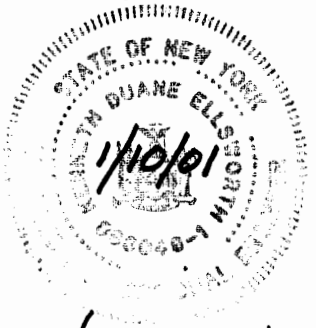
KEYSTONE ASSOCIATES
ARCHITECTS • ENGINEERS • SURVEYORS, LLC

CONSTRUCTION CERTIFICATION REPORT
GORICK C & D LANDFILL CLOSURE
TOWN OF KIRKWOOD
BROOME COUNTY, NEW YORK

December 6, 2000
Amended: January 8, 2001

Prepared For:
GORICK CONSTRUCTION COMPANY
27 TRACK DRIVE
BINGHAMTON, NEW YORK 13904
PH: 607-775-1765
FAX: 607-775-1608



Kenneth D. Ellsworth

Kenneth D. Ellsworth, PE

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Project No. 51.7196

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GORICK C&D LANDFILL CLOSURE
TOWN OF KIRKWOOD
BROOME COUNTY, NEW YORK

INTRODUCTION

This document details the activities for the closure of the Gorick C&D Landfill. The site is located on a 35-acre parcel in the Town of Kirkwood, Broome County, New York. The landfill is approximately 5 miles southeast of Binghamton, off NYS Route 11, near Five-Mile Point.

The landfill, NYSDEC Site No. 7-04-019, is approximately 18 acres. The final cover system was constructed following 6NYCRR Part 360 guidelines.

CERTIFICATION

It is hereby certified that the remedial design was implemented and all construction activities were completed in substantial accordance with the Department approved remedial design.

SITE PREPARATION

Prior to final cover placement some site remediation was required. In December 1995 Gorick Construction began regrading the existing C&D debris in order to reach design subgrade elevations. This included regrading the entire south and west slopes to consolidate debris and obtain the desired gradient. In conjunction with regrading the closure area an area of debris in the north west corner of the parcel was relocated into the closure area.

After completion of regrading and relocating debris the balance of the site was brought to grade using Alternate Grading Material (AGM). This activity was on going as AGM material became available from December 1995 until August 1999 .

Site remediation also included removing accumulated scrap. Gorick Construction began sorting scrap in January 1996 and were substantially complete with scrap removal in March 1996.

ENVIRONMENTAL MONITORING

On April 11, 1996 Buck Environmental Laboratories conducted an explosive gas survey. A probe was inserted 1'-2" into the soil at 21 locations and a methane L.E.L. measurement was made on gas pumped from the probe. No methane was detected in this survey.

The first ground water analysis during the remediation process was begun on April 10, 1996. Buck Environmental Laboratories sampled and analyzed 9 wells at the Gorick C&D Landfill and 2 surface water samples from the Susquehanna River. Wells were purged on April 10, 1996 and sampled on April 11, 1996. The analytic list was taken from the Baseline Parameter List of NYS Part 360.

On March 14, 1997 an RFP for well installation and abandonment was sent out. May 13-May 20, 1997 Maxim Technologies installed new monitoring well MW 8 (R)S and abandoned wells 7S, *8S, 9S,* and 10S. The wells were abandoned following NYSDEC Groundwater Monitoring Well Decommissioning Procedures.

A second round of monitoring well sampling occurred in October 1997. The third round occurred in December 1998.

FINAL COVER SYSTEM

The final cover system consists of a low permeability barrier layer composed of 18 inches of compacted low permeability soil as outlined in 6 NYCRR Part 360-7.9(j)(1) (October 9, 1993 regulations). Twenty-four inches of barrier protection soil was placed over the low permeability barrier layer as required by 6 NYCRR Part 360-7.9(I)(2). Finally a six-inch topsoil layer capable of sustaining vegetative cover was placed, as required by 6 NYCRR Part 360-7.9(I)(3). A passive gas vent system consisting of approximately 3200 feet of collection trench and piping was installed beneath the barrier layer. Outlet vents were installed approximately 100 feet apart.

On March 17, 1997 Gorick Construction began processing low permeability barrier soil at the Klepfer Pit. Gorick Construction began placing intermediate cover over the AGM on March 18, 1997. This provided a solid, workable surface for placement of low permeability barrier soil. Subgrade preparation was begun in the Phase I area, which includes the 100 year floodplain of the Susquehanna River.

On April 16, 1997 material qualification testing of the low permeability barrier soil was started. For details of the testing see the QA/QC manual.

Approval for the final cover system QA/QC plan was received from NYSDEC on June 3, 1997. On June 9, 1997 placement of the final cover system began with the first lift of low permeability barrier soil placement in Phase I.

As the designated acres were completed they were tested to verify compliance with the specifications. Upon receipt of passing soil test results the second lift of low permeability barrier soil was placed. This was followed by QC testing of the second lift. When the second lift was complete the areas were examined to insure the proper lift thickness were in place from the stakeout grid on the closure and an as-built survey performed by Southern Tier Surveying.

After completion, testing, and surveying of the 18-inch low permeability barrier soil layer the 24-inch barrier protection layer was started. Phase I barrier protection was started on August 1, 1997. Following the placement, inspection, testing, and surveying of this layer the cobble slope protection in the floodplain zone was started. Phase I slope protection installation occurred between August 26 and September 2, 1997. Phase I topsoil was placed in mid September with seeding and mulching on September 26, 2000.

Phase I capping was completed in September 1997. This included Acres 1-7. Closure activities from September 1997 to March 1998 included placing additional AGM to reach design subgrade elevations.

1998 ACTIVITIES

In March 1998 closure activities resumed. Additional low permeability barrier soil was processed and qualification testing performed. The landfill subgrade was fine graded and compacted in preparation of low permeability barrier soil placement. The volume of AGM placed allowed preparation of Acres 8-12. Capping resumed with the placement of the first lift of low permeability barrier layer on May 8, 1998.

The passive gas venting system was begun on May 18, 1998. This included 6-inch Perforated PVC laterals with gravel bedding and geotextile wrap. Risers were installed every l00 feet. The gas vents were installed at the locations shown on the closure plan and according to the approved detail. Vents were placed only in areas with completed AGM placement and approved subgrade.

The low permeability barrier soil layer was completed on acres 8-12 late in 1998. The weather allowed barrier protection material placement on acres 8 and 9 only. The balance of barrier protection material on acres 10, 11, 12 was completed in April 1999.

1999 CLOSURE ACTIVITIES

AGM was placed throughout the winter months. This allowed more area to be fine graded and prepared for capping. The balance of barrier protection material on acres 10, 11, and 12 was completed in April.

AGM continued to be placed to complete subgrade preparation. In July 1999 the gas vent system was continued in available areas. It took until August 1999 to obtain enough AGM to meet design subgrade elevations. Upon final placement of AGM the passive gas vent system was completed. This was closely followed by placing low permeability barrier soil in acres 13-18. After the first lift was placed, tested, and accepted the second lift of low permeability barrier soil was installed. This was completed in January 2000. Due to unfavorable weather further closure activities were delayed until spring.

2000 CLOSURE ACTIVITIES

Closure activities at the Gorick C&D Landfill resumed in March 2000 with the placement of the barrier protection layer on Acres 13-18. Barrier protection layer placement was completed in April 2000, with Quality Control testing completed on May 3, 2000.

Upon completion, testing and as-built surveys of the barrier protection layer final topsoil placement began on Acres 8-18. Topsoil installation was completed on June 26, 2000. Final seeding occurred on July 7 and 8, 2000.

Table 1 Low Permeability Barrier Layer Testing Summary

Material Source: Klepfer Pit, Track Drive, Binghamton
Material Volume: 18 acres @1.5 feet thick = 43,560 cubic yards

Test	Frequency	Required	Actual
Qualification Testing:			
Soil Particle Size, ASTM D422	1 test/2500 cy	18	16
Atterburg Limits	1 test/1000 cy	44	37
Lab Permeability	1 test/5000 cy	9	12
Moisture Density ASTM D698	1 test/5000 cy	9	12
Construction Testing:			
In-Place Density, ASTM D2922	9 tests/ac/lift	324	377
In-Place Moisture Content ASTM D3017	9 tests/ac/lift	324	377
Shelby Tube Permeability, ASTM D5084	1 test/ac/lift	36	38

APPENDIX A
PROGRESS REPORTS

PHONE (607) 775-1765
FAX (607) 775-1608

EXCAVATION
DEMOLITION
CRANE SERVICE

GORICK CONSTRUCTION CO., INC.

27 TRACK DRIVE
BINGHAMTON, NEW YORK 13904

GORICK C & D LANDFILL

MAY 1998 PROGRESS

5/1/98	Fine Grade Subgrade
5/7/98	Fine Grade Subgrade Southern Tier Surveying Taking Subgrade As - Builts
5/13/98	Begin Placing First Lift Low Perm Soil
5/14/98	Place AGM Place First Lift Low Perm Soil
5/15/98	Place AGM Place First Lift Low Perm Soil
5/16/98	Place First Lift Low Perm Soil
5/18/98	Place AGM Begin Gas Vent Installation with 6 in PVC Clean Gravel And Geotextile Wrap
5/19/98	Continue Installing Gas Vents
5/20/98	Install Gas Vents Place AGM Maxim Technologies Took Shelby Tubes for First Lift Acres 8, 9, 10

NE (607) 775-1765
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JUNE 1998 PROGRESS

6/2/98	Complete Gas Vents in Available Areas Place AGM
6/3/98	Place AGM
6/4/98	Fine Grade Subgrade
6/5/98	Place AGM
6/8/98	Place AGM Shim and Fine Grade Subgrade
6/9/98	Fine Grade Subgrade
6/10/98	Southern Tier Surveying Doing As - Builts
6/11/98	Place AGM
6/12/98	Place AGM
6/16/98	Place AGM
6/17/98	Place AGM
6/18/98	Place AGM
6/19/98	Place AGM

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JULY 1998 PROGRESS

7/9/98	Place AGM
7/16/98	Place AGM
7/27/98	Place AGM
7/28/98	Place AGM

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NOVEMBER 1998 PROGRESS

11/02/98	Place AGM
11/03/98	Place Barrier Protection Layer - Acres 8 & 9 Place AGM
11/04/98	Place Barrier Protection Layer
11/05/98	Place Barrier Protection Layer Place AGM
11/06/98	Place AGM
11/07/98	Place AGM
11/12/98	Place Barrier Protection Layer
11/13/98	Place Barrier Protection Layer
11/17/98	Place AGM
11/19/98	Place AGM
11/20/98	Place Second Lift Low Perm Soil - Acres 10, 11, 12
11/23/98	Place Low Perm Soil
11/24/98	Place Low Perm Soil Place AGM
11/25/98	Place Low Perm Soil Place AGM Maxim on-site for IPD'S and Shelby Tubes
11/30/98	Place Barrier Protection Layer

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DECEMBER 1998 PROGRESS

12/21/98	Place AGM
12/30/98	Place AGM
12/31/98	Place AGM

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JANUARY 1998 PROGRESS

01/05/99	Place AGM
01/06/99	Place AGM

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FEBRUARY 1999 PROGRESS

02/15/99	Place AGM
02/16/99	Place AGM
02/17/99	Place AGM
02/18/99	Place AGM
02/22/99	Place AGM

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MARCH 1999 PROGRESS

03/12/99	Place AGM
03/15/99	Place AGM
03/17/99	Place AGM

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APRIL 1999 PROGRESS

04/01/99	Place AGM
04/05/99	Screen Low Perm Mobilize For Capping
04/06/99	Screen Low Perm Place Barrier Protection — Acres 10, 11, 12 Schloss As Builts
04/07/99	Screen Low Perm Place Barrier Protection
04/08/99	Screen Low Perm Place Barrier Protection
04/09/99	Screen Low Perm Place Barrier Protection Install AGM to Obtain Design Subgrade
04/13/99	Screen Low Perm Place Barrier Protection
04/14/99	Screen Low Perm Place Barrier Protection
04/15/99	Place Barrier Protection
04/16/99	Place Barrier Protection - Rain Out Screen Low Perm
04/19/99	Screen Low Perm
04/20/99	Place Barrier Protection
04/21/99	Place Barrier Protection
04/26/99	Place Barrier Protection
04/27/99	Place Barrier Protection
04/28/99	Place AGM Place Barrier Protection
04/29/99	Place AGM Place Barrier Protection
04/30/99	Place AGM Place Barrier Protection

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MAY 1999 PROGRESS

05/03/99	Place AGM
05/04/99	Place AGM
05/05/99	Place AGM
05/06/99	Place AGM
05/07/99	Place AGM
05/10/99	Place AGM
05/11/99	Place AGM
05/12/99	Place AGM
05/13/99	Place AGM
05/14/99	Place AGM
05/17/99	Place AGM
05/18/99	Place AGM
05/19/99	Place AGM
05/20/99	Place AGM
05/21/99	Place AGM
05/24/99	Place AGM
05/25/99	Place AGM
05/26/99	Place AGM
05/27/99	Place AGM
05/28/99	Place AGM

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JUNE 1999 PROGRESS

06/16/99	Level AGM
06/28/99	Place AGM
06/29/99	Place AGM
06/30/99	Level AGM

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JULY 1999 PROGRESS

07/01/99	Install Gas Vents	IN AREAS WITH PREPARED SUBGRADE
07/02/99	Install Gas Vents	
07/06/99	Install Gas Vents Level AGM	
07/09/99	Level AGM	
07/19/99	Install Gas Vents Level AGM	

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AUGUST 1999 PROGRESS

08/02/99	Place AGM
08/06/99	Place AGM
08/07/99	Place AGM
08/10/99	Place AGM
08/11/99	Place AGM

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DECEMBER 1999 PROGRESS

12/06/99	Level AGM Install Gas Vents
12/07/99	Level AGM Install Gas Vents
12/08/99	Level AGM Install Gas Vents — GAS VENTS COMPLETED
12/09/99	Shim AGM — SUBGRADE FINALIZED
12/10/99	Shim AGM — SCHMSS AS BUILTS
12/13/99	Place Low Perm — ACRES 13 → 18
12/14/99	Place Low Perm — SCHMSS AS BUILTS
12/15/99	Place Low Perm
12/16/99	Place Low Perm
12/17/99	Place Low Perm
12/20/99	Place Low Perm — MAXIM IPD's & SHADEYS 1ST LIFT ACRES 13, 14, 16
12/21/99	Place Low Perm
12/22/99	Place Low Perm
12/23/99	Place Low Perm
12/27/99	Place Low Perm
12/28/99	Place Low Perm
12/29/99	Place Low Perm — MAXIM IPD's & SHADEYS ACRES 15, 17, 18
12/30/99	Place Low Perm ← Complete Low Perm 2nd LIFT

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JANUARY 2000 PROGRESS

1/5/00 As Built Low Perm (Schiass)

1/7/00 Maxim Technologies complete second lift low perm soil testing acres 13-18

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MARCH 2000 PROGRESS

Acres 13 → 18

3/20/00	Place barrier protection layer from on-site stockpile
3/21/00	Place barrier protection layer from on-site stockpile
3/22/00	Place barrier protection material from on-site stockpile
3/23/00	Place barrier protection material from on-site stockpile
3/24/00	Place barrier protection layer from on-site stockpile
3/27/00	Haul in barrier protection material from Klepfer pit - Schiess As Built Survey

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APRIL 2000 PROGRESS

4/17/00	Haul in, place and compact barrier protection
4/26/00	Place barrier protection from Klepfer's Pit
4/27/00	Place barrier protection layer
4/28/00	Place barrier protection from Klepfer's Pit

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MAY 2000 PROGRESS

5/1/00	Fine grade barrier protection Begin hauling in topsoil
5/2/00	Fine grade and recompact barrier protection layer Haul in and place topsoil
5/3/00	Haul in and place topsoil Maxim Technologies completing Barrier Protection in-place testing
5/4/00	Place topsoil
5/5/00	Place topsoil
5/8/00	Place topsoil
5/9/00	Place topsoil
5/10/00	Place topsoil
5/18/00	Fine grade topsoil
5/31/00	Fine grade topsoil

— SCHNESS AS BUILT SURVEY OF BARRIER PROTECTION

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JUNE 2000 PROGRESS

6/1/00	Haul in and place topsoil
6/2/00	Place and fine grade topsoil
6/3/00	Place and fine grade topsoil
6/5/00	Fine grade topsoil
6/6/00	Fine grade topsoil
6/7/00	Haul in and place topsoil
6/9/00	Fine grade topsoil, start cleaning up around vents
6/10/00	Fine grade topsoil
6/12/00	Haul in and fine grade topsoil
6/26/00	Fine grade topsoil, adjust gas vent risers

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JULY 2000 PROGRESS

7/7/00 Seed and mulch cap

7/8/00 Seed and mulch cap

7/12/00 FINAL AS-BUILTS COMPLETED CAP (SCHAAL)

APPENDIX B
NEW MONITORING WELL SUBSURFACE LOG AND PIEZOMETER DETAILS

DATE STARTED: 5-13-97
FINISHED: 5-13-97

MAXIM TECHNOLOGIES INC

SUBSURFACE LOG

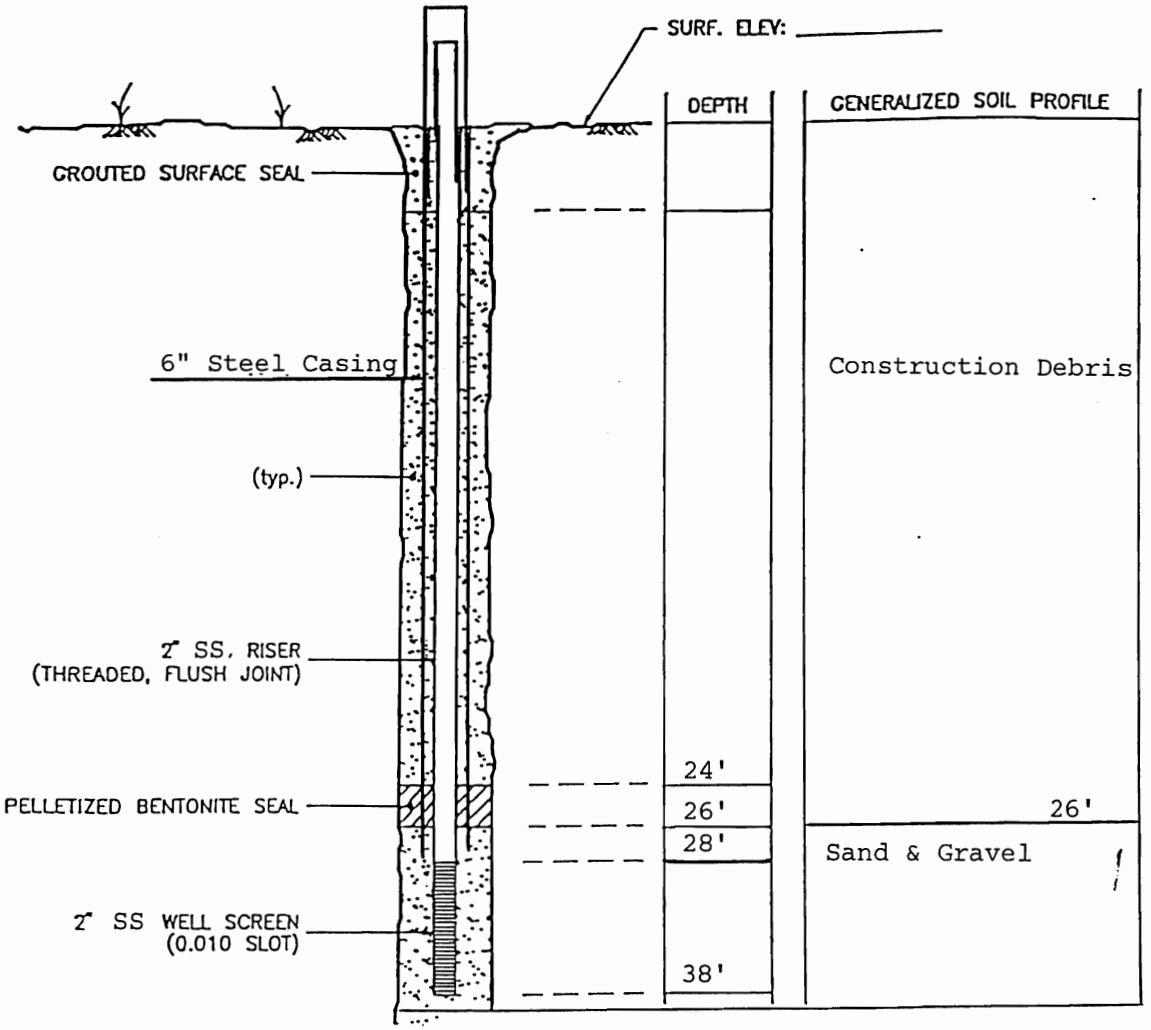
6101700612

BORING NO.: MW-8RS
SURF. ELEV.: NA
SHEET 1 OF 1

PROJECT: Gorick C & D Landfill
LOCATION: Kirkwood, New York
CLIENT: Gorick Construction

DEPTH-FT.	SAMPLES	SAMPLE NO	BLOWS ON SAMPLER 0/6	6/12	12/18	18/24	N	REC	SYMBOL	SOIL OR ROCK CLASSIFICATION	NOTES
0		1	8	8	6	5	14	1.4		Gray SILTY CLAY w/fine-coarse SAND, little fine gravel (Firm-Moist)	
		2	3	5	3	5	8	1.6			
5		3	7	5	3	3	8	1.0		Similar w/WOOD possible FILL to 10.0'	
		4	5	10	10	5	20	0.7			
		5	1	1	1	3	2	0.6			
10		6	9	24	20	11	44	0		No Recovery	
		7	9	16	1	2	17	0.1		WOOD	
15		8	3	10	25	21	35	1.2		Organics, Gray SILT, fine SAND, trace fill	
		9	5	8	5	7	13	0.3		Brown/Gray SILT, trace cinders	
		10	20	34	10	5	44	0.1		Brown WOOD, Spoon Bouncing	
20		11	1	3	12	7	15	1.0		Gray/Brown CEMENT WOOD, COAL & Cinders	
		12	8	8	5	7	13	0.8		Brown WOOD & CINDERS (Loose-Moist)	
		13	8	3	2	2	5	0			
25		14	8	8	8	12	16	0.7		Gray fine-coarse SAND & fine GRAVEL (Loose-Wet)	
		15	9	13	15	11	28	0.5			
30		16	11	10	10	11	20	1.2			
		17	18	15	12	11	27	0.9		Brown fine-coarse SAND & fine GRAVEL, Some Silt (Firm-Wet)	
35		18	40	20	16	14	36	1.2			
		19	18	14	16	16	30	0.7			
40										Boring Terminated @ 38.0'	

DRILLER: J. Warner
DRILL RIG:
METHOD OF INVESTIGATION: 4 1/2" I.D. Hollow Stem Auger (ASTM D-1586)
WEATHER:
CLASSIFIED BY: Driller



PIEZOMETER No.

MW-8RS

MAXIM TECHNOLOGIES INC

Empire Soils Investigations, Inc., Division

PIEZOMETER DETAILS

GORICK C&D LANDFILL
KIRKWOOD, NEW YORK

SCALE:	
DATE:	6-17-97
DRAWN BY:	
REV'D BY:	
DWG. FILE:	
PROJ. No.:	6101700612
DRAWING No.:	

APPENDIX C
TOPSOIL QUALIFICATION TESTING

HUMMEL & CO., INC.

Hummel & Co., Inc. • 36 King Street • P.O. Box 606 • Trumansburg, New York 14886 • Phone: (607) 387-5594 • Fax: (607) 387-9499 • Email: soildr1@epix.net • Web Site: www.turfdoctor.com

MATERIALS TEST REPORT FOR
Keystone Material Testing

REPORT TO: Keystone Material Testing
229-231 State Street
First Floor
Binghamton, NY 13901

DATE RECEIVED: April 7, 2000
TEST DATES: April 7 - 10
REPORT DATE: April 10, 2000
CONDITION OF SAMPLE: Normal

MATERIALS ANALYSIS

Lab ID No.	Sample	% Organic*	pH**
7891-1	Gorick 0 – 5000 cy	5.41	7.1
7891-2	Gorick 5000 – 10,000 cy	3.80	7.3
7891-3	Gorick 10,000 – 15,000 cy	3.43	7.2

*ASTM F1647, Method 1
** ASTM D4972

APPENDIX D
GAS VENT MATERIAL QUALIFICATION TESTING

MAXIM TECHNOLOGIES INC

Empire Soils Investigations, Inc., Division
2415 N. Triphammer Rd., Suite 3
Ithaca, New York 14850
Telephone: (607) 266-0147
Fax: (607) 266-6409

PERMEABILITY TEST ON GRANULAR SOIL

ASTM D2434

Project No.: 9734344 — Date Tested: August 24, 1999

Project : Kirkwood Landfill — Material: Gravel with sand, trace silt

Sample No. Gas Vent Material — Lab No.: 99477

Unit Weight Determination:

Diameter, D, cm.: 10.16
Area, A, sq.cm.: 81.07
Length of sample,cm: 11.68
Sample Weight, g: 2074.5

Manometer, L, cm.: 11.68

Dry Unit Wt. 129.9 pcf

Moisture Content:

Before	After
5.2 %	7.2 %

W (max): 142.3 pcf
Optimum 5.5 %
Compaction 91.3 %

Test Run No. 1 — k=QL/Ath — 2

Head, h, cm. 27.9 — 41.9

Time (sec.)	Flow	Q
0		0
30		12
60		26
90		38
120		50
150		62
180		75
210		81
240		99
270		101
300		113
360		138

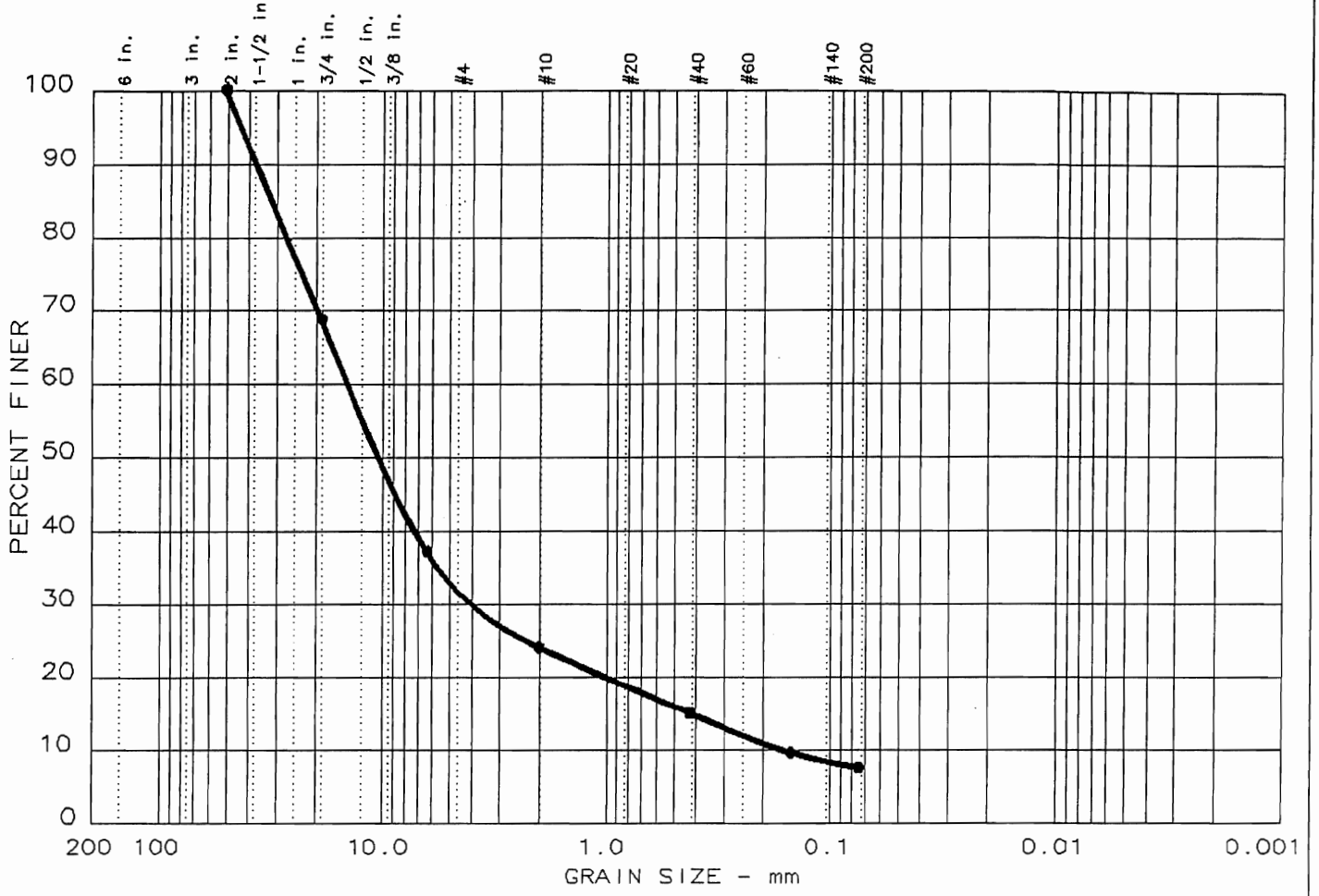
Permeability: 2.0 X 10-3

Time (sec.)	Flow	Q
0		0
30		65
60		80
90		95
120		110
150		125
180		140
210		155
240		170
270		185
300		200
360		230

Permeability 2.2 X 10-3

Tested by: A. Marks — Calculations by: T. Hamilton

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	6	0.0	67.8	24.6	7.6		GP-GM		

SIEVE inches size	PERCENT FINER ●		
2	100.0		
0.75	68.7		
0.25	37.3		
	GRAIN SIZE		
D_{60}	14.5		
D_{30}			
D_{10}	0.162		
	COEFFICIENTS		
C_c	6.76		
C_u	89.1		

SIEVE number size	PERCENT FINER ●		
10	24.1		
40	15.1		
100	9.6		
200	7.6		

Sample information:
● Gorick Rte 11 Pit
Gas Vent Material
Gravel some sand

Remarks:
Sampled by Maxim on 7/31

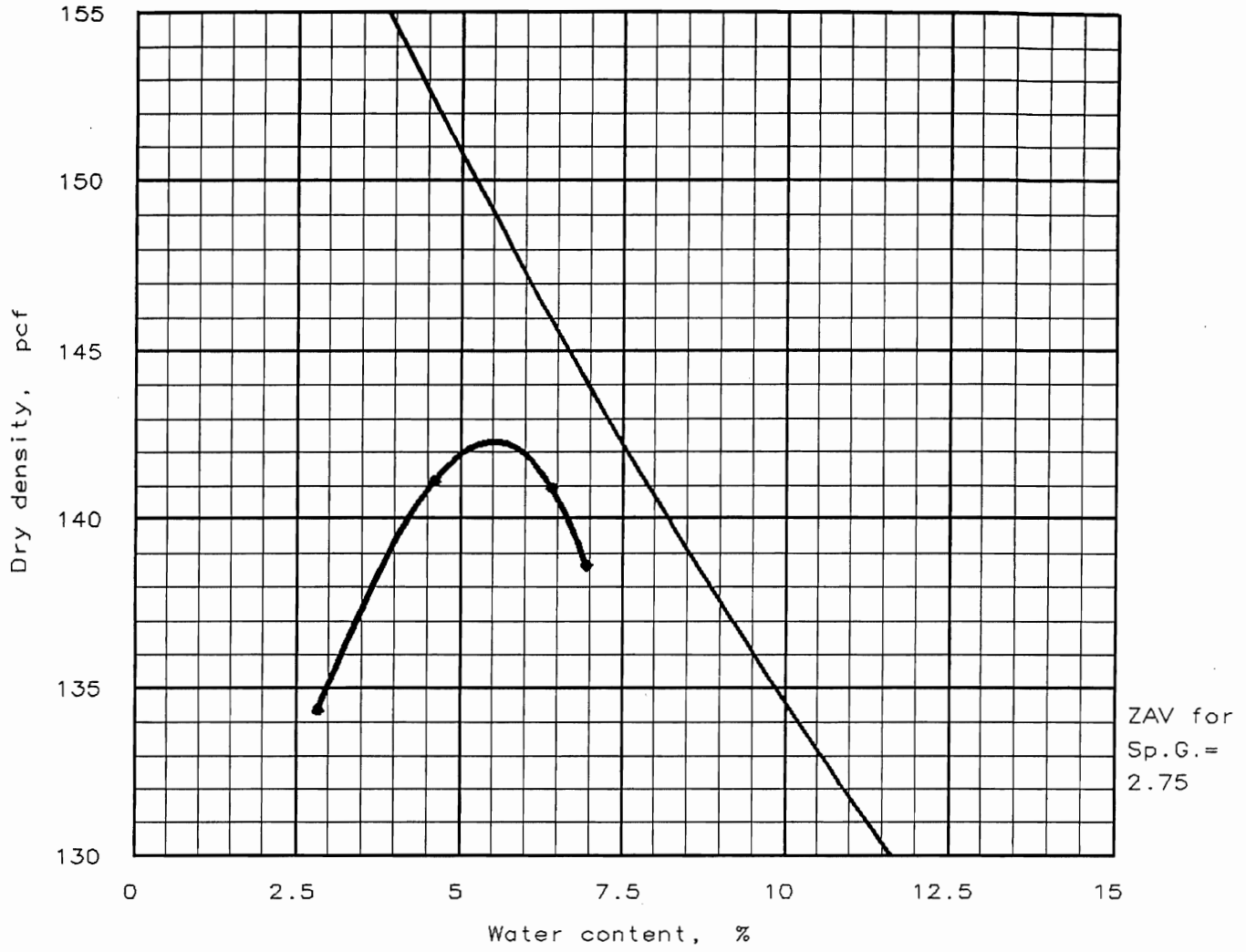
Lab No. 99477

MAXIM TECHNOLOGIES

Project No.: 9902733
Project: Pilot Travel Center

Date: August 12, 1999 Data Sheet ~~No.~~

MOISTURE-DENSITY RELATIONSHIP TEST



Test specification: ASTM D 1557-78 Method D, Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No.200
	USCS	AASHTO						
	GP-GM						31.3 %	7.6 %

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 142.3 pcf Optimum moisture = 5.5 %	Gas Vent Material

Project No.: 9902733
Project: Pilt Travel Center # 170
Location: Kirkwood, NY

Date: August 12, 1999

Remarks:
Sampled by Maxim on 7/31

MOISTURE-DENSITY RELATIONSHIP TEST

MAXIM TECHNOLOGIES

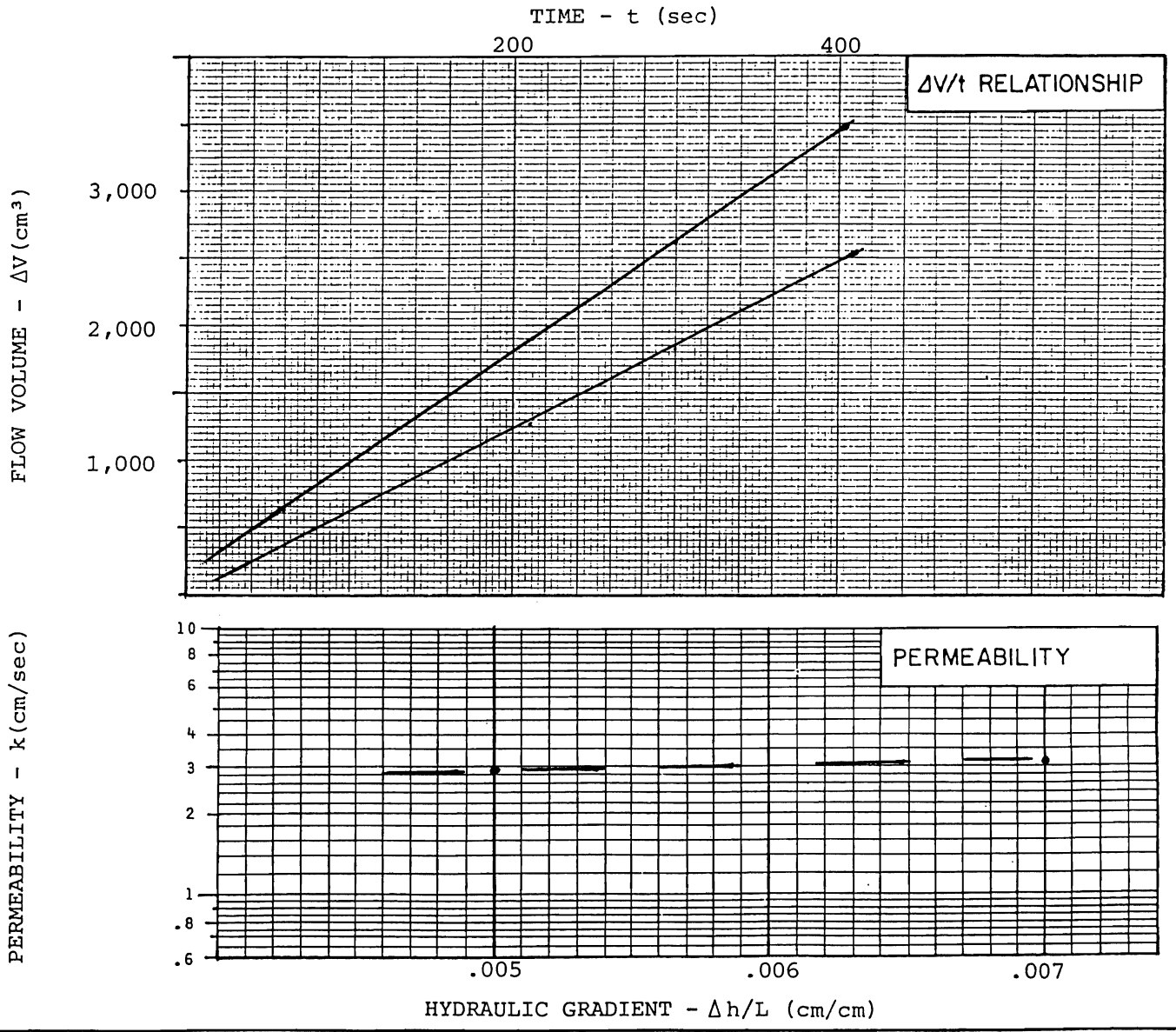
Fig. No. 99477

TEST DATA:

Specimen Height (cm): 25.38
Specimen Diameter (cm): 22.91
Dry Unit Weight (pcf): 119.2
Moisture Content Before Test (%): 0.4
Moisture Content After Test (%): 5.5
Cell Confining Pressure (psi): -
Test Pressure (psi): ____ ____
Back Pressure (psi): ____ ____
Differential Head (~~psi~~ cm): 0.118 ____ 0.156
Flow Rate ($\Delta V/t$) (cm^3/sec) O 6.18 Δ 8.30
Permeability (cm/sec): O 2.99 Δ 3.03

SAMPLE DATA:

Sample Identification: Gas Vent Material
Al Gorick, Route 11 Pit
Visual Description: Gravel, Some Sand
Remarks:
Maximum Dry Density
(ASTM D ____) (pcf): ____
Optimum Moisture Content (%): NA
Percent Compaction: ____
Permeameter Type: Rigid Wall



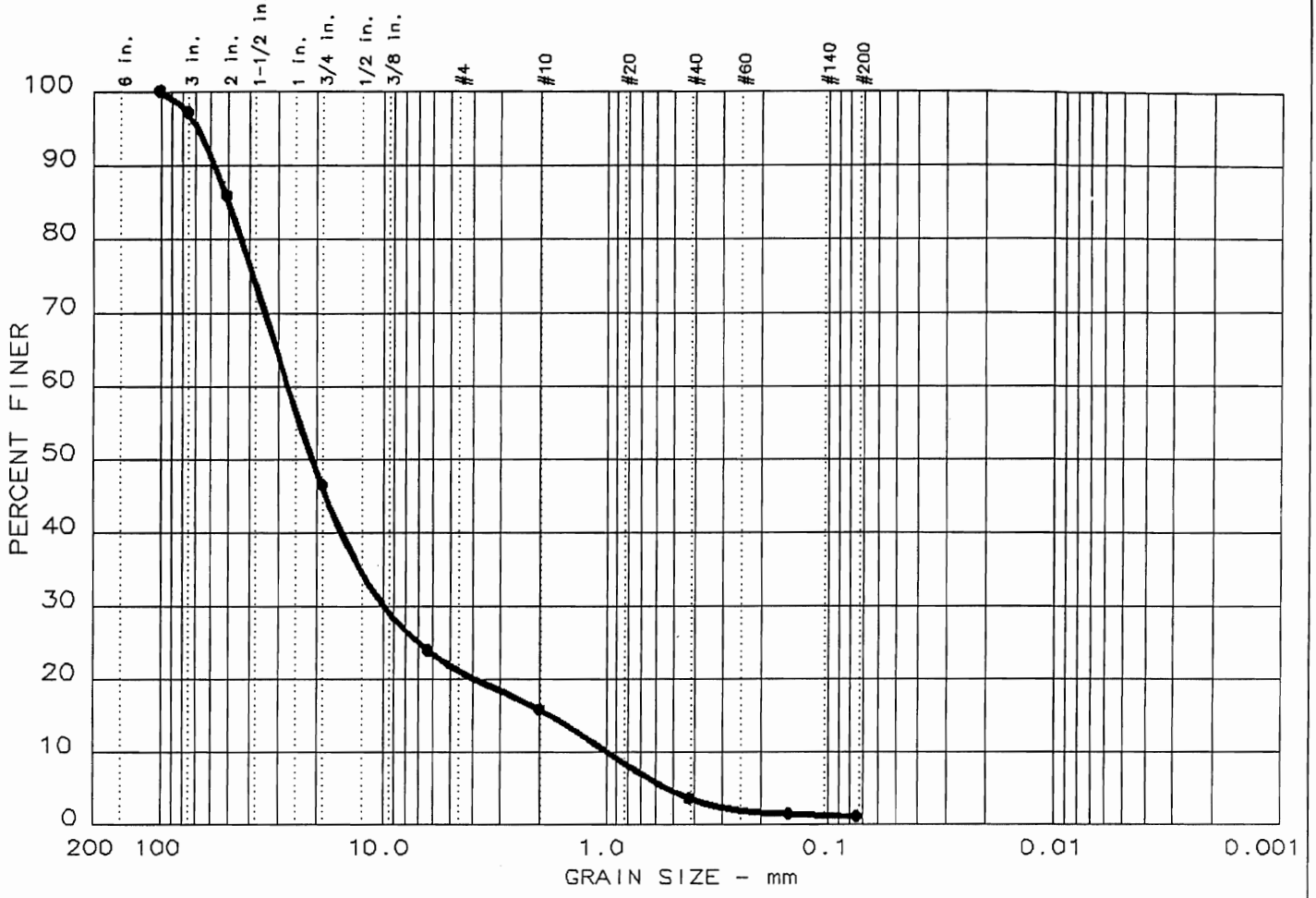
MAXIM TECHNOLOGIES INC

PERMEABILITY TEST REPORT

KIRKWOOD LANDFILL CLOSURE
AL GORICK, ROUTE 11 PIT

DR BY: TH	CK'D.	DATE: April 1998	PROJ.NO. 9734344

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	15	2.9	75.8	20.2	1.1		GP		

SIEVE Inches size	PERCENT FINER ●		
4	100.0		
3	97.1		
2	85.9		
0.75	46.5		
0.25	23.9		
	GRAIN SIZE		
D_{60}	26.9		
D_{30}			
D_{10}	0.989		
	COEFFICIENTS		
C_c	3.67		
C_u	27.2		

SIEVE number size	PERCENT FINER ●		
10	15.8		
40	3.7		
100	1.4		
200	1.1		

Sample information:
● Al Gorick, Rt. 11 Pit
Gas Vent Material
Gravel Some Sand,

Remarks:
Sampled on 3/27/98

Lab No. 98080

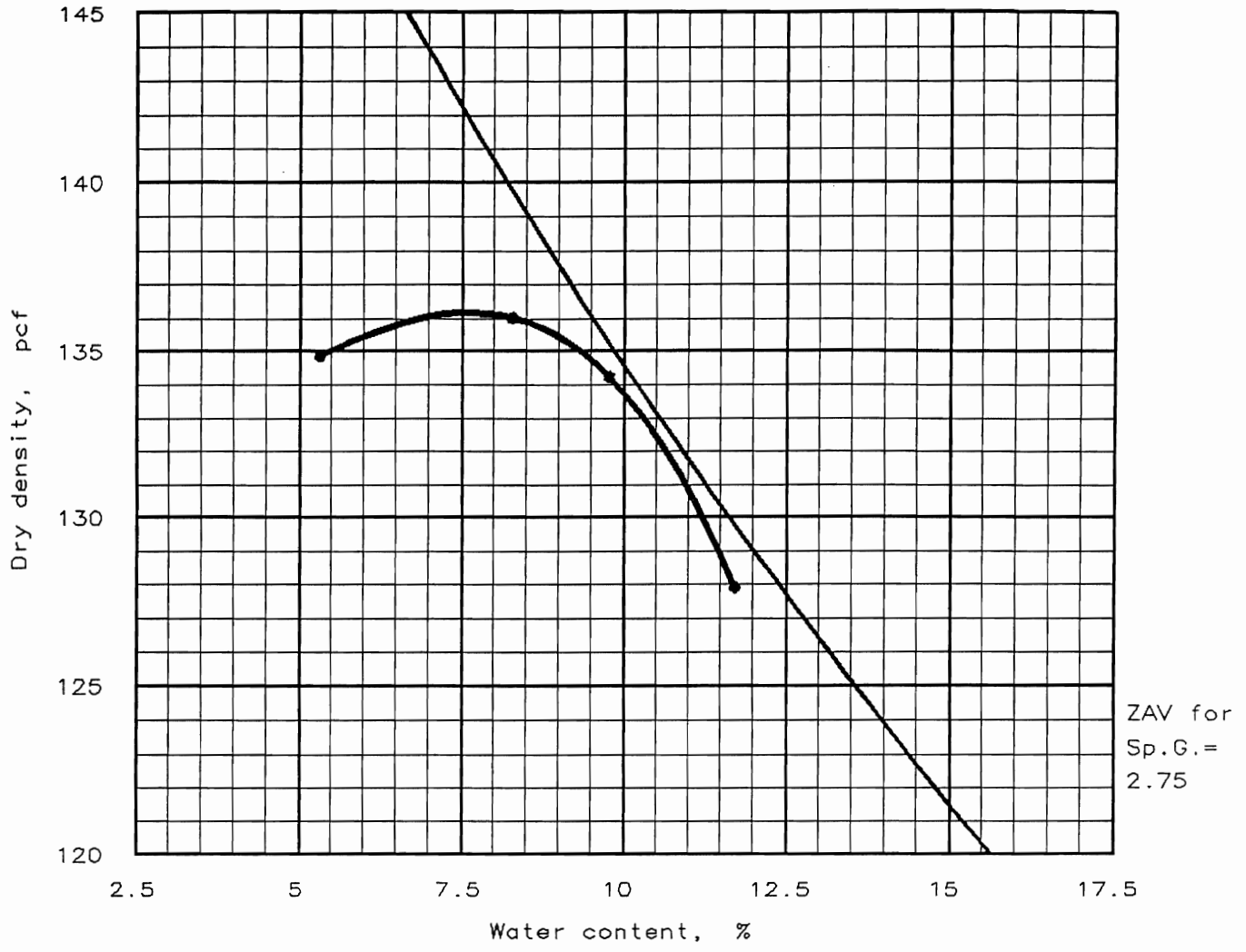
MAXIM TECHNOLOGIES

Project No.: 9734344
Project: Kirkwood Landfill Closure

Date: April 1, 1998 Data Sheet ~~No.~~

APPENDIX E
BARRIER PROTECTION MATERIAL QUALIFICATION AND IN-PLACE TESTING

MOISTURE-DENSITY RELATIONSHIP TEST



Test specification: ASTM D 698-78 Method D, Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No.200
	USCS	AASHTO						
	GM						18.3 %	33.3 %

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 136.2 pcf Optimum moisture = 7.6 %	Barrier Protection Klepfer Pit

Project No.: 9734344
Project: Kirkwood Landfill Closure
Location: Kirkwood, New York
0 - 5,000 cy Sample
Date: April 1, 1998

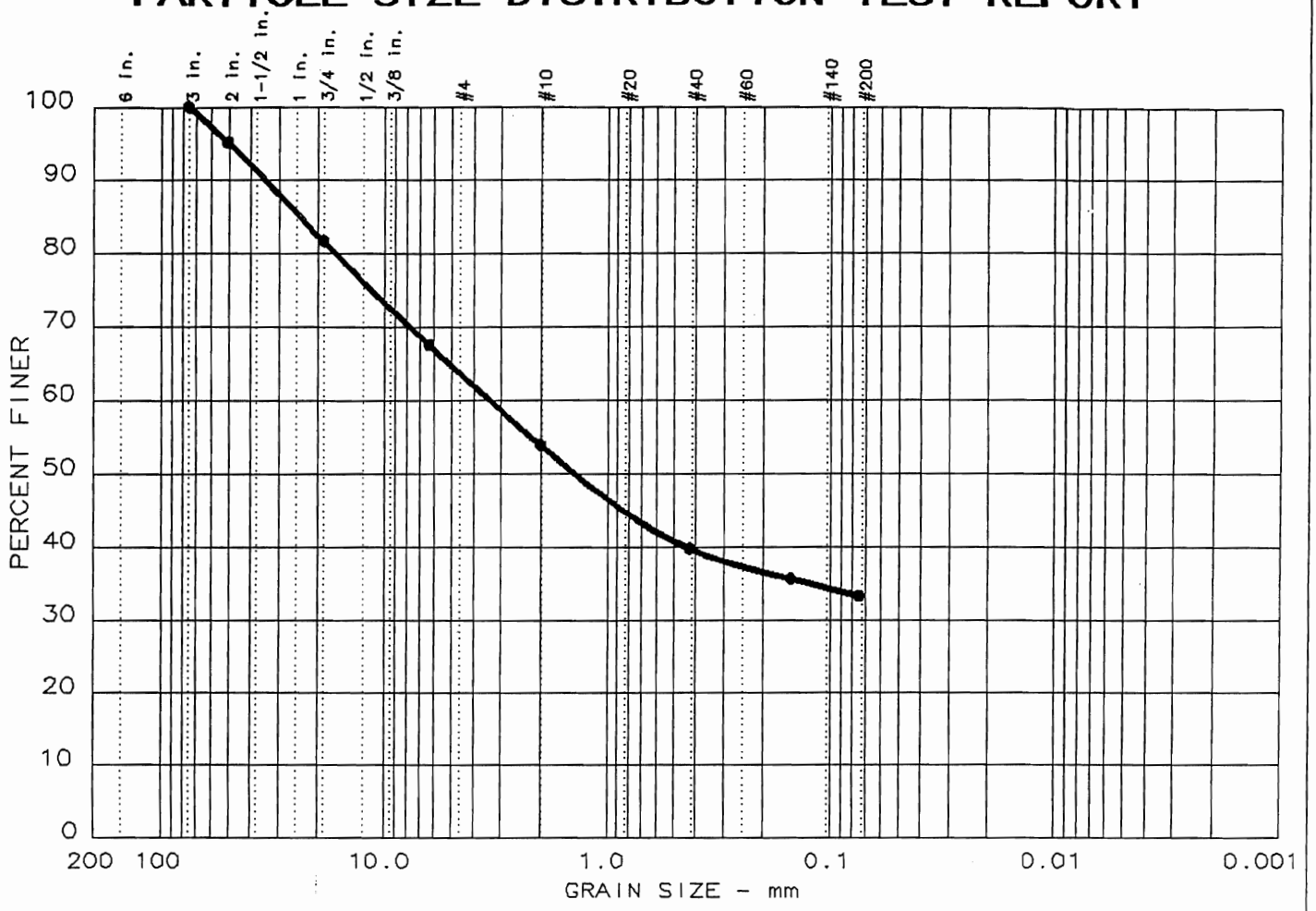
Remarks:
Tested using stone substitution.
Lab No. 98081

MOISTURE-DENSITY RELATIONSHIP TEST

MAXIM TECHNOLOGIES

Fig. No. 98081

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	16	0.0	36.0	30.7	33.3		GM		

SIEVE inches size	PERCENT FINER ●		
3	100.0		
2	95.1		
0.75	81.7		
0.25	67.5		
GRAIN SIZE			
D_{60}	3.39		
D_{30}			
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
10	53.8		
40	39.8		
100	35.7		
200	33.3		

Sample information:
● 0 - 5,000 cy sample
Barrier Protection
Klepfer Pit

Remarks:
Sampled on 3/27/98

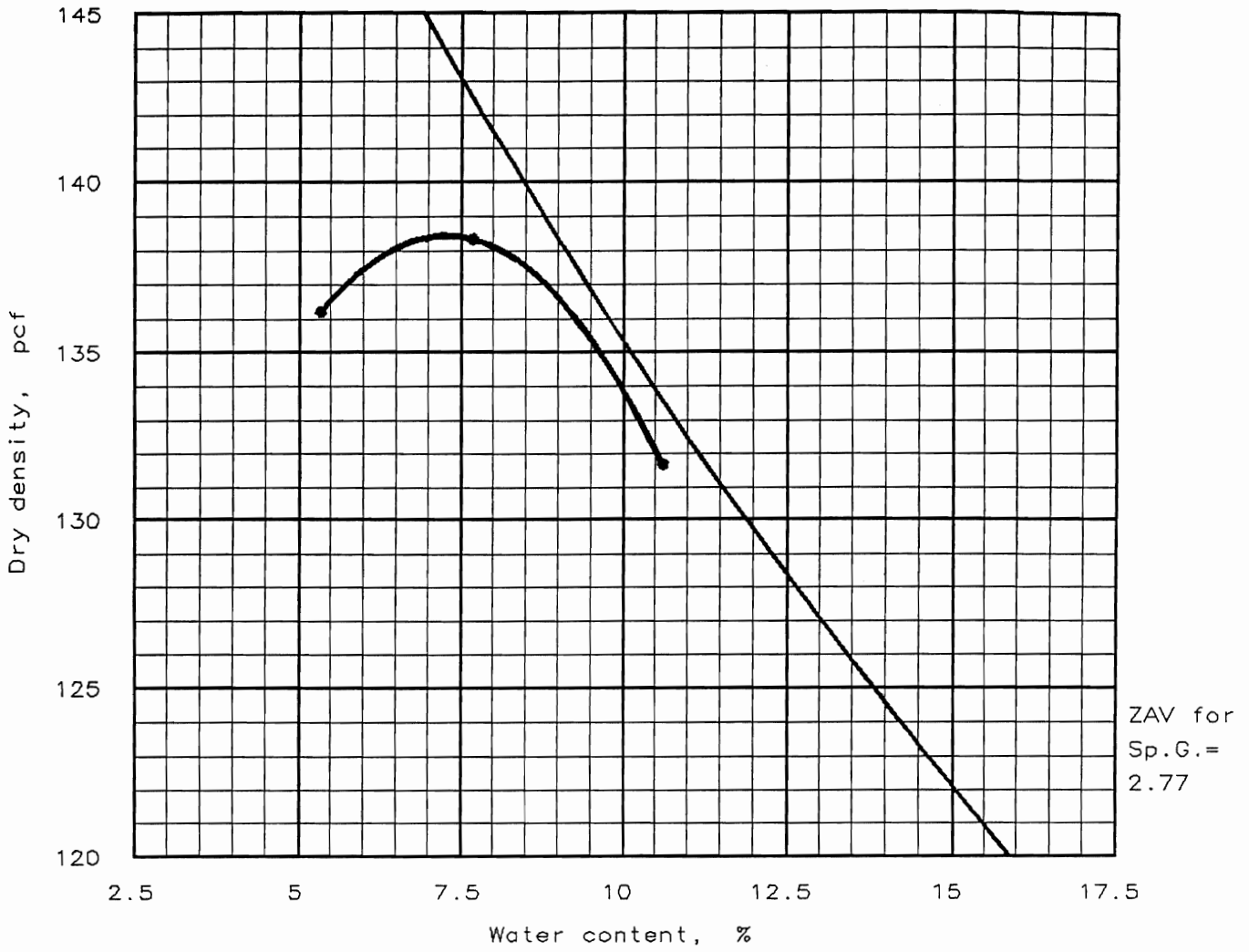
Lab No. 98081

MAXIM TECHNOLOGIES

Project No.: 9734344
Project: Kirkwood Landfill Closure

Date: April 1, 1998 Data Sheet ~~No.~~

MOISTURE-DENSITY RELATIONSHIP TEST



Test specification: ASTM D 698-78 Method D, Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No.200
	USCS	AASHTO						
	GM						13.8 %	34.2 %

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 138.4 pcf Optimum moisture = 7.3 %	Barrier Protection Klepfer Pit

Project No.: 9734344
Project: Kirkwood Landfill Closure
Location: Kirkwood, New York
5,000 - 10,000 cy Sample
Date: April 1, 1998

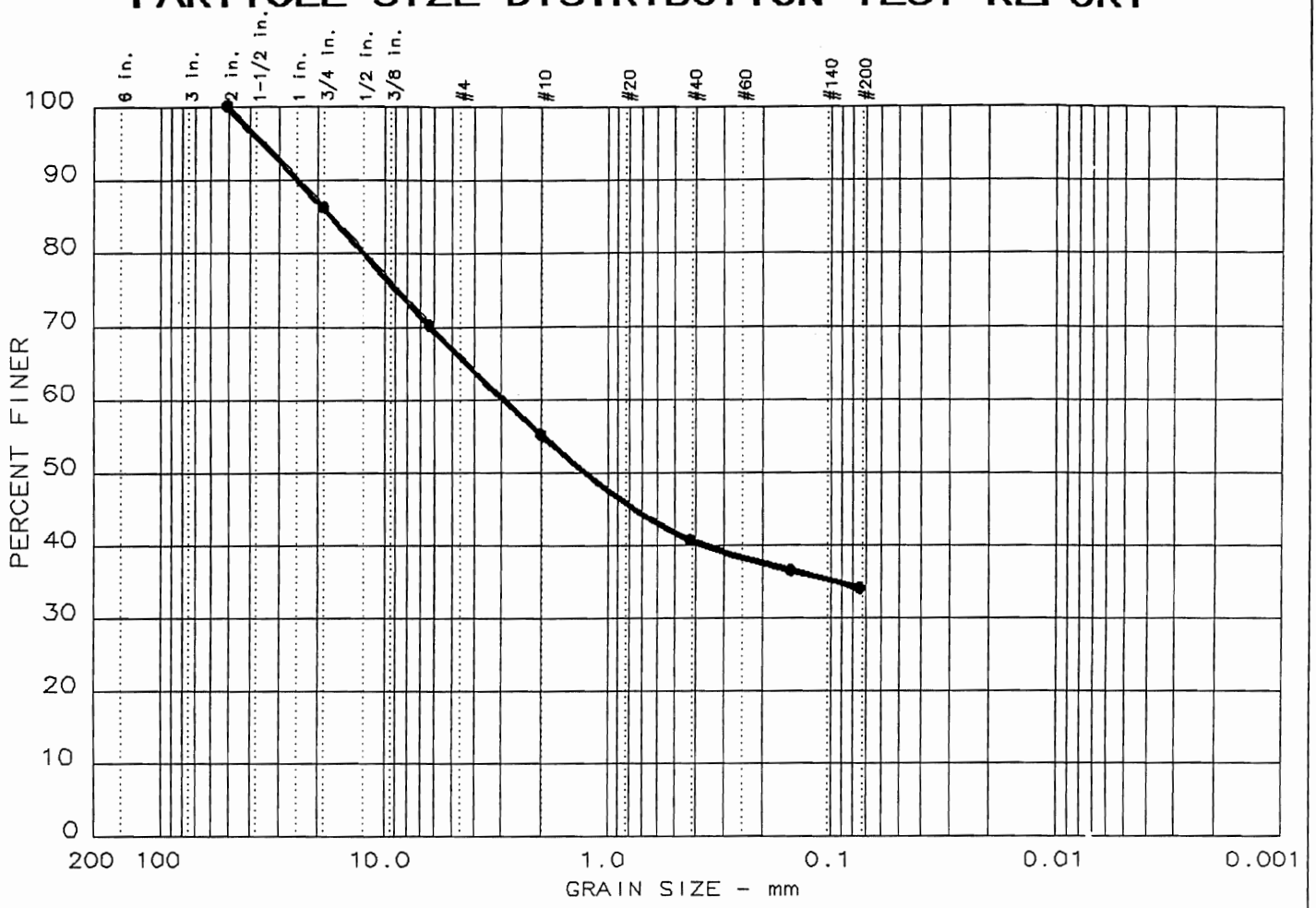
Remarks:
Tested using stone substitution.
Lab No. 98082

MOISTURE-DENSITY RELATIONSHIP TEST

MAXIM TECHNOLOGIES

Fig. No. 98082

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	17	0.0	33.7	32.1	34.2		GM		

SIEVE Inches size	PERCENT FINER ●		
2	100.0		
0.75	86.2		
0.25	70.3		
	GRAIN SIZE		
D_{60} D_{30} D_{10}	2.95		
	COEFFICIENTS		
C_c C_u			

SIEVE number size	PERCENT FINER ●		
10	55.2		
40	40.8		
100	36.6		
200	34.1		

Sample information:
● 5,000 - 10,000 cy
Barrier Protection
Klepfer Pit

Remarks:
Sampled on 3/27/98

Lab No. 98082

MAXIM TECHNOLOGIES

Project No.: 9734344
Project: Kirkwood Landfill Closure

Date: April 1, 1998 Data Sheet ~~No.~~

MAXIM
TECHNOLOGIES

Empire Soils Investigations, Inc., Division

2415 North Triphammer Road, Suite 3
Ithaca, New York 14850
Phone: (607) 266-0147
Fax: (607) 266-6409

FIELD IN-PLACE DENSITY TEST REPORT

Project: Kirkwood Landfill Closure

Client: Gorick Construction — Report: 971102

Contractor: Gorick Construction — Date 9-10-97

Weather: — Job No: 9734344

Test No.	Depth or Elev.	In-place Density (pcf)	In-place Moisture	Maximum Density (pcf)	Comp. (%)	Proctor Code	Spec. Comp. (%)	Location and Comments
1	6" lift	132.1	5.0	135.4	97.5	97400	90	Acre 7, 40' South from stake 306
2	6" lift	129.6	4.6	135.4	95.7	97400	90	Acre 7, 40' South x 30' West from stake 306
3	6" lift	132.0	6.0	135.4	97.4	97400	90	Acre 7, 6' West from stake 306
4	6" lift	135.4	5.1	135.4	99.1	97400	90	Acre 7, 20' North x 30' West from stake 306
5	6" lift	128.8	6.5	135.4	95.1	97400	90	Acre 7, 50' North x 5' West from stake 306
6	6" lift	131.5	5.7	135.4	97.1	97400	90	Acre 7, 4' West from stake 307
7	6" lift	132.3	5.0	135.4	97.7	97400	90	Acre 7, 5' South from stake 308
8	6" lift	131.8	5.8	135.4	97.3	97400	90	Acre 7, 10' West from stake 305
9	6" lift	130.0	6.1	135.4	96.0	97400	90	Acre 7, 4' West from stake 304
10	Barrier	129.2	8.5	135.4	95.4	97400	90	10' East from stake 405
11	Barrier	134.9	6.9	135.4	99.6	97400	90	5' South from stake 403A

Proctor Code	Maximum Density	Optimum Moisture	Proctor Type	Material Type and Source
97400	135.4	8.6	Modified	Silt/Clay some Sand & Gravel

REMARKS:

Technician: D. Verdon

Time on Site: 8:00-11:30

Respectfully submitted,
EMPIRE SOILS INVESTIGATIONS, INC.

T. Hamilton

Thomas A. Hamilton

MAXIM
TECHNOLOGIES

Empire Soils Investigations, Inc., Division

2415 North Triphammer Road, Suite 3
Ithaca, New York 14850
Phone: (607) 266-0147
Fax: (607) 266-6409

FIELD IN-PLACE DENSITY TEST REPORT

Project: Kirkwood Landfill Closure

Client: Gorick Construction — Report: 970864

Contractor: Gorick Construction — Date 8-14-97

Weather: — Job No: 9734344

Test No.	Depth or Elev.	In-place Density (pcf)	In-place Moisture	Maximum Density (pcf)	Comp. (%)	Proctor Code	Spec. Comp. (%)	Location and Comments
1	2nd lift	129.7	6.7	135.4	95.7	97400	90	Acre 1, 12' North x 25' East of 508
2	2nd lift	124.1	5.8	135.4	91.6	97400	90	Acre 1, 25' South x 8' West of 404
3	2nd lift	122.9	6.1	135.4	90.7	97400	90	Acre 1, 12' North x 25' West of 506
4	2nd lift	122.0	6.7	135.4	90.1	97400	90	Acre 1, 28' South x 6' West of 403
5	2nd lift	127.2	6.2	135.4	93.9	97400	90	Acre 1, 18' West of 505
6	2nd lift	122.4	6.6	135.4	90.4	97400	90	Acre 1, 78'West of 505
7	2nd lift	124.8	7.0	135.4	92.1	97400	90	Acre 1, 40' West x 10' North of 403
8	2nd lift	125.4	7.0	135.4	92.6	97400	90	Acre 1, 50' North x 15' West of404
9	2nd lift	124.9	6.4	135.4	92.2	97400	90	Acre 1, 30' West of 404
10	1st lift	126.6	8.5	135.4	93.5	97400	90	Acre 7, 12' West of 308
11	1st lift	127.9	6.2	135.4	94.4	97400	90	Acre 7, 25' West of 307
12	1st lift	127.4	6.3	135.4	94.0	97400	90	Acre 7, 25' West of 306
13	1st lift	127.3	6.1	135.4	94.0	97400	90	Acre 7, 30' West of 305
14	1st lift	126.2	6.2	135.4	93.2	97400	90	Acre 7,18' East x 25' South of 305
15	1st lift	125.8	7.2	135.4	92.9	97400	90	Acre 7, 30' South of 304
16	1st lift	131.7	6.7	135.4	97.2	97400	90	Acre 7, 10' South of 303
17	1st lift	129.0	5.6	135.4	95.3	97400	90	Acre 7, 40' South of 302
18	1st lift	130.9	5.3	135.4	96.6	97400	90	Acre 7, 20' South of 301
19	Barrier	124.9	7.4	135.4	92.2	97400	90	Acre 4, 20' West x 10' South of 517
20	Barrier	129.3	6.7	135.4	95.5	97400	90	Acre 4, 5' North of 418

Proctor Code	Maximum Density	Optimum Moisture	Proctor Type	Material Type and Source
97400	135.4	8.6	Modified	Silt/Clay some Sand & Gravel

REMARKS:

Technician: D.McGrady

Time on Site: 1:45-4:15

Respectfully submitted,
EMPIRE SOILS INVESTIGATIONS, INC.

T. Hamilton

Thomas A. Hamilton

MAXIM
TECHNOLOGIES

Empire Soils Investigations, Inc., Division

2415 North Triphammer Road, Suite 3
Ithaca, New York 14850
Phone: (607) 266-0147
Fax: (607) 266-6409

FIELD IN-PLACE DENSITY TEST REPORT

Project: Kirkwood Landfill Closure

Client: Gorick Construction — Report: 970864,970964

Contractor: Gorick Construction — Date 8-14,26-97

Weather: — Job No: 9734344

Test No.	Depth or Elev.	In-place Density (pcf)	In-place Moisture	Maximum Density (pcf)	Comp. (%)	Proctor Code	Spec. Comp. (%)	Location and Comments
21	Barrier	129.1	9.1	135.4	95.3	97400	90	Acre 3, 15' West of 516
22	Barrier	126.9	7.7	135.4	93.7	97400	90	Acre 3, 20' East of 412
1	Barrier	127.7	8.0	134.5	94.9	2	90	Acre 6, 15' North of stake 528
2	Barrier	125.2	7.9	134.5	93.1	2	90	Acre 6, 10' North of stake 429
3	Barrier	125.5	8.5	134.5	93.3	2	90	Acre 5, 4'South of stake 525A
4	Barrier	126.0	7.6	134.5	93.7	2	90	Acre 5, 8'North of stake 423A
5	Barrier	138.6	5.4	134.5	103.0	2	90	Acre 2, 20' West of stake 511
6	Barrier	123.2	8.7	134.5	91.6	2	90	Acre 2, 16' East from stake 510A

Proctor Code	Maximum Density	Optimum Moisture	Proctor Type	Material Type and Source
97400	135.4	8.6	Modified	Silt/Clay some Sand & Gravel
2	134.5	7.6	Modified	Klepher's Pit -Glacial Till

REMARKS:

Technician: D.McGrady, D. Verdon

Time on Site: 11:00-4:15

Respectfully submitted,
EMPIRE SOILS INVESTIGATIONS, INC.

T. Hamilton

Thomas A. Hamilton

MAXIM TECHNOLOGIES INC

Maxim Technologies, Inc.
2415 North Triphammer Rd., Suite 3
Ithaca, New York 14850
TEL: (607) 266-0147
FAX: (607) 266-6409

REPORT OF IN-PLACE DENSITY

CLIENT: GORICK CONSTRUCTION
Jon Van Deusen
27 Track Drive
Binghamton, NY 13904

PROJECT NO.: 9734344
REPORT NO.: 001237
DATE OF SERVICE: 5/03/2000
AUTHORIZATION: Client
REPORT DATE: 5/16/2000

PROJECT: Kirkwood Landfill Closure

SERVICES: Perform in-place density and moisture content tests to determine the degree of field compaction.

PROJECT DATA

CONTRACTOR: GORICK CONSTRUCTION
METHOD OF TEST:
DENSITY: ASTM D2922
MOISTURE: ASTM D3017
SPECIFICATION:
DENSITY: 90% Compaction
MOISTURE:

GAUGE: Troxler, 3411-B
GAUGE SERIAL NO.: 12455
STANDARD COUNTS
MOISTURE - CURRENT: 610 PREVIOUS:
DENSITY - CURRENT: 2785 PREVIOUS:
TEST MODE: Direct Transmission
PROBE DEPTH (in.): 6

TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	REFERENCE REPORT NO
Top Compaction		7.6	136.2	

REPORT OF TESTS

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
1.	30' N of Sta. 637, Acre 8	8.5	7.6	137.6	126.8	136.2	93.1
2.	40' S of Sta. 636, Acre 8	7.5	7.6	134.5	125.1	136.2	91.9
3.	3' S of Sta. #633A Acre 9	7.9	7.6	145.3	134.7	136.2	98.9
4.	8' N of Sta. #632 Acre 9	8.6	7.6	141.7	130.5	136.2	95.8
5.	30'N of Sta. 302 Acre 10	7.5	7.6	136.6	127.1	136.2	93.3

Report Of Tests Continued On Page 2

MAXIM

GORICK CONSTRUCTION
PROJECT NO. 9734344
DATE OF SERVICE: 5/03/2000

REPORT NO. 001237
PAGE 2 OF 3

REPORT OF TESTS (Continued)

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
6.	4' S of Sta. #626 Acre 10	7.2	7.6	141.0	131.5	136.2	96.5
7.	40' N of Sta. #323 Acre #11	7.1	7.6	139.2	130.0	136.2	95.4
8.	5' S of Sta. #648 Acre 11	9.8	7.6	136.9	124.7	136.2	91.6
9.	3' S of Sta. #646A Acre 12	8.5	7.6	142.7	131.5	136.2	96.5
10.	20' S of Sta. $645 Acre 12	7.9	7.6	141.6	131.2	136.2	96.3
11.	60' N of Sta. #674 Acre 13	7.1	7.6	144.7	135.1	136.2	99.2
12.	30' N of Sta. #674 Acre 13	7.5	7.6	132.2	123.0	136.2	90.3
13.	45' S of Sta. #637 Acre 14	8.1	7.6	136.6	126.4	136.2	92.8
14.	30' S of Sta. #638 Acre 14	7.2	7.6	134.1	125.1	136.2	91.9
15.	25' S of Sta. #700A Acre 15	7.5	7.6	138.7	129.0	136.2	94.7
16.	25' S of Sta. #709 Acre 15	8.1	7.6	134.0	124.0	136.2	91.0
17.	32' N of Sta. #335 Acre 16	7.5	7.6	136.1	126.6	136.2	93.0
18.	15' S of Sta, #672A Acre 16	6.8	7.6	138.6	129.8	136.2	95.3
19.	20' S of Sta. #669 Acre 17	7.5	7.6	132.2	123.0	136.2	90.3

Report Of Tests Continued On Page 3

MAXIM

GORICK CONSTRUCTION
PROJECT NO. 9734344
DATE OF SERVICE: 5/03/2000

REPORT NO. 001237

REPORT OF TESTS (Continued)

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	FIELD DENSITY (pcf) DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
20.	40' S of Sta. #670A Acre 17	8.3	7.6	134.3	124.0	136.2	91.0
21.	25' N of Sta. 701A Acre 18	7.9	7.6	132.4	122.7	136.2	90.1
22.	30' W of Sta. #721 Acre 18	8.0	7.6	138.9	128.6	136.2	94.4

Test results on this report meet project specifications as noted on page 1.

Technician: Randy Truex
Engineering Technician

Report Distribution:
(1) GORICK CONSTRUCTION

MAXIM TECHNOLOGIES INC.

Jeffrey Truax
Const. Services Manager

APPENDIX F
LOW PERMEABILITY BARRIER MATERIAL QUALIFICATION AND IN-PLACE TESTING

Low Perm Stockpile

1. Test Pad Permeability
2. Atterberg Limits
3. Moisture - Density Relationship
4. Gradation
5. Remolded Perms

LOW PERM STOCKPILE

TEST PAD

SOILS MATERIALS TESTING, INC.
57 SOUTH MAIN STREET • CASTLETON, N.Y. 12033

• TELEPHONES •
(518) 732-7205 CASTLETON OFFICE
(607) 722-1582 BINGHAMTON

S.M.T. Job No. 7286

Test Date 16 April 1997

FIELD COMPACTION SUMMARY

Job Name and Location Kirkwood Landfill Closure

Architect or Engineer

Contractor Gorick Construction

Method of Field Density Measurement ☐ Sand Cone Method ☒ Nuclear Method ☐ _____ DATUM

TEST NO.	DATE	LOCATION	LIFT NO. OR ELEV.	MTL. MARK	MAXIMUM LAB DRY DENSITY	WATER CONTENT	IN-PLACE DRY DENSITY	PERCENT COMPACTION	COMMENTS
1.	4/16	Shelby 1/E	@grade	8"	134/138	6.6%	138.38	100/100%	
2.	"	Shelby 2/C	"	"	" "	8.7%	130.35	97/94%	
3.	"	Shelby /W	"	"	" "	8.9%	132.8	99/96%	
4.	"	Shelby 3/	"	"	" "	9.2%	132.2	99/96%	
Test pad for glacial till.									
						Nuclear densities by Mike Newcomb			
						James R. Bender			
						Branch Manager			
						Binghamton, NY			

NOTES: Densities shown: lbs. per cubic foot
Water Content: Percent of dry weight

Percent Compaction: Based on maximum dry density obtained on a sample indicated by material mark or ☐ estimated.

SOIL & MATERIAL TESTING, INC.

57 SOUTH MAIN STREET • CASTLETON, N.Y. 12033

Office	Telephone	Office	Telephone
Castleton	(518) 732-7206	Binghamton	(607) 722-1582
	Fax (518) 732-4516	Kingston	(914) 336-4471
		Pittsfield	(413) 499-5338

HYDRAULIC CONDUCTIVITY TEST RESULTS

PROJECT NAME: *KIRKWOOD LANDFILL CLOSURE*
Kirkwood, Broome County, New York

CLIENT: Gorlick Construction Co.
27 Track Drive
Binghamton, New York 13904

SMT PROJECT No.: 7286

SAMPLE DESCRIPTION: *Test Pad; Shelby Tube #1 (East).*
Undisturbed Shelby Tube Specimen

DATE SAMPLED: 4/16/97
DATE REPORTED 5/1/97

DATE TESTED: 4/18/97

TEST STANDARD: ASTM D 5084
TEST BY: TMK

TEST DESCRIPTION: Falling Head/
Rising tail Flexible Walled Permeability

RESULTS:

Initial Specimen Properties		Test Conditions	
Length =	12.33 cm	Back Pressure =	65.0 psi
Diameter =	7.30 cm	Cell Pressure =	70.0 psi
Moisture Content =	8.8 %	Hydraulic Gradient =	10
Dry Density =	133.3 pcf	Permeant Liquid:	*Tap Water*

Remarks:

Hydraulic Conductivity: $k_{10} = 4.6 \times 10^{-8}$ *cm/sec*

Soil & Material Testing, Inc.

Thomas M. Kenney

SOIL & MATERIAL TESTING, INC.
57 SOUTH MAIN STREET • CASTLETON, N.Y 12033

Office	Telephone	Office	Telephone
Castleton	(518) 732-7205	Binghamton	(607) 722-1582
	Fax (518) 732-4516	Kingston	(914) 336-4471
		Pittsfield	(413) 499-5338

HYDRAULIC CONDUCTIVITY TEST RESULTS

PROJECT NAME: *KIRKWOOD LANDFILL CLOSURE*
Kirkwood, Broome County, New York

CLIENT: Gorick Construction Co.
27 Track Drive
Binghamton, New York 13904

SMT PROJECT No.: 7286

SAMPLE DESCRIPTION: *Test Pad; Shelby Tube #2 (center).*
Undisturbed Shelby Tube Specimen

DATE SAMPLED: 4/16/97
DATE REPORTED 5/1/97

DATE TESTED: 4/18/97

TEST STANDARD: ASTM D 5084
TEST BY: TMK

TEST DESCRIPTION: Falling Head/ Rising tail Flexible Walled Permeability

---

RESULTS:

Initial Specimen Properties		Test Conditions	
Length =	10.76 cm	Back Pressure =	65.0 psi
Diameter =	7.28 cm	Cell Pressure =	70.0 psi
Moisture Content =	9.1 %	Hydraulic Gradient =	20
Dry Density =	133.1 pcf	Permeant Liquid:	*Tap Water*

Remarks:

Hydraulic Conductivity: $k_{20} = 3.7 \times 10^{-8}$ *cm/sec*

Soil & Material Testing, Inc.

Thomas M. Kenney

SOIL & MATERIAL TESTING, INC.

57 SOUTH MAIN STREET • CASTLETON, N.Y. 12033

Office	Telephone	Office	Telephone
Castleton	(518) 732-7205	Binghamton	(607) 722-1562
	Fax (518) 732-4516	Kingston	(914) 336-4471
		Pittsfield	(413) 499-5338

HYDRAULIC CONDUCTIVITY TEST RESULTS

PROJECT NAME: *KIRKWOOD LANDFILL CLOSURE*
Kirkwood, Broome County, New York

CLIENT: Gorick Construction Co.
27 Track Drive
Binghamton, New York 13904

SMT PROJECT No.: 7286

SAMPLE DESCRIPTION: *Test Pad; Shelby Tube #3 (West).*
Undisturbed Shelby Tube Specimen

DATE SAMPLED: 4/16/97
DATE REPORTED 5/1/97

DATE TESTED: 4/18/97

TEST STANDARD: ASTM D 5084
TEST BY: TMK

TEST DESCRIPTION: Falling Head/
Rising tail Flexible Walled Permeability

RESULTS:

Initial Specimen Properties		Test Conditions	
Length =	9.75 cm	Back Pressure =	65.0 psi
Diameter =	7.12 cm	Cell Pressure =	70.0 psi
Moisture Content =	9.7 %	Hydraulic Gradient =	30
Dry Density =	132.0 pcf	Permeant Liquid:	*Tap Water*

Remarks:

Hydraulic Conductivity: $k_{20} = 4.3 \times 10^{-8}$ *cm/sec*

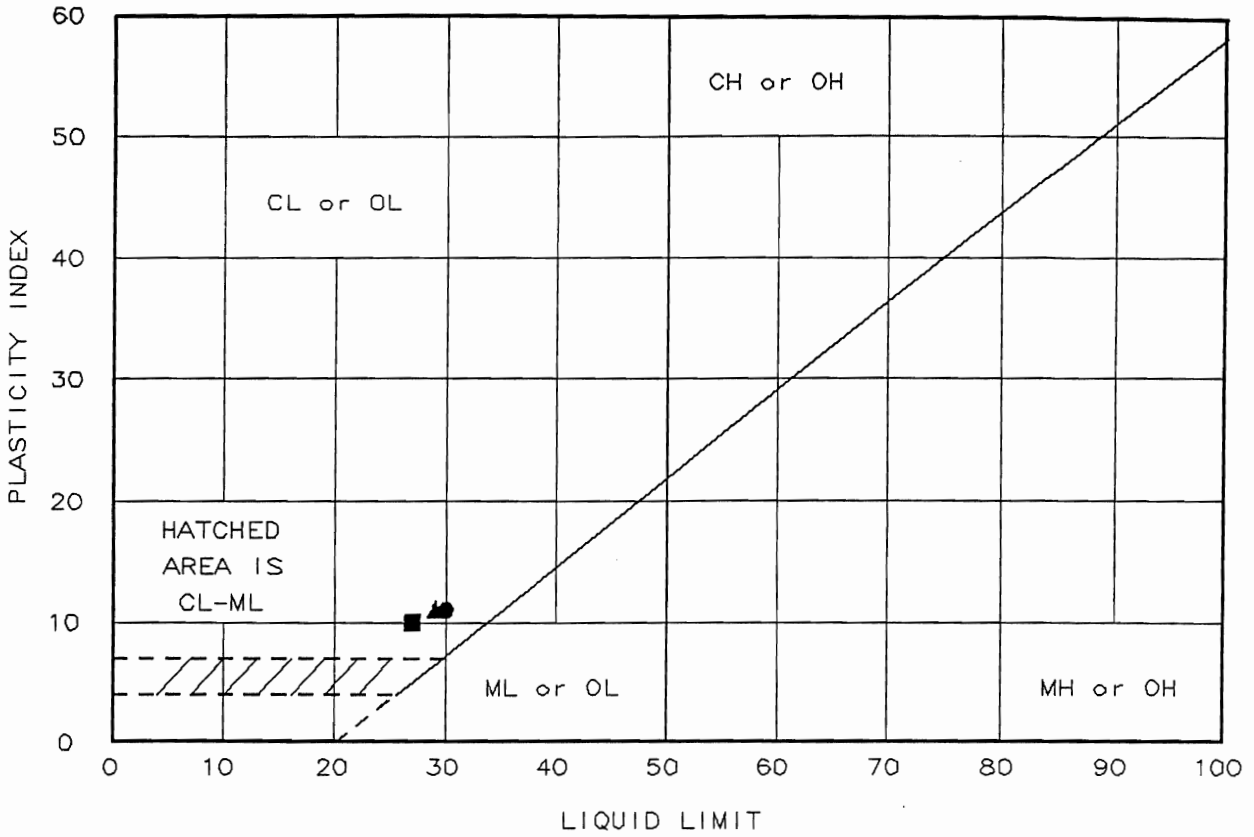
Soil & Material Testing, Inc.

Thomas M. Kenney

Low Perm Stockpile

Atterberg Limits

LIQUID AND PLASTIC LIMITS TEST REPORT



	Location + Description	LL	PL	PI	-200	ASTM D 2487-90
●	Low Perm Soil 5,000 cy sample	30	19	11		
▲	Low Perm Soil 10,000 cy sample	29	18	11		
■	Low Perm Soil 15,000 cy sample	27	17	10		
◆	Low Perm Soil 20,000 cy sample	27	17	10		

Project No.: 9734344
Project: Kirkwood Land Fill Closure

Client: Gorick Construction
Location: Kirkwood, New York

Date: Aug. 11, 1999

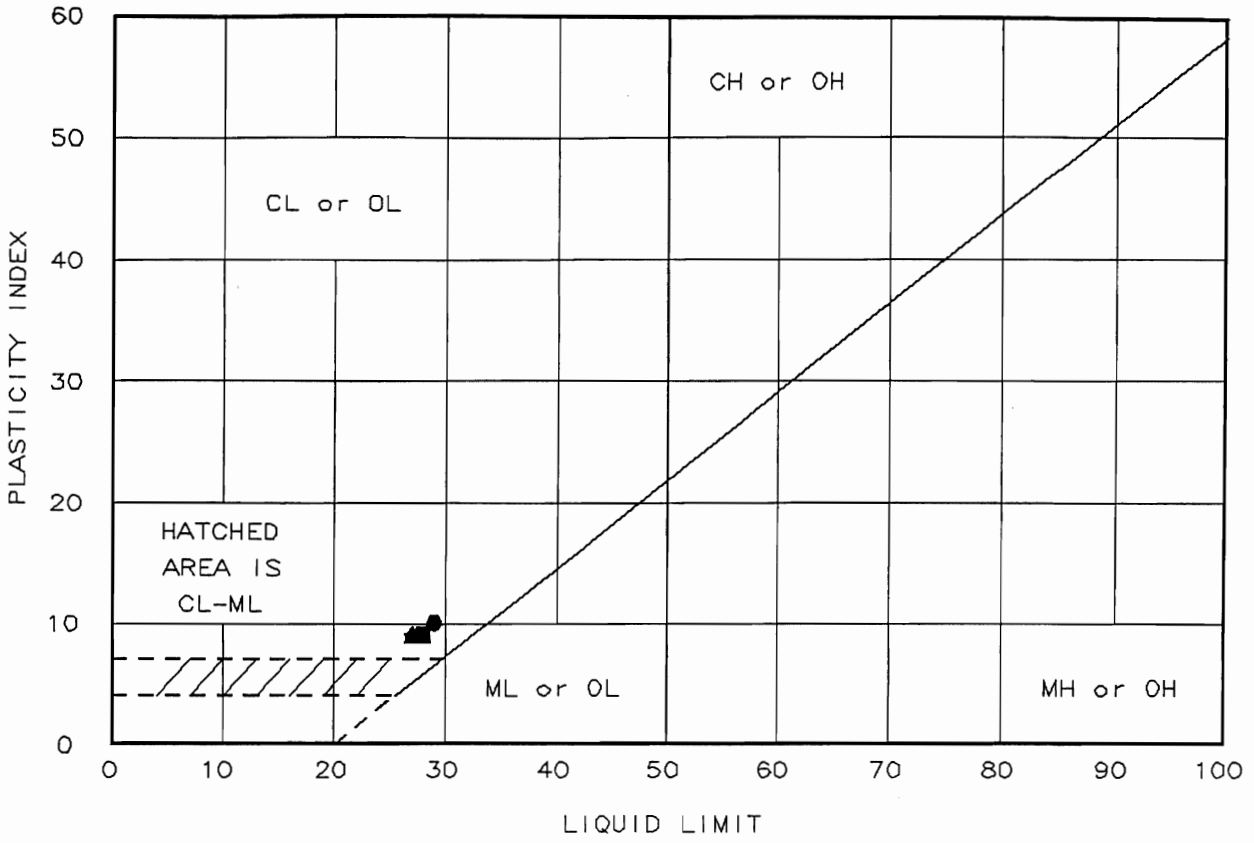
LIQUID AND PLASTIC LIMITS TEST REPORT

MAXIM TECHNOLOGIES

Remarks:

Fig. No. 99478

LIQUID AND PLASTIC LIMITS TEST REPORT



	Location + Description	LL	PL	PI	-200	ASTM D 2487-90
●	15,000 - 16,000 cy Lab No. 98078	29	19	10		
▲	17,000 - 18,000 cy Lab No. 98076	27	18	9		
■	20,000 - 21,000 cy Lab No. 98079	28	19	9		
◆	22,000 - 23,000 cy Lab No. 98077	27	18	9		

Project No.: 9734344
Project: Kirkwood Landfill Closure

Client: Gorick Construction
Location: Kirkwood, New York

Date: April 1, 1998

LIQUID AND PLASTIC LIMITS TEST REPORT

MAXIM TECHNOLOGIES

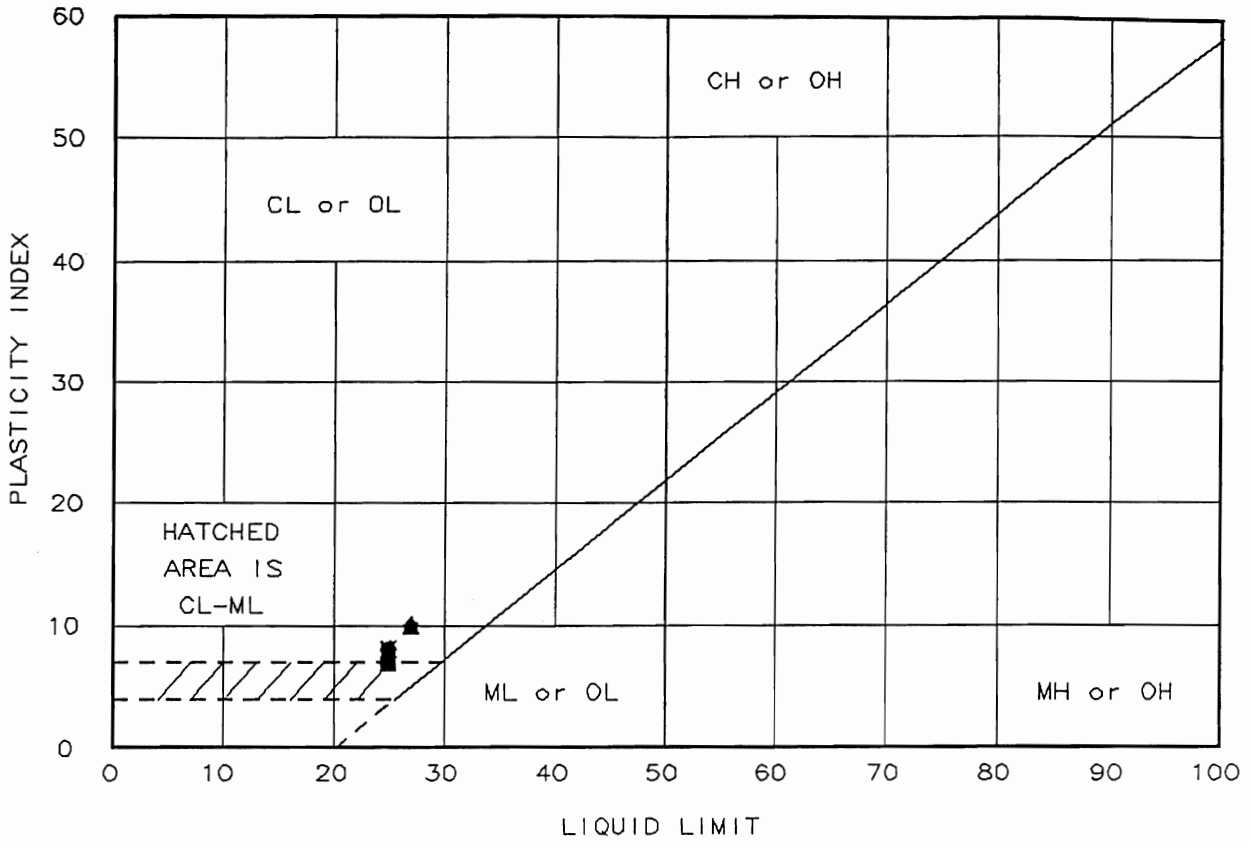
Remarks:

Low Permeability Soil

Klepfer Pit

Fig. No. _____

LIQUID AND PLASTIC LIMITS TEST REPORT



	Location + Description	LL	PL	PI	-200	ASTM D 2487-90
●	23,000 - 24,000 cy Lab No. 98159	25	17	8		
▲	24,000 - 25,000 cy Lab No. 98160	27	17	10		
■	25,000 - 26,000 cy Lab No. 98161	25	18	7		
◆	26,000 - 27,000 cy Lab No. 98162	27	17	10		
×	27,000 - 28,000 cy Lab No. 98163	25	17	8		

Project No.: 9734344
Project: Kirkwood Landfill Closure

Client: Gorick Construction
Location: Kirkwood, New York

Date: May 15, 1998

LIQUID AND PLASTIC LIMITS TEST REPORT

MAXIM TECHNOLOGIES

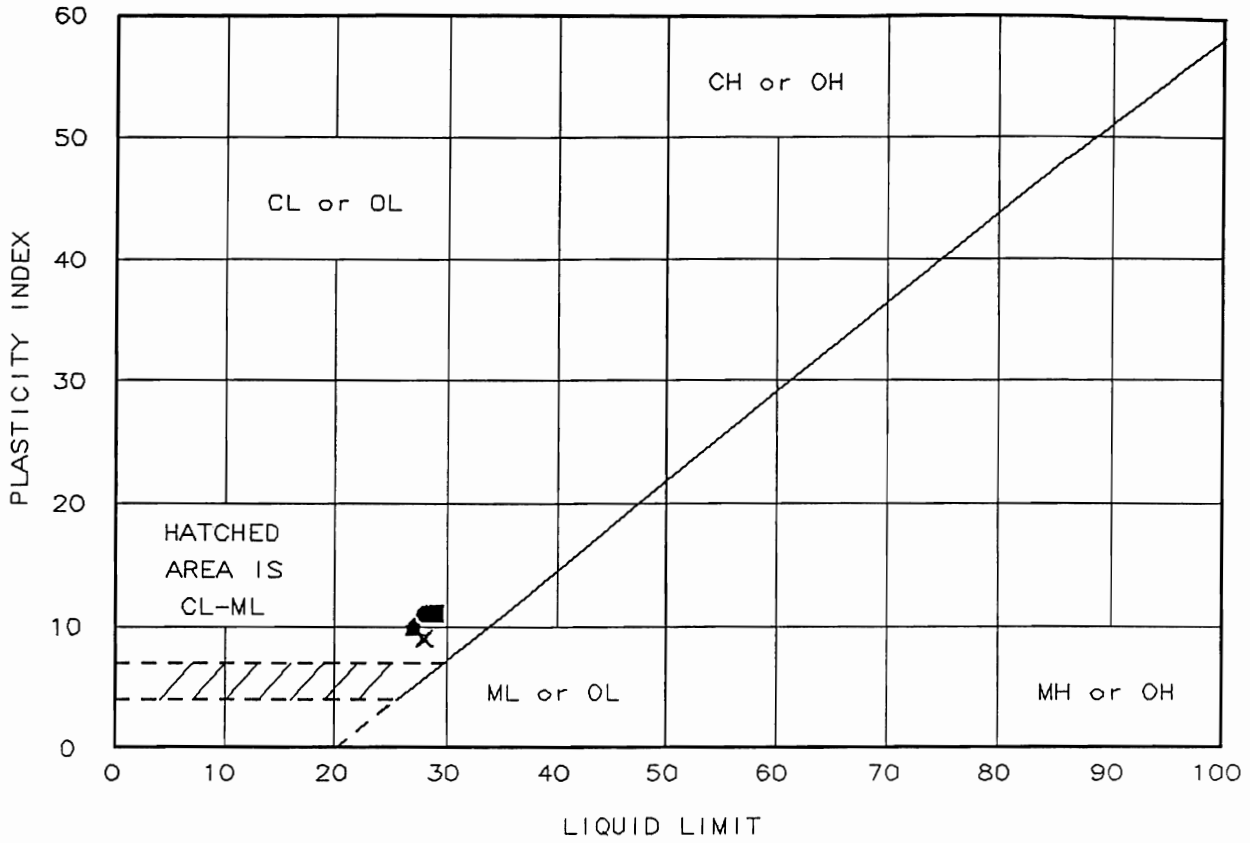
Remarks:

Low Permeability Soil

Klepfer Pit

Fig. No. _____

LIQUID AND PLASTIC LIMITS TEST REPORT



	Location + Description	LL	PL	PI	-200	ASTM D 2487-90
●	28,000 - 29,000 cy Lab No. 98164	28	17	11		
▲	29,000 - 30,000 cy Lab No. 98165	27	17	10		
■	30,000 - 31,000 cy Lab No. 98166	29	18	11		
◆	31,000 - 32,000 cy Lab No. 98167	27	17	10		
X	32,000 - 33,000 cy Lab No. 98168	28	19	9		

Project No.: 9734344
Project: Kirkwood Landfill Closure

Client: Gorick Construction
Location: Kirkwood, New York

Date: May 15, 1998

LIQUID AND PLASTIC LIMITS TEST REPORT

MAXIM TECHNOLOGIES

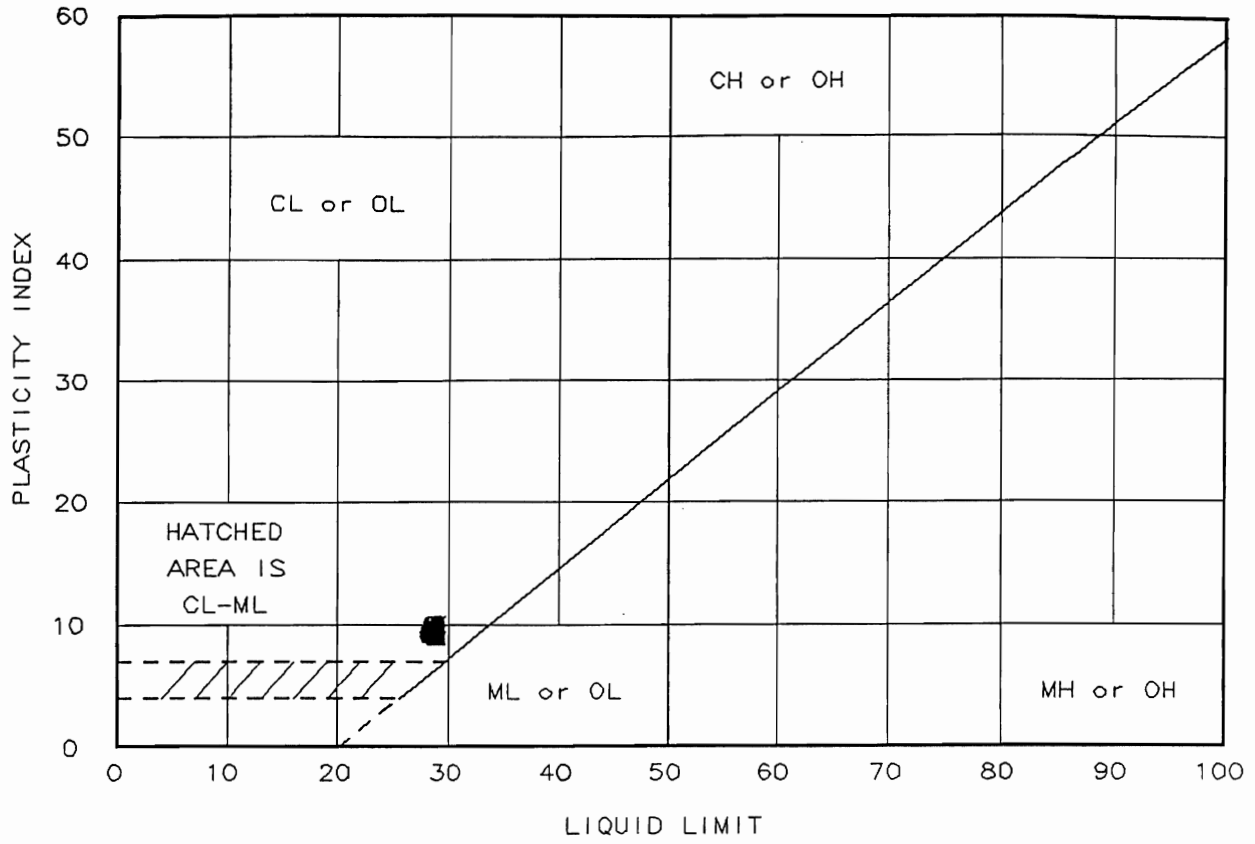
Remarks:

Low Permeability Soil

Klepfer Pit

Fig. No. _____

LIQUID AND PLASTIC LIMITS TEST REPORT



	Location + Description	LL	PL	PI	-200	ASTM D 2487-90
●	33,000 - 34,000 cy Lab No. 98169	29	19	10		
▲	34,000 - 35,000 cy Lab No. 98170	28	18	10		
■	35,000 - 36,000 cy Lab No. 98171	29	20	9		
◆	36,000 - 37,000 cy Lab No. 98172	28	19	9		
×	37,000 - 38,000 cy Lab No. 98173	29	19	10		

Project No.: 9734344
Project: Kirkwood Landfill Closure

Client: Gorick Construction
Location: Kirkwood, New York

Date: May 15, 1998

LIQUID AND PLASTIC LIMITS TEST REPORT

MAXIM TECHNOLOGIES

Remarks:

Low Permeability Soil

Klepfer Pit

Fig. No. _____

Low Perm Stockpile

Moisture - Density Relationship

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57 SOUTH MAIN STREET • CASTLETON, N.Y. 12033

• TELEPHONES •
(518) 732-7205 CASTLETON OFFICE
(607) 722-1582 BINGHAMTON

S.M.T. Job No. 7286

Test Date 6 November 1996

LABORATORY COMPACTION REPORT

Job Name and Location Kirkwood Landfill Closure

Architect or Engineer

Contractor Gorick Construction

A. Description of Soil: Glacial Till

Material Mark ____ Unified Classification ____ AASHO Classification ____

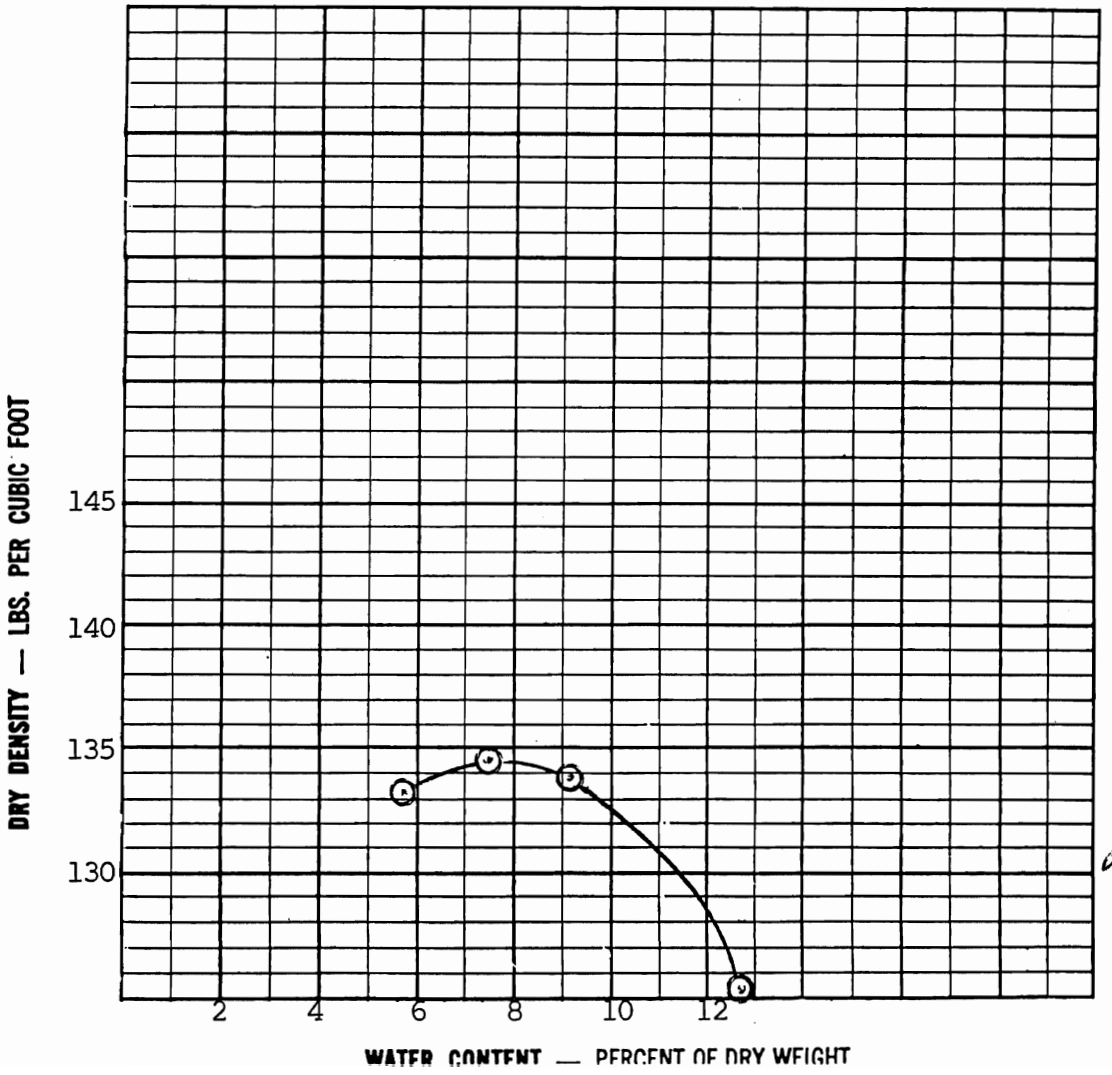
Source of Material Klepher's Pit

Natural Water Content NT % Natural Dry Density NT PCF Specific Gravity NT

Liquid Limit 28 % Plastic Limit 20 % Plasticity Index 8

B. Test Procedure Used: ASTM D 1557 Method C

C. Test Results: Maximum Dry Density 134.54 PCF Optimum Water Content 7.6 %



James R. Bender
Branch Manager

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57 SOUTH MAIN STREET • CASTLETON, N.Y. 12033

• TELEPHONES •
(518) 732-7205 CASTLETON OFFICE
(607) 722-1582 BINGHAMTON

S.M.T. Job No. 7286

Test Date 30 March 1997

LABORATORY COMPACTION REPORT

Job Name and Location Kirkwood Landfill Closure

Architect or Engineer

Contractor Gorcik Construction, Binghamton, NY

A. Description of Soil: Glacial Till

Material Mark ____ Unified Classification ____ AASHO Classification ____

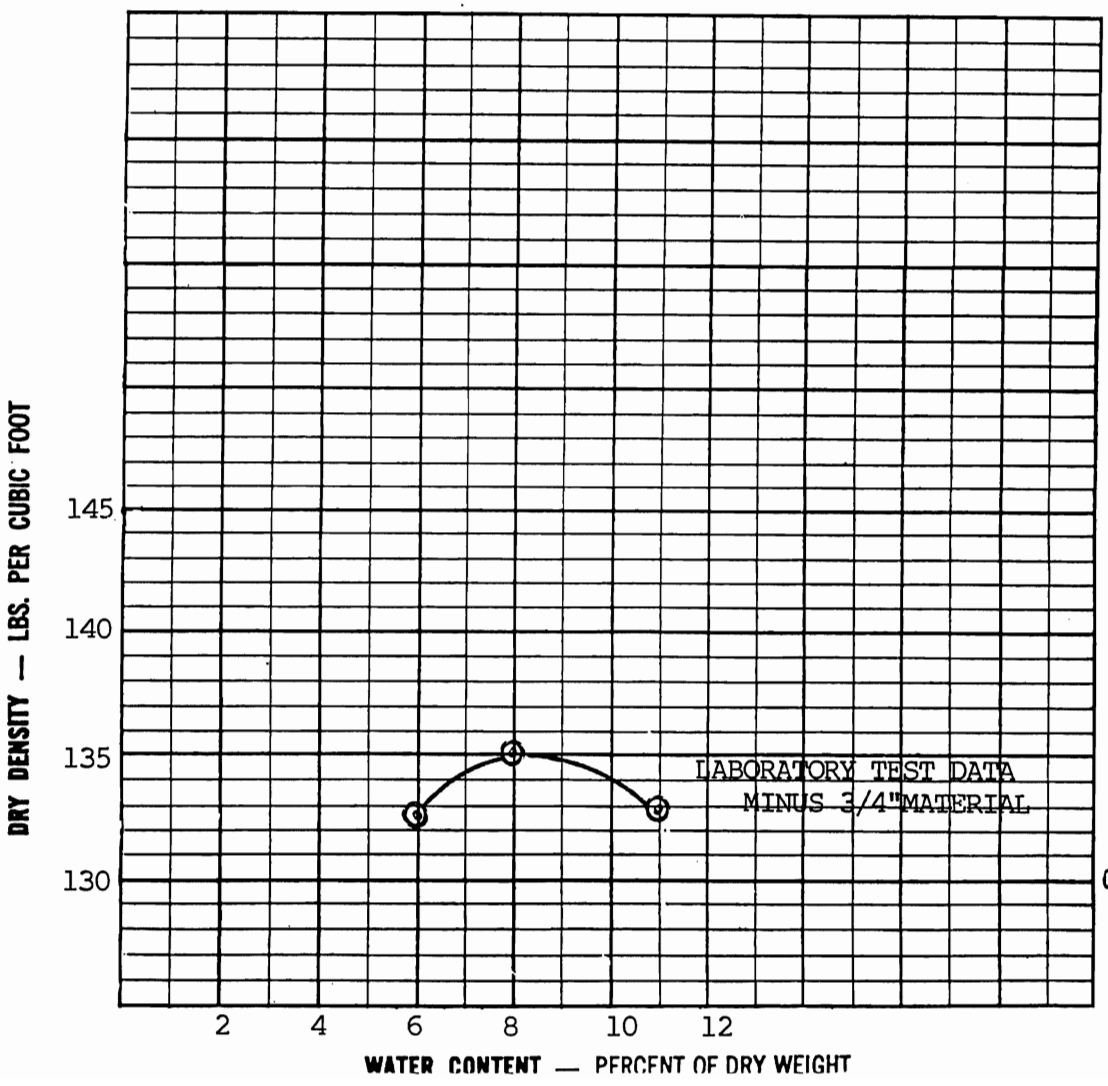
Source of Material Klephfer's Pit

Natural Water Content NT % Natural Dry Density NT PCF Specific Gravity NT

Liquid Limit NT % Plastic Limit NT % Plasticity Index NT

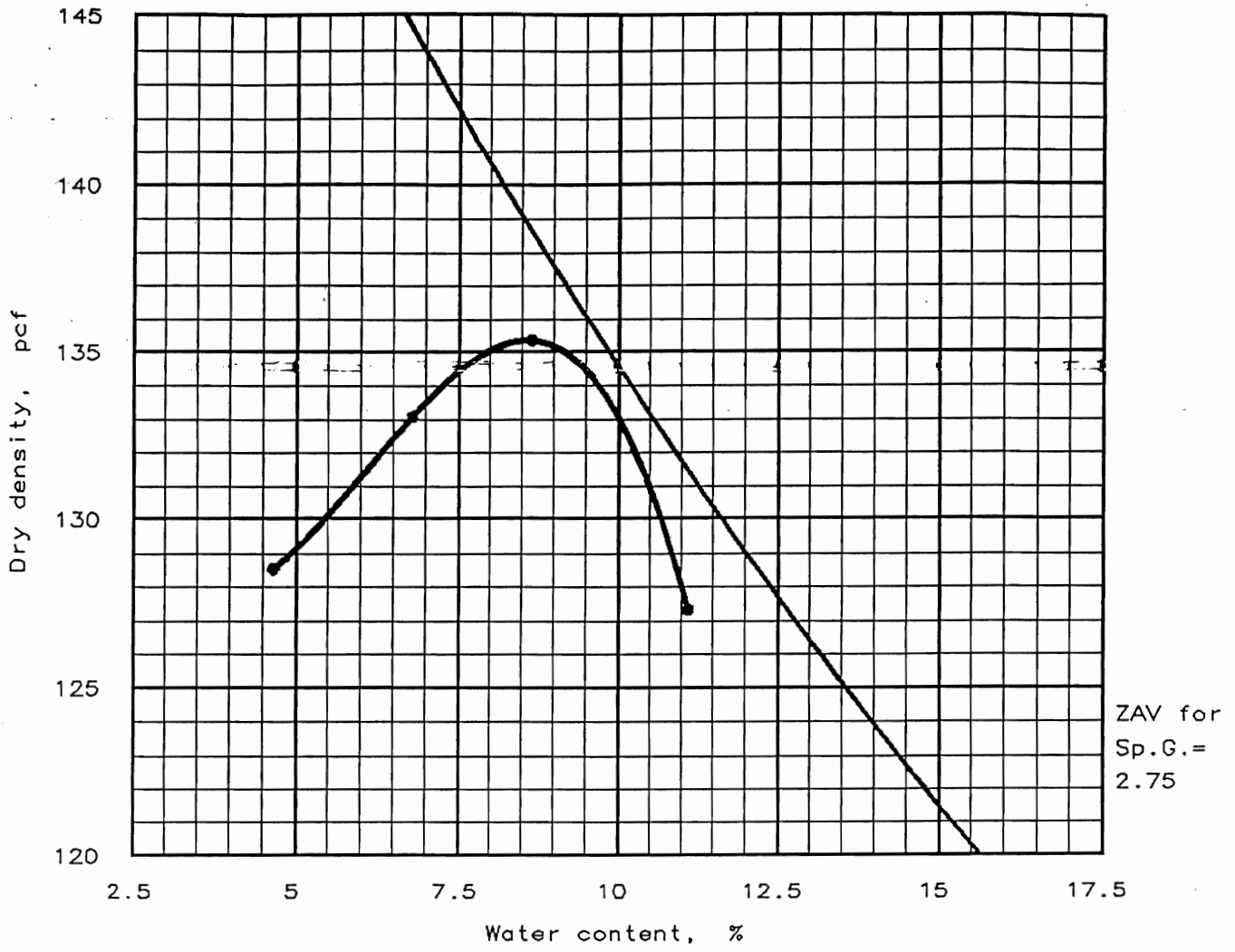
B. Test Procedure Used: ASTM D-1557 Method C with oversize correction per ASTM D-4718

C. Test Results: Maximum Dry Density 138.0 PCF Optimum Water Content 7.9 %



James R. Bender
Branch Manager

MOISTURE-DENSITY RELATIONSHIP TEST



Test specification: ASTM D 1557-78 Method D, Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No.200
	USCS	AASHTO						
	SM						12.8 %	45.5 %

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 135.4 pcf Optimum moisture = 8.6 %	10,000 - 15,000 cy Silt or Clay Some Snd&Gr

Project No.: 6103700670
Project: Kirkwood C. & D. Landfill Closure
Location: Imported Cover Material
Kirkwood, New York
Date: August 5, 1997

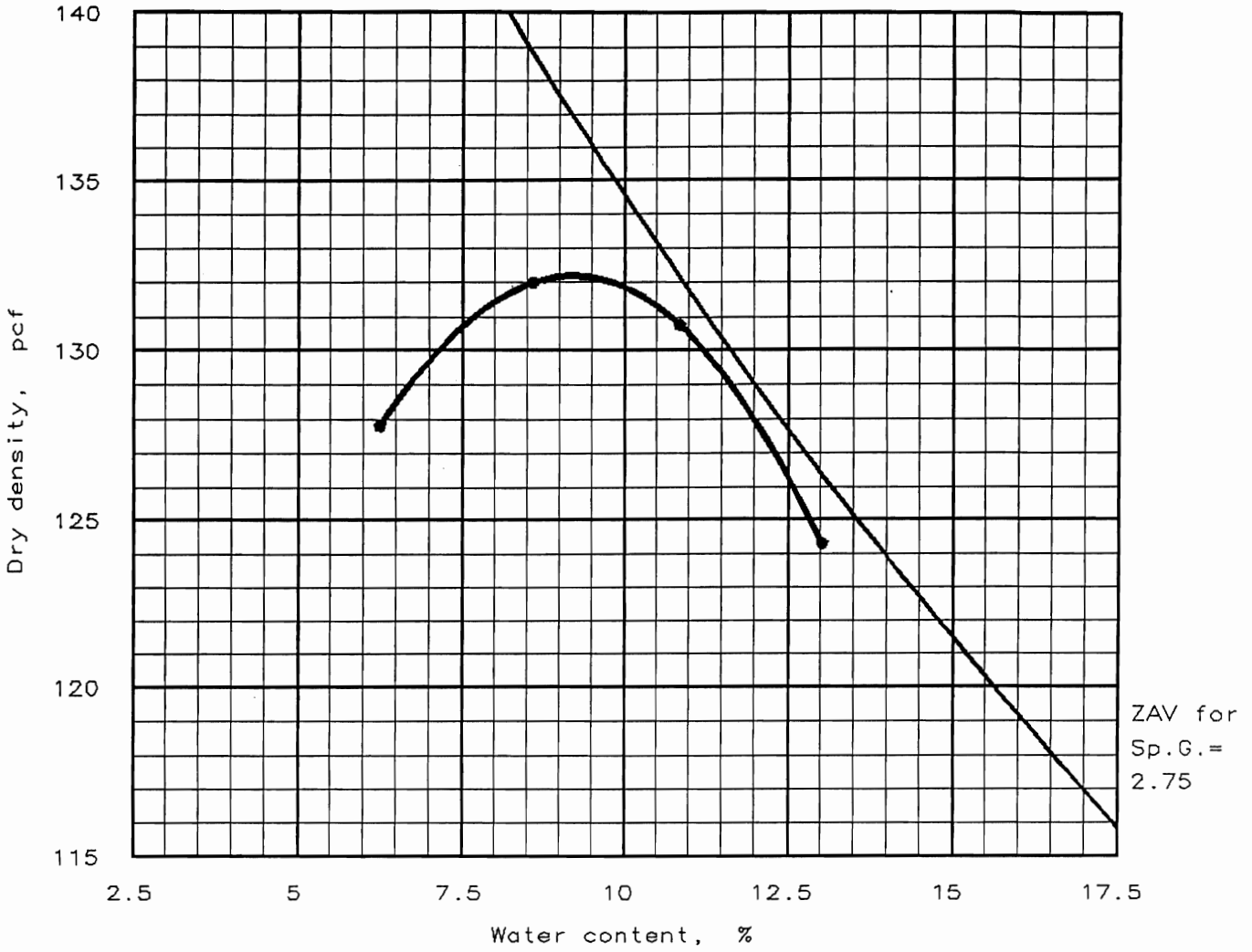
Remarks:
Sampled by Maxim
July 28, 1997
Lab No. 97400

MOISTURE-DENSITY RELATIONSHIP TEST

MAXIM TECHNOLOGIES

Fig. No. 97400

MOISTURE-DENSITY RELATIONSHIP TEST



Test specification: ASTM D 698-78 Method D, Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No.200
	USCS	AASHTO						
	GC				27	9	9.5 %	46.7 %

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 132.2 pcf Optimum moisture = 9.2 %	Low Perm Soil

Project No.: 9734344
Project: Kirkwood Landfill Closure
Location: Kirkwood, New York
15,000 - 20,000 cy Sample
Date: April 1, 1998

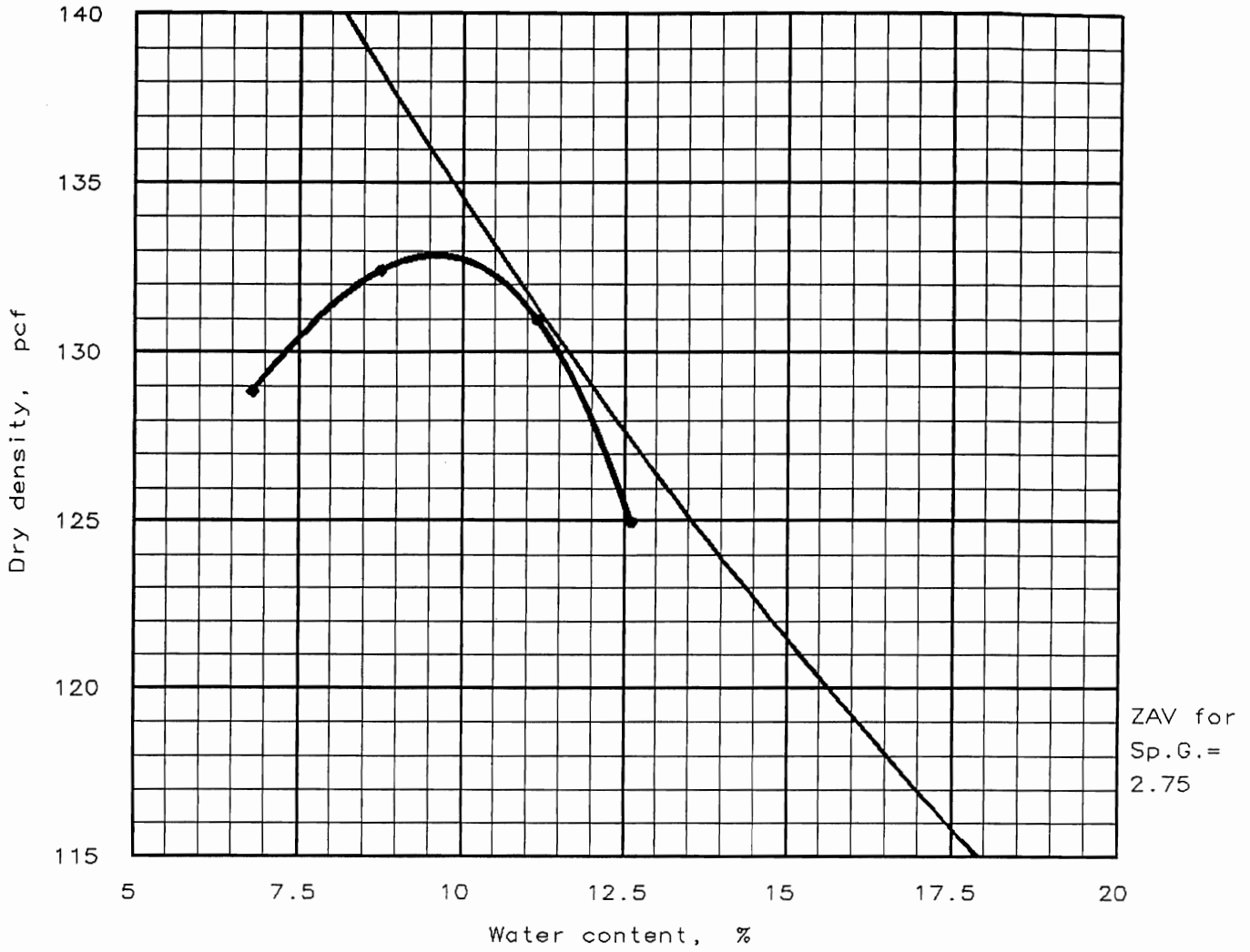
Remarks:
Tested using stone substitution.
Lab No. 98078

MOISTURE-DENSITY RELATIONSHIP TEST

MAXIM TECHNOLOGIES

Fig. No. 98078

MOISTURE-DENSITY RELATIONSHIP TEST



Test specification: ASTM D 698-78 Method D, Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No.200
	USCS	AASHTO						
	SC				27	9	5.9 %	48.3 %

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 132.9 pcf Optimum moisture = 9.6 %	Low Perm Soil

Project No.: 9734344
Project: Kirkwood Landfill Closure
Location: Kirkwood, New York
20,000 - 25,000 cy Sample
Date: April 1, 1998

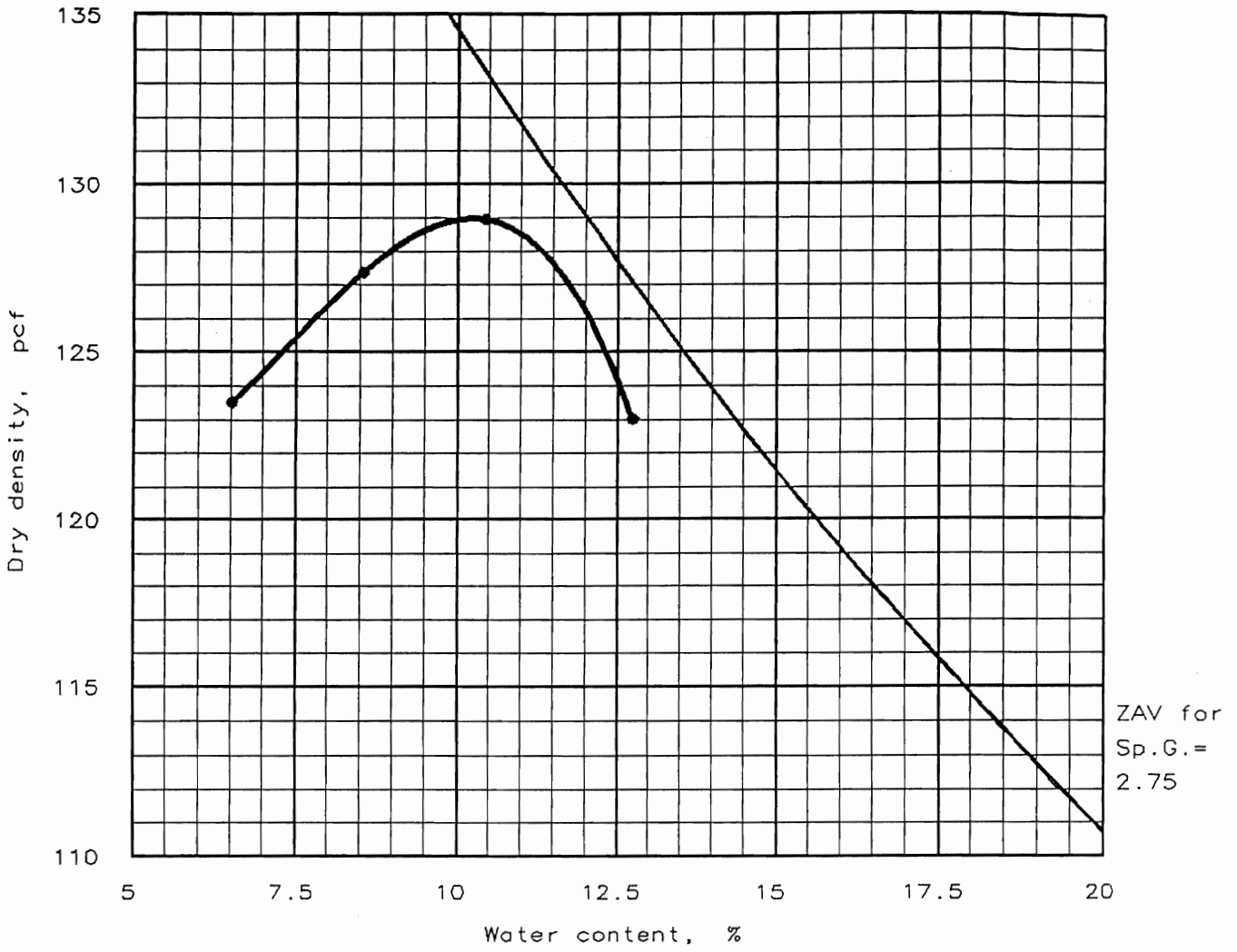
Remarks:
Tested using stone substitution.
Lab No. 98079

MOISTURE-DENSITY RELATIONSHIP TEST

MAXIM TECHNOLOGIES

Fig. No. 98079

MOISTURE-DENSITY RELATIONSHIP TEST



Test specification: ASTM D 698-78 Method D, Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No.200
	USCS	AASHTO						
	CL				26	8	6.4 %	50.4 %

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 129.0 pcf Optimum moisture = 10.2 %	25,000-30,000 cy Low Perm Soil

Project No.: 9734344
Project: Kirkwood C. & D. Landfill Closure
Location: Kirkwood, New York
South End of Stockpile
Date: May 11, 1998

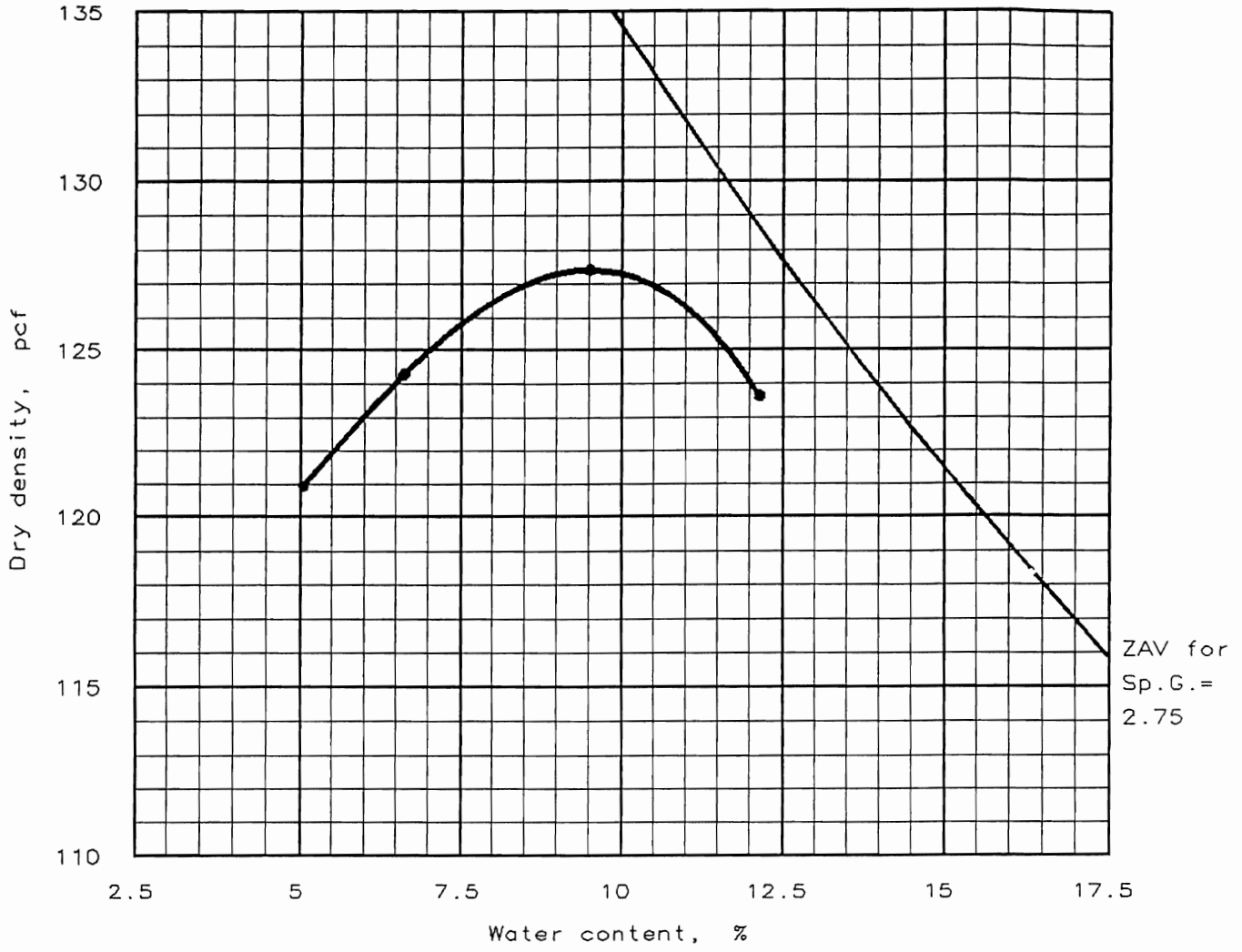
Remarks:
Tested using stone substitution.
Lab No. 98177

MOISTURE-DENSITY RELATIONSHIP TEST

MAXIM TECHNOLOGIES

Fig. No. 98177

MOISTURE-DENSITY RELATIONSHIP TEST



Test specification: ASTM D 698-78 Method D, Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No.200
	USCS	AASHTO						
	GC				26	8	11.2 %	45.0 %

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 127.4 pcf Optimum moisture = 9.5 %	30.000 - 35.000 cy Low Perm Soil

Project No.: 9734344
Project: Kirkwood C. & D. Landfill Closure
Location: Kirkwood, New York
Middle of Stockpile
Date: May 11, 1998

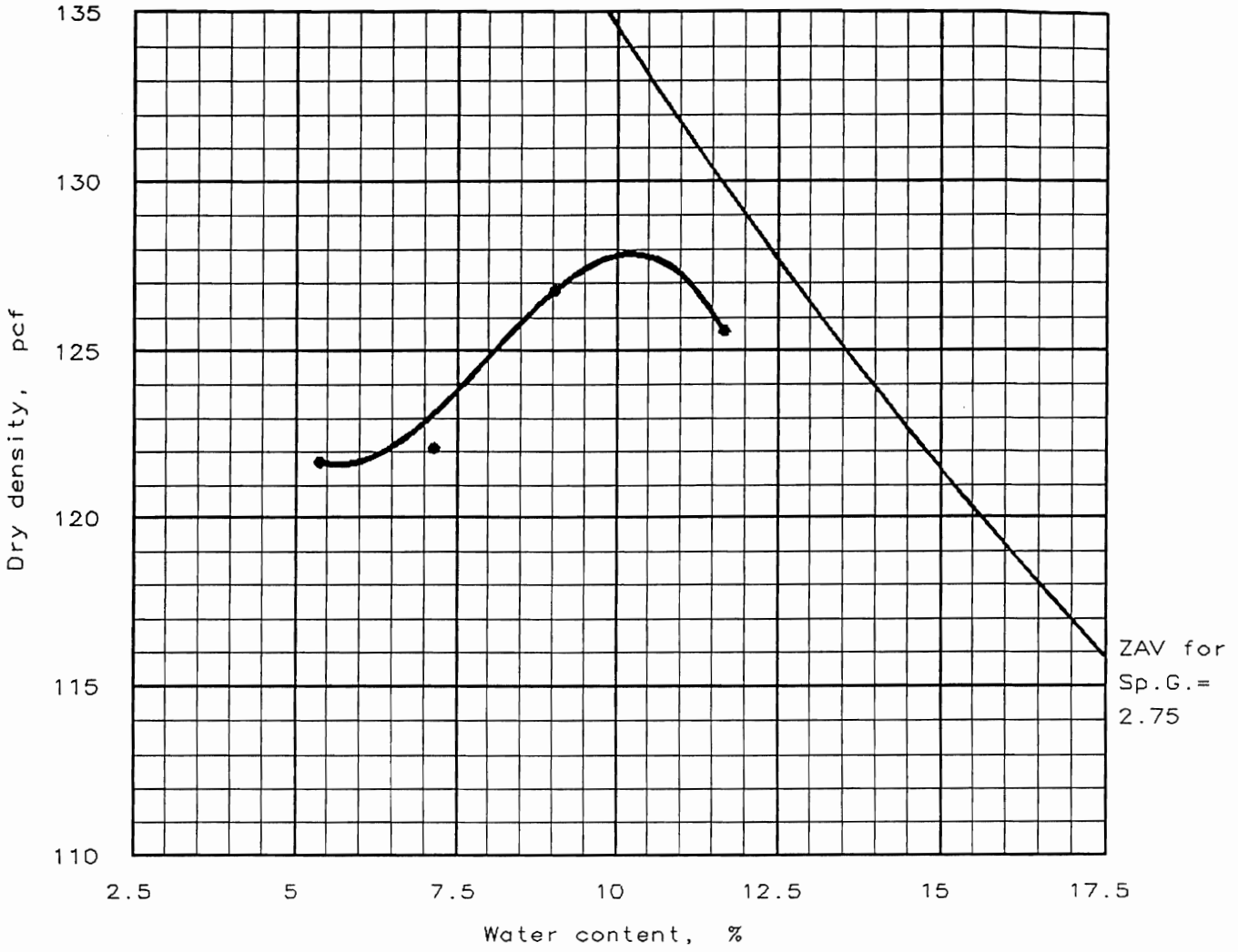
Remarks:
Tested using stone substitution.
Lab No. 98178

MOISTURE-DENSITY RELATIONSHIP TEST

MAXIM TECHNOLOGIES

Fig. No. 98178

MOISTURE-DENSITY RELATIONSHIP TEST



Test specification: ASTM D 698-78 Method D, Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No.200
	USCS	AASHTO						
	GC				26	8	10.2 %	49.4 %

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 127.8 pcf Optimum moisture = 10.2 %	35,000-40,000 cy Low Perm Soil

Project No.: 9734344
Project: Kirkwood C. & D. Landfill Closure
Location: Kirkwood, New York
North End of Stockpile
Date: May 12, 1998

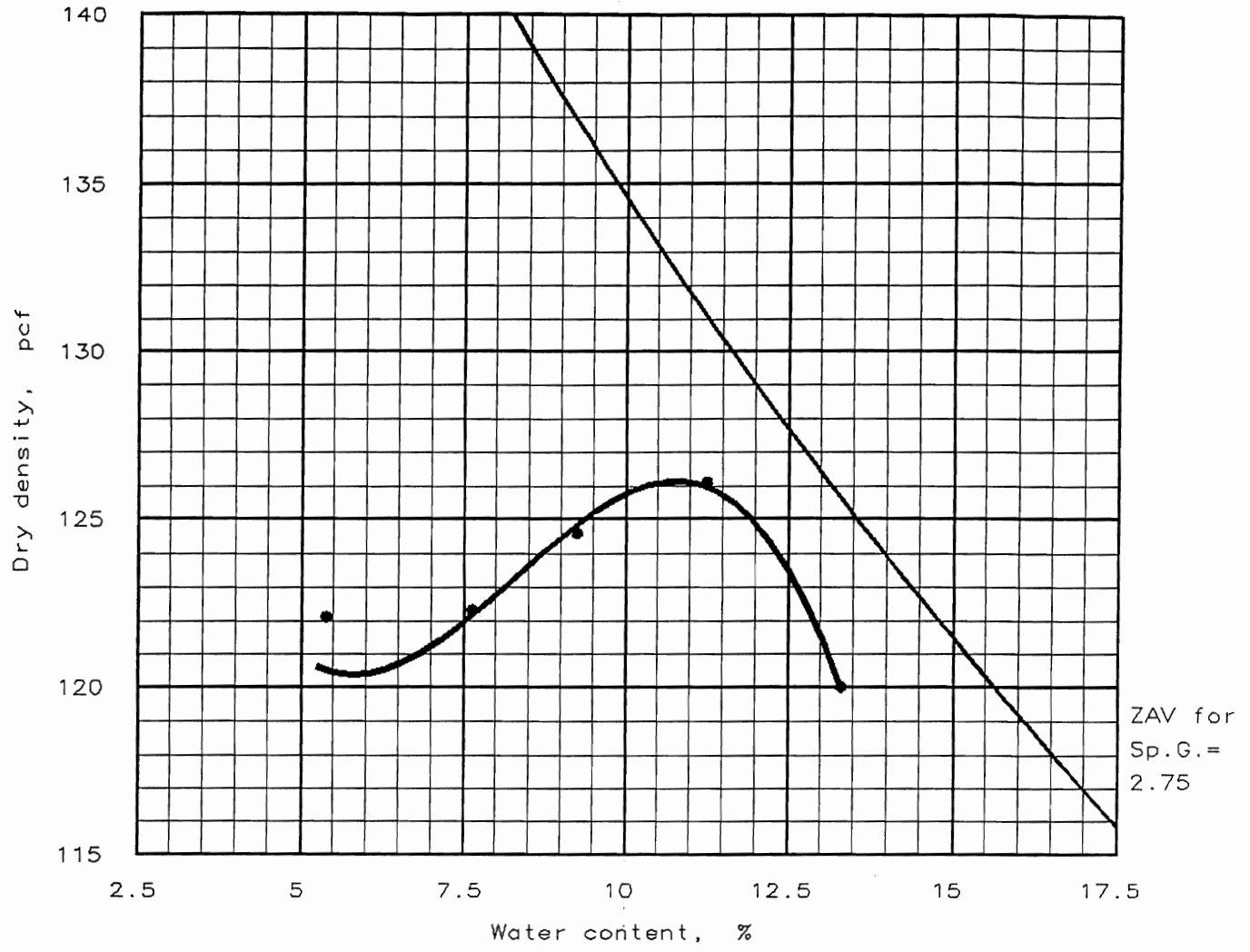
Remarks:
Tested using stone substitution.
Lab No. 98179

MOISTURE-DENSITY RELATIONSHIP TEST

MAXIM TECHNOLOGIES

Fig. No. 98179

MOISTURE-DENSITY RELATIONSHIP TEST



Test specification: ASTM D 698-78 Method C, Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No.200
	USCS	AASHTO						
	CL				30	19	4.3 %	52.9 %

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 126.1 pcf Optimum moisture = 10.8 %	Low Perm Soil

Project No.: 9734344
Project: Kirkwood Landfill Closure
Location: Kirkwood, New York

Date: August 5, 1999

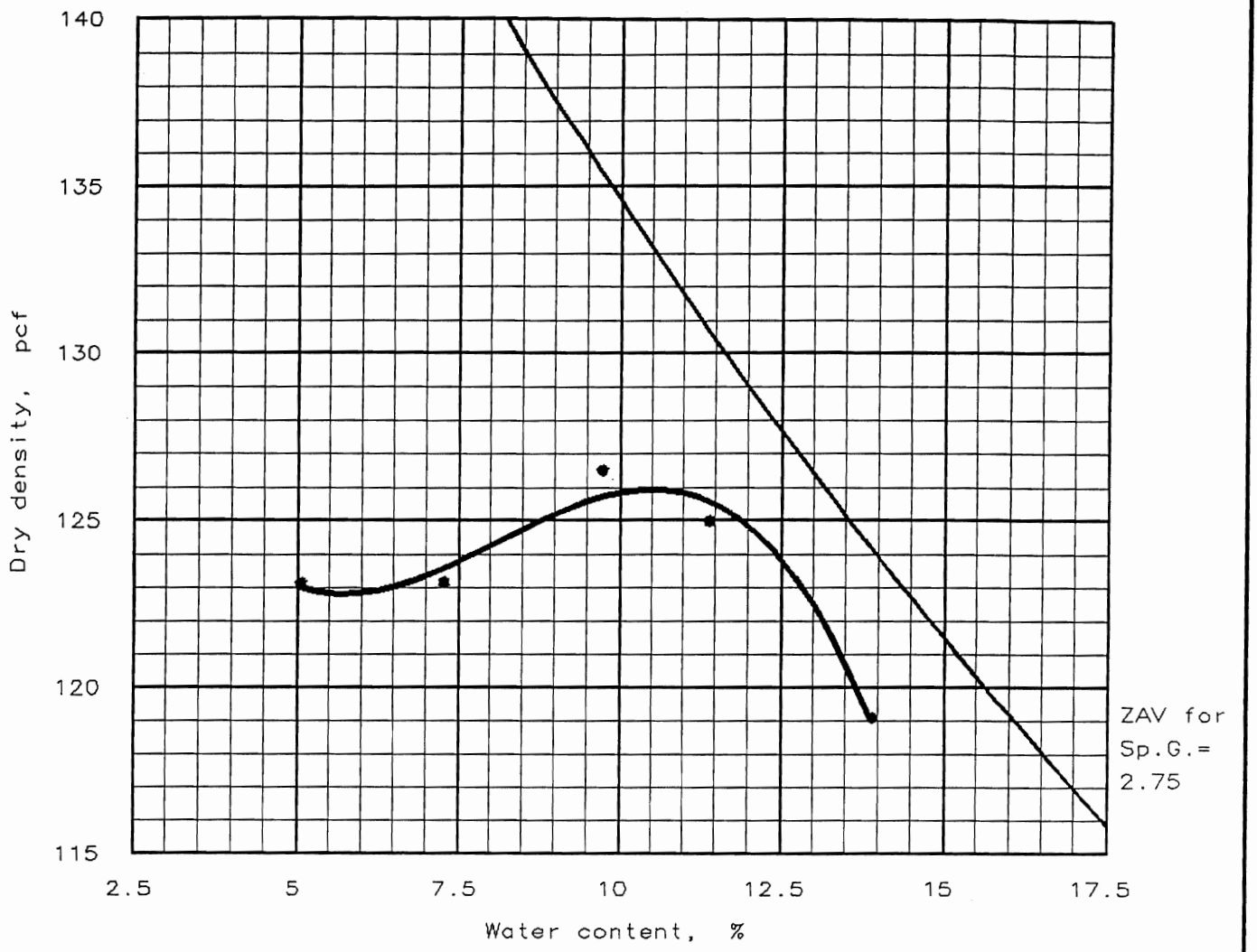
Remarks:
Sampled by Maxim on 7/31/99.
5,000 cy sample

MOISTURE-DENSITY RELATIONSHIP TEST

MAXIM TECHNOLOGIES

Fig. No. 99478

MOISTURE-DENSITY RELATIONSHIP TEST



Test specification: ASTM D 698-78 Method C, Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No.200
	USCS	AASHTO						
	CL				29	11	4.8 %	52.4 %

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 125.9 pcf Optimum moisture = 10.5 %	Low Perm Soil

Project No.: 9734344
Project: Kirkwood Landfill Closure
Location: Kirkwood, New York

Date: August 5, 1999

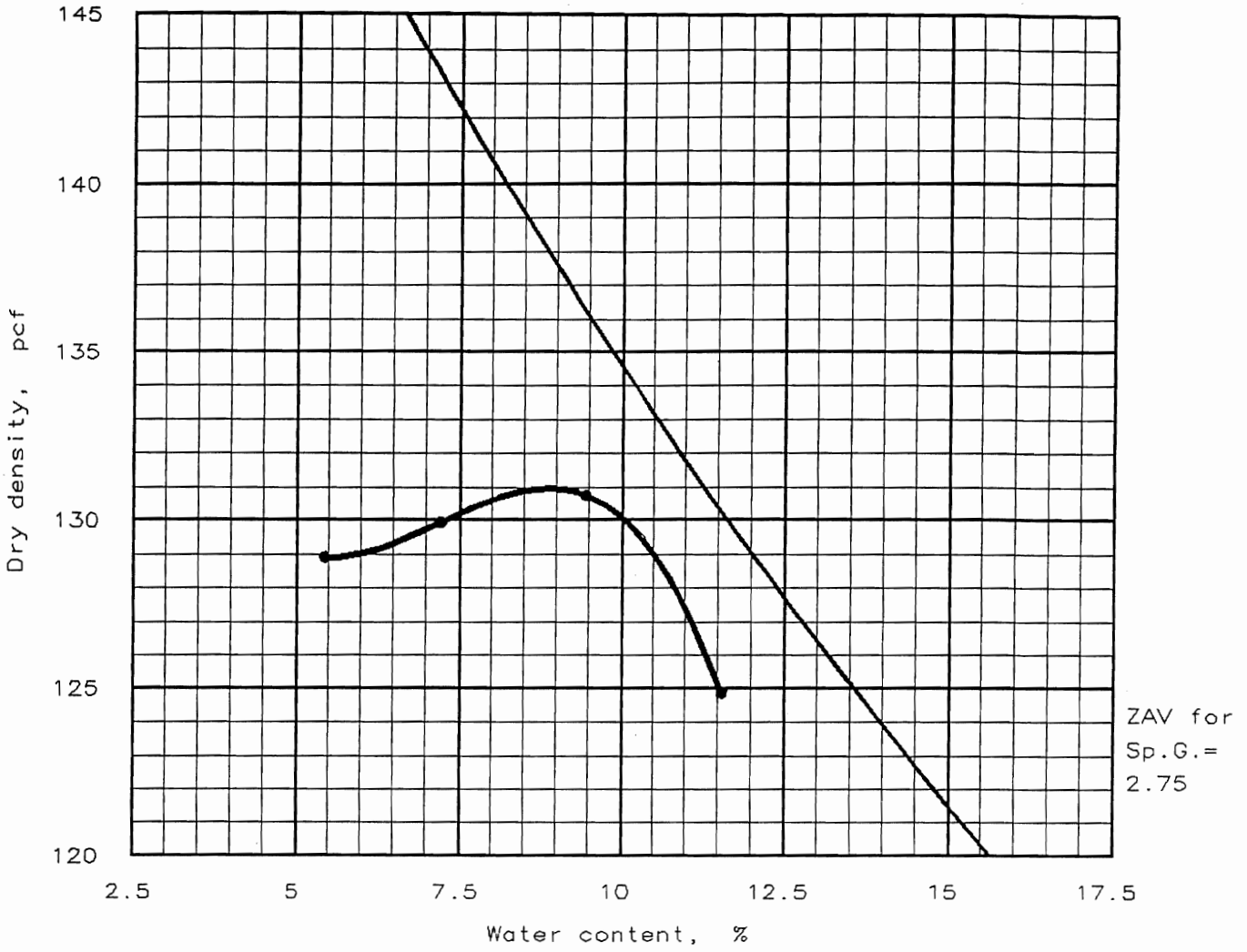
Remarks:
Sampled by Maxim on 7/31/99.
10,000 cy sample

MOISTURE-DENSITY RELATIONSHIP TEST

MAXIM TECHNOLOGIES

Fig. No. 99479

MOISTURE-DENSITY RELATIONSHIP TEST



Test specification: ASTM D 698-78 Method D, Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No.200
	USCS	AASHTO						
	GC				27	10	12.6 %	42.4 %

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 131.0 pcf Optimum moisture = 8.9 %	Low Perm Soil

Project No.: 9734344
Project: Kirkwood Landfill Closure
Location: Kirkwood, New York

Date: August 5, 1999

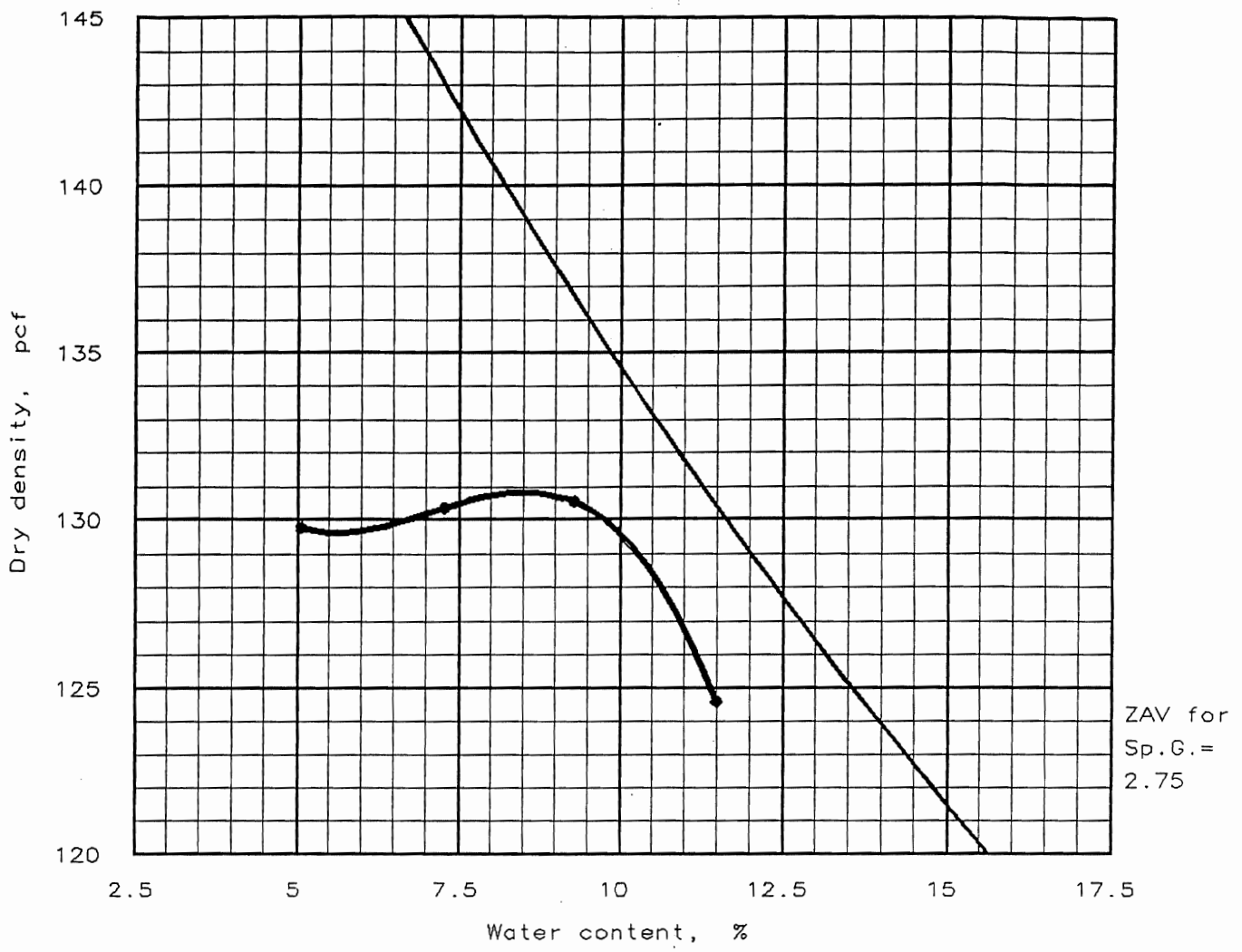
Remarks:
Sampled by Maxim on 7/31/99.
15,000 cy sample

MOISTURE-DENSITY RELATIONSHIP TEST

MAXIM TECHNOLOGIES

Fig. No. 99480

MOISTURE-DENSITY RELATIONSHIP TEST



Test specification: ASTM D 698-78 Method D, Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No.200
	USCS	AASHTO						
	GC				27	10	11.9 %	43 %

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 130.8 pcf Optimum moisture = 8.5 %	Low Perm Soil

Project No.: 9734344
Project: Kirkwood Landfill Closure
Location: Kirkwood, New York

Date: August 5, 1999

Remarks:
Sampled by Maxim on 7/31/99.
20,000 cy sample

MOISTURE-DENSITY RELATIONSHIP TEST

MAXIM TECHNOLOGIES

Fig. No. 99481

Low Perm Stockpile

Gradation

SOIL & MATERIAL TESTING, INC.
532 FRONT STREET • BINGHAMTON, NY 13905-1536

Office	Telephone
Binghamton	(607) 722-1582
Castleton	(518) 732-7205
Kingston	(914) 366-4471

6 November 1996

SMT#: 7286

Gorick Construction
27 Track Drive
Binghamton, NY 13904

REFERENCE: Kirkwood Landfill Closure

Sirs:

Listed below are the results of a washed gradation done on the above referenced project. Material source-Klepher Pit, Track Drive, Binghamton, NY.

SIEVE SIZE	% PASSING
3"	100%
1½"	93.5%
3/4"	77.7%
3/8"	67.2%
No.4	60.9%
No.8	54.6%
No.16	49.8%
No.30	49.1%
No.50	44.5%
No.100	43.6%
No.200	41.1%

Material tested as per ASTM D-422.

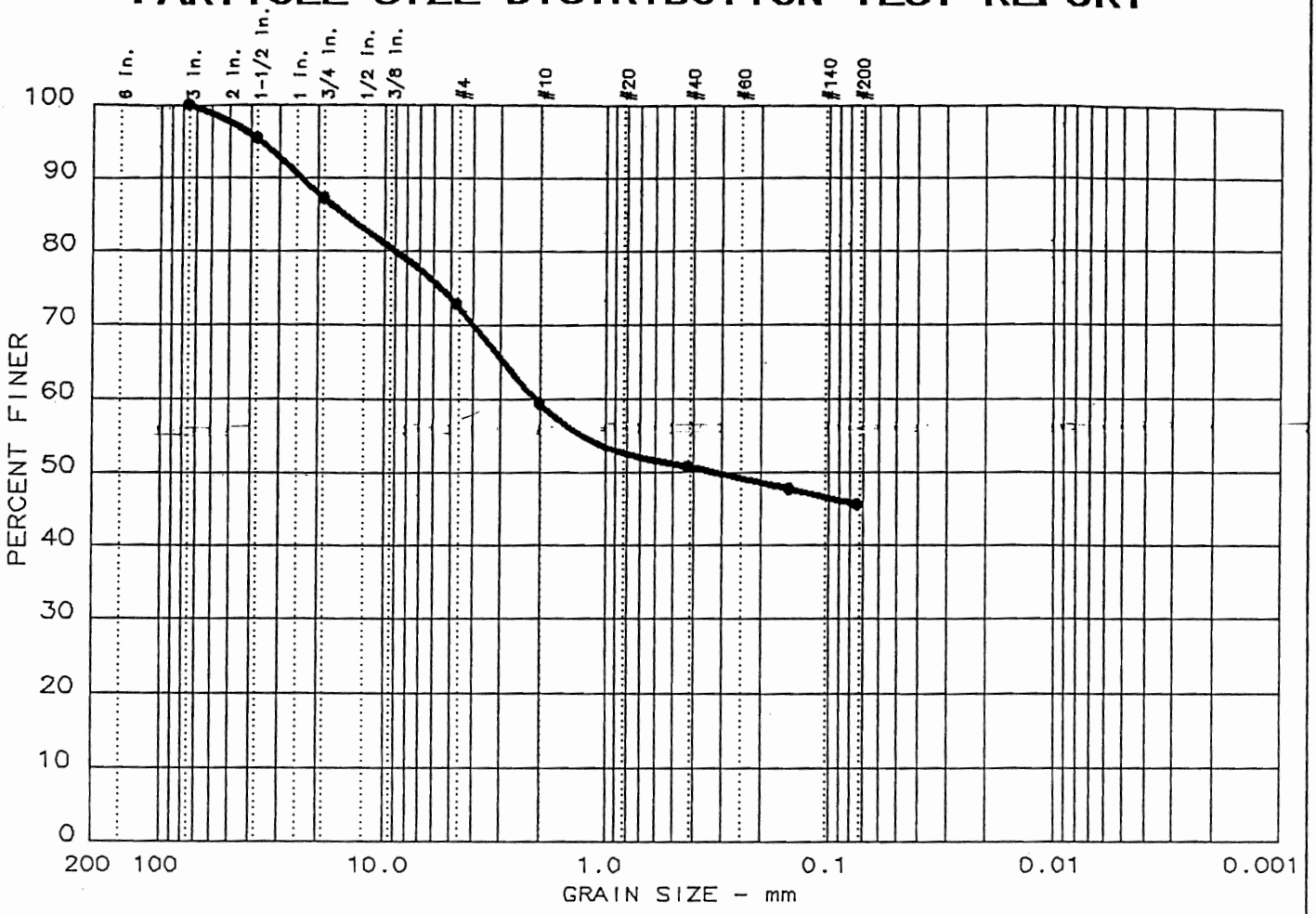
If there are any questions regarding this report, or any other matter, please do not hesitate to contact us.

Sincerely yours,

SOIL & MATERIAL TESTING INC.

James R. Bender
Branch Manager

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	20	0.0	27.2	27.3	45.5		SM		

SIEVE Inches size	PERCENT FINER ●		
3	100.0		
1.5	95.4		
0.75	87.2		
	GRAIN SIZE		
D_{60}	2.07		
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
4	72.8		
10	59.4		
40	50.7		
100	47.7		
200	45.6		

Sample information:

● Imported Cover Material Silt and/or Clay, some Sand, Gravel.

Remarks:

Sampled by Maxim 7/28/97
10,000 - 15,000 cy

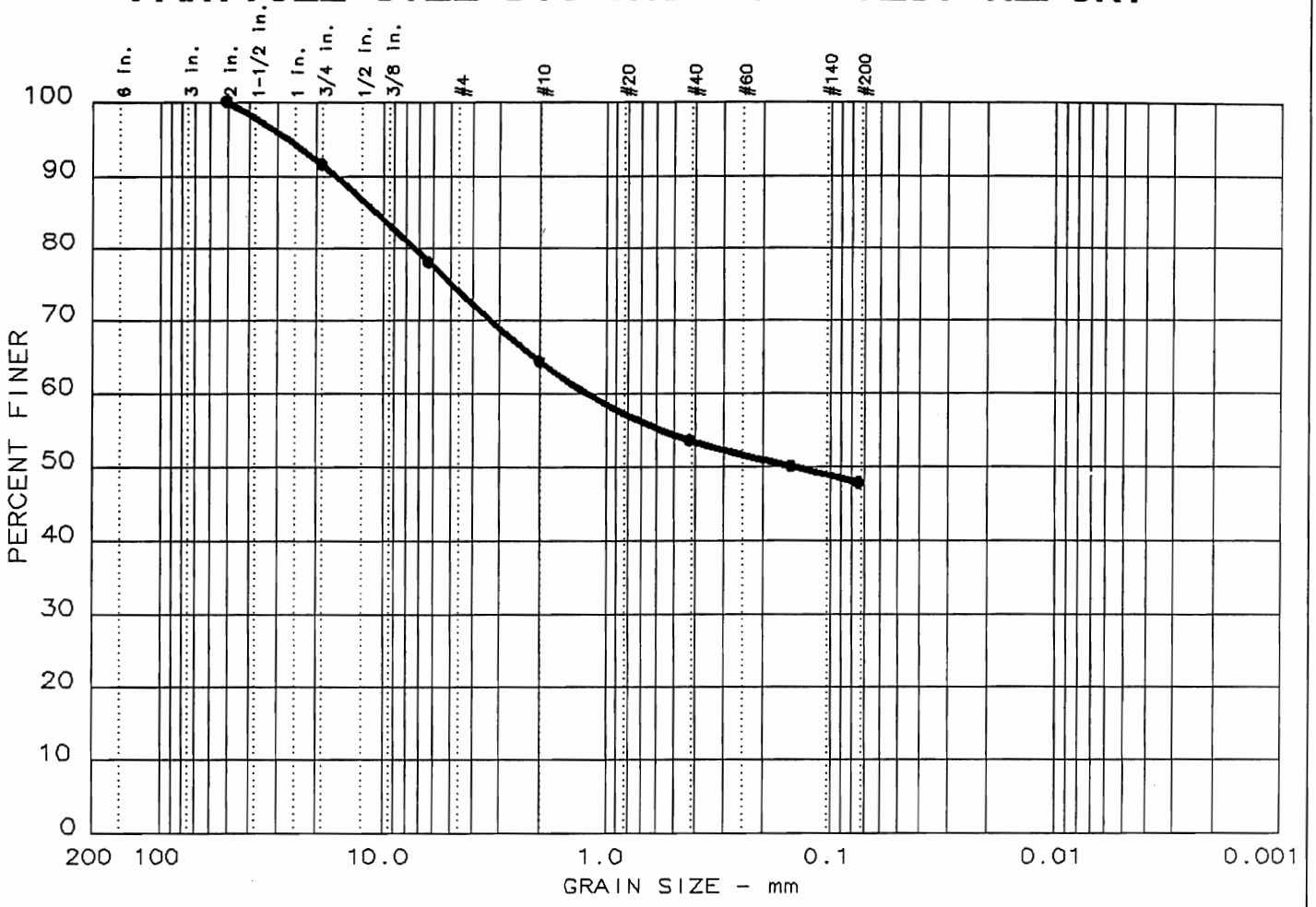
Lab No. 97400

MAXIM TECHNOLOGIES

Project No.: 6103700670
Project: Kirkwood C. & D. Landfill Closure

Date: August 5, 1997 Data Sheet ~~No.~~

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	11	0.0	25.7	26.4	47.9		SC	29	10

SIEVE Inches size	PERCENT FINER ●		
2	100.0		
0.75	91.6		
0.25	78.0		
	GRAIN SIZE		
D_{60}	1.22		
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
10	64.4		
40	53.5		
100	50.0		
200	47.9		

Sample information:
● 15,000 - 17,500 cy
Low Perm Soil
Klepfer Pit

Remarks:
Sampled on 3/27/98

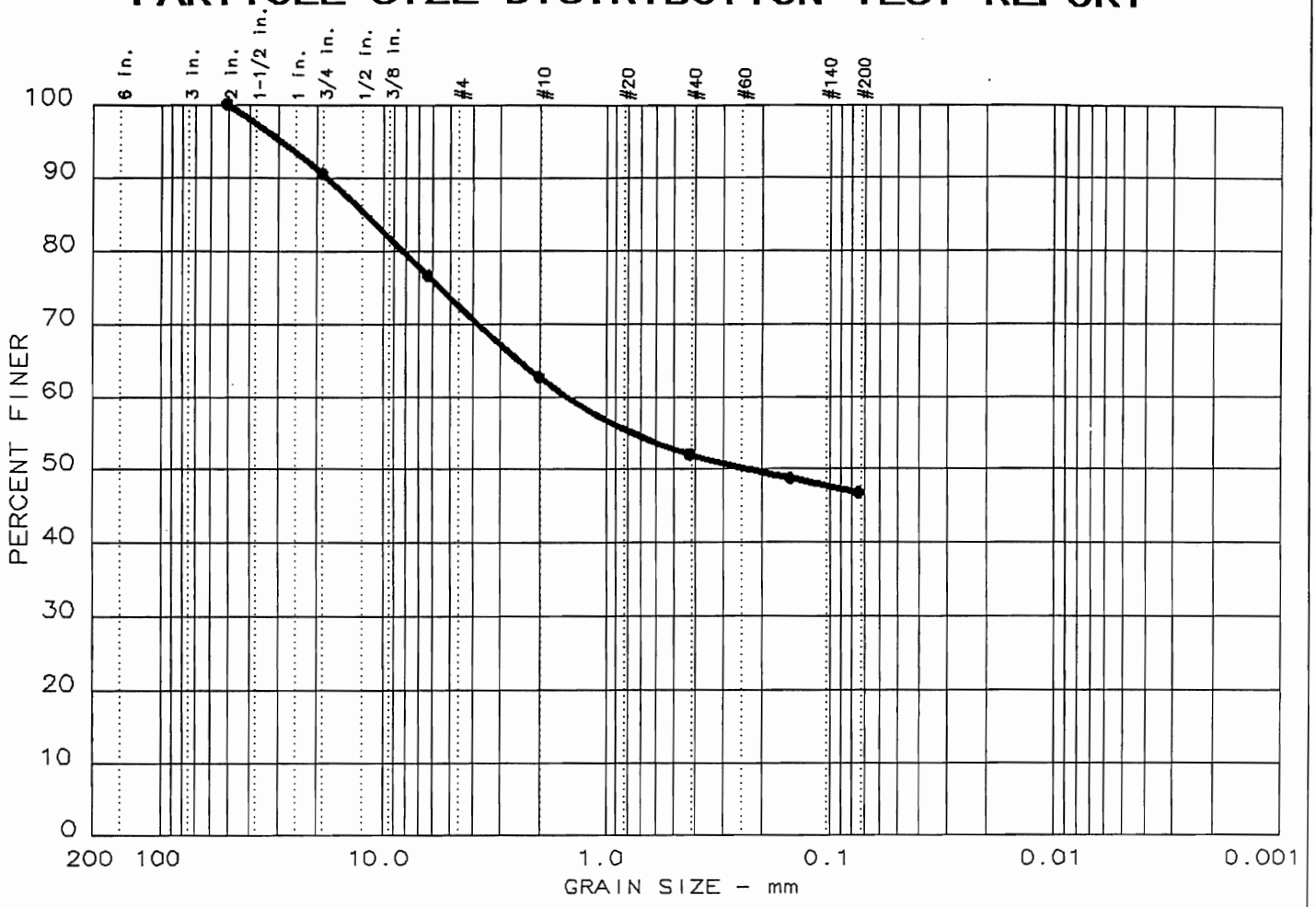
Lab No. 98076

MAXIM TECHNOLOGIES

Project No.: 9734344
Project: Kirkwood Landfill Closure

Date: April 1, 1998 Data Sheet ~~No.~~

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	13	0.0	27.2	26.1	46.7		GC	27	9

SIEVE inches size	PERCENT FINER ●		
2	100.0		
0.75	90.5		
0.25	76.6		
GRAIN SIZE			
D_{60}	1.50		
D_{30}			
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
10	62.7		
40	52.0		
100	48.7		
200	46.7		

Sample information:
● 17,500 - 20,000 cy
Low Perm Soil
Klepfer Pit

Remarks:
Sampled on 3/27/98

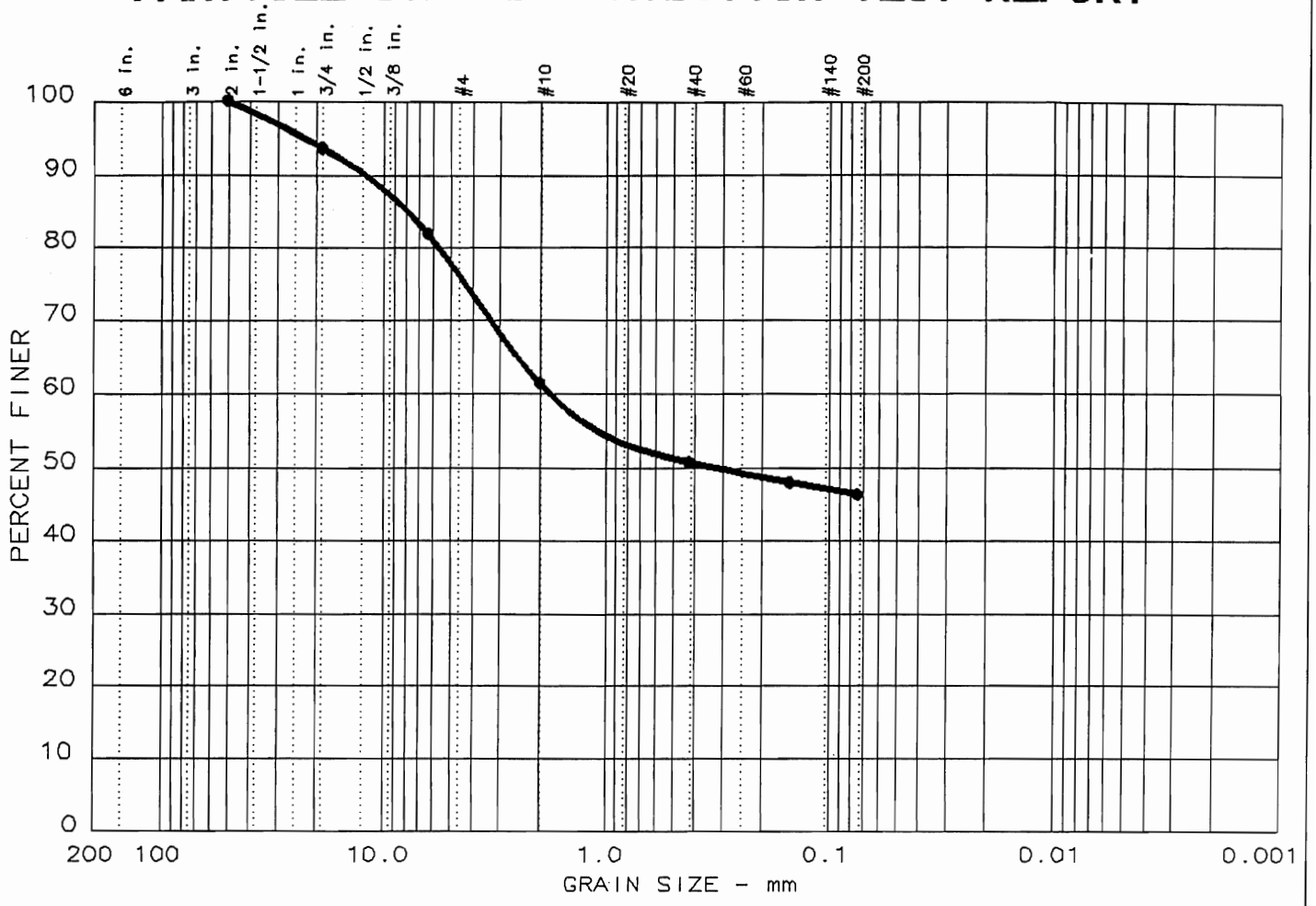
Lab No. 98078

MAXIM TECHNOLOGIES

Project No.: 9734344
Project: Kirkwood Landfill Closure

Date: April 1, 1998 Data Sheet ~~No.~~

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	12	0.0	23.1	30.5	46.4		SC	28	9

SIEVE inches size	PERCENT FINER ●		
2	100.0		
0.75	93.7		
0.25	81.9		
	GRAIN SIZE		
D_{60}	1.80		
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
10	61.4		
40	50.8		
100	48.0		
200	46.4		

Sample information:
● 20,000 - 22,500 cy
Low Perm Soil
Klepfer Pit

Remarks:
Sampled on 3/27/98

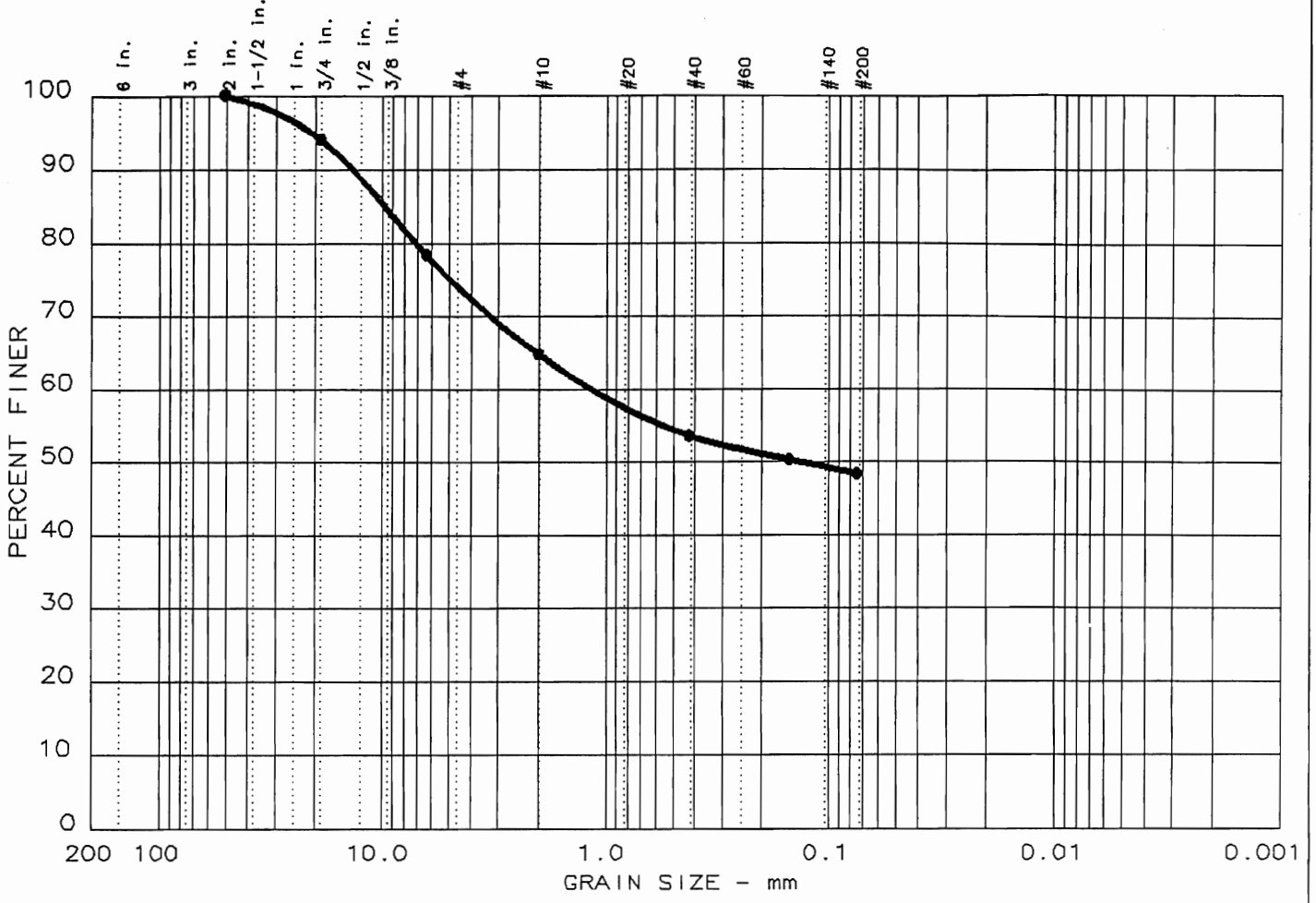
Lab No. 98077

MAXIM TECHNOLOGIES

Project No.: 9734344
Project: Kirkwood Landfill Closure

Date: April 1, 1998 Data Sheet ~~No.~~

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	14	0.0	25.5	26.2	48.3		SC	27	9

SIEVE inches size	PERCENT FINER ●		
2	100.0		
0.75	94.1		
0.25	78.5		
	GRAIN SIZE		
D_{60}	1.16		
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
10	64.8		
40	53.6		
100	50.3		
200	48.3		

Sample information:
● 22,500 - 25,000 cy
Low Perm Soil
Klepfer Pit

Remarks:
Sampled on 3/27/98

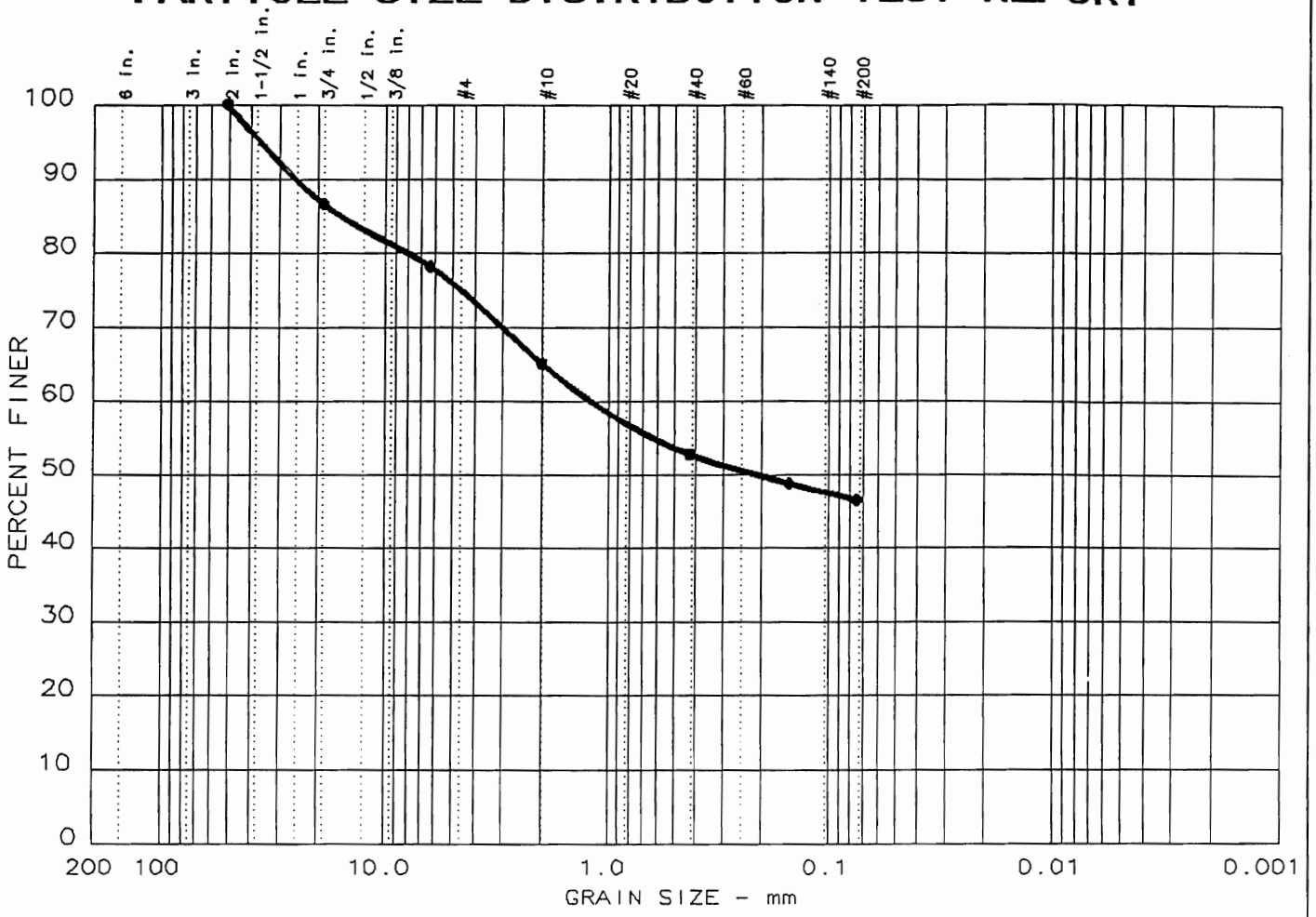
Lab No. 98079

MAXIM TECHNOLOGIES

Project No.: 9734344
Project: Kirkwood Landfill Closure

Date: April 1, 1998 Data Sheet ~~No.~~

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	13	0.0	24.8	28.8	46.4		SC	26	8

SIEVE inches size	PERCENT FINER ●		
2	100.0		
0.75	86.6		
0.25	78.1		
	GRAIN SIZE		
D_{60}	1.20		
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
10	65.1		
40	52.8		
100	48.8		
200	46.5		

Sample information:
● 25,000-27,500 cy
Low Perm Soil

Remarks:
S. End of Stockpile

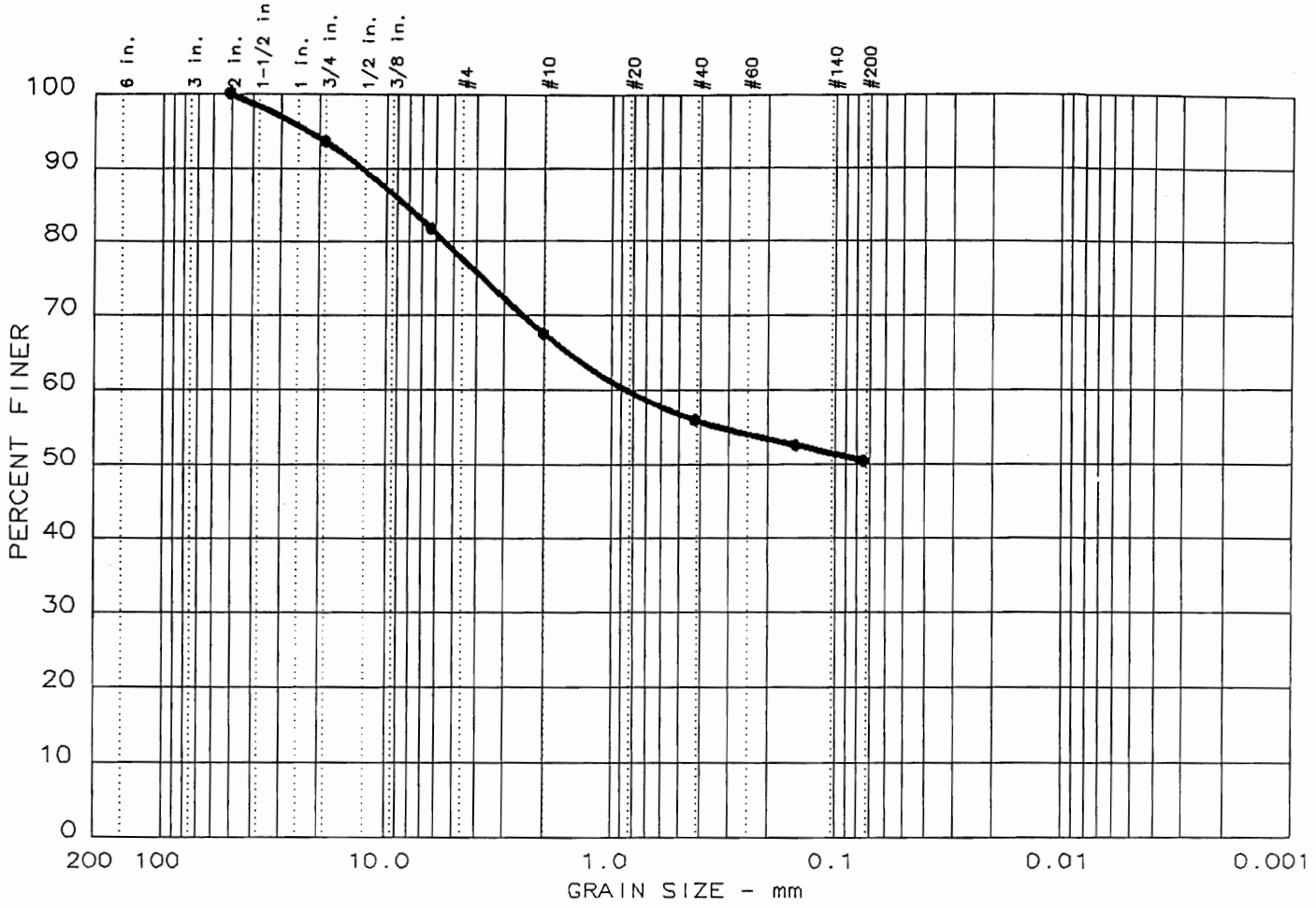
Lab No. 98174

MAXIM TECHNOLOGIES

Project No.: 9734344
Project: Kirkwood Landfill Closure

Date: May 15, 1998 Data Sheet ~~No.~~

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	14	0.0	22.1	27.5	50.4		CL	26	8

SIEVE Inches size	PERCENT FINER ●		
2	100.0		
0.75	93.6		
0.25	81.6		
	GRAIN SIZE		
D_{60}	0.851		
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
10	67.4		
40	56.0		
100	52.6		
200	50.4		

Sample information:
● 27,500-30,000 cy
Low Perm Soil

Remarks:
S. End of Stockpile

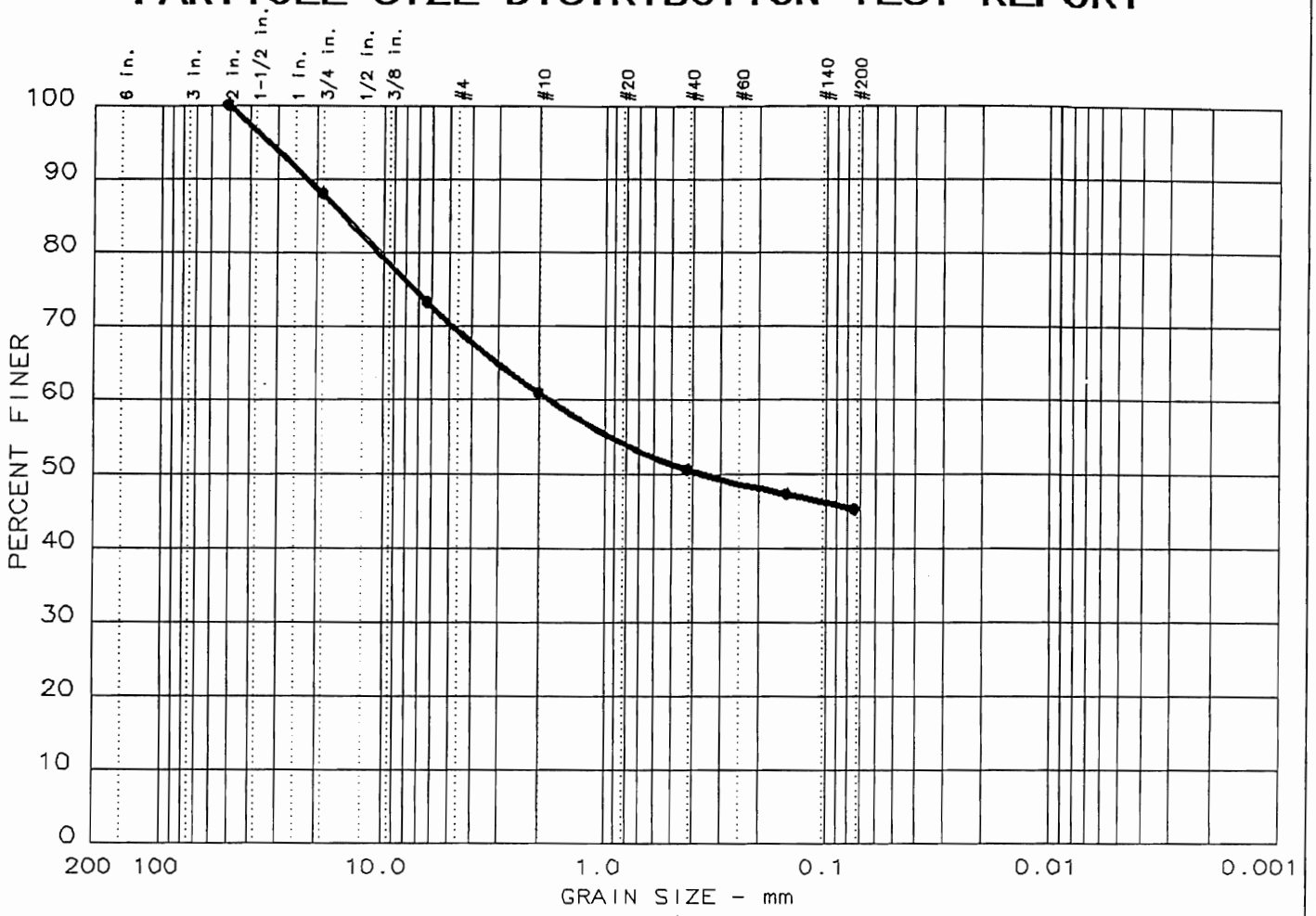
Lab No. 98177

MAXIM TECHNOLOGIES

Project No.: 9734344
Project: Kirkwood Landfill Closure

Date: May 15, 1998 Data Sheet ~~No.~~

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	15	0.0	30.3	24.4	45.3		GC	26	8

SIEVE inches size	PERCENT FINER ●		
2	100.0		
0.75	88.0		
0.25	73.2		
☒	GRAIN SIZE		
D_{60}	1.78		
D_{30}			
D_{10}			
☒	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
10	60.8		
40	50.6		
100	47.3		
200	45.3		

Sample information:
● 30,000-32,500 cy
Low Perm Soil

Remarks:
Middle of Stockpile

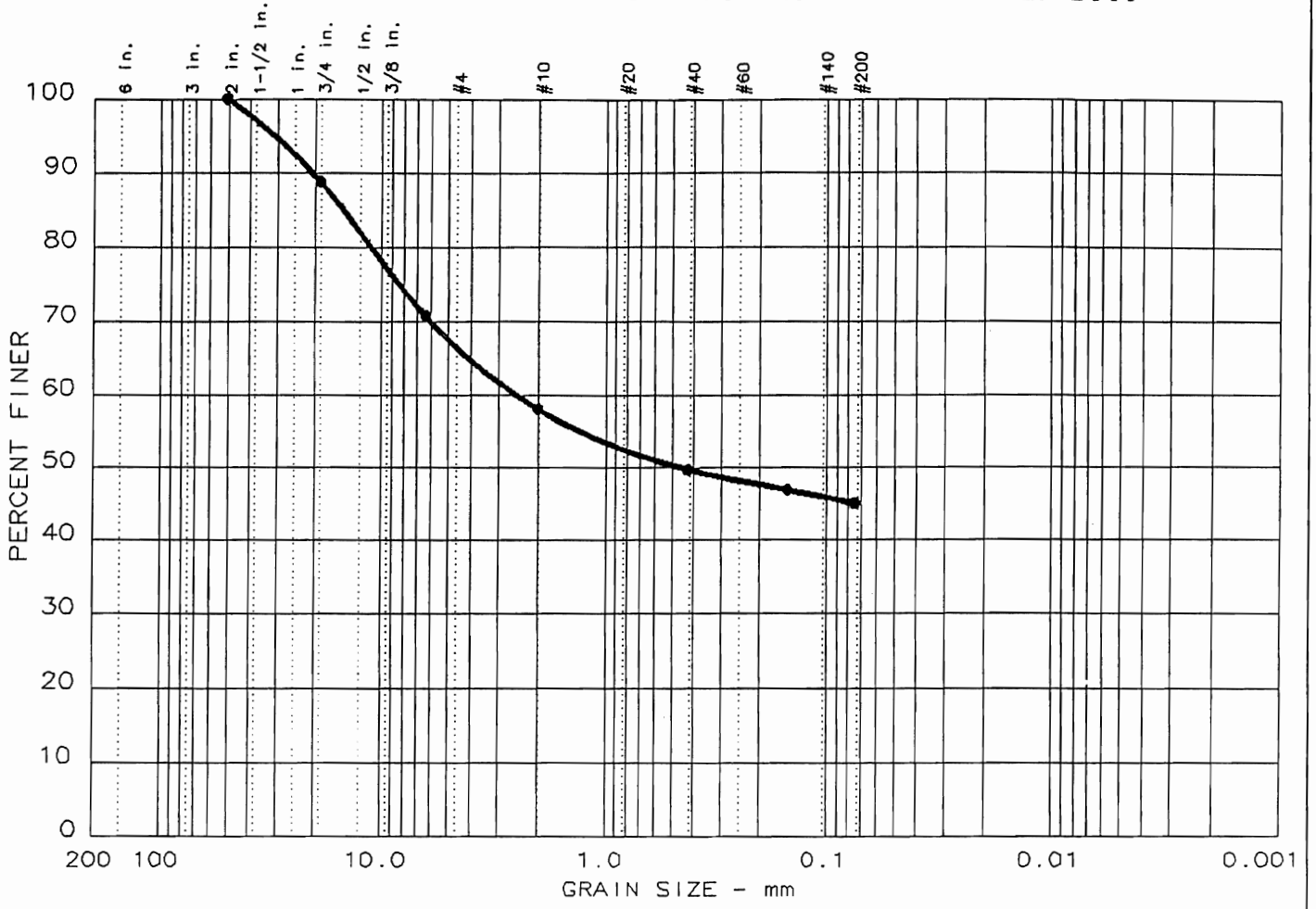
Lab No. 98175

MAXIM TECHNOLOGIES

Project No.: 9734344
Project: Kirkwood Landfill Closure

Date: May 15, 1998 Data Sheet ~~No.~~

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	16	0.0	33.3	21.8	44.9		GC	26	8

SIEVE inches size	PERCENT FINER ●		
2	100.0		
0.75	88.8		
0.25	70.7		
GRAIN SIZE			
D_{60}	2.51		
D_{30}			
D_{10}			
COEFFICIENTS			
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
10	58.1		
40	49.7		
100	46.8		
200	45.0		

Sample information:
● 32,500-35,000 cy
Low Perm Soil

Remarks:
Middle of Stockpile

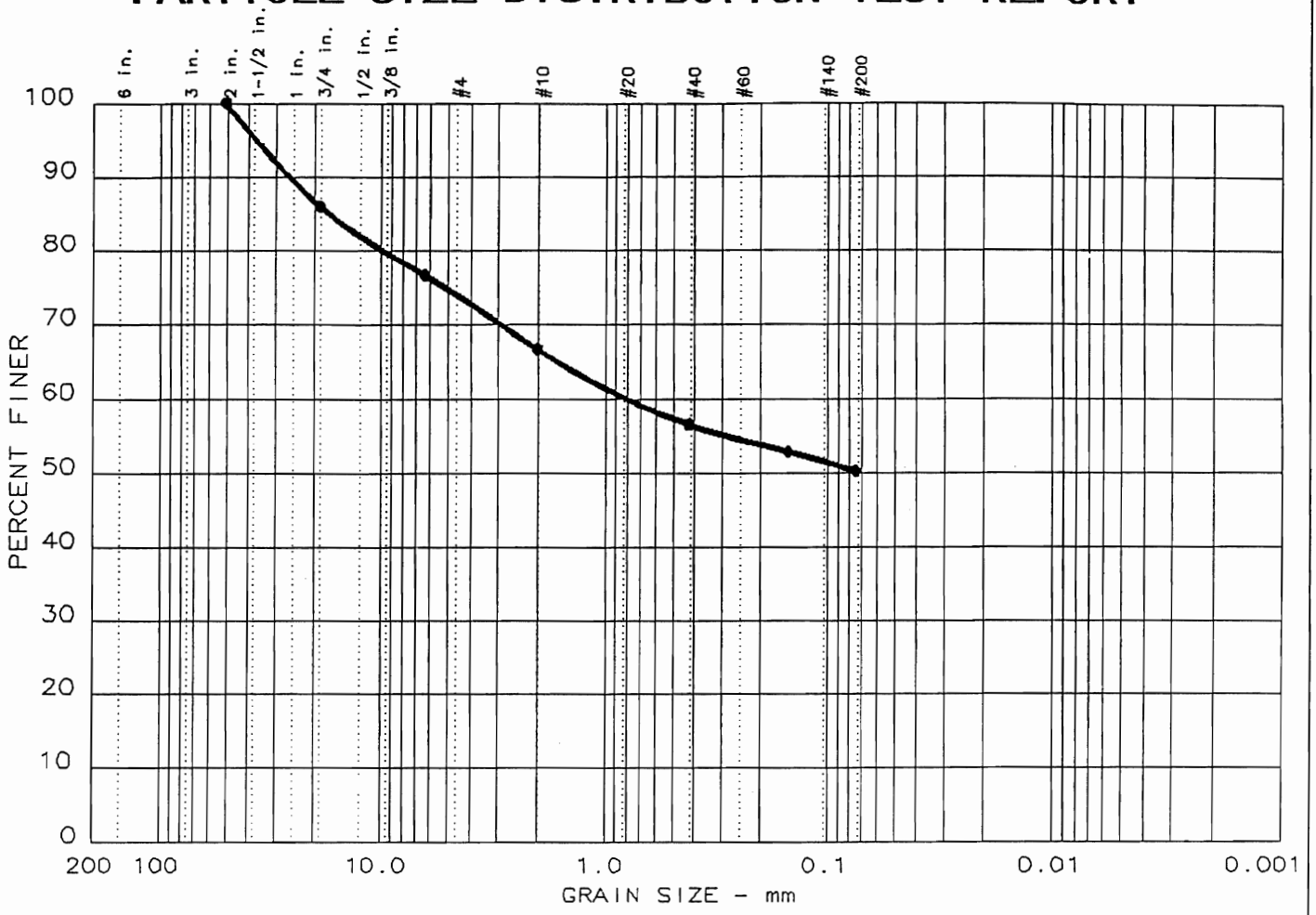
Lab No. 98178

MAXIM TECHNOLOGIES

Project No.: 9734344
Project: Kirkwood Landfill Closure

Date: May 15, 1998 Data Sheet ~~No.~~

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	17	0.0	25.8	23.9	50.3		CL	26	8

SIEVE inches size	PERCENT FINER ●		
2	100.0		
0.75	86.0		
0.25	76.6		
	GRAIN SIZE		
D_{60}	0.794		
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
10	66.6		
40	56.6		
100	52.9		
200	50.3		

Sample information:
● 35,000-37,500 cy
Low Perm Soil

Remarks:
North End of Stockpile

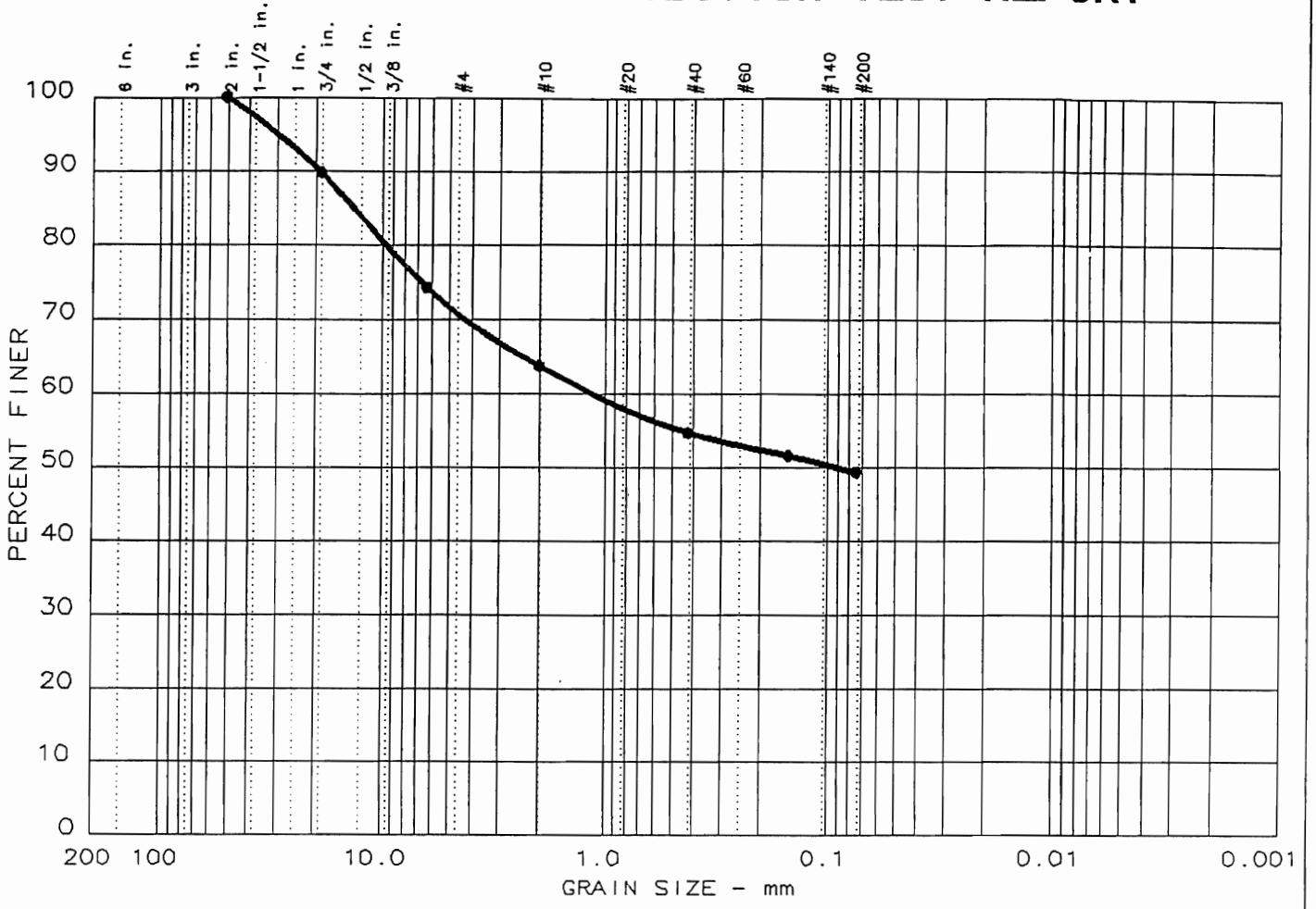
Lab No. 98176

MAXIM TECHNOLOGIES

Project No.: 9734344
Project: Kirkwood Landfill Closure

Date: May 15, 1998 Data Sheet ~~No.~~

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	18	0.0	29.0	21.6	49.4		GC	26	8

SIEVE inches size	PERCENT FINER ●		
2	100.0		
0.75	89.8		
0.25	74.3		
	GRAIN SIZE		
D_{60}	1.12		
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
10	63.7		
40	54.7		
100	51.6		
200	49.4		

Sample information:
● 37,500-40,000 cy
Low Perm Soil

Remarks:
North End of Stockpile

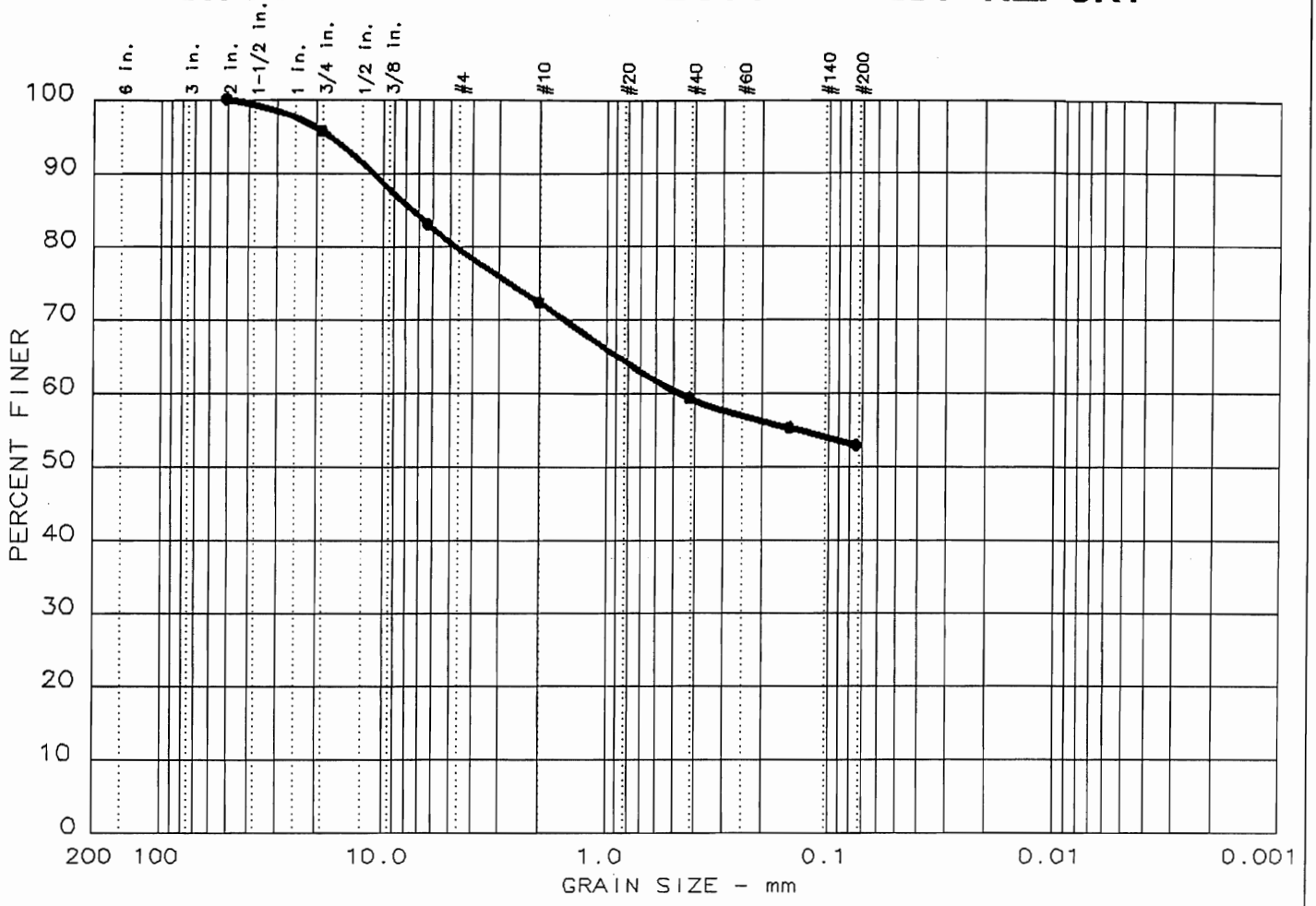
Lab No. 98179

MAXIM TECHNOLOGIES

Project No.: 9734344
Project: Kirkwood Landfill Closure

Date: May 15, 1998 Data Sheet ~~No.~~

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	1	0.0	20.1	27.0	52.9		CL	30	19

SIEVE inches size	PERCENT FINER ●		
2	100.0		
0.75	95.7		
0.25	83.0		
	GRAIN SIZE		
D_{60}	0.468		
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
10	72.3		
40	59.4		
100	55.3		
200	52.9		

Sample information:

● Stockpile
Clay/silt some sand and gravel

Remarks:
Sampled by Maxim on 7/31
5,000 cy sample

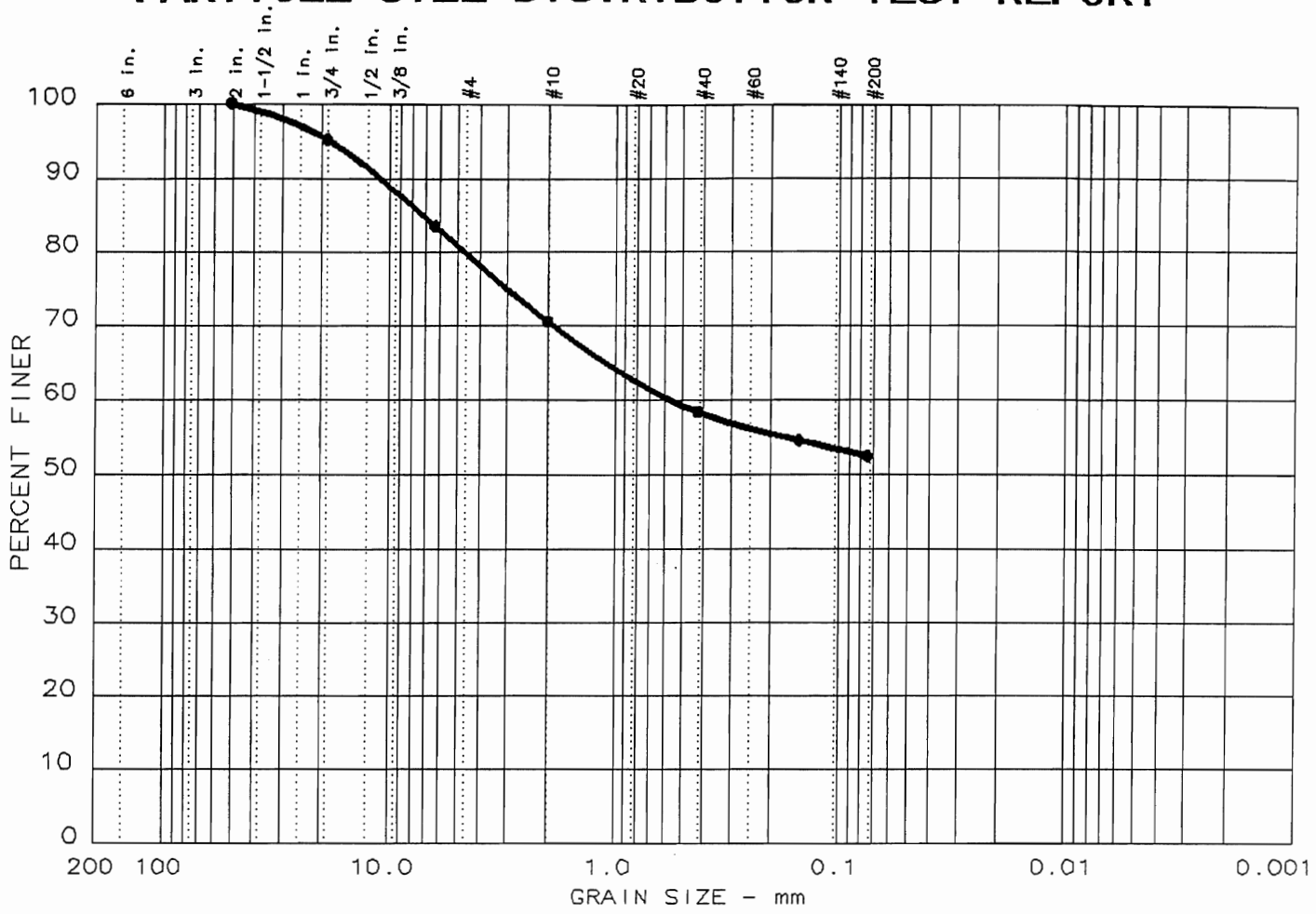
Lab No. 99478

MAXIM TECHNOLOGIES

Project No.: 9734344
Project: Kirkwood Landfill Closure

Date: August 11, 1999 Data Sheet ~~No.~~

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	2	0.0	20.0	27.6	52.4		CL	29	11

SIEVE inches size	PERCENT FINER ●		
2	100.0		
0.75	95.2		
0.25	83.5		
	GRAIN SIZE		
D_{60}	0.562		
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
10	70.5		
40	58.4		
100	54.6		
200	52.4		

Sample information:

● Stockpile
Clay/silt some sand and gravel

Remarks:
Sampled by Maxim on 7/31
10,000 cy sample

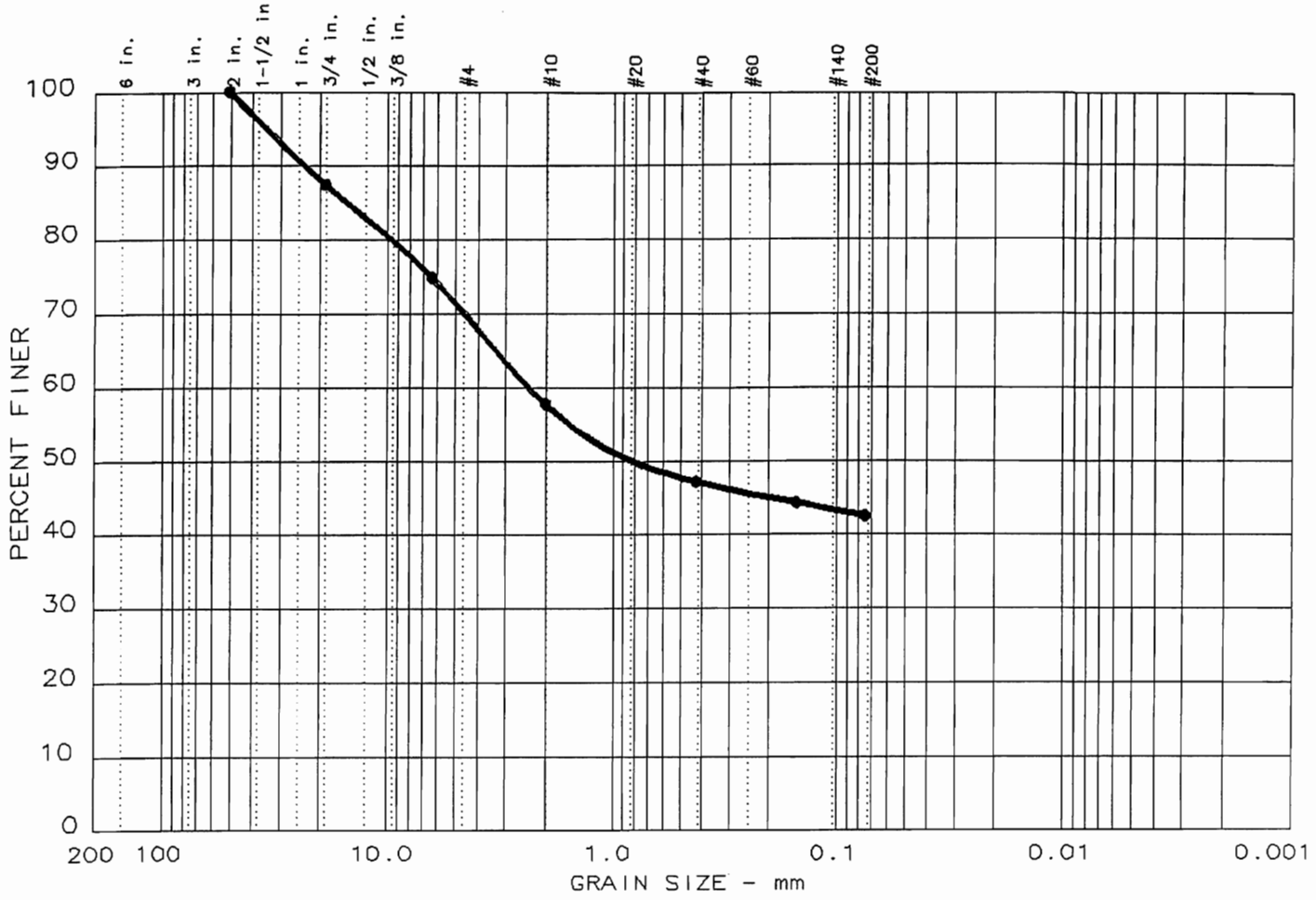
Lab No. 99479

MAXIM TECHNOLOGIES

Project No.: 9734344
Project: Kirkwood Landfill Closure

Date: August 11, 1999 Data Sheet ~~No.~~

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	3	0.0	29.4	28.2	42.4		GC	27	10

SIEVE inches size	PERCENT FINER ●		
2	100.0		
0.75	87.4		
0.25	74.9		
	GRAIN SIZE		
D_{60}	2.34		
D_{30}			
D_{10}			
	COEFFICIENTS		
C_c			
C_u			

SIEVE number size	PERCENT FINER ●		
10	57.8		
40	47.2		
100	44.3		
200	42.4		

Sample information:

● Stockpile
Clay/silt some gravel and sand

Remarks:
Sampled by Maxim on 7/31
15,000 cy sample

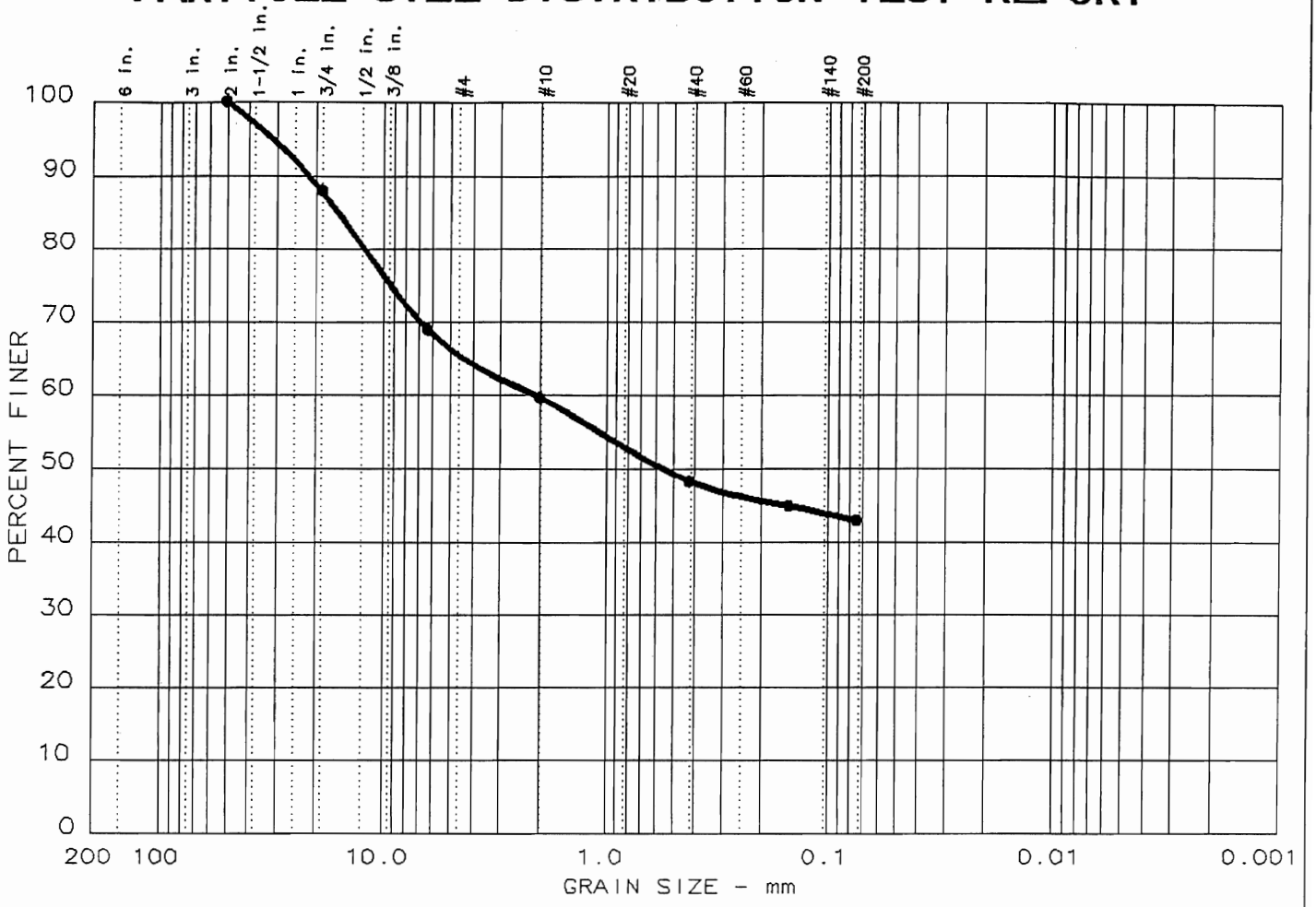
Lab No. 99480

MAXIM TECHNOLOGIES

Project No.: 9734344
Project: Kirkwood Landfill Closure

Date: August 11, 1999 Data Sheet ~~No.~~

PARTICLE SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY	USCS	LL	PI
●	4	0.0	34.3	22.7	43.0		GC	27	10

SIEVE inches size	PERCENT FINER ●		
2	100.0		
0.75	88.1		
0.25	69.0		
	GRAIN SIZE		
D_{60} D_{30} D_{10}	2.09		
	COEFFICIENTS		
C_c C_u			

SIEVE number size	PERCENT FINER ●		
10	59.6		
40	48.4		
100	44.9		
200	43.0		

Sample information:
● Stockpile
Clay/silt some gravel and sand

Remarks:
Sampled by Maxim on 7/31
20,000 cy sample

Lab No. 99481

MAXIM TECHNOLOGIES

Project No.: 9734344
Project: Kirkwood Landfill Closure

Date: August 11, 1999 Data Sheet ~~No.~~

LOW PERM STOCKPILE

REMOLDED PERMS

SOIL & MATERIAL TESTING, INC.
57 SOUTH MAIN STREET • CASTLETON, N.Y. 12033

Office	Telephone	Office	Telephone
Castleton	(518) 732-7205	Binghamton	(607) 722-1582
	Fax (518) 732-4516	Kingston	(914) 336-4471
		Pittsfield	(413) 499-5338

HYDRAULIC CONDUCTIVITY TEST RESULTS

PROJECT NAME: *KIRKWOOD LANDFILL CLOSURE*
Kirkwood, Broome County, New York

CLIENT: Gorick Construction Co.
27 Track Drive
Binghamton, New York 13904

SMT PROJECT No.: 7286

SAMPLE DESCRIPTION: *Glacial Till, Klepher Pit, Track Drive (96-394).*
Remolded specimen 0 - 5000 CY

DATE REMOLDED: 11/6/96
DATE REPORTED 11/19/96

DATE TESTED: 11/13/96

TEST STANDARD: ASTM D 5084
TEST BY: JO

TEST DESCRIPTION: Falling Head/ Rising tail Flexible Walled Permeability

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RESULTS:

Initial Specimen Properties		Test Conditions	
Length =	11.14 cm	Back Pressure =	60.0 psi
Diameter =	7.11 cm	Cell Pressure =	65.0 psi
Moisture Content =	11.7 %	Hydraulic Gradient =	10
Dry Density =	118.1 pcf	Permeant Liquid:	*Tap Water*
% Compaction =	87.8 %		

Remarks: Only 3/4" minus material used in test.

Hydraulic Conductivity: $k_{20} = 1.2 \times 10^{-7}$ *cm/sec*

Soil & Material Testing, Inc.

Thomas M. Kenney

SOIL & MATERIAL TESTING, INC.
57 SOUTH MAIN STREET • CASTLETON, N.Y. 12033

Office	Telephone	Office	Telephone
Castleton	(518) 732-7205	Binghamton	(607) 722-1582
	Fax (518) 732-4516	Kingston	(914) 336-4471
		Pittsfield	(413) 499-5338

HYDRAULIC CONDUCTIVITY TEST RESULTS

PROJECT NAME: *KIRKWOOD LANDFILL CLOSURE*
Kirkwood, Broome County, New York

CLIENT: Gorick Construction Co.
27 Track Drive
Binghamton, New York 13904

SMT PROJECT No.: 7286

SAMPLE DESCRIPTION: *Klepher Pit, Glacial Till (97-117).*
Remolded specimen

5000 - 10000 CY

DATE REMOLDED: 4/04/97
DATE REPORTED 4/08/97

DATE TESTED: 4/04/97

TEST STANDARD: ASTM D 5084
TEST BY: TMK

TEST DESCRIPTION: Falling Head/ Rising tail Flexible Walled Permeability

RESULTS:

Initial Specimen Properties		Test Conditions	
Length =	10.11 cm	Back Pressure =	65.0 psi
Diameter =	7.19 cm	Cell Pressure =	70.0 psi
Moisture Content =	10.2 %	Hydraulic Gradient =	10
Dry Density =	116.7 pcf	Permeant Liquid:	*Tap Water*
% Compaction =	84.6 %		

Remarks: Only 3/4" minus material used in test.

Hydraulic Conductivity: $k_{20} = 2.7 \times 10^{-7}$ *cm/sec*

Soil & Material Testing, Inc.

Thomas M. Kenney

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 10.67
Specimen Diameter (cm): 7.06
Dry Unit Weight (pcf): 113.3
Moisture Before Test (%): 8.6
Moisture After Test (%): 8.7
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

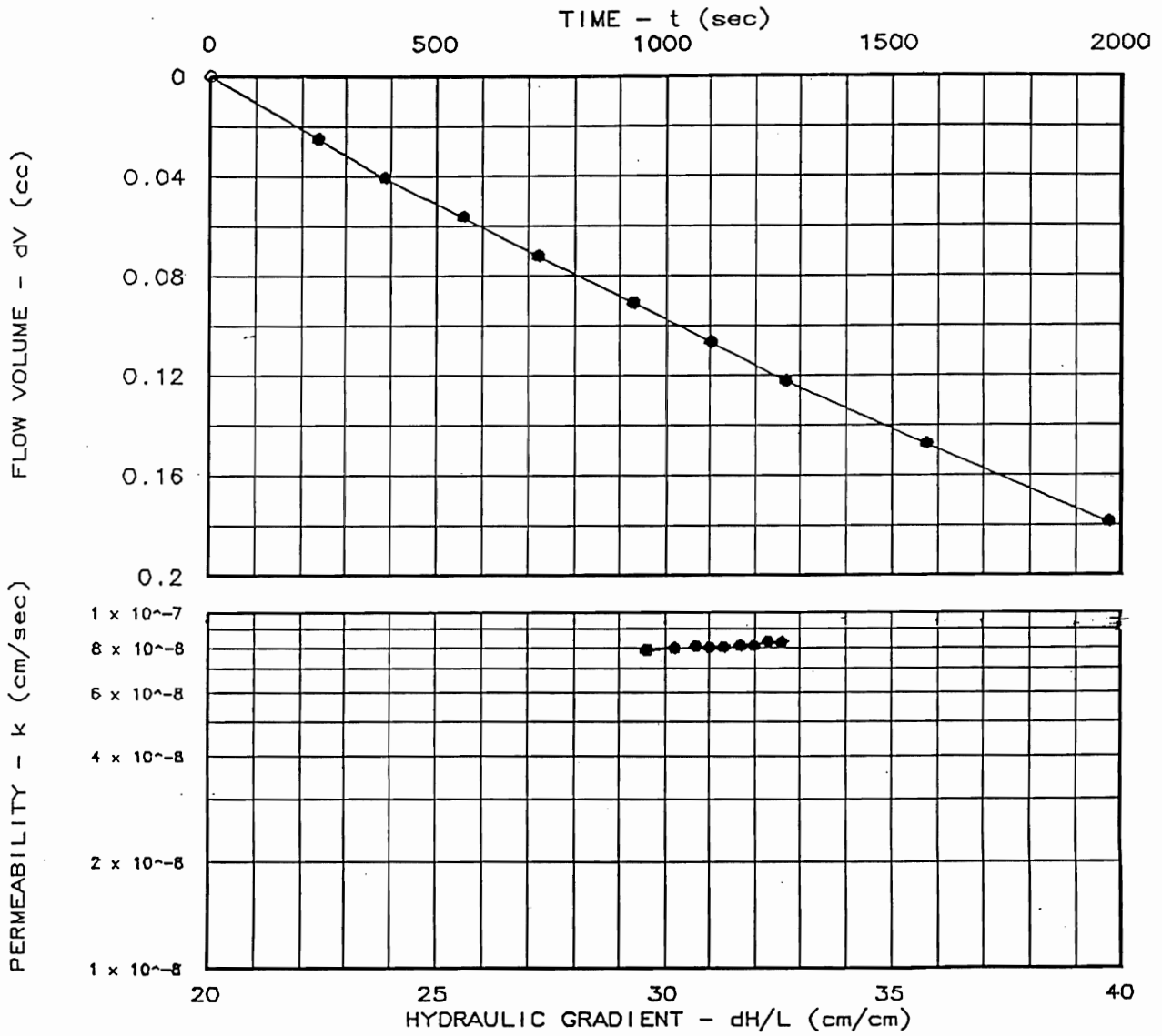
Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.5

Perm. (cm/sec): 7.96 x 10^-8

SAMPLE DATA:

Sample Identification: Imported Cover Material, 10,000 - 15,000 cy sample.
Visual Description: Silt & Clay, Some Sand, Gravel.
Remarks:

Maximum Dry Density (pcf): 135.4
Optimum Moisture Content (%): 8.6
ASTM(D1557)
Percent Compaction: 83.7%
Permeameter type: Flexible Wall
Sample type: Remolded



Project: Kirkwood C. & D. Landfill Closure
Location: Kirkwood, New York
Date: 08/14/97

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97400
Lab No.: 97400
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 11.68
Specimen Diameter (cm): 10.35
Dry Unit Weight (pcf): 113.5
Moisture Before Test (%): 11.3
Moisture After Test (%): 13.7
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

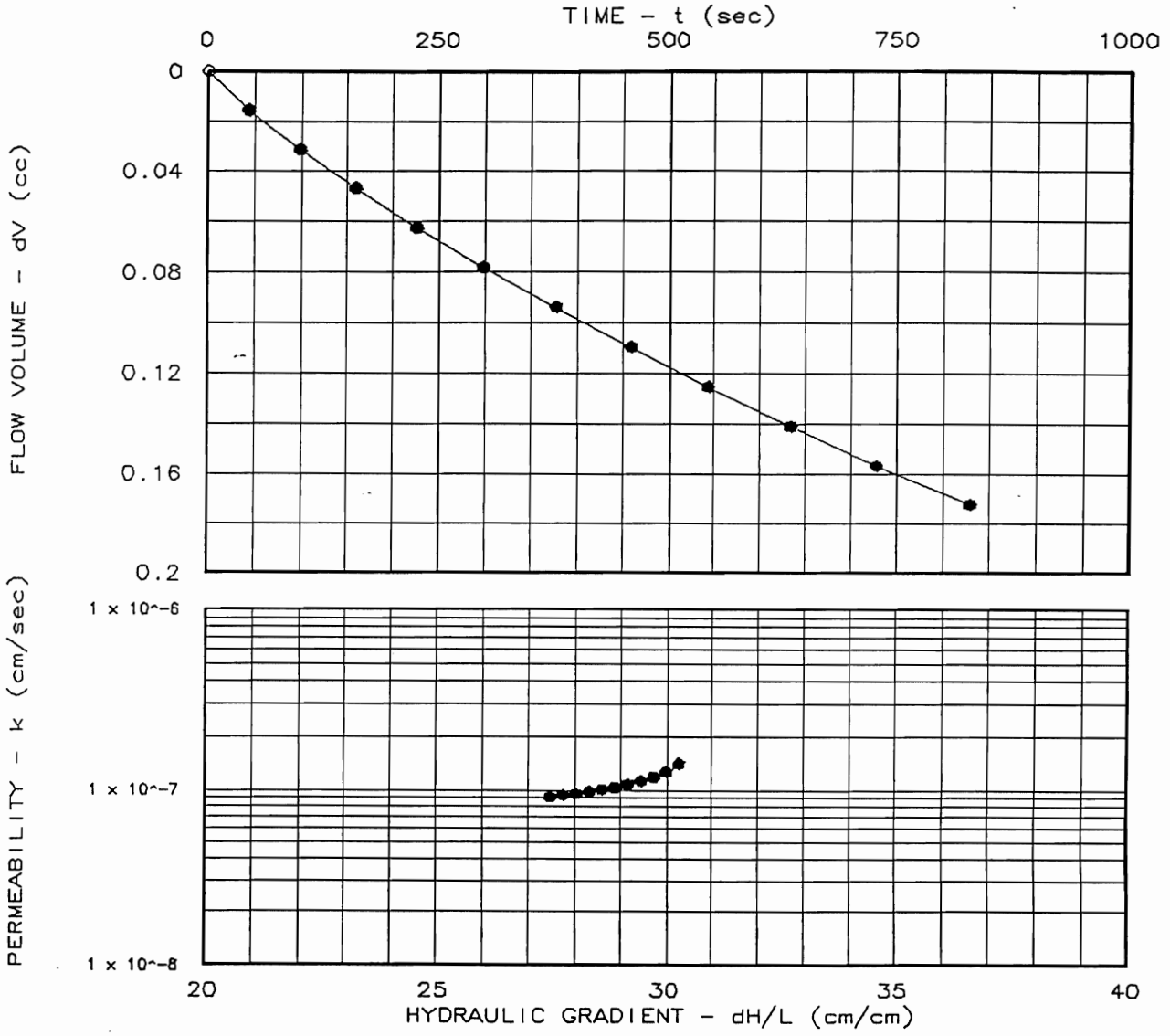
Perm. (cm/sec): 8.93 x 10^-8

SAMPLE DATA:

Sample Identification: Low Permeability Soil, 15,000 - 20,000 cy sample.
Visual Description: Clayey Sand with Gravel

Remarks:

Maximum Dry Density (pcf): 132.2
Optimum Moisture Content (%): 9.2
ASTM(D698)
Percent Compaction: 85.9%
Permeameter type: Flexible Wall
Sample type: Remolded



Project: Kirkwood Landfill Closure
Location: Klepfer Pit, Kirkwood, NY
Date: 04/07/98

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 98078
Lab No.: 98078
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 11.81
Specimen Diameter (cm): 10.19
Dry Unit Weight (pcf): 122.2
Moisture Before Test (%): 13.1
Moisture After Test (%): 12.3
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

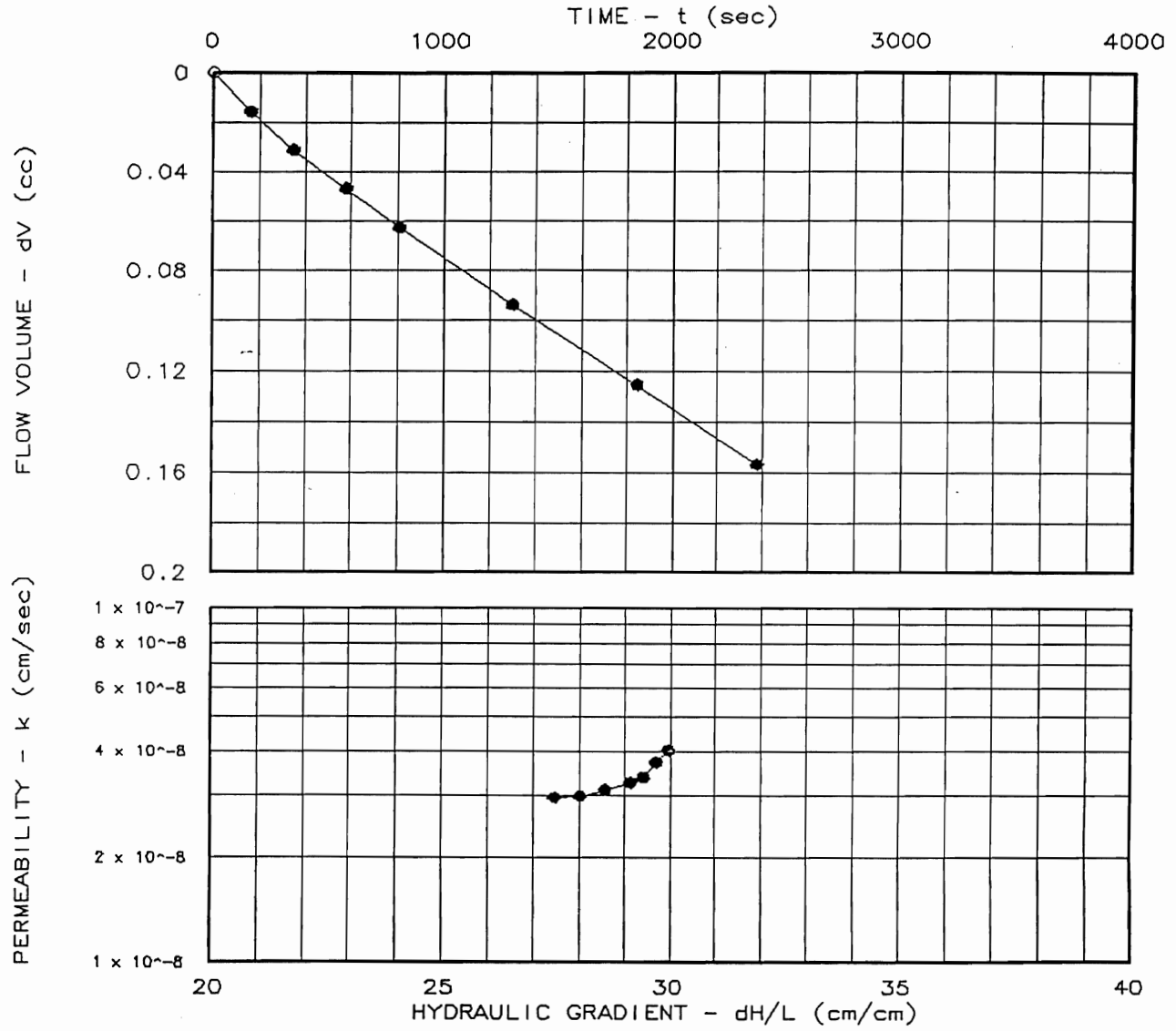
Perm. (cm/sec): 2.94 x 10^-8

SAMPLE DATA:

Sample Identification: Low Permeability Soil, 20,000 - 25,000 cy sample.
Visual Description: Clayey Sand with Gravel

Remarks:

Maximum Dry Density (pcf): 132.9
Optimum Moisture Content (%): 9.6
ASTM(D698)
Percent Compaction: 92.0%
Permeameter type: Flexible Wall
Sample type: Remolded



Project: Kirkwood Landfill Closure
Location: Klepfer Pit, Kirkwood, NY
Date: 04/21/98

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 98079R
Lab No.: 98079R
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 11.96
Specimen Diameter (cm): 9.60
Dry Unit Weight (pcf): 125.8
Moisture Before Test (%): 12.9
Moisture After Test (%): 13.9
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

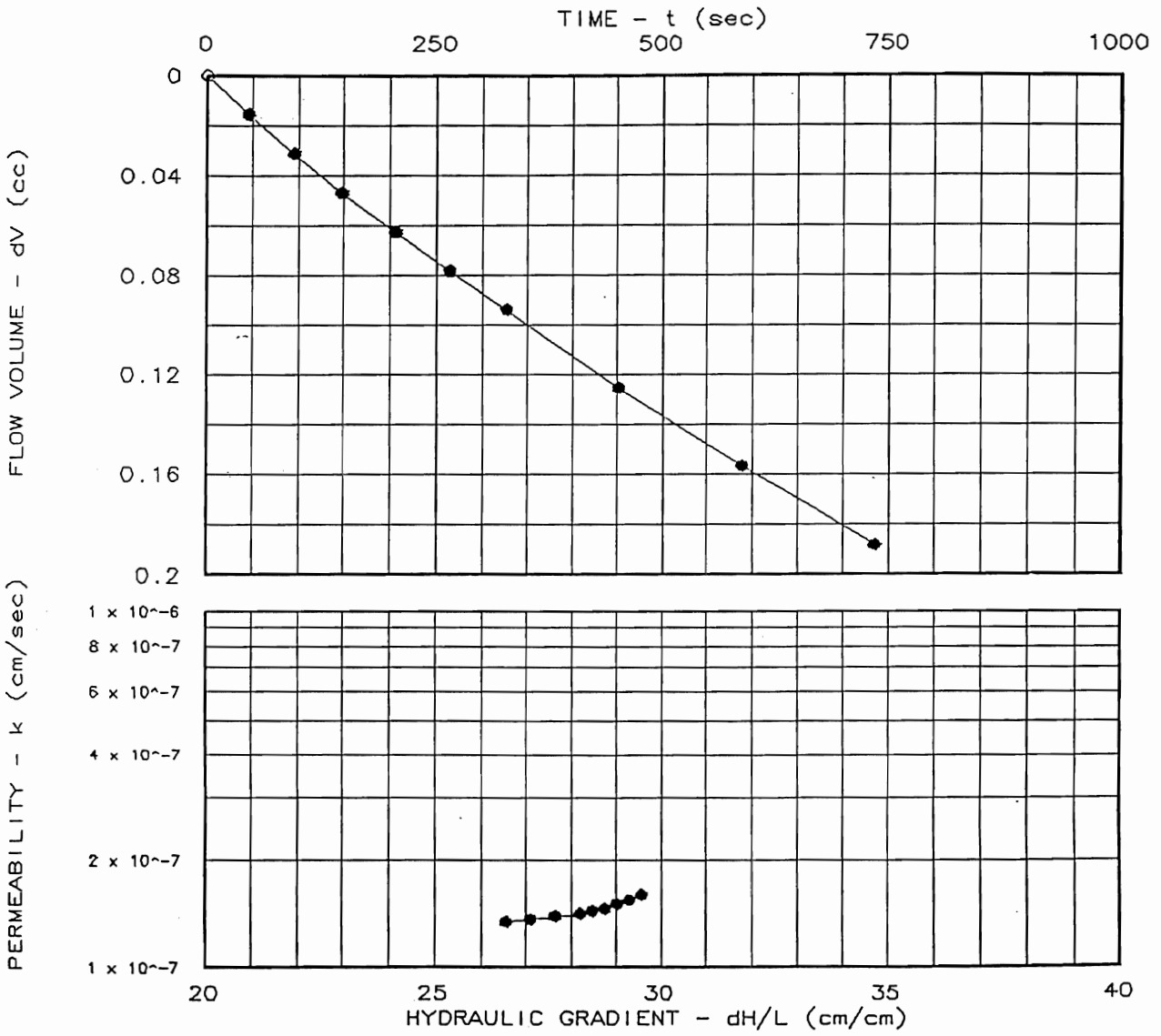
Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.5

Perm. (cm/sec): 1.34 x 10^-7

SAMPLE DATA:

Sample Identification: 25,000 - 30,000 cy, Low Perm Soil, South End of Stockpile
Visual Description: Brown Silt/Clay with sand and gravel.
Remarks:

Maximum Dry Density (pcf): 129.0
Optimum Moisture Content (%): 10.2
ASTM(D698)
Percent Compaction: 97.5%
Permeameter type: Flexible Wall
Sample type: Remolded



Project: Kirkwood C.& D. Landfill Closure
Location: Kirkwood, New York
Date: 05149898

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 98177
Lab No.: 98177
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 12.01
Specimen Diameter (cm): 9.65
Dry Unit Weight (pcf): 122.8
Moisture Before Test (%): 12.8
Moisture After Test (%): 13.6
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

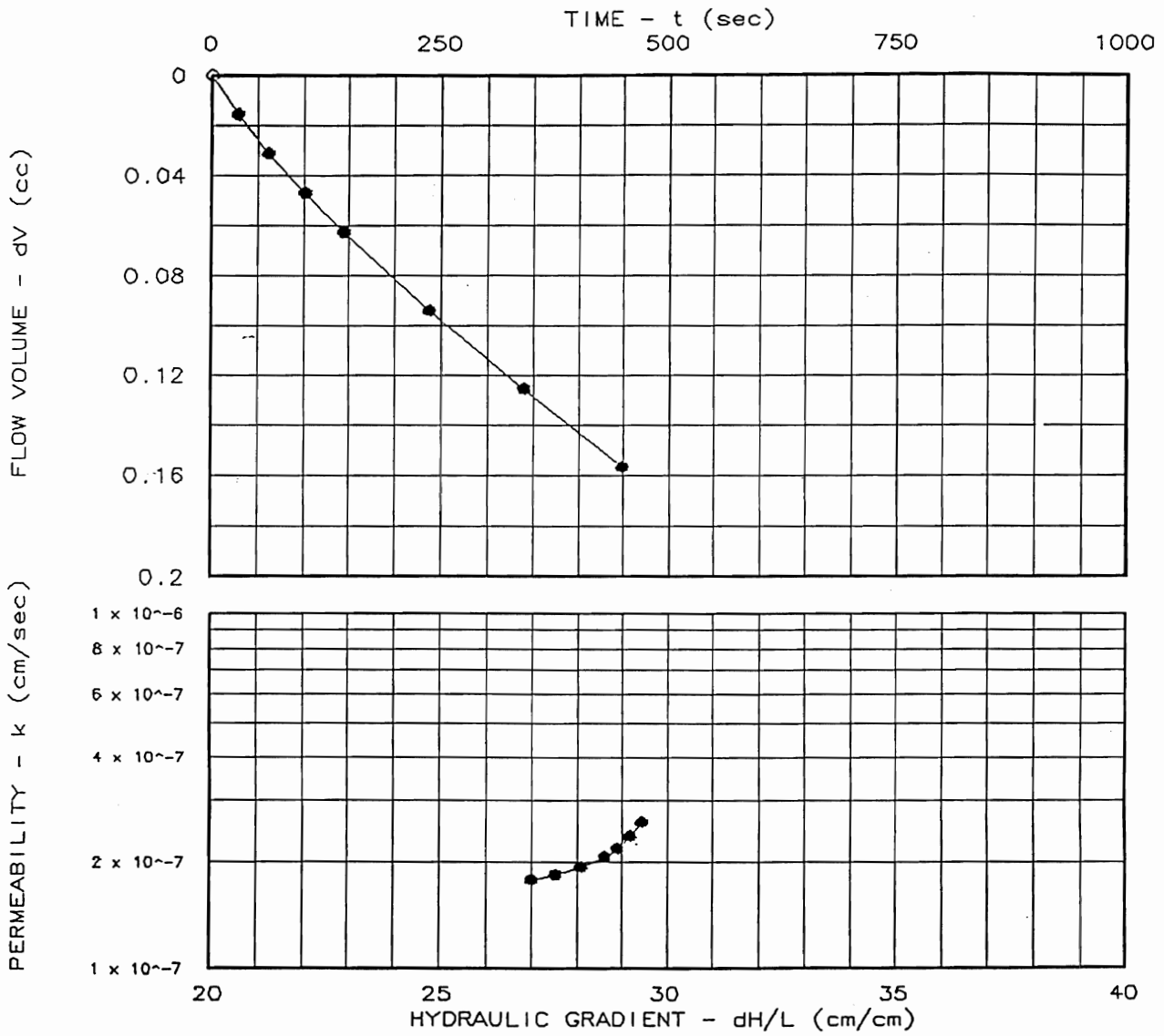
Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 1.82 x 10^-7

SAMPLE DATA:

Sample Identification: 30,000 - 35,000 cy, Low Perm Soil, Middle of Stockpile
Visual Description: Brown Silt/Clay with sand and gravel.
Remarks:

Maximum Dry Density (pcf): 127.4
Optimum Moisture Content (%): 9.5
ASTM(D698)
Percent Compaction: 96.4%
Permeameter type: Flexible Wall
Sample type: Remolded



Project: Kirkwood C.& D. Landfill Closure
Location: Kirkwood, New York
Date: 05/14/98

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 98178
Lab No.: 98178
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

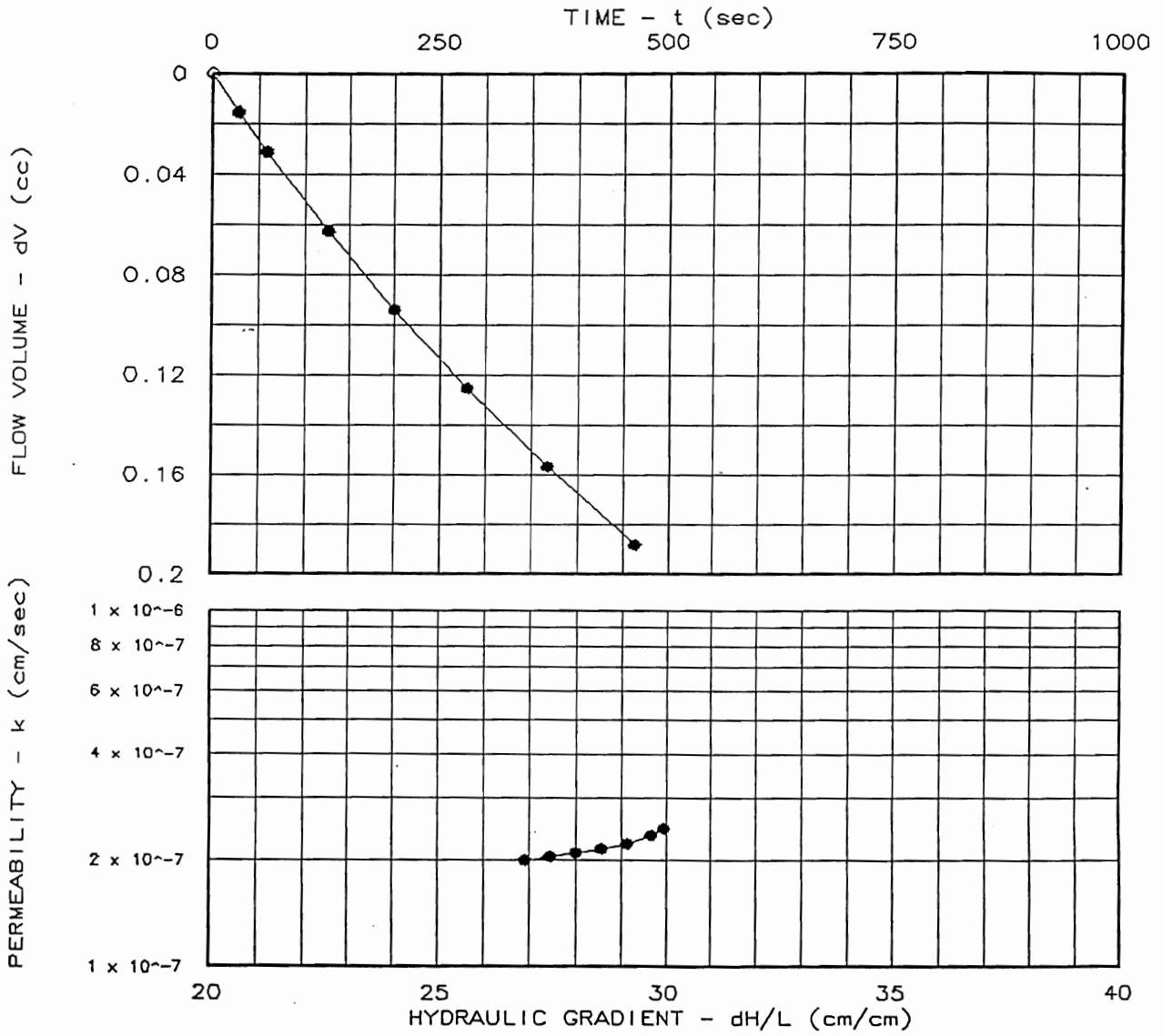
TEST DATA:
Specimen Height (cm): 11.81
Specimen Diameter (cm): 9.86
Dry Unit Weight (pcf): 120.5
Moisture Before Test (%): 11.7
Moisture After Test (%): 13.5
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.5

Perm. (cm/sec): 1.97 x 10^-7

SAMPLE DATA:
Sample Identification: 35,000 - 40,000 cy, Low Perm Soil, North End of Stockpile
Visual Description: Brown Silt/Clay with sand and gravel.
Remarks:

Maximum Dry Density (pcf): 127.8
Optimum Moisture Content (%): 10.2
ASTM(D698)
Percent Compaction: 94.3%
Permeameter type: Flexible Wall
Sample type: Remolded



Project: Kirkwood C.& D. Landfill Closure
Location: Kirkwood, New York
Date: 05/14/98

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 98179
Lab No.: 98179
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 11.81
Specimen Diameter (cm): 10.16
Dry Unit Weight (pcf): 113.2
Moisture Before Test (%): 13.6
Moisture After Test (%): 14.6
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

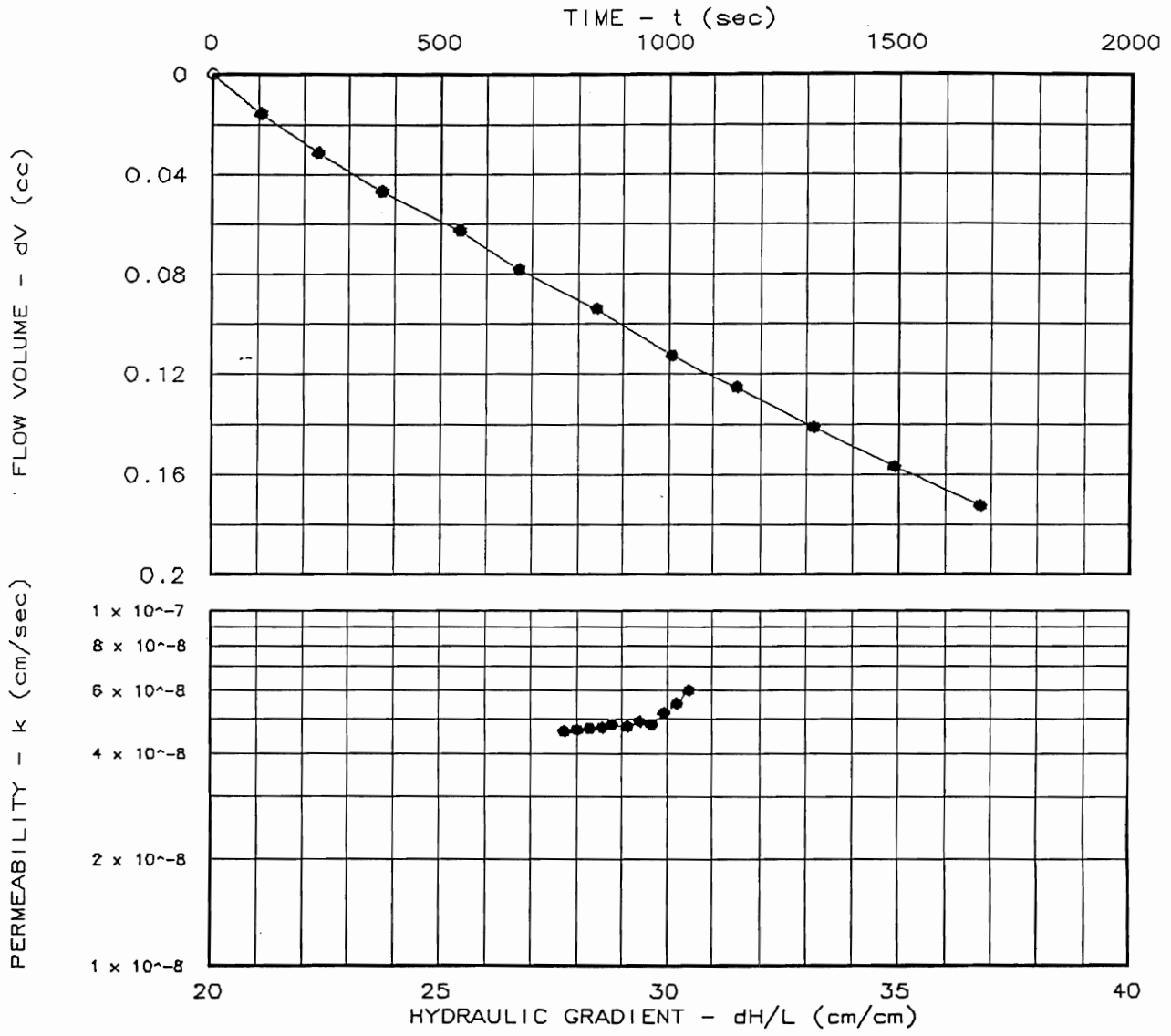
Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.7

Perm. (cm/sec): 4.67 x 10^-8

SAMPLE DATA:

Sample Identification: Low Perm Soil
5,000 cy sample 1999
Visual Description: Clay/silt some sand and gravel
Remarks:

Maximum Dry Density (pcf): 126.1
Optimum Moisture Content (%): 10.8
ASTM(D698)
Percent Compaction: 89.8%
Permeameter type: Flexible Wall
Sample type: Remolded



Project: Kirkwood Landfill Closure
Location: Kirkwood, New York
Date: 08/09/99

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 99478
Lab No.: 99478
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

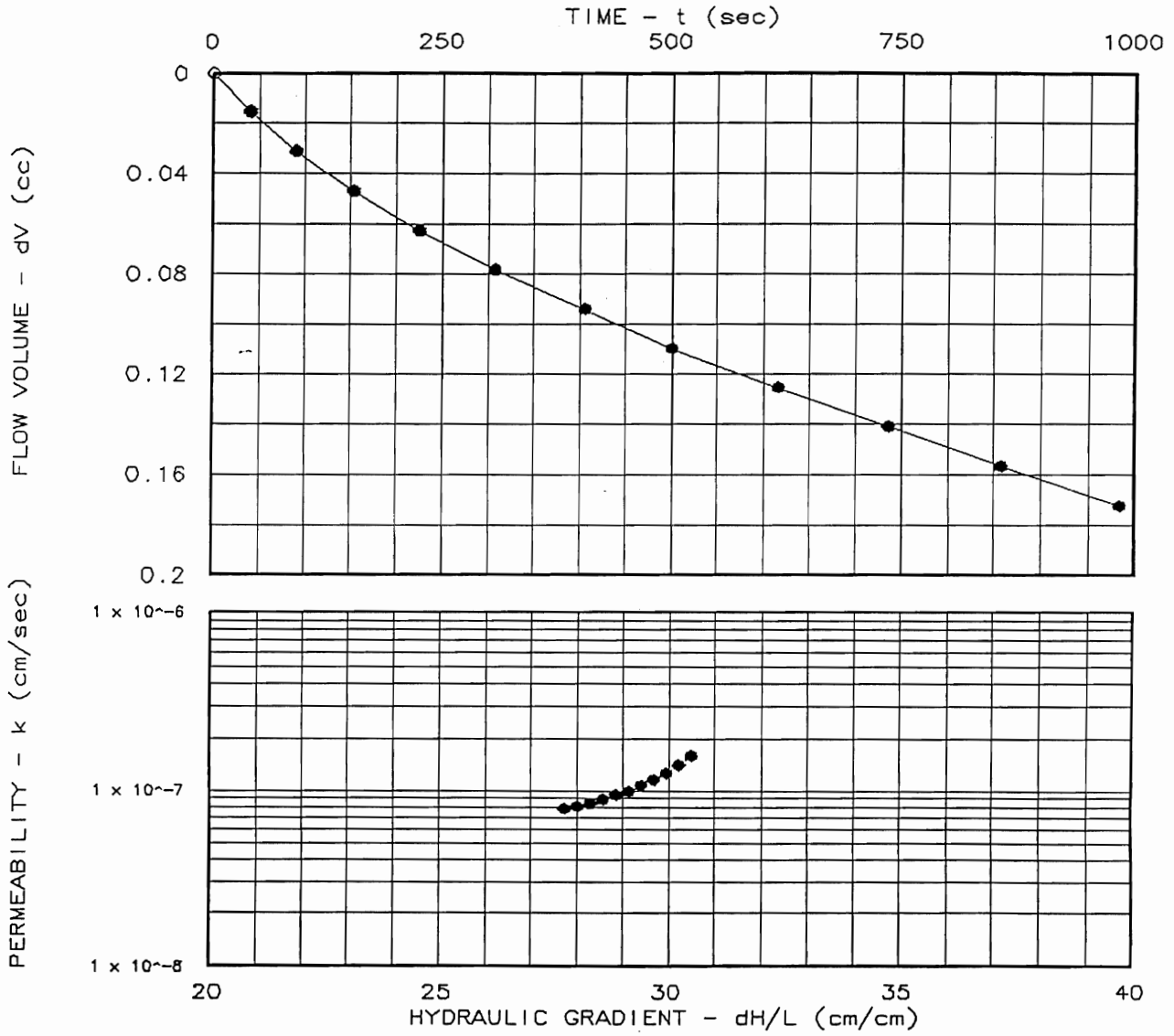
TEST DATA:
Specimen Height (cm): 11.81
Specimen Diameter (cm): 10.16
Dry Unit Weight (pcf): 111.5
Moisture Before Test (%): 13.7
Moisture After Test (%): 14.5
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.7

Perm. (cm/sec): 6.08 x 10^-8

SAMPLE DATA:
Sample Identification: Low Perm Soil
10,000 cy sample 1999
Visual Description: Clay/silt some sand and gravel
Remarks:

Maximum Dry Density (pcf): 125.9
Optimum Moisture Content (%): 10.5
ASTM(D698)
Percent Compaction: 88.6%
Permeameter type: Flexible Wall
Sample type: Remolded



Project: Kirkwood Landfill Closure
Location: Kirkwood, New York
Date: 08/09/99

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 99479
Lab No.: 99479
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 11.81
Specimen Diameter (cm): 10.16
Dry Unit Weight (pcf): 116.1
Moisture Before Test (%): 12.3
Moisture After Test (%): 13.1
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

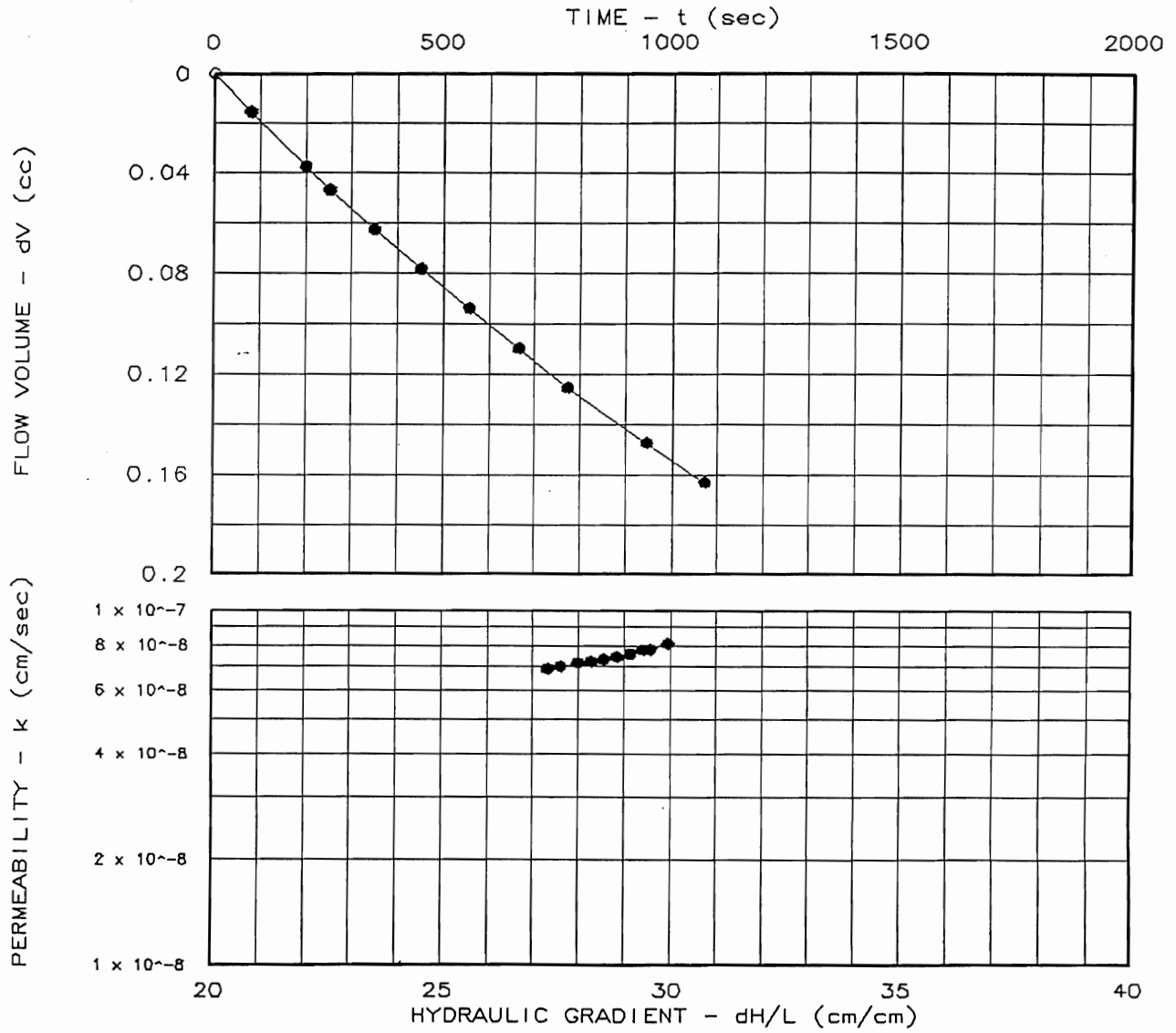
Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 7.06 x 10^-8

SAMPLE DATA:

Sample Identification: Low Perm Soil
15,000 cy sample 1999
Visual Description: Clay/silt some gravel and sand
Remarks:

Maximum Dry Density (pcf): 131.0
Optimum Moisture Content (%): 8.9
ASTM(D698)
Percent Compaction: 88.6%
Permeameter type: Flexible Wall
Sample type: Remolded



Project: Kirkwood Landfill Closure
Location: Kirkwood, New York
Date: 08/09/99

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 99480
Lab No.: 99480
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 11.81
Specimen Diameter (cm): 10.16
Dry Unit Weight (pcf): 117.8
Moisture Before Test (%): 10.9
Moisture After Test (%): 12.7
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

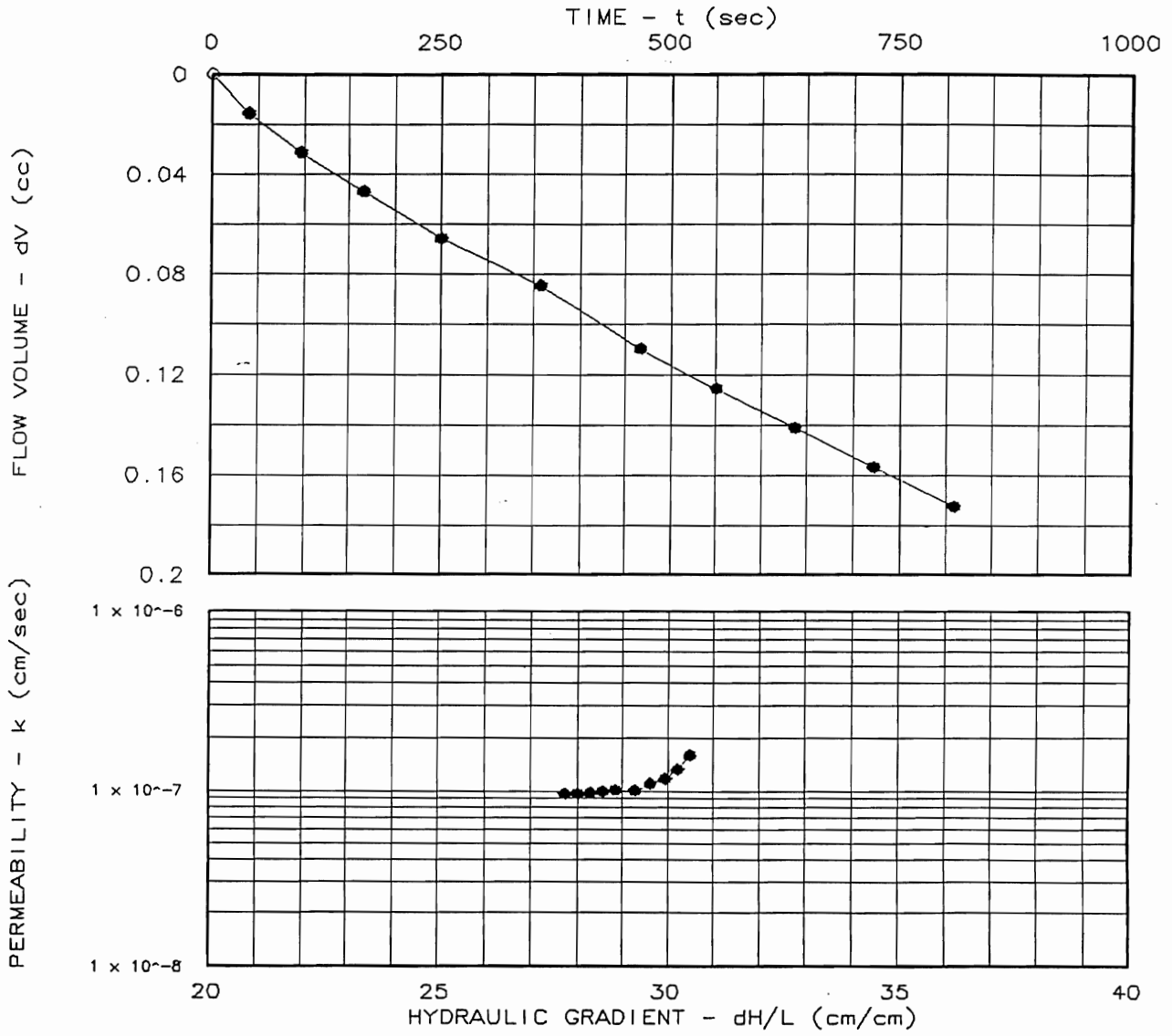
Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.7

Perm. (cm/sec): 9.68 x 10^-8

SAMPLE DATA:

Sample Identification: Low Perm Soil
20,000 cy sample 1999
Visual Description: Clay/silt some gravel and sand
Remarks:

Maximum Dry Density (pcf): 130.8
Optimum Moisture Content (%): 8.5
ASTM(D698)
Percent Compaction: 90.0%
Permeameter type: Flexible Wall
Sample type: Remolded



Project: Kirkwood Landfill Closure
Location: Kirkwood, New York
Date: 08/10/99

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 99481
Lab No.: 99481
Tested by: AM
Checked by: JT
Test: CV - Constant volume

Low Perm Soil

Acres 1, 2, 3, 4, 5, 6, 7

1st & 2nd Lift IPD's & Perms

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 10.55
Specimen Diameter (cm): 7.21
Dry Unit Weight (pcf): 122.8
Moisture Before Test (%): 9.0
Moisture After Test (%): 12.2
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

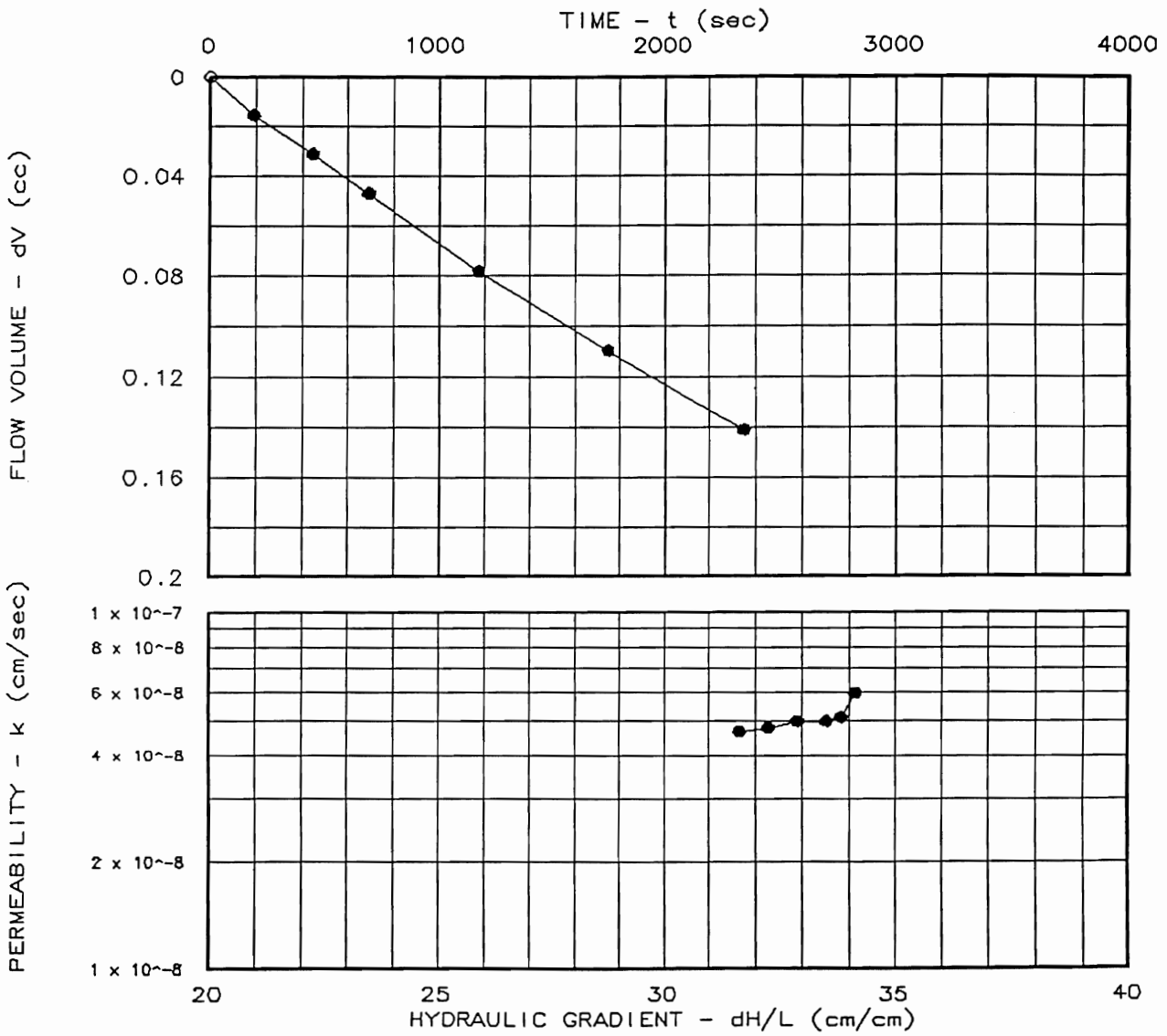
Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.8

Perm. (cm/sec): 4.84 x 10^-8

SAMPLE DATA:

Sample Identification: Acre 1, 1st Lift, 25'W of 403
Visual Description: Brown Silt, Sand, & gravel.
Remarks: 130.2 pcf @ 6.6% Nuclear

Maximum Dry Density (pcf): 134.8
Optimum Moisture Content (%): 7.1
ASTM(D698)
Percent Compaction: 91.1%
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C.& D. Landfill Closure
Location: Kirkwood, New York
Date: 07/25/97

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97383
Lab No.: 97383
Tested by: AM
Checked by: TH
Test: CV - Constant volume

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CONSTANT HEAD PERMEABILITY (FLEXIBLE WALL) DATA SHEET

PROJECT: Gorick/C & D Kirkwood Landfill JOB NUMBER: ET862

CLIENT: Gorick Construction Co., Inc. DATE: June 13, 1997

SAMPLE NO.: ST2 TAG NO.: 8622 LOCATION/SUPPLIER: Acre 2, first lift, 35' S of Stake #406

PERFORMED BY: M. Brown DATE PICKED UP: June 11, 1997 by R. Craig

INITIAL MOISTURE CONTENT (%): 9.9 DRY UNIT WEIGHT (PCF): 131.4 (In-place density)

INITIAL AREA ($IN.^2$) 6.33 INITIAL LENGTH (IN.) 5.08 INITIAL DIAMETER (IN) 2.84

% OF MAX. DRY DENSITY: 98 MAX. DRY DENSITY (pcf): 134.5 OMC (%): 7.6

DIFFERENTIAL HEAD (PSI) 5.0 CONFINING PRESSURE (PSI) 53

TEST PRESSURE (PSI) 50 BACK PRESSURE (PSI) 45

FINAL AREA (IN^2) 6.33 FINAL LENGTH (IN.) 5.07

FINAL DIAMETER (IN.) 2.84 FINAL MOISTURE CONTENT (%) 12.1

PERMEABILITY (CM/SEC) 7.75×10^{-8} PERMEANT WATER % SATURATION 100

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 11.98
Specimen Diameter (cm): 7.18
Dry Unit Weight (pcf): 128.6
Moisture Before Test (%): 9.9
Moisture After Test (%): 11.1
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 2.90 x 10^-8

SAMPLE DATA:

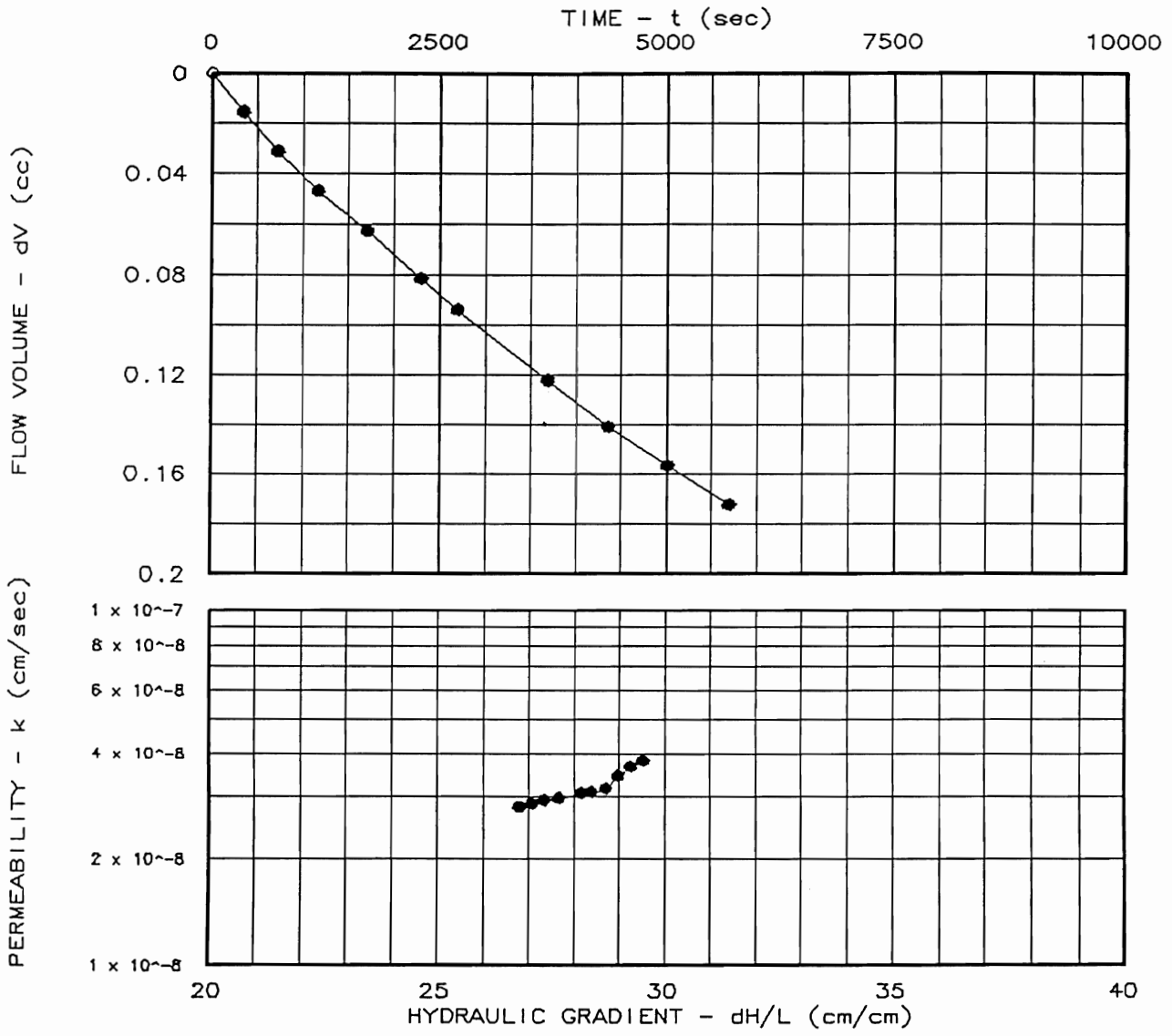
Sample Identification: Acre #3 First Lift

Visual Description: Silt, Clay, Sand & Gr.

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C. & D. Landfill
Location: Kirkwood, New York
Date: 07/09/97

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97336
Lab No.: 97336
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 9.99
Specimen Diameter (cm): 7.22
Dry Unit Weight (pcf): 128.0
Moisture Before Test (%): 9.2
Moisture After Test (%): 10.5
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

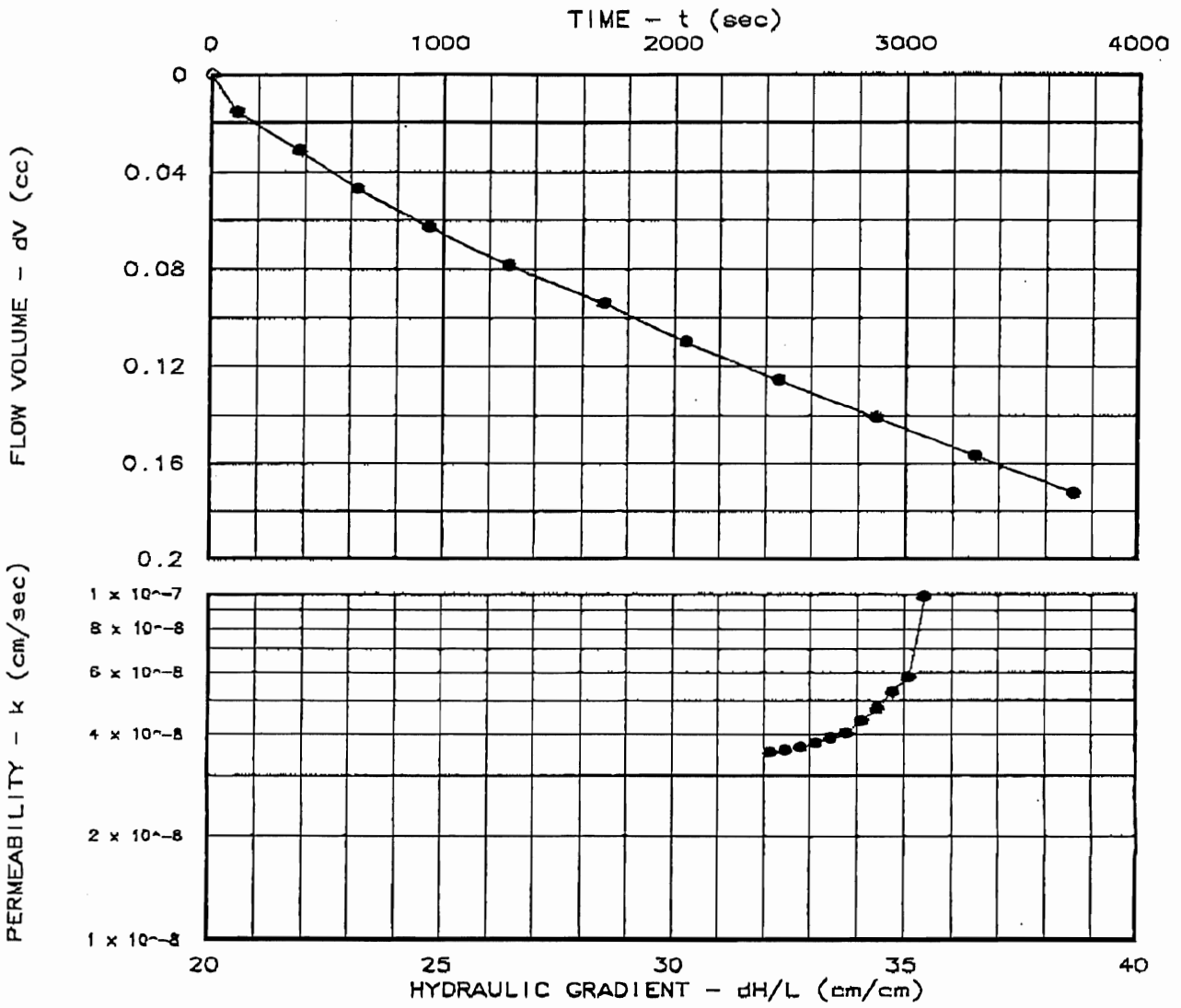
Perm. (cm/sec): 3.64 x 10^-8

SAMPLE DATA:

Sample Identification: Acre 4, First Lift (12 inches)
Visual Description: Silt, Clay, Sand, and Gravel.
Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C. & D. Landfill
Location: Kirkwood, New York
Date: 07/13/97

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97348
Lab No.: 97348
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 11.56
Specimen Diameter (cm): 7.20
Dry Unit Weight (pcf): 125.9
Moisture Before Test (%): 11.0
Moisture After Test (%): 13.7
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 85.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

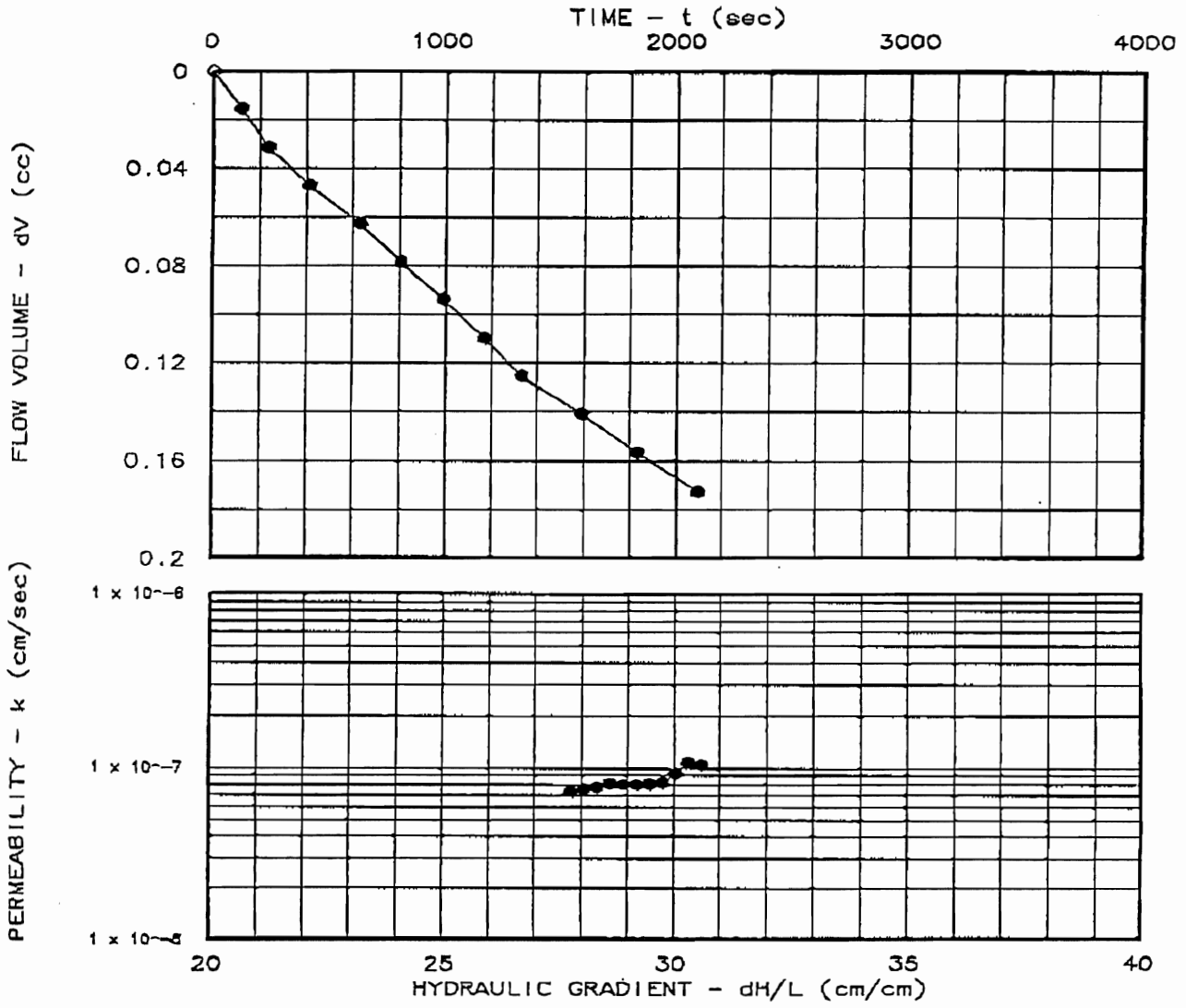
Perm. (cm/sec): 7.65 x 10^-8

SAMPLE DATA:

Sample Identification: Acre 5, First Lift (12 inches)
Visual Description: Silt, Clay, Sand, and Gravel.
Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C. & D. Landfill
Location: Kirkwood, New York
Date: 07/13/97

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97349
Lab No.: 97349
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 8.01
Specimen Diameter (cm): 7.24
Dry Unit Weight (pcf): 127.2
Moisture Before Test (%): 8.8
Moisture After Test (%): 11.2
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.5

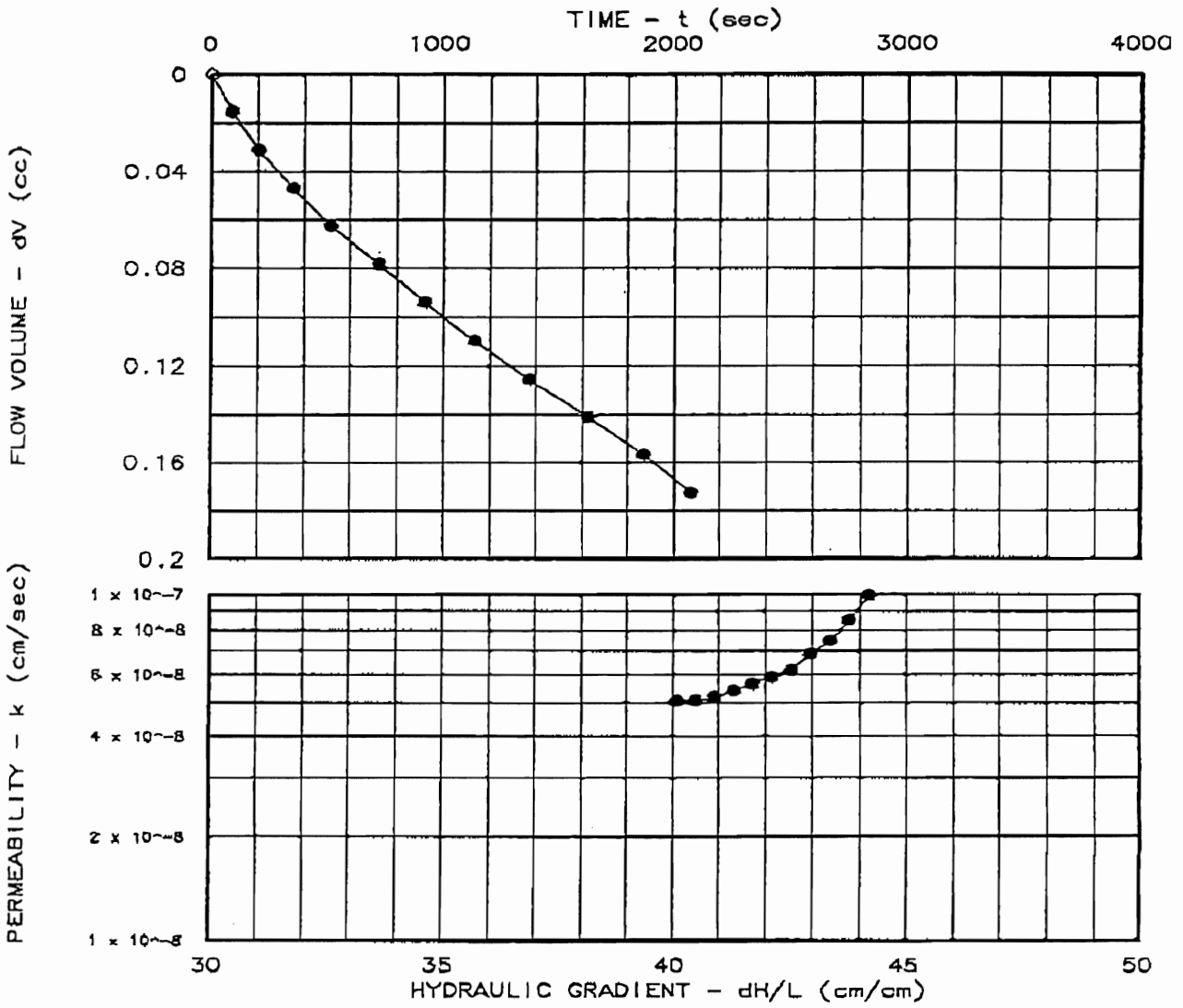
Perm. (cm/sec): 5.17 x 10^-8

SAMPLE DATA:

Sample Identification: Acre 6, First Lift (12 inches)
Visual Description: Silt, Clay, Sand, and Gravel.
Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C. & D. Landfill
Location: Kirkwood, New York
Date: 07/13/97

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97350
Lab No.: 97350
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 11.11
Specimen Diameter (cm): 7.20
Dry Unit Weight (pcf): 119.1
Moisture Before Test (%): 12.2
Moisture After Test (%): 12.3
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

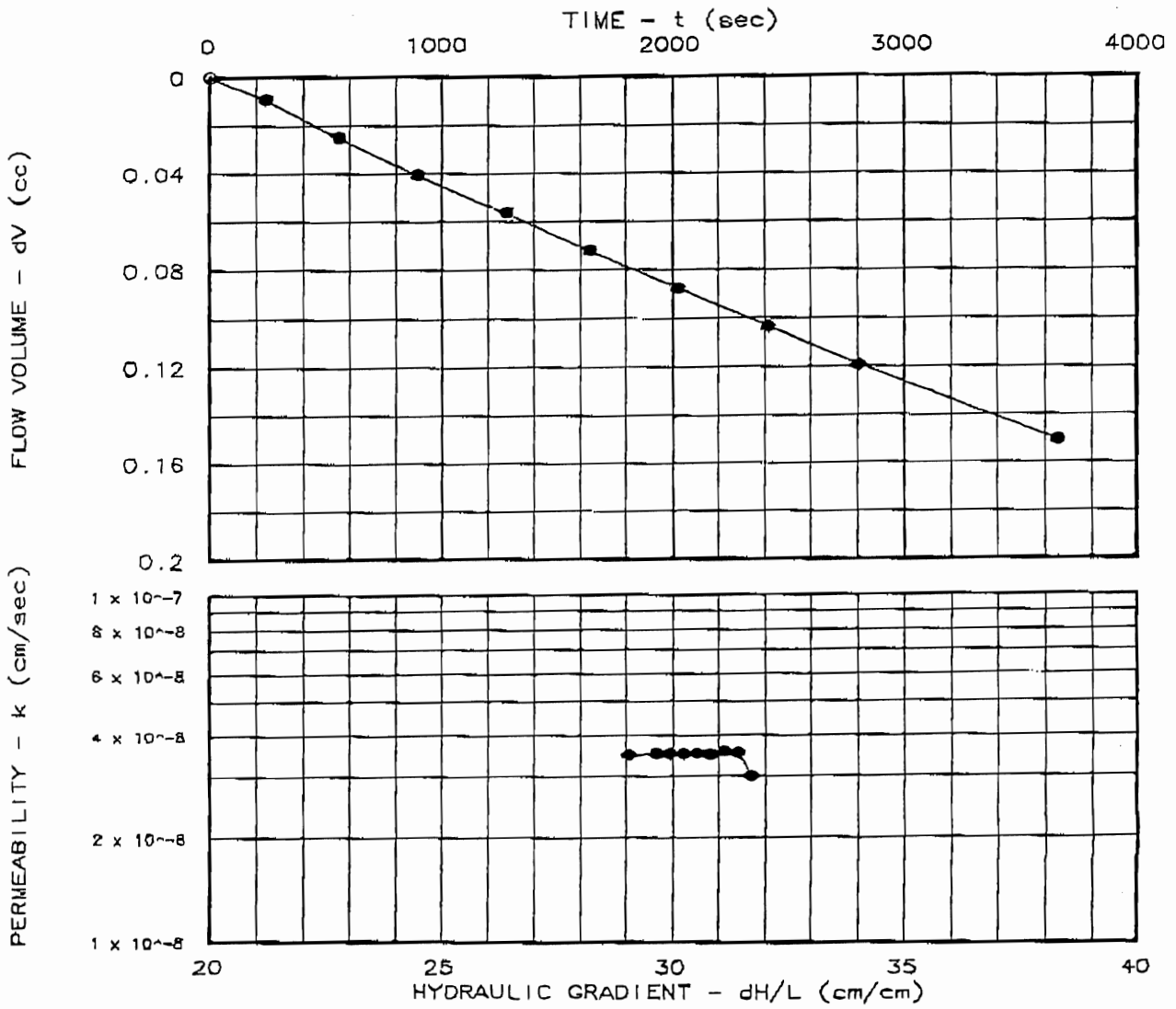
Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 3.52 x 10^-8

SAMPLE DATA:
Sample Identification: Acre 7, 1st Lift, 40'S of Sta. 308
Visual Description: Brown Silt, Some Gravel Sand.
Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C.& D. Landfill
Location: Kirkwood, New York
Date: 08/28/97

PERMEABILITY TEST REPORT
MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97483
Lab No.: 97483
Tested by: AM
Checked by: TH
Test: CV - Constant volume

DAILY SOIL REPORT NUMBER ET862S-1-6-97

PROJECT INFORMATION

CLIENT: Gorick Construction Co., Inc.
PROJECT: Gorick/C & D Kirkwood Landfill
Kirkwood, New York
CONTRACTOR: Gorick Construction Co., Inc.

DATE: June 11, 1997 (Wednesday)
ATL REPRESENTATIVE: R. Craig

NUCLEAR DENSITY GAUGE DATA

Gauge Model No.: Troxler 3430
Gauge Serial No.: Troxler 21033

Moisture Standard: 646
Density Standard: 2665

FIELD INFORMATION

At the request of Mr. John VanDusen representing Gorick Construction Co., Inc., nuclear moisture-density testing was performed in accordance with ASTM D 2922 direct transmission and ASTM D 3017.

Density tests were performed on the screened glacial till from Klepher's Pit being placed as the first lift of low permeability soil.

Project specifications require a minimum 92% of the maximum dry density as determined by ASTM D 1557. The laboratory compaction test values were supplied by Gorick Construction Co., Inc.

Mr. VanDusen was informed of all test results prior to departure from the site.

Two sets of Shelby Tube samples were collected at the locations of In-Place Field Density Test Numbers 1 and 15 and returned to our facility for Laboratory Triaxial Permeability Tests in accordance with ASTM D 5084. Five Shelby Tubes were destroyed during attempted sample collection due to the gravelly nature of the material. The samples from In-Place Field Density Test location Number 1 failed to maintain the necessary test shape upon extrusion from the tubes; and, therefore, were not tested. Reference ATL Report No. ET862S-2-6-97 for laboratory test results.

IN-PLACE FIELD DENSITY TEST RESULTS

Test No.	Test Location	Elevation	Optimum Moisture Content (%)	Maximum Dry Density (pcf)	Field Wet Density (pcf)	Field Moisture Content (%)	Field Dry Density (pcf)	Compaction (%)
Acre 1:								
1	20'N of Stake #505	First lift, low permeability soil	7.6	134.5	143.7	8.7	132.3	98
2	10'W, 12'N of Stake #402	First lift, low permeability soil	7.6	134.5	145.3	8.4	134.0	100
3	5'E, 33'N of Stake #402	First lift, low permeability soil	7.6	134.5	142.7	8.2	131.9	98
4	10'N, 12'W of Stake #403	First lift, low permeability soil	7.6	134.5	145.1	8.2	134.1	100
5	30'W, 3'S of Stake #403	First lift, low permeability soil	7.6	134.5	145.8	7.7	135.3	100+
6	20'W, 8'N of Stake #506	First lift, low permeability soil	7.6	134.5	138.6	8.0	128.4	95
7	40'W, 85'N of Stake #506	First lift, low permeability soil	7.6	134.5	140.4	8.4	129.5	96

IN-PLACE FIELD DENSITY TEST RESULTS

Test No.	Test Location	Elevation	Optimum Moisture Content (%)	Maximum Dry Density (pcf)	Field Wet Density (pcf)	Field Moisture Content (%)	Field Dry Density (pcf)	Compaction (%)
8	13'W, 21'S of Stake #603	First lift, low permeability soil	7.6	134.5	143.9	8.3	132.9	99
9	5'N, 5'E of Stake #507	First lift, low permeability soil	7.6	134.5	142.5	8.4	131.5	98
Acre 2								
10	15'N, 40'W of Stake #507	First lift, low permeability soil	7.6	134.5	142.6	7.9	132.2	98
11	35'N, 40'W of Stake #507	First lift, low permeability soil	7.6	134.5	141.8	9.8	129.2	96
12	48'E, 82'N of Stake #507	First lift, low permeability soil	7.6	134.5	148.2	8.6	136.5	100+
13	68'W, 50'N of Stake #406	First lift, low permeability soil	7.6	134.5	144.9	8.6	133.5	99
14	43'N, 3'W of Stake #406	First lift, low permeability soil	7.6	134.5	141.9	10.6	128.3	95
15	35'S of Stake #406	First lift, low permeability soil	7.6	134.5	144.4	9.9	131.4	98
16	10'W, 2'S of Stake #406	First lift, low permeability soil	7.6	134.5	141.4	8.1	130.8	97
17	5'E, 25'N of Stake #406	First lift, low permeability soil	7.6	134.5	142.1	10.0	129.3	96
18	40'E of Stake #510	First lift, low permeability soil	7.6	134.5	141.1	10.4	127.9	95

Reviewed by: Mark Gilliam Date: 7-17-97

MAXIM TECHNOLOGIES INC

Maxim Technologies, Inc.
2415 North Triphammer Rd., Suite 3
Ithaca, New York 14850
TEL: (607) 266-0147
FAX: (607) 266-6409

REPORT OF IN-PLACE DENSITY

CLIENT: GORICK CONSTRUCTION
Jon Van Deusen
27 Track Drive
Binghamton, NY 13904

PROJECT NO.: 6103700670
REPORT NO.: 970504
DATE OF SERVICE: 7/07/97
AUTHORIZATION: Jon
REPORT DATE: 7/18/97

PROJECT: Kirkwood Landfill Closure

SERVICES: Perform in-place density and moisture content tests to determine the degree of field compaction.

PROJECT DATA

CONTRACTOR: GORICK CONSTRUCTION
METHOD OF TEST:
DENSITY: ASTM D2922
MOISTURE: ASTM D3017
SPECIFICATION:
DENSITY: 90% Compaction
MOISTURE:

GAUGE: Troxler, 3411B
GAUGE SERIAL NO.: 13420
STANDARD COUNTS
MOISTURE - CURRENT: 531 PREVIOUS: 596
DENSITY - CURRENT: 2377 PREVIOUS: 2362
TEST MODE: Direct Transmission
PROBE DEPTH (in.): 8

TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	REFERENCE REPORT NO
Klepher's Pit	Impermeable Liner	7.6	134.5	

REPORT OF TESTS

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
1.	861 (1st Lift 12") Acre 3	8.2	7.6	136.5	123.9	134.5	92.1
2.	861 (1st Lift 12") Acre 3	8.7	7.6	136.6	123.4	134.5	91.7
3.	861 (1st Lift) Acre 4	9.3	7.6	143.7	128.4	134.5	95.5
4.	861 Acre 4	9.3	7.6	143.7	128.4	134.5	95.5
5.	861 Acre 4 Tubes	9.3	7.6	137.4	123.3	134.5	91.7
6.	861 Acre 4	7.5	7.6	135.1	123.6	134.5	91.9

Report Of Tests Continued On Page 2

MAXIM

GORICK CONSTRUCTION
PROJECT NO. 6103700670
DATE OF SERVICE: 7/07/97

REPORT NO. 970504
PAGE 2 OF 2

REPORT OF TESTS (Continued)

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	FIELD DENSITY (pcf) DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
7.	861 Acre 4	8.0	7.6	135.5	123.3	134.5	91.7
8.	861 Acre 4	8.7	7.6	132.5	120.0	134.5	89.2
9.	861 Acre 4	6.9	7.6	138.4	127.2	134.5	94.6
10.	861 Acre 4	9.9	7.6	134.1	119.9	134.5	89.1
11.	861 Acre 4	5.8	7.6	135.8	126.5	134.5	94.1
12.	861 1st 12" Lift Acre 3	8.9	7.6	140.7	126.5	134.5	94.1
13.	861 1st 12" Lift Acre 3	10.8	7.6	134.8	119.4	134.5	88.8
14.	861 1st 12" Lift Acre 3	10.5	7.6	137.3	121.7	134.5	90.5
15.	861 1st 12" Lift Acre 3	8.2	7.6	145.0	130.9	134.5	97.3
16.	861 1st 12" Lift Acre 3	7.4	7.6	145.5	132.5	134.5	98.5
17.	861 1st 12" Lift Acre 3	5.9	7.6	139.4	129.5	134.5	96.3
18.	861 1st 12" Lift Acre 3	6.5	7.6	142.9	131.6	134.5	97.8
1.	Retest: Acre 4 1st Lift 20' W of 518 (7-7-97)	6.2	7.6	140.8	130.3	134.5	96.9
2.	Retest: 20' W of 516 Acre 3 1st Lift	5.4	7.6	132.4	124.1	134.5	92.3

Test results on this report meet project specifications as noted on page 1.

Technician: Thomas Hamilton
Const. Service Manager

Report Distribution:
(1) GORICK CONSTRUCTION

MAXIM TECHNOLOGIES INC.

T. Hamilton
Thomas Hamilton
Const. Service Manager

MAXIM TECHNOLOGIES INC

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FAX: (607) 266-6409

REPORT OF IN-PLACE DENSITY

CLIENT: GORICK CONSTRUCTION
Jon Van Deusen
27 Track Drive
Binghamton, NY 13904

PROJECT NO.: 6103700670
REPORT NO.: 970521
DATE OF SERVICE: 7/10/97
AUTHORIZATION: Jon
REPORT DATE: 7/18/97

PROJECT: Kirkwood Landfill Closure

SERVICES: Perform in-place density and moisture content tests to determine the degree of field compaction.

PROJECT DATA

CONTRACTOR: GORICK CONSTRUCTION
METHOD OF TEST:
DENSITY: ASTM D2922
MOISTURE: ASTM D3017
SPECIFICATION:
DENSITY: 95% Compaction
MOISTURE:

GAUGE: Troxler, 3411-B
GAUGE SERIAL NO.: 13414
STANDARD COUNTS
MOISTURE - CURRENT: 623 PREVIOUS: 630
DENSITY - CURRENT: 2386 PREVIOUS: 2399
TEST MODE: Direct Transmission
PROBE DEPTH (in.): 0

TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS OPTIMUM MOISTURE %	MOISTURE/DENSITY RELATIONS MAXIMUM DENSITY pcf	REFERENCE REPORT NO
Cover Material	Silt & Clay w/Sand & Gravel	7.6	134.5	

REPORT OF TESTS

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	FIELD DENSITY (pcf) DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
1.	Acre 6: 30' E & 20' N of 526 1st Lift	5.9	7.6	143.7	133.2	134.5	99.0
2.	Acre 6: 20' S of 527 1st Lift	5.7	7.6	137.1	127.8	134.5	95.0
3.	Acre 6 25' S of 300 1st Lift	7.4	7.6	141.1	128.8	134.5	95.8
4.	Acre 6: 30' N of 427 1st Lift	6.6	7.6	135.9	125.5	134.5	93.3

Report Of Tests Continued On Page 2

MAXIM

GORICK CONSTRUCTION
PROJECT NO. 6103700670
DATE OF SERVICE: 7/10/97

REPORT NO. 970521

REPORT OF TESTS (Continued)

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
5.	Acre 6: 15' S & 20' W of 529 1st Lift	9.0	7.6	139.4	125.3	134.5	93.2
6.	Acre 6: 35' E & 12' S of 529 1st Lift	7.7	7.6	141.2	128.5	134.5	95.5
7.	Acre 6: 45' W & 20' S of 530 1st Lift	8.2	7.6	144.1	130.2	134.5	96.8
8.	Acre 6: 15' S of 530 1st Lift	7.6	7.6	143.0	130.1	134.5	96.7
9.	Acre 6: 15' S & 30' W of 531 1st Lift	7.8	7.6	134.8	123.0	134.5	91.4
10.	Acre 5: 5' W & 15' S of 526 1st Lift	7.6	7.6	140.0	127.6	134.5	94.9
11.	Acre 5: 18' E & 20' S of 525 1st Lift	6.5	7.6	133.5	123.6	134.5	91.9
2.	Acre 5: 25' W & 20' S of 525 1st Lift	4.9	7.6	132.2	124.6	134.5	92.6
13.	Acre 5: 10' E & 25' S of 525 1st Lift	4.7	7.6	132.1	124.8	134.5	92.8
14.	Acre 5: 15' N & 35' E of 422 1st Lift	5.4	7.6	131.5	123.3	134.5	91.7
15.	Acre 5: 8' S of 523 1st Lift	5.0	7.6	134.8	126.8	134.5	94.3
16.	Acre 5: 40' W of 35' S of 523 1st Lift	4.5	7.6	131.8	124.8	134.5	92.8
17.	Acre 5: 17' S of 522 1st Lift	5.0	7.6	133.8	125.9	134.5	93.6
18.	Acre 5: 10' N & 20' W of 421 1st Lift	5.9	7.6	133.3	124.2	134.5	92.3

Test results on this report meet project specifications as noted on page 1.

Technician: Donald McGrady
Sr. Engineering Tech.

Report Distribution:
(1) GORICK CONSTRUCTION

MAXIM TECHNOLOGIES INC.

T. Hamilton
Thomas Hamilton
Const. Service Manager

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FIELD IN-PLACE DENSITY TEST REPORT

Project: Kirkwood Landfill Closure

Client: Gorick Construction — Report: 970864

Contractor: Gorick Construction — Date 8-14-97

Weather: — Job No: 9734344

Test No.	Depth or Elev.	In-place Density (pcf)	In-place Moisture	Maximum Density (pcf)	Comp. (%)	Proctor Code	Spec. Comp. (%)	Location and Comments
1	2nd lift	129.7	6.7	135.4	95.7	97400	90	Acre 1, 12' North x 25' East of 508
2	2nd lift	124.1	5.8	135.4	91.6	97400	90	Acre 1, 25' South x 8' West of 404
3	2nd lift	122.9	6.1	135.4	90.7	97400	90	Acre 1, 12' North x 25' West of 506
4	2nd lift	122.0	6.7	135.4	90.1	97400	90	Acre 1, 28' South x 6' West of 403
5	2nd lift	127.2	6.2	135.4	93.9	97400	90	Acre 1, 18' West of 505
6	2nd lift	122.4	6.6	135.4	90.4	97400	90	Acre 1, 78'West of 505
7	2nd lift	124.8	7.0	135.4	92.1	97400	90	Acre 1, 40' West x 10' North of 403
8	2nd lift	125.4	7.0	135.4	92.6	97400	90	Acre 1, 50' North x 15' West of404
9	2nd lift	124.9	6.4	135.4	92.2	97400	90	Acre 1, 30' West of 404
10	1st lift	126.6	8.5	135.4	93.5	97400	90	Acre 7, 12' West of 308
11	1st lift	127.9	6.2	135.4	94.4	97400	90	Acre 7, 25' West of 307
12	1st lift	127.4	6.3	135.4	94.0	97400	90	Acre 7, 25' West of 306
13	1st lift	127.3	6.1	135.4	94.0	97400	90	Acre 7, 30' West of 305
14	1st lift	126.2	6.2	135.4	93.2	97400	90	Acre 7,18' East x 25' South of 305
15	1st lift	125.8	7.2	135.4	92.9	97400	90	Acre 7, 30' South of 304
16	1st lift	131.7	6.7	135.4	97.2	97400	90	Acre 7, 10' South of 303
17	1st lift	129.0	5.6	135.4	95.3	97400	90	Acre 7, 40' South of 302
18	1st lift	130.9	5.3	135.4	96.6	97400	90	Acre 7, 20' South of 301
19	Barrier	124.9	7.4	135.4	92.2	97400	90	Acre 4, 20' West x 10' South of 517
20	Barrier	129.3	6.7	135.4	95.5	97400	90	Acre 4, 5' North of 418

Low Perm In-Lift Acre 7

Proctor Code	Maximum Density	Optimum Moisture	Proctor Type	Material Type and Source
97400	135.4	8.6	Modified	Silt/Clay some Sand & Gravel

REMARKS:

Technician: D.McGrady

Time on Site: 1:45-4:15

Respectfully submitted,
EMPIRE SOILS INVESTIGATIONS, INC.

T. Hamilton

Thomas A. Hamilton

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 12.71
Specimen Diameter (cm): 7.20
Dry Unit Weight (pcf): 123.9
Moisture Before Test (%): 10.3
Moisture After Test (%): 11.6
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

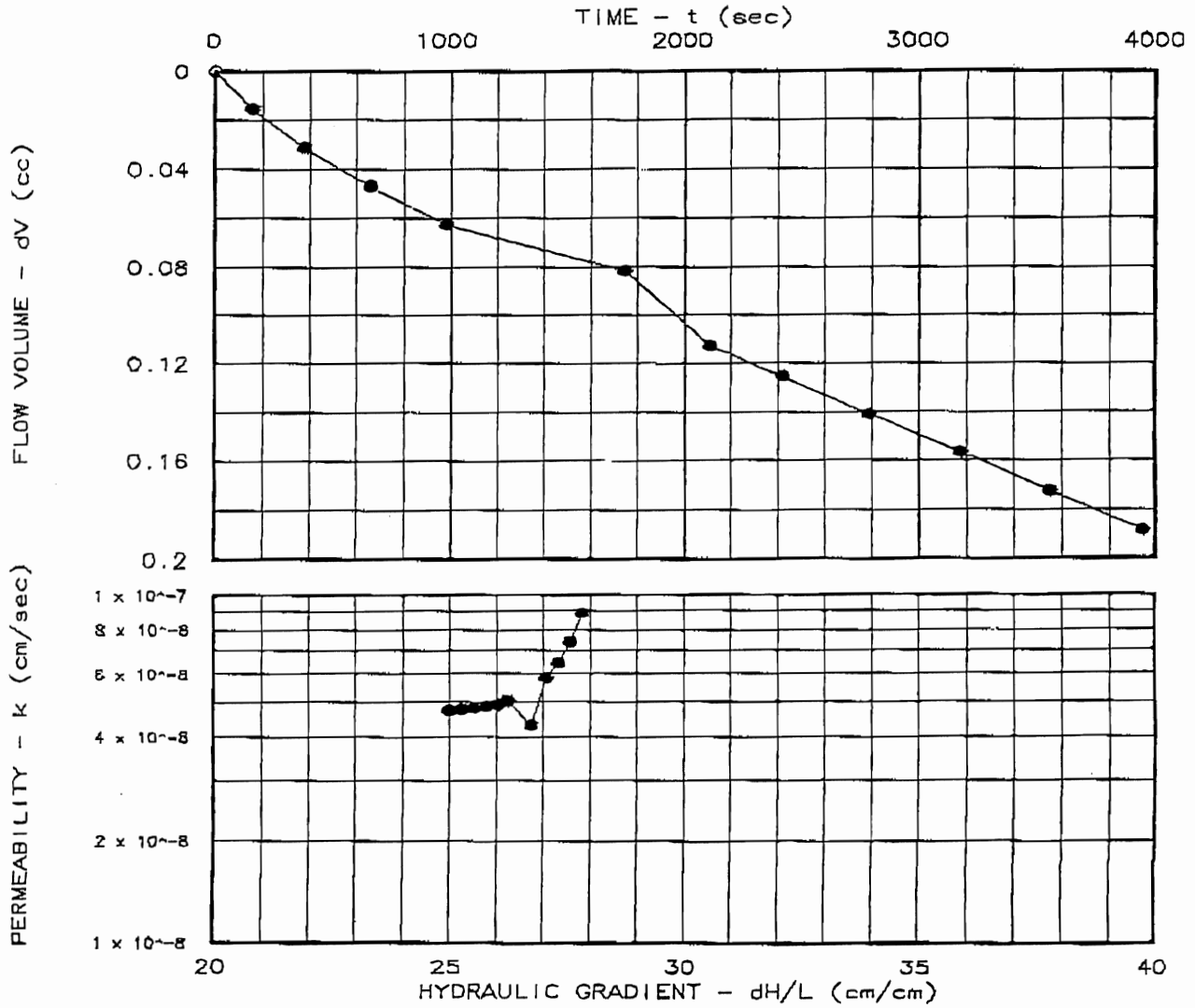
Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.5

Perm. (cm/sec): 4.77 x 10^-8

SAMPLE DATA:
Sample Identification: Acre 1, 2nd Lift, 20'N of Sta. 405
Visual Description: Brown Silt, Some Gravel Sand.
Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C.& D. Landfill
Location: Kirkwood, New York
Date: 08/28/97

PERMEABILITY TEST REPORT
MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97482
Lab No.: 97482
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 13.90
Specimen Diameter (cm): 7.19
Dry Unit Weight (pcf): 119.1
Moisture Before Test (%): 10.9
Moisture After Test (%): 11.5
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

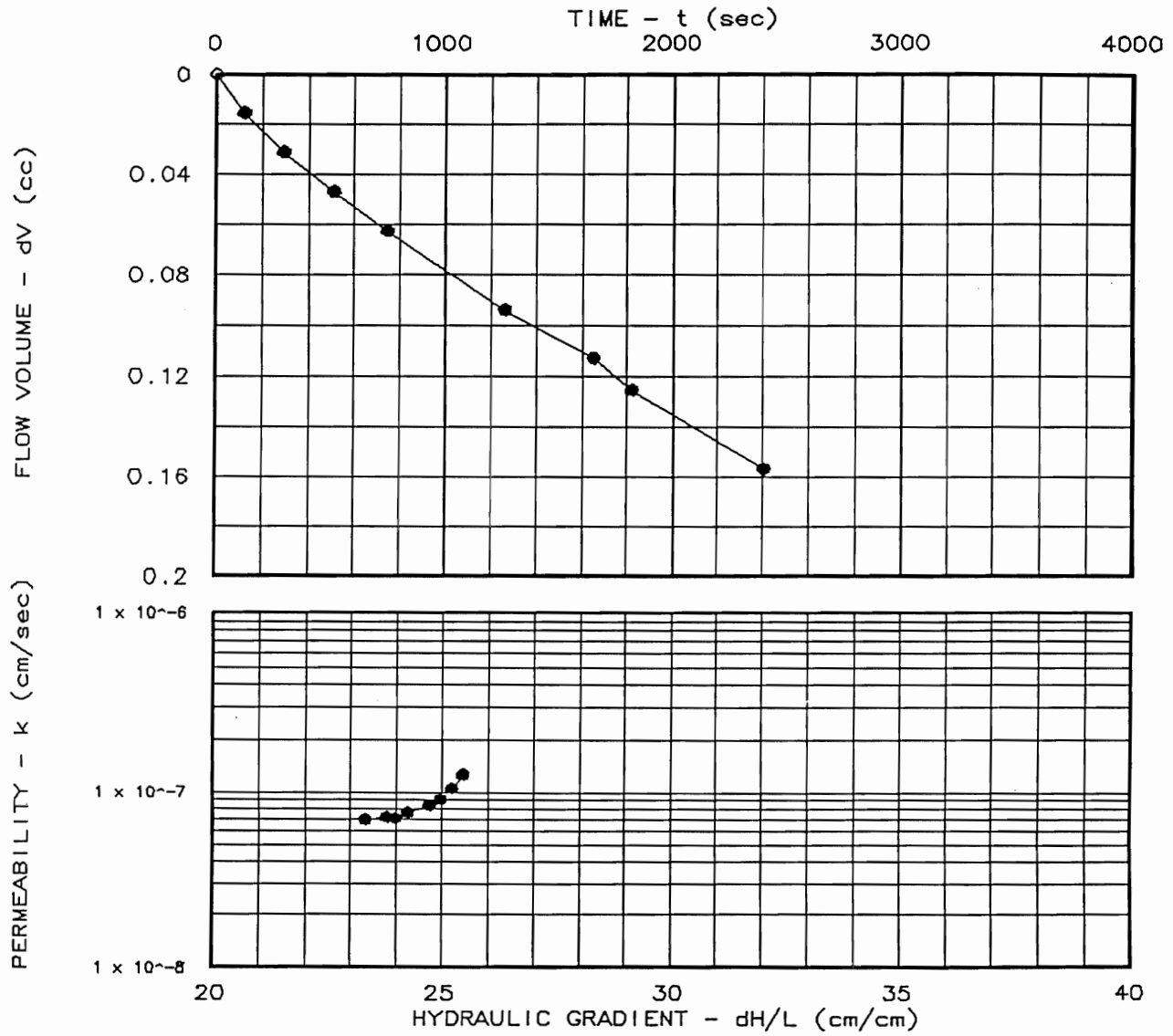
Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 7.17 x 10^-8

SAMPLE DATA:

Sample Identification: Acre 2, 2nd Lift, 20'N of 511
Visual Description: Brown Silt, Sand, & gravel.
Remarks:

Maximum Dry Density (pcf): 134.8
Optimum Moisture Content (%): 7.1
ASTM(D698)
Percent Compaction: 88.3%
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C.& D. Landfill Closure
Location: Kirkwood, New York
Date: 07/30/97

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97404
Lab No.: 97404
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

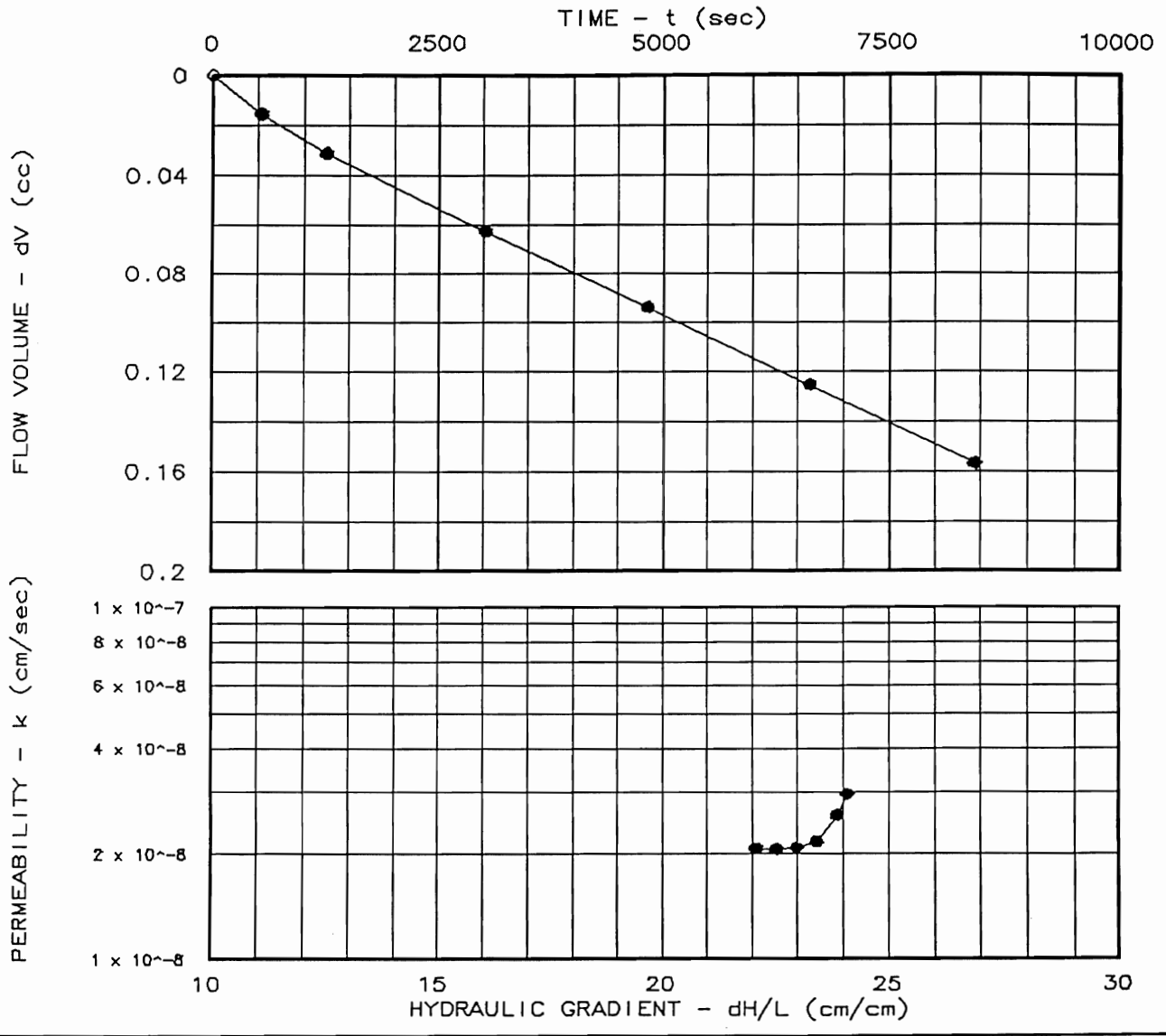
TEST DATA:
Specimen Height (cm): 14.68
Specimen Diameter (cm): 7.21
Dry Unit Weight (pcf): 124.3
Moisture Before Test (%): 9.5
Moisture After Test (%): 11.3
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 2.09 x 10^-8

SAMPLE DATA:
Sample Identification: Acre 3, 2nd Lift, 15'W of 514
Visual Description: Brown Silt, Sand, & gravel.
Remarks:

Maximum Dry Density (pcf): 134.8
Optimum Moisture Content (%): 7.1
ASTM(D698)
Percent Compaction: 92.2%
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C.& D. Landfill Closure
Location: Kirkwood, New York
Date: 07/30/97

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97405
Lab No.: 97405
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 11.69
Specimen Diameter (cm): 7.20
Dry Unit Weight (pcf): 117.1
Moisture Before Test (%): 13.6
Moisture After Test (%): 15.7
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

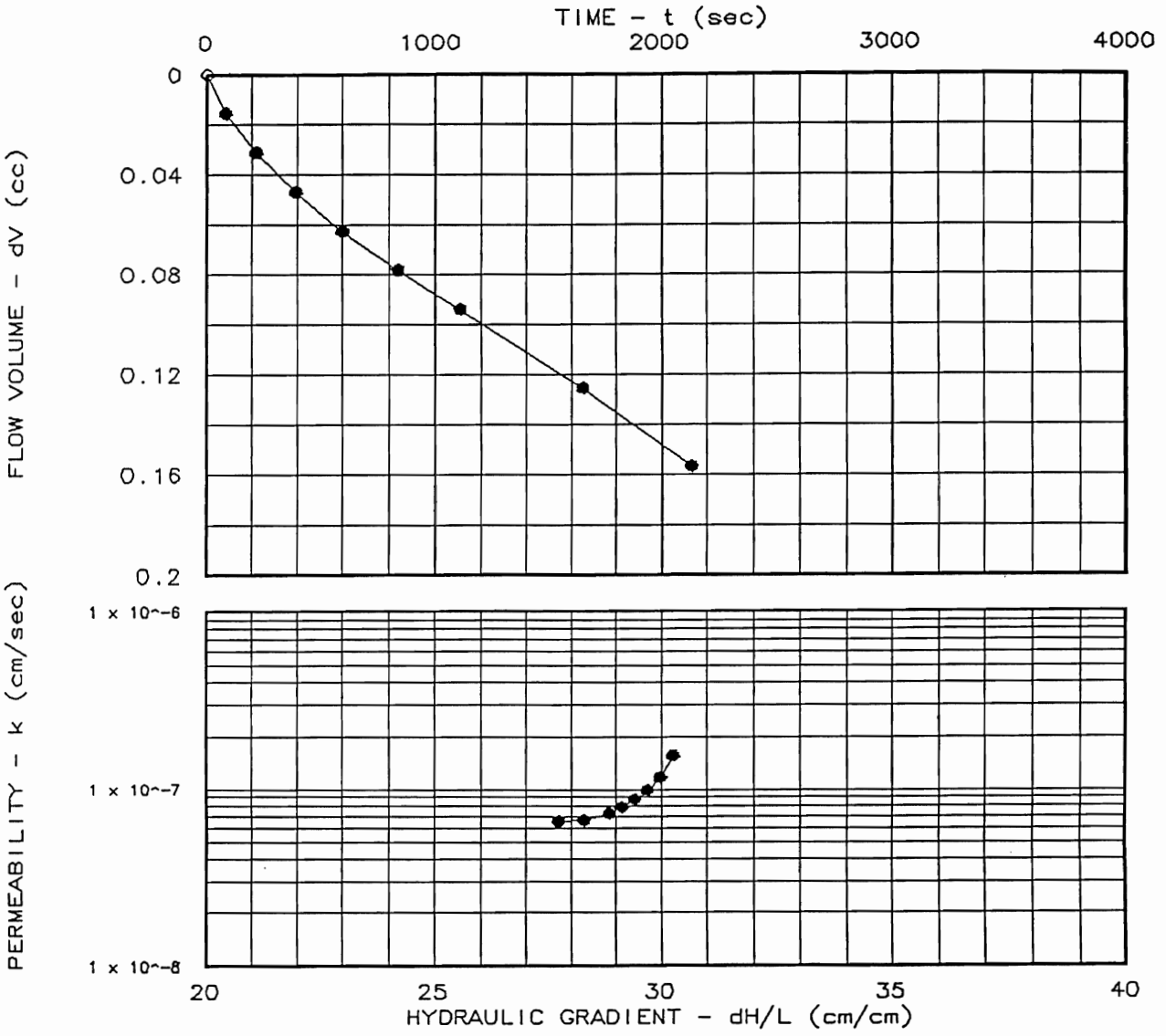
Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 7.06 x 10^-8

SAMPLE DATA:

Sample Identification: Acre 4, 2nd Lift, 25'W of 520
Visual Description: Brown Silt, Sand, & gravel.
Remarks: 126.5 pcf @ 8.0% Nuclear

Maximum Dry Density (pcf): 134.8
Optimum Moisture Content (%): 7.1
ASTM(D698)
Percent Compaction: 86.8%
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C.& D. Landfill Closure
Location: Kirkwood, New York
Date: 07/25/97

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97384
Lab No.: 97384
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

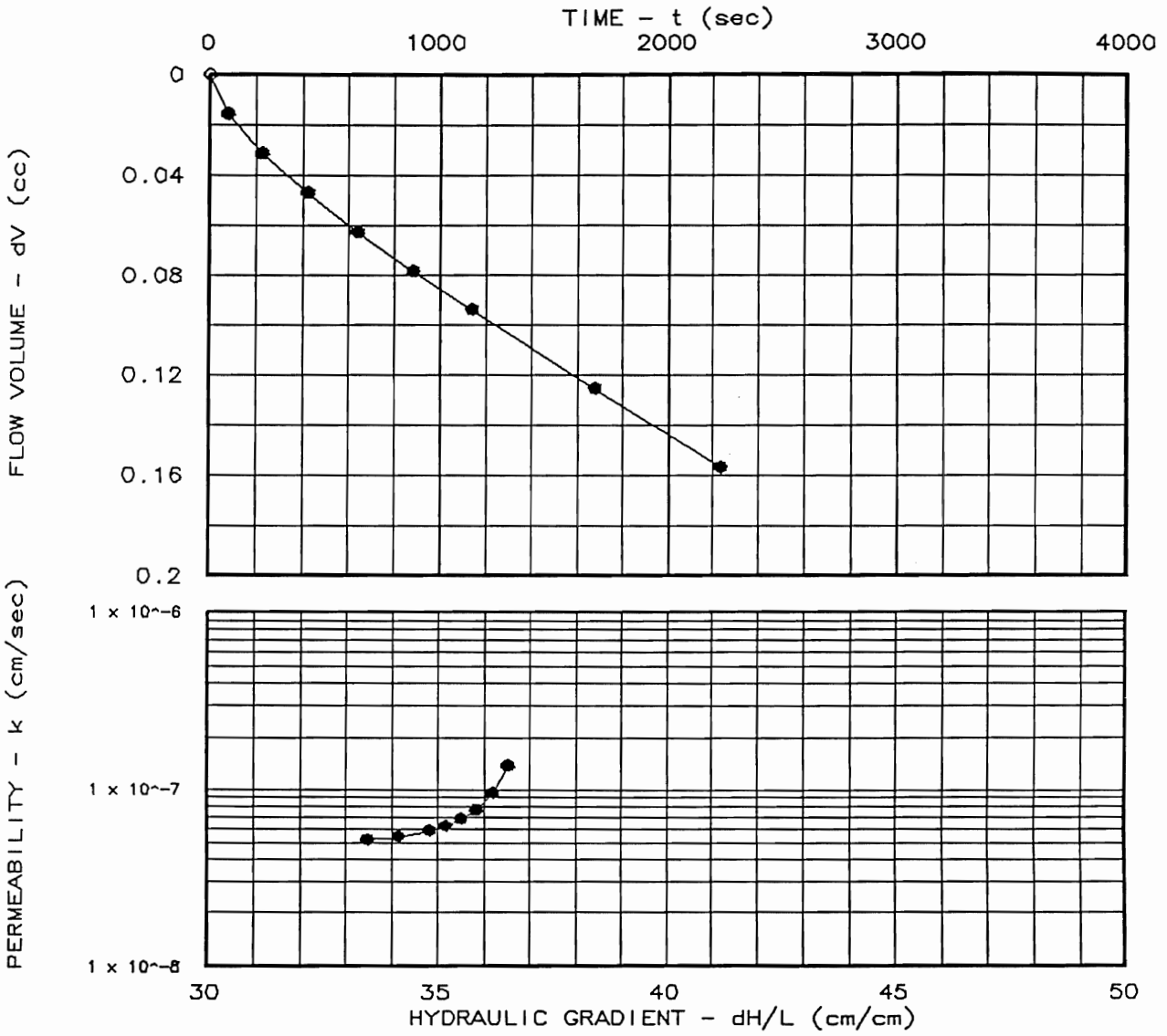
TEST DATA:
Specimen Height (cm): 9.69
Specimen Diameter (cm): 7.19
Dry Unit Weight (pcf): 125.0
Moisture Before Test (%): 10.9
Moisture After Test (%): 11.9
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 5.67 x 10^-8

SAMPLE DATA:
Sample Identification: Acre 5, 2nd Lift, 12'S of 512
Visual Description: Brown Silt, Sand, & gravel.
Remarks:

Maximum Dry Density (pcf): 134.8
Optimum Moisture Content (%): 7.1
ASTM(D698)
Percent Compaction: 92.7%
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C.& D. Landfill Closure
Location: Kirkwood, New York
Date: 07/30/97

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97403
Lab No.: 97403
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

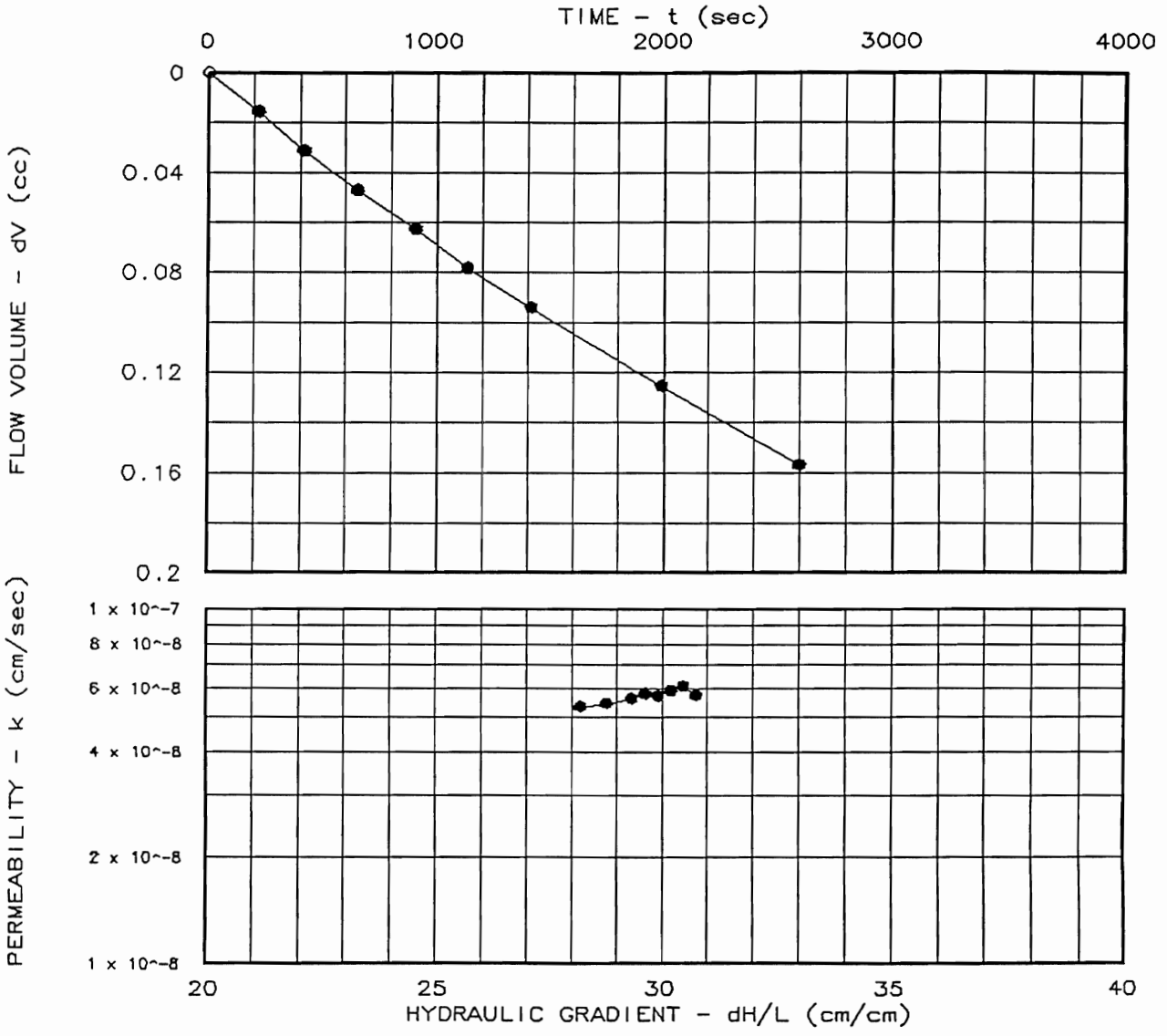
TEST DATA:
Specimen Height (cm): 11.50
Specimen Diameter (cm): 7.17
Dry Unit Weight (pcf): 116.1
Moisture Before Test (%): 10.7
Moisture After Test (%): 12.0
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 5.55 x 10^-8

SAMPLE DATA:
Sample Identification: Acre 6, 2nd Lift, 20'N & 40'E of 526
Visual Description: Brown Silt, Sand, & gravel.
Remarks: 125.3 pcf @ 8.9% Nuclear

Maximum Dry Density (pcf): 134.8
Optimum Moisture Content (%): 7.1
ASTM(D698)
Percent Compaction: 86.1%
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C.& D. Landfill Closure
Location: Kirkwood, New York
Date: 07/25/97

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97382
Lab No.: 97382
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 11.49
Specimen Diameter (cm): 7.10
Dry Unit Weight (pcf): 121.8
Moisture Before Test (%): 11.4
Moisture After Test (%): 13.8
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

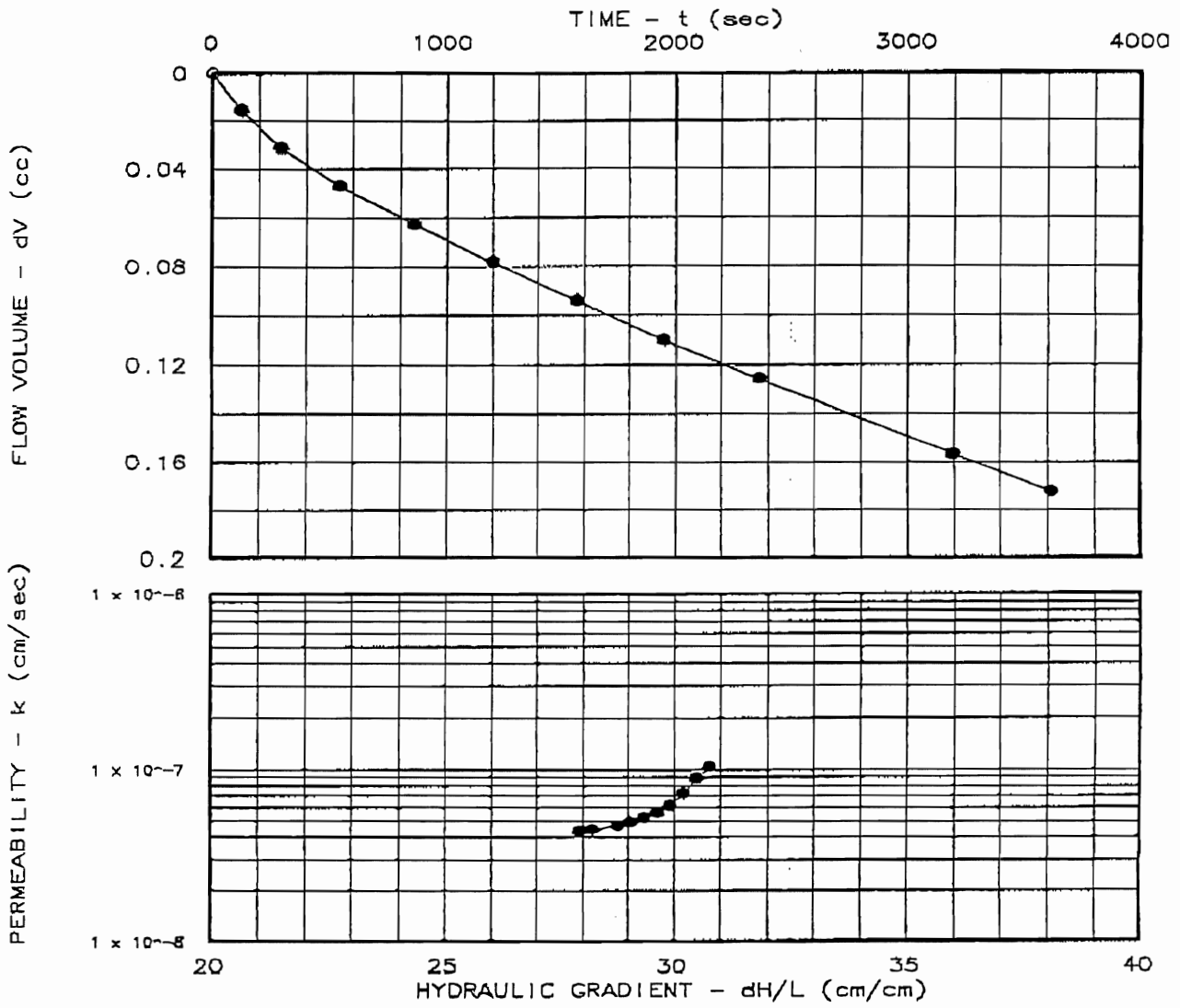
Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 4.58 x 10^-8

SAMPLE DATA:
Sample Identification: Acre 7, 2nd lift. 20 ft. West of Sta. 307.
Visual Description: Brown Silt, fine Sand, some gravel, trace clay.
Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C. & D. Landfill
Location: Kirkwood, New York
Date: 09/12/97

PERMEABILITY TEST REPORT
MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97490
Lab No.: 97490
Tested by: AM
Checked by: TH
Test: CV - Constant volume

MAXIM
TECHNOLOGIES

Empire Soils Investigations, Inc., Division
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Ithaca, New York 14850
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Fax: (607) 266-6409

FIELD IN-PLACE DENSITY TEST REPORT

Project: Kirkwood Landfill Closure

Client: Gorick Construction — Report: 970864

Contractor: Gorick Construction — Date 8-14-97

Weather: — Job No: 9734344

Test No.	Depth or Elev.	In-place Density (pcf)	In-place Moisture	Maximum Density (pcf)	Comp. (%)	Proctor Code	Spec. Comp. (%)	Location and Comments
1	2nd lift	129.7	6.7	135.4	95.7	97400	90	Acre 1, 12' North x 25' East of 508
2	2nd lift	124.1	5.8	135.4	91.6	97400	90	Acre 1, 25' South x 8' West of 404
3	2nd lift	122.9	6.1	135.4	90.7	97400	90	Acre 1, 12' North x 25' West of 506
4	2nd lift	122.0	6.7	135.4	90.1	97400	90	Acre 1, 28' South x 6' West of 403
5	2nd lift	127.2	6.2	135.4	93.9	97400	90	Acre 1, 18' West of 505
6	2nd lift	122.4	6.6	135.4	90.4	97400	90	Acre 1, 78'West of 505
7	2nd lift	124.8	7.0	135.4	92.1	97400	90	Acre 1, 40' West x 10' North of 403
8	2nd lift	125.4	7.0	135.4	92.6	97400	90	Acre 1, 50' North x 15' West of404
9	2nd lift	124.9	6.4	135.4	92.2	97400	90	Acre 1, 30' West of 404
10	1st lift	126.6	8.5	135.4	93.5	97400	90	Acre 7, 12' West of 308
11	1st lift	127.9	6.2	135.4	94.4	97400	90	Acre 7, 25' West of 307
12	1st lift	127.4	6.3	135.4	94.0	97400	90	Acre 7, 25' West of 306
13	1st lift	127.3	6.1	135.4	94.0	97400	90	Acre 7, 30' West of 305
14	1st lift	126.2	6.2	135.4	93.2	97400	90	Acre 7,18' East x 25' South of 305
15	1st lift	125.8	7.2	135.4	92.9	97400	90	Acre 7, 30' South of 304
16	1st lift	131.7	6.7	135.4	97.2	97400	90	Acre 7, 10' South of 303
17	1st lift	129.0	5.6	135.4	95.3	97400	90	Acre 7, 40' South of 302
18	1st lift	130.9	5.3	135.4	96.6	97400	90	Acre 7, 20' South of 301
19	Barrier	124.9	7.4	135.4	92.2	97400	90	Acre 4, 20' West x 10' South of 517
20	Barrier	129.3	6.7	135.4	95.5	97400	90	Acre 4, 5' North of 418

ACRE 1

Proctor Code	Maximum Density	Optimum Moisture	Proctor Type	Material Type and Source
97400	135.4	8.6	Modified	Silt/Clay some Sand & Gravel

REMARKS:

Technician: D.McGrady

Time on Site: 1:45-4:15

Respectfully submitted,
EMPIRE SOILS INVESTIGATIONS, INC.

T. Hamilton

Thomas A. Hamilton

MAXIM
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FIELD IN-PLACE DENSITY TEST REPORT

Project: Kirkwood Landfill Closure

Client: Gorick Construction — Report: 970681

Contractor: Gorick Construction — Date 07-28-97

Weather: — Job No: 9734344

Test No.	Depth or Elev.	In-place Density (pcf)	In-place Moisture	Maximum Density (pcf)	Comp. (%)	Proctor Code	Spec. Comp. (%)	Location and Comments
1	2nd lift	127.0	6.2	134.5	94.4	2	90	Acre 3, 15' West x 20' North of 517
2	2nd lift	125.8	6.7	134.5	93.6	2	90	Acre 3, 15 West of 516
3	2nd lift	128.1	6.8	134.5	95.3	2	90	Acre 3, 25' West x 35' South of 515
4	2nd lift	126.4	6.9	134.5	94.0	2	90	Acre 3, 25' West of 515
5	2nd lift	124.5	6.5	134.5	92.6	2	90	Acre 3, 20' West x 55' North of 515
6	2nd lift	127.6	7.8	134.5	94.9	2	90	Acre 3, 15' West of 514
7	2nd lift	125.4	6.5	134.5	93.2	2	90	Acre 3, 15' West x 30' North of 514
8	2nd lift	125.2	6.6	134.5	93.1	2	90	Acre 3, 25' West of 513
9	2nd lift	126.5	7.3	134.5	94.1	2	90	Acre 3, 25' West x 45' North of 513
10	2nd lift	121.3	6.9	134.5	90.2	2	90	Acre 2, 25' West of 512
11	2nd lift	125.9	7.7	134.5	93.6	2	90	Acre 2, 45' North of 512
12	2nd lift	123.4	7.4	134.5	91.7	2	90	Acre 2, 20' North of 511
13	2nd lift	126.2	7.5	134.5	93.9	2	90	Acre 2, 20' North x 40' East of 511
14	2nd lift	132.7	7.2	134.5	98.7	2	90	Acre 2, 30' North of 510
15	2nd lift	130.4	7.3	134.5	97.0	2	90	Acre 2, 30' North x 50' East of 510
16	2nd lift	128.6	8.2	134.5	95.6	2	90	Acre 2, 60' North of 509
17	2nd lift	125.7	7.5	134.5	93.5	2	90	Acre 2, 115' North of 509
18	2nd lift	128.9	7.2	134.5	95.9	2	90	Acre 2, 10' North x 15' West of 508
19	2nd lift	125.1	8.2	134.5	93.0	2	90	Acre 5, 12' South of 523

Proctor Code	Maximum Density	Optimum Moisture	Proctor Type	Material Type and Source
2	134.5	7.6	Modified	Klepher's Pit-Glacial Till

REMARKS:

Technician: D.McGrady

Time on Site: 9:00-1:30

Respectfully submitted,
EMPIRE SOILS INVESTIGATIONS, INC.

T. Hamilton

Thomas A. Hamilton

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FIELD IN-PLACE DENSITY TEST REPORT

Project: Kirkwood Landfill Closure

Client: Gorick Construction — Report: 970626

Contractor: Gorick Construction — Date 7-22-97

Weather: — Job No: 9734344

Test No.	Depth or Elev.	In-place Density (pcf)	In-place Moisture	Maximum Density (pcf)	Comp. (%)	Proctor Code	Spec. Comp. (%)	Location and Comments
1	2nd lift	124.3	8.3	134.5	92.4	2	90	Acre 4, 10' West x 30' South of 517
2	2nd lift	123.3	9.1	134.5	91.7	2	90	Acre 4, 20' West x 70' South of 517
3	2nd lift	126.4	7.8	134.5	94.0	2	90	Acre 4, 25' West of 518
4	2nd lift	121.6	8.7	134.5	90.4	2	90	Acre 4, 10' West x 30' South of 518
5	2nd lift	122.2	7.8	134.5	90.8	2	90	Acre 4, 15' West of 519
6	2nd lift	126.5	8.0	134.5	94.1	2	90	Acre 4, 25' West of 520
7	2nd lift	123.1	7.5	134.5	91.5	2	90	Acre 4, 30' West of 521
8	2nd lift	123.7	7.9	134.5	92.0	2	90	Acre 4, 10' South x 48' West of 522
9	2nd lift	127.4	8.2	134.5	94.7	2	90	Acre 4, 20' South x 15' West of 522
10	2nd lift	130.1	8.7	134.5	96.7	2	90	Acre 5, 20' South x 15' East of 522
11	2nd lift	126.2	8.3	134.5	93.9	2	90	Acre 5, 20' South x 45' East of 522
12	2nd lift	122.2	9.1	134.5	90.8	2	90	Acre 5, 10' South of 523
13	2nd lift	131.0	8.7	134.5	97.4	2	90	Acre 5, 25' South x 30' East of 523
14	2nd lift	131.1	8.1	134.5	97.5	2	90	Acre 5, 25'South x 15' West of 524
15	2nd lift	127.0	8.6	134.5	94.4	2	90	Acre 5, 10'South x 15'East of 524
16	2nd lift	128.0	8.0	134.5	95.1	2	90	Acre 5, 10' South x 45' East of 524
17	2nd lift	127.2	6.7	134.5	94.6	2	90	Acre 5, 20' South of 525
18	2nd lift	128.8	7.4	134.5	95.8	2	90	Acre 5, 20' South x 30' East of 525
19	2nd lift	129.4	6.2	134.5	96.2	2	90	Acre 6, 20' South x 15' East of 526
20	2nd lift	122.3	8.0	134.5	91.0	2	90	Acre 6, 20' North x 15' East of 526

Proctor Code	Maximum Density	Optimum Moisture	Proctor Type	Material Type and Source
2	134.5	7.6	Modified	Klepher's Pit- Glacial Till

REMARKS:

Technician: D. McGrady

Time on Site: 12:45-4:45

Respectfully submitted,
EMPIRE SOILS INVESTIGATIONS, INC.

T. Hamilton

Thomas A. Hamilton

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FIELD IN-PLACE DENSITY TEST REPORT

Project: Kirkwood Landfill Closure

Client: Gorick Construction — Report: 970626

Contractor: Gorick Construction — Date 7-22-97

Weather: — Job No: 9734344

Test No.	Depth or Elev.	In-place Density (pcf)	In-place Moisture	Maximum Density (pcf)	Comp. (%)	Proctor Code	Spec. Comp. (%)	Location and Comments
21	2nd lift	125.3	8.9	134.5	93.2	2	90	Acre 6, 20' North x 40' East of 526
22	2nd lift	128.9	7.7	134.5	95.9	2	90	Acre 6, 20' South x 40' East of 526
23	2nd lift	134.4	8.0	134.5	100.0	2	90	Acre 6, 20' South of 527
24	2nd lift	128.7	7.7	134.5	95.7	2	90	Acre 6, 20' North of 527
25	2nd lift	129.2	7.4	134.5	96.1	2	90	Acre 6, 20' North x 25' E of 527
26	2nd lift	128.0	8.2	134.5	95.2	2	90	Acre 6, 20' South x 25' East of 527
27	2nd lift	130.0	6.4	134.5	96.6	2	90	Acre 6, 20' South of 528
28	1st lift	130.2	6.6	134.5	96.8	2	90	Acre 1, 25' West of 403

Proctor Code	Maximum Density	Optimum Moisture	Proctor Type	Material Type and Source
2	134.5	7.6	Modified	Klepher's Pit-Glacial Till

REMARKS:

Technician: D. McGrady

Time on Site: 12:45-4:45

Respectfully submitted,

EMPIRE SOILS INVESTIGATIONS, INC.

T. Hamilton

Thomas A. Hamilton

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FIELD IN-PLACE DENSITY TEST REPORT

Project: Kirkwood Landfill Closure

Client: Gorick Construction — Report: 971102

Contractor: Gorick Construction — Date 9-10-97

Weather: — Job No: 9734344

Test No.	Depth or Elev.	In-place Density (pcf)	In-place Moisture	Maximum Density (pcf)	Comp. (%)	Proctor Code	Spec. Comp. (%)	Location and Comments
1	6" lift	132.1	5.0	135.4	97.5	97400	90	Acre 7, 40' South from stake 306
2	6" lift	129.6	4.6	135.4	95.7	97400	90	Acre 7, 40' South x 30' West from stake 306
3	6" lift	132.0	6.0	135.4	97.4	97400	90	Acre 7, 6' West from stake 306
4	6" lift	135.4	5.1	135.4	99.1	97400	90	Acre 7, 20' North x 30' West from stake 306
5	6" lift	128.8	6.5	135.4	95.1	97400	90	Acre 7, 50' North x 5' West from stake 306
6	6" lift	131.5	5.7	135.4	97.1	97400	90	Acre 7, 4' West from stake 307
7	6" lift	132.3	5.0	135.4	97.7	97400	90	Acre 7, 5' South from stake 308
8	6" lift	131.8	5.8	135.4	97.3	97400	90	Acre 7, 10' West from stake 305
9	6" lift	130.0	6.1	135.4	96.0	97400	90	Acre 7, 4' West from stake 304
10	Barrier	129.2	8.5	135.4	95.4	97400	90	10' East from stake 405
11	Barrier	134.9	6.9	135.4	99.6	97400	90	5' South from stake 403A

Proctor Code	Maximum Density	Optimum Moisture	Proctor Type	Material Type and Source
97400	135.4	8.6	Modified	Silt/Clay some Sand & Gravel

REMARKS:

Technician: D. Verdon

Time on Site: 8:00-11:30

Respectfully submitted,
EMPIRE SOILS INVESTIGATIONS, INC.

T. Hamilton

Thomas A. Hamilton

LOW PRIM SOIL

ACRES 8, 9, 10, 11, 12

1ST & 2ND LIFT IPDIS & PRIMS

* ACRE 8 1ST LIFT WAS A FAILURE FOR PRIMARILY. THEREFORE 2 ADDITIONAL TUBES WERE PUSHED ON EITHER SIDE OF FAILURE. BOTH OF THESE PASSED, SO THE ACRE WAS DEEMED PASSING

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 14.33
Specimen Diameter (cm): 7.17
Dry Unit Weight (pcf): 123.1
Moisture Before Test (%): 9.9
Moisture After Test (%): 11.5
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

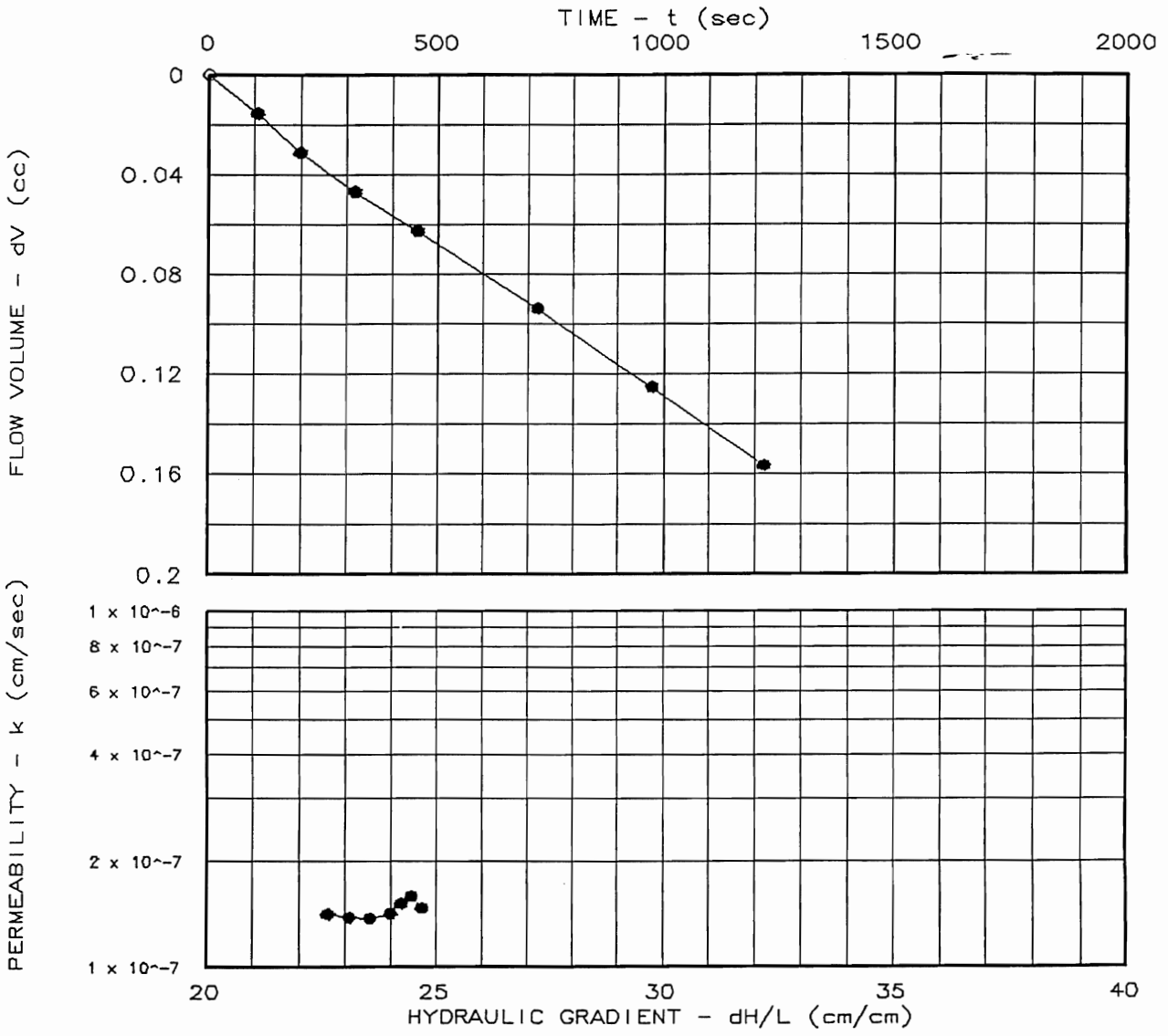
Perm. (cm/sec): 1.33 x 10^-7

SAMPLE DATA:

Sample Identification: Acre 8, Stake 312, 1st Lift
Visual Description: Clayey gravel with sand
Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C. & D. Landfill Closure
Location: Kirkwood, New York
Date: 05/22/98

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 98213
Lab No.: 98213
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 11.01
Specimen Diameter (cm): 7.16
Dry Unit Weight (pcf): 127.1
Moisture Before Test (%): 9.3
Moisture After Test (%): 10.7
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 5.76 x 10^-8

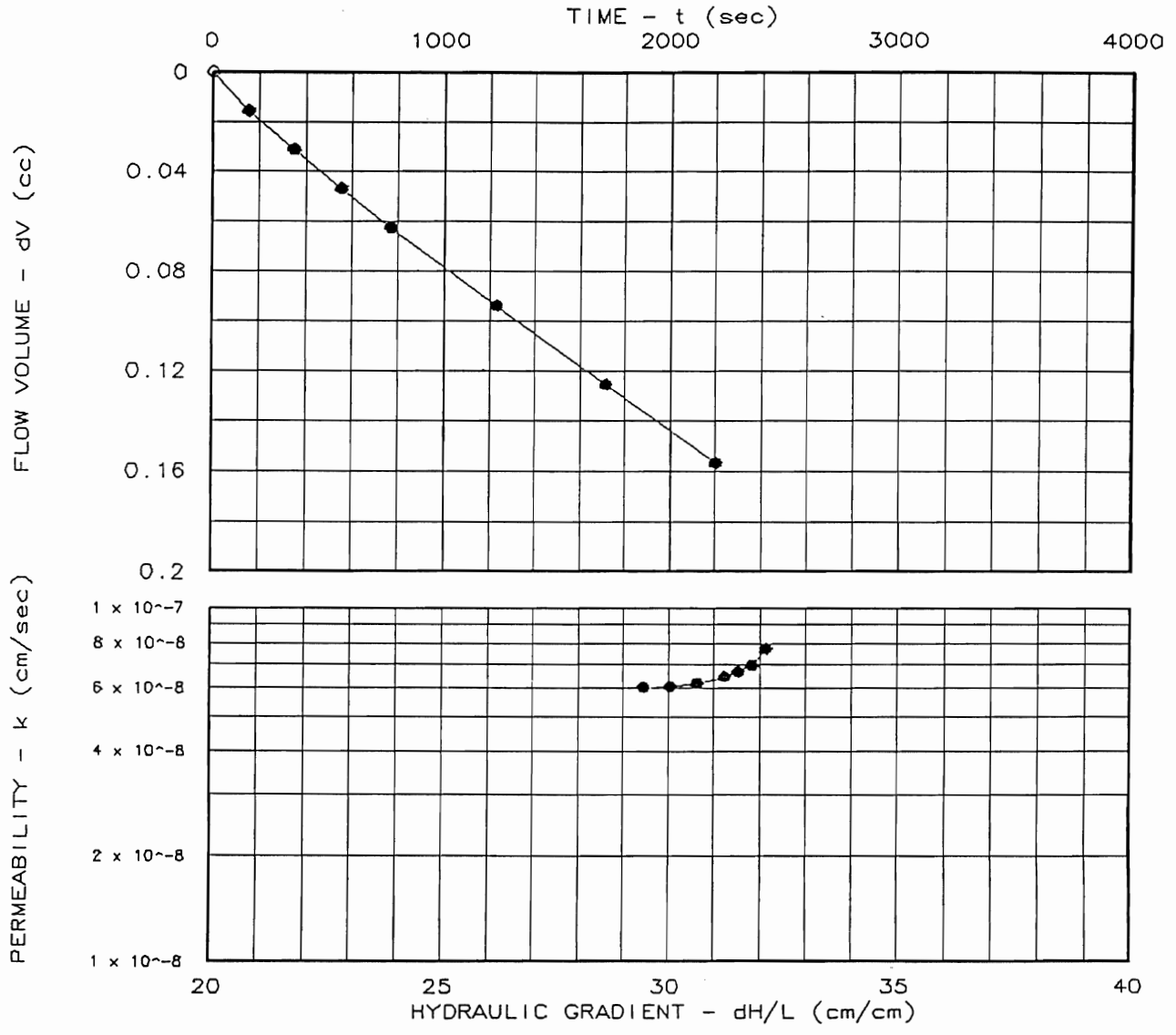
SAMPLE DATA:

Sample Identification: 10'W of Stake 312, Acre 8, 1st lift re-test
Visual Description: Brown Till

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C.& D. Landfill Closure
Location: Kirkwood, New York
Date: 06/06/98

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 980241
Lab No.: 980241
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 9.69
Specimen Diameter (cm): 7.18
Dry Unit Weight (pcf): 124.8
Moisture Before Test (%): 10.2
Moisture After Test (%): 11.6
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

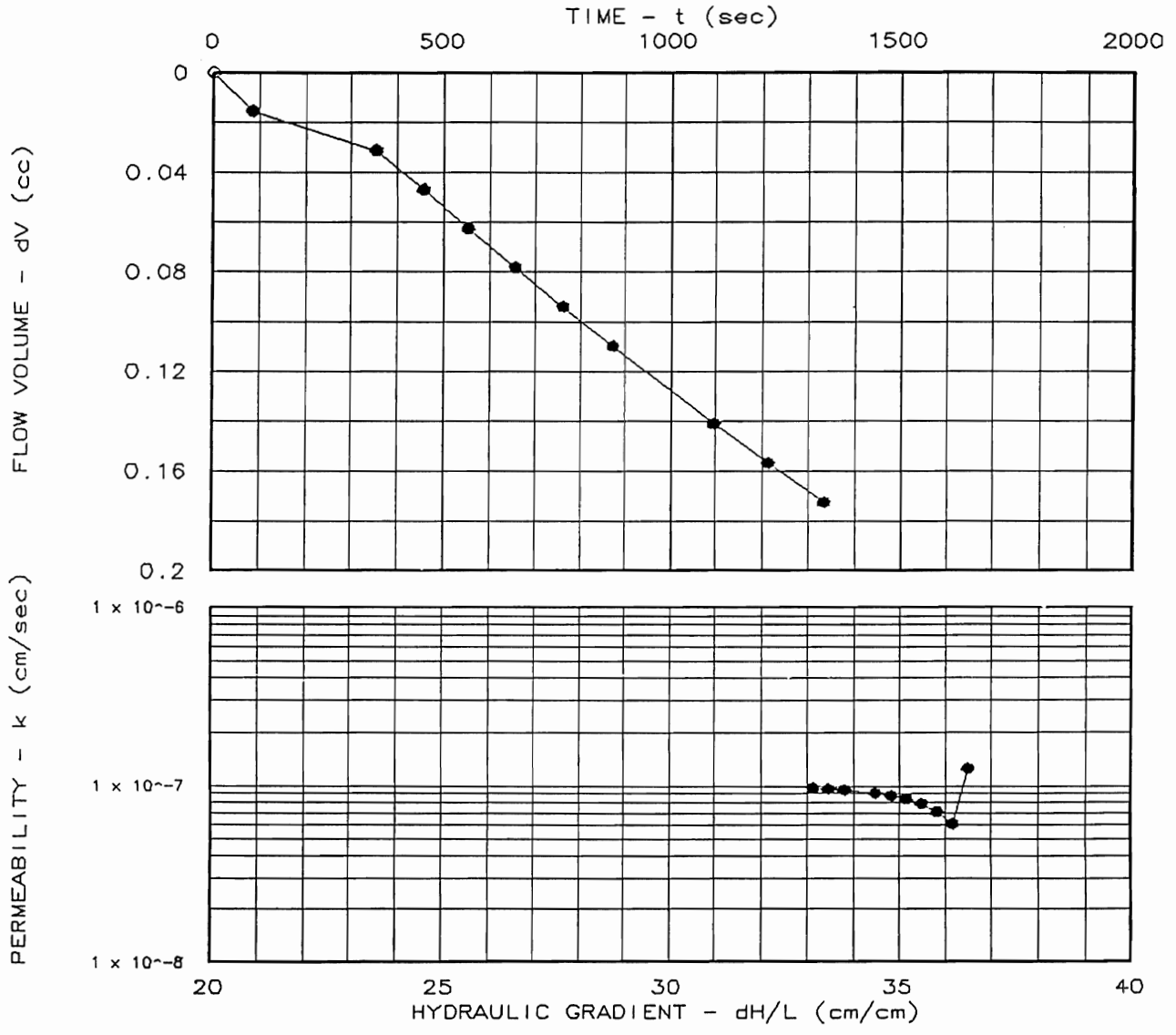
Perm. (cm/sec): 8.79 x 10^-8

SAMPLE DATA:
Sample Identification: 10'E of Stake 312, Acre 8, 1st lift re-test
Visual Description: Brown Till

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C.& D. Landfill Closure
Location: Kirkwood, New York
Date: 06/05/98

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 98240
Lab No.: 98240
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 14.24
Specimen Diameter (cm): 7.18
Dry Unit Weight (pcf): 119.7
Moisture Before Test (%): 10.7
Moisture After Test (%): 12.0
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

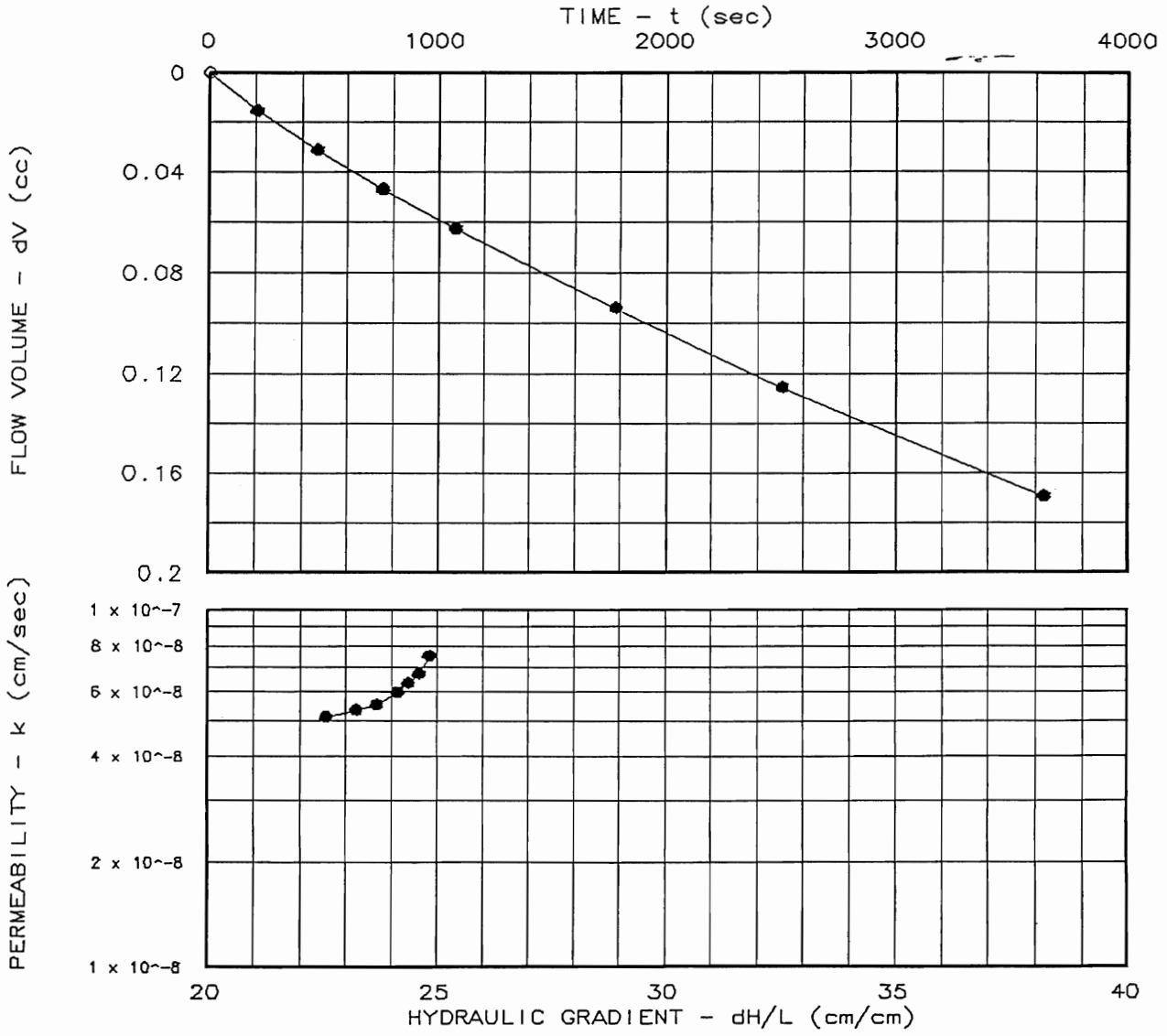
Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 5.23 x 10^-8

SAMPLE DATA:
Sample Identification: Acre 9, Stake 633A, 1st Lift
Visual Description: Clayey gravel with sand
Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C. & D. Landfill Closure
Location: Kirkwood, New York
Date: 05/22/98

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 98214
Lab No.: 98214
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 12.13
Specimen Diameter (cm): 7.21
Dry Unit Weight (pcf): 120.1
Moisture Before Test (%): 10.9
Moisture After Test (%): 12.2
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

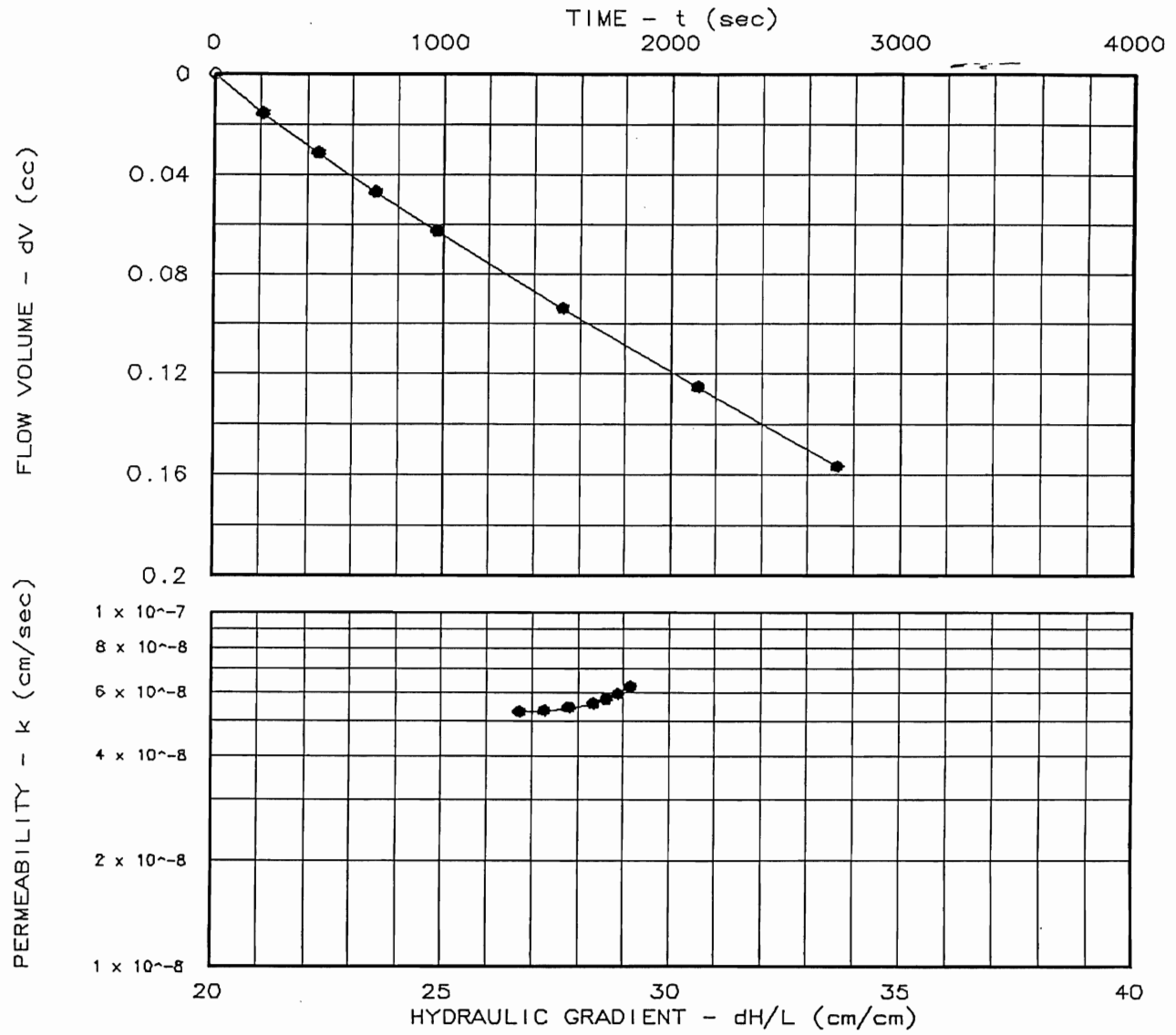
Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 5.16 x 10^-8

SAMPLE DATA:
Sample Identification: Acre 10 Stake 663, 1st Lift
Visual Description: Clayey gravel with sand
Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C. & D. Landfill Closure
Location: Kirkwood, New York
Date: 05/22/98

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 98215
Lab No.: 98215
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 12.52
Specimen Diameter (cm): 7.19
Dry Unit Weight (pcf): 128.2
Moisture Before Test (%): 11.1
Moisture After Test (%): 12.5
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

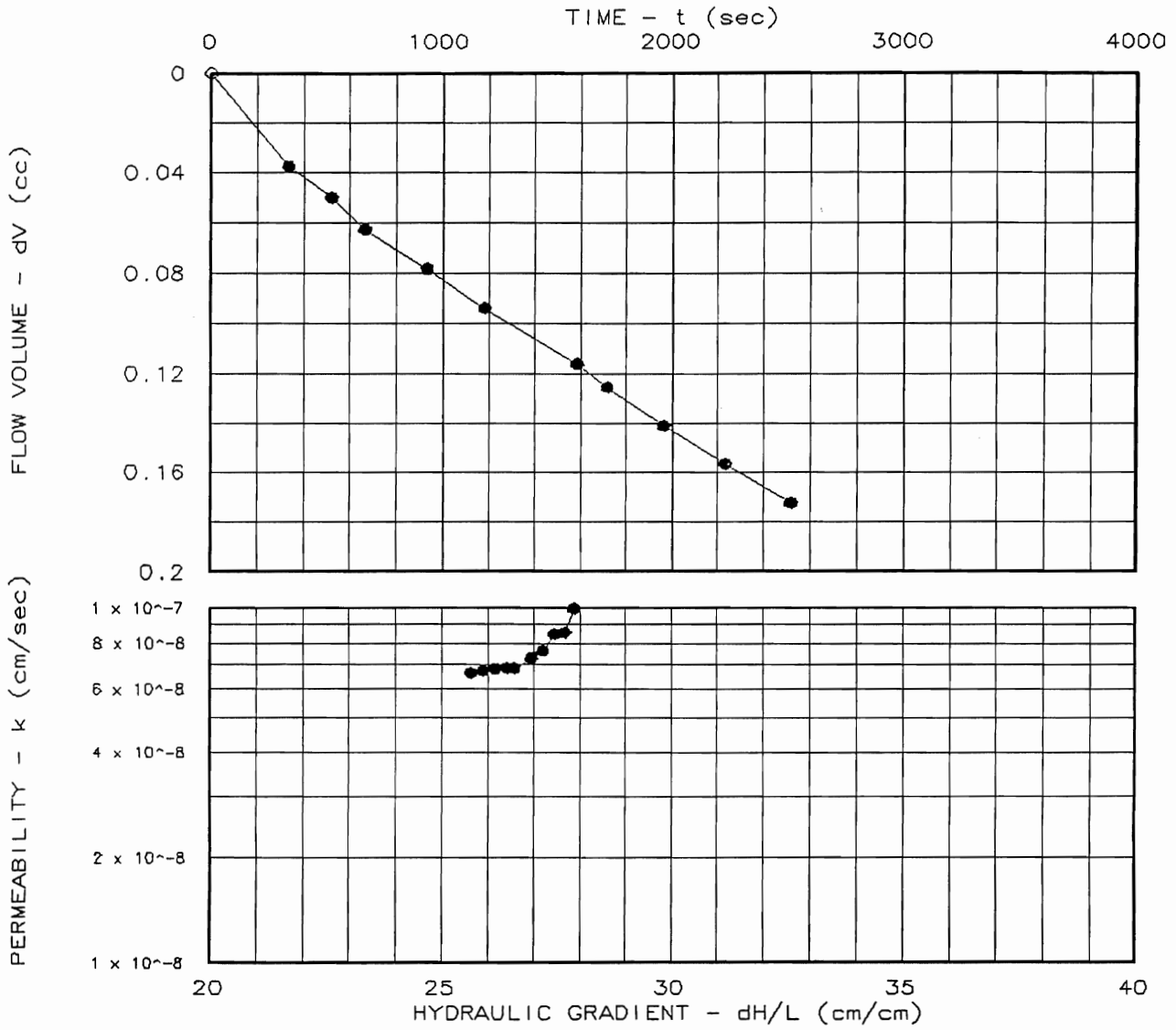
Perm. (cm/sec): 6.74 x 10^-8

SAMPLE DATA:
Sample Identification: Acre 11, First Lift
2 ft. E. of stake 648.
Visual Description: Brown Till

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C. & D. Landfill Closure
Location: Kirkwood, New York
Date: 10/08/98

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 98522
Lab No.: 98522
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 10.80
Specimen Diameter (cm): 7.19
Dry Unit Weight (pcf): 122.6
Moisture Before Test (%): 12.1
Moisture After Test (%): 12.6
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 4.35 x 10^-8

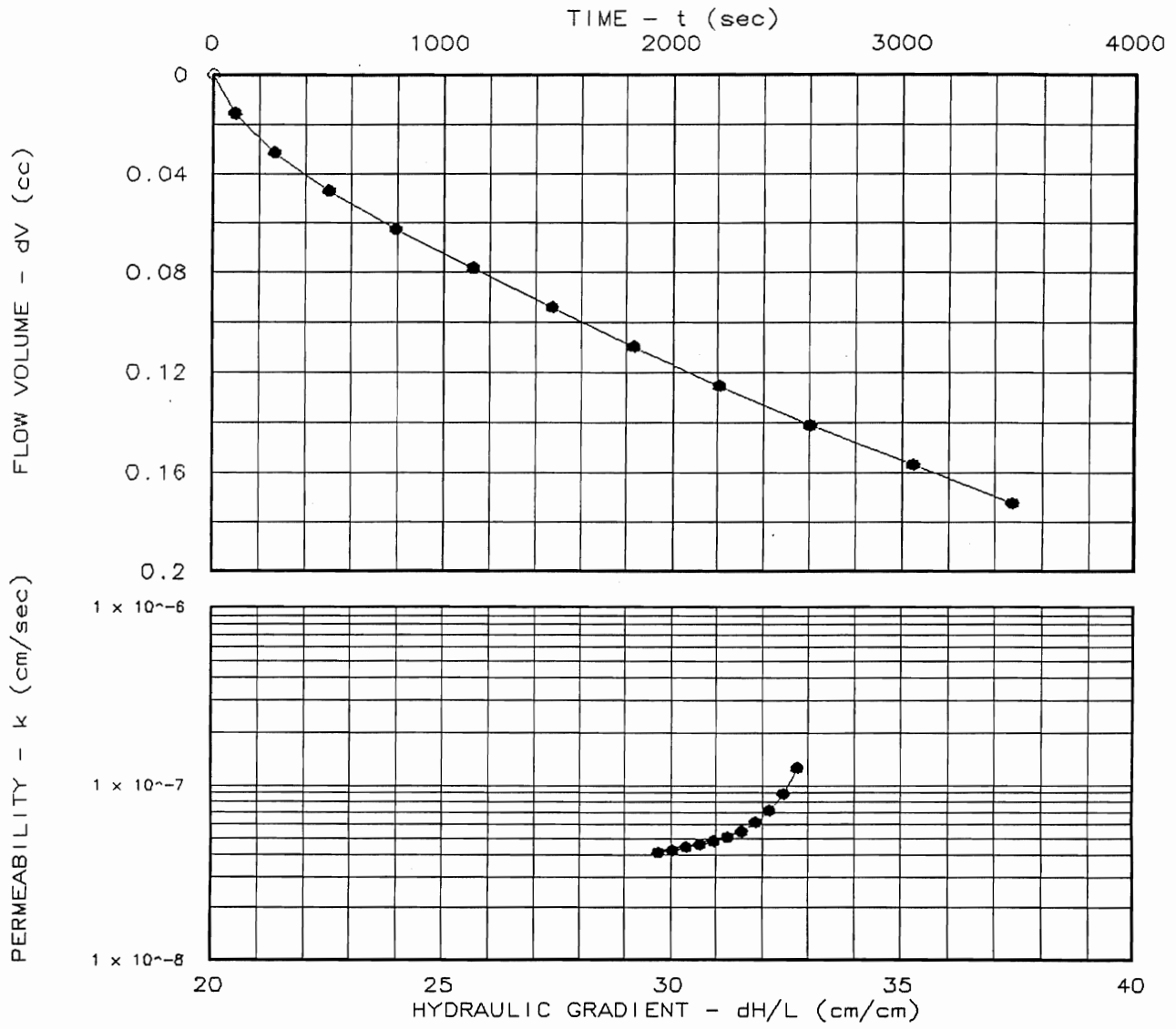
SAMPLE DATA:

Sample Identification: Acre 12, First Lift
20 ft. S. of stake 318.
Visual Description: Brown Till

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C. & D. Landfill Closure
Location: Kirkwood, New York
Date: 10/08/98

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 98523
Lab No.: 98523
Tested by: AM
Checked by: JT
Test: CV - Constant volume

MAXIM TECHNOLOGIES INC

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REPORT OF IN-PLACE DENSITY

CLIENT: GORICK CONSTRUCTION
Jon Van Deusen
27 Track Drive
Binghamton, NY 13904

PROJECT NO.: 9734344
REPORT NO.: 980523
DATE OF SERVICE: 5/20/98
AUTHORIZATION: AL
REPORT DATE: 5/21/98

PROJECT: Kirkwood Landfill Closure

SERVICES: Perform in-place density and moisture content tests to determine the degree of field compaction.

PROJECT DATA

CONTRACTOR: GORICK CONSTRUCTION
METHOD OF TEST:
DENSITY: ASTM D2922
MOISTURE: ASTM D3017
SPECIFICATION:
DENSITY: 95% Compaction
MOISTURE:

GAUGE: Troxler, 3440
GAUGE SERIAL NO.: 10468
STANDARD COUNTS
MOISTURE - CURRENT: 631 PREVIOUS: 625
DENSITY - CURRENT: 2606 PREVIOUS: 2611
TEST MODE: Direct Transmission
PROBE DEPTH (in.): 8

TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	REFERENCE REPORT NO
Low Perm Soil	25,000 - 30,000 cubic yards	10.2	129.0	

REPORT OF TESTS

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
1.	10' W of Stake 309A	8.8	10.2	143.6	132.0	129.0	102.3
2.	15' W of Stake 310	7.8	10.2	132.8	123.2	129.0	95.5
3.	8' N & 6' W of Stake 311	7.5	10.2	143.7	133.7	129.0	103.6
4.	5' E of Stake 372 Shelby Tube ST-8	8.6	10.2	141.0	129.8	129.0	100.6
5.	14' E of Stake 312A	8.2	10.2	141.9	131.1	129.0	101.6
6.	20' S of Stake 635A	6.8	10.2	143.0	133.9	129.0	103.8

AC 8 1ST LIFT

Report Of Tests Continued On Page 2

MAXIM

GORICK CONSTRUCTION
PROJECT NO. 9734344
DATE OF SERVICE: 5/20/98

REPORT NO. 980523
PAGE 2 OF 2

REPORT OF TESTS (Continued)

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	FIELD DENSITY (pcf) DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)	
Ac 8 1ST LIFT	7. 4' W of Stake 670	8.0	10.2	135.4	125.4	129.0	97.2	
	8. 5' W of Stake 669A	7.9	10.2	137.0	127.0	129.0	98.4	
	9. 6' E of Stake 635	7.5	10.2	136.6	127.1	129.0	98.5	
Ac 9 1ST LIFT	10. 8' S of Stake 669	6.8	10.2	130.8	122.5	129.0	95.0	
	11. 5' W of Stake 668A	6.5	10.2	128.5	120.7	129.0	93.6	*
	12. 3' W of Stake 633A Shelby Tube ST-9	7.8	10.2	141.2	131.0	129.0	101.6	
	13. 12' S of Stake 308A	7.7	10.2	138.0	128.1	129.0	99.3	
	14. 6' S of Stake 633	6.9	10.2	136.9	128.1	129.0	99.3	
	15. 4' W of Stake 632A	6.8	10.2	136.4	127.7	129.0	99.0	
	16. 7' W of Stake 632A	9.1	10.2	142.9	131.0	129.0	101.6	
	17. 5' W of Stake 667	8.3	10.2	139.5	128.8	129.0	99.8	
	18. 10' E of Stake 631A	6.7	10.2	135.1	126.6	129.0	98.1	
Ac 10 1ST LIFT	19. 10' E of Stake 630	6.7	10.2	139.6	130.8	129.0	101.4	
	20. 4' S of Stake 664	8.7	10.2	137.4	126.4	129.0	98.0	
	21. 6' S of Stake 663A	7.7	10.2	139.7	129.7	129.0	100.5	
	22. 5' S of Stake 663 Shelby Tube ST-10	8.1	10.2	132.7	122.8	129.0	95.2	
	23. 6' S of Stake 628	8.5	10.2	134.6	124.1	129.0	96.2	
	24. 10' S of Stake 628A	7.9	10.2	135.6	125.7	129.0	97.4	

An asterisk (*) appears next to test results which do NOT meet the project specifications as noted on page 1.

ADDITIONAL COMMENTS:

Elevation: 1st Lift
Location: Tests 1-9 Acre 8, Tests 10-18 Acre 9, tests 19-24 Acre 10

Technician: David Verdon
Sr. Engineering Tech.

Report Distribution:
(1) GORICK CONSTRUCTION

MAXIM TECHNOLOGIES INC.

T. Hamilton

Thomas Hamilton
Manager, Const. Services

MAXIM

GORICK CONSTRUCTION
PROJECT NO. 9734344
DATE OF SERVICE: 10/06/98

REPORT NO. 981266

REPORT OF TESTS (Continued)

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
7.	5' W of Stake 310, Acre 8	5.3	9.5	133.1	126.4	127.4	99.2
8.	2' E of Stake 635, Acre 8	5.5	9.5	135.1	128.1	127.4	100.5
9.	40' S of Stake 310, Acre 8	5.7	9.5	133.9	126.7	127.4	99.5
10.	6' E of Stake 634, Acre 9	5.9	9.5	138.2	130.5	127.4	102.4
11.	5' W of Stake 309, Acre 9	7.3	9.5	137.7	128.3	127.4	100.7
12.	25' N of Stake 668, Acre 9	5.2	9.5	135.1	128.4	127.4	100.8
13.	15' W of Stake 668, Acre 9	6.1	9.5	133.8	126.1	127.4	99.0
14.	14' W of Stake 633, Acre 9	5.7	9.5	129.9	122.9	127.4	96.5
15.	8' W of Stake 667, Acre 9	6.3	9.5	129.6	121.9	127.4	95.7
16.	5' W of Stake 632, Acre 9	5.2	9.5	130.6	124.1	127.4	97.4
17.	10' W of Stake 666, Acre 9 ST-9	6.4	9.5	134.5	126.4	127.4	99.2
18.	7' W of Stake 631, Acre 9	7.4	9.5	135.4	126.1	127.4	99.0
19.	6' E of stake 625, Acre 11	6.7	9.5	140.7	131.9	127.4	103.5
20.	2' E of Stake 660, Acre 11	7.1	9.5	141.2	131.8	127.4	103.5
21.	30' N of Stake 660, Acre 11	5.8	9.5	137.1	129.6	127.4	101.7
22.	33' N of Stake 625, Acre 11	7.7	9.5	137.9	128.0	127.4	100.5
23.	5' E of Stake 679, Acre 11	6.0	9.5	140.3	132.4	127.4	103.9
24.	6' E of stake 650, Acre 11	6.8	9.5	138.0	129.2	127.4	101.4
25.	5' E of Stake 649, Acre 11	9.8	9.5	143.3	130.5	127.4	102.4
26.	40' N of Stake 679, Acre 11	9.5	9.5	144.3	131.8	127.4	103.5
27.	2' E of Stake 648, Acre 11 ST-11	11.9	9.5	142.7	127.5	127.4	100.1

1ST LIFT

Report Of Tests Continued On Page 3

MAXIM

GORICK CONSTRUCTION
PROJECT NO. 9734344
DATE OF SERVICE: 10/06/98

REPORT NO. 981266

REPORT OF TESTS (Continued)

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
28.	4' E of Stake 677, Acre 12	9.8	9.5	142.5	129.8	127.4	101.9
29.	5' E of Stake 647, Acre 12	10.5	9.5	137.9	124.8	127.4	98.0
30.	3' E of Stake 321, Acre 12	10.0	9.5	140.9	128.1	127.4	100.5
31.	8' E of Stake 676, Acre 12	10.2	9.5	144.8	131.4	127.4	103.1
32.	10' E of Stake 646, Acre 12	10.9	9.5	143.8	129.7	127.4	101.8
33.	4' E of Stake 320, Acre 12	11.5	9.5	141.0	126.5	127.4	99.3
34.	5' W of Stake 319, Acre 12	11.1	9.5	140.8	126.7	127.4	99.5
35.	20' S of Stake 318, Acre 12 ST-12	10.7	9.5	138.2	124.8	127.4	98.0
36.	14' S of stake 501, Acre 12	9.9	9.5	136.9	124.6	127.4	97.8

1ST LIFT

An asterisk (*) appears next to test results which do NOT meet the project specifications as noted on page 1.

ADDITIONAL COMMENTS:

Elevation: Tests 1 through 24 Second Lift
Tests 25 through 36 First Lift

Technician: David Verdon
Sr. Engineering Tech.

Report Distribution:
(1) GORICK CONSTRUCTION

MAXIM TECHNOLOGIES INC.

Thomas Hamilton
Manager, Const. Services

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 11.86
Specimen Diameter (cm): 7.19
Dry Unit Weight (pcf): 126.1
Moisture Before Test (%): 10.2
Moisture After Test (%): 11.4
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

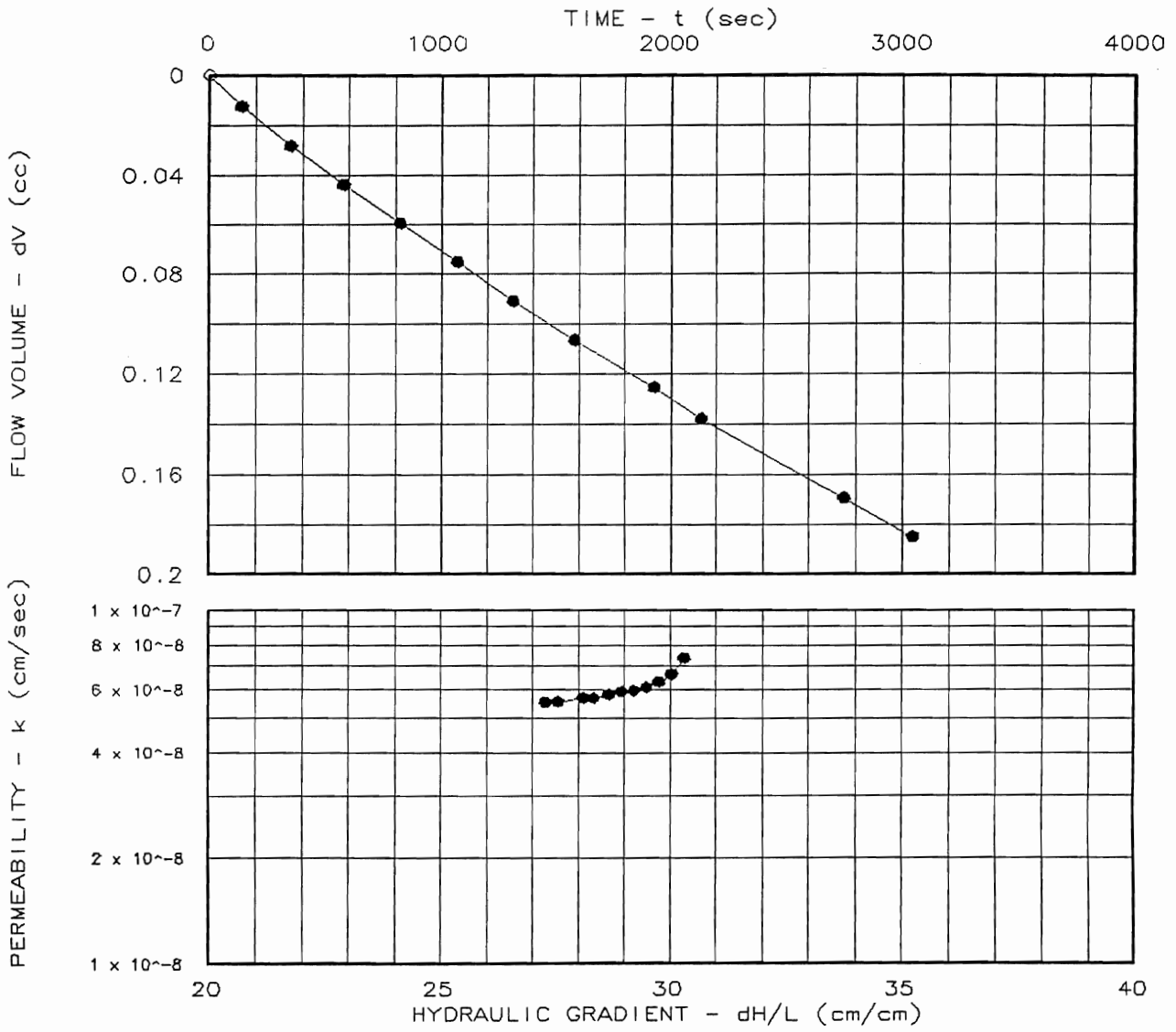
Perm. (cm/sec): 5.60 x 10^-8

SAMPLE DATA:
Sample Identification: Acre 8, Second Lift
18 ft. S. of stake 312.
Visual Description: Brown Till

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C. & D. Landfill Closure
Location: Kirkwood, New York
Date: 10/08/98

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 98524
Lab No.: 98524
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 14.35
Specimen Diameter (cm): 7.19
Dry Unit Weight (pcf): 126.7
Moisture Before Test (%): 10.6
Moisture After Test (%): 11.6
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

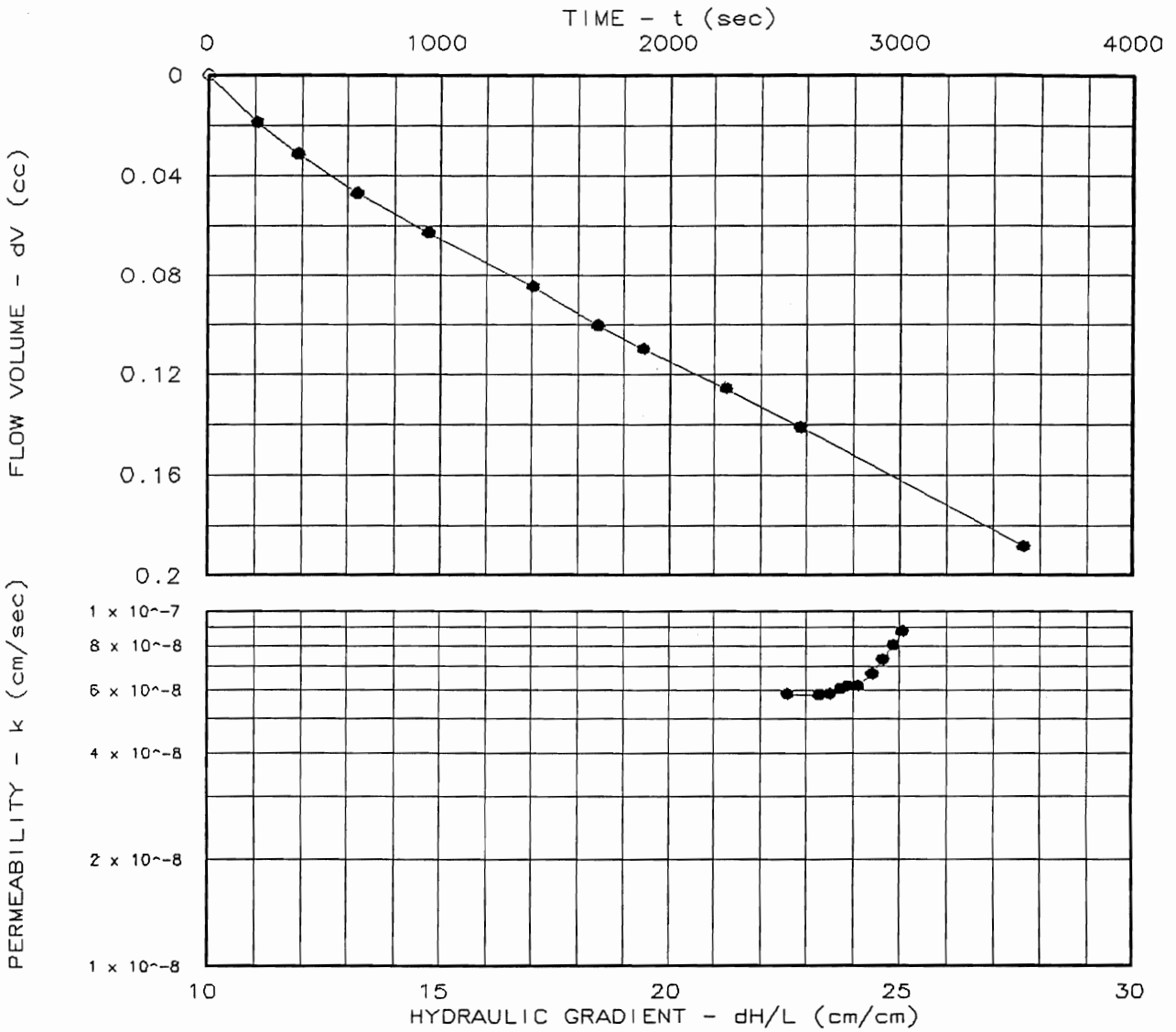
Perm. (cm/sec): 5.90 x 10^-8

SAMPLE DATA:
Sample Identification: Acre 9, Second Lift
10 ft. W. of stake 666.
Visual Description: Brown Till

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C. & D. Landfill Closure
Location: Kirkwood, New York
Date: 10/08/98

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 98525
Lab No.: 98525
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 10.46
Specimen Diameter (cm): 7.18
Dry Unit Weight (pcf): 122.0
Moisture Before Test (%): 10.4
Moisture After Test (%): 11.9
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.5

Perm. (cm/sec): 5.70 x 10^-8

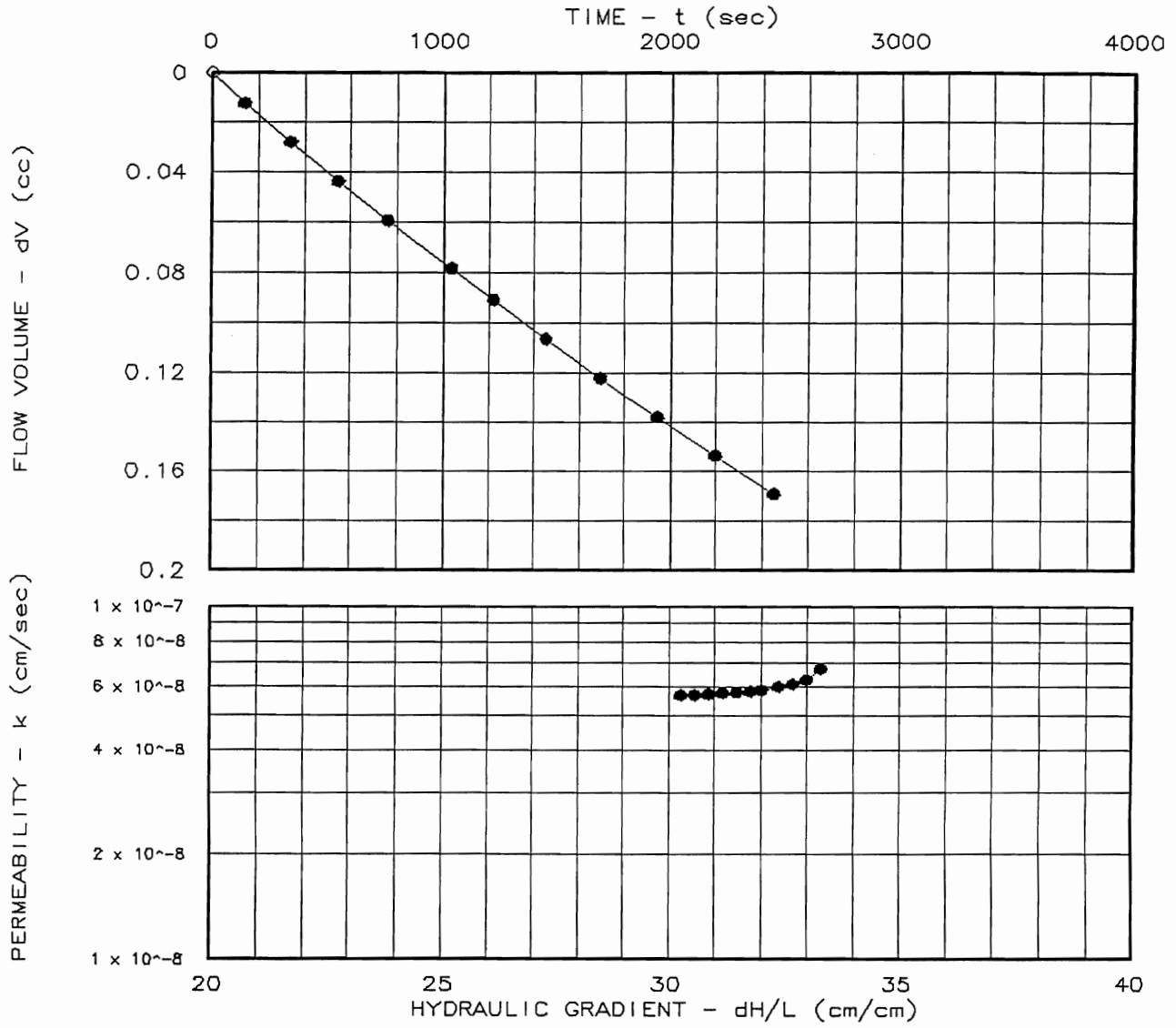
SAMPLE DATA:

Sample Identification: Acre 10, Second Lift
6 ft. E. of stake 663.
Visual Description: In-Place Cover Material

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C & D Landfill Closure
Location: Kirkwood, New York
Date: 12/02/98

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9834334
File No.: 98567
Lab No.: 98657
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 11.18
Specimen Diameter (cm): 7.19
Dry Unit Weight (pcf): 131.0
Moisture Before Test (%): 9.4
Moisture After Test (%): 10.9
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.7

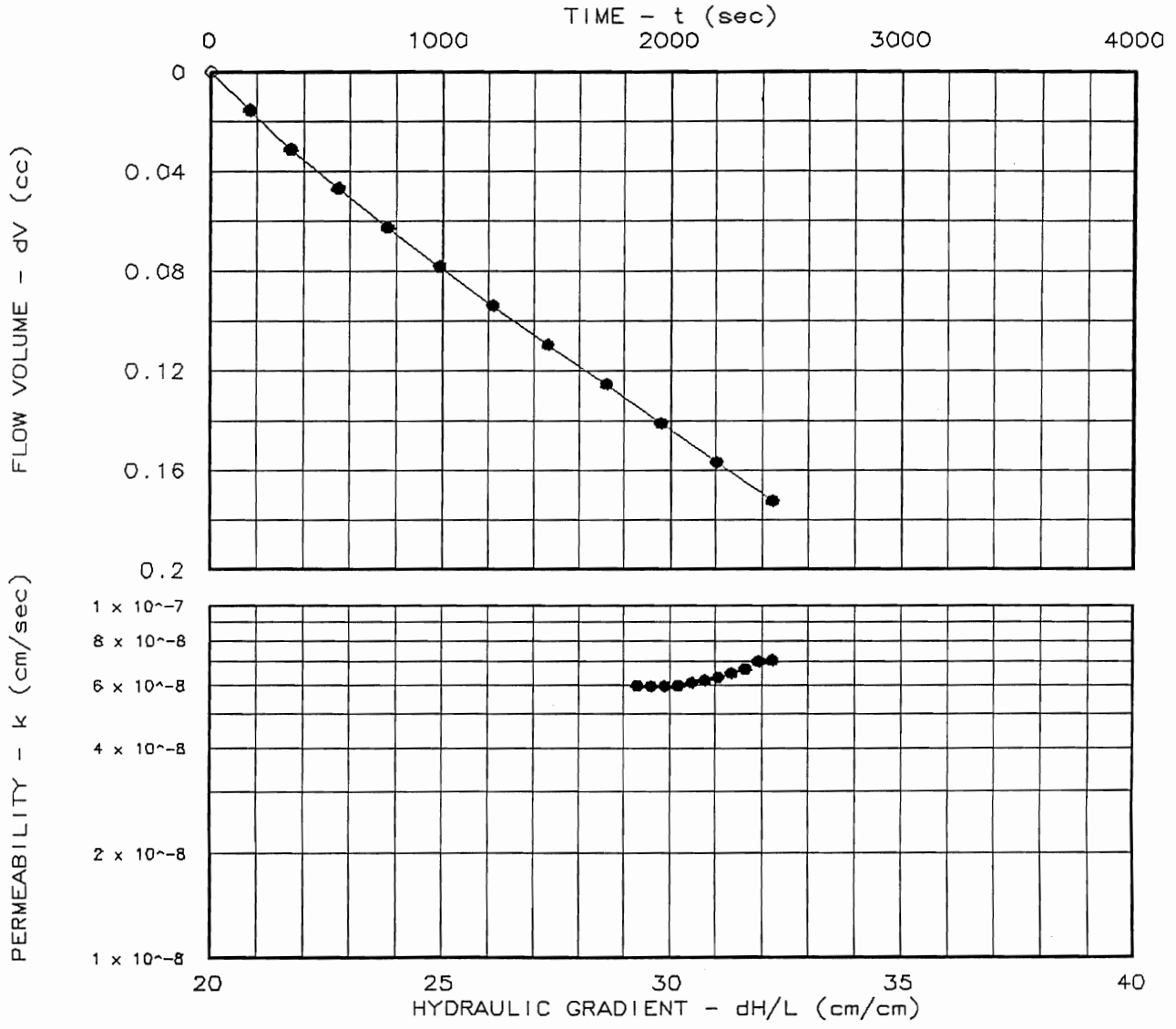
Perm. (cm/sec): 5.96 x 10^-8

SAMPLE DATA:
Sample Identification: Acre 11, 2nd Lift
6 FT E. STAKE 650
Visual Description: In-Place Cover Material

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Shelby Tube



Project: Kirkwood C & D Landfill Closure
Location: Kirkwood, New York
Date: 12/21/98

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734334
File No.: 9734334
Lab No.: 98684
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 14.04
Specimen Diameter (cm): 7.19
Dry Unit Weight (pcf): 133.8
Moisture Before Test (%): 8.9
Moisture After Test (%): 10.3
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.7

Perm. (cm/sec): 5.93 x 10^-8

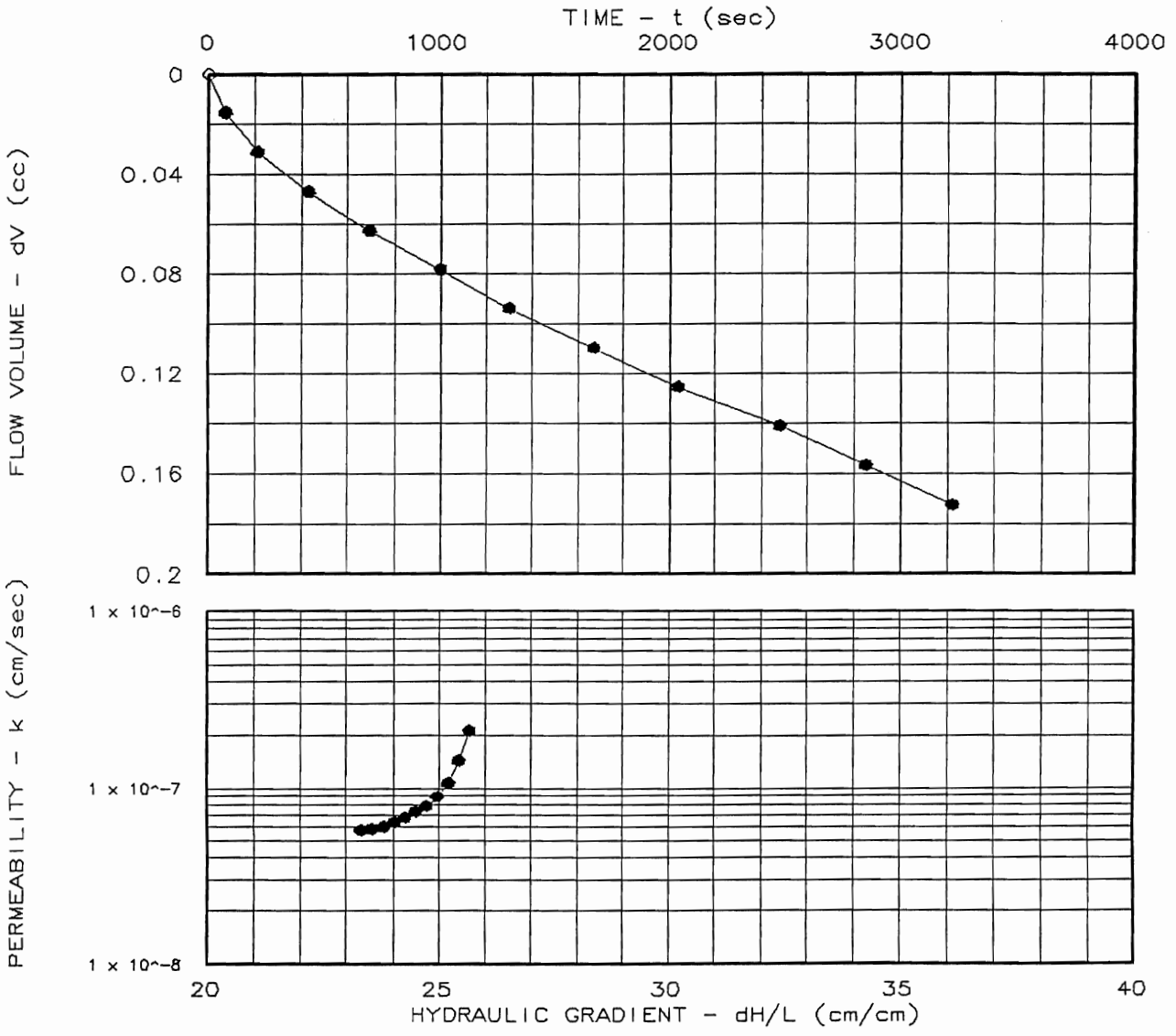
SAMPLE DATA:

Sample Identification: Acre 12, 2nd Lift
25' North of Stake 321
Visual Description: In-Place Cover Material

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Shelby Tube



Project: Kirkwood C & D Landfill Closure
Location: Kirkwood, New York
Date: 12/21/98

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734334
File No.: 9734334
Lab No.: 98683
Tested by: AM
Checked by: JT
Test: CV - Constant volume

MAXIM TECHNOLOGIES INC

Maxim Technologies, Inc.
2415 North Triphammer Rd., Suite 3
Ithaca, New York 14850
TEL: (607) 266-0147
FAX: (607) 266-6409

REPORT OF IN-PLACE DENSITY

CLIENT: GORICK CONSTRUCTION
Jon Van Deusen
27 Track Drive
Binghamton, NY 13904

PROJECT NO.: 9734344
REPORT NO.: 981266
DATE OF SERVICE: 10/06/98
AUTHORIZATION: Client
REPORT DATE: 10/08/98

PROJECT: Kirkwood Landfill Closure

SERVICES: Perform in-place density and moisture content tests to determine the degree of field compaction.

PROJECT DATA

CONTRACTOR: GORICK CONSTRUCTION
METHOD OF TEST:
DENSITY: ASTM D2922
MOISTURE: ASTM D3017
SPECIFICATION:
DENSITY: 95% Compaction
MOISTURE:

GAUGE: 12Troxler, 3440
GAUGE SERIAL NO.: 14678
STANDARD COUNTS
MOISTURE - CURRENT: 623 PREVIOUS:
DENSITY - CURRENT: 2586 PREVIOUS: 2570
TEST MODE: Direct Transmission
PROBE DEPTH (in.): 8

TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	REFERENCE REPORT NO
Low Perm Material	30,000 to 35,000 cy.	9.5	127.4	

REPORT OF TESTS

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
1.	10' N of Stake 669, Acre 8	5.2	9.5	139.7	132.8	127.4	104.2
2.	10' S of Stake 670, Acre 8	5.4	9.5	136.6	129.6	127.4	101.7
3.	40' N of Stake 670, Acre 8	5.7	9.5	142.7	135.0	127.4	106.0 *
4.	35' S of Stake 509, Acre 8	5.6	9.5	135.0	127.8	127.4	100.3
5.	18' S of Stake 312, Acre 8 ST-8	5.7	9.5	135.0	127.7	127.4	100.2
6.	4' W of Stake 637, Acre 8	5.5	9.5	133.6	126.6	127.4	99.4

Report Of Tests Continued On Page 2

MAXIM

GORICK CONSTRUCTION
PROJECT NO. 9734344
DATE OF SERVICE: 10/06/98

REPORT NO. 981266

REPORT OF TESTS (Continued)

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	FIELD DENSITY (pcf) DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
7.	5' W of Stake 310, Acre 8	5.3	9.5	133.1	126.4	127.4	99.2
8.	2' E of Stake 635, Acre 8	5.5	9.5	135.1	128.1	127.4	100.5
9.	40' S of Stake 310, Acre 8	5.7	9.5	133.9	126.7	127.4	99.5
10.	6' E of Stake 634, Acre 9	5.9	9.5	138.2	130.5	127.4	102.4
11.	5' W of Stake 309, Acre 9	7.3	9.5	137.7	128.3	127.4	100.7
12.	25' N of Stake 668, Acre 9	5.2	9.5	135.1	128.4	127.4	100.8
13.	15' W of Stake 668, Acre 9	6.1	9.5	133.8	126.1	127.4	99.0
14.	14' W of Stake 633, Acre 9	5.7	9.5	129.9	122.9	127.4	96.5
15.	8' W of Stake 667, Acre 9	6.3	9.5	129.6	121.9	127.4	95.7
16.	5' W of Stake 632, Acre 9	5.2	9.5	130.6	124.1	127.4	97.4
17.	10' W of Stake 666, Acre 9 ST-9	6.4	9.5	134.5	126.4	127.4	99.2
18.	7' W of Stake 631, Acre 9	7.4	9.5	135.4	126.1	127.4	99.0
19.	6' E of stake 625, Acre 11	6.7	9.5	140.7	131.9	127.4	103.5
20.	2' E of Stake 660, Acre 11	7.1	9.5	141.2	131.8	127.4	103.5
21.	30' N of Stake 660, Acre 11	5.8	9.5	137.1	129.6	127.4	101.7
22.	33' N of Stake 625, Acre 11	7.7	9.5	137.9	128.0	127.4	100.5
23.	5' E of Stake 679, Acre 11	6.0	9.5	140.3	132.4	127.4	103.9
24.	6' E of stake 650, Acre 11	6.8	9.5	138.0	129.2	127.4	101.4
25.	5' E of Stake 649, Acre 11	9.8	9.5	143.3	130.5	127.4	102.4
26.	40' N of Stake 679, Acre 11	9.5	9.5	144.3	131.8	127.4	103.5
27.	2' E of Stake 648, Acre 11 ST-11	11.9	9.5	142.7	127.5	127.4	100.1

Report Of Tests Continued On Page 3

MAXIM TECHNOLOGIES INC

Maxim Technologies, Inc.
2415 North Triphammer Rd., Suite 3
Ithaca, New York 14850
TEL: (607) 266-0147
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REPORT OF IN-PLACE DENSITY

CLIENT: GORICK CONSTRUCTION
Jon Van Deusen
27 Track Drive
Binghamton, NY 13904

PROJECT NO.: 9734344
REPORT NO.: 981614
DATE OF SERVICE: 11/25/98
AUTHORIZATION: Client
REPORT DATE: 12/22/98

PROJECT: Kirkwood Landfill Closure

SERVICES: Perform in-place density and moisture content tests to determine the degree of field compaction.

PROJECT DATA

CONTRACTOR: GORICK CONSTRUCTION
METHOD OF TEST:
DENSITY: ASTM D2922
MOISTURE: ASTM D3017
SPECIFICATION:
DENSITY: 95% Compaction
MOISTURE:

GAUGE: Troxler, 3440
GAUGE SERIAL NO.: 14678
STANDARD COUNTS
MOISTURE - CURRENT: PREVIOUS:
DENSITY - CURRENT: PREVIOUS:
TEST MODE: Direct Transmission
PROBE DEPTH (in.): 6

TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	REFERENCE REPORT NO
	Low Perm	10.2	127.8	

REPORT OF TESTS

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
1.	5' E of Stake 664, Acre 10 Elevation: 2nd Lift	9.3	10.2	142.0	129.9	127.8	101.6
2.	8' N of Stake 629, Acre 10 Elevation: 2nd Lift	8.4	10.2	139.6	128.8	127.8	100.8
3.	2' N of Stake 628, Acre 10 Elevation: 2nd Lift	7.3	10.2	135.2	126.0	127.8	98.6
4.	6' E of Stake 663, Acre 10 Elevation: 2nd Lift Shelby Tube ST-10	8.8	10.2	138.1	126.9	127.8	99.3

Report Of Tests Continued On Page 2

MAXIM

GORICK CONSTRUCTION
PROJECT NO. 9734344
DATE OF SERVICE: 11/25/98

REPORT NO. 981614

REPORT OF TESTS (Continued)

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	FIELD DENSITY (pcf) DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
5.	5' W of Stake 303, Acre 10 Elevation: 2nd Lift	8.5	10.2	134.2	123.7	127.8	96.8
6.	10' W of Stake 627, Acre 10 Elevation: 2nd Lift	8.1	10.2	136.3	126.1	127.8	98.7
7.	10' W of Stake 302 Acre 10 Elevation: 2nd Lift	9.0	10.2	137.0	125.7	127.8	98.4
8.	10' W of Stake 301, Acre 10 Elevation: 2nd Lift	8.3	10.2	138.9	128.3	127.8	100.4
9.	10' W of Stake 626 Acre 10 Elevation: 2nd Lift	9.1	10.2	138.9	127.3	127.8	99.6
10.	10' N of Stake 625, Acre 11 Elevation: ~~1st~~ 2nd Lift	8.7	10.2	137.6	126.6	127.8	99.1
11.	6' E of Stake 650, Acre 11 Elevation: 2nd Lift	10.7	10.2	143.5	129.6	127.8	101.4
12.	8' E of Stake 679, Acre 11 Elevation: 2nd Lift	10.6	10.2	144.2	130.4	127.8	102.0
13.	5' W of Stake 323, Acre 11 Elevation: 2nd Lift Shelby Tube ST-11	9.5	10.2	139.3	127.2	127.8	99.5
14.	10' W of Stake 649, Acre 11 Elevation: 2nd Lift	10.4	10.2	142.3	128.9	127.8	100.9
15.	40' S of Stake 322, Acre 11 Elevation: 2nd Lift	8.6	10.2	141.2	130.0	127.8	101.7
16.	10' N of Stake 322, Acre 11 Elevation: 2nd Lift	9.5	10.2	139.9	127.8	127.8	100.0
17.	10' W of Stake 648, Acre 11 Elevation: 2nd Lift	9.2	10.2	141.2	129.3	127.8	101.2
18.	15' W of Stake 532, Acre 11 Elevation: 2nd Lift	9.2	10.2	134.5	123.2	127.8	96.4

Test results on this report meet project specifications as noted on page 1.

Technician: David Verdon
Sr. Engineering Tech.

Report Distribution:
(1) GORICK CONSTRUCTION

MAXIM TECHNOLOGIES INC.

T. Hamilton
Thomas Hamilton
Manager, Const. Services

MAXIM TECHNOLOGIES INC

Maxim Technologies, Inc.
2415 North Triphammer Rd., Suite 3
Ithaca, New York 14850
TEL: (607) 266-0147
FAX: (607) 266-6409

REPORT OF IN-PLACE DENSITY

CLIENT: GORICK CONSTRUCTION
Jon Van Deusen
27 Track Drive
Binghamton, NY 13904

PROJECT NO.: 9734344
REPORT NO.: 971717
DATE OF SERVICE: 12/17/98
AUTHORIZATION: Client
REPORT DATE: 12/22/98

PROJECT: Kirkwood Landfill Closure

SERVICES: Perform in-place density and moisture content tests to determine the degree of field compaction.

PROJECT DATA

CONTRACTOR: GORICK CONSTRUCTION
METHOD OF TEST:
DENSITY: ASTM D2922
MOISTURE: ASTM D3017
SPECIFICATION:
DENSITY: 95% Compaction
MOISTURE:

GAUGE: Troxler, 3440
GAUGE SERIAL NO.: 14678
STANDARD COUNTS
MOISTURE - CURRENT: PREVIOUS:
DENSITY - CURRENT: PREVIOUS:
TEST MODE: Direct Transmission
PROBE DEPTH (in.): 6

TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	REFERENCE REPORT NO
	Low Perm	10.2	127.8	

REPORT OF TESTS

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	FIELD DENSITY (pcf) DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
1.	10' N & 5' E of Stake 677, Acre 12	9.7	10.2	137.7	125.5	127.8	98.2
2.	25' N of Stake 647, Acre 12	9.1	10.2	135.6	124.3	127.8	97.3
3.	25' N of Stake 321, Acre 12 Shelby Tube ST-12	9.0	10.2	137.0	125.7	127.8	98.4
4.	15' W of Stake 530, Acre 12	8.6	10.2	139.0	128.0	127.8	100.2
5.	10' E of Stake 676, Acre 12	7.9	10.2	142.3	131.9	127.8	103.2
6.	5' E of Stake 320, Acre 12	8.2	10.2	140.7	130.0	127.8	101.7

Report Of Tests Continued On Page 2

MAXIM

GORICK CONSTRUCTION
PROJECT NO. 9734344
DATE OF SERVICE: 12/17/98

REPORT NO. 971717

REPORT OF TESTS (Continued)

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	FIELD DENSITY (pcf) DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
7.	16' E of Stake 320, Acre 12	8.3	10.2	132.1	122.0	127.8	95.5
8.	4' E of Stake 319, Acre 12	8.7	10.2	144.8	133.2	127.8	104.2
9.	30' S of Stake 318, Acre 12	9.1	10.2	141.3	129.5	127.8	101.3

Test results on this report meet project specifications as noted on page 1.

ADDITIONAL COMMENTS:
Elevation: 2nd Lift

Technician: David Verdon
Sr. Engineering Tech.

Report Distribution:
(1) GORICK CONSTRUCTION

MAXIM TECHNOLOGIES INC.

T. Hamilton
Thomas Hamilton
Manager, Const. Services

Low Perm Soil

Acres 13, 14, 15, 16, 17, 18

1st & 2nd Lift | PD's & Perms

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 14.61
Specimen Diameter (cm): 7.11
Dry Unit Weight (pcf): 124.0
Moisture Before Test (%): 11.2
Moisture After Test (%): 12.1
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.5

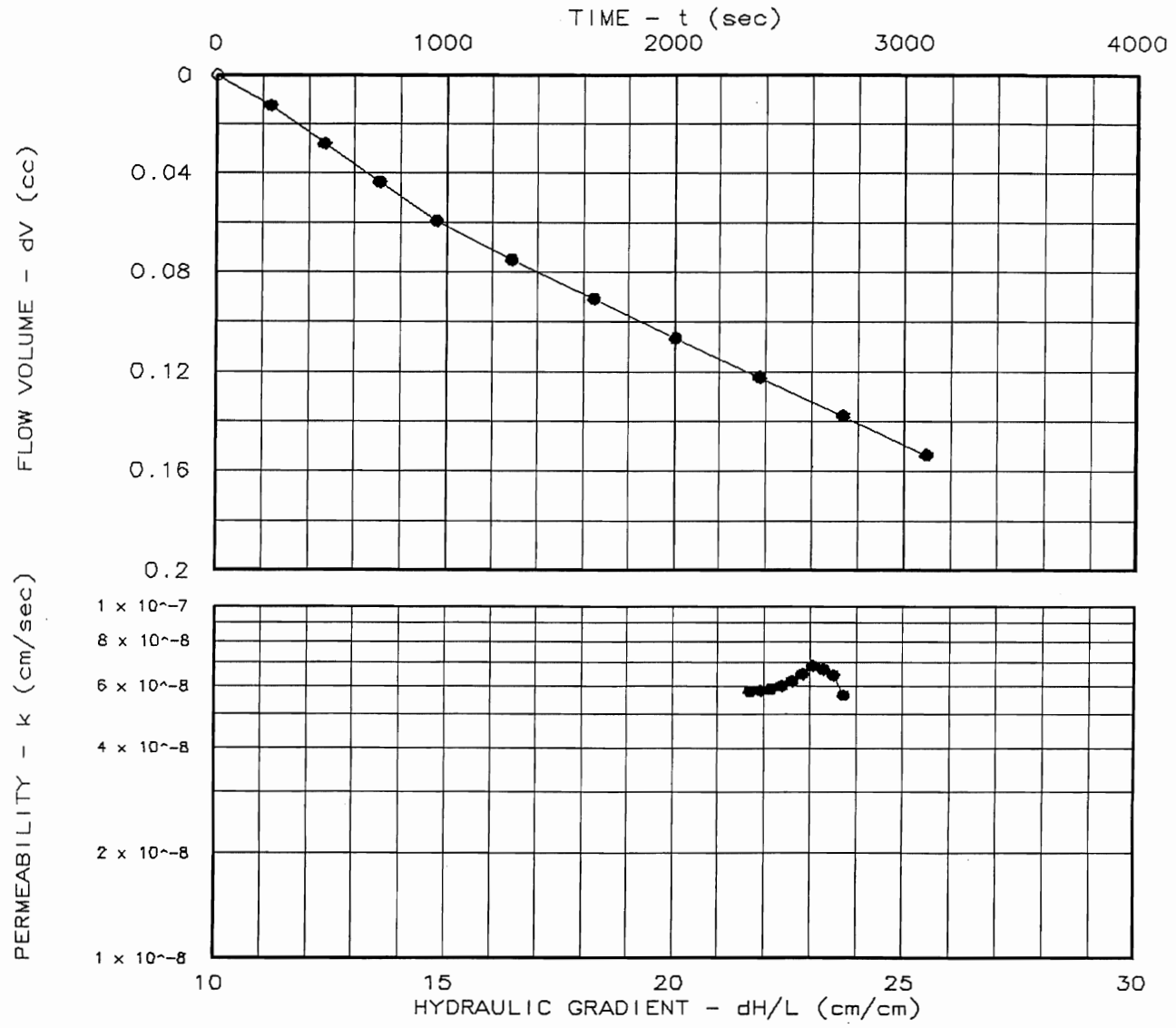
Perm. (cm/sec): 5.85 x 10^-8

SAMPLE DATA:
Sample Identification: Acre No. 13, 5' N of Sta. 643, First Lift
Visual Description: Low Perm Soil

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood Landfill Closure
Location: Kirkwood, NY
Date: 1/04/00

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 99774
Lab No.: 99774
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 14.78
Specimen Diameter (cm): 7.11
Dry Unit Weight (pcf): 126.4
Moisture Before Test (%): 10.4
Moisture After Test (%): 11.6
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.7

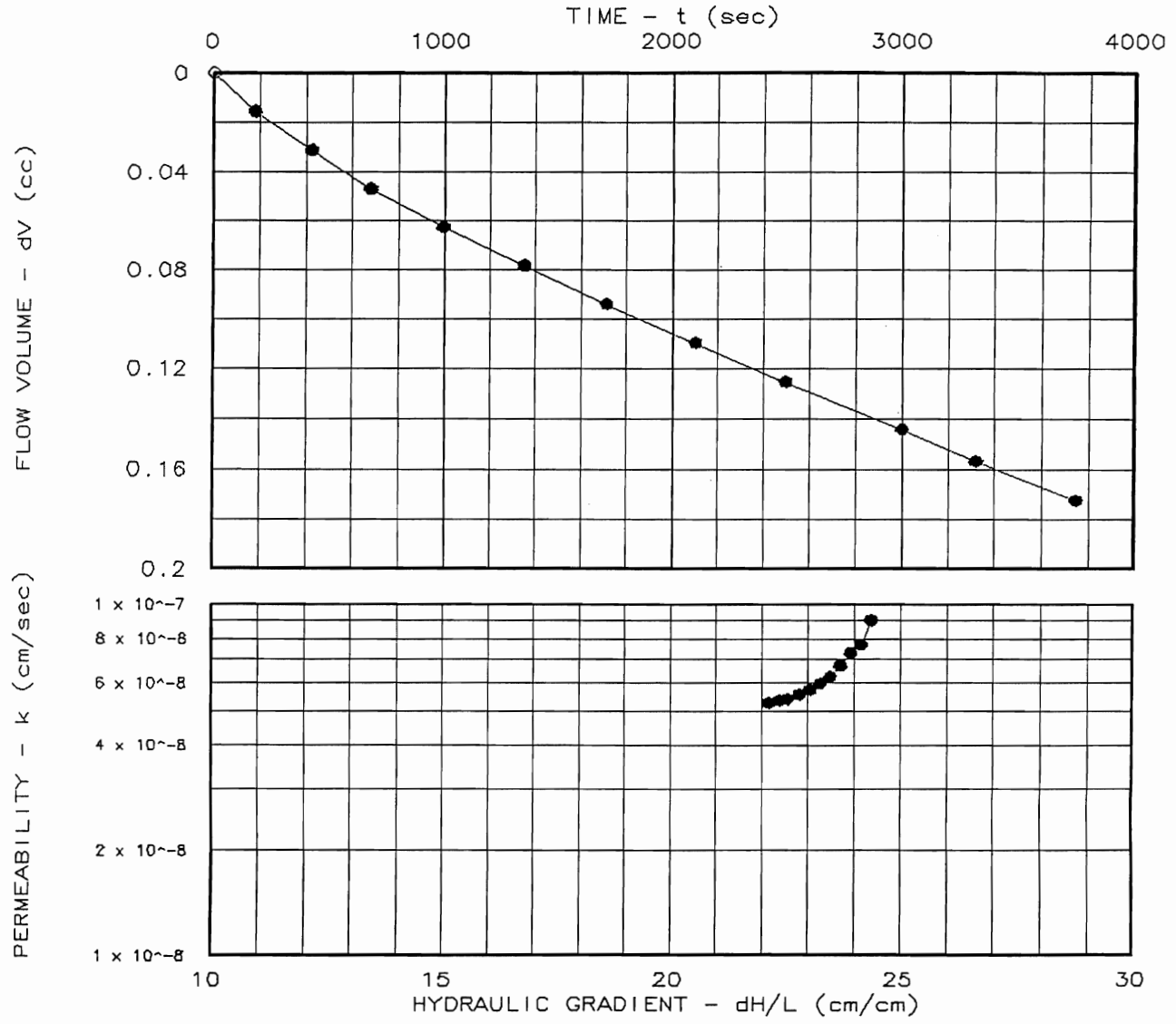
Perm. (cm/sec): 5.39 x 10^-8

SAMPLE DATA:
Sample Identification: Acre No. 14, 10' N of Sta. 640, First Lift
Visual Description: Low Perm Soil

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood Landfill Closure
Location: Kirkwood, NY
Date: 1/04/00

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 99775
Lab No.: 99775
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 14.48
Specimen Diameter (cm): 7.11
Dry Unit Weight (pcf): 124.9
Moisture Before Test (%): 11.5
Moisture After Test (%): 12.2
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.7

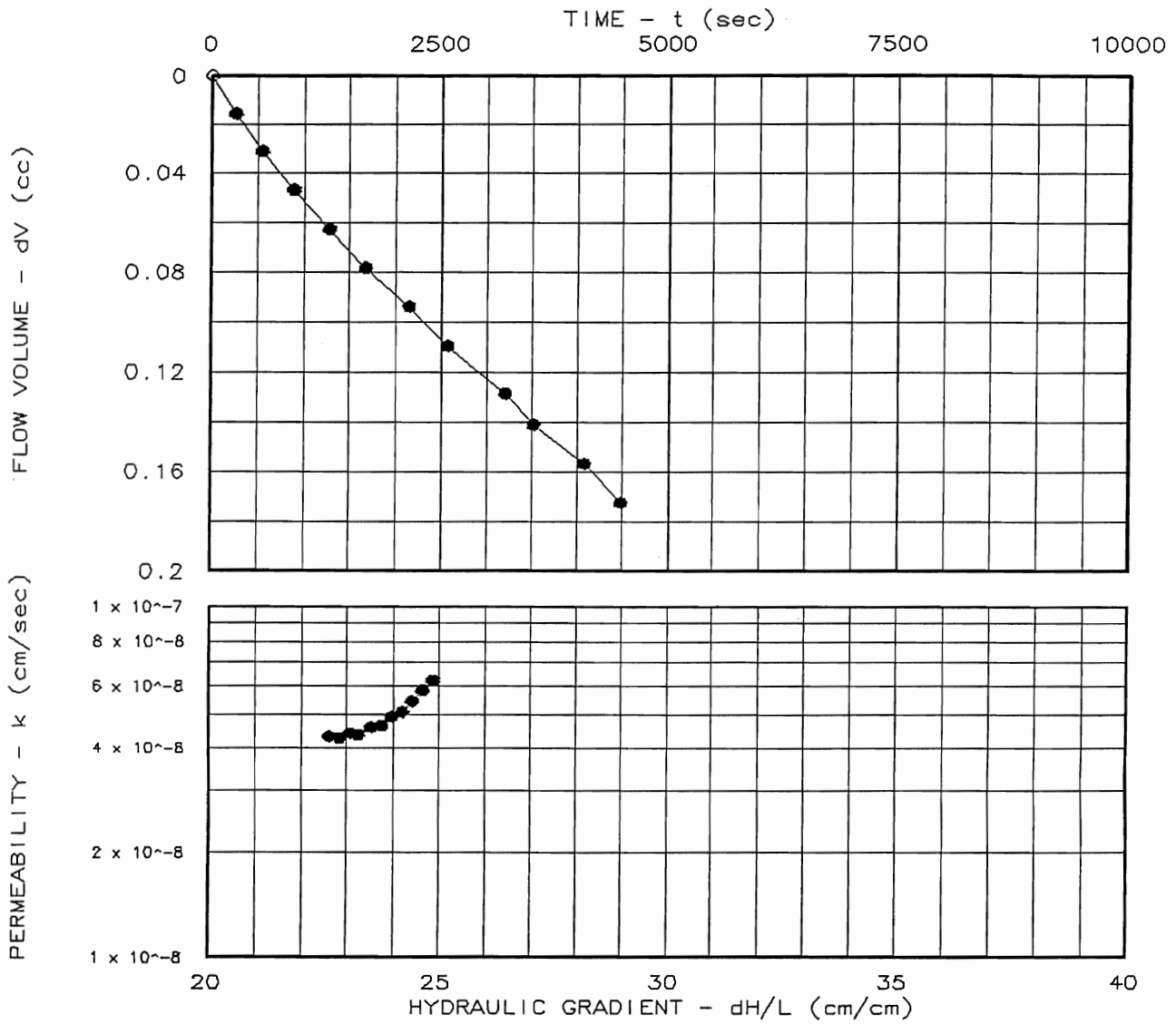
Perm. (cm/sec): 4.33 x 10^-8

SAMPLE DATA:
Sample Identification: Acre No. 15, 3' S of Sta. 323, First Lift
Visual Description: Low Perm Soil

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood Landfill Closure
Location: Kirkwood, NY
Date: 1/05/00

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 99776
Lab No.: 99776
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 14.63
Specimen Diameter (cm): 7.11
Dry Unit Weight (pcf): 124.7
Moisture Before Test (%): 11.6
Moisture After Test (%): 12.4
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

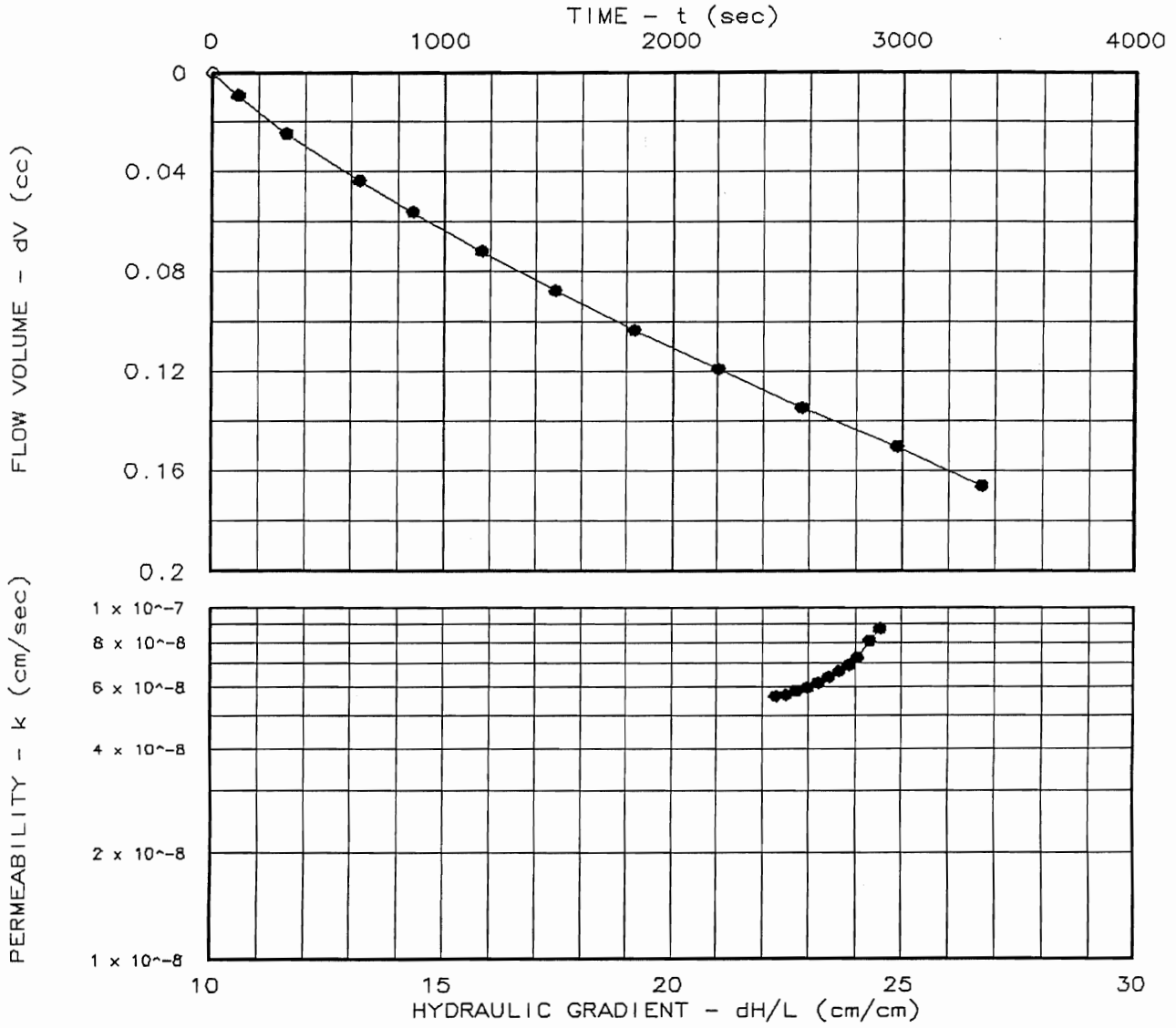
Perm. (cm/sec): 5.77 x 10^-8

SAMPLE DATA:
Sample Identification: Acre No. 16, 10' E of Sta. 640, First Lift
Visual Description: Low Perm Soil

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood Landfill Closure
Location: Kirkwood, NY
Date: 1/04/00

PERMEABILITY TEST REPORT
MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 99777
Lab No.: 99777
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 13.94
Specimen Diameter (cm): 7.11
Dry Unit Weight (pcf): 122.6
Moisture Before Test (%): 15.5
Moisture After Test (%): 14.5
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.7

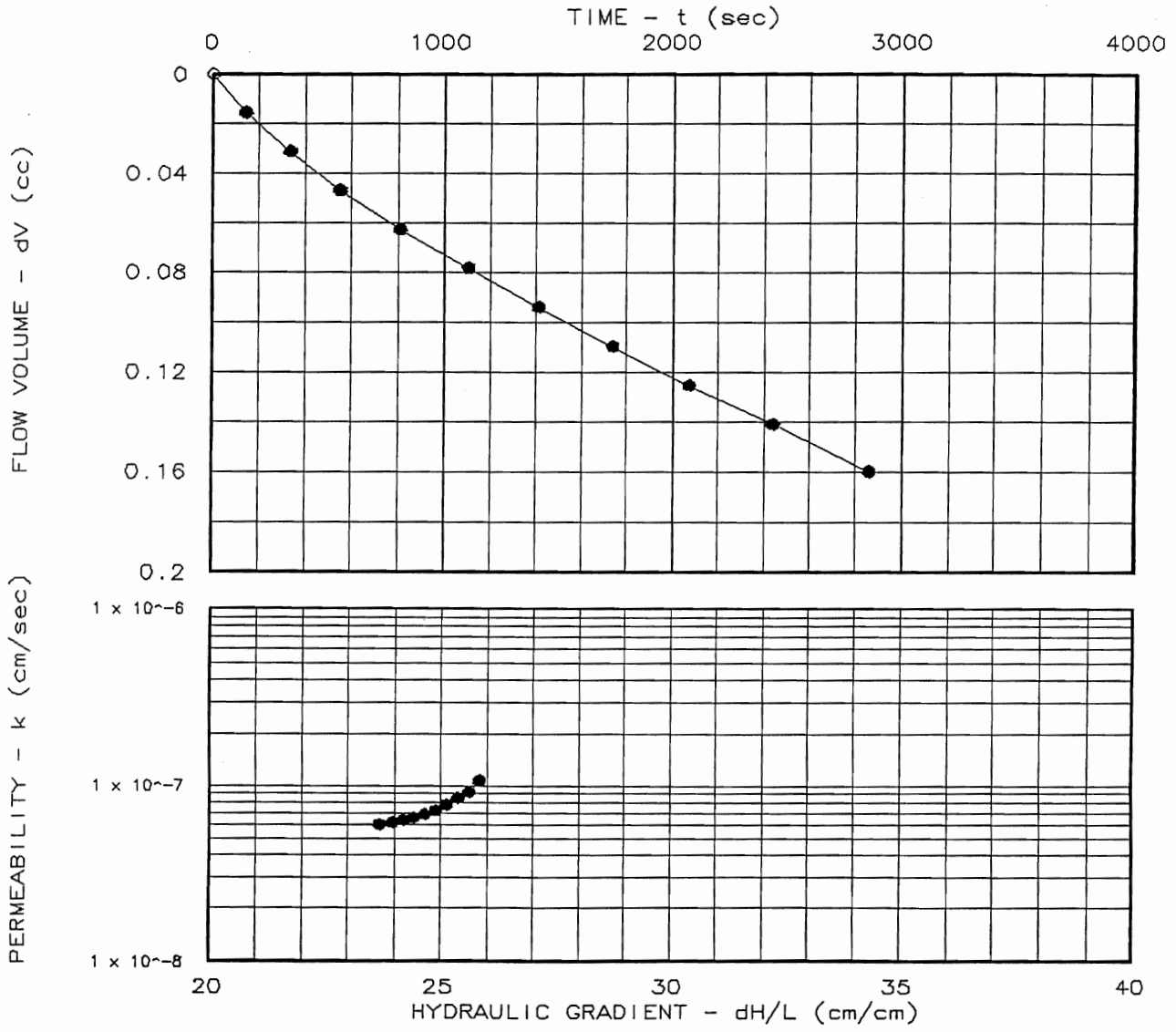
Perm. (cm/sec): 6.23 x 10^-8

SAMPLE DATA:
Sample Identification: Acre No. 17, 10' E of Sta. 640, First Lift
Visual Description: Low Perm Soil

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood Landfill Closure
Location: Kirkwood, NY
Date: 1/04/00

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 99778
Lab No.: 99778
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 14.20
Specimen Diameter (cm): 7.11
Dry Unit Weight (pcf): 130.3
Moisture Before Test (%): 11.1
Moisture After Test (%): 12.0
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 2.93 x 10^-8

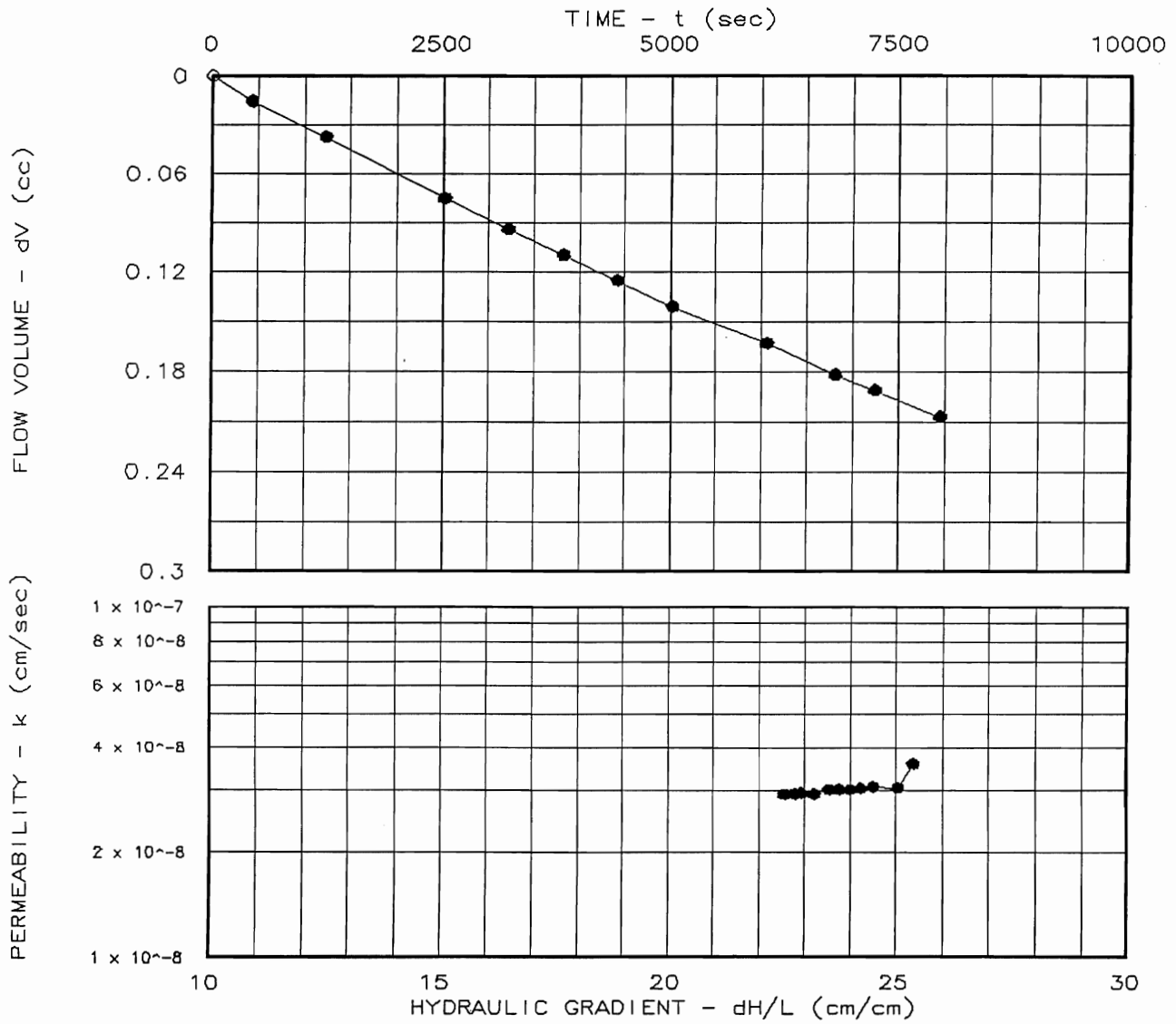
SAMPLE DATA:

Sample Identification: Acre No. 18, 30' E of Sta. 702, First Lift
Visual Description: Low Perm Soil

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood Landfill Closure
Location: Kirkwood, NY
Date: 1/05/00

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 99779
Lab No.: 99779
Tested by: AM
Checked by: JT
Test: CV - Constant volume

MAXIM TECHNOLOGIES INC

Maxim Technologies, Inc.
2415 North Triphammer Rd., Suite 3
Ithaca, New York 14850
TEL: (607) 266-0147
FAX: (607) 266-6409

REPORT OF IN-PLACE DENSITY

CLIENT: GORICK CONSTRUCTION
Jon Van Deusen
27 Track Drive
Binghamton, NY 13904

PROJECT NO.: 9734344
REPORT NO.: 991306
DATE OF SERVICE: 12/20/1999
AUTHORIZATION: Jon
REPORT DATE: 1/04/2000

PROJECT: Kirkwood Landfill Closure

SERVICES: Perform in-place density and moisture content tests to determine the degree of field compaction.

PROJECT DATA

CONTRACTOR: GORICK CONSTRUCTION
METHOD OF TEST:
DENSITY: ASTM D2922
MOISTURE: ASTM D3017
SPECIFICATION:
DENSITY: 95% Compaction
MOISTURE:

GAUGE: Troxler, 3411-B
GAUGE SERIAL NO.:
STANDARD COUNTS
MOISTURE - CURRENT: 612 PREVIOUS: 616
DENSITY - CURRENT: 2798 PREVIOUS: 2796
TEST MODE: Direct Transmission
PROBE DEPTH (in.): 12

TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS OPTIMUM MOISTURE %	MOISTURE/DENSITY RELATIONS MAXIMUM DENSITY pcf	REFERENCE REPORT NO
5,000 cubic yards	Low Perm Soil	10.8	126.1	
10,000 cubic yards	Low Perm Soil	10.5	125.9	
15,000 cubic yards	Low Perm Soil	8.9	131.0	
20,000 cubic yards	Low Perm Soil	8.5	130.8	

REPORT OF TESTS

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	FIELD DENSITY (pcf) DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
1.	15' W of Sta. 643	11.7	10.5	136.1	121.8	125.9	96.7
2.	15' S & 9' W of Sta. 643	9.2	8.5	141.7	129.8	130.8	99.2
3.	15' S & 25' W of Sta. 644	10.0	8.5	137.0	124.5	130.8	95.2
4.	21' S of Sta. 674	10.7	10.8	134.7	121.7	126.1	96.5
5.	6' S & 4' E of Sta. 644A	8.8	8.9	144.9	133.2	131.0	101.7
6.	18' N & 15' E of Sta. 642	10.4	8.9	141.6	128.3	131.0	97.9
7.	1' N & 45' W of Sta. 317A	10.4	8.9	141.9	128.5	131.0	98.1

Report Of Tests Continued On Page 2

MAXIM

GORICK CONSTRUCTION
PROJECT NO. 9734344
DATE OF SERVICE: 12/20/1999

REPORT NO. 991306

REPORT OF TESTS (Continued)

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
8.	30' S & 6' E of Sta. 316	10.8	8.9	140.9	127.2	131.0	97.1
9.	9' S & 27' W of Sta. 614A	9.9	8.9	140.6	127.9	131.0	97.6
10.	30' S & 3' W of Sta. 674	10.3	8.9	140.4	127.3	131.0	97.2
11.	8' S & 3' W of Sta. 673A	10.5	8.9	140.0	126.7	131.0	96.7
12.	2' S & 21' E of Sta. 673	11.5	8.9	139.4	125.0	131.0	95.4
13.	30' N & 12' E of Sta. 334A	10.5	8.9	137.7	124.6	131.0	95.1
14.	33' S & 7' E of Sta. 335	11.3	10.8	135.9	122.1	126.1	96.8
15.	24' & 45' E of Sta. 335	11.5	10.8	138.4	124.1	126.1	98.4
16.	39' S & 12' W of Sta. 334A	10.8	8.9	142.0	128.2	131.0	97.9
17.	21' N & 27' E of Sta. 334	10.9	8.9	140.7	126.9	131.0	96.9
18.	9' S & 4' E of Sta. 672	9.9	8.9	140.7	128.0	131.0	97.7
19.	3' N & 27' E of Sta. 671	10.0	8.9	139.2	126.5	131.0	96.6
20.	7' N & 8' E of Sta. 671A	10.8	8.9	139.3	125.7	131.0	96.0
21.	9' N & 6' E of Sta. 672	9.9	8.9	142.8	129.9	131.0	99.2
22.	4' S & 15' E of Sta. 639A	12.1	8.9	140.7	125.5	131.0	95.8
23.	12' N & 26' of Sta. 672A	10.4	8.9	139.5	126.4	131.0	96.5
24.	4' S & 12' E of Sta. 640	10.8	8.9	138.7	125.2	131.0	95.6
25.	12' N & 4' E of Sta. 640A	11.0	8.9	140.2	126.3	131.0	96.4
26.	3' S & 15' W of Sta. 641	10.9	8.9	139.6	125.9	131.0	96.1
27.	14' N & 24' E of Sta. 674	11.5	8.9	139.9	125.5	131.0	95.8

Test results on this report meet project specifications as noted on page 1.

Report Of Tests Continued On Page 3

MAXIM

GORICK CONSTRUCTION
PROJECT NO. 9734344
DATE OF SERVICE: 12/20/1999

REPORT NO. 991306
PAGE 3 OF 3

REPORT OF TESTS (Continued)

ADDITIONAL COMMENTS:

Acre 13, Tests 1 - 9
Acre 16, Tests 10 - 18
Acre 14, Tests 19 - 27
Elevation: First Lift

Technician: Doug Jennings
Engineering Technician

Report Distribution:
(1) GORICK CONSTRUCTION

MAXIM TECHNOLOGIES INC.

Jeffrey Truax
Const. Services Manager

MAXIM TECHNOLOGIES INC

Maxim Technologies, Inc.
2415 North Triphammer Rd., Suite 3
Ithaca, New York 14850
TEL: (607) 266-0147
FAX: (607) 266-6409

REPORT OF IN-PLACE DENSITY

CLIENT: GORICK CONSTRUCTION
Jon Van Deusen
27 Track Drive
Binghamton, NY 13904

PROJECT NO.: 9734344
REPORT NO.: 991341
DATE OF SERVICE: 12/29/1999
AUTHORIZATION: Al
REPORT DATE: 1/05/2000

PROJECT: Kirkwood Landfill Closure

SERVICES: Perform in-place density and moisture content tests to determine the degree of field compaction.

PROJECT DATA

CONTRACTOR: GORICK CONSTRUCTION
METHOD OF TEST:
DENSITY: ASTM D2922
MOISTURE: ASTM D3017
SPECIFICATION:
DENSITY: 95% Compaction
MOISTURE:

GAUGE: Troxler, 3440
GAUGE SERIAL NO.: 14656
STANDARD COUNTS
MOISTURE - CURRENT: 520 PREVIOUS: 522
DENSITY - CURRENT: 2779 PREVIOUS: 2771
TEST MODE: Direct Transmission
PROBE DEPTH (in.): 12

TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	REFERENCE REPORT NO
Modified	Low Perm Soil	8.5	130.8	

REPORT OF TESTS

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
1.	4' N of Sta. 324, Acre 15	10.1	8.5	141.9	128.9	130.8	98.5
2.	2' S of Sta. 338, Acre 15	11.3	8.5	141.6	127.2	130.8	97.2
3.	4' S of Sta. 679, Acre 15	11.7	8.5	140.6	125.9	130.8	96.3
4.	5' E of Sta. 678, Acre 15	10.9	8.5	140.2	126.4	130.8	96.6
5.	8' W of Sta. 648, Acre 15	11.5	8.5	141.4	126.8	130.8	96.9
6.	3' N of Sta. 649, Acre 15	10.0	8.5	137.5	125.0	130.8	95.6
7.	2' W of Sta. 650, Acre 15	10.3	8.5	138.1	125.2	130.8	95.7

Report Of Tests Continued On Page 2

MAXIM

GORICK CONSTRUCTION
PROJECT NO. 9734344
DATE OF SERVICE: 12/29/1999

REPORT NO. 991341

REPORT OF TESTS (Continued)

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	FIELD DENSITY (pcf) DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
8.	3' S of Sta. 323, Acre 15 ST-15	9.2	8.5	137.8	126.2	130.8	96.5
9.	2' W of Sta. 529, Acre 15	9.3	8.5	143.3	131.1	130.8	100.2
10.	6' S of Sta. 329, Acre 17	9.3	8.5	142.0	129.9	130.8	99.3
11.	2' E of Sta. 330A, Acre 17	9.8	8.5	143.1	130.3	130.8	99.6
12.	6' S of Sta. 331, Acre 17 ST-17	10.0	8.5	141.1	128.3	130.8	98.1
13.	8' S of Sta. 332, Acre 17	8.6	8.5	137.8	126.9	130.8	97.0
14.	30' E of Sta. 704, Acre 17	9.1	8.5	144.6	132.5	130.8	101.3
15.	20' W of Sta. 704, Acre 17	8.9	8.5	143.6	131.9	130.8	100.8
16.	12' S of Sta. 705, Acre 17	10.0	8.5	141.5	128.6	130.8	98.3
17.	2' S of Sta. 723, Acre 17	10.4	8.5	140.3	127.1	130.8	97.2
18.	2' S of Sta. 724, Acre 17	9.6	8.5	143.1	130.6	130.8	99.8
19.	15' W of Sta. 328, Acre 18	9.7	8.5	141.6	129.1	130.8	98.7
20.	2' S of Sta. 327, Acre 18	9.7	8.5	141.6	129.1	130.8	98.7
21.	20' S of Sta. 702, Acre 18	9.9	8.5	140.8	128.1	130.8	97.9
22.	30' E oof Sta. 702, Acre 18 ST-18	10.1	8.5	141.6	128.6	130.8	98.3
23.	2' S of Sta. 722, Acre 18	9.3	8.5	142.0	129.9	130.8	99.3
24.	40' E of Sta. 722, Acre 18	9.4	8.5	142.0	129.8	130.8	99.2
25.	2' N of Sta. 721, Acre 18	10.7	8.5	142.6	128.8	130.8	98.5
26.	8'S of Sta. 701, Acre 18	9.6	8.5	139.6	127.4	130.8	97.4
27.	2' W of Sta. 326, Acre 18	9.5	8.5	141.4	129.1	130.8	98.7

Test results on this report meet project specifications as noted on page 1.

Report Of Tests Continued On Page 3

MAXIM

GORICK CONSTRUCTION
PROJECT NO. 9734344
DATE OF SERVICE: 12/29/1999

REPORT NO. 991341
PAGE 3 OF 3

REPORT OF TESTS (Continued)

ADDITIONAL COMMENTS:

Elevation: First Lift

Technician: David Verdon
Sr. Engineering Tech.

Report Distribution:
(1) GORICK CONSTRUCTION

MAXIM TECHNOLOGIES INC.

Jeffrey Truax
Const. Services Manager

MAXIM TECHNOLOGIES INC

Maxim Technologies, Inc.
2415 North Triphammer Rd., Suite 3
Ithaca, New York 14850
TEL: (607) 266-0147
FAX: (607) 266-6409

REPORT OF IN-PLACE DENSITY

CLIENT: GORICK CONSTRUCTION
Jon Van Deusen
27 Track Drive
Binghamton, NY 13904

PROJECT NO.: 9734344
REPORT NO.: 001016
DATE OF SERVICE: 1/07/2000
AUTHORIZATION: Jon
REPORT DATE: 1/18/2000

PROJECT: Kirkwood Landfill Closure

SERVICES: Perform in-place density and moisture content tests to determine the degree of field compaction.

PROJECT DATA

CONTRACTOR: GORICK CONSTRUCTION
METHOD OF TEST:
DENSITY: ASTM D2922
MOISTURE: ASTM D3017
SPECIFICATION:
DENSITY: 90% Compaction
MOISTURE:

GAUGE: Troxler, 3411-B
GAUGE SERIAL NO.: 12455
STANDARD COUNTS
MOISTURE - CURRENT: 629 PREVIOUS: 626
DENSITY - CURRENT: 2788 PREVIOUS: 2796
TEST MODE: Direct Transmission
PROBE DEPTH (in.): 6

TEST OF	MATERIALS	MOISTURE/DENSITY RELATIONS OPTIMUM MOISTURE %	MAXIMUM DENSITY pcf	REFERENCE REPORT NO
	Low Perm Soil	8.5	130.8	

REPORT OF TESTS

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
1.	4' S & 33' W of Sta. 16-673A	11.0	8.5	137.0	123.4	130.8	94.3
2.	36' S & 6' E of Sta. 16-673A	10.7	8.5	138.3	124.9	130.8	95.5
3.	3' S & 31' W of Sta. 16-673	11.5	8.5	136.5	122.4	130.8	93.6
4.	9' S & 45' E of Sta. 16-707	11.5	8.5	134.2	120.4	130.8	92.0
5.	9' S & 1' E of Sta. 16-334 Shelby Tube	11.7	8.5	135.6	121.4	130.8	92.8
6.	27' S & 6' E of Sta. 16-671A	11.7	8.5	135.7	121.5	130.8	92.9

Report Of Tests Continued On Page 2

MAXIM

GORICK CONSTRUCTION
PROJECT NO. 9734344
DATE OF SERVICE: 1/07/2000

REPORT NO. 001016
PAGE 2 OF 4

REPORT OF TESTS (Continued)

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	FIELD DENSITY (pcf) DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
7.	36' S & 15' E of Sta. 16-705A	11.2	8.5	136.2	122.5	130.8	93.7
8.	33' S & 18' E of sta. 16-333	11.6	8.5	134.3	120.3	130.8	92.0
9.	30' S of Sta. 16-671	9.3	8.5	143.9	131.7	130.8	100.7
10.	9' S & 27' E of Sta. 17 & 331	10.9	8.5	138.1	124.5	130.8	95.2
11.	25' S & 21' W of Sta. 17 & 331A	11.1	8.5	134.1	120.7	130.8	92.3
12.	21' S & 18' W of Sta. 17-329A	11.4	8.5	134.7	120.9	130.8	92.4
13.	6' N & 30' W of Sta. 17-703 Shelby Tube	10.1	8.5	136.2	123.7	130.8	94.6
14.	12' S & 6' W of Sta. 17-703A	11.9	8.5	136.0	121.5	130.8	92.9
15.	9' N & 4'W of Sta. 17-704	12.1	8.5	135.9	121.2	130.8	92.7
16.	3' N & 18' E of Sta. 17-723	10.1	8.5	137.5	124.9	130.8	95.5
17.	5' N & 4' E of Sta. 17-704A	12.0	8.5	137.3	122.6	130.8	93.7
18.	3' S & 36' W of Sta. 17-705	9.8	8.5	135.4	123.3	130.8	94.3
19.	9' S & 33' E of Sta. 18-328A	11.0	8.5	135.3	121.9	130.8	93.2
20.	4' S & 6' E of Sta. 18-327	11.6	8.5	134.5	120.5	130.8	92.1
21.	9' N & 7' W of Sta. 18-326A	11.5	8.5	136.8	122.7	130.8	93.8
22.	15' S & 18' W of Sta. 18-701A	12.0	8.5	136.1	121.5	130.8	92.9
23.	12' S & 15' W of Sta. 18-326	10.4	8.5	134.9	122.2	130.8	93.4
24.	3' S & 33' E of Sta. 18-326 Shelby Tube	11.4	8.5	137.5	123.4	130.8	94.3
25.	18' S & 21' W of Sta. 18-701	11.4	8.5	135.2	121.4	130.8	92.8
26.	2' N & 15' E of Sta. 18-701	11.3	8.5	136.5	122.6	130.8	93.7

Report Of Tests Continued On Page 3

MAXIM

GORICK CONSTRUCTION
PROJECT NO. 9734344
DATE OF SERVICE: 1/07/2000

REPORT NO. 001016
PAGE 3 OF 4

REPORT OF TESTS (Continued)

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
27.	15' S & 7' E of Sta. 18-724	11.0	8.5	138.5	124.8	130.8	95.4
28.	27' S & 18' E of Sta. 15-700A	10.9	8.5	134.7	121.5	130.8	92.9
29.	4' N & 15' W of Sta. 15-324	11.5	8.5	134.7	120.8	130.8	92.4
30.	27' N & 3' E of Sta. 15-338A	10.2	8.5	136.4	123.8	130.8	94.6
31.	3' S & 21' W of Sta. 15-338 Shelby Tube	11.2	8.5	135.0	121.4	130.8	92.8
32.	30' S & 3' E of Sta. 15-708A	10.9	8.5	139.6	125.9	130.8	96.3
33.	27' S & 33' W of Sta. 15-336A	11.0	8.5	135.9	122.4	130.8	93.6
34.	9' N & 3' E of Sta. 15-336A	12.7	8.5	135.5	120.2	130.8	91.9
35.	30' S & 4' E of Sta. 15-336	10.3	8.5	136.8	124.0	130.8	94.8
36.	9' S & 3' W of Sta. 15-675A	11.4	8.5	140.5	126.1	130.8	96.4
37.	2' N & 30' E of Sta. 13-315	10.8	8.5	140.7	127.0	130.8	97.1
38.	10' N & 24' E of Sta. 13-315A	10.5	8.5	137.5	124.4	130.8	95.1
39.	5' N & 2' W of Sta. 13-316	9.8	8.5	139.2	126.8	130.8	96.9
40.	4' S & 31' W of Sta. 13-317	11.1	8.5	137.4	123.7	130.8	94.6
41.	2' N & 19' W of sta. 13-317A	10.9	8.5	136.6	123.2	130.8	94.2
42.	30' S & 12' W of Sta. 13-643	10.7	8.5	134.1	121.1	130.8	92.6
43.	3' S & 32' W of Sta. 13-644	11.6	8.5	135.8	121.7	130.8	93.0
44.	34' S & 8' W of Sta. 13-641A	10.7	8.5	140.6	127.0	130.8	97.1
45.	1' N & 9' W of Sta. 13-642 Shelby Tube	11.5	8.5	137.3	123.1	130.8	94.1
46.	1' S & 10' W of Sta. 14-670A	11.5	8.5	134.7	120.8	130.8	92.4
47.	32' S & 9' W of Sta. 14-638	13.0	8.5	137.7	121.9	130.8	93.2

Report Of Tests Continued On Page 4

MAXIM

GORICK CONSTRUCTION
PROJECT NO. 9734344
DATE OF SERVICE: 1/07/2000

REPORT NO. 001016
PAGE 4 OF 4

REPORT OF TESTS (Continued)

TEST NO	LOCATION	FIELD MOISTURE (%)	OPTIMUM MOISTURE (%)	FIELD DENSITY (pcf) WET	DRY	MAXIMUM DENSITY (Pcf)	DENSITY (% max)
48.	29' S & 21' E of Sta. 14-313	10.9	8.5	135.3	122.0	130.8	93.3
49.	18' N & 2' E of Sta. 14-672A	10.9	8.5	139.5	125.8	130.8	96.2
50.	27' S & 8' E of Sta. 14-640 Shelby Tube	11.3	8.5	138.2	124.2	130.8	95.0
51.	36' N & 2' W of Sta. 14-640	11.6	8.5	135.8	121.7	130.8	93.0
52.	9' S & 24' E of Sta. 14-314A	10.2	8.5	140.7	127.7	130.8	97.6
53.	8' S & 15' E of Sta. 14-640	10.7	8.5	138.3	124.9	130.8	95.5
54.	27' N & 21' E of Sta. 14-673A	10.1	8.5	140.7	127.8	130.8	97.7

Test results on this report meet project specifications as noted on page 1.

ADDITIONAL COMMENTS:
Elevation: Second Lift

Technician: Doug Jennings
Engineering Technician

Report Distribution:
(1) GORICK CONSTRUCTION

MAXIM TECHNOLOGIES INC.

Jeffrey Truax
Const. Services Manager

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 12.27
Specimen Diameter (cm): 7.11
Dry Unit Weight (pcf): 132.0
Moisture Before Test (%): 12.0
Moisture After Test (%): 12.7
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.7

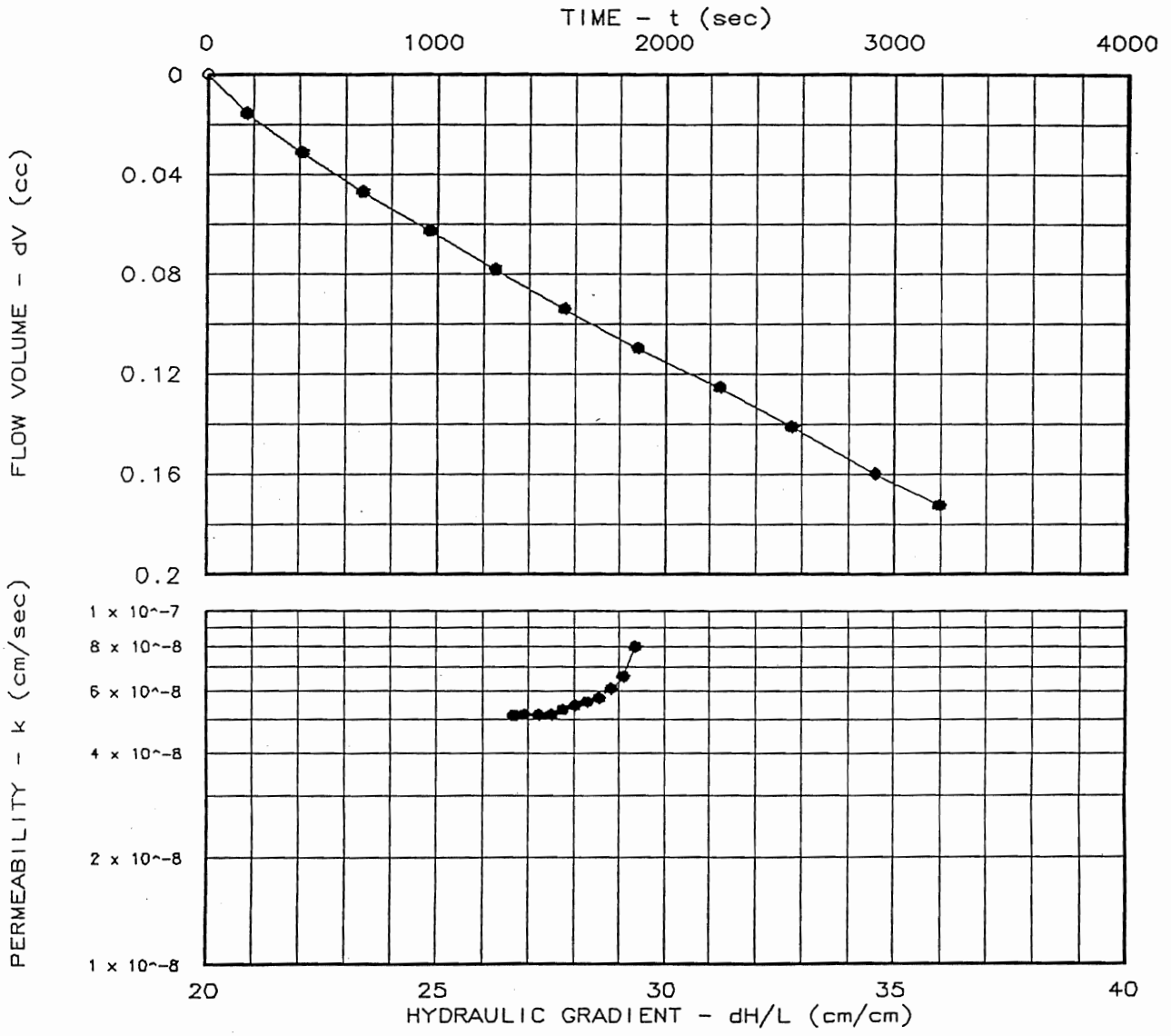
Perm. (cm/sec): 5.13 x 10^-8

SAMPLE DATA:
Sample Identification: Acre No. 13, Sta. 642, Second Lift
Visual Description: Low Perm Soil

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood Landfill Closure
Location: Kirkwood, NY
Date: 1/11/2000

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 20003
Lab No.: 20003
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 14.73
Specimen Diameter (cm): 7.11
Dry Unit Weight (pcf): 130.1
Moisture Before Test (%): 12.0
Moisture After Test (%): 12.6
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.7

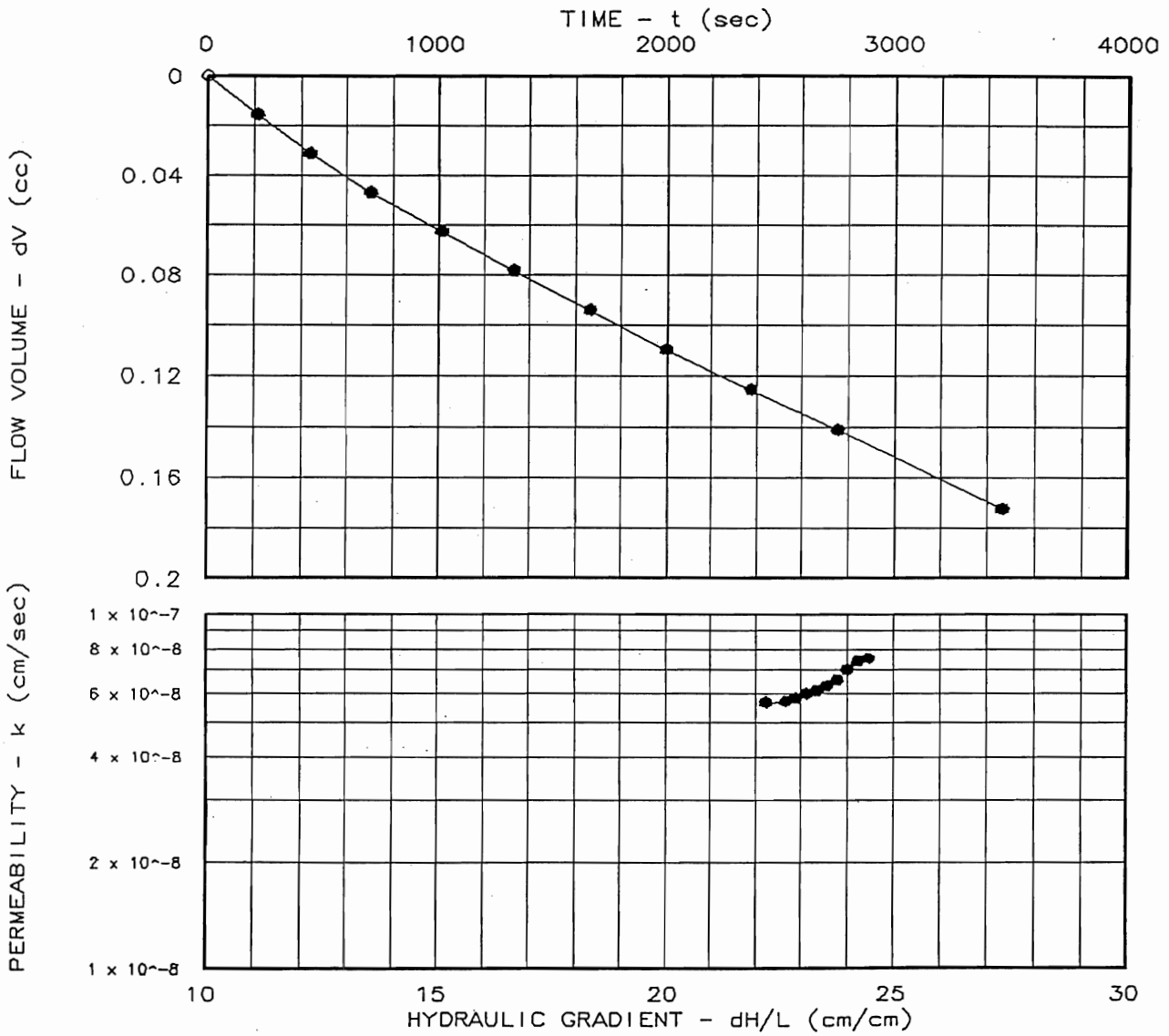
Perm. (cm/sec): 5.80 x 10^-8

SAMPLE DATA:
Sample Identification: Acre No. 14, Sta. 640, Second Lift
Visual Description: Low Perm Soil

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood Landfill Closure
Location: Kirkwood, NY
Date: 1/11/2000

PERMEABILITY TEST REPORT
MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 20005
Lab No.: 20005
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 14.63
Specimen Diameter (cm): 7.11
Dry Unit Weight (pcf): 132.8
Moisture Before Test (%): 10.9
Moisture After Test (%): 11.4
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.7

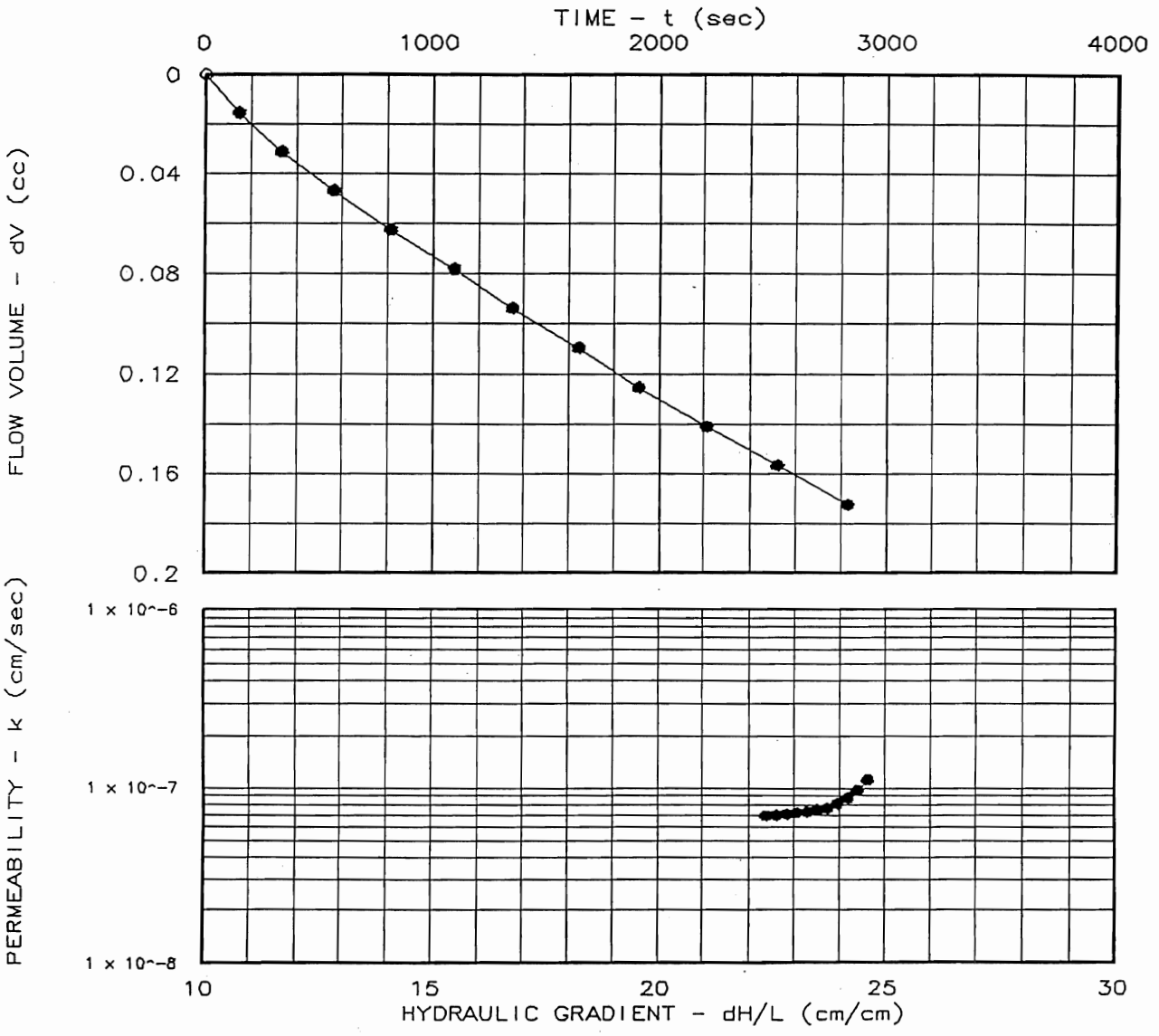
Perm. (cm/sec): 7.02 x 10^-8

SAMPLE DATA:
Sample Identification: Acre No. 15, Sta. 338, Second Lift
Visual Description: Low Perm Soil

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood Landfill Closure
Location: Kirkwood, NY
Date: 1/12/2000

PERMEABILITY TEST REPORT
MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 20007
Lab No.: 20007
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 14.63
Specimen Diameter (cm): 7.11
Dry Unit Weight (pcf): 124.1
Moisture Before Test (%): 11.3
Moisture After Test (%): 12.3
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.7

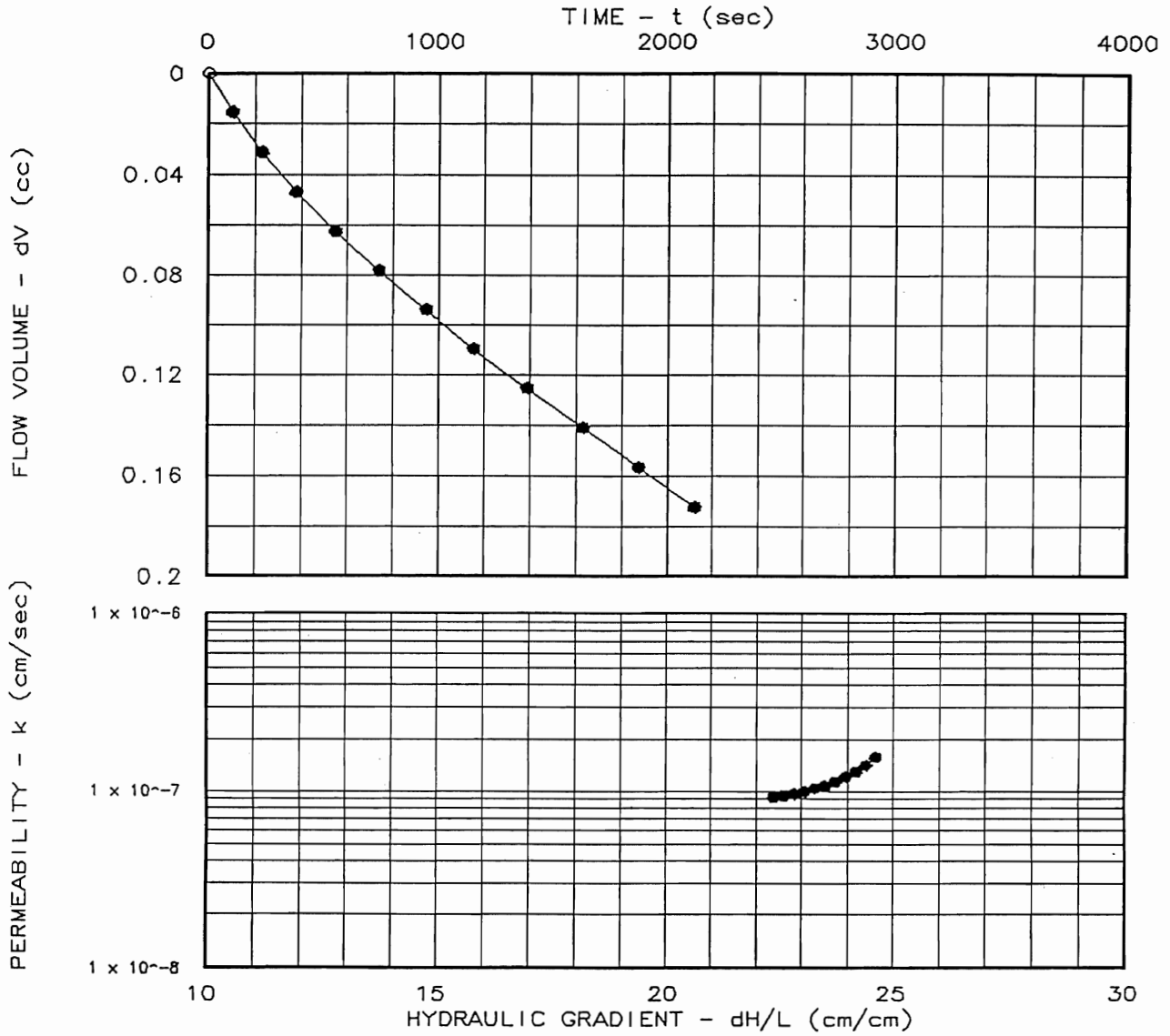
Perm. (cm/sec): 9.50 x 10^-8

SAMPLE DATA:
Sample Identification: Acre No. 16, Sta. 334, Second Lift
Visual Description: Low Perm Soil

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood Landfill Closure
Location: Kirkwood, NY
Date: 1/12/2000

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 20004
Lab No.: 20004
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 11.56
Specimen Diameter (cm): 7.11
Dry Unit Weight (pcf): 121.3
Moisture Before Test (%): 10.8
Moisture After Test (%): 13.9
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.7

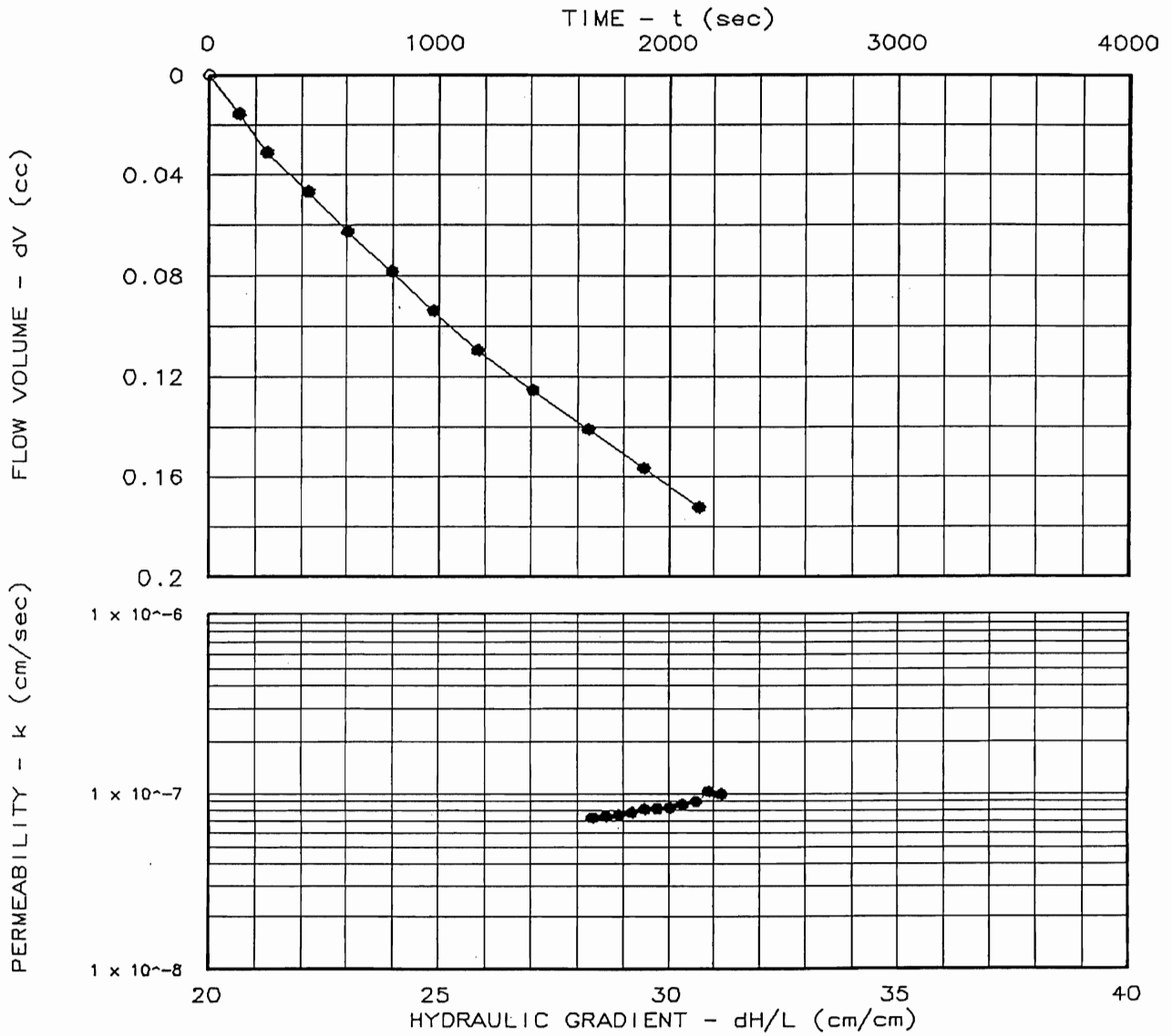
Perm. (cm/sec): 7.43 x 10^-8

SAMPLE DATA:
Sample Identification: Acre No. 17, Sta. 703, Second Lift
Visual Description: Low Perm Soil

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood Landfill Closure
Location: Kirkwood, NY
Date: 1/11/2000

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 20006
Lab No.: 20006
Tested by: AM
Checked by: JT
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 14.58
Specimen Diameter (cm): 7.11
Dry Unit Weight (pcf): 126.3
Moisture Before Test (%): 12.5
Moisture After Test (%): 12.5
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.7

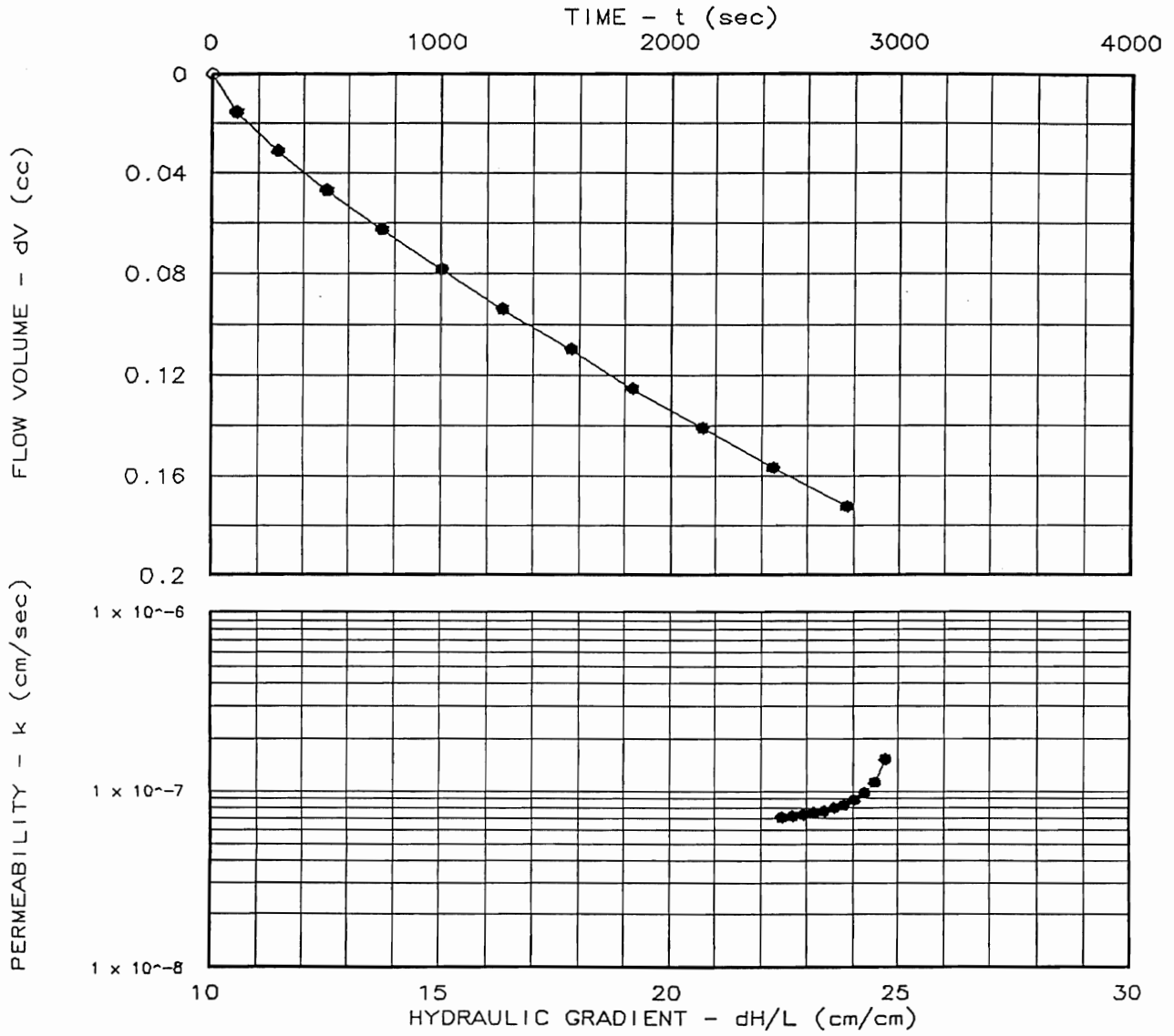
Perm. (cm/sec): 7.22 x 10^-8

SAMPLE DATA:
Sample Identification: Acre No. 18, Sta. 326, Second Lift
Visual Description: Low Perm Soil

Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood Landfill Closure
Location: Kirkwood, NY
Date: 1/12/2000

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 9734344
File No.: 20008
Lab No.: 20008
Tested by: AM
Checked by: JT
Test: CV - Constant volume

APPENDIX G
CONSTRUCTION REVIEW DAILY REPORTS

KEYSTONE TROZZE, LLC
ARCHITECTS AND ENGINEERS

Kenneth D. Ellsworth, P.E. • Bernard A. Perkosky, AIA • Peter J.M. Trozze, AIA

July 14, 1997

Alfred Gorick, Jr., President
Gorick Construction Co., Inc.
27 Track Drive
Binghamton, New York 13904

Re: Gorick C & D Landfill
DEC Site No. 7-04-19

Dear Sir:

Enclosed please find "Field Reports" for our on-site review of the above project for the period from June 9, 1997 to July 7, 1997.

If you have any questions please do not hesitate to contact our office.

Very truly yours,

KEYSTONE TROZZE, LLC

Kenneth D. Ellsworth

Kenneth D. Ellsworth, P.E.
President

KDE:bjz

Enclosure

File 19:51.7196

One Brick Avenue • Binghamton, NY 13901 • Tel: (607) 722-1100 • Fax: (607) 722-2515
915 Bay Ridge Avenue • Annapolis, MD 21403 • Tel: (410) 216-9063 • Fax: (410) 216-9576

Field Report

Project Gorrick C+D Landfill
Tri. of Kirkwood, NY.

site visit

Weather:

Date: 9 June 1997

Time:

Work in Progress:

Equip.: Four trucks, Loader, D5; 10 Ton Roller

Men: 4 truck drivers, 2 operators, 1 foreman

Contractor placed first 1 ft Low permeable soil on Acre No. 1

Field Directives:

None

Remarks:

None

Copies: Gorrick Construction

By: Steven J. Lange

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

ject Gorrck C&D Landfill
Tri. of Kirkwood, NY

Site Visit

Weather:

Date: 10 June 1997

Time:

Work in Progress:

Equip: 5 trucks, loader, DS, Roller, 330 exc., D9

Men: 5 truck drivers, 2 operaters, 1 foreman

Contractor placed first lift of low permeable soil at Acres No. 2+1 and screened at Klepfers pit.

Field Directives:

None

Remarks:

John Vanduesen stated that Atlantic Testing would be on site June 11th

Copies: Gorrck Construction

By: Steven T. Jange

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

ject Gorrck C+D Landfill
Tri. of Kirkwood, NY

Weather:

Date: 11 June 1997

Time:

Site Visit

Work in Progress:

Equip: D5, Roller, 225, D8'

Men: 3 operators, 1 foreman, 1 man from Atlantic Testing

Contractor graded subgrade at Acres. No. 5 & 6 and screened at Klepfers pit.

Atlantic Testing pushed shelby Tubes and ran marsture density tests on Acres No. 1 & 2.

Field Directives:

None

Remarks:

None

Copies: Gorrck Construction

By: Steven J. Zange

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

ject Gorrck C+D Landfill
Tri. of Kirkwood, NY

Site visit

Weather:

Date: 12 June 1997

Time:

Work in Progress:

Equip: D5, Roller, 4 trucks, 330 exc., D8

Men: 4 truck drivers, 2 operators, 1 foreman

Contractor placed first lift of low permeable soil at Acre No. 3 and screened at klepfers pit.

Field Directives:

None

Remarks: None

Copies: Garrck Constructron

By: Steven F. Jauge

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

ject - Garrek C+D Landfill
Trn. of Knoxwood, NY

site visit

Weather:

Date: 13 June 1997

Time:

Work in Progress:

Equip: D8, 330 excavator

Men: 2 operators

Contractor screened at klepfers pit.

Field Directives: None

Remarks: None

Copies: Garrek Construction

By: Steven W. Trozze

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

ject Gorrick C+D Landfill
Town of Kirkwood, NY

site visit

Weather:

Date: 16 June 1997

Time:

Work in Progress:

Equip: 4 trucks, loader, DS, Roller, D8, 330
Men: 4 truck drivers, 2 operators, 1 foreman

Contractor placed first lift low permeable soil on Acres No. 4+5 and screened at Klepfers pit.

Field Directives:

None

Remarks: John Vanduesen stated they were going to shim to subgrade Acres No. 3+4 June 17.

Copies: Gorrick Construction

By: Steven D. Jauss

Keystone Trozze, LLC
One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

ject Gorrck C+D Landfill
Tri. of. Kirkwood, NY

Site Visit

Weather:

Date: 17 June 1997

Time:

Work in Progress:

Equip: 1 D8, Roller, 4 trucks, 330

Men: 4 truck drivers, 2 operators, 1 foreman

Contractor shimmed to subgrade Acres No. 3+4

Field Directives: None

Remarks: None

Copies: Gorrck Construction

By: Steven F. Jange

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

ject Gorrck: C+D Landfill
Tri. of Kirkwood, NY

Site Visit

Weather:

Date: 18 June 1997

Time:

Work in Progress:

* Atlantic Testing was on site to push Shelby Tubes on Acre No. 1, orrginal set unable to test. They also pushed tubes on Acre No. 3.

Field Directives: None

Remarks: None

Copies: Gorrck Construction

By: Steven J. Jauge

Keystone Trozze, LLC
One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

ject Gorrck C+D Landfill
Tri. of. kirkwood, NY
site visit

Weather:
Date: 26 June 1997.
Time:

Work in Progress:

Ron Scherss was on site for subgrade stakeout

Field Directives: None

Remarks: None

Copies: Gorrck construction

By: Steven T. Tauge

Keystone Trozze, LLC
One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

ject Gorrck C+D Landfill
Tri. of Kirkwood, NY

Site Visit

Weather: 75-80 partly cloudy
Date: 2 July 1997
Time: 10:00 - 10:30

Work in Progress:

Equip: 235, D9, D75, D5, 10 Ton Roller, 4 TW
Men: 4 drivers, 2 operators, 1 foreman

Contractor shimmed first lift low permeable soil on Acre No. 4 and screened at Klepfers pit.

Field Directives:

None

Remarks:

None

Copies: Gorrck Construction

By: Steven J. Lange

Keystone Trozze, LLC
One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

ject Gorrck C+D Landfill
Trs. Of Kirkwood, NY

Site visit w/ John Vandluesen

Weather: 75-80° partly cloudy
Date: 3 July 1997
Time: 10:00 – 11:00

Work in Progress:

Equip: 235, D9, D75, D5, 10 Ton Killer, 4TW.
Men: 4 drivers, 2 operators, 1 foreman

Contractor shimmed first low permeable soil on Acres No. 445 and screened at Klepfers pit.

Field Directives: None

Remarks: John stated that shelby Tubes and morsture density tests will be done on July 7th.

Copies: Gorrck Construction

By: Steven F. Lange

Keystone Trozze, LLC
One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

Project Gorrck C+D Landfill
Tri. of Kirkwood, NY

Site Visit

Weather: 80-85 Mostly Sunny
Date: 7 July 1997
Time: 2:00 - 4:00 pm

Work in Progress:

Equip: 5 trucks, loader, D5, 10 Ton Roller, D8, 330, water truck.
Men: 4 truck drivers, 3 operators, 1 foreman, 1 Maximum Technologies

Contractor placed first lift Low permeable soil on Acres No. 5+6
Tom Hamilton from Maximum Technologies pushed shelby tubes and ran morsture density tests.

Field Directives:

None

Remarks:

John Vanduesen stated that he is now using Maximum Technologies instead of Atlantic Testing. John was unsatisfied with Atlantic's work. Test results for Acres No. 1, 2, + 3 have not been returned to John.

Copies: Gorrck Construction

By: Steven J. Lange

Keystone Trozze, LLC
One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

GORICK LANDFILL

JUNE 9

PLACE FIRST LIFT LOW PERM SOIL ACRE #1

4 TRUCKS
LOADER
D5
ROLLER
FOREMAN

JUNE 10

PLACE FIRST LIFT LOW PERM SOIL ACRE 1 & 2

~~ATLANTIC~~
5 TRUCKS
LOADER
D5
ROLLER
FOREMAN
SCREEN @ KLEPFERS
330 EXCAVATOR
D9

JUNE 11

GRADING SUBGRADE ACRES 5+6

D5+ ROLLER

SCREEN @ KLEPFERS

225+ D8

ATLANTIC TESTING ON SITE FOR MOISTURE DENSITY AND SHELBY TUBES ACRES 1+2

JUNE 12

PLACE FIRST LIFT LOW PERM ACRE 3

D5

ROLLER

4 TRUCKS

FOREMAN

SCREEN @ KLEPFER PIT

330

D8

June 13

Screen @ Klepfer Pit D8, 330

June 16

Place First Lift Low Perm Soils on Acres 4+5

4 Trucks
Loader
D5
Roller
Foreman
Screen: D8, 330

June 17

Shim to Subgrade Acres 3+4

D8
Roller
4 Trucks
330

JUNE 18

ATLANTIC TESTING ON SITE TO PUSH MORE SHELBY TUBES ON ACRE 1, ORIGINAL SET NOT ABLE TO TEST. ALSO PUSHED TUBES ON ACRE 3

JUNE 26

ROW SCHMESS ON SITE FOR SUBGRADE STAKEOUT

KEYSTONE TROZZE, LLC
ARCHITECTS AND ENGINEERS

Kenneth D. Ellsworth, P.E. • Bernard A. Perkosky, AIA • Peter J.M. Trozze, AIA

August 7, 1997

Alfred Gorick, Jr., President
Gorick Construction Co., Inc.
27 Track Drive
Binghamton, New York 13904

Re: Gorick C & D Landfill
DEC Site No. 7-04-19

Dear Sir:

Enclosed please find "Field Reports" for our on-site review of the above project for the period from July 8, 1997 to July 31, 1997.

If you have any questions please do not hesitate to contact our office.

Very truly yours,

KEYSTONE TROZZE, LLC

Kenneth D. Ellsworth

Kenneth D. Ellsworth, P.E.
President

KDE:bjz

Enclosure

File 19:51.71962

One Brick Avenue • Binghamton, NY 13901 • Tel: (607) 722-1100 • Fax: (607) 722-2515
915 Bay Ridge Avenue • Annapolis, MD 21403 • Tel: (410) 216-9063 • Fax: (410) 216-9576

Field Report

Project: Gorrck C+D Landfill
Tri. of Kirkwood

Site visit :

Weather:

Date: 8 July 1997.

Time:

Work in Progress:

Equip: D75, D8, Roller, 5TW, 235, D9
Men: 5 drivers, 5 operators, 1 foreman

Contractor placed 1st lift low perm. soil and screened at Klepfers pit.

Field Directives: None

Remarks: None

Copies: Gorrck Construction

By: Steven J. Jones

Keystone Trozze, LLC
One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

Project: Gorrck C+D Landfill
Trr. of Kirkwood

Site Visit

Weather:

Date: 9 July 1997

Time:

Work in Progress:

Equip: D75, Roller, D5, 4Tw, 235, D9
Men: 4 Drivers, 4 operaters, 1 foreman

Contractor placed 1st 15ft low perm. soil and screened at Klepfers pit.

Field Directives:

None

Remarks:

None

Copies: Gorrck Construction

By: Steven F. Jauge

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One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

ject Gorrick C&D Landfill
Tri. of. Kirkwood, NY

Weather:

Date: 10 July 1997.

Site Visit:

Time:

Work in Progress:

Equip: D75, D5, Roller, 4TW, 330, D9.
Men: 4 Drivers, 4 operators, 1 foreman

Contractor placed 1st lift low perm. soil and screened at Klepfers pit.

Ron Schiess on site - stake out

Maxim. Tech. on site - Soil Testing Acres No. 4, 5, + 6 first lift
See Results Attached on back.

eld Directives:

None

Remarks: None

Copies: Gorrick Construction

By: Steven J. Jansz

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PERMEABILITY TEST REPORT

TEST DATA:
Specimen Height (cm): 9.99
Specimen Diameter (cm): 7.22
Dry Unit Weight (pcf): 128.0
Moisture Before Test (%): 9.2
Moisture After Test (%): 10.5
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

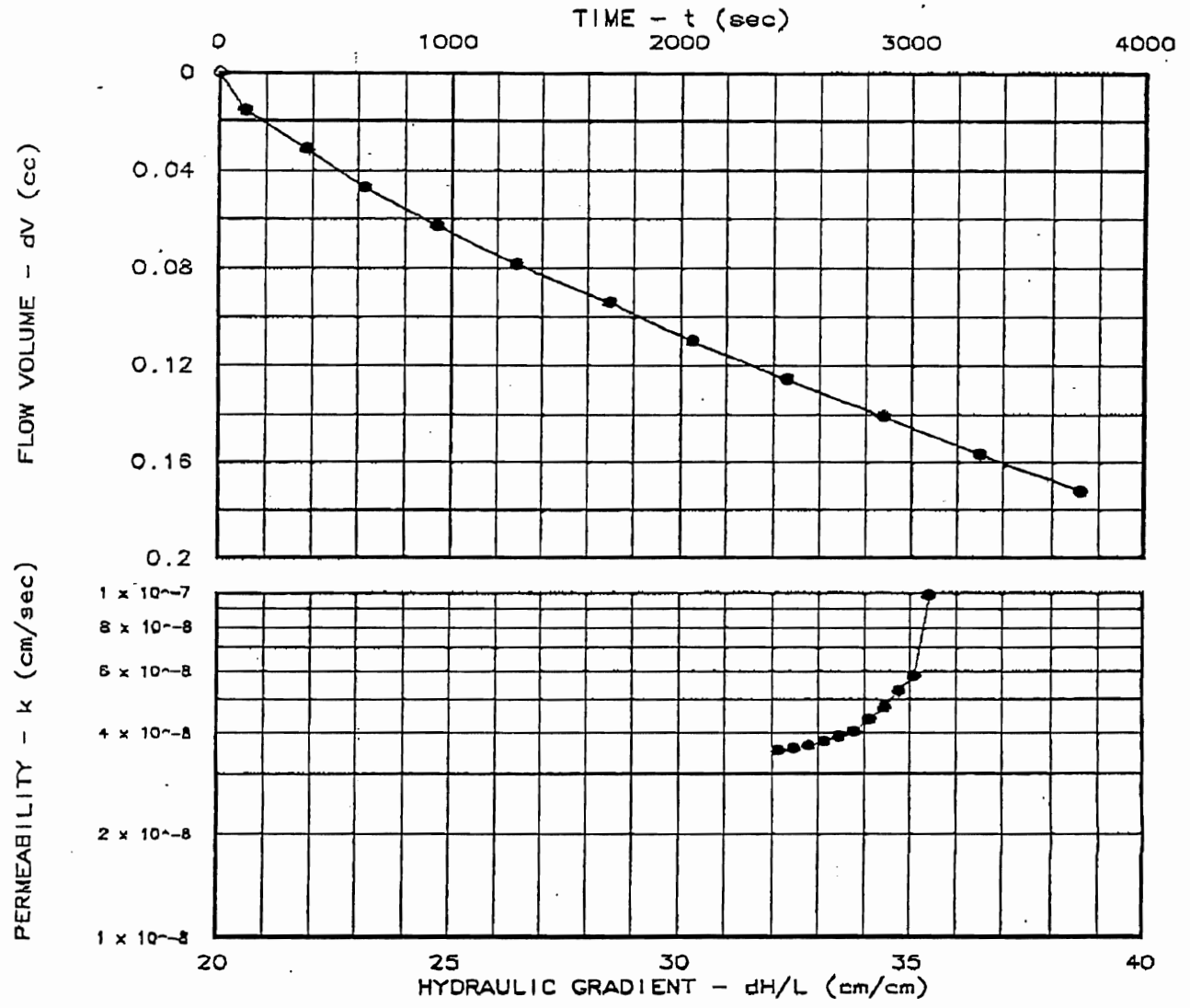
Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 3.64 x 10^-8

SAMPLE DATA:
Sample Identification: Acre 4, First Lift (12 inches)
Visual Description: Silt, Clay, Sand, and Gravel.
Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C. & D. Landfill
Location: Kirkwood, New York
Date: 07/13/97

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97348
Lab No.: 97348
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 11.56
Specimen Diameter (cm): 7.20
Dry Unit Weight (pcf): 125.9
Moisture Before Test (%): 11.0
Moisture After Test (%): 13.7
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

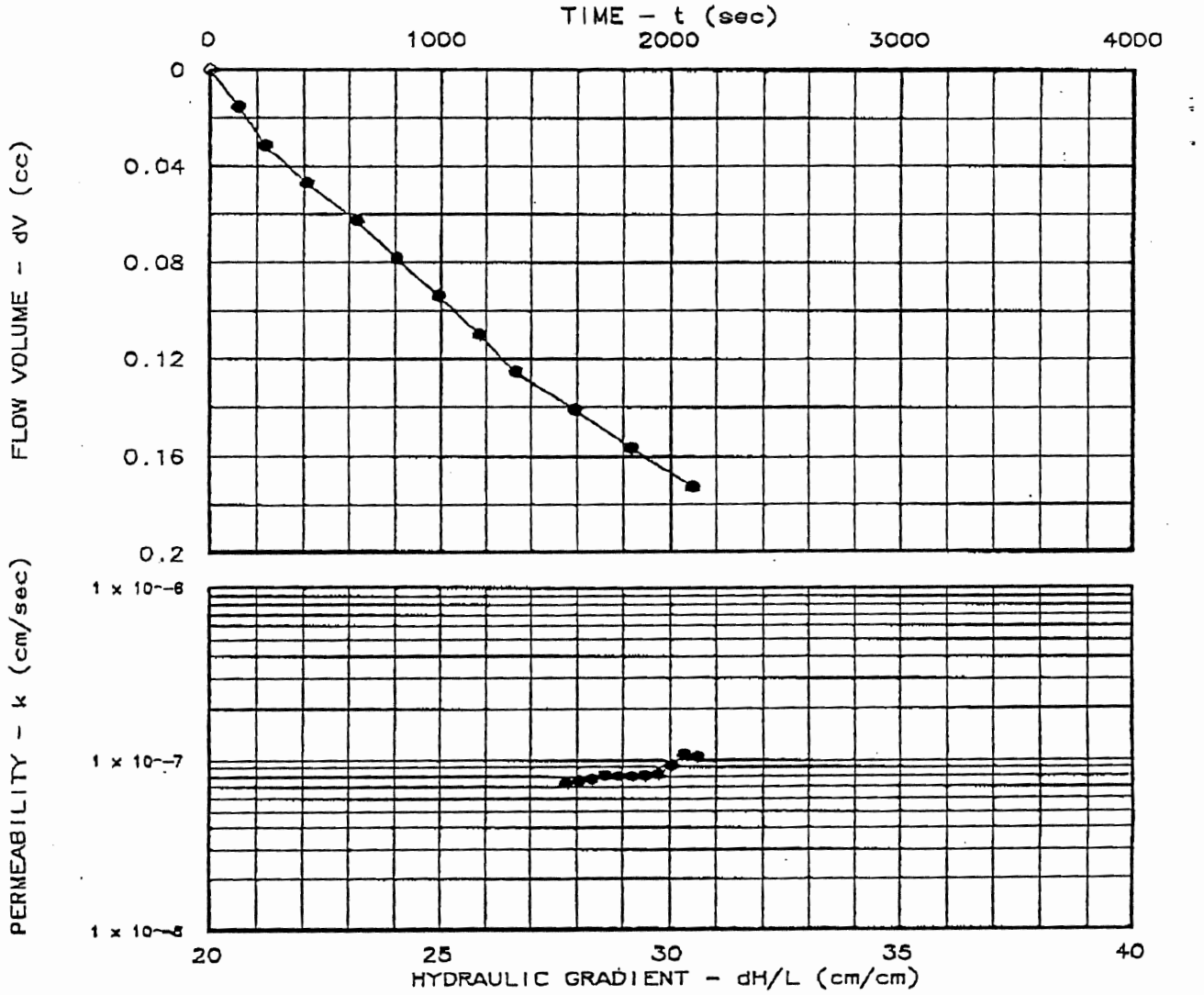
Perm. (cm/sec): 7.68 x 10^-8

SAMPLE DATA:

Sample Identification: Acre 5, First Lift (12 inches)
Visual Description: Silt, Clay, Sand, and Gravel.
Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C. & D. Landfill
Location: Kirkwood, New York
Date: 07/13/97

Project No.: 6103700670
File No.: 97349
Lab No.: 97349
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 8.01
Specimen Diameter (cm): 7.24
Dry Unit Weight (pcf): 127.2
Moisture Before Test (%): 8.8
Moisture After Test (%): 11.2
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.5

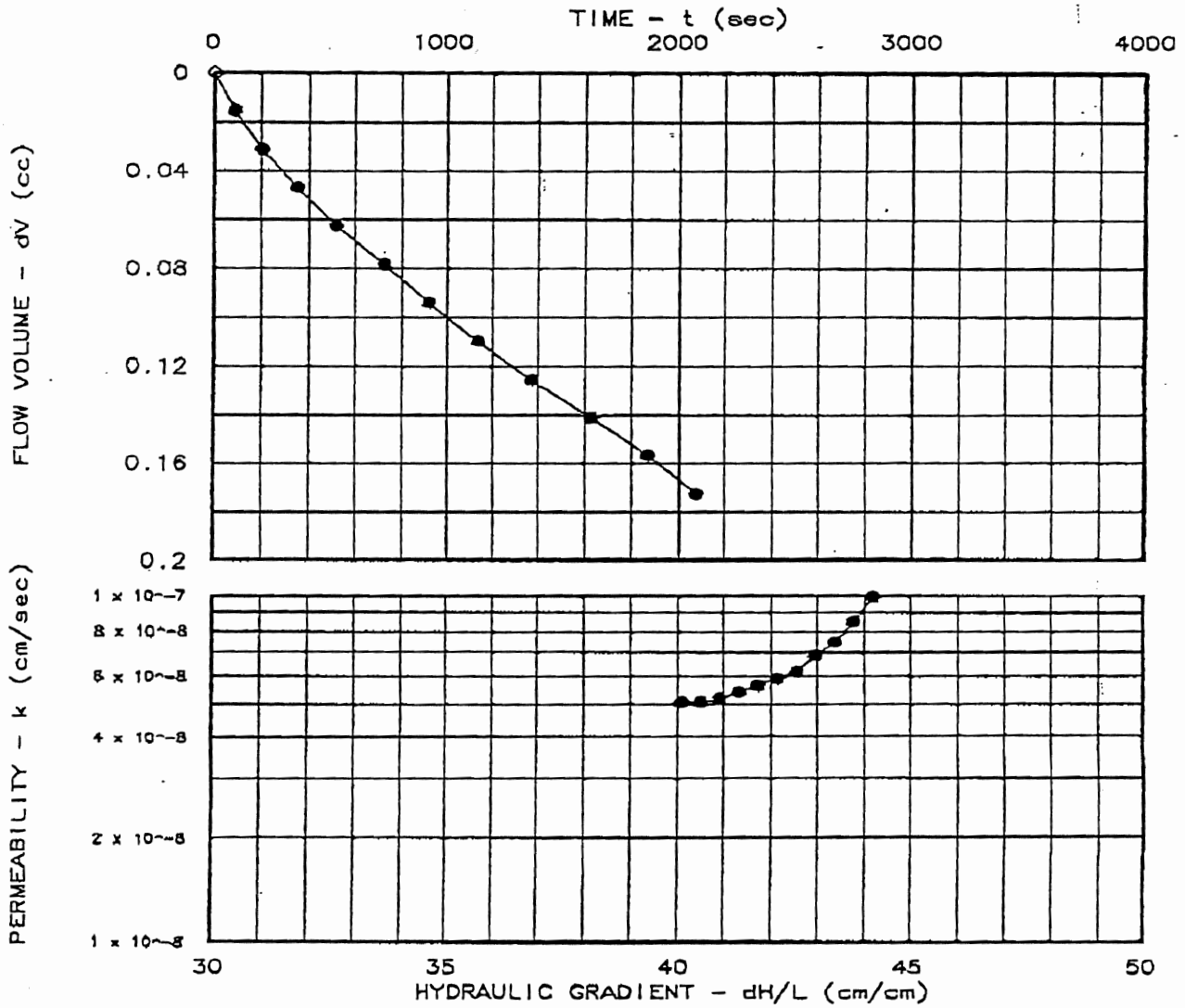
Perm. (cm/sec): 5.17 x 10^-8

SAMPLE DATA:

Sample Identification: Acre 6, First Lift (12 inches)
Visual Description: Silt, Clay, Sand, and Gravel.
Remarks:

Maximum Dry Density (pcf):
Optimum Moisture Content (%):

Percent Compaction:
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C. & D. Landfill
Location: Kirkwood, New York
Date: 07/13/97

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97350
Lab No.: 97350
Tested by: AM
Checked by: TH
Test: CV - Constant volume

Field Report

ject Gorrck C+D Landfill
Tri. of. Kirkwood

site visit

Weather:

Date: 15 July 1997

Time:

Work in Progress:

Equip! D75, Water, 4Tw, D5, Roller, 330, D9
Men! 4 drivers, 4operaters, 1 foreman

Contractor placed and left low perm. soil and screened at Klepfers pit.

Field Directives: None

Remarks: None

Copies: Gorrck Construction

By: Steven T. Jungle

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Field Report

Project: Gorick C+D Landfill
Tri. of Kirkwood

Site Visit:

Weather:

Date: 16 July 1997

Time:

Work in Progress:

Equip: D75, Water, D5, Roller, 3 TW, 330
Men: 3 Drivers, 4 operators

Contractor placed 2nd lift low perm. soil and screened at Klepfers pit.

Field Directives: None

Remarks: None

Copies: Gorick Construction

By: Edward J. [illegible]

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Field Report

Project: Gorrck C+D Landfill
Tri. of Kirkwood

Site Visit

Weather:

Date: 17 July 1997.

Time:

Work in Progress:

Equip: D6D, Roller, 3 Tw, D75, water truck
Men: 3 Drivers, 3 operators

Contractor placed 2nd lift low perm. soil

Field Directives: None

Remarks: None

Copies: Gorrck Construction

By: Steven J. Jones

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Field Report

Project: Gorick C+D Landfill
Twn of Kirkwood

Site Visit

Weather:
Date: 18 July 1997
Time:

Work in Progress:

Equip: DGD, Roller, water, D75, 3TW
Men: 3 drivers, 3 operators

Contractor placed 2nd lift low perm. soil

Field Directives:
None

Remarks: None

Copies: Gorick Construction

By: [signature]

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Field Report

Project: Gorick C+D Landfill
Trn of Kirkwood

Site Visit

Weather:

Date: 21 July 1997

Time:

Work in Progress:

Equip: D75, water, 4TW, DGD, Roller
Men: 4 Drivers, 3 operators, 1 foreman

Contractor placed 2nd lift low perm. soil

Field Directives: None

Remarks: None

Copies: Gorick Construction

By: [signature]

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Field Report

Project: Gorrick C+D Landfill
Tri. of Kirkwood, NY

Site Visit:

Weather:

Date: 22 July 1997.

Time:

Work in Progress:

Equip: D75, 4 TW, D6D, Roller
Men: 4 drivers, 3 operators, 1 Foreman

Contractor placed 2nd lift low perm. soil.

Maxim Tech. on site - soil Testing on Acre No. 1 first lift, Acre's No. 4+6 second lift. See results Attached on back.

Field Directives:

None

Remarks:

None

Copies: Gorrick Construction

By: Steven J. [illegible]

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PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 10.55
Specimen Diameter (cm): 7.21
Dry Unit Weight (pcf): 122.8
Moisture Before Test (%): 9.0
Moisture After Test (%): 12.2
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

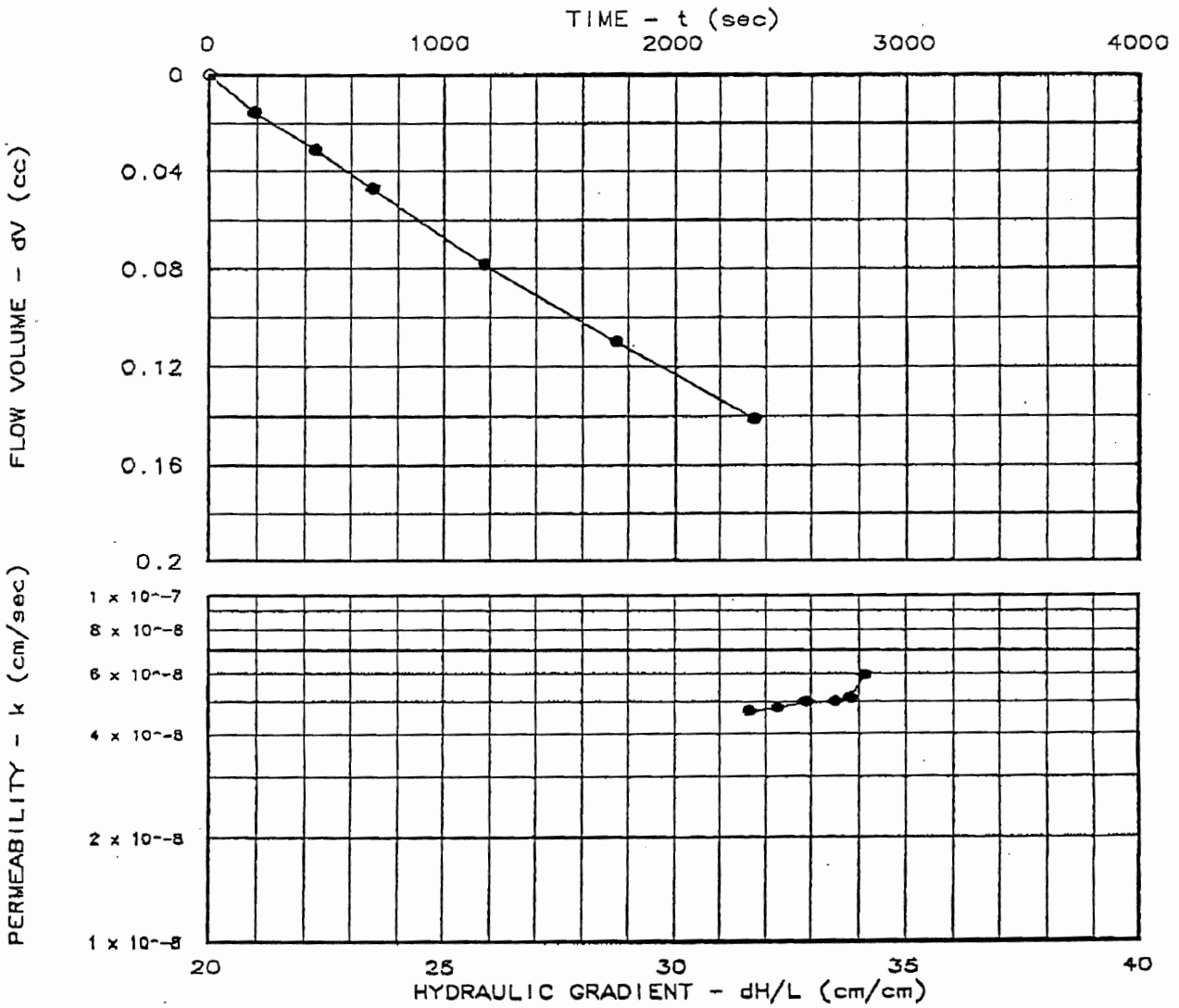
Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.8

Perm. (cm/sec): 4.84 x 10^-8

SAMPLE DATA:

Sample Identification: Acre 1, 1st Lift, 25'W of 403
Visual Description: Brown Silt, Sand, & gravel.
Remarks: 130.2 pcf @ 6.6% Nuclear

Maximum Dry Density (pcf): 134.8
Optimum Moisture Content (%): 7.1
ASTM(D698)
Percent Compaction: 91.1%
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C.& D. Landfill Closure
Location: Kirkwood, New York
Date: 07/25/97

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97383
Lab No.: 97383
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

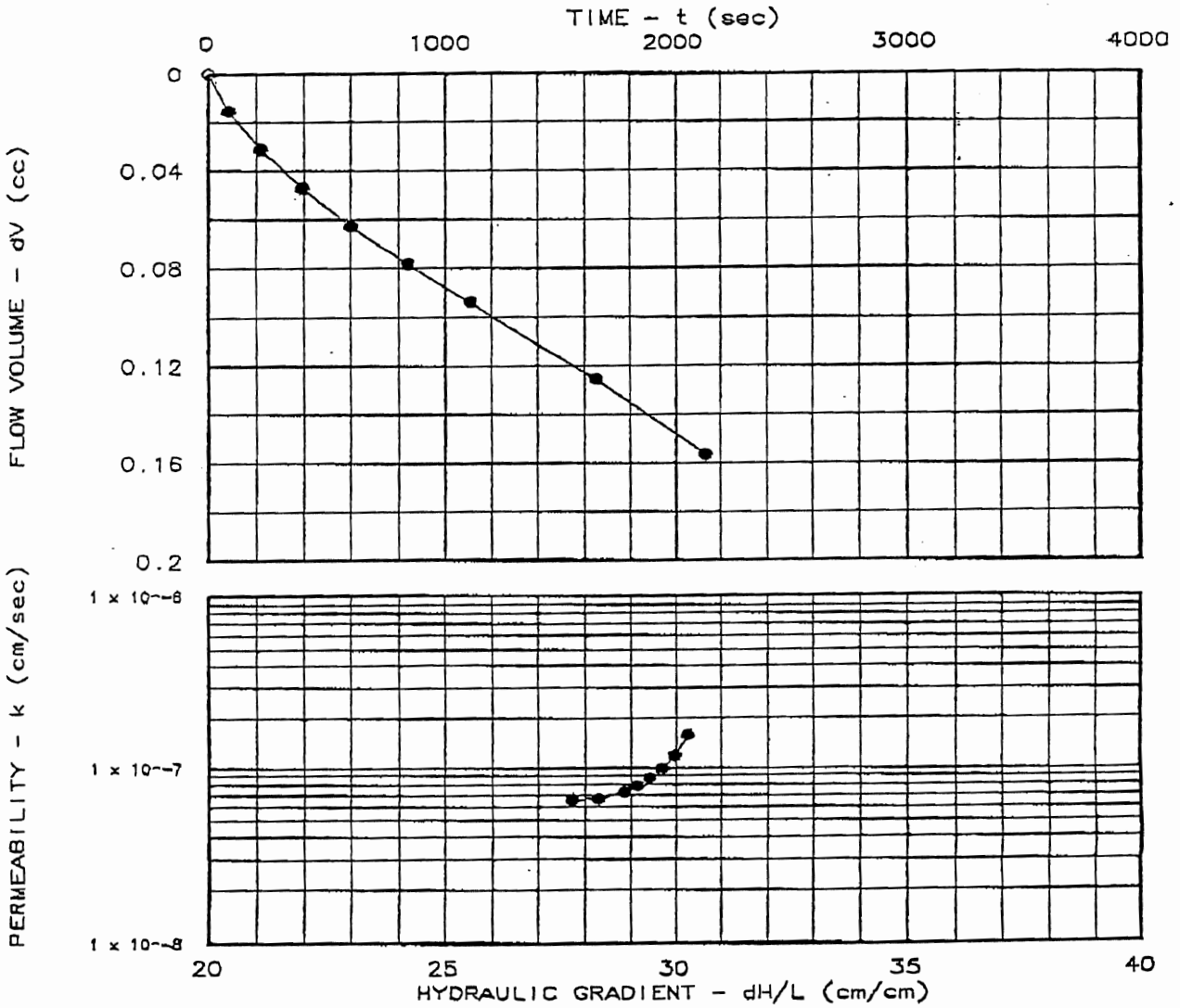
TEST DATA:
Specimen Height (cm): 11.69
Specimen Diameter (cm): 7.20
Dry Unit Weight (pcf): 117.1
Moisture Before Test (%): 13.6
Moisture After Test (%): 15.7
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 7.06 x 10^-8

SAMPLE DATA:
Sample Identification: Acre 4, 2nd Lift, 25'W of 520
Visual Description: Brown Silt, Sand, & gravel.
Remarks: 126.5 pcf @ 8.0% Nuclear

Maximum Dry Density (pcf): 134.8
Optimum Moisture Content (%): 7.1
ASTM(D698)
Percent Compaction: 86.8%
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C.& D. Landfill Closure
Location: Kirkwood, New York
Date: 07/25/97

PERMEABILITY TEST REPORT
MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97384
Lab No.: 97384
Tested by: AM
Checked by: TH
Test: CV - Constant volume

PERMEABILITY TEST REPORT

TEST DATA:

Specimen Height (cm): 11.50
Specimen Diameter (cm): 7.17
Dry Unit Weight (pcf): 116.1
Moisture Before Test (%): 10.7
Moisture After Test (%): 12.0
Run Number: 1 ● 2 ▲
Cell Pressure (psi): 95.0

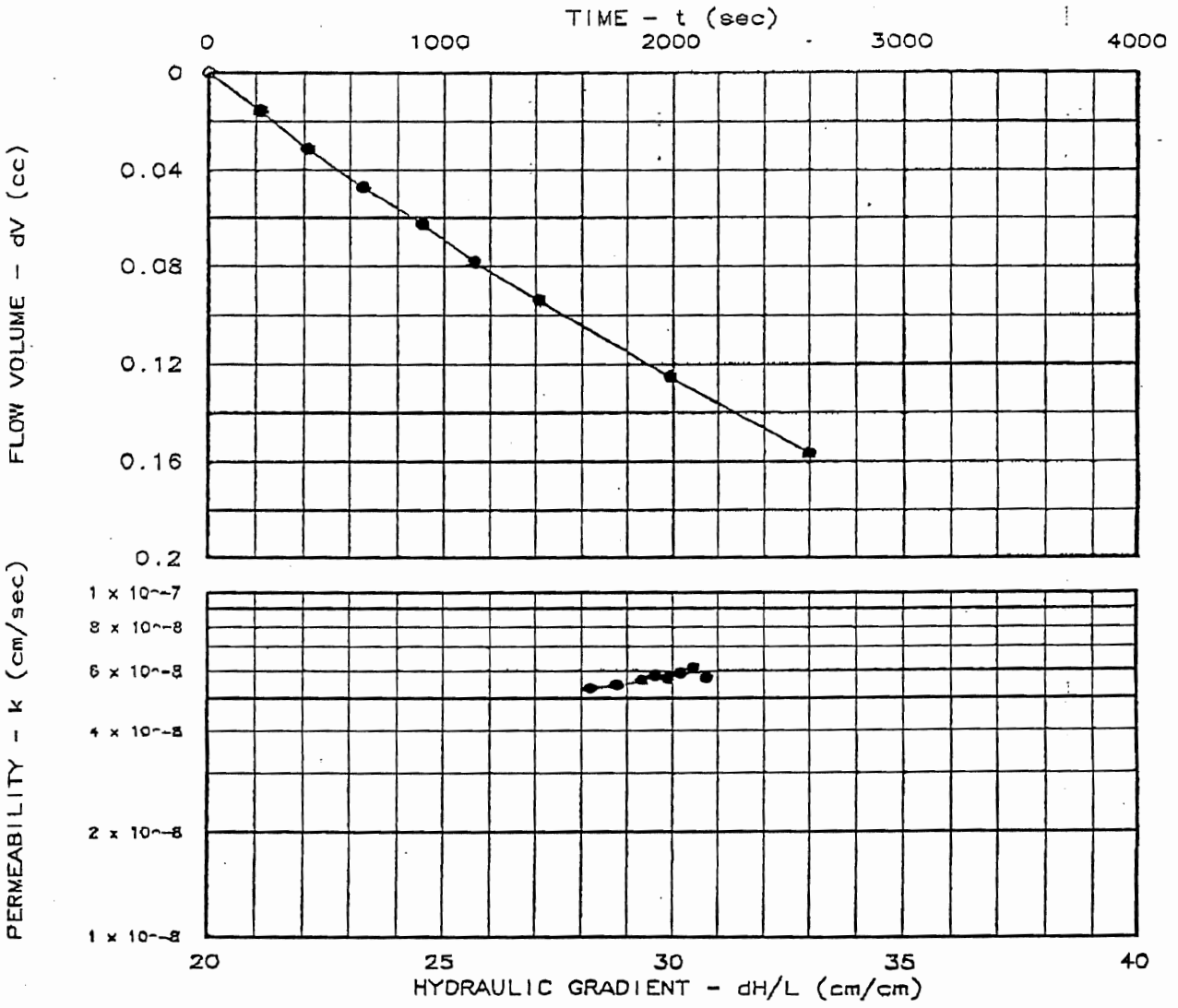
Sat. Pressure (psi): 80.0
Diff. Head (psi): 4.6

Perm. (cm/sec): 5.55 x 10^-8

SAMPLE DATA:

Sample Identification: Acre 6, 2nd Lift, 20'N & 40'E of 526
Visual Description: Brown Silt, Sand, & gravel.
Remarks: 125.3 pcf @ 8.9% Nuclear

Maximum Dry Density (pcf): 134.8
Optimum Moisture Content (%): 7.1
ASTM(D698)
Percent Compaction: 86.1%
Permeameter type: Flexible Wall
Sample type: Undisturbed



Project: Kirkwood C.& D. Landfill Closure
Location: Kirkwood, New York
Date: 07/25/97

PERMEABILITY TEST REPORT

MAXIM TECHNOLOGIES

Project No.: 6103700670
File No.: 97382
Lab No.: 97382
Tested by: AM
Checked by: TH
Test: CV - Constant volume

Field Report

Project: Gorrck C+D Landfill
Twn. of Kirkwood, NY

Site Visit :

Weather:

Date: 23 July 1997

Time:

Work in Progress:

Equip: D75, 4TW, D6, Roller
Men: 4 drivers, 3 operators

Contractor placed 2nd lift low perm. soil

Field Directives: None

Remarks: None

Copies: Gorrck Construction

By: [signature]

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Field Report

Project: Gurick C+D Construction
Trr. of Kirkwood, NY

Site Visit

Weather:

Date: 24 July 1997

Time:

Work in Progress:

Equip: D75, 2TW, D6, Roller

Men: 2 Drivers, 3 operators, 1 Foreman

Contractor placed 2nd 1ft low perm. soil

Field Directives: None

Remarks: None

Copies: Gurick Construction

By: Steven J. Trozze

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Field Report

Project: Gorick C+D Landfill
Trr. of Kirkwood, NY

Site visit

Weather:

Date: 25 July 1997

Time:

Work in Progress:

Equip: D75, 3TW, D6, D5, Roller, 330, D9
Men: 3 drivers, 4 operators, 1 foreman

Contractor placed 2nd lift low Perm. soil, fine grade slopes

Field Directives: None

Remarks: None

Copies: Gorick Construction

By: Kevin J. Trozze

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Field Report

Project: Gorick C&D Landfill
Tri. of Kirkwood, NY

Site visit

Weather:

Date: 28 July 1997

Time:

Work in Progress:

Equip: D75, Water, 6 TW, Roller, D5, DG
Men: 6 drivers, 3 operators, 1 foreman

Contractor placed 2nd lift low perm. soil, fine grade.

Maxim Technologies on site: Soil Testing

Field Directives:

None

Remarks: None

Copies: Gorick Construction

By: Steven J. Jones

Keystone Trozze, LLC
One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

ject Borrek C+D Landfill
Tri of Kirkwood, NY

Site visit w/ John Vandusen

Weather: 70-75
Date: 29 July 1997.
Time: 9:30 - 11:00 AM

Work in Progress:

Equip: D75, 3 TW, D5, DG, Roller
men: 3 drivers, 3 operators, 1 foreman
Contractor placed 2nd lift low perm. soil, fine grade slopes.

John and I verified cover (18") for low permeable soil. The followings stakes were missing and will be verified by a surveyor sometime today:
T7, T8, T10, 409, 422.
The following stakes were low and will be filled to meet requirements today:
T1, T2, T3, T11, T12, T13, T14, T15, T17, T18, 410, 411, 414, 416, 423A, 427.
The rest of the stakes meet the required 18" cover.

Field Directives:
None

Remarks:
None

Copies: Borrek Construction

By: Steven F. Jungé

Keystone Trozze, LLC
One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

Project: Gorrck C+D Landfill
Trt. of. Kirkwood, NY

Site Visit:

Weather:

Date: 30 July 1997

Time:

Work in Progress:

Equip: D75, 3TW, D5, Roller, 330, D9
Men: 3 Drivers, 4 operators, 1 foreman

Contractor placed 2nd 18ft. low Perm. soil

Field Directives:

None

Remarks: None

Copies: Gorrck Construction

By: Steven J. Jones

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Field Report

Project: Gorick C+D Landfill
Twn. of Kirkwood

Site Visit

Weather: Sunny 70-75
Date: 31 July 1997
Time: 8:00 - 9:00 AM

Work in Progress:

Equip: D5, Roller (10-Ton), 935 (back loader), [illegible] trucks
[illegible] Drivers, [illegible]

Contractor placed 2nd lift low perm. soil on Acres No. 5 + 6.

Ron Schress : stakeout

Field Directives:

None

Remarks: See Attached June Progress Report.

Copies: Gorick Construction

By: Steven J. [illegible]

Keystone Trozze, LLC
One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

PHONE (607) 775-1765
FAX (607) 775-1608

EXCAVATION
DEMOLITION
CRANE SERVICE

GORICK CONSTRUCTION CO., INC.
27 TRACK DRIVE
BINGHAMTON, NEW YORK 13904

GORICK C&D LANDFILL

JUNE PROGRESS REPORT

6/3/97	Place AGM to obtain design subgrade elevations
6/4/97	Place AGM
6/9/97	Begin capping, placing first lift low perm soil.
6/10/97	Placing first lift low perm soil. Atlantic Testing on site for IPD's and Shelby's. Screening in borrow pit.
6/11/97	Shimming to subgrade with unclassified fill. Atlantic Testing back to push tubes. Screening low perm soil
6/12/97	Placing first lift low perm soil and screen low perm soil.
6/13/97	Screen low perm soil
6/16/97	Place first lift low perm soil. Screen low perm.
6/17/97	Shim to subgrade with unclassified fill.
6/18/97	Place AGM to reach design subgrade elevations
6/19/97	Place AGM
6/24/97	Place AGM
6/26/97	Place AGM. Ron Schiess on site for field survey
6/27/97	Screen low perm soil
6/30/97	Shim to subgrade with unclassified fill and screen low perm soil.

KEYSTONE TROZZE, LLC
ARCHITECTS AND ENGINEERS

Kenneth D. Ellsworth, P.E. • Bernard A. Perkosky, AIA • Peter J.M. Trozze, AIA

September 5, 1997

Alfred Gorick, Jr., President
Gorick Construction Co., Inc.
27 Track Drive
Binghamton, New York 13904

Re: Gorick C & D Landfill
DEC Site No. 7-04-19

Dear Sir:

Enclosed please find "Field Reports" for our on-site review of the above project for the period from August 1, 1997 to August 31, 1997.

If you have any questions please do not hesitate to contact our office.

Very truly yours,

KEYSTONE TROZZE, LLC

Kenneth D. Ellsworth

Kenneth D. Ellsworth, P.E.
President

KDE:bjz

Enclosure

File 19:51.7196

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915 Bay Ridge Avenue • Annapolis, MD 21403 • Tel: (410) 216-9063 • Fax: (410) 216-9576

Field Report

Project: Gorick C+D Landfill
Twn. of Kirkwood, NY

site Visit

Weather:

Date: 1 August 1997

Time: 9:00 - 10:00

Work in Progress:

Equip: 330 exc., D9 dozer, D5 dozer, 5 trucks, 10-Ton Roller

Men: 5 drivers, 3 operators

Contractor placed 24" barrier protection layer on Area No. 6.

Field Directives: None

Remarks: None

Copies: Gorick Construction

By: Steven J. Jauge

Keystone Trozze, LLC

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Field Report

Project: Gorrick C+D Landfill
Trn. of Kirkwood, NY

Site Visit

Weather:

Date: 4 August 1997

Time: 9:00 - 10:00

Work in Progress:

Equip: 330 exc., D9 dozer, D5 dozer, 6 trucks, 10-Ton Roller

Men: 6 drivers, 3 operators

Contractor placed 24" barrier protection layer on Acre No. 5.

Field Directives:

None

Remarks: None

Copies: Gorrick Construction

By: Steven J. Lange

Keystone Trozze, LLC

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Field Report

Project: Gorrick C&D Landfill
Trv. of Kirkwood, NY

Site Visit

Weather:

Date: 5 August 1997

Time: 10:00- 11:00

Work in Progress:

Equip: 330exc., D9 dozer, D5 dozer, 5trucks, 10-Ton Roller

Men: 5 drivers, 3 operators

Contractor placed 24" barrier protection layer on Area No. 4 & 5

Field Directives:

None

Remarks: None

Copies: Gorrick Construction

By: Steven J. Jauge

Keystone Trozze, LLC

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Field Report

Project: Gorrick C+D Landfill
Twn. of Kirkwood, NY

Site visit

Weather:

Date: 6 August 1999

Time: 1:30 - 2:30

Work in Progress:

Equip: 330 exc., D9 dozer, D5 dozer, 5 trucks, 10-Ton Roller,
Manl: 5 drivers, 3 operators

Contractor placed 24" barrier protection layer on Area A-4

Field Directives: None

Remarks: None

Copies: Gorrick Construction

By: Steven J. Jauge

Keystone Trozze, LLC

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Field Report

Project: Gorick C&D Landfill
Twn of Kirkwood, NY

Weather:

Date: 7 August 1997

Time:

Work in Progress:

Equip: 330 exc., D9 dozer, D5 dozer, 5 trucks, 10 Ton Roller
Men: 5 drivers, 3 operators

Contractor placed 24" barrier protection layer on Acre No. 3

Meeting @ Gorick for Landfill. Attendees: Steve Erickson (DOT), Joe Brochek (DOT), Frank Trent (DEC), John May (DEC), Al Gorick, John Vanduesen, John Kaytor (Resident), Ken Ellsworth (Keystone Trozze), and Myself. Major issue was trucks tracking dirt onto Route 11.

Field Directives: None

Remarks: Solution to dirt problem will be sweeping with truck broom as needed and watering ≈ 100 ft back away from entrance.

Copies: Gorick Construction

By: Steven J. Tange

Keystone Trozze, LLC

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Field Report

Project Gorrick C+D Landfill
Trr. of Kirkwood, NY

Weather:

Date: 8 August 1997

Time: 2:00 - 3:00

Work in Progress:

Equip: 330 exc., D9 dozer, D5 dozer, 5 trucks, 10 ton roller

Men: 5 drivers, 3 operators

Contractor placed 24" barrier protection layer on Acres No. 2 & 3

Field Directives:

None

Remarks:

None

Copies: Gorrick Construction

By: Steven J. Jungé

Keystone Trozze, LLC

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Field Report

ject Gorrick C+D Landfill
Trv. of Kirkwood, NY

Site Visit

Weather:

Date: 11 August 1997

Time: 9:00 - 10:00

Work in Progress:

Equip: 330 exc., D5 dozer, 5# Trucks, 10 ton Roller

Men: 5 drivers, 3 operators

Contractor placed 24". barrier protection layer on acres No 2 & 3

Field Directives:

None

Remarks:

None

Copies: Gorrick Construction

By: Steven J. Jungo

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax: 607-722-2515

Field Report

Project: Gorrick C&D Landfill
Tn. of Kirkwood, NY

Site Visit

Weather:

Date: 12 August 1997

Time: 10:00 - 11:00

Work in Progress:

Equip: 330 exc., D9 dozer, D5 dozer, 5 trucks, 10 ton Roller

Men: 5 drivers, 3 operators

Contractor placed 24" barrier protection layer on Area No. 3

Field Directives:

None

Remarks: None

Copies: Gorrick Construction

By: Steven J. Jauge

Keystone Trozze, LLC

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Field Report

Project: Gorick C&D Landfill
Trv. of Kirkwood, NY

Site Visit

Weather:

Date: 14 August 1997

Time: 1100-2100

Work in Progress:

Equip: 330 exc., D5 dozer, 5 trucks, 10 Ton Roller

Men: 5 drivers, 3 operators

Contractor placed 24" barrier protection layer on Acres No. 3 & 4

Maxim Technologies was on-site testing.

Field Directives:

None

Remarks:

None

Copies: Gorick Construction

By: Steven J. Jauga

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax: 607-722-2515

Field Report

Project: Gorrick C+D Landfill
Twn. of Kirkwood, NY

Site Visit

Weather:

Date: 15 August 1997

Time: 9:00 - 10:00

Work in Progress:

Equip: 330 exc., D5 dozers, 5 trucks, 10 Ton Roller
Men: 5 drivers, 3 operators

Contractor placed 24" barrier protection layer on Hores No. 4+5

Field Directives:

None

Remarks:

None

Copies: Gorick Construction

By: Steven J. Jauge

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax: 607-722-2515

Field Report

Project: Gorrick C+D Landfill
Inv. of Kirkwood, NY

Site Visit

Weather:

Date: 18 August 1997

Time: 10:00 - 11:00

Work in Progress:

Equip: 330 exc., D5 dozer, 6 trucks, 10 ton Roller
Men: 6 drivers, 3 operators

Contractor placed 24" bank run gravel layer on area No. 5

Field Directives: None

Remarks: None

Copies: Gorrick Construction

By: Steven J. Jaeger

Keystone Trozze, LLC
One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax: 607-722-2515

Field Report

Project: Gorick C+D Landfill
Trr. of Kirkwood, NY

Site Visit

Weather:

Date: 19 August 1997

Time: 9:00 - 10:00

Work in Progress:

Equip: 330 exc., D5 dozer, 3 trucks, 10 ton Roller
Men: 5 drivers, 3 operators

Contractor placed 24" barrier protection layer on Area No. 5+6

Field Directives: None

Remarks: None

Copies: Gorick Construction

By: Steven J. Jangs

Keystone Trozze, LLC
One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax: 607-722-2515

Field Report

ject Gorick C+D Landfill
Tn. of Kirkwood, NY

Site Visit

Weather:

Date: 20 August 1997

Time: 1100 - 2:00

Work in Progress:

Equip: 330 exc., D5 dozer, 5 trucks, 10 - Ton Roller

Men: 5 drivers, 3 operators

Contractor placed 24" barrier protection layer on Area No. 6

Field Directives:

None

Remarks:

None

Copies: Gorick Construction

By: Steven J. Jaycox

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax: 607-722-2515

Field Report

Project: Gorick C&D Landfill
Twn. of Kirkwood, NY

Site Visit

Weather:

Date: 22 August 1997

Time: 10:30 - 11:30

Work in Progress:

Equip: 330 exc., D5 dozer, 5 trucks, 10-Ton Roller
Men: 5 drivers, 3 operators

Contractor placed 24" barrier protection layer on Area No. 3

Field Directives: None

Remarks: None

Copies: Gorick Construction

By: Steven J. Jaworski

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax: 607-722-2515

Field Report

Project: Gorick C&D Landfill
Twn. of Kirkwood, NY

Site Visit

Weather:

Date: 25 August 1997

Time: 1130 - 2130

Work in Progress:

Equip: 330 exc., D5 dozer, 4 trucks

Men: 4 drivers, 2 operators

Contractor placed 24" barrier protection layer on Area 1

Field Directives:

None

Remarks:

None

Copies: Gorick Construction

By: Steven J. Lange

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax: 607-722-2515

Field Report

Project Gorrick C+D Landfill
Trv. of Kirkwood, NY

Site Visit

Weather:

Date: 26 August 1997

Time: 10:30 - 11:30

Work in Progress:

Equip: 330 exc., 200 exc., 802 Rubber tired loader, 3 trucks

Men: 3 drivers, 3 operators

Contractor placed stone slope protection in 100 yr Flood Plane on Acres No. 5+6.

Field Directives:

None

Remarks:

None

Copies: Gorrick Construction

By: Steven F. Jamsc

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax: 607-722-2515

Field Report

Project Gorick C&D Landfill
Twn. of Kirkwood, NY

Site Visit

Weather:

Date: 27 August 1997

Time: 9:00 - 10:00

Work in Progress:

Equip: 330 exc., 80z rubber tired loader, 3 trucks

Men: 3 drivers, 2 operators

Contractor placed stone slope protection in 100 yr. flood plane on Area 5

Field Directives:

None

Remarks:

None

Copies: Gorick Construction

By: Steven M. Trozze

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax: 607-722-2515

Field Report

Project: Gorick C+D Landfill
Trv. of Kirkwood, NY

Site Visit

Weather:

Date: 28 August 1997

Time: 1:00 - 2:00

Work in Progress:

Equip: 330 exc., 80Z rubber tired loader, 3 trucks

Men: 3 drivers, 2 operators

Contractor placed stone slope protection in 100 yr flood plane on Areas No 3+4

Field Directives:

None

Remarks: None

Copies: Gorick Construction

By: Steven J. Jange

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

Project Gorick C+D Landfill
Trn. of Kirkwood, NY

Weather:

Date: 29 August 1997

Time: 1130-2130

Work in Progress:

Equip: 330 exc., 80Z rubber tired loader, 3 trucks

Men: 3 drivers, 2 operators

Contractor placed stone slope protection in 100 yr flood plane on Acres No. 2+3

Field Directives:

None

Remarks: None

Copies: Gorick Construction

By: Steven T. Jange

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

KEYSTONE TROZZE, LLC
ARCHITECTS AND ENGINEERS

Kenneth D. Ellsworth, P.E. • Bernard A. Perkosky, AIA • Peter J.M. Trozze, AIA

October 6, 1997

Alfred Gorick, Jr., President
Gorick Construction Co., Inc.
27 Track Drive
Binghamton, New York 13904

Re: Gorick C & D Landfill
DEC Site No. 7-04-19

Dear Sir:

Enclosed please find "Field Reports" for our on-site review of the above project for the period from September 1, 1997 to September 26, 1997.

If you have any questions please do not hesitate to contact our office.

Very truly yours,

KEYSTONE TROZZE, LLC

Kenneth D. Ellsworth

Kenneth D. Ellsworth, P.E.
President

KDE:bjz

Enclosure

File 19:51.7196

One Brick Avenue • Binghamton, NY 13901 • Tel: (607) 722-1100 • Fax: (607) 722-2515
915 Bay Ridge Avenue • Annapolis, MD 21403 • Tel: (410) 216-9063 • Fax: (410) 216-9576

Field Report

Project: Gorick C&D Landfill
Twp. of Kirkwood

Site Visit

Weather:

Date: 2 September 1997

Time: 9:30 - 10:30

Work in Progress:

Equip: 330 exc., 802 rubber tired loader, 3 trucks
Men: 3 drivers, 2 operators

Contractor placed stone slope protection in 100 yr. flood plain

Field Directives:

None

Remarks: None

Copies: Gorick Construction

By: Steven J. Jungc

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

Project Gorick C+D Landfill
Trv. of Kirkwood, NY

Site Visit

Weather:

Date: 3 September 1997

Time: 1:30 - 2:30

Work in Progress:

Equip: 330 exc., D5 dozer, 3+ trucks, 10-ton Roller

Contractor placed 24" barrier protection layer on Acres No. 1 & 2.

Field Directives:

None

Remarks: None

Copies: Gorick Construction

By: Steven J. Jungc

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

Project: Gorrek C+D Landfill
Trn. of Kirkwood, NY

Site Visit

Weather:

Date: 4 September 1997

Time: 10:30 - 11:30

Work in Progress:

Equip: 330 exc., D8 dozer, 3 trucks, 10-Ton Roller
Men: 3 drivers, 3 operators

Contractor placed 2nd lift low permeable soil on Area No. 1

Field Directives: None

Remarks: None

Copies: Gorrek Construction

By: Steven J. Lange

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

Project Gorick C+D Landfill
Irv. of Kirkwood

Site Visit

Weather:

Date: 9 September 1997

Time: 1130-2:30

Work in Progress:

Equip: 330exc, D8 dozer, 3 trucks, 10-Ton Roller

Men: 3 drivers, 3 operators

Contractor placed 24" barrier protection layer on Area No. 1

Field Directives: None

Remarks: None

Copies: Gorick Construction

By: Steven J. Jungce

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

Project: Gorick CYD Landfill
Twn. of Kirkwood

Site Visit

Weather:

Date: 10 September 1997

Time: 10:30 - 11:30

Work in Progress:

Equip: 330 exc., D8 dozer, 4 trucks, 10-Ton Roller
Men: 4 drivers, 3 operators

Contractor placed 24" barrier protection layer on Area No. 1

Equip: 330 exc. 80z rubber tired loader, 3 trucks
Men: 3 drivers, 2 operators

Contractor placed: Stone slope protection in 100 yr. Flood Plain on Area No. 4

Maximum on site Soil Testing

Field Directives:

None

Remarks: None

Copies: Gorick Construction

By: Steven T. Jauss

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

Project: Gorick C+D Landfill
Inc. of Kirkwood, NY

Site visit

Weather:

Date: Sept. 11, 1997

Time: 12:45 - 1:30

Work in Progress:

Photos Taken

No Work in Progress

Field Directives:

None

Remarks:

None

Copies: Gorick Construction

By: Steven J. Grunge

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax: 607-722-2515

Field Report

Project Gorick C+D Landfill
TN. of Kirkwood

Site Visit

Weather:

Date: 15 September 1997

Time: 2:00 - 3:30

Work in Progress:

Equip: 330 exc., D8 dozer, 4 trucks, 10-ton Roller
Men: 4 drivers, 3 operators

Contractor placed 24" barrier protection layer on Acres No. 1+3

Equip: D5 dozer, water 420, 3 trucks
Men: 3 drivers, 1 operator

Contractor placed 6" topsoil layer on Acre No. 3+4

Field Directives:

None

Remarks:

None

Copies: Gorick Construction

By: Steven J. Lange

Keystone Trozze, LLC

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Field Report

Project: Gorrick C&D Landfill
Twp. of Kirkwood

Site Visit

Weather:

Date: 16 September 1997

Time: 9:00 – 10:30

Work in Progress:

Equip: 330 exc., D8 dozer, 4 trucks, 10-Ton Roller
Men: 4 drivers, 3 operators

Contractor placed 24" barrier protection layer on Area No. 7

Equip: D5 dozer, 3 trucks, water 1/20
Men: 3 drivers, 1 operator

Contractor placed 6" topsoil layer on Area No. 5 & 6

Field Directives:

None

Remarks:

None

Copies: Gorrick Construction

By: Steven J. Jungc

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100 • Fax 607-722-2515

Field Report

Project: Gorick C+D Landfill
Trn. of Kirkwood, NY

Site Visit

Weather:

Date: 17 September 1997

Time: 1:30 - 2:30

Work in Progress:

Equip: 330 exc., D7E loader, D5 dozer, 7 trucks, 10-Ton Roller
Men: 7 drivers, 4 operators

Contractor placed 24" barrier protection layer on Area No. 2.

Ron Schress was on-site doing AS-Builts

Field Directives:

None

Remarks:

None

Copies: Gorick Construction

By: Steven J. Jungc

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100

Field Report

Project: Gorick C&D Landfill
Twp. of Kirkwood, NY
Site Visit

Weather:

Date: 18 September 1997

Time: 9100 - 10100

Work in Progress:

Equip: 330 exc., D75 loader, D5 dozer, 7 trucks, 10 - Ton Roller
Men: 7 drivers, 4 operators

Contractor placed 24" barrier protection layer on Area No. 7

Field Directives:

None

Remarks:

None

Copies: Gorick Construction

By: Steven J. Jauge

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100

Field Report

Project: Gorick C&D Landfill
Trt. of Kirkwood

Site West

Weather:

Date: 19 September 1997

Time: 10:30 - 11:30

Work in Progress:

Equip: 330 exc., D5 dozer, 5 trucks, water wgn
Men: 5 drivers, 2 operators

Contractor placed 6" topsoil layer @ Areas No. 5 & 6

Equip: 330 exc. 80 rubber tired loader, 3 trucks
Men: 3 drivers, 2 operators

Contractor placed stone slope protection in 100 yr flood plane on Areas No. 1 & 2

Field Directives:

None

Remarks:

None

Copies: Gorick Construction

By: Steven J. Jange

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100

Field Report

Project: Gorick C+D Landfill
Twn. of Kirkwood, NY

Site Visit

Weather:

Date: 22 September 1997

Time: 9:00 - 10:00

Work in Progress:

Equip: PC 300 exc., D5 dozer, 3 trucks
Men: 3 drivers, 2 operators

Contractor placed 6" topsoil layer on Acres No. 4 + 5

Field Directives:

None

Remarks: None

Copies: Gorick Construction

By: Steven R. Trozze

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100

Field Report

Project: Gorick C+D Landfill
Twn. of Kirkwood, NY
Site Visit

Weather:

Date: 23 September 1997

Time: 10:30 - 11:30

Work in Progress:

Equip: PC 300 exc, D5 dozer, 4 trucks

Men: 4 drivers, 2 operators

Contractor placed 6" topsoil [illegible] on Areas No 1 & 2

Field Directives:

None

Remarks:

None

Copies: Gorick Construction

By: Steven J. [illegible]

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100

Field Report

Project: Garrick C+D Landfill
Tn. of Kirkwood, NY

Site Visit

Weather:

Date: 24 September 1997

Time: 9:00 - 10:00

Work in Progress:

Equip: JC 300 exc., D5 dozer, 3 trucks

Men: 3 drivers, 2 operators

Contractor placed 6" topsoil layer on Area No. 1

Phase I Complete!

Field Directives:

None

Remarks: None

Copies: Garrick Construction

By: Steven F. Jange

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100

Field Report

Project: Gorrick C & D Landfill
Tn. of Kirkwood, NY

Site Visit

Weather:

Date: 26 September 1997

Time: 10:30 - 11:30

Work in Progress:

Equip: Hydro Seeder, D5 dozer, mulcher

Men: 1 operator, 4 laborers

Contractor seeded & mulched topsoil areas.

Field Directives: None

Remarks: None

Copies: Gorrick Construction

By: Steven J. Jarosz

Keystone Trozze, LLC

One Brick Avenue • Binghamton, New York 13901 • Phone: 607-722-1100

KEYSTONE TROZZE, LLC
ARCHITECTS AND ENGINEERS

Kenneth D. Ellsworth, P.E. • Bernard A. Perkosky, AIA

October 8, 1998

Gorick Construction Co., Inc.
27 Track Drive
Binghamton, New York 13904

Attn: Alfred Gorick, Jr. President

Re: Gorick C&D Landfill

Dear Al:

Enclosed please find two (2) copies of the daily reports for our on-site review of the above captioned project for the period from March 31, 1998 to October 6, 1998.

Please arrange to transmit the second copy to NYSDEC.

If you have any questions, please contact our office.

Very truly yours,

KEYSTONE TROZZE, LLC

Theresa E. Gruver

Theresa E. Gruver,
Engineering Technician

32:981008L

One Brick Avenue • Binghamton, NY 13901 • Tel: (607) 722-1100 • Fax: (607) 722-2515
468 Broadway • Saratoga Springs, NY 12866 • Tel: (518) 587-1533

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO. 2

DATE: 4.22.98
PAGE 1 OF 2

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: 2:30 To: 3:30

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
43° - PARTLY SUNNY

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR ON SITE TO CONTINUE FINE GRADING OF SUBGRADE IN AREA B:9.

MANPOWER AND EQUIPMENT USED:
- 2 - DUMP TRUCKS W/ DRIVERS
- 2 - BLUE DOZERS W/ OPERATORS
- 1 - FRONT END LOADER W/ OPERATOR
- 1 - EXCAVATOR W/ OPERATOR

VISITORS, DISCUSSIONS, MEETINGS:
NONE

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
NONE

DELAYS AND LOST TIME:
NONE

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: K.D. Ellsworth
Field Representative

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO. 1

DATE: 3/31/98

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: 9:30 To: 10:15

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
37°- CLOUDY

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR ON SITE TO BEGIN FINE GRADING OF SUB GRADE IN AREA 8:9

MANPOWER AND EQUIPMENT USED:
DUMP TRUCK 1 OPERATOR
ROLLER (SAME OPERATOR)

VISITORS, DISCUSSIONS, MEETINGS:
NONE

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
NONE

DELAYS AND LOST TIME:
NONE

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: K.D. Elsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO. 2

DATE: 4.22.98
PAGE 1 OF 2

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: 2:30 To: 3:30

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
43° - PARTLY SUNNY

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR ON SITE TO CONTINUE FINE GRADING OF SUBGRADE IN AREA B-9.

MANPOWER AND EQUIPMENT USED:
- 2 - DUMP TRUCKS W/ DRIVERS
- 2 - BULL DOZERS W/ OPERATORS
- 1 - FRONT END LOADER W/ OPERATOR
- 1 - EXCAVATOR W/ OPERATOR

VISITORS, DISCUSSIONS, MEETINGS:
NONE

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
NONE

DELAYS AND LOST TIME:
NONE

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: K. D. Ekeroth
Field Representative

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO. 1

DATE: 3/31/98

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: 9:30 To: 10:15

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
37°- CLOUDY

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR ON SITE TO REGRADE FINE GRADING OF SUB GRADE IN AREA 8:9

MANPOWER AND EQUIPMENT USED:
1 DUMP TRUCK & OPERATOR
1 ROLLER (SAME OPERATOR)

VISITORS, DISCUSSIONS, MEETINGS:
NONE

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
NONE

DELAYS AND LOST TIME:
NONE

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: K. D. Elsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO. 2

DATE: 4.22.98

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: 2:30 To: 3:30

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
43° - PARTLY SUNNY

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR ON SITE TO CONTINUE FINE GRADING OF SUBGRADE IN AREA B:9.

MANPOWER AND EQUIPMENT USED:
- 2 - DUMP TRUCKS W/ DRIVERS
- 2 - BOW DOZERS W/ OPERATORS
- 1 - FRONT END LOADER W/ OPERATOR
- 1 - EXCAVATOR W/ OPERATOR

VISITORS, DISCUSSIONS, MEETINGS:
NONE

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
NONE

DELAYS AND LOST TIME:
NONE

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: K. D. Elsworth
Field Representative

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO. 1

DATE: 3/31/98

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: 9:30 To: 10:15

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
37°- Cloudy

DESCRIPTION OF WORK PERFORMED:
Contractor on site to begin fine grading of sub grade in Area 8:9

MANPOWER AND EQUIPMENT USED:
Dump Truck & Operator
Roller (same operator)

VISITORS, DISCUSSIONS, MEETINGS:
None

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
None

DELAYS AND LOST TIME:
None

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: K.D. Elsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO. 2

DATE: 4.22.98
PAGE 1 OF 2

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: 2:30 To: 3:30

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
43° - PARTLY SUNNY

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR ON SITE TO CONTINUE FINE GRADING OF SUBGRADE IN AREA B-9.

MANPOWER AND EQUIPMENT USED:
- 2 - DUMP TRUCKS W/ DRIVERS
- 2 - BLW. DOZERS W/ OPERATORS
- 1 - FRONT END LOADER W/ OPERATOR
- 1 - EXCAVATOR W/ OPERATOR

VISITORS, DISCUSSIONS, MEETINGS:
NONE

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
NONE

DELAYS AND LOST TIME:
NONE

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: K.D. Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO. 1

DATE: 3/31/98

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: 9:30 To: 10:15

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
37°- CLOUDY

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR ON SITE TO REGRADE FINE GRADING OF SUB GRADE IN AREA 8:9

MANPOWER AND EQUIPMENT USED:
1 DUMP TRUCK & OPERATOR
1 ROLLER (SAME OPERATOR)

VISITORS, DISCUSSIONS, MEETINGS:
NONE

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
NONE

DELAYS AND LOST TIME:
NONE

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: K.D. Elsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO. 1

DATE: 3/31/98

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: 9:30 To: 10:15

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
37°- CLOUDY

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR ON SITE TO BEGIN FINE GRADING OF SUB GRADE IN AREA 8:9

MANPOWER AND EQUIPMENT USED:
DUMP TRUCK 1 OPERATOR
ROLLER (SAME OPERATOR)

VISITORS, DISCUSSIONS, MEETINGS:
NONE

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
NONE

DELAYS AND LOST TIME:
NONE

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: K.D. Elsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO. 2

DATE: 4.22.98
PAGE 1 OF 2

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: 2:30 To: 3:30

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
43° - PARTLY SUNNY

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR ON SITE TO CONTINUE FINE GRADING OF SUBGRADE IN AREA B-9.

MANPOWER AND EQUIPMENT USED:
- 2 - DUMP TRUCKS W/ DRIVERS
- 2 - BULL DOZERS W/ OPERATORS
- 1 - FRONT END LOADER W/ OPERATOR
- 1 - EXCAVATOR W/ OPERATOR

VISITORS, DISCUSSIONS, MEETINGS:
NONE

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
NONE

DELAYS AND LOST TIME:
NONE

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: K. D. Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO. 3

DATE: 5.13.98
PAGE 1 OF 2

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: 12:45 To: 1:50

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
60° F - SUNNY

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR BEGAN PLACING 1ST 12" LIFT OF LOW PERM. SOIL IN AREA B.

MANPOWER AND EQUIPMENT USED:
1 - EXCAVATOR & OPERATOR
1 - ROLLER W/ OPERATOR
1 - BULL DOZERS & OPERATOR
3 - DUMP TRUCKS & DRIVERS

VISITORS, DISCUSSIONS, MEETINGS:
NONE

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
NONE

DELAYS AND LOST TIME:
NONE

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: K. D. Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO. 4

DATE: 5.18.98

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: 9:00 To: 10:00

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
62° F - PARTLY SUNNY

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR BEGAN INSTALLATION OF GAS VENTS IN AREA 1D.

MANPOWER AND EQUIPMENT USED:
2 - EXCAVATORS W/ OPERATORS
2 - DUMP TRUCKS W/ DRIVERS
1 - LABORER

VISITORS, DISCUSSIONS, MEETINGS:
NONE

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
NONE

DELAYS AND LOST TIME:
NONE

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO [X] YES [ ] (IF YES, EXPLAIN)

Reviewed by: _____

Signed: K. D. Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO. 5

DATE: 6.2.98

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: 11:00 To: 12:00

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
68° F - SUNNY

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR CONTINUED INSTALLATION OF GAS VENTS IN AREA B.

MANPOWER AND EQUIPMENT USED:
1 - EXCAVATOR W/ OPERATOR
1 - LABORER

VISITORS, DISCUSSIONS, MEETINGS:
NONE

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
NONE

DELAYS AND LOST TIME:
NONE

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: K. D. Ekworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO. 6

DATE: 10/6/98
PAGE 1 OF 2

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: 1:30 To: 2:30

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
60°F - SUNNY TEG

DESCRIPTION OF WORK PERFORMED:

- CONTRACTOR ON SITE TO PLACE 1ST 12" LIFT OF LOW PERM. SOIL IN ACRES 11 & 12
- RON SCHLESS ON SITE COMPLETING AS BUILT SURVEY AND SUB GRADE STAKE OUT
- MAXIM TESTING ON SITE TO COMPLETE COMPACTION TESTING ON: 1ST LIFT ACRE 11 & 12 & 2ND LIFT ACRE 8 & 9. TEG

MANPOWER AND EQUIPMENT USED:
1 - BULL DOZER W/ OPERATOR
1 - ROLLER W/ OPERATOR TEG

VISITORS, DISCUSSIONS, MEETINGS:
NONE TEG

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
NONE TEG

DELAYS AND LOST TIME:
NONE TEG

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN) TEG

Reviewed by: _____

Signed: Therese E. Gruver
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 11/6/98
PAGE 1 OF 2
WEEK OF 11/2 - 11/6, 1998

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
J

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR PLACED AGM AND PLACED BARRIER PROTECTION LAYER MATERIAL IN ACRES 8 & 9.
J

MANPOWER AND EQUIPMENT USED:
J

VISITORS, DISCUSSIONS, MEETINGS:
J

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
J

DELAYS AND LOST TIME:
J

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 11/13/98

PAGE 1 OF 2

WEEK OF 11/9-13/98

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR PLACED AGM AND BARRIER PROTECTION LAYER MATERIAL

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO [X] YES [ ] (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 11/20/98

PAGE 1 OF 2

WEEK OF 11/16-20/98

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR PLACED AGM AND PLACED LOW PERMEABILITY BARRIER MATERIAL 2ND LIFT IN ACRES 10, 11, & 12.

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO [X] YES [ ] (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 11/27/98

PAGE 1 OF 2

WEEK OF 11/23-27/98

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR PLACED AGM AND LOW PERMEABILITY BARRIER SOIL MATERIAL

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:
MAXIM ON SITE 11/25/98 FOR IPD'S AND TO TAKE SHELBY TUBES

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 4/9/00

PAGE 1 OF 2

WEEK OF 4/5-9/99

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
J

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR PLACED AGM, SCREENED LOW PERMEABILITY BARRIER MATERIAL AND PLACED BARRIER PROTECTION MATERIAL IN ACRES 10, 11, AND 12. J

MANPOWER AND EQUIPMENT USED:
J

VISITORS, DISCUSSIONS, MEETINGS:
RON SCHIESS ON SITE 4/6/99 FOR RECORD SURVEY

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
J

DELAYS AND LOST TIME:
J

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 4/16/99

PAGE 1 OF 2

WEEK OF 4/12-16/99

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR SCREENED LOW PERMEABILITY MATERIAL AND PLACED BARRIER PROTECTION MATERIAL.

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:
RAIN ON 4/14/99

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 4/23/99
PAGE 1 OF 2
WEEK OF 4/19-23/99

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
J

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR SCREENED LOW PERMEABILITY MATERIAL AND PLACED BARRIER PROTECTION MATERIAL.
J

MANPOWER AND EQUIPMENT USED:
J

VISITORS, DISCUSSIONS, MEETINGS:
J

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
J

DELAYS AND LOST TIME:
J

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 4/30/99
PAGE 1 OF 2
WEEK OF 4/26-30/99

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR PLACED AGM AND BARRIER PROTECTION MATERIAL

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO [X] YES [ ] (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 5/28/00

PAGE 1 OF 2

WEEK OF 5/24/-28/99

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR PLACED AGM.

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 7/2/99

PAGE 1 OF 2

WEEK OF 6/28-7/2/99

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR PLACED AND GRADED AGM AND INSTALLED GAS VENTS.

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 7/9/99

PAGE 1 OF 2

WEEK OF 7/5-9/99

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR GRADED AGM AND INSTALLED GAS VENTS.

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 8/11/99

PAGE 1 OF 2

WEEK OF 8/9-11/99

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR PLACED AGM.

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ainsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 12/10/99

PAGE 1 OF 2

WEEK OF 12/6-10/99

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR GRADED AGM. / INSTALLED GAS VENTS.

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:
RON SCHIESS ON SITE 12/10 FOR RECORD SURVEY

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 12/17/99

WEEK OF 12/13-17/99

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR PLACED LOW PERMEABILITY BARRIER MATERIAL.

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:
RON SCHIESS ON SITE 12/14 FOR RECORD SURVEY

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO [X] YES [ ] (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 11/23/99

PAGE 1 OF 2

WEEK OF 11/23-24/99

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR PLACED LOW PERMEABILITY BARRIER MATERIAL

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:
MAXIM ON SITE 12/20 TO TAKE IPD's AND SHELBY TUBES IST LIFT OF ACRES 13, 14, and 16

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 12/30/99
PAGE 1 OF 2
WEEK OF 12/27-30/99

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR PLACED LOW PERMEABILITY BARRIER MATERIAL AND COMPLETED THE SECOND LIFT.

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:
MAXIM ON SITE 12/29 TO TAKE IPD's AND SHELBY TUBES IN ACRES 15, 17, AND 18.

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☑ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 1/7/00

PAGE 1 OF 2

WEEK OF 1/3-7/00

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:
RON SCHIESS ON SITE 1/5 FOR RECORD SURVEY OF BARRIER SOIL LAYER

MAXIM ON SITE 1/7 FOR SOIL TESTING OF ACRES 13-18.

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO [X] YES [ ] (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 3/24/00
PAGE 1 OF 2
WEEK OF 3/20-24/00

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR PLACED BARRIER PROTECTION LAYER FROM ON SITE STOCKPILE.

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO [X] YES [ ] (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 4/28/00
PAGE 1 OF 2
WEEK OF 4/24-28/00

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR HAULED IN (FROM KLEPFER'S PIT) AND COMPACTED BARRIER PROTECTION LAYER MATERIAL.

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 5/5/00

PAGE 1 OF 2

WEEK OF 5/1 – 5/00

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR FINE GRADED PROTECTION LAYER & HAULED IN AND PLACED TOPSOIL.

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:
RON SCHIESL ON SITE FOR RECORD SURVEY OF BARRIER PROTECTION LAYER

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO [X] YES [ ] (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 5/12/00

PAGE 1 OF 2

WEEK OF 5/8-12/00

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR PLACED TOPSOIL.

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 6/2/00
PAGE 1 OF 2
WEEK OF 5/29-6/2/00

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR HAULED, PLACED, AND FINE GRADED TOPSOIL.

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ainsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 4/9/00

PAGE 1 OF 2

WEEK OF 4/5-9/00

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR HAULED PLACED AND FINE GRADED TOPSOIL.

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 6/30/00
PAGE 1 OF 2
WEEK OF 6/26-30/00

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:
f

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR FINE GRADED TOPSOIL AND ADJUSTED GAS VENT RISERS.

MANPOWER AND EQUIPMENT USED:
f

VISITORS, DISCUSSIONS, MEETINGS:
f

SPECIAL INSTRUCTIONS/ACTION REQUESTED:
f

DELAYS AND LOST TIME:
f

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 7/7/00

PAGE 1 OF 2

WEEK OF 7/3-7/00

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
CONTRACTOR SEEDED AND MULCHED CAP.

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Ellsworth
Field Representative

DR

PROJECT NO.: 51.7196

KEYSTONE TROZZE, LLC
DAILY REPORT

REPORT NO.

DATE: 7/12/00
PAGE 1 OF 2

PROJECT: **Gorick C&D Landfill**
Town of Kirkwood
Broome County, New York State

PROJECT REVIEW:
Resident: [ ]
Intermittent: [X]
On Site From: _____ To: _____

Contractor: Gorick Construction

WEATHER/TEMPERATURE:

DESCRIPTION OF WORK PERFORMED:
RON SCHIESS ON SITE TO COMPLETE FINAL RECORD SURVEY OF COMPLETED CAP

MANPOWER AND EQUIPMENT USED:

VISITORS, DISCUSSIONS, MEETINGS:

SPECIAL INSTRUCTIONS/ACTION REQUESTED:

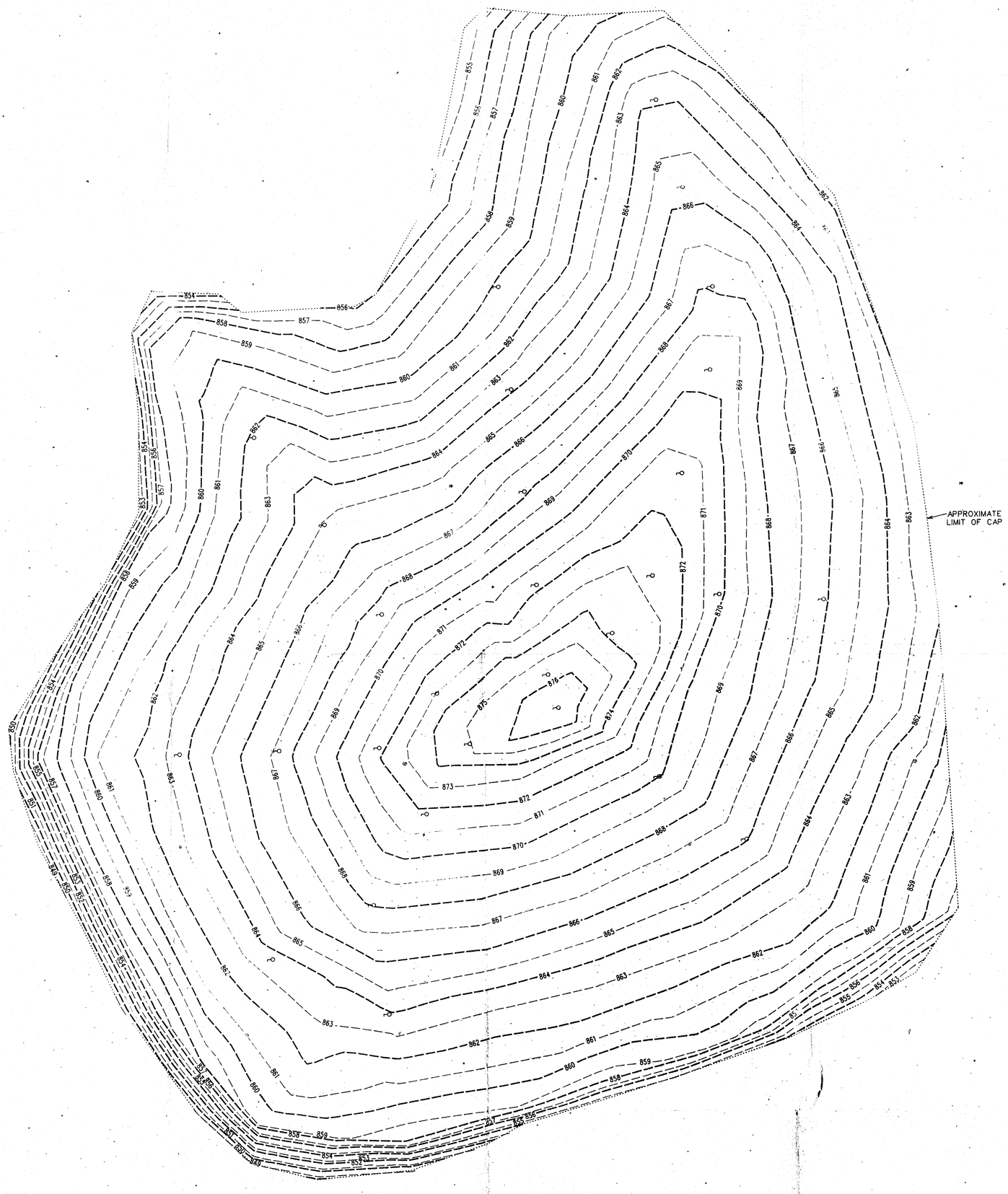
DELAYS AND LOST TIME:

ACCIDENTS:
REPORTED TO OR OBSERVED BY FIELD REPRESENTATIVE: NO ☒ YES ☐ (IF YES, EXPLAIN)

Reviewed by: _____

Signed: Ken Elsworth
Field Representative

APPENDIX H
AS-BUILT RECORD SURVEY



LEGEND

-o- GAS VENT

CONTOUR MAP

GORICK CONSTRUCTION
C & D LANDFILL CLOSURE

TOWN OF KIRKWOOD

BROOME COUNTY, NEW YORK

SCALE: 1 INCH = 50 FEET

AUGUST 16, 2000

Only copies marked with the Land Surveyor's embossed seal and signed in red ink shall be considered true valid copies

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N.Y. LIC. No. 049554

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