-7	0600	277.93	5.00	272.93
	0810	277.93	5.03	272.90
	0930	277.93	5.01	272.92
	1050	277.93	5.11	272.82
	1220	277.93	5.00	272.93
	1300	277.93	5.08	272.85
	1510	277.93	5.06	272.87
	1600	277.93	5.00	272.93
SWW-8	0601	278.24	4.08	274.16
	0815	278.24	4.08	274.16
	0930	278.24	4.07	274.17
	1045	278.24	4.05	274.19
	1315	278.24	4.05	274.19
	1410	278.24	4.05	274.19
SWW-9	0604	285.55	14.75	270.80
	0805	285.55	14.95	270.60
	0930	285.55	15.15	270.40
	1045	285.55	15.05	270.50
	1215	285.55	15.00	270.55
	1300	285.55	14.97	270.58
	1405	285.55	14.96	270.59
	1600	285.55	14.95	270.60
SWW-10	0605	280.43	11.55	268.88
	0800	280.43	11.56	268.87
	0930	280.43	11.57	268.86
	1045	280.43	11.57	268.86
	1215	280.43	11.58	268.85
	1255	280.43	11.58	268.85
	1405	280.43	11.57	268.86
	1540	280.43	11.55	268.88

Table 2. Water-Level Measurements Collected During Pumping of the Leachate Collection System on May 6, 1991, Poilution Abatement Services, Oswego, New York.

Measuring Point or Well Designation	Time	Elevation of Measuring Point (feet above mean sea level)	Depth to Water (feet)	Elevation of Water Level (feet above mean sea level)
SWW-11	0545	273.50	4.07	269.43
	0750	273.50	4.20	269.30
	0930	273.50	4.44	269.06
	1030	273.50	4.65	268.85
	1215	273.50	5.05	268.45
	1255	273.50	5.16	268.34
	1405	273.50	5.21	268.29
	1530	273.50	5.40	268.10
	1615	273.50	5.48	268.02
SWW-12	0540	272.82	6.76	266.06
	0755	272.82	6.78	266.04
	0930	272.82	6.81	266.01
	1030	272.82	6.83	265.99
	1210	272.82	6.92	265.90
	1255	272.82	6.96	265.86
	1400	272.82	6.89	265.93
	1530	272.82	6.89	265.93
	1620	272.82	6.90	265.92
LCW-1	0530	272.21	3.05	269.16
	0700	272.21	4.48	267.73
	0750	272.21	6.08	266.13
	0930	272.21	6.75	265.46
	1030	272.21	13.21	259.00
	1200	272.21	13.00	259.21
	1250	272.21	13.00	259.21
	1400	272.21	13.15	259.06
	1525	272.21	13.25	258.96
LCW-2	0535	274.44	5.33	269.11
	0700	274.44	7.08	267.36
	0750	274.44	7.93	266.51
	0930	274.44	9.61	264.83
	1155	274.44	10.42	264.02
	1250	274.44	10.79	263.65
	1355	274.44	11.54	262.90
	1525	274.44	12.41	262.03
	1625	274.44	12.90	261.54

Table 2. Water-Level Measurements Collected During Pumping of the Leachate Collection System on May 6, 1991, Pollution Abatement Services, Oswego, New York.

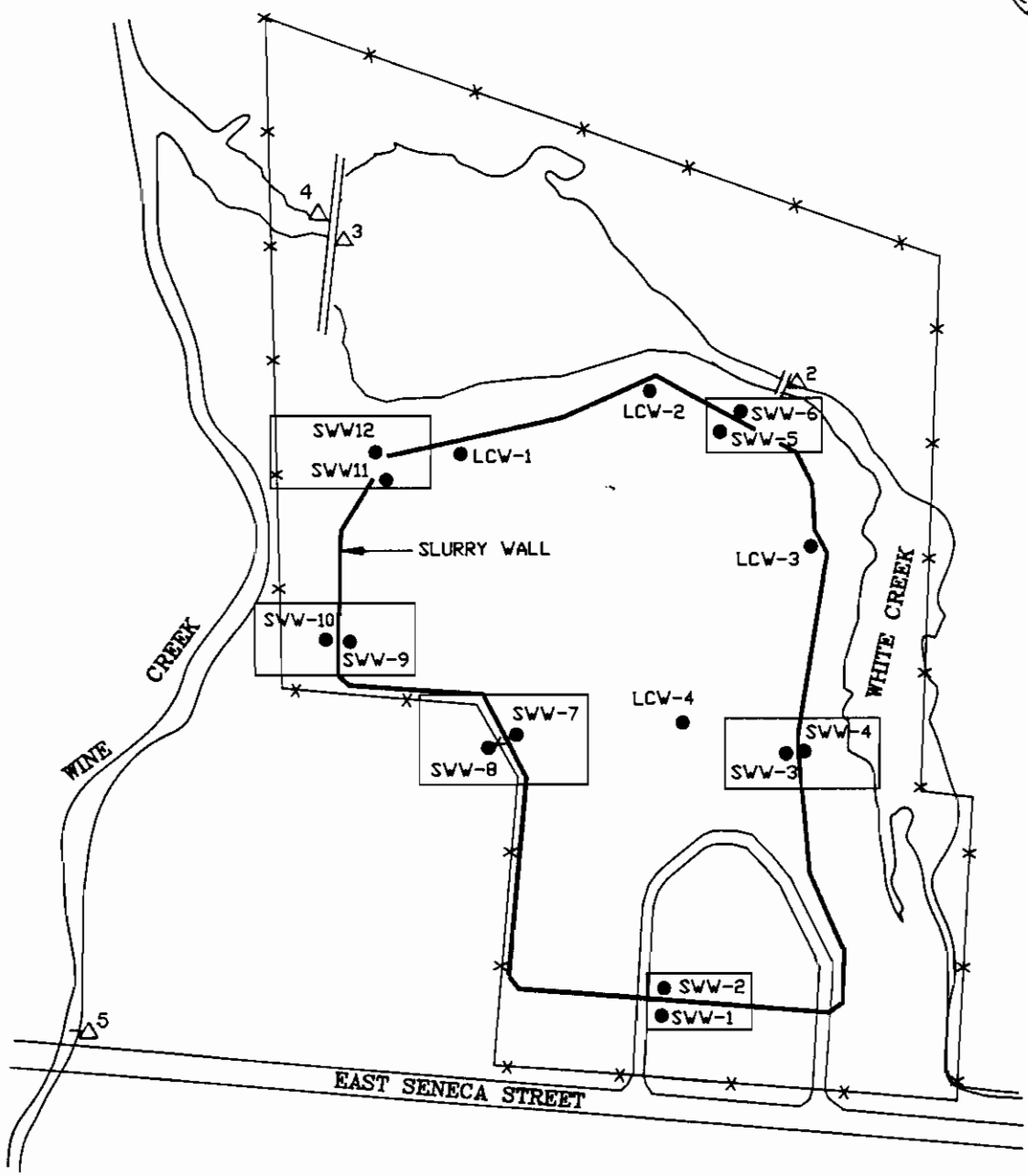
Measuring Point or Well Designation	Time	Elevation of Measuring Point (feet above mean sea level)	Depth to Water (feet)	Elevation of Water Level (feet above mean sea level)
LCW-3	0536	284.36	15.21	269.15
	0700	284.36	16.71	267.65
	0745	284.36	15.82	268.54
	0925	284.36	15.85	268.51
	1145	284.36	19.54	264.82
	1245	284.36	17.95	266.41
	1350	284.36	17.60	266.76
	1505	284.36	17.37	266.99
	1635	284.36	16.95	267.41
LCW-4	0538	285.70	14.39	271.31
	0705	285.70	14.40	271.30
	0810	285.70	14.37	271.33
	1205	285.70	14.35	271.35
	1410	285.70	14.35	271.35
	1610	285.70	14.37	271.33
Surface Water 1	1000	275.59	2.56	273.03
Surface Water 2	1200	270.40	1.45	268.95
Surface Water 3	1035	266.80	1.26	265.54
Surface Water 4	1035	266.20	5.40	260.80
Surface Water 5	1010	273.15	4.45	268.70

Table 3. Precipitation Data for Oswego, New York from April 29 through May 14, 1991.

Date	Precipitiation (inches)
April 29	Trace
April 30	0.08
May 1	0.02
May 2	0.01
May 3	Trace
May 4	--
May 5	0.12
May 6	0.29
May 7	--
May 8	Trace
May 9	0.08
May 10	--
May 11	--
May 12	--
May 13	0.06
May 14	Trace

-- No precipitation.

Source of precipitation data is the Oswego Paladium Times Daily Newspaper - data collected by the National Weather Service.



EXPLANATION

- LC-4 ● LOCATION AND DESIGNATION OF LEACHATE COLLECTION WELL
- △2 SURFACE WATER MEASURING POINT
- FENCE
- SWW12 ● / SWW11 ● LOCATION AND DESIGNATION OF PAIRED SLURRY WALL MONITORING WELLS

SCALE 0 — 200 FT

GERAGHTY & MILLER, INC.
Environmental Services

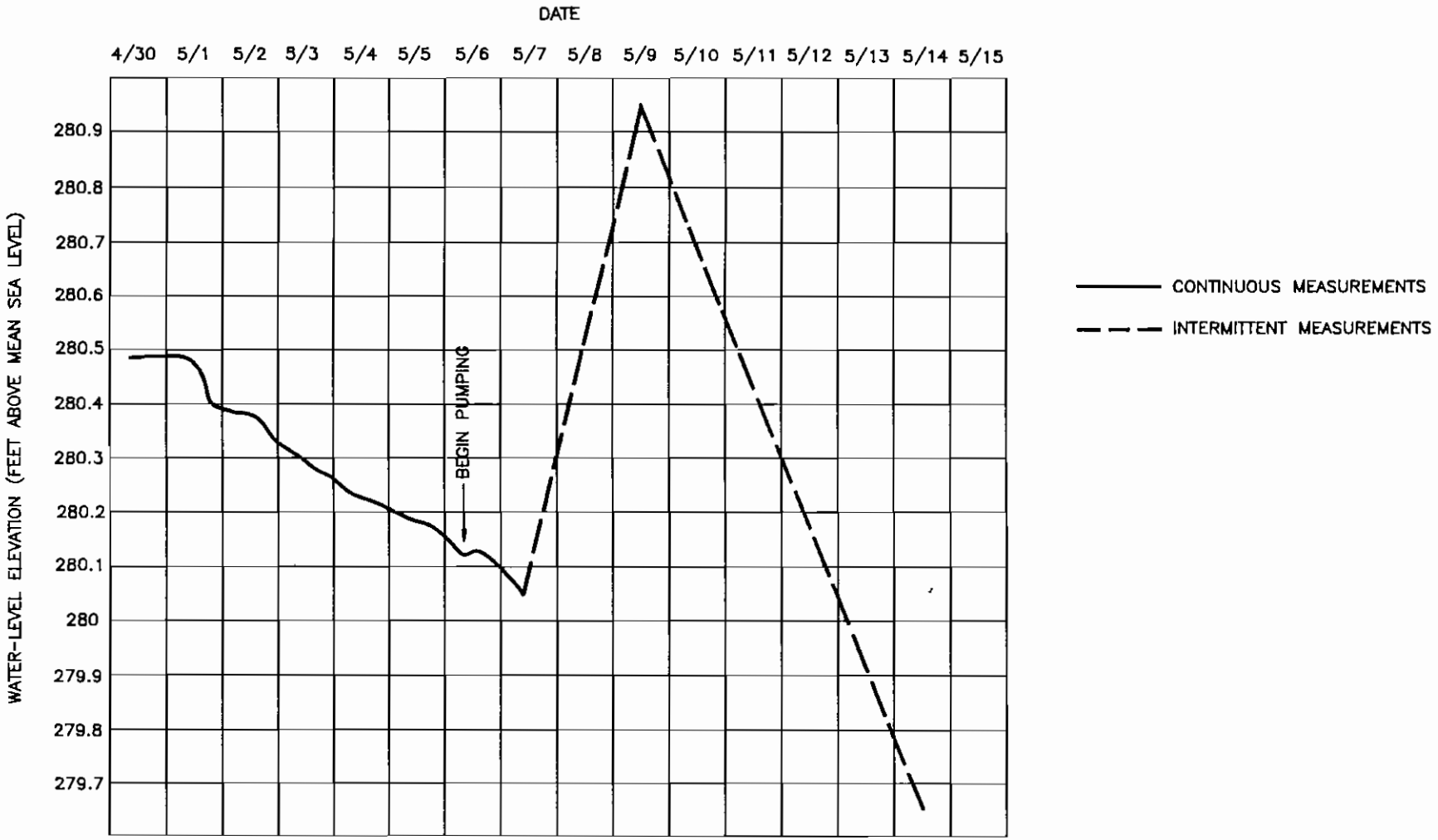
WATER LEVEL MEASUREMENT POINTS

POLLUTION ABATEMENT SERVICES SITE
OSWEGO, NEW YORK

FIGURE
1

DRAFTER: V. CARUNCHO | APPROVED: L. VIGNONA | CHECKED: L. VIGNONA | CAD FILE: WATERLEV | FILE NO.: | PRJCT. NO.: NY50402 | DWG. DATE: 10-17-90

DWG DATE: 5/91	PRJCT NO.: NY50402	FILE NO.: –	DRAWING: SWW-1	CHECKED: R. EBY	APPROVED: L. VIGNONA	DRAFTER: V. CARUNCHO



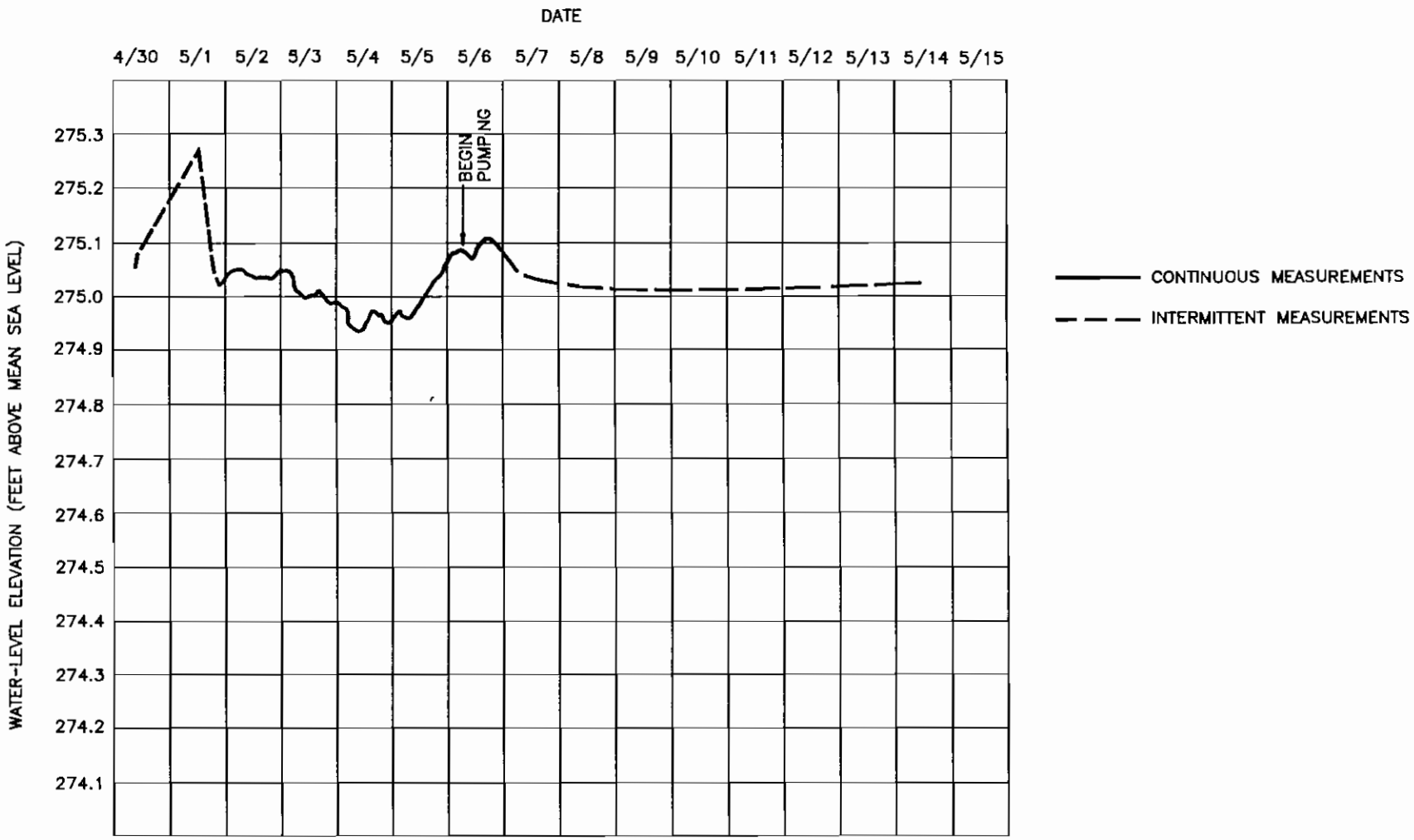
GERAGHTY & MILLER, INC.
Environmental Services

WATER-LEVEL ELEVATIONS IN MONITORING WELL SWW-1 FROM APRIL 30 THROUGH MAY 14, 1991

POLLUTION ABATEMENT SERVICES
OSWEGO, NEW YORK

FIGURE
2

DWG DATE: 5/91	PRJCT NO.: NY50402	FILE NO.: –	DRAWING: SWW-2	CHECKED: R. EBY	APPROVED:–L. VIGNONA	DRAFTER: V. CARUNCHO



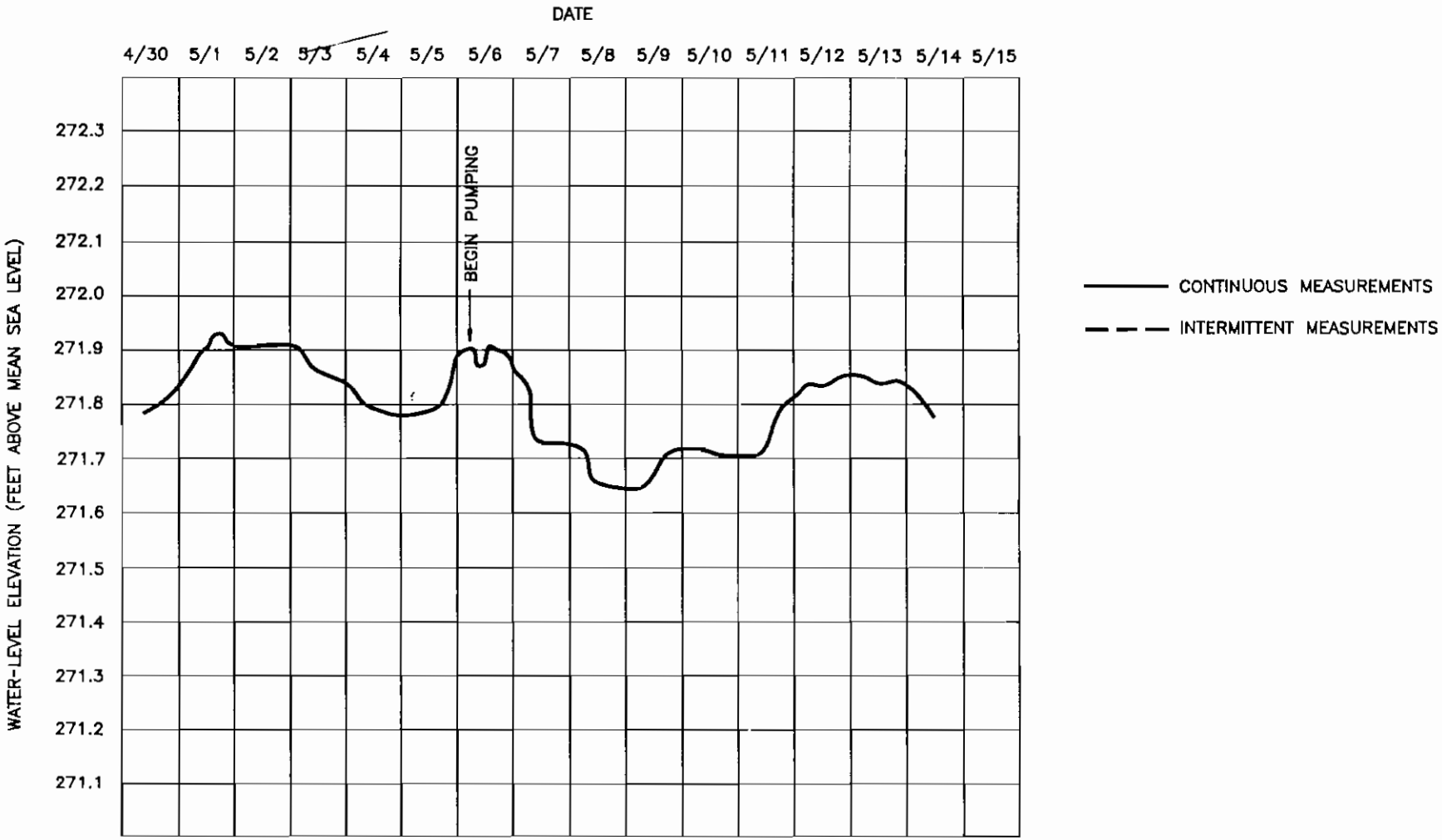
GERAGHTY & MILLER, INC.
Environmental Services

WATER-LEVEL ELEVATIONS IN MONITORING WELL SWW-2 FROM APRIL 30 THROUGH MAY 14, 1991

POLLUTION ABATEMENT SERVICES
OSWEGO, NEW YORK

FIGURE
3

DWG DATE: 5/91	PRJCT NO.: NY50402	FILE NO.: –	DRAWING: _SWW-3	CHECKED: R. EBY	APPROVED: L. VIGNONA	DRAFTER: V. CARUNCHO



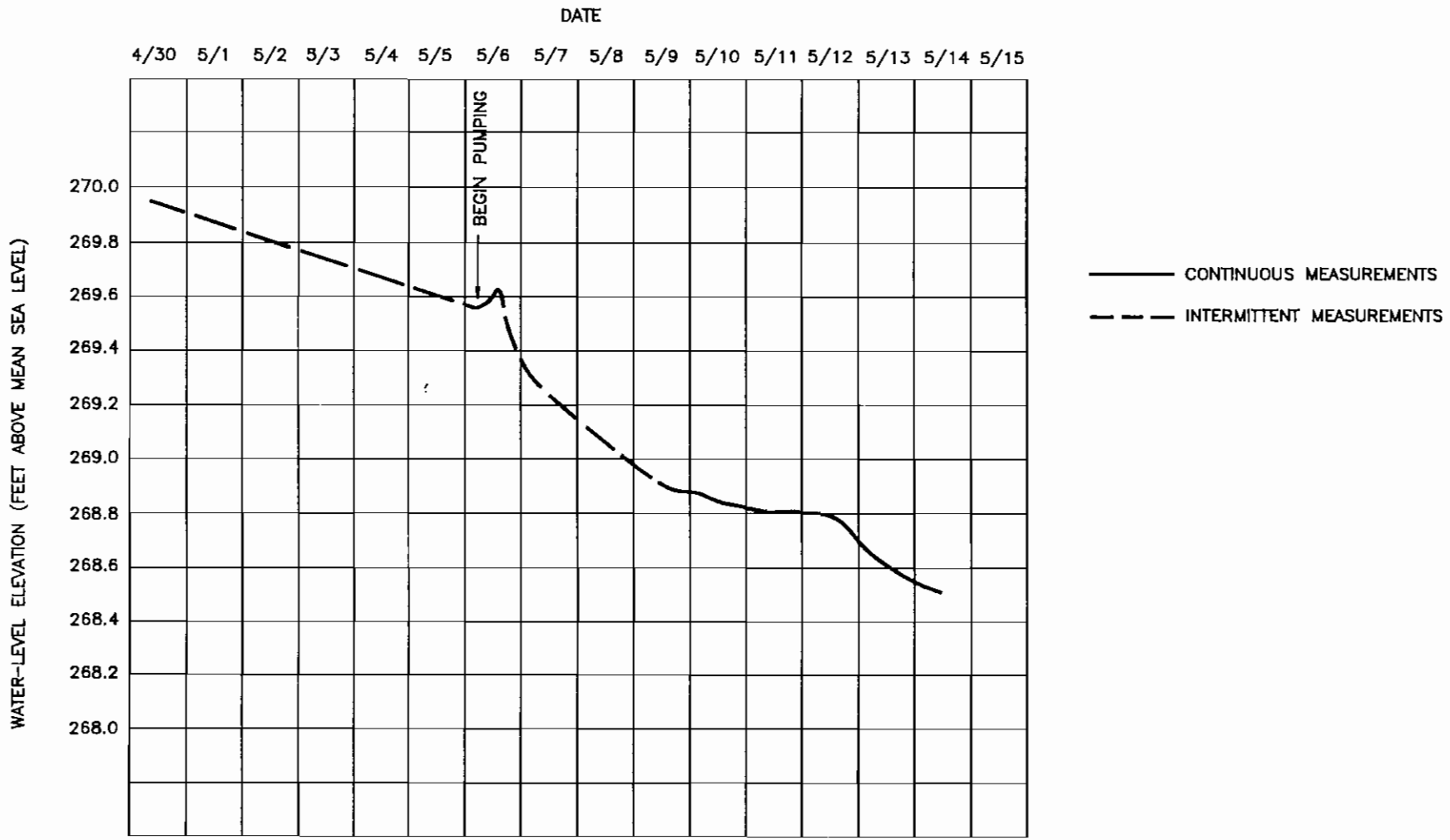
GERAGHTY & MILLER, INC.
Environmental Services

WATER-LEVEL ELEVATIONS IN MONITORING WELL SWW-3 FROM APRIL 30 THROUGH MAY 14, 1991

POLLUTION ABATEMENT SERVICES
OSWEGO, NEW YORK

FIGURE
4

DWG DATE: 5/91	PRJCT NO.: NY50402	FILE NO.: –	DRAWING: SWW-4	CHECKED: R. EBY	APPROVED: L. VIGNONA	DRAFTER: V. CARUNCHO



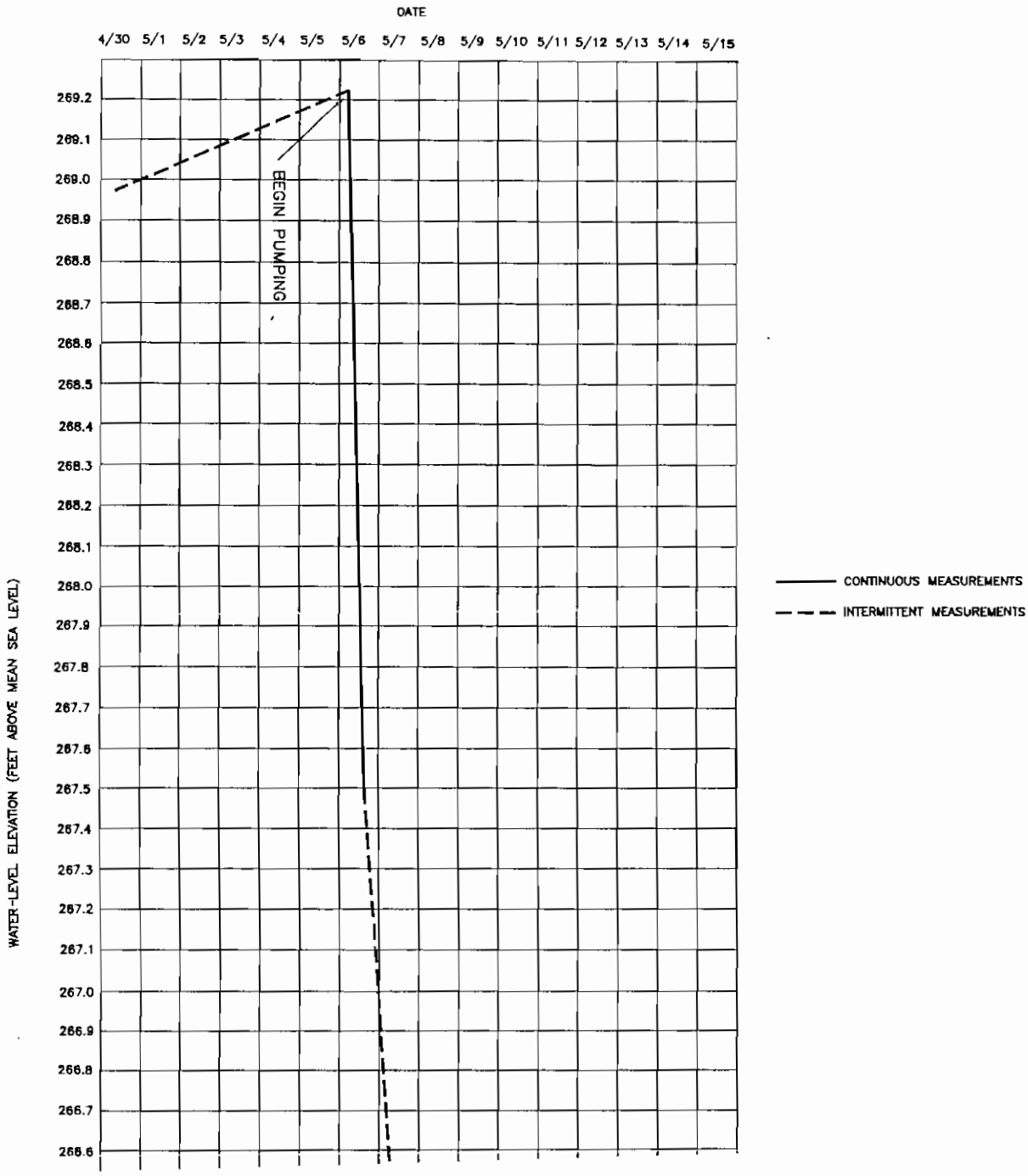
GERAGHTY & MILLER, INC.
Environmental Services

WATER-LEVEL ELEVATIONS IN MONITORING WELL SWW-4 FROM APRIL 30 THROUGH MAY 14, 1991

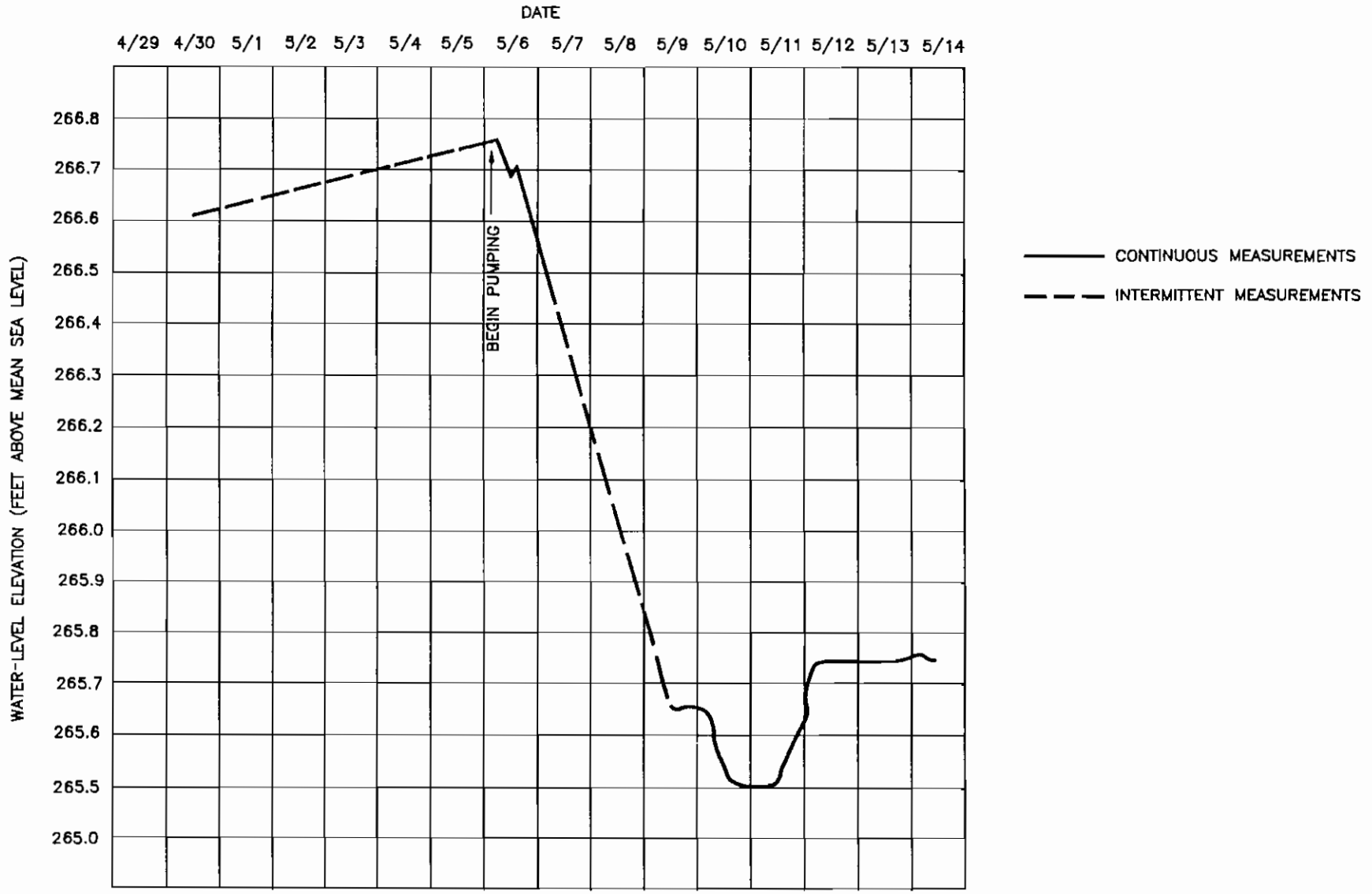
POLLUTION ABATEMENT SERVICES
OSWEGO, NEW YORK

FIGURE
5

DWG DATE: 5/91	PRJCT NO.: NY5040D2	FILE NO.: –	DRAWING: SWW-5	CHECKED: R. EBY	APPROVED: L. VIGNONA	DRAFTER: V. CARUNCHO



DWG DATE: 5/91	PRJCT NO.: NY50402	FILE NO.: –	DRAWING: SWW-6	CHECKED: R. EBY	APPROVED: L. VIGNONA	DRAFTER: V. CARUNCHO



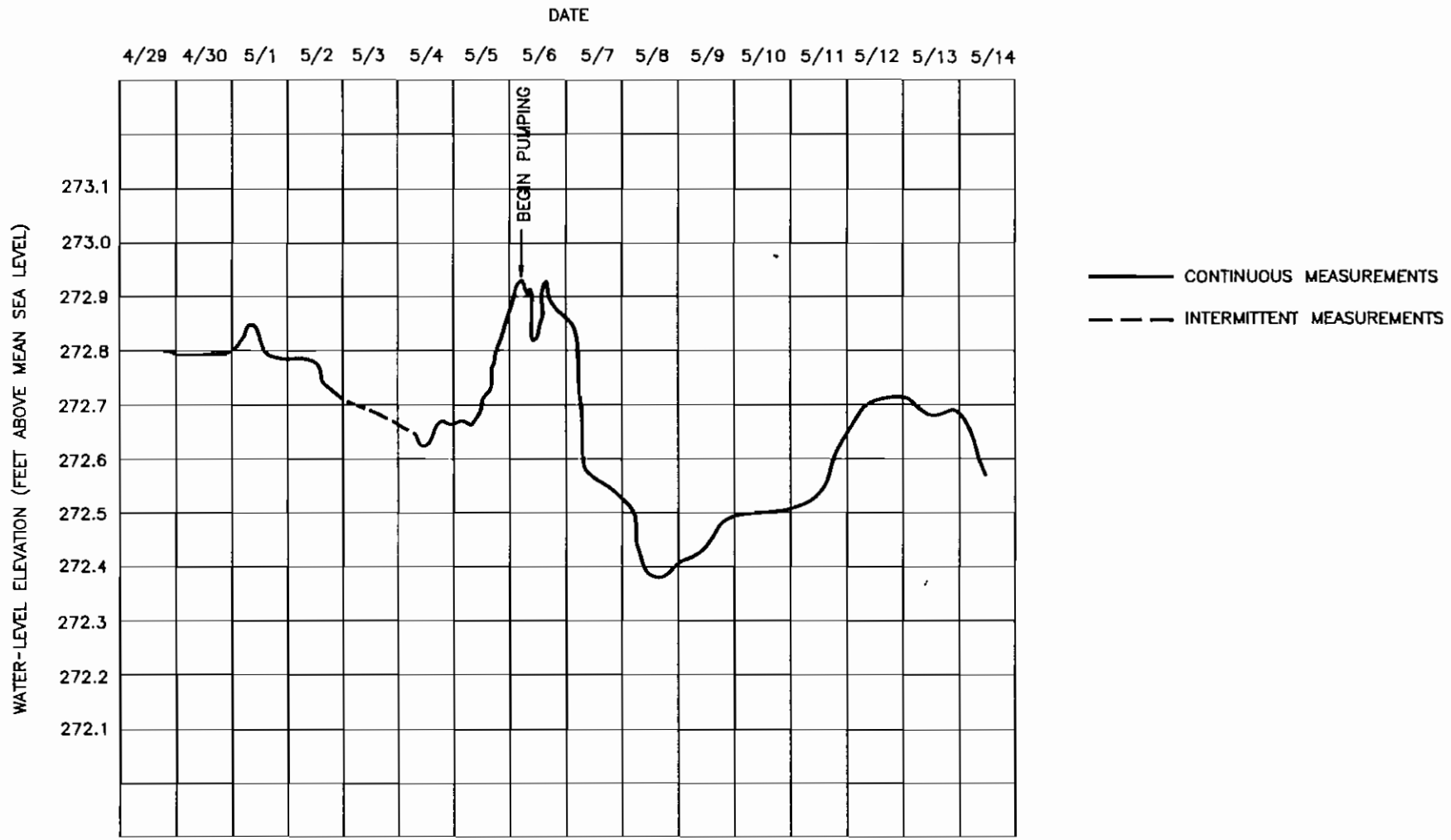
GERAGHTY & MILLER, INC.
Environmental Services

WATER-LEVEL ELEVATIONS IN MONITORING WELL SWW-6 FROM APRIL 30 THROUGH MAY 14, 1991

POLLUTION ABATEMENT SERVICES
OSWEGO, NEW YORK

FIGURE
7

DWG DATE: 5/91	PRJCT NO.: NY50402	FILE NO.: –	DRAWING: SWW-7	CHECKED: R. EBY	APPROVED: L. VIGNONA	DRAFTER: V. CARUNCHO



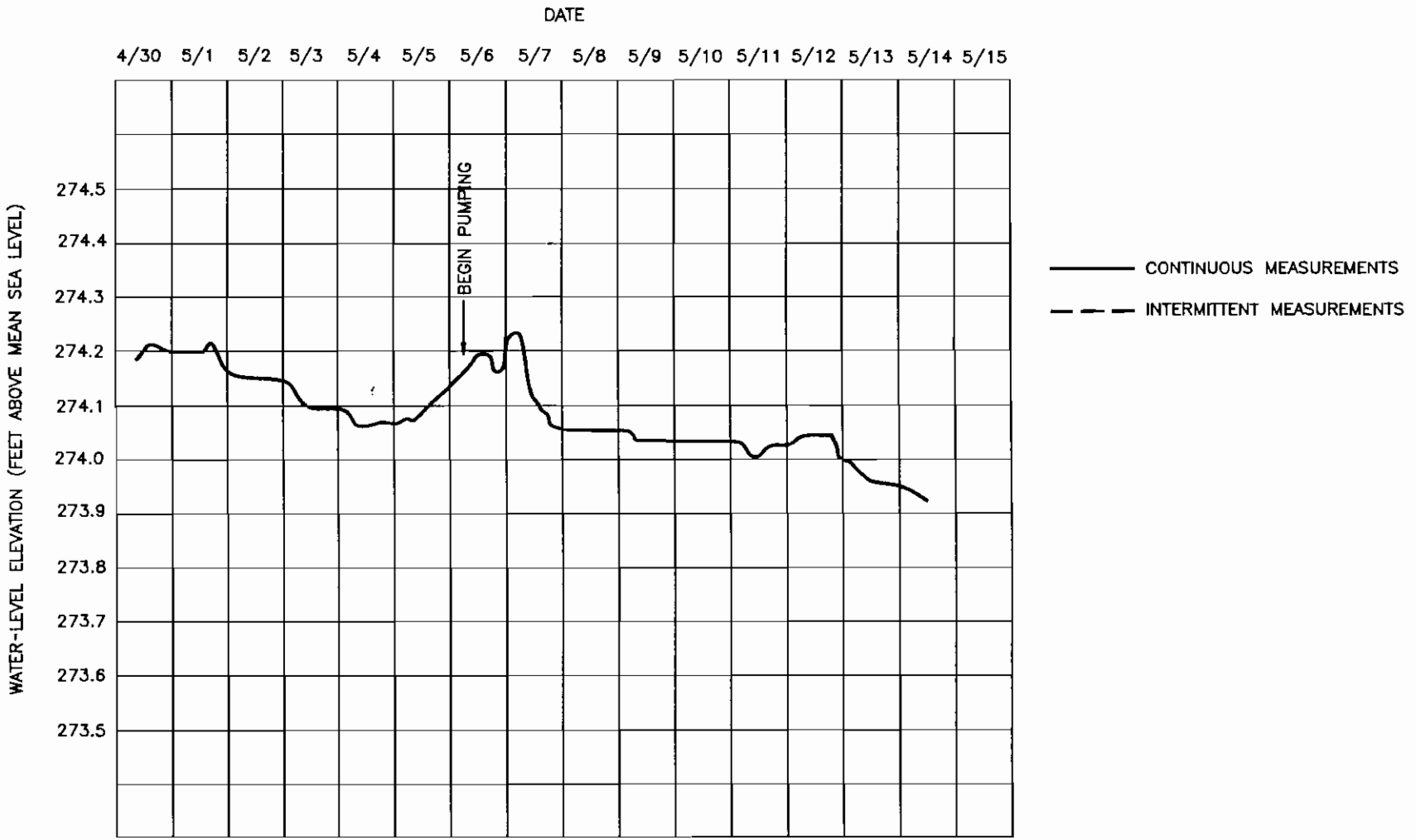
GERAGHTY & MILLER, INC.
Environmental Services

WATER-LEVEL ELEVATIONS IN MONITORING WELL SWW-7 FROM APRIL 30 THROUGH MAY 14, 1991

POLLUTION ABATEMENT SERVICES
OSWEGO, NEW YORK

FIGURE
8

DWG DATE: 5/91	PRJCT NO.: NY50402	FILE NO.: –	DRAWING: SWW-8	CHECKED: R. EBY	APPROVED: L. VIGNONA	DRAFTER: V. CARUNCHO



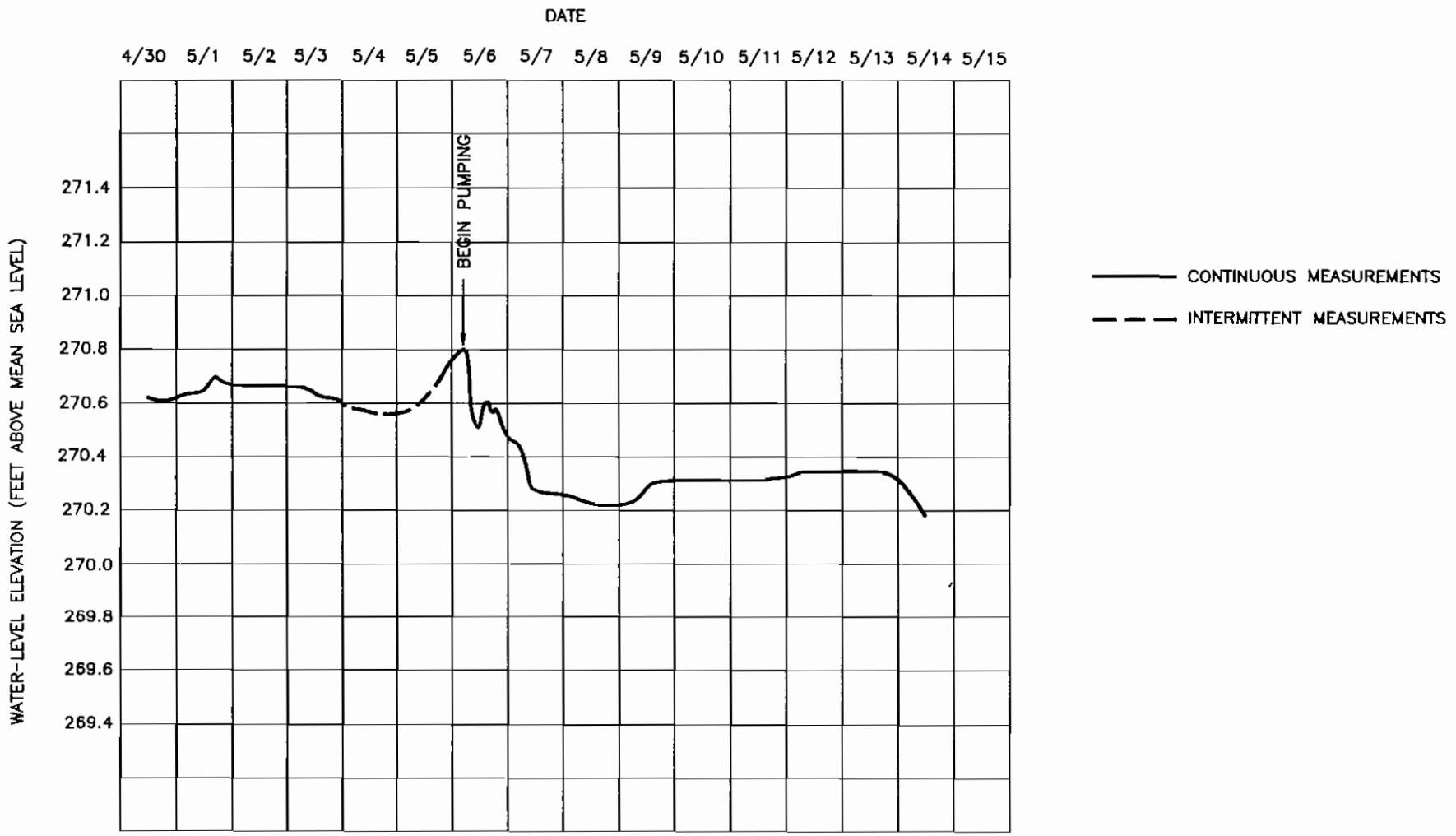
GERAGHTY & MILLER, INC.
Environmental Services

WATER-LEVEL ELEVATIONS IN MONITORING WELL SWW-8 FROM APRIL 30 THROUGH MAY 14, 1991

POLLUTION ABATEMENT SERVICES
OSWEGO, NEW YORK

FIGURE
9

DWG DATE: 5/91	PRJCT NO.: NY50402	FILE NO.: –	DRAWING: SWW-9	CHECKED: R. EBY	APPROVED: L. VIGNONA	DRAFTER: V. CARUNCHO

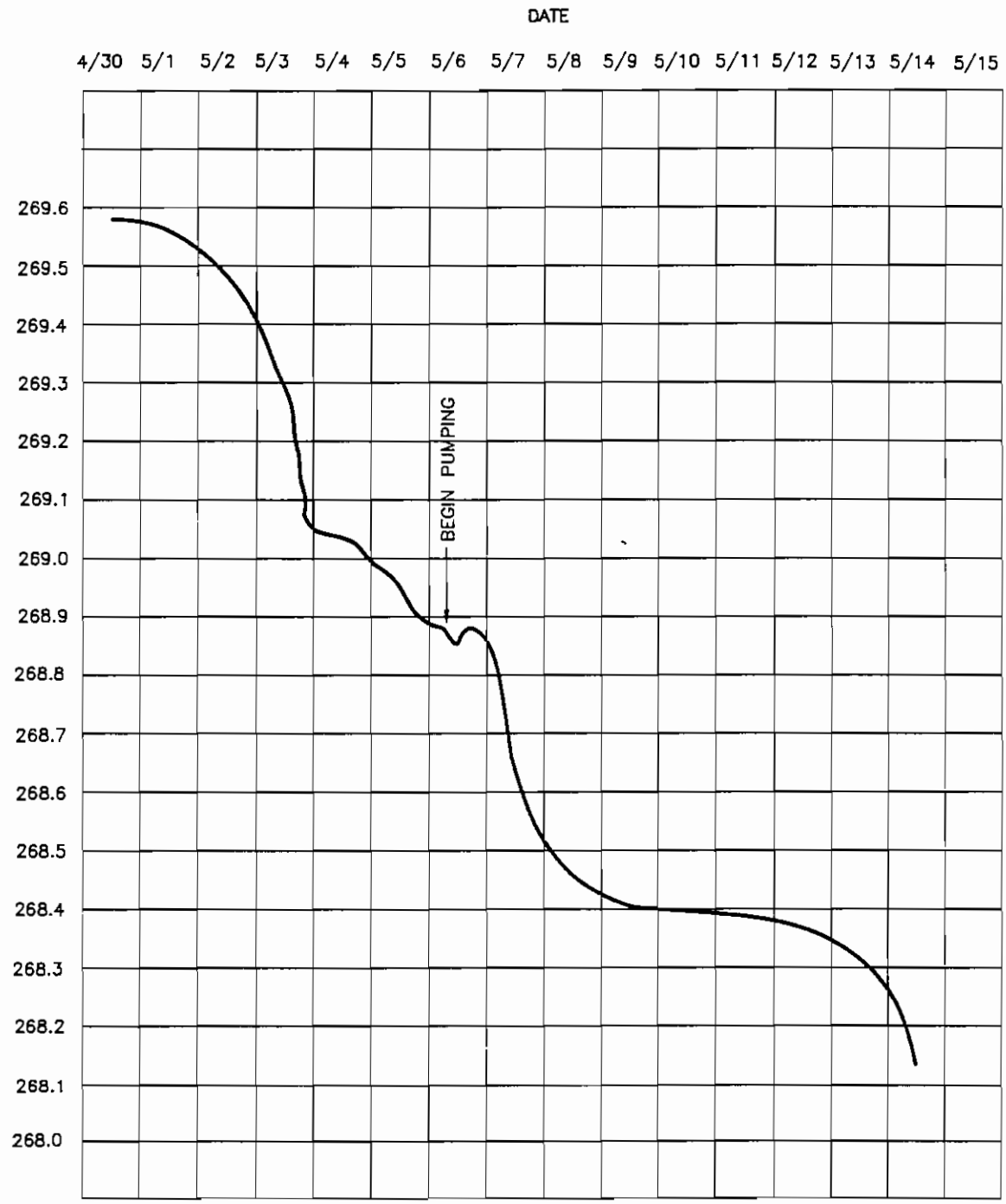


GERAGHTY & MILLER, INC.
Environmental Services

WATER-LEVEL ELEVATIONS IN MONITORING WELL SWW-9 FROM APRIL 30 THROUGH MAY 14, 1991

POLLUTION ABATEMENT SERVICES
OSWEGO, NEW YORK

FIGURE
10



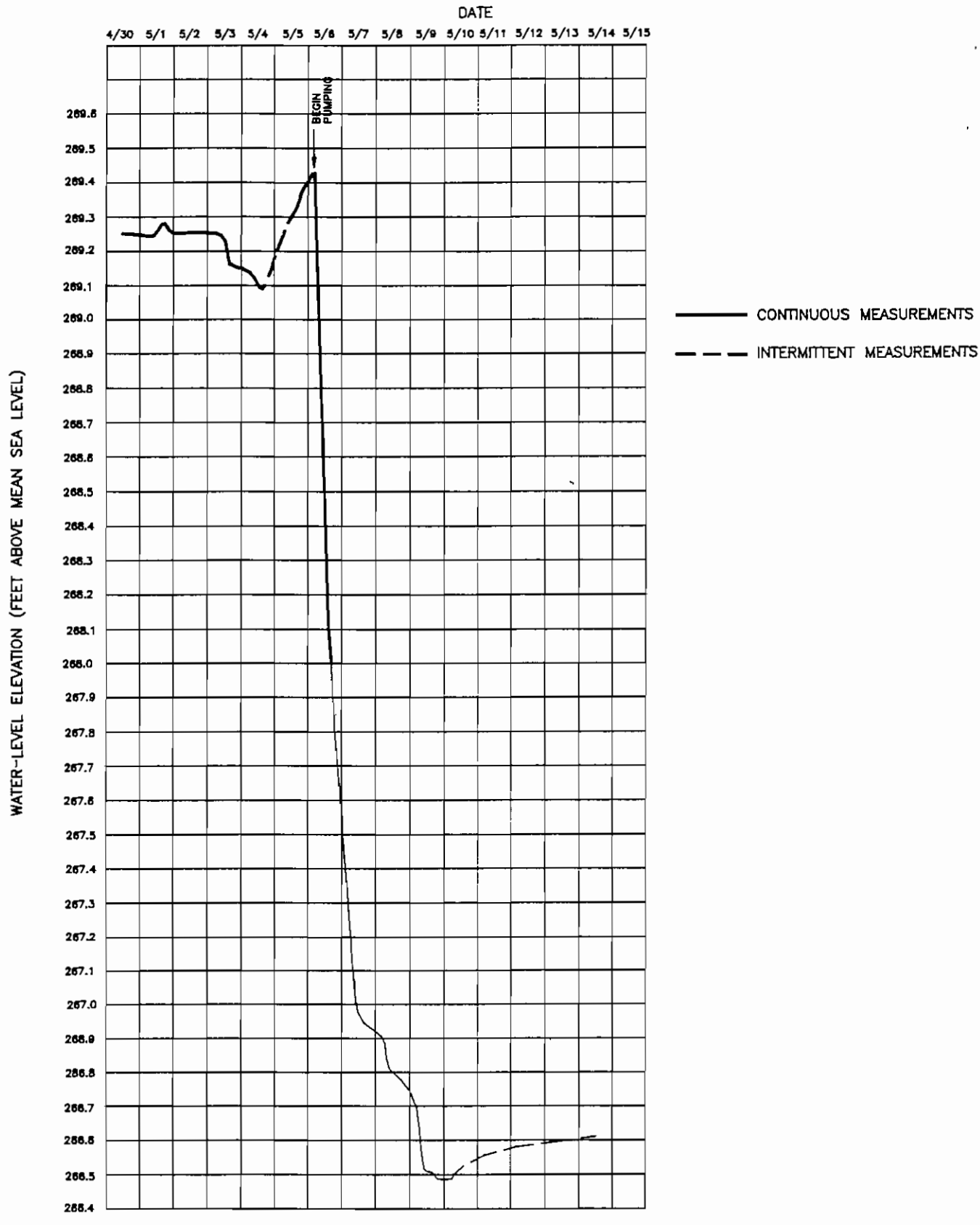
DRAFTER: V. CARUNCHO | APPROVED: L. VIGNONA | CHECKED: R. EBY | DRAWING: SWW-10 | FILE NO.: - | PRJCT NO.: NY50402 | DWG DATE: 5/91

GERAGHTY & MILLER, INC.
Environmental Services

WATER-LEVEL ELEVATIONS IN MONITORING WELL SWW-10
FROM APRIL 30 THROUGH MAY 14, 1991

POLLUTION ABATEMENT SERVICES
OSWEGO, NEW YORK

FIGURE
11



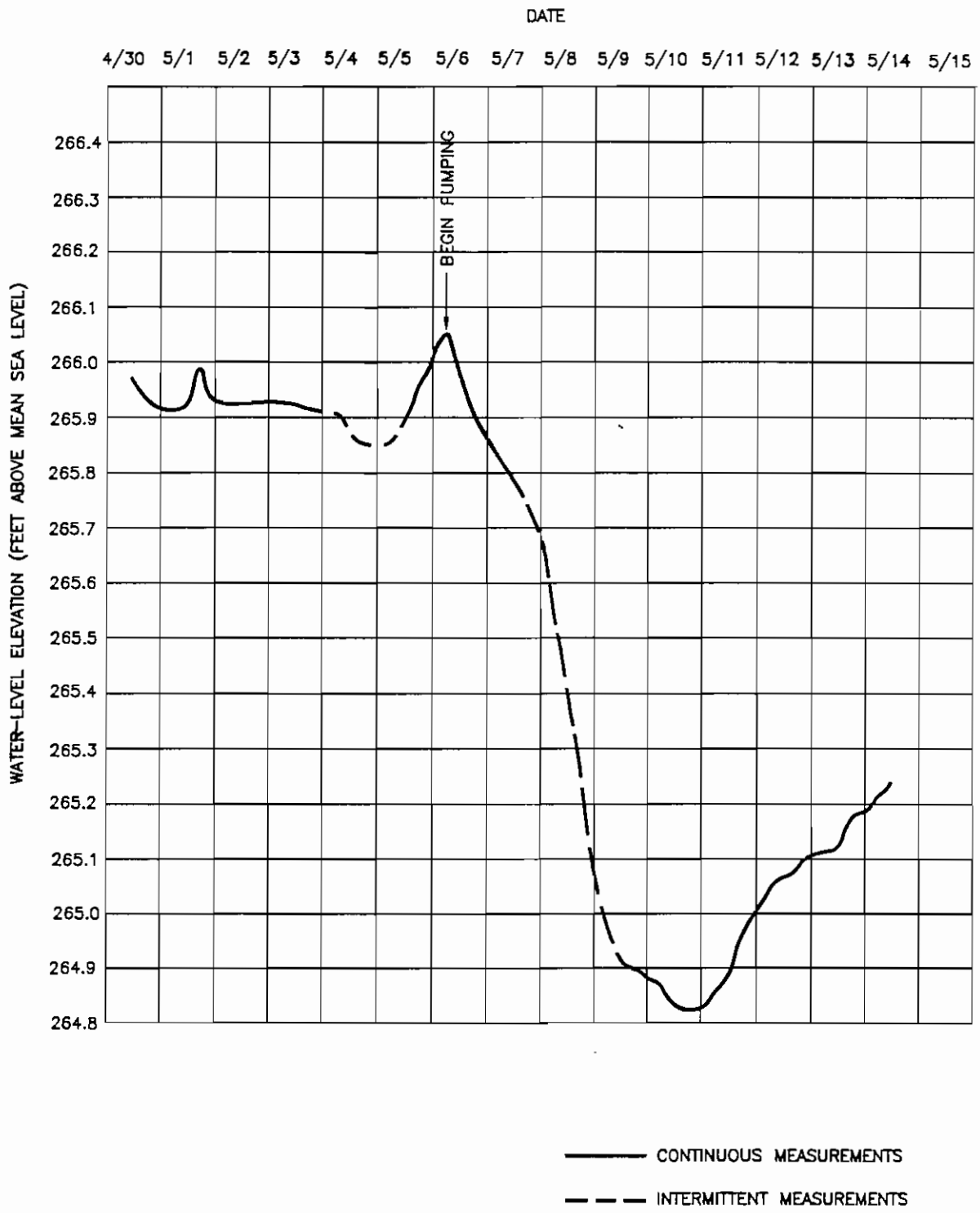
DRAFTER: V. CARUNCHO | APPROVED: L. VIGNONA | CHECKED: R. EBY | DRAWING: SWW-11 | FILE NO.: - | PRJCT NO.: NY50402 | DWG DATE: 5/91

GERAGHTY & MILLER, INC.
Environmental Services

WATER-LEVEL ELEVATIONS IN MONITORING WELL SWW-11
FROM APRIL 30 THROUGH MAY 14, 1991

POLLUTION ABATEMENT SERVICES
OSWEGO, NEW YORK

FIGURE
12



DRAFTER: V. CARUNCHO | APPROVED: L. VIGNONA | CHECKED: R. EBY | DRAWING: SWW-12 | FILE NO.: - | PRJCT NO.: NY50402 | DWG DATE: 5/91

GERAGHTY & MILLER, INC.
Environmental Services

WATER-LEVEL ELEVATIONS IN MONITORING WELL SWW-12
FROM APRIL 30 THROUGH MAY 14, 1991

POLLUTION ABATEMENT SERVICES
OSWEGO, NEW YORK

FIGURE
13

PAS SITE
OSWEGO, NEW YORK
COMPILATION OF GROUND WATER ELEVATION MEASUREMENTS
INTERIM GROUND WATER REMEDIAL ACTIVITIES

DATE	TIME	SWW1	SWW2	SWW3	SWW4	SWW5	SWW6	SWW7	SWW8	SWW9	SWW10	SWW11	SWW12	LCW1	LCW2	LCW3	LCW4
1/29/92	9:30 a.m.	280.48	274.60	271.05	269.97	267.62	266.50	272.08	274.14	269.79	269.90	267.85	266.04	267.67	267.64	267.92	270.28
2/06/92	8:00 a.m.	280.11	274.68	271.07	269.11	267.49	266.14	272.06	274.03	269.77	269.05	267.82	265.86	267.74	267.61	267.92	270.30
	12:30 p.m.	280.13	274.73	271.14	269.17	267.57	266.23	272.13	274.13	269.79	269.08	267.82	265.90	266.09	266.13	267.48	270.30
2/10/92	7:40 a.m.	279.90	274.53	270.93	268.79	266.33	265.53	271.58	273.87	269.65	268.55	267.00	265.65	266.70	266.67	267.31	270.31
	9:58 a.m.	279.90	274.54	270.93	268.79	266.35	265.56	271.61	273.88	269.66	268.56	266.89	265.65	265.59	265.57	266.46	270.33
2/11/92	12:00 p.m.	279.90	274.64	271.07	268.89	266.27	266.14	272.06	273.97	269.73	268.62	266.74	265.64	265.53	265.52	266.99	270.36
3/9/92	1:47 p.m.	280.96	274.72	271.23	271.0	267.01	266.56	272.47	274.61	270.03	270.64	267.49	266.09	267.06	267.05	267.65	270.56
3/10/92	11:40 a.m.	281.02	274.83	271.37	271.40	267.08	266.87	272.82	274.75	270.12	270.74	267.09	266.04	261.94	261.98	268.47	270.59
3/11/92	9:40 a.m.	281.0	274.80	271.36	271.55	265.63	266.72	272.76	274.63	270.11	270.69	266.42	265.95	262.85	262.83	268.26	270.59
3/25/92	4:30 p.m.	280.42	274.78	271.24	269.29	265.22	266.10	272.27	274.31	269.99	269.52	266.12	265.58	265.02	263.01	267.90	270.62

REMARKS:

TME:bdm/TECH31.8

PAS SITE
OSWEGO, NEW YORK
COMPILATION OF GROUND WATER ELEVATION MEASUREMENTS
INTERIM GROUND WATER REMEDIAL ACTIVITIES

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	M-21	M-22	M-23
2/06/92	8:00 a.m.	284.53	276.09	282.66	269.18	274.03	268.65	265.82	265.81	253.33	265.89	263.58	266.90	268.40	262.80	263.45	258.60
3/9/92	1:47 p.m.	286.17	276.63	272.54	269.66	274.62	269.83	266.03	266.32	264.37	266.06	264.78	267.99	269.02	264.01	263.95	259.54

REMARKS:

TME:bdm/TECH31.8

A.K.

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233 – 7010

Thomas C. Jorling
Commissioner

JAN 15 19[illegible]

Mr. Dharmarajan R. Iyer, Ph.D.
Project Manager
URS Consultants, Inc.
282 Delaware Avenue
Buffalo, NY 14202-1207

RE: Site #7-38-001
Pollution Abatement Services
Groundwater Elevations and Leachate Pumping

Dear Mr. Iyer:

Attached are the groundwater measurements for the long-term monitoring wells at the PAS site. These elevations were taken on November 11, and December 17, 1991. Also, attached is completed PAS-4 form for the November leachate pumping.

If you have any questions please call me at 518/457-0927.

Sincerely,

A. K. Gupta

Ashok K. Gupta, P.E.
Project Manager
Operation & Maintenance Section
Bureau of Construction Services
Division of Hazardous Waste Remediation

Attachment

a:grwtrele.pas:AKG:et

(12-75)

New York State Department of Environmental Conservation

MEMORANDUM

TO: A. K. Gupta, O&M Section
FROM: Bob Edwards, CRP Section
SUBJECT: PAS Monthly Groundwater Measurements

DATE: November 13, 1991

Listed below are the groundwater measurements for the long-term monitoring wells at the PAS site. These are the November, 1991 measurements.

If you have any questions, please see me.

PAS long-term monitoring well groundwater elevations

date: 11/11/91

well id.#	depth to water from top of riser	top of riser elevation	leachate elevations	
SWW-1	10.12	289.33	LCW-1	267.11
SWW-2	15.18	289.37	LCW-2	267.06
SWW-3	15.33	286.50	LCW-3	267.65
SWW-4	14.75	283.60	LCW-4	270.62
SWW-5	9.77	277.02		
SWW-6	6.42	273.06		
SWW-7	6.35	277.93		
SWW-8	4.29	278.24		
SWW-9	16.67	285.55		
SWW-10	13.08	280.43		
SWW-11	6.12	273.50		
SWW-12	6.83	272.82		
LS-2	6.88	289.81		
LD-2	7.58	289.73		
LR-2	14.31	289.85		
LD-3	4.67	278.62		
LR-3	9.52	278.06		
LD-4	12.04	273.25		
LD-5	7.00	272.94		
LS-6	8.14	274.14		
LD-6	8.00	274.03		
LR-6	10.90	274.59		
LD-8	5.92	272.85		
LR-8	10.40	273.42		
LS-9	8.33	276.72		

-75)

New York State Department of Environmental Conservation

MEMORANDUM

TO: A. K. Gupta, O&M Section
FROM: Bob Edwards, CRP Section
SUBJECT: PAS Monthly Groundwater Measurements

DATE: December 17, 1991

Listed below are the groundwater measurements for the long-term monitoring wells at the PAS site. These are the December, 1991 measurements.

If you have any questions, please see me.

PAS long-term monitoring well groundwater elevations

date: 12/17/91

well id.#	depth to water from top of riser	top of riser elevation	leachate elevations	
SWW-1	8.96	289.33	LCW-1	267.50
SWW-2	14.90	289.37	LCW-2	267.48
SWW-3	15.48	286.50	LCW-3	267.86
SWW-4	13.67	283.60	LCW-4	269.26
SWW-5	9.73	277.02		
SWW-6	6.58	273.06		
SWW-7	6.12	277.93		
SWW-8	4.00	278.24		
SWW-9	16.14	285.55		
SWW-10	10.63	280.43		
SWW-11	6.00	273.50		
SWW-12	6.56	272.82		
LS-2	4.02	289.81		
LD-2	6.79	289.73		
LR-2	10.21	289.85		
LD-3	4.38	278.62		
LR-3	8.71	278.06		
LD-4	10.04	279.25		
LD-5	6.29	278.31		
LS-6	7.94	274.14		
LD-6	7.86	274.03		
LR-6	10.36	274.38		
LD-8	5.29	278.63		
LR-8	9.46	273.42		
LS-9	7.34	276.72		

LEACHATE DISPOSAL RE RD

Pollution Abatement Services

Date: 11/19/91
Name of Contractor: _____
Destination: _____

Pumping Record from Wells to Tank

Well	Before Pumping		Pumping		After Pumping		Notes
	Time	Level	Time Start	Time Stop	Time	Level	
LCW-1	7:26	4,94	7:49	8 0[illegible]	9:35	5,23	
LCW-2	7:24	7,08	7:36	8 0[illegible]	9:33	7,51	
LCW-3	7:23	15,25	7:35	8 0[illegible]	9:32	17.12	
LCW-4	7:21	15,67	7:33	8[illegible]	9 30	16 00	
Tank	7 15	5,92			9.20	4.33	

Pumping from Tank to Disposal Truck

	Before Pumping		After Pumping		Pumping		Volume
	Time	Level	Time	Level	Start	Stop	Pumped
TANK	807	4,00	8 15	6.00	807	8 45	62 00
	852	6,00	9 20	4,33	8:52	9 20	4300

Remarks: _____

By: Bob Edwards

Firm: NYSDEC Telephone #: _____

PAS-

15 (12-75)

New York State Department of Environmental Conservation

MEMORANDUM

TO: A. K. Gupta, O&M Section
FROM: Bob Edwards, CRP Section
SUBJECT: PAS Monthly Groundwater Measurements

DATE: December 17, 1991

Listed below are the groundwater measurements for the long-term monitoring wells at the PAS site. These are the December, 1991 measurements.

If you have any questions, please see me.

PAS long-term monitoring well
groundwater elevations

date: 12/17/91

well id.#	depth to water from top of riser	top of riser elevation	leachate elevations	
SWW-1	8.96	289.33	LCW-1	267.50
SWW-2	14.90	289.37	LCW-2	267.48
SWW-3	15.48	286.50	LCW-3	267.86
SWW-4	13.67	283.60	LCW-4	269.26
SWW-5	9.73	277.02		
SWW-6	6.58	273.06		
SWW-7	6.12	277.93		
SWW-8	4.00	278.24		
SWW-9	16.14	285.55		
SWW-10	10.63	280.43		
SWW-11	6.00	273.50		
SWW-12	6.56	272.02		
LS-2	4.02	289.61		
LD-2	6.73	289.73		
LR-2	10.21	289.85		
LD-3	4.38	276.67		
LR-3	5.71	276.05		
LD-4	10.04	279.25		
LD-5	6.89	277.94		
LS-6	7.94	274.14		
LD-6	7.86	274.03		
LR-6	10.36	274.39		
LD-8	5.29	272.05		
LR-8	9.46	273.42		
LS-9	7.34	276.72		

15 (12-75)

New York State Department of Environmental Conservation

MEMORANDUM

TO: A. K. Gupta, O&M Section
FROM: Bob Edwards, CRP Section
SUBJECT: PAS Monthly Groundwater Measurements

DATE: November 13, 1991

Listed below are the groundwater measurements for the long-term monitoring wells at the PAS site. These are the November, 1991 measurements.

If you have any questions, please see me.

PAS long-term monitoring well
groundwater elevations

date: 11/11/91

well id.#	depth to water from top of riser	top of riser elevation	leachate elevations	
SWW-1	10.12	289.33	LCW-1	267.11
SWW-2	15.18	289.37	LCW-2	267.06
SWW-3	15.33	286.50	LCW-3	267.65
SWW-4	14.75	283.60	LCW-4	270.62
SWW-5	9.77	277.02		
SWW-6	6.42	273.06		
SWW-7	6.35	277.93		
SWW-8	4.29	278.24		
SWW-9	16.67	285.55		
SWW-10	13.08	280.43		
SWW-11	6.12	273.50		
SWW-12	6.83	272.82		
LS-2	6.88	289.81		
LD-2	7.58	289.73		
LR-2	14.31	289.85		
LD-3	4.67	278.62		
LR-3	9.52	278.0[illegible]		
LD-4	12.04	279.25		
LD-5	7.00	274.[illegible]		
LS-6	8.14	274.14		
LD-6	8.00	274.03		
LR-6	10.90	274.39		
LD-8	5.92	272.85		
LR-8	10.40	271.42		
LS-9	8.33	276.72		

A.K.

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233 - 7010

Thomas C. Jorling
Commissioner

OCT 22 1991

Mr. Dharmarajan R. Iyer, Ph.D.
Project Manager
URS Consultants, Inc.
282 Delaware Avenue
Buffalo, NY 14202-1207

RE: Site #7-38-001
Pollution Abatement Services -
Groundwater Elevations and Leachate Pumping

Dear Mr. Iyer:

Attached are the groundwater measurements for the long-term monitoring wells at the PAS site. These elevations were taken on October 14, 1991. Also, attached is completed PAS-4 form for the October leachate pumping.

If you have any questions, please call me at 518/457-0927.

Sincerely,

A. K. Gupta

A. K. Gupta, P.E.
Project Manager
Operation & Maintenance Section
Bureau of Construction Services
Division of Hazardous Waste Remediation

Attachment

a:grwtrele.pas:AKG:et

New York State Department of Environmental Conservation

MEMORANDUM

TO: A. K. Gupta, O&M Section
FROM: Bob Edwards, CRP Section
SUBJECT: PAS Monthly Groundwater Measurements

DATE: October 21, 1991

Listed below are the groundwater measurements for the long-term monitoring wells at the PAS site. These are the October, 1991 measurements.

If you have any questions, please see me.

PAS long-term monitoring well groundwater elevations

date: 10/14/91

well id.#	depth to water from top of riser	top of riser elevation
SWW-1	10.00	289.33
SWW-2	15.29	289.37
SWW-3	15.27	286.50
SWW-4	13.83	283.60
SWW-5	9.71	277.02
SWW-6	6.14	273.06
SWW-7	6.67	277.93
SWW-8	4.58	278.24
SWW-9	16.83	285.55
SWW-10	12.92	280.43
SWW-11	6.14	273.50
SWW-12	6.67	272.82
LS-2	4.71	289.81
LD-2	6.83	289.73
LR-2	13.96	289.85
LD-3	4.92	278.62
LR-3	9.54	278.06
LD-4	12.35	279.25
LD-5	6.79	272.94
LS-6	7.92	274.14
LD-6	7.96	274.03
LR-6	10.69	274.39
LD-8	5.50	272.83
LR-8	10.06	273.42
LS-9	7.92	276.72

LCW-1	267.21
LCW-2	267.19
LCW-3	267.98
LCW-4	270.85

LEACHATE DISPOSAL RECORD

Pollution Abatement Services

Date: [illegible]
Name of Contractor: [illegible]
Destination: [illegible]

Pumping Record from Wells to Tank

Well	Before Pumping		Pumping		After Pumping		Notes
	Time	Level	Time Start	Time Stop	Time	Level	
LCW-1	0636	[illegible]	0645	0755	[illegible]	6.3[illegible]	
LCW-2	0634	[illegible]	0647	[illegible]	[illegible]	[illegible]	
LCW-3	0632	14.3[illegible]	0646	[illegible]	[illegible]	[illegible]	
LCW-4	0630	14.85'	0643	[illegible]	[illegible]	[illegible]	
Tank	0625	6.[illegible]			0752	11,[illegible]	

Pumping from Tank to Disposal Truck

	Before Pumping		After Pumping		Pumping		Volume
	Time	Level	Time	Level	Start	Stop	Pumped
TANK		4.00	[illegible]	[illegible]	[illegible]	[illegible]	7,500
	1250	6.00	1316	7.20	1251	1316	4,500

Remarks: _____

By: _____

Firm: [illegible] Telephone #: [illegible]

PAS-4

Environmental
PRODUCTS & SERVICES, INC.
Corporate Office: 1-800-THE-TANK
P.O. Box 315 • Syracuse, NY 13209-0315

Albany, NY 518-465-4000 | Buffalo, NY 716-876-7100 | Newburgh, NY 914-561-0707 | Rochester, NY 716-436-5660 | Syracuse, NY 315-471-0503
Bridgeport, CT 203-367-3774 | Boston, MA 800-5454-EPS | Springfield, MA 413-731-1000 | Linden, NJ 908-862-8008 | Scranton, PA 717-341-8188

DAILY JOB REPORT

Day/Date: Job Number:

Company:

Tail Gate Safety Meeting: Time _____ Not Applicable ☐ Supervisor/Foreman:

Street:

Health & Safety Site Characterization: Change from Set-up: ☐ Yes ☐ No If yes, describe:

City, State, Zip:

Location of Work:

Call your supervisor. Time _____ Signature: _____

Contact: Telephone:

Job Description:

Change of Scope (Call your supervisor):

Job Complete: ☐ Yes ☐ No Lunch Taken: ☐ Yes ☒ No

Code	Name	Title	Start	Finish	Total

Code	Equipment - Type	Qty.

Code	Material - Type	Qty.

Code	Long-Term Rental	Qty.	In	Out

Sub-Contractors

Per Diem/Number of Men:

Disposal	Brief Description	Quantity Liquids	Quantity Solids
Drums: ☐			
Tanker: ☒			
Roll Off: ☐			
Bags: ☐			
Plastic ☐			

Comments:

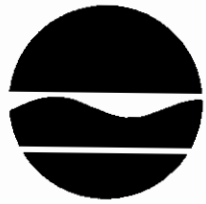
Site: ☐ Yes ☒ No

Environmental Products & Services, Inc.: Customer:

RATE OFFICE Canary - BRANCH OFFICE Pink - CUSTOMER

A.K.

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233-7010



Thomas C. Jorling
Commissioner

SEP 19 1991

Mr. Dharmarajan R. Iyer, Ph.D.
Project Manager
URS Consultants, Inc.
282 Delaware Avenue
Buffalo, NY 14202-1207

RE: Site #7-38-001
Pollution Abatement Services -
Groundwater Elevations and Leachate Pumping

Dear Mr. Iyer:

Attached are the groundwater measurements for the long-term monitoring wells at the PAS site. These elevations were taken on September 9, 1991. Also, attached is completed PAS-4 form for the September leachate pumping.

If you have any questions, please call me at 518/457-0927.

Sincerely,

A. K. Gupta

A. K. Gupta, P.E.
Project Manager
Operation & Maintenance Section
Bureau of Construction Services
Division of Hazardous Waste Remediation

Attachment

a:grwtrele.pas:AKG:et

New York State Department of Environmental Conservation

MEMORANDUM

TO: A. K. Gupta, Operation and Maintenance Section, BCS
FROM: Robert McNamee, Central Projects Section, BCRA
SUBJECT: Pollution Abatement Services Site (7-38-001): Groundwater Levels

DATE: September 19, 1991

Groundwater levels were measured at PAS on September 9, 1991 prior to leachate pumping for removal which occurred on September 10, 1991. The groundwater levels in the wells and leachate levels within the leachate collection trench were as follows:

SWW1	-10.85'	LS2	-9.87'
SWW2	-15.42'	LD2	-8.85'
SWW3	-15.19'	LR2	-15.79'
SWW4	-16.13'	LD3	-8.29'
SWW5	-9.77'	LR3	-11.21'
SWW6	-7.71'	LD4	-14.46'
SWW7	-7.08'	LD5	-8.06'
SWW8	-7.94'	LS6	-9.46'
SWW9	-16.67'	LD6	-8.63'
SWW10	-16.10'	LR6	-11.92
SWW11	-6.00'	LD8	-8.35'
SWW12	-7.94'	LR8	-11.33'
		LS9	-9.52'

LCW1	-4.83'
LCW2	-7.06'
LCW3	-16.31'
LCW4	-14.83'

The electric meter reading on September 9, 1991 after the pumping was 36970.

If you have any questions, give me a call.

cc: R. Edwards

LEACHATE DISPOSAL RECORD

Pollution Abatement Services

Date: 9/10/91
Name of Contractor: CP+S
Destination: Frontier

Pumping Record from Wells to Tank

Well	9/9/91 Before Pumping Time	Before Pumping Level	9/9/91 Pumping Time Start	Pumping Time Stop	9/10/91 After Pumping Time	After Pumping Level	Notes
LCW-1	1511	-4.83'	1700	1830	0711	-6.75'	
LCW-2	1509	-7.06'	1700	1830	0709	-8.98'	
LCW-3	1506	-16.31'	1700	1800	0707	-16.5'	
LCW-4	1503	-14.83'	—	—	0715	-14.81'	
Tank	1505	-7.59'			1830 9/11/91	-4.25'	

Pumping from Tank to Disposal Truck

9/10/91	Before Pumping Time	Before Pumping Level	After Pumping Time	After Pumping Level	Pumping Start	Pumping Stop	Volume Pumped
TANK	0900	-58"	1003	-75½"	0928	1000	~5400 gals
	1003	-75½"	1115	-92"	1020	1111	~5700 gals

Remarks: There's leachate in north portion of tank at a level approximately 3" below baffle. Pumping out of tank did not affect this. Leachate has been there for a while. Don't have a key to open back door to remove leachate. There are about 5,000 gallons of leachate in the north chamber.

By: R. McNamee

Firm: NYSDEC Telephone #: 457 5677

PAS-4

15 (12-75)

New York State Department of Environmental Conservation

MEMORANDUM

TO: A. K. Gupta, Operation and Maintenance Section, BCS
FROM: Robert McNamee, Central Projects Section, BCRA
SUBJECT: Pollution Abatement Services Site (7-38-001): Groundwater Levels

DATE: September 19, 1991

Groundwater levels were measured at PAS on September 9, 1991 prior to leachate pumping for removal which occurred on September 10, 1991. The groundwater levels in the wells and leachate levels within the leachate collection trench were as follows:

SWW1	-10.85'	LS2	-9.87'
SWW2	-15.42'	LD2	-8.85'
SWW3	-15.19'	LR2	-15.79'
SWW4	-16.13'	LD3	-8.29'
SWW5	-9.77'	LR3	-11.21'
SWW6	-7.71'	LD4	-14.46'
SWW7	-7.08'	LD5	-8.06'
SWW8	-7.94'	LS6	-9.46'
SWW9	-16.67'	LD6	-8.63'
SWW10	-16.10'	LR6	-11.92
SWW11	-6.00'	LD8	-8.35'
SWW12	-7.94'	LR8	-11.33'
		LS9	-9.52'

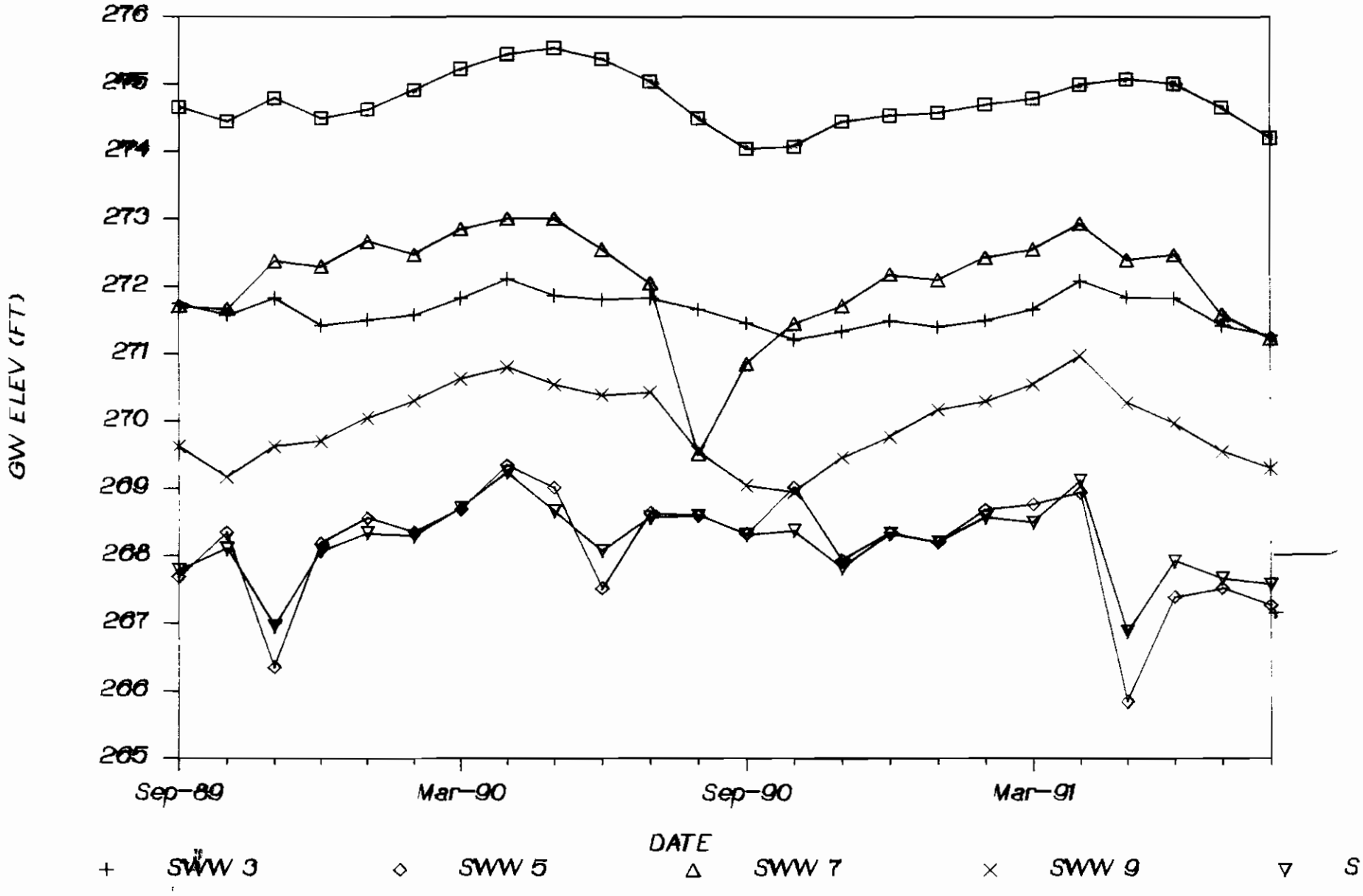
LCW1	-4.83'
LCW2	-7.06'
LCW3	-16.31'
LCW4	-14.83'

The electric meter reading on September 9, 1991 after the pumping was 36970.

If you have any questions, give me a call.

cc: R. Edwards

PAS GW ELEVATIONS



15 (12-75)

New York State Department of Environmental Conservation

MEMORANDUM

TO: A. K. Gupta, Operation and Maintenance Section, BCS
FROM: Robert McNamee, Central Projects Section, BCRA
SUBJECT: Pollution Abatement Services Site (7-38-001): Groundwater Levels

DATE: August 14, 1991

Groundwater levels were measured at PAS on August 12, 1991 prior to conducting a pump test in conjunction with leachate removal which occurred on August 13, 1991. The groundwater levels in the wells and leachate levels within the leachate collection trench were as follows:

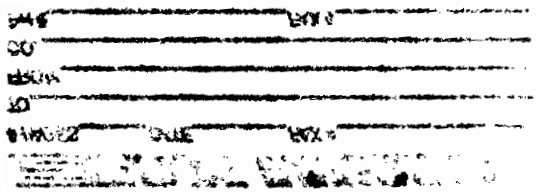
SWW1	-10.625'	LS2	-8.54'
SWW2	-15.17'	LD2	-8.125'
SWW3	-15.23'	LR2	-15.67'
SWW4	-15.75'	LD3	-6.69'
SWW5	-9.75'	LR3	-10.5'
SWW6	-7.83'	LD4	-13.875'
SWW7	-6.71'	LD5	-7.25'
SWW8	-6.375'	LS6	-8.875'
SWW9	-16.25'	LD6	-8.85'
SWW10	-15.375'	LR6	-11.40
SWW11	-5.92'	LD8	-10.58'
SWW12	-7.15'	LR8	-6.48'
		LS9	-7.75'
LCW1	-4.67'		
LCW2	-6.875'		
LCW3	-16.29'		
LCW4	-14.83'		

The electric meter reading on August 13, 1991 after the pump test was 36960.

If you have any questions, give me a call.

cc: R. Edwards

FAX MEMO 716-856-2545
PAGES 2 DATE 8/15/91 FAX # 716-856-2545
TO MR. IYER
FROM A. K. GUPTA
CO.
PH # FAX #



15 (12-75)

New York State Department of Environmental Conservation

MEMORANDUM

TO: A. K. Gupta, Operation and Maintenance Section, BCS
FROM: Robert McNamee, Central Projects Section, BCRA
SUBJECT: Pollution Abatement Services Site (7-38-001): Groundwater Elevations

DATE: August 5, 1991

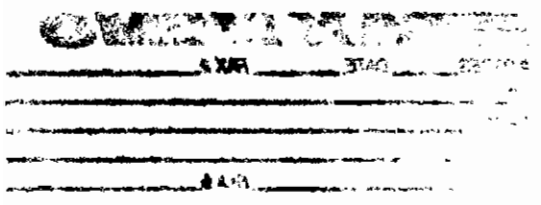
Groundwater levels were measured at PAS on July 15, 1991 prior to conducting a pump test in conjunction with leachate removal which occurred on July 16, 1991. The groundwater elevations in the wells and leachate levels within the leachate collection trench were as follows:

SWW1	278.91	LS2	280.87
SWW2	274.66	LD2	281.38
SWW3	271.42	LR2	274.64
SWW4	267.72	LD3	272.54
SWW5	267.52	LR3	267.81
SWW6	265.48	LD4	266.33
SWW7	271.58	LD5	265.31
SWW8	272.51	LS6	265.06
SWW9	269.55	LD6	265.68
SWW10	266.14	LR6	262.97
SWW11	267.67	LD8	265.50
SWW12	265.32	LR8	262.71
		LS9	267.84
LCW1	267.63		
LCW2	267.59		
LCW3	268.07		
LCW4	270.72		

If you have any questions, give me a call.

cc: R. Edwards

FAX MEMO
PAGES 1 DATE 8/6/91 FAX # 716/856-2545
TO D. IYER
FROM A. K. Gupta
CO. NYS DEC
PH # 457-4254 FAX # 457-7743



A.K.

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233 -7010

Thomas C. Jorling
Commissioner

JUN 2 0 1991

Mr. Dharmarajan R. Iyer, Ph.D
Project Manager
URS Consultants, Inc.
282 Delaware Avenue
Buffalo, New York 14202-1207

RE: PAS Monthly Groundwater Measurements

Dear Mr. Iyer:

Enclosure are the groundwater measurements for the long-term monitoring wells at the PAS site. These elevations were taken on June 10, 1991. Also following are the groundwater measurements for the LCW wells.

Date	Depth to water from top of riser (feet)			
	LCW-1	LCW-2	LCW-3	LCW-4
Top of Riser Elevation (feet)	272.21	274.44	284.36	285.70
5/20/91	6.63	8.88	17.50	14.40
6/10/91	4.94	7.16	16.18	14.40

If you have any questions, please call me at 518/457-0927.

Sincerely,

A. K. Gupta

A. K. Gupta, P.E.
Environmental Engineer 2
Operation & Maintenance Section
Bureau of Construction Services
Division of Hazardous Waste Remediation

Enclosure

a:mogrmeas.pas:AKG:et

New \ x State Department of Environme..al Conservation

MEMORANDUM

TO: A. K. Gupta, O&M Section
FROM: Bob Edwards, CRP Section
SUBJECT: PAS Monthly Groundwater Measurements

DATE: June 11, 1991

Listed below are the groundwater measurements for the long-term monitoring wells at the PAS site. These are the June, 1991 measurements.

If you have any questions, please see me.

PAS long-term monitoring well groundwater elevations

date: 6/10/91

well id.#	depth to water from top of riser	top of riser elevation
SWW-1	9.88	289.33
SWW-2	14.36	289.37
SWW-3	14.67	286.50
SWW-4	15.08	283.60
SWW-5	9.63	277.02
SWW-6	7.79	273.06
SWW-7	5.46	277.93
SWW-8	4.42	278.24
SWW-9	15.58	285.55
SWW-10	13.16	280.43
SWW-11	5.58	273.50
SWW-12	7.33	272.82
LS-2	8.16	289.81
LD-2	8.25	289.73
LR-2	14.16	289.85
LD-3	4.90	278.62
LR-3	6.58	278.06
LD-4	12.00	279.25
LD-5	7.16	272.94
LS-6	8.69	274.14
LD-6	8.33	274.03
LR-6	10.85	274.39
LD-8	6.48	272.83
LR-8	10.00	273.47
LS-9	8.75	276.72

P.S Leachate Collection well Leachate Elevations

DATE	LCW-1	LCW-2	LCW-3	LCW-4	REMARKS
5-7-90	268.46	268.44			
10-15-90	268.53	268.67	268.61	271.76	
1-29-91	268.54	268.48			
2-20-91	268.58	268.61			
3-5-91	268.63	268.65			
4-10-91	268.90	268.88	268.90		
4-29-91	269.02	269.00	269.03	271.32	* PRIOR TO Leachate Pumping TEST
5-20-91	265.58	265.56	266.86	271.30	
6-10-91	267.27	267.29	268.18	271.30	

LCW-1 271

LCW-2

JUN 19

D. Iyer.

Elevations for LCW wells at PAS site

Thanks!

HK.

FILE COPY

Originator _____

Reviewer _____

Reviewer _____

Reviewer _____

MAY 3 1 1991

Mr. Dharmarajan R. Iyer
Project Manager
URS Consultants, Inc.
570 Delaware Avenue
Buffalo, New York 14202-1207

RE: PAS Monthly Groundwater Measurements

Dear Mr. Iyer:

Attached are the groundwater measurements for the long-term monitoring wells at the PAS site. These elevations were taken on May 20, 1991.

If you have any questions, please call me at 518/457-0927.

Sincerely,

A. K. Gupta, P.E.
Environmental Engineer 2
Operation & Maintenance Section
Bureau of Construction Services
Division of Hazardous Waste Remediation

Attachment

a:pasmogw:AKG:et

New York State Department of Environmental Conservation

MEMORANDUM

TO: A. K. Gupta, O&M Section
FROM: Bob Edwards, CRP Section
SUBJECT: PAS Monthly Groundwater Measurements

DATE: May 29, 1991

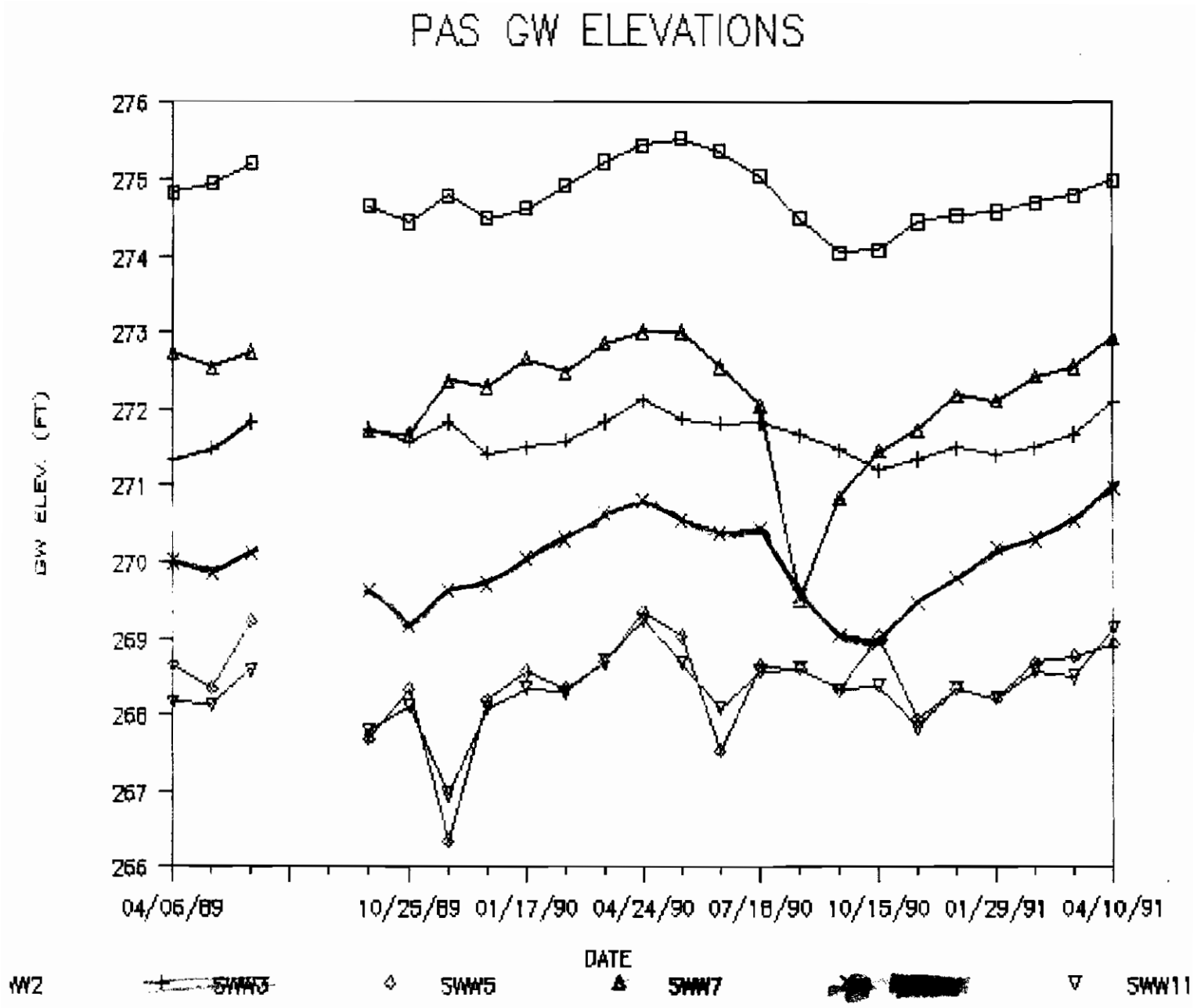
Listed below are the groundwater measurements for the long-term monitoring wells at the PAS site. These are the May, 1991 measurements.

If you have any questions, please see me.

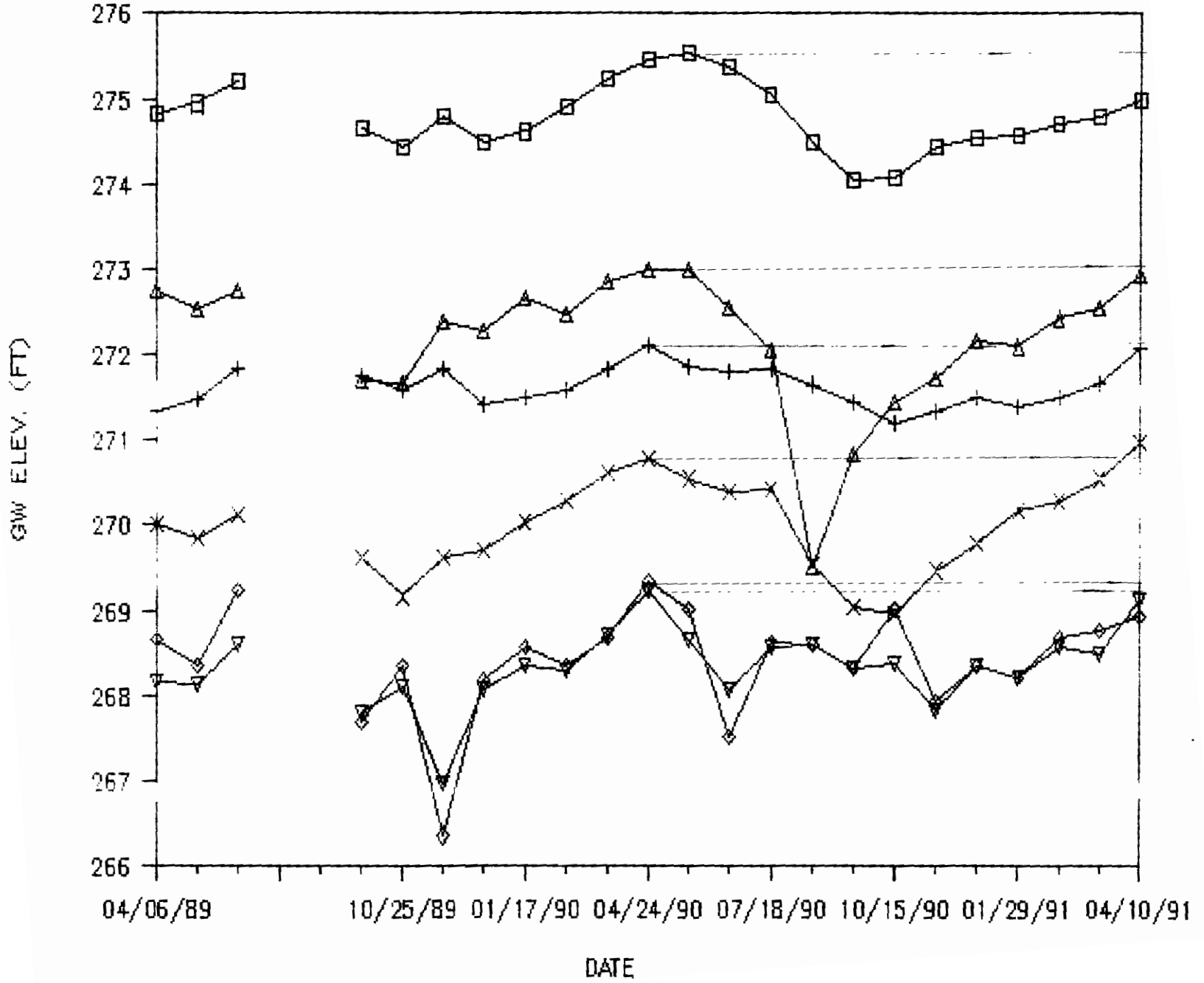
PAS long-term monitoring well groundwater elevations

date: 5/20/91

well id.#	depth to water from top of riser	top of riser elevation
SWW-1	9.70	289.33
SWW-2	14.29	289.37
SWW-3	14.66	286.50
SWW-4	14.93	283.60
SWW-5	11.18	277.02
SWW-6	7.22	273.06
SWW-7	5.54	277.93
SWW-8	4.38	278.24
SWW-9	15.28	285.55
SWW-10	12.56	280.43
SWW-11	6.62	273.50
SWW-12	7.34	272.82
LS-2	7.84	289.81
LD-2	7.90	289.73
LR-2	14.81	289.85
LD-3	4.72	278.62
LR-3	9.39	278.06
LD-4	11.55	279.25
LD-5	7.48	272.94
LS-6	9.00	274.14
LD-6	8.71	274.03
LR-6	10.82	274.39
LD-8	6.26	272.83
LR-8	9.98	273.42
LS-9	8.40	276.72


PAS GW ELEVATIONS
GW ELEV. (FT)
276
275
274
273
272
271
270
269
268
267
266
04/06/89
10/25/89
01/17/90
04/24/90
07/16/90
10/15/90
01/29/91
04/10/91
DATE
MW2
SWW3
SWW5
SWW7
SWW11

PAS GW ELEVATIONS



Mr. Dharmarajan R. Iyer
Project Manager
URS Consultants, Inc.
570 Delaware Avenue
Buffalo, New York 14202-1207

RE: PAS Monthly Groundwater Measurements

Dear Mr. Iyer:

Attached are the groundwater measurements for the long-term monitoring wells at the PAS site. These elevations were taken on April 10, 1991.

If you have any questions, please call me at 518/457-0927.

Sincerely,

A. K. Gupta, P.E.
Environmental Engineer 2
Operation & Maintenance Section
Bureau of Construction Services
Division of Hazardous Waste Remediation

Attachment

a:pasmogw:AKG:et

(12-75)

New York State Department of Environmental Conservation

MEMORANDUM

TO: A. K. Gupta, O&M Section
FROM: Bob Edwards, CRP Section
SUBJECT: PAS Monthly Groundwater Measurements

DATE: April 12, 1991

Listed below are the groundwater measurements for the long-term monitoring wells at the PAS site. These are the March, 1991 measurements.

If you have any questions, please see me.

PAS long-term monitoring well groundwater elevations

date: 4/10/91

well id.#	depth to water from top of riser	top of riser elevation
SWW-1	8.83	289.33
SWW-2	14.38	289.37
SWW-3	14.42	286.50
SWW-4	13.00	283.60
SWW-5	8.08	277.02
SWW-6	5.94	273.06
SWW-7	5.00	277.93
SWW-8	3.42	278.24
SWW-9	14.58	285.55
SWW-10	10.48	280.43
SWW-11	4.38	273.50
SWW-12	6.65	272.82
LS-2	4.00	289.81
LD-2	6.25	289.73
LR-2	12.92	289.85
LD-3	3.67	278.62
LR-3	8.44	278.06
LD-4	9.96	279.25
LD-5	6.65	272.94
LS-6	7.73	274.14
LD-6	8.16	274.03
LR-6	10.92	274.39
LD-8	4.65	272.83
LR-8	8.83	273.42
LS-9	5.42	276.72

AK

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233-7010

Thomas C. Jorling
Commissioner

MAR 18 1991

Mr. Dharmarajan R. Iyer
Project Manager
URS Consultants, Inc.
570 Delaware Avenue
Buffalo, New York 14202-1207

RE: PAS Monthly Groundwater Measurements

Dear Mr. Iyer:

Attached are the groundwater measurements for the long-term monitoring wells at the PAS site. These elevations were taken on March 5, 1991.

If you have any questions, please call me at 518/457-0927.

Sincerely,

A. K. Gupta

A. K. Gupta, P.E.
Environmental Engineer 2
Operation & Maintenance Section
Bureau of Construction Services
Division of Hazardous Waste Remediation

Attachment

a:pasmogw:AKG:et

New York State Department of Environmental Conservation

MEMORANDUM

TO: A. K. Gupta, O&M Section
FROM: Bob Edwards, CRP Section
SUBJECT: PAS Monthly Groundwater Measurements

DATE: MAR 15 1991

Listed below are the groundwater measurements for the long-term monitoring wells at the PAS site. These are the March, 1991 measurements.

If you have any questions, please see me.

PAS long-term monitoring well groundwater elevations

date: 3/05/91

well id.#	depth to water from top of riser	top of riser elevation
SWW-1	7.73	289.33
SWW-2	14.58	289.37
SWW-3	14.83	286.50
SWW-4	11.00	283.60
SWW-5	8.25	277.02
SWW-6	7.00	273.06
SWW-7	5.38	277.93
SWW-8	3.73	278.24
SWW-9	15.00	285.55
SWW-10	9.25	280.43
SWW-11	5.00	273.50
SWW-12	7.29	272.82
LS-2	3.88	289.81
LD-2	5.96	289.73
LR-2	13.08	289.85
LD-3	3.33	278.62
LR-3	6.54	278.06
LD-4	8.65	279.25
LD-5	7.58	272.94
LS-6	8.17	274.14
LD-6	8.67	274.03
LR-6	10.83	274.39
LD-8	3.94	272.83
LR-8	6.88	273.42
LS-9	7.58	276.72

15 (12-75)

New York State Department of Environmental Conservation

MEMORANDUM

TO: A. K. Gupta, O&M Section
FROM: Bob Edwards, CRP Section
SUBJECT: PAS Monthly Groundwater Measurements

DATE: MAR 15 1991

Listed below are the groundwater measurements for the long-term monitoring wells at the PAS site. These are the March, 1991 measurements.

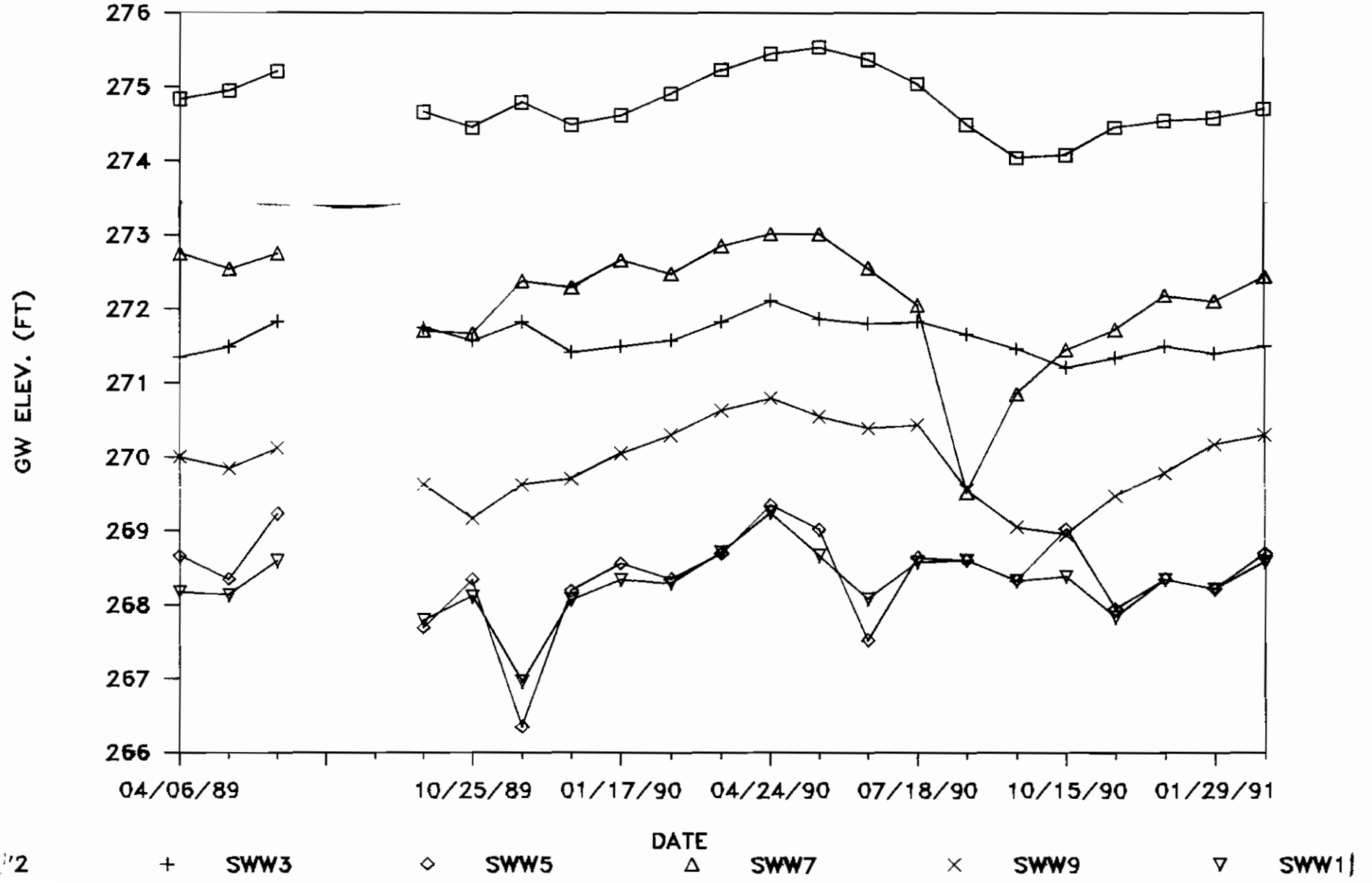
If you have any questions, please see me.

PAS long-term monitoring well groundwater elevations

date: 3/05/91

well id.#	depth to water from top of riser	top of riser elevation
SWW-1	7.73	289.33
SWW-2	14.58	289.37
SWW-3	14.83	286.50
SWW-4	11.00	283.60
SWW-5	8.25	277.02
SWW-6	7.00	273.06
SWW-7	5.38	277.93
SWW-8	3.73	278.24
SWW-9	15.00	285.55
SWW-10	9.25	280.43
SWW-11	5.00	273.50
SWW-12	7.29	272.82
LS-2	3.88	289.81
LD-2	5.96	289.73
LR-2	13.08	289.85
LD-3	3.33	278.62
LR-3	6.54	278.06
LD-4	8.65	279.25
LD-5	7.58	272.94
LS-6	8.17	274.14
LD-6	8.67	274.03
LR-6	10.83	274.39
LD-8	3.94	272.83
LR-8	6.88	273.42
LS-9	7.58	276.72

PAS GW ELEVATIONS



AK

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233-7010

Thomas C. Jorling
Commissioner

FEB 25 1991

Mr. Dharmarajan R. Iyer
Project Manager
URS Consultants, Inc.
570 Delaware Avenue
Buffalo, New York 14202-1207

RE: PAS Monthly Groundwater Measurements

Dear Mr. Iyer:

Attached are the groundwater measurements for the long-term monitoring wells at the PAS site. These elevations were taken on February 20, 1991.

If you have any questions, please call me at 518/457-0927.

Sincerely,

A. K. Gupta

A. K. Gupta, P.E.
Environmental Engineer 2
Operation & Maintenance Section
Bureau of Construction Services
Division of Hazardous Waste Remediation

Attachment

a:pasmogw:AKG:et

New York State Department of Environmental Conservation

MEMORANDUM

TO: A. K. Gupta, O&M Section
FROM: Bob Edwards, CRP Section
SUBJECT: PAS Monthly Groundwater Measurements

DATE: FEB 22 1991

Attached for your information are the groundwater measurements for the long-term monitoring wells at the PAS site. These are the February, 1991 measurements.

If you have any questions, please see me.

Attachment

PAS long-term monitoring well groundwater elevations

date: 2/20/91

well id.#	depth to water from top of riser	top of riser elevation
SWW-1	8.69	289.33
SWW-2	14.67	289.37
SWW-3	15.00	286.50
SWW-4	12.16	283.60
SWW-5	8.33	277.02
SWW-6	7.58	273.06
SWW-7	5.50	277.93
SWW-8	3.54	278.24
SWW-9	15.25	285.55
SWW-10	10.08	280.43
SWW-11	4.92	273.50
SWW-12	7.29	272.82
LS-2	4.08	289.81
LD-2	6.38	289.73
LR-2	13.58	289.85
LD-3	2.00	278.62
LR-3	7.25	278.06
LD-4	9.50	279.25
LD-5	6.08	272.94
LS-6	8.08	274.14
LD-6	9.00	274.03
LR-6	11.58	274.39
LD-8	4.92	272.83
LR-8	9.16	273.42
LS-9	7.42	276.72

A.K.

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233- 7010

JAN 31 1991

Thomas C. Jorling
Commissioner

Mr. Dharmarajan R. Iyer
Project Manager
URS Consultants, Inc.
570 Delaware Avenue
Buffalo, New York 14202-1207

RE: PAS Monthly Groundwater Measurements

Dear Mr. Iyer:

Attached are the groundwater measurements for the long-term monitoring wells at the PAS site. These elevations were taken on January 29, 1991.

If you have any questions, please call me at 518/457-0927.

Sincerely,

A. K. Gupta, P.E.
Environmental Engineer 2
Operation & Maintenance Section
Bureau of Construction Services
Division of Hazardous Waste Remediation

Attachment

a:pasmogw:AKG:et

New York State Department of Environmental Conservation

MEMORANDUM

TO: A. K. Gupta
FROM: Bob Edwards
SUBJECT: PAS Monthly Groundwater Measurements

DATE:

JAN 30 1991

Attached for your information are the groundwater measurements for the long-term monitoring wells at the PAS site. These are the January, 1991 measurements.

If you have any questions, please see me.

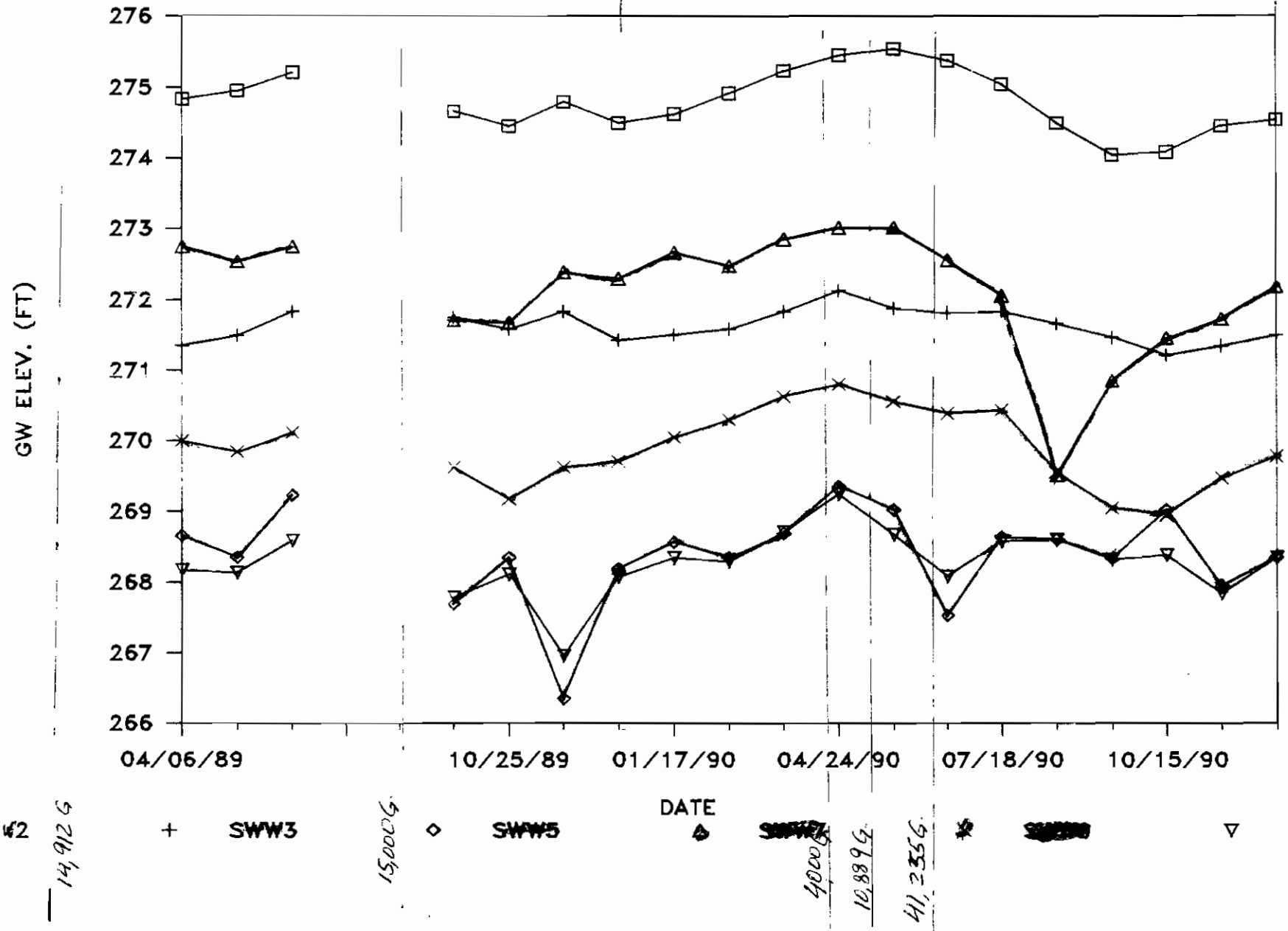
Attachment

PAS long-term monitoring well groundwater elevations

date: 1/29/91

well id.#	depth to water from top of riser	top of riser elevation
SWW-1	8.79	289.33
SWW-2	14.79	289.37
SWW-3	15.10	286.50
SWW-4	14.33	283.60
SWW-5	8.81	277.02
SWW-6	7.96	273.06
SWW-7	5.83	277.93
SWW-8	3.58	278.24
SWW-9	15.38	285.55
SWW-10	11.04	280.43
SWW-11	5.29	273.50
SWW-12	8.08	272.82
LS-2	7.08	289.81
LD-2	7.77	289.73
LR-2	13.83	289.85
LD-3	4.58	278.62
LR-3	9.54	278.06
LD-4	10.25	279.25
LD-5	8.21	272.94
LS-6	9.42	274.14
LD-6	9.00	274.03
LR-6	12.16	274.39
LD-8	6.16	272.83
LR-8	9.67	273.42
LS-9	8.40	276.72

PAS GW ELEVATIONS



PAS GROUNDWATER ELEVATIONS LONG-TERM MONITORING WELLS

	date	SWW1		SWW2		SWW3	
		tor	gr.286.2 elev 289.33	tor	gr.286.3 elev 289.37	tor	gr.286 elev 286.5
4	4/6/89	-8.94	280.39	-14.54	274.83	-15.15	271.35
5	5/4/89	-9.5	279.82	-14.42	274.95	-15	271.49
6	6/5/89	-9.5	279.82	-14.16	275.21	-14.67	271.83
7							
8							
9	9/11/89	-10.44	278.89	-14.71	274.66	-14.75	271.75
10	10/25/89	-10.13	279.2	-14.92	274.45	-14.92	271.58
11	11/12/89	-9.75	279.58	-14.58	274.79	-14.67	271.83
12	12/28/89	-9.92	279.41	-14.88	274.49	-15.08	271.42
1	1/17/90	-8.75	280.58	-14.75	274.62	-15	271.5
2	2/14/90	-8.29	281.04	-14.46	274.91	-14.92	271.58
3	3/28/90	-8.67	280.66	-14.14	275.23	-14.67	271.83
4	4/24/90	-8.54	280.79	-13.92	275.45	-14.38	272.12
5	5/7/90	-9.16	280.17	-13.83	275.54	-14.63	271.87

SWW4		SWW5		SWW6		SWW7	
	gr.282.9		gr.275.9		gr.270.9		gr.275.3
tor	elev	tor	elev	tor	elev	tor	elev
	283.6		277.02		273.06		277.93
-12.81	270.79	-8.36	268.66	-6.91	266.15	-5.18	272.75
-14.79	268.81	-8.67	268.35	-7.25	265.81	-5.39	272.54
-15.08	268.52	-7.79	269.23	-7.21	265.85	-5.18	272.75
-15.92	267.68	-9.33	267.69	-7.75	265.31	-6.22	271.71
-14.6	269	-8.67	268.35	-6.33	266.73	-6.26	271.67
-13.54	270.06	-10.67	266.35	-7.75	265.31	-5.55	272.38
-15.56	268.04	-8.83	268.19	-8.21	264.85	-5.64	272.29
-13.42	270.18	-8.46	268.56	-7.44	265.62	-5.27	272.66
-13.54	270.06	-8.67	268.35	-7.71	265.35	-5.46	272.47
-14.25	269.35	-8.33	268.69	-7.75	265.31	-5.08	272.85
-13.71	269.89	-7.67	269.35	-6.75	266.31	-4.92	273.01
-14.63	268.97	-8	269.02	-7.42	265.64	-4.92	273.01

SWW8		SWW9		SWW10		SWW11	
	gr.275.7		gr.283.3		gr.279.3		gr.271.
tor	elev	tor	elev	tor	elev	tor	elev
	278.24		285.55		280.43		273.5
-3.94	274.3	-15.63	270	-9.79	270.64	-5.33	268.17
-4.25	273.99	-15.71	269.84	-11.18	269.25	-5.37	268.13
-4.06	274.18	-15.43	270.12	-11.39	269.04	-4.91	268.59
-6.31	271.93	-15.92	269.63	-14.66	265.77	-5.71	267.79
-4.56	273.68	-16.38	269.17	-13.85	266.58	-5.39	268.11
-4.31	273.93	-15.92	269.63	-10.6	269.83	-6.54	266.96
-4.44	273.8	-15.84	269.71	-12.43	268	-5.42	268.08
-3.67	274.57	-15.5	270.05	-10	270.43	-5.16	268.34
-3.92	274.32	-15.25	270.3	-10.16	270.27	-5.21	268.29
-4.16	274.08	-14.92	270.63	-10.69	269.74	-4.79	268.71
-3.79	274.45	-14.75	270.8	-10.44	269.99	-4.25	269.25
-3.67	274.57	-15	270.55	-11.42	269.01	-4.83	268.67

SWW12		LS2		LD2		LR2	
	gr.270.2		gr.287.5		gr.287.1		gr.287.5
tor	elev	tor	elev	tor	elev	tor	elev
	272.82		289.81		289.73		289.85
-7.21	265.61						
-7.56	265.26	-5.75	284.06	-8.57	281.16	-14.89	274.96
-7.69	265.13	-6.5	283.31	-8.77	280.96	-15.15	274.7
-7.94	264.88	-9.54	280.27	-10.07	279.66	-16.76	273.09
-6.27	266.55	-6.17	283.64	-5.8	283.93	-15.68	274.17
-7.69	265.13	-5.25	284.56	-8.32	281.41	-14.6	275.25
-7.85	264.97	-7.67	282.14	-8.61	281.12	-14.93	274.92
-7.35	265.47	-4.16	285.65	-6.25	283.48	-13.92	275.93
-8	264.82	-4.79	285.02	-6.75	282.98	-13.83	276.02
-8.12	264.7	-6.46	283.35	-7.42	282.31	-14	275.85
-7.42	265.4	-5.88	283.93	-7.16	282.57	-13.83	276.02
-7.42	265.4	-4.9	284.91	-7.12	282.61	-14.16	275.69

LD3		LR3		LD4		LD5	
	gr.275.8		gr.275.5		gr.276.3		gr.270.2
tor	elev	tor	elev	tor	elev	tor	elev
	278.62		278.06		279.25		272.94
-4.38	274.24	-8.74	269.32	-9.41	269.84	-7.21	265.73
-4.42	274.2	-9.2	268.86	-10.77	268.48	-7.52	265.42
-4.67	273.95	-9.32	268.74	-10.77	268.48	-7.69	265.25
-6.71	271.91	-10.9	267.16	-13.18	266.07	-7.96	264.98
-4.96	273.66	-9.51	268.55	-12.75	266.5	-6.15	266.79
-4.63	273.99	-9.32	268.74	-10.23	269.02	-7.77	265.17
-4.79	273.83	-9.82	268.24	-11.35	267.9	-7.36	265.58
-4	274.62	-9	269.06	-9.38	269.87	-7.21	265.73
-4.33	274.29	-8.92	269.14	-9.54	269.71	-7.92	265.02
-4.46	274.16	-9	269.06	-9.83	269.42	-8.25	264.69
-4.21	274.41	-8.83	269.23	-9.71	269.54	-7.58	265.36
-3.92	274.7	-8.88	269.18	-10.58	268.67	-7.67	265.27

	LD6		LR6		LD8	
	gr.271.4		gr.270.9		gr.270.9	
tor	elev	tor	elev	tor	elev	tor	elev
	274.14		274.03		274.39		272.83
-8.19	265.95	-8.42	265.61	-10.64	263.75	-5.52	267.31
-8.63	265.51	-9.75	264.28	-11.26	263.13	-6.52	266.31
-8.79	265.35	-8.58	265.45	-11.3	263.09	-6.89	265.94
-9.27	264.87	-8.58	265.45	-12.39	262	-7.14	265.69
-7.54	266.6	-7.58	266.45	-10.84	263.55	-5.66	267.17
-9.21	264.93	-8.75	265.28	-11.51	262.88	-6.48	266.35
-9.54	264.6	-9.29	264.74	-11.8	262.59	-7.23	265.6
-8.27	265.87	-8.88	265.15	-11	263.39	-6	266.83
-9.16	264.98	-8.88	265.15	-11	263.39	-5.58	267.25
-9.33	264.81	-9	265.03	-11.16	263.23	-6.46	266.37
-8.65	265.49	-8.54	265.49	-10.83	263.56	-6	266.83
-8.83	265.31	-8.58	265.45	-11	263.39	-5.58	267.25

LR8		LS9	
	gr.270		gr.274
tor	elev	tor	elev
	273.42		276.72
-7.64	265.78	-8.27	268.45
-8.72	264.7	-8.34	268.38
-8.8	264.62	-8.63	268.09
-10.26	263.16	-9.63	267.09
-8.39	265.03	-8.46	268.26
-8.64	264.78	-8.54	268.18
-9.51	263.91	-8.71	268.01
-7.92	265.5	-8.21	268.51
-7.58	265.84	-8.16	268.56
-8.67	264.75	-8.5	268.22
-7.88	265.54	-8.25	268.47
-8.16	265.26	-8.42	268.3