



**TOWN OF CLARKSTOWN
DEPARTMENT OF ENVIRONMENTAL CONTROL**

**CLARKSTOWN SANITARY LANDFILL REMEDIATION
AND LANDFILL CAPPING
CONTRACT NO. 34-1996**

CONSTRUCTION CERTIFICATION REPORT

**APPENDIX H: TOPSOIL AND VEGETATION
LAYER**

April 14, 2000

Prepared for:

Town of Clarkstown
Department of Environmental Control
10 Maple Avenue
New City, NY 10956

Submitted to:

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

Prepared by:

Roy F. Weston of New York, Inc.
130 West 30th Street
New York, NY 10001



APPENDIX H: TOPSOIL AND VEGETATION LAYER

Appendix H1:	Analytical Laboratory Test Results
Appendix H2:	Chemical Analysis Laboratory Test Reports
Appendix H3:	Seed Mixture and Certificates of Compliance

APPENDIX H1:

Analytical Laboratory Test Results



M&T/NAMOW/TCL □ J.V.

GRADATION TESTING OF SOIL

CLIENT: Roy F. Weston, Inc., Sutton Park
PROJECT: Clarkstown Landfill
SAMPLE ID: TS-03 (Source: HS-SV Mix, insitu)
SAMPLED BY: Client
PICKUP/DEL BY: Client

LAB#: FOB-001
REPORT#: MC-73
DATE DELIVERED: 8/29/97
DATE TESTED: 9/03/97

(A) GRADATION TEST RESULTS (ASTM D422 & ASTM D1140)

Sieve Size	Percent Passing (%)	Specifications	Sieve Size	Percent Passing (%)	Specifications
2-1/2"			#10	69.8	
2"			#16	64.8	
1-1/2"	100.0		#20	61.6	
1"	91.2		#30	56.7	
3/4"	89.1		#40	50.6	
1/2"	86.1		#50	44.4	
3/8"	83.2		#60	40.1	
1/4"	78.9		#80	33.0	
#4	76.4		#100	28.6	
#8	71.2		#200	16.2	

(B) MOISTURE (ASTM D2216): 27.3%

(C) SOIL CLASSIFICATION (ASTM D2487): SM - Silty sand with gravel

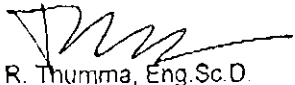
(D) SOIL DESCRIPTION: c-m-f SAND, some Gravel, little Silt

COLOR: Black;

ODOR: None;

CONTAMINATION: None

TESTWELL CRAIG LABORATORIES, INC.


Kaspal R. Thumma, Eng.Sc.D.
Laboratory Manager
KRT/mp
cc: rfwoy 1, file 1, bill 1/mp



M&T/NAMOW/TCL □ J.V.

LIQUID LIMIT, PLASTIC LIMIT, PH AND ORGANIC CONTENT OF SOILS

Client: Roy F. Weston
Project: Clarkstown Landfill
Sample ID: Indicated Below
Sampled By: Client
Picked up/Delivered by: Client

Lab #: FOB-001
Report #: MC-75
Date Pick up/del: 8/29/97
Date Tested: 9/04/97

(A) LIQUID LIMIT & PLASTIC LIMIT TEST RESULTS (ASTM D4318)

Soil Sample No.	Liquid Limit (wt %)	Plastic Limit, (wt %)	Plastic Index
CS-07 Source: Hyland Insitu	15.8	NP	0
TS-03 Source: HS-SV mix, insitu	31.5	NP	0

NOTE: NP indicates that the soil is non-plastic since 1/8" diameter thread could not be rolled at any moisture content.

(B) ORGANIC CONTENT (ASTM D 2974)

Soil Sample No.	Organic Content (wt.%)
CS-07 (Hyland Insitu)	1.63
TS-03 (HS-SV Mix, insitu)	6.8

(C) PH OF SOIL (ASTM D 4972)

Soil Sample No.	Organic Content (wt. %)
TS-03 (HS-SV Mix, Insitu)	6.8

TESTWELL CRAIG LABORATORIES

Kaspal R. Thumma, Eng.Sc.D., P.E.
Laboratory Manager
KRT\mp
cc: rfwony 1, file 1, bill 1/mp

**M&T/NAMOW/TCL-J.V.****GRADATION TESTING OF SOIL**

CLIENT: Roy F. Weston, Inc., Sutton Park

PROJECT: Clarkstown Landfill

SAMPLE ID: TS-05

SOURCE: Insitu CH-6

SAMPLED BY: Client

PICKUP/DEL BY: Client

LAB#: FOB-001

REPORT#: MC-105

DATE DELIVERED: 10/14/97

DATE TESTED: 10/17/97

Page 1 of 2

(A) GRADATION TEST RESULTS (ASTM D422 & ASTM D1140)

Sieve Size	Percent Passing (%)	Specifications	Sieve Size	Percent Passing (%)	Specifications
2-1/2"			#10	71.3	
2"			#16	65.6	
1-1/2"	100.0		#20	62.6	
1"	98.1		#30	57.8	
3/4"	92.2		#40	51.3	
1/2"	89.2		#50	44.2	
3/8"	86.4		#60	39.0	
1/4"	82.1		#80	31.1	
#4	79.5		#100	26.5	
#8	73.0		#200	14.9	

The gradation curve is shown in Figure 1

COLOR: Black; ODOR: None;

CONTAMINATION: None

TESTWELL CRAIG LABORATORIES, INC.

Kaspal R. Thumma, Eng.Sc.D.

Laboratory Manager

KRT/mp

cc: rfwoy 1, file 1, bill 1/mp

Corporate Headquarters □ 47 Hudson Street □ Ossining, N.Y. 10562 □ Tel: 914-762-9000 □ Fax: 914-762-9638

Received: 10/20/97 02:10:16 From: 9147629638

M&T/NAMOW/TCL-J.V.

Roy F. Weston, Inc., Sutton Park
Lab #: FOB-001 Rpt #: MC-105
Page 2 of 2

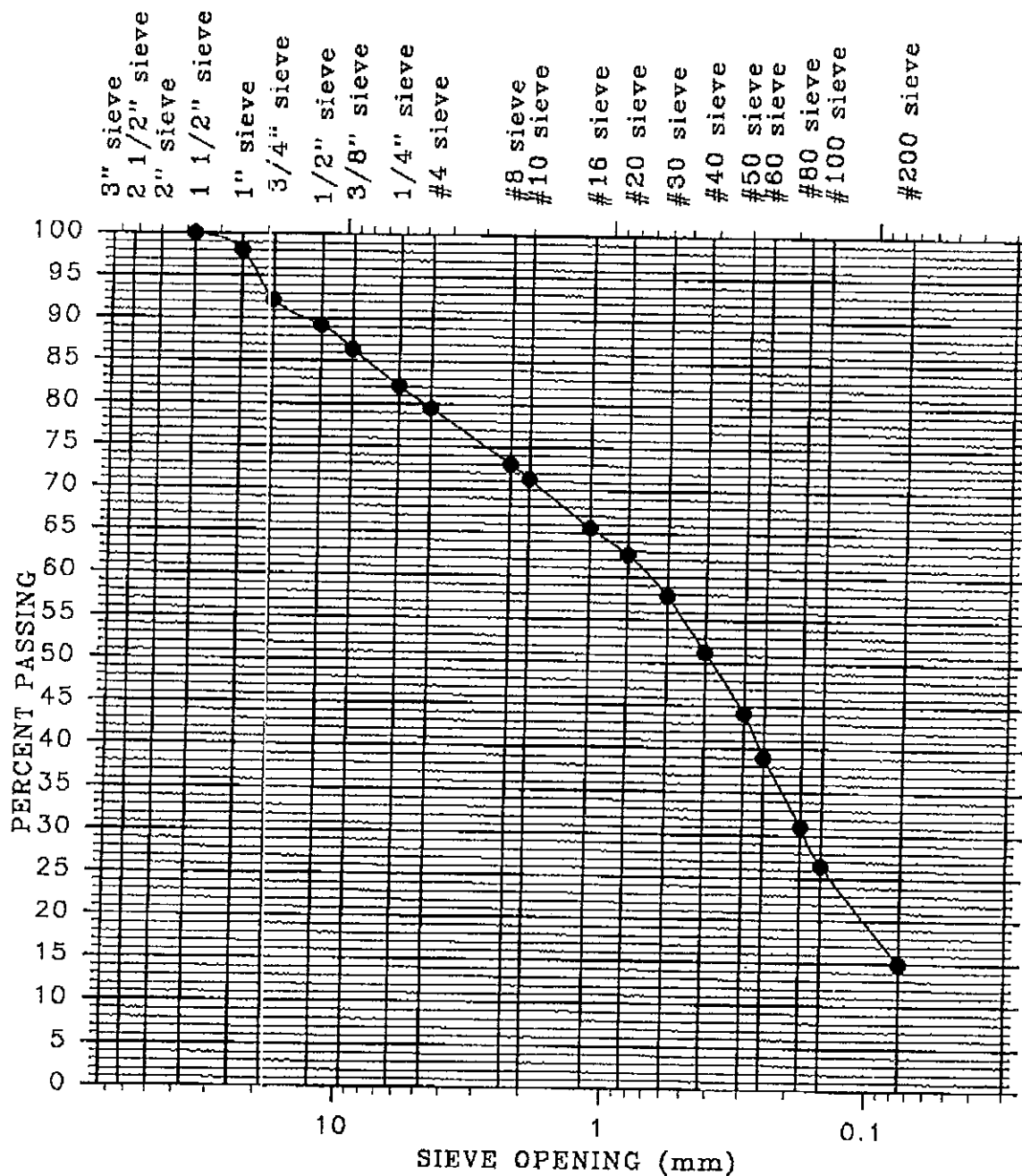


Figure 1: Particle Size Gradation Curve of Soil No. TS-05

**M&T/NAMOW/TCL J.V.****PH AND ORGANIC CONTENT OF SOILS**

Client: Roy F. Weston
Project: Clarkstown Landfill
Sampled By: Client
Picked up/Delivered by: Client

Lab #: FOB-001
Report #: MC-107
Date Pick up/del: 10/14/97
Date Tested: 10/17/97

(A) ORGANIC CONTENT(ASTM D 2974)

Soil Sample No.	Organic Content (wt.%)
TS-04 (Source: Insitu SB-3)	6.8
TS-05 (Source: Insitu CH-6)	5.7

(B) PH OF SOIL (ASTM D 4972)

Soil Sample No.	PH
TS-04 (Source: Insitu SB-3)	7.5
TS-05 (Source: Insitu CH-6)	7.6

TESTWELL CRAIG LABORATORIES

Kaspal R. Thumma, Eng.Sc.D., P.E.
Laboratory Manager
KRT:mp
cc: rfwoy 1, file 1, bill 1/mp

**M&T/NAMOW/TCL □ J.V.****GRADATION TESTING OF SOIL**

CLIENT: Roy F. Weston, Inc., Sutton Park
PROJECT: Clarkstown Landfill
SAMPLE ID: TS-04
SOURCE: Insitu SB-3
SAMPLED BY: Client
PICKUP/DEL BY: Client

LAB#: FOB-001
REPORT#: MC-106
DATE DELIVERED: 10/14/97
DATE TESTED: 10/17/97

Page 1 of 2

(A) GRADATION TEST RESULTS (ASTM D422 & ASTM D1140)

Sieve Size	Percent Passing (%)	Specifications	Sieve Size	Percent Passing (%)	Specifications
2-1/2"			#10	69.2	
2"			#16	65.1	
1-1/2"	100.0		#20	62.7	
1"	91.6		#30	58.7	
3/4"	89.5		#40	53.0	
1/2"	84.9		#50	46.4	
3/8"	82.0		#60	41.5	
1/4"	78.1		#80	33.4	
#4	75.7		#100	28.6	
#8	70.4		#200	16.3	

The gradation curve is shown in Figure 1

COLOR: Black; ODOR: None;

CONTAMINATION: None

TESTWELL CRAIG LABORATORIES, INC.

Kaspal R. Thumma, Eng.Sc.D.
Laboratory Manager
KRT/mp
cc: rfwoy 1, file 1, bill 1/mp

Corporate Headquarters □ 47 Hudson Street □ Ossining, N.Y. 10562 □ Tel: 914-762-9000 □ Fax: 914-762-9638

Received: 10/20/97 02:10:16 From: 9147629638

M&T/NAMOW/TCL-J.V.

Roy F. Weston, Inc., Sulton Park
Lab #: FOB-001 Rpt #: MC-106
Page 2 of 2

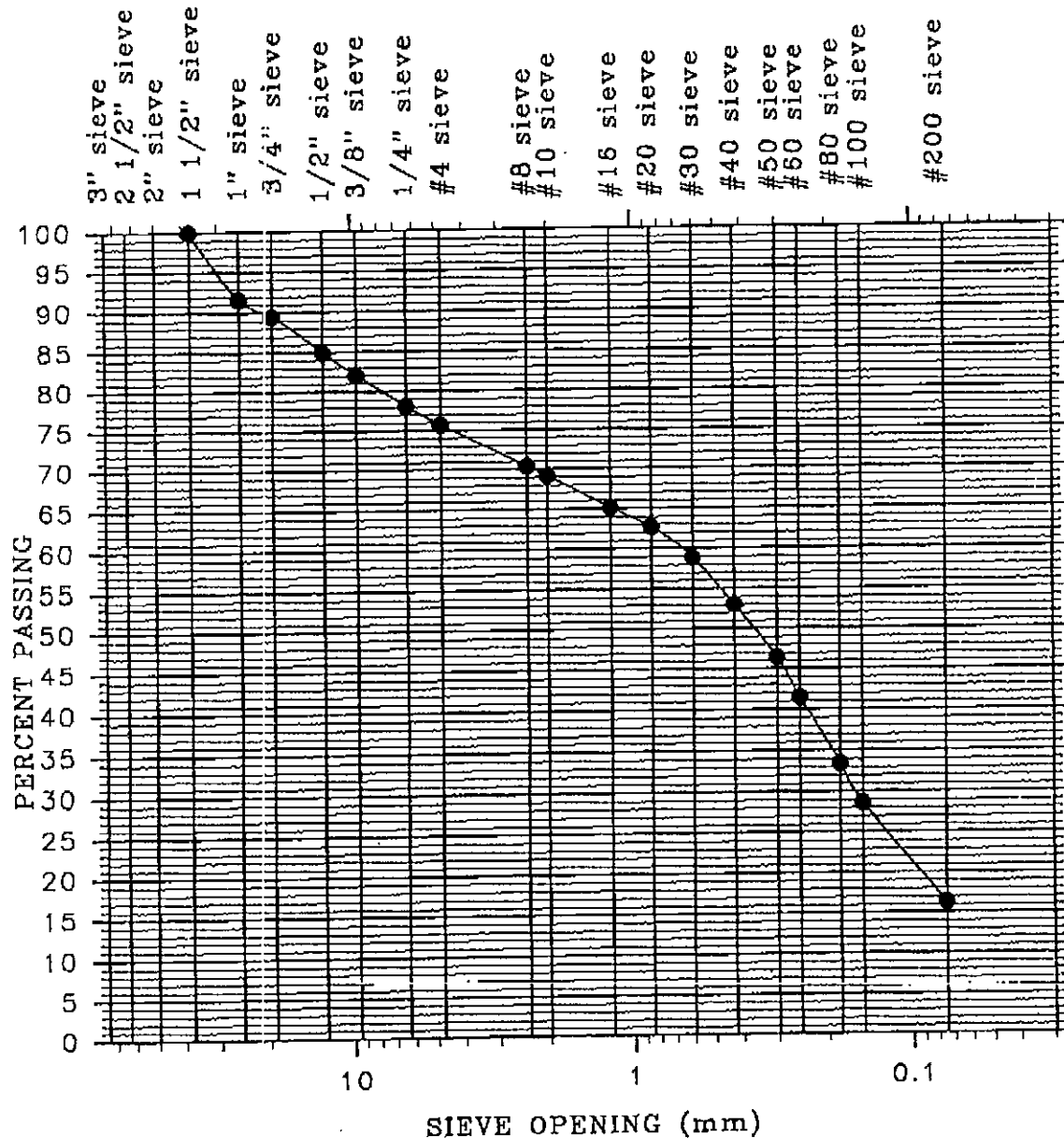


Figure 1: Particle Size Gradation Curve of Soil No. TS-04

**M&T/NAMOW/TCL J.V.****PH AND ORGANIC CONTENT OF SOILS**

Client: Roy F. Weston
Project: Clarkstown Landfill
Sampled By: Client
Picked up/Delivered by: Client

Lab #: FOB-001
Report #: MC-107
Date Pick up/del: 10/14/97
Date Tested: 10/17/97

(A) ORGANIC CONTENT(ASTM D 2974)

Soil Sample No.	Organic Content (wt.%)
TS-04 (Source: Insitu SB-3)	6.8
TS-05 (Source: Insitu CH-6)	5.7

(B) PH OF SOIL (ASTM D 4972)

Soil Sample No.	PH
TS-04 (Source: Insitu SB-3)	7.5
TS-05 (Source: Insitu CH-6)	7.6

TESTWELL CRAIG LABORATORIES

Kaspal R. Thumma, Eng.Sc.D., P.E.
Laboratory Manager
KRT:mp
cc: rfwony 1, file 1, bill 1/mp

Corporate Headquarters □ 47 Hudson Street □ Ossining, N.Y. 10562 □ Tel: 914-762-9000 □ Fax: 914-762-9638

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M&T/NAMOW/TCL □ J.V.

GRADATION TESTING OF SOIL

CLIENT: Roy F. Weston of New York
PROJECT: Clarkstown Landfill Cap Site
SAMPLE ID: TS-06
SAMPLE SOURCE: CH-7 Area Insitu
SAMPLED BY: Client
PICKUP/DEL BY: Client

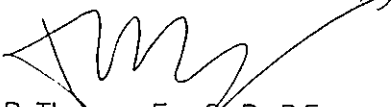
LAB#: FOB-001
REPORT#: MC-122
DATE PICKUP/DEL: 11/07/97
DATE TESTED: 11/12/97

(A) GRADATION TEST RESULTS (ASTM D422 & ASTM D1140)

Sieve Size	Percent Passing	Specifications*	Sieve Size	Percent Passing	Specifications*	Sieve Size	Percent Passing	Specifications*
3"			3/8"	79.9		#30	52.8	
2 1/2"			1/4"	75.2		#40	46.3	
2"			#4	72.0		#50	39.5	
1 1/2"	100.0		#8	66.6		#60	34.6	
1"	94.2		#10	65.2		#80	26.8	
3/4"	89.3		#16	60.5		#100	22.3	
1/2"	84.1		#20	57.8		#200	12.0	

(B) SOIL DESCRIPTION: m-f SAND, some m Gravel, little Silt
COLOR: Gray; ODOR: None; CONTAMINATION: None

TESTWELL CRAIG LABORATORIES, INC.


Kaspal R. Thumma, Eng.Sc.D., P.E.
Laboratory Manager
KRT/mp



M&T/NAMOW/TCL J.V.

LIQUID LIMIT AND PLASTIC LIMIT, PH AND ORGANIC CONTENT OF SOIL

Client: Roy F. Weston
Project: Clarkstown Landfill
Sample ID: Indicated Below
Sampled By: Client
Picked up/Delivered by: Client

Lab #: FOB-001
Report#: MC-123
Date Pick up/del: 11/07/97
Date Tested: 11/12/97

(A) LIQUID LIMIT & PLASTIC LIMIT TEST RESULTS (ASTM D4318)

Soil Sample No.	Liquid Limit (wt %)	Plastic Limit, (wt %)	Plastic Index
SF-33 Source: HSL Insitu	17.8	17.31	0.49
TS-06			

(B) ORGANIC CONTENT TEST RESULTS (ASTM D2974)

Soil Sample No.	Organic Content (wt.%)
TS-06 (CH7 Area Insitu)	3.7

(C) RESULTS OF PH OF SOIL (ASTM D4972)

Soil Sample No.	PH
TS-06 (CH7 Area Insitu)	7.3

TESTWELL CRAIG LABORATORIES, INC.

Kaspal R. Thumma, Eng.Sc.D., P.E.
Laboratory Manager
KRT\mp
cc: rfwoy 1, file 1, bill 1/mp



M&T/NAMOW/TCL J.V.

TESTING OF SOIL FOR GRADATION, ORGANIC CONTENT & PH

CLIENT: Roy F. Weston of New York
PROJECT: Clarkstown Landfill Cap Site
SAMPLE ID: TS-07
SOURCE: Sample Bag
SAMPLED BY: Client
PICKUP/DEL BY: Client

LAB#: FOB-00
REPORT#: MC-13
DATE PICKUP/DEL: 1/22/9
DATE TESTED: 1/23/9

(A) GRADATION TEST RESULTS (ASTM D422 & ASTM D1140)

Sieve Size	Percent Passing	Specifications*	Sieve Size	Percent Passing	Specifications*	Sieve Size	Percent Passing	Specifications*
3"			3/8"	97.8		#30	70.9	
2 1/2"			1/4"	95.6		#40	61.3	
2"			#4	94.0		#50	50.5	
1 1/2"			#8	88.8		#60	42.5	
1"	100.0		#10	87.4		#80	31.4	
3/4"	98.5		#16	81.5		#100	25.7	
1/2"	98.5		#20	77.7		#200	13.3	

The gradation curve is shown in Figure 1

(B) ORGANIC CONTENT (ASTM D2974): 6.9%

(C) PH (ASTM D 4972): 7.5

M & T / NAMOW / TCL / J.V.

Kaspal R. Thumma, Eng.Sc.D., P.E.
Laboratory Manager
KRT/mp

M&T/NAMOW/TCL-J.V.

Roy F. Weston of NY
Lab #: FO8-001 Rpt #: MC-136
Page 2 of 2

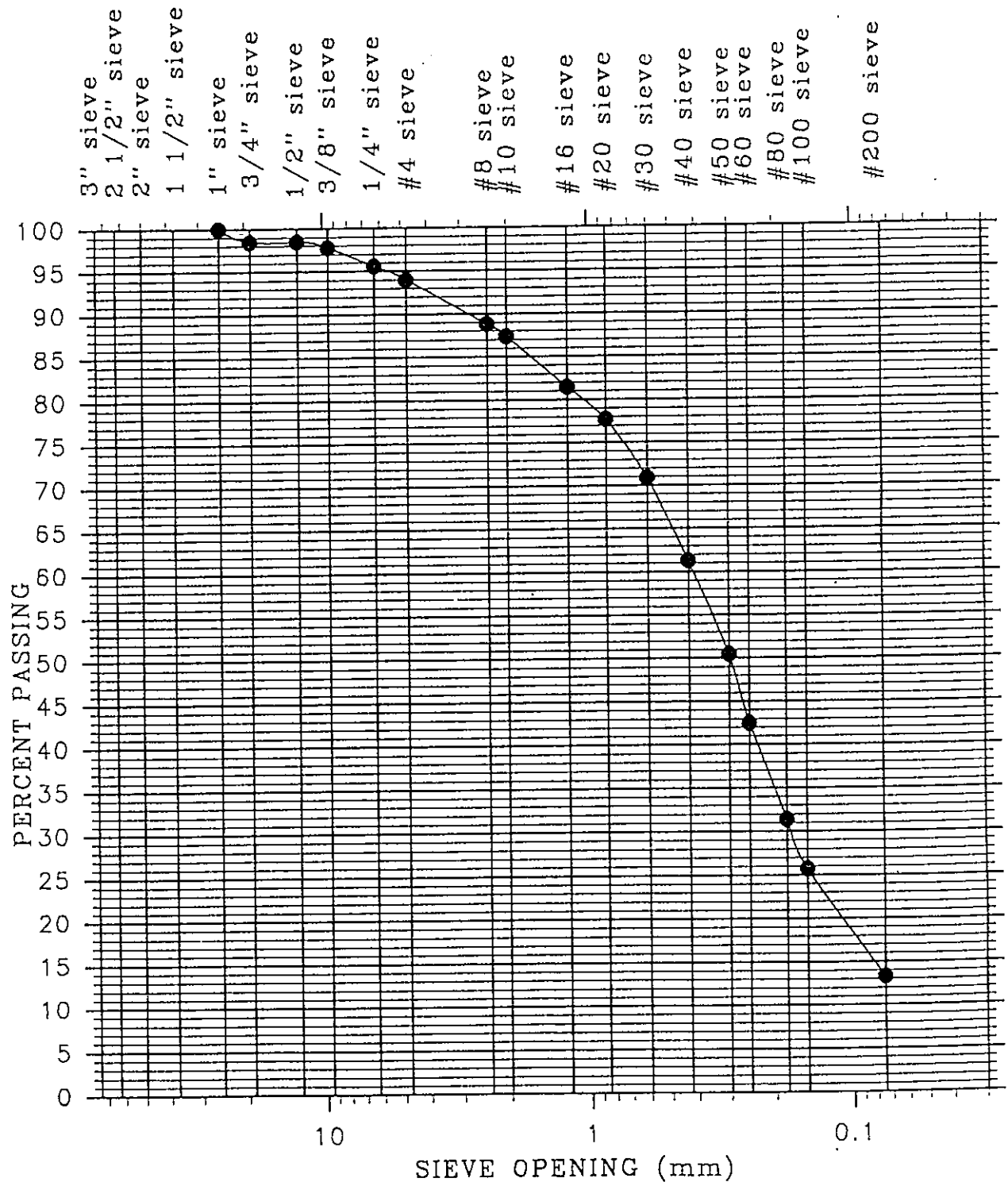


Figure 1: Particle Size Gradation Curve of Soil No. TS-07



M&T/NAMOW/TCL J.V.

TO: Roy F. Weston of NY Clarkstown Office	Lab #: FOB-001
166 Route 303	Date: 08/26/1998
West Nyack, NY 10994	Attention: Bruce La Penta
	Project: Clarkstown Landfill Cap Site

We are sending you: ☒ Attached ☐ Under separate cover via _____ the following items:

☒ Lab Reports ☐ Specifications ☐ Samples ☐ Bldg. Dept. Forms ☐ Copy of Letter
☐ Design Mix ☐ Other _____

Copies	Date	No.	Description
1	-	MC-164	Gradation and Organic Content Testing of Soil
1		MC-165	Gradation and Standard Proctor Compaction Testing of Soil
1		MC-166	Gradation and Standard Proctor Compaction Testing of Soil

These are transmitted as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit ___ copies for approval
☒ For your use ☐ Approved as noted ☐ Submit ___ copies for distribution
☐ As requested ☐ Returned for corrections ☐ Return ___ corrected prints
☐ For review and comment: _____

Remarks: _____

cc: rfwoy 1, rfwi 1, file 1, bill 1/ajf

Signed: _____

Antonio Fonseca



M&T/NAMOW/TCL J.V.

GRADATION AND ORGANIC CONTENT TESTING OF SOIL

CLIENT: Roy F. Weston of New York
PROJECT: Clarkstown Landfill cap Site
SAMPLE ID: TS-08
SAMPLED BY: Client
PICKUP/DEL BY: Client

LAB#: FOB-001
REPORT#: MC-164
DATE PICKUP/DEL: 08/19/98
DATE TESTED: 08/21/98

Page 1 of 2

(A) GRADATION TEST RESULTS (ASTM D422 & ASTM D1140)

Sieve Size	Percent Passing	Specifications	Sieve Size	Percent Passing	Specifications	Sieve Size	Percent Passing	Specifications
3"			3/8"	65.7		#30	33.6	
2-1/2"			1/4"	60.1		#40	29.7	
2"	100.0		#4	56.3		#50	26.3	
1-1/2"	85.0		#8	48.5		#60	24.3	
1"	79.7		#10	46.6		#80	21.2	
3/4"	75.5		#16	40.7		#100	19.6	
1/2"	70.4		#20	37.5		#200	14.8	

The gradation curve is shown in Figure 1.

- (B) SOIL DESCRIPTION: c-m GRAVEL , and m-f Sand, little Silt
COLOR: Brown; ODOR: None; CONTAMINATION: None
(C) USDA CLASSIFICATION: Gravel with loamy sand
(D) ORGANIC CONTENT (ASTM D2974): 2.1%

M&T / NAMOW / TCL-J.V.

Kaspal R. Thumma, Eng.Sc.D., P.E.
Laboratory Manager
KRT/ajf

Roy F. Weston of New York
 Lab #: FOB-001 Rpt #: MC-164
 Page 2 of 2

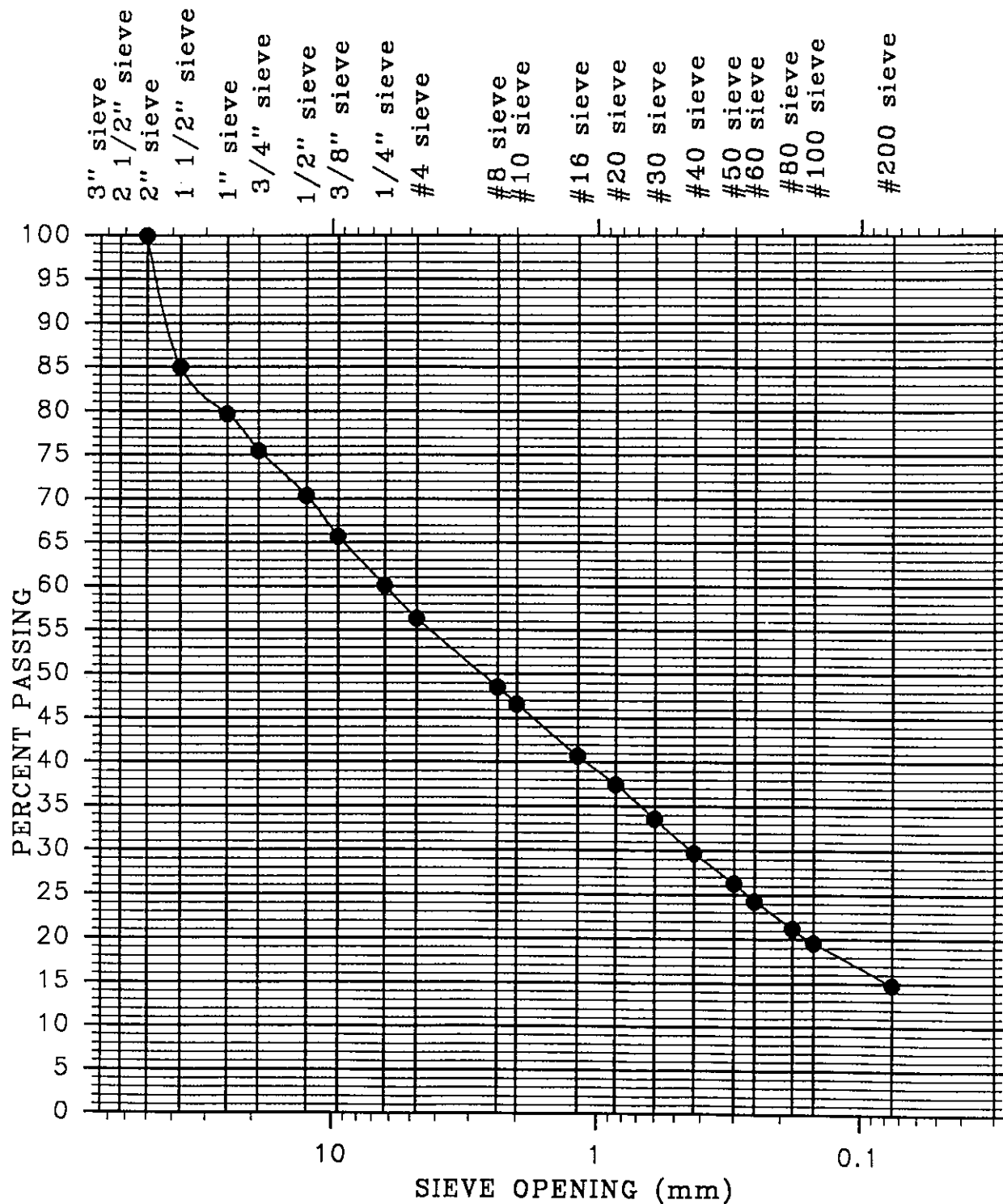
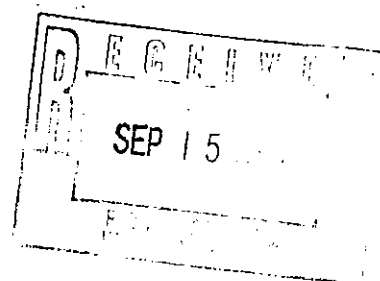


Figure 1: Particle Size Gradation Curve of Soil No. TS-08



M&T/NAMOW/TCL J.V.



TO: Roy F. Weston of NY Clarkstown Office	Lab #: FOB-001
166 Route 303	Date: 09/08/1998
West Nyack, NY 10994	Attention: Bruce La Penta
	Project: Clarkstown Landfill Cap Site

We are sending you: ☒ Attached ☐ Under separate cover via _____ the following items:

☒ Lab Reports ☐ Specifications ☐ Samples ☐ Bldg. Dept. Forms ☐ Copy of Letter

☐ Design Mix ☐ Other _____

Copies	Date	No.	Description
1	-	MC-167	Liquid Limit and Plastic Limit of Soils
		MC-168	Gradation and Organic Content Testing of Soil
		MC-169	Gradation and Organic Content Testing of Soil

These are transmitted as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit ___ copies for approval

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☐ As requested ☐ Returned for corrections ☐ Return ___ corrected prints

☐ For review and comment: _____

Remarks: _____

cc: rfwoy 1, rfwi 1, file 1, bill 1/ajf

Signed: _____

(Antonio Fonseca)



M&T/NAMOW/TCL-J.V.

GRADATION AND ORGANIC CONTENT TESTING OF SOIL

CLIENT: Roy F. Weston of New York
PROJECT: Clarkstown Landfill cap Site
SAMPLE ID: TS-08 R
SAMPLED BY: Client
PICKUP/DEL BY: Client

LAB#: FOB-001
REPORT#: MC-168
DATE PICKUP/DEL: 09/02/98
DATE TESTED: 09/04/98

Page 1 of 2

(A) GRADATION TEST RESULTS (ASTM D422 & ASTM D1140)

Sieve Size	Percent Passing	Specifications	Sieve Size	Percent Passing	Specifications	Sieve Size	Percent Passing	Specifications
3"			3/8"	73.6		#30	41.9	
2-1/2"			1/4"	70.3		#40	34.1	
2"	100.0		#4	68.7		#50	27.8	
1-1/2"	90.3		#8	61.3		#60	25.1	
1"	87.6		#10	59.9		#80	20.8	
3/4"	83.9		#16	53.3		#100	18.8	
1/2"	77.9		#20	48.3		#200	15.7	

The gradation curve is shown in Figure 1.

(B) SOIL DESCRIPTION: m-f SAND, some c-m Gravel, little Silt
COLOR: Brown; ODOR: None; CONTAMINATION: None
(C) ORGANIC CONTENT (ASTM D2974): 2.8%

M&T / NAMOW / TCL-J.V.

Kaspal R. Thumma, Eng.Sc.D., P.E.
Laboratory Manager
KRT/ajf

M&T/NAMOW/TCL J.V.

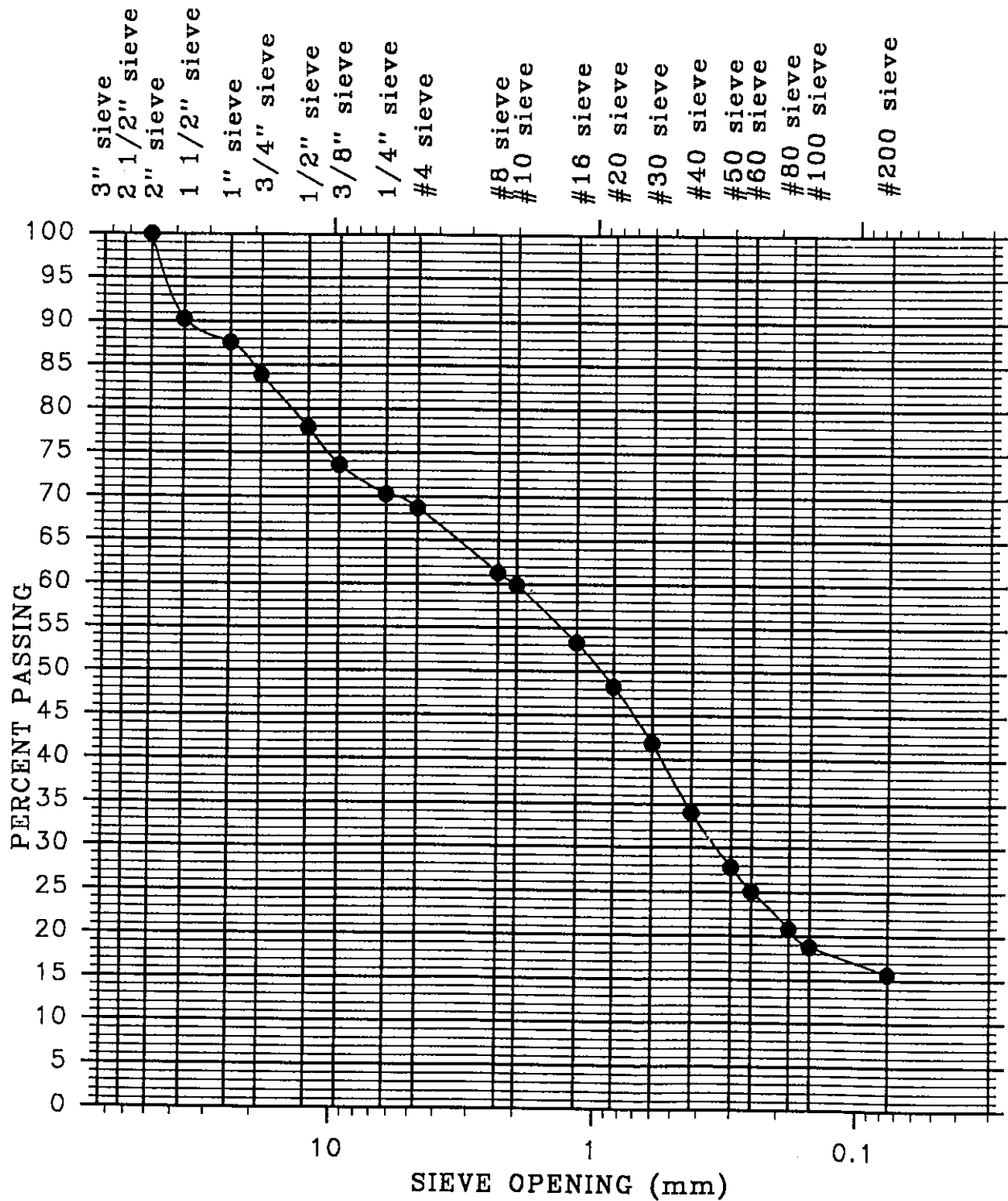


Figure 1: Particle Size Gradation Curve of Soil No. TS-08R



M&T/NAMOW/TCL-J.V.

GRADATION AND ORGANIC CONTENT TESTING OF SOIL

CLIENT: Roy F. Weston of New York
PROJECT: Clarkstown Landfill cap Site
SAMPLE ID: TS-09
SAMPLED BY: Client
PICKUP/DEL BY: Client

LAB#: FOB-001
REPORT#: MC-169
DATE PICKUP/DEL: 09/02/98
DATE TESTED: 09/04/98

Page 1 of 2

(A) GRADATION TEST RESULTS (ASTM D422 & ASTM D1140)

Sieve Size	Percent Passing	Specifications	Sieve Size	Percent Passing	Specifications	Sieve Size	Percent Passing	Specifications
3"			3/8"	81.1		#30	53.6	
2-1/2"			1/4"	75.5		#40	48.5	
2"	100.0		#4	73.0		#50	43.9	
1-1/2"	91.1		#8	66.8		#60	41.0	
1"	91.1		#10	65.4		#80	36.5	
3/4"	88.2		#16	59.5		#100	33.8	
1/2"	84.6		#20	57.7		#200	24.0	

The gradation curve is shown in Figure 1.

(B) SOIL DESCRIPTION: m-f SAND, some m Gravel, some Silt
COLOR: Gray; ODOR: None; CONTAMINATION: None

(C) ORGANIC CONTENT (ASTM D2974): 12.9%

M&T / NAMOW / TCL-J.V.

Kaspal R. Thumma, Eng.Sc.D., P.E.
Laboratory Manager
KRT/ajf

M&T/NAMOW/TCL-J.V.

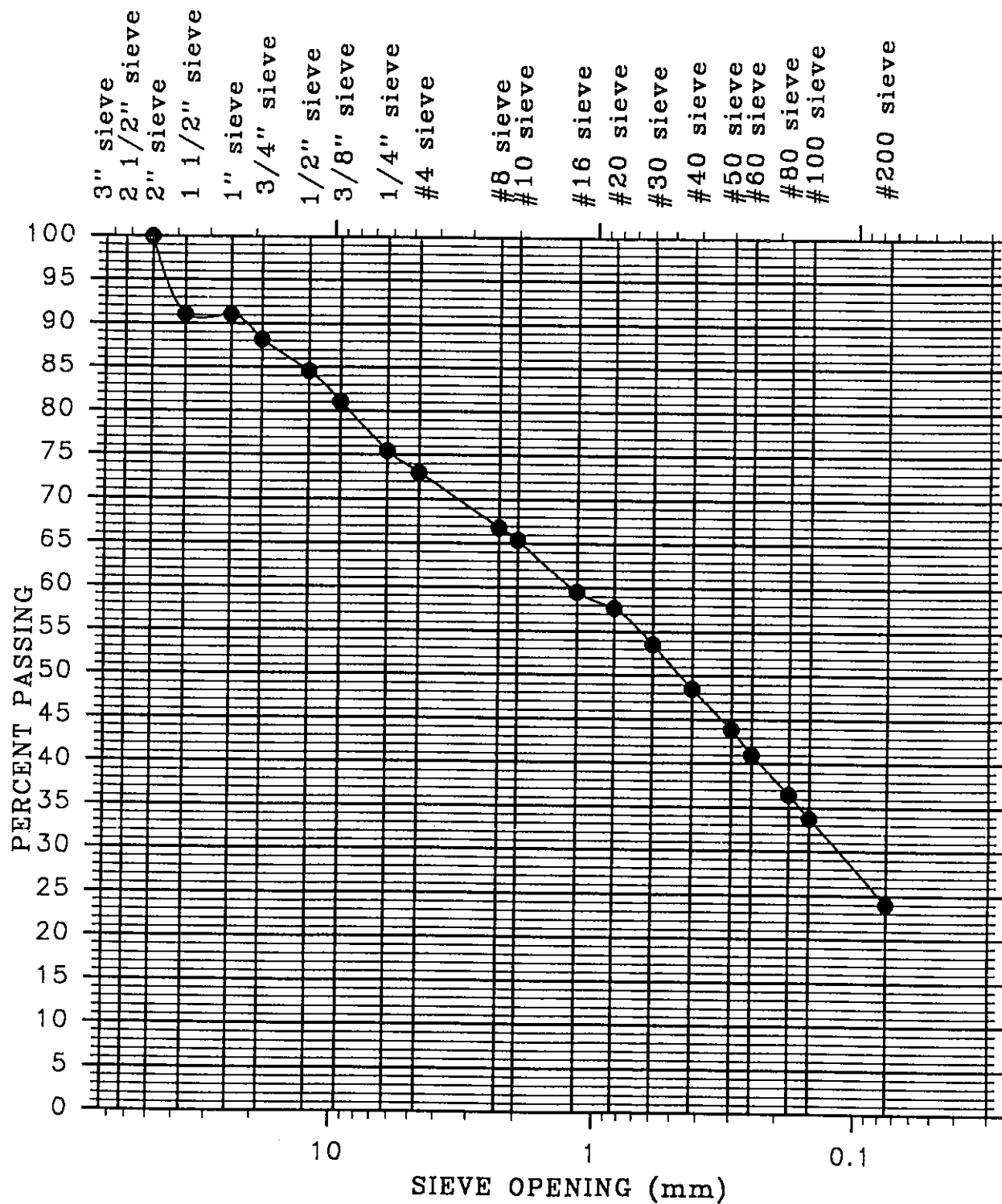


Figure 1: Particle Size Gradation Curve of Soil No. TS-09



M&T/NAMOW/TCL □ J.V.

LETTER OF TRANSMITTAL

TO: Roy F. Weston of NY Clarkstown Office	Lab #: FOB-001
101 Fieldcrest Avenue	Date: 12/28/98
Raritam Plaza3 Suite 2B	Attention: Bruce La Penta
Edison, NJ 08837	Project: Clarkstown Landfill Cap Site

We are sending you: ☒ Attached ☐ Under separate cover via _____ the following items:

☒ Lab Reports ☐ Specifications ☐ Samples ☐ Bldg. Dept. Forms ☐ Copy of Letter

☐ Design Mix ☐ Other _____

Copies	Date	No.	Description
1	-	MC-173	Gradation and Organic Content Testing of Soil
1		MC-174	Gradation Testing of Soil
1		MC-175	Gradation Testing of Soil

These are transmitted as checked below:

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☐ As requested ☐ Returned for corrections ☐ Return ____ corrected prints

☐ For review and comment: _____

Remarks: _____

cc: rfw 2, file 1, bill 1/ajf

Signed: 
Antonio Fonseca



M&T/NAMOW/TCL-J.V.

GRADATION AND ORGANIC CONTENT TESTING OF SOIL

CLIENT: Roy F. Weston of New York
PROJECT: Clarkstown Landfill Cap Site
SAMPLE ID: TS-08 RZ
SOURCE: Sam Braen
SAMPLED BY: Client
PICKUP/DEL BY: Client

LAB#: FOB-001
REPORT#: MC-173
DATE PICKUP/DEL: 12/07/98
DATE TESTED: 12/09/98

Page 1 of 2

(A) GRADATION TEST RESULTS (ASTM D422 & ASTM D1140)

Sieve Size	Percent Passing	Specifications	Sieve Size	Percent Passing	Specifications	Sieve Size	Percent Passing	Specifications
3"			3/8"	79.5		#30	47.6	
2-1/2"			1/4"	74.6		#40	42.7	
2"			#4	71.1		#50	37.3	
1-1/2"	100.0		#8	64.4		#60	33.9	
1"	93.7		#10	62.7		#80	28.9	
3/4"	89.5		#16	56.9		#100	26.7	
1/2"	83.0		#20	52.9		#200	18.7	

The gradation curve is shown in Figure 1.

(B) SOIL DESCRIPTION: Color: Gray; m-f SAND, some m Gravel, little Silt

(C) ORGANIC CONTENT (ASTM D2974): 6.6% of dry sample fraction passing through No. 4 Sieve.

Note: The submitted sample was dried in oven at 110°C and sieved through No. 4 sieve. The fraction passing through No. 4 sieve was ignited at 440°C for determination of organic content.

M&T / NAMOW / TCL-J.V.

spal R. Thumma, Eng.Sc.D., P.E.
Laboratory Manager
KRT/ajf

JAN 4 1999

JAN 4 1993

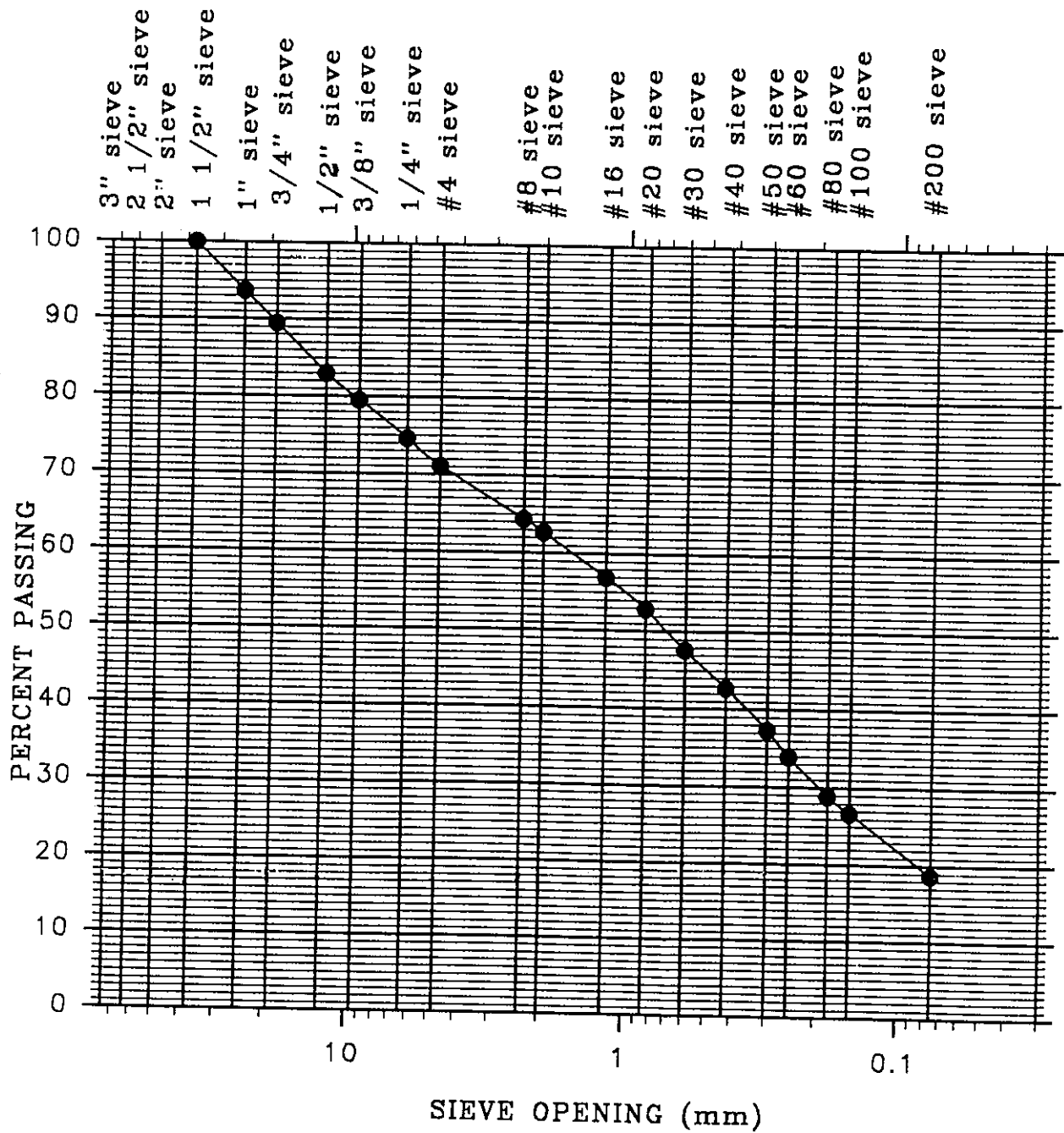


Figure 1: Particle Size Gradation Curve of Soil No. TS-08RZ



M&T/NAMOW/TCL □ J.V.

12/23/98 10:00 AM

TO: Roy F. Weston of NY Clarkstown Office	Lab #: FOB-001
166 Route 303	Date: 09/24/1998
West Nyack, NY 10994	Attention: Bruce La Penta
	Project: Clarkstown Landfill Cap Site

We are sending you: ☒ Attached ☐ Under separate cover via _____ the following items:

☒ Lab Reports ☐ Specifications ☐ Samples ☐ Bldg. Dept. Forms ☐ Copy of Letter

☐ Design Mix ☐ Other _____

Copies	Date	No.	Description
1	-	MC-170	Gradation PH and Organic Content Testing of Soil

These are transmitted as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit ___ copies for approval

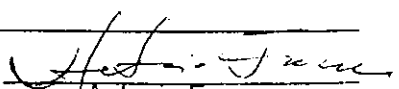
☒ For your use ☐ Approved as noted ☐ Submit ___ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return ___ corrected prints

☐ For review and comment: _____

Remarks: _____

cc: rfwoy 1, rfwi 1, file 1, bill 1/ajf

Signed: 
Antonio Fonseca



M&T/NAMOW/TCL J.V.

GRADATION, PH AND ORGANIC CONTENT TESTING OF SOIL

CLIENT: Roy F. Weston of New York
PROJECT: Clarkstown Landfill Cap Site
SAMPLE ID: TS-10
SOURCE: Taylor Recycl.
SAMPLED BY: Client
PICKUP/DEL BY: Client

LAB#: FOB-001
REPORT#: MC-170
DATE PICKUP/DEL: 09/17/98
DATE TESTED: 09/22/98

Page 1 of 2

(A) GRADATION TEST RESULTS (ASTM D422 & ASTM D1140)

Sieve Size	Percent Passing	Specifications	Sieve Size	Percent Passing	Specifications	Sieve Size	Percent Passing	Specifications
3"			3/8"	88.3		#30	35.0	
2-1/2"			1/4"	80.8		#40	29.1	
2"			#4	75.4		#50	24.6	
1-1/2"			#8	59.3		#60	22.1	
1"	100.0		#10	57.0		#80	18.6	
3/4"	99.4		#16	47.1		#100	16.8	
1/2"	94.3		#20	41.7		#200	11.8	

The gradation curve is shown in Figure 1.

(B) SOIL DESCRIPTION: c-m-f SAND, and m-f Gravel, little Silt
COLOR: Gray; ODOR: None; CONTAMINATION: None
(C) ORGANIC CONTENT (ASTM D2974): 10.3%
(D) PH ANALYSIS (ASTM D4972): 6.3

M&T / NAMOW / TCL-J.V.

Kaspal R. Thumma, Eng.Sc.D., P.E.
Laboratory Manager
KRT/ajf

M&T/NAMOW/TCL J.V.

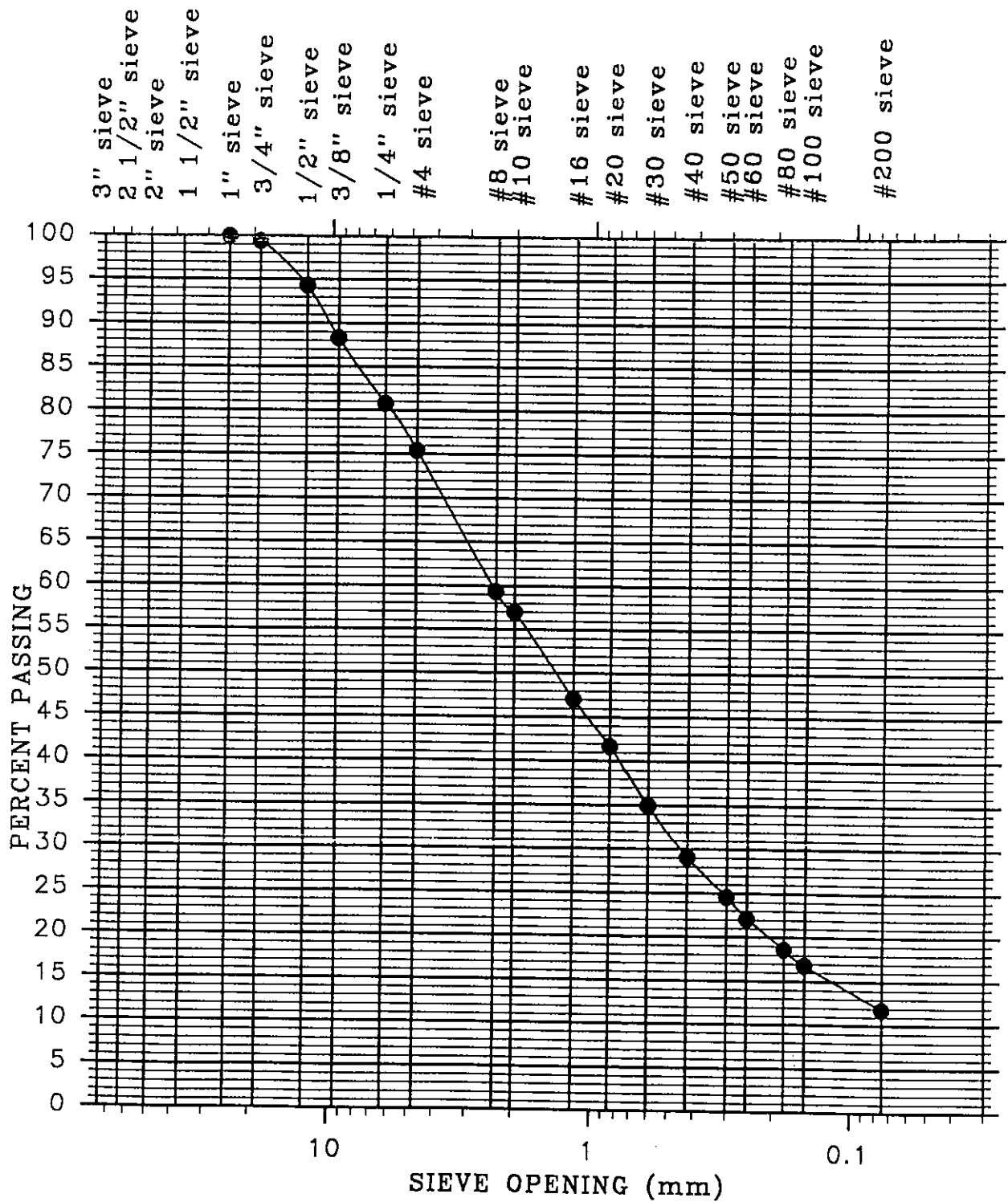


Figure 1: Particle Size Gradation Curve of Soil No. TS-10



SINCE 1969

FAIRWAY TESTING

CONSTRUCTION MATERIALS: TESTING · INSPECTION · RESEARCH

P.O. BOX 578 · STONY POINT, NY 10980 · TELEPHONE (914) 942-2088 · FAX (914) 942-0995

December 9, 1998

client Ogden Remediation Services

project Clarkstown Landfill

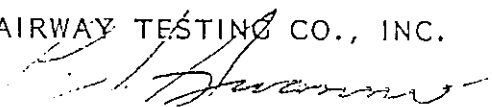
On December 8, 1998, topsoil sample TS-SB-30 was delivered to this laboratory by the client. Test results are shown below.

Organic Content (D2974)

TS-SB-30

8.2%

FAIRWAY TESTING CO., INC.


P. J. Aguanno, P.E.

Soil Sample Test Request Record

[illegible]

APPENDIX H2:

Chemical Analysis Laboratory Test Reports

TESTWELL CRAIG LABORATORIES, INC.

ENVIRONMENTAL LABORATORY

47 Hudson Street, Building B
Ossining, NY 10562

CLIENT: ROY F. WESTON OF NEW YORK
CLARKSTOWN FIELD OFFICE
166 ROUTE 303
WEST NYACK, NY 10994

LAB#: FOB-001
REPORT #: MC-82

PROJECT: CLARKSTOWN LANDFILL REMEDIATION

SOURCE: HS-SV MIX IN-SITU

SAMPLED BY: CLIENT

VOLATILE STARS MEMO ANALYSIS DATA SHEET (SOIL)

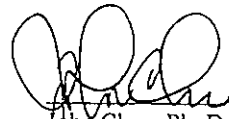
Lab Identification:		52827	MDL
Client Identification:		TS-03	
File Identification:		E0838	
Percent Moisture:		19.31	
Dilution Factor:		NA	
Date Sample Received:		08/29/97	
Date Sample Prepared:		09/04/97	
Date Sample Analyzed:		09/04/97	
CAS NO.	ANALYTE	µg/Kg	µg/Kg
71-43-2	Bezene	U	2
100-41-4	Ethylbenzene	U	2
108-88-3	Toluene	U	2
1724	o-Xylene	U	2
108-38-3	m-Xylene	U	2
	m & p-Xylene	U	2
	Mixed Xylene	U	2
98-82-8	Isopropylbenzene	U	2
103-65-1	n-Propylbenzene	U	2
99-87-6	p-Isopropyltolune	U	2
95-63-6	1,2,4-Trimethylbenzene	U	2
108-67-8	1,3,5-Trimethylbenzene	U	2
104-51-8	n-Butylbenzene	U	2
135-98-8	sec-Butylbenzene	U	2
98-06-6	t-Butylbenzene	U	2

CDS7

U = UNDETECTED (FALLING BELOW THE METHOD DETECTION LIMIT)

MDL = METHOD DETECTION LIMIT

Analysis run according to EPA Method 8260.



John Chen, Ph. D.
Laboratory Director

NOTE: ANALYSIS WAS RUN ACCORDING TO EPA 8260. ONLY COMPOUNDS REQUIRED BY NYSDEC STARS MEMO#1 (EPA METHOD 8020/8021 HAVE BEEN REPORTED).

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TESTWELL CRAIG LABORATORIES, INC.

ENVIRONMENTAL LABORATORY

47 Hudson Street, Building B
Ossining, NY 10562

CLIENT: ROY F. WESTON OF NEW YORK
CLARKSTOWN FIELD OFFICE
166 ROUTE 303
WEST NYACK, NY 10994

LAB#: FOB-001
REPORT#: MC-79

PROJECT: CLARKSTOWN LANDFILL REMEDIATION
SOURCE: HS-SV MIX IN-SITU
SAMPLED BY: CLIENT

SEMI-VOLATILE STARS MEMO ANALYSIS DATA SHEET (SOIL)

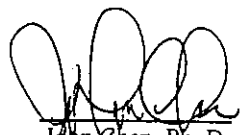
Lab Identification:		52827	MDL
Client Identification:		TS-03	
File Identification:		D2320	
Percent Moisture:		19.31	
Dilution Factor:		1	
Date Sample Received:		08/29/97	
Date Sample Prepared:		09/03/97	
Date Sample Analyzed:		09/03/97	MDL
CAS NO.	ANALYTE	µg/Kg	µg/Kg
91-20-3	Naphthalene	U	250
120-12-7	Anthracene	U	250
86-73-7	Fluorene	U	250
85-01-8	Phenanthrene	290	250
129-00-0	Pyrene	410	250
83-32-9	Acenaphthene	U	250
56-55-3	Benzo(a)anthracene	U	250
206-44-0	Fluoranthene	540	250
205-99-2	Benzo(b)fluoranthene	300	250
207-08-9	Benzo(k)fluoranthene	U	250
218-01-9	Chrysene	U	250
50-32-8	Benzo(a)pyrene	U	250
191-24-2	Benzo(g,h,i)perylene	U	250
193-39-5	Indenol(1,2,3-cd)pyrene	U	250
53-70-3	Dibenz(a,h)anthracene	U	250

CD87

U = UNDETECTED

MDL = METHOD DETECTION LIMIT

Analysis run according to EPA Method 8270.


John Chen, Ph. D.
Laboratory Director

NOTE:

ANALYSIS WAS RUN ACCORDING TO EPA 8270. ONLY COMPOUNDS REQUIRED BY NYSDEC STARS MEMO#1 HAVE BEEN REPORTED.

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M&T/NAMOW/TCL □ J.V.

CLIENT: ROY F. WESTON OF NEW YORK
CLARKSTOWN FIELD OFFICE
166 ROUTE 303
WEST NYACK, NY 10994

LAB #: FOB-001
REPORT #: MC-110

PROJECT: CLARKSTOWN LANDFILL REMEDIATION
SOURCE: IN SITU (CH-6)
SAMPLED BY: CLIENT

VOLATILE STARS MEMO ANALYSIS DATA SHEET (SOIL)

Lab Identification:		53160	MDL
Client Identification:		TS - 05	
File Identification:		E0923	
Percent Moisture:		16.0	
Dilution Factor:		1	
Date Sample Received:		10/14/97	
Date Sample Prepared:		10/15/97	
Date Sample Analyzed:		10/15/97	
CAS NO.	ANALYTE	µg/Kg	µg/Kg
71-43-2	Benzene	U	2
100-41-4	Ethylbenzene	U	2
108-88-3	Toluene	U	2
1724	o-Xylene	U	2
108-38-3	m-Xylene	U	2
	m & p-Xylene	U	2
	Mixed Xylene	U	2
98-82-8	Isopropylbenzene	U	2
103-65-1	n-Propylbenzene	U	2
99-87-6	p-Isopropyltoluene	U	2
95-63-6	1,2,4-Trimethylbenzene	U	2
108-67-8	1,3,5-Trimethylbenzene	U	2
104-51-8	n-Butylbenzene	U	2
135-98-8	sec-Butylbenzene	U	2
98-06-6	t-Butylbenzene	U	2

CL97

U = UNDETECTED (FALLING BELOW THE METHOD DETECTION LIMIT)

MDL = METHOD DETECTION LIMIT

Analysis run according to EPA Method 8260.

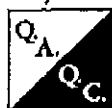

John Chen, Ph. D.
Laboratory Director

NOTE:

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M&T/NAMOW/TCL □ J.V.

CLIENT: ROY F. WESTON OF NEW YORK
CLARKSTOWN FIELD OFFICE
166 ROUTE 303
WEST NYACK, NY 10994

LAB #: FOB-001
REPORT #: MC-111

PROJECT: CLARKSTOWN LANDFILL REMEDIATION
SOURCE: IN SITU (CH-6)
SAMPLED BY: CLIENT

SEMI-VOLATILE STARS MEMO ANALYSIS DATA SHEET (SOIL)

Lab Identification:		53160	MDL
Client Identification:		TS - 05	
File Identification:		D2425	
Percent Moisture:		16.0	
Dilution Factor:		1	
Date Sample Received:		10/14/97	
Date Sample Prepared:		10/15/97	
Date Sample Analyzed:		10/16/97	
CAS NO.	ANALYTE	µg/Kg	µg/Kg
91-20-3	Naphthalene	U	240
120-12-7	Anthracene	U	240
86-73-7	Fluorene	U	240
85-01-8	Phenanthrene	500	240
129-00-0	Pyrene	470	240
83-32-9	Acenaphthene	U	240
56-55-3	Benzo(a)anthracene	320	240
206-44-0	Fluoranthene	940	240
205-99-2	Benzo(b)fluoranthene	400	240
207-08-9	Benzo(k)fluoranthene	U	240
218-01-9	Chrysene	340	240
50-32-8	Benzo(a)pyrene	320	240
191-24-2	Benzo(g,h,i)perylene	U	240
193-39-5	Indenol(1,2,3-cd)pyrene	U	240
53-70-3	Dibenz(a,h)anthracene	U	240

U = UNDETECTED

MDL = METHOD DETECTION LIMIT

Analysis run according to EPA Method 8270.


John Chen, Ph. D.
Laboratory Director

NOTE:

ANALYSIS WAS RUN ACCORDING TO EPA 8270. ONLY COMPOUNDS REQUIRED BY NYSDEC STARS MEMO#1 HAVE BEEN REPORTED.

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M&T/NAMOW/TCL-J.V.

CLIENT: ROY F. WESTON OF NEW YORK
CLARKSTOWN FIELD OFFICE
166 ROUTE 303
WEST NYACK, NY 10994

LAB #: FOB-001
REPORT #: MC-109

PROJECT: CLARKSTOWN LANDFILL REMEDIATION

SOURCE: IN SITU (SB-3)

SAMPLED BY: CLIENT

VOLATILE STARS MEMO ANALYSIS DATA SHEET (SOIL)

Lab Identification:		53159	MDL
Client Identification:		TS - 04	
File Identification:		E0922	
Percent Moisture:		18.0	
Dilution Factor:		1	
Date Sample Received:		10/14/97	
Date Sample Prepared:		10/15/97	
Date Sample Analyzed:		10/15/97	
CAS NO.	ANALYTE	RESULTS	MDL
71-43-2	Benzene	U	2
100-41-4	Ethylbenzene	U	2
108-88-3	Toluene	U	2
1724	o-Xylene	U	2
108-38-3	m-Xylene	U	2
	m & p-Xylene	U	2
	Mixed Xylene	U	2
98-82-8	Isopropylbenzene	U	2
103-65-1	n-Propylbenzene	U	2
99-87-6	p-Isopropyltoluene	U	2
95-63-6	1,2,4-Trimethylbenzene	U	2
108-67-8	1,3,5-Trimethylbenzene	U	2
104-51-8	n-Butylbenzene	U	2
135-98-8	sec-Butylbenzene	U	2
98-06-6	t-Butylbenzene	U	2

0092

U = UNDETECTED (FALLING BELOW THE METHOD DETECTION LIMIT)

MDL = METHOD DETECTION LIMIT

Analysis run according to EPA Method 8260.


John Chen, Ph. D.
Laboratory Director

NOTE:

ANALYSIS WAS RUN ACCORDING TO EPA 8260. ONLY COMPOUNDS REQUIRED BY NYSDEC STARS MEMO#1 (EPA METHOD 8020/8021 HAVE BEEN REPORTED).

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M&T/NAMOW/TCL □ J.V.

CLIENT: ROY F. WESTON OF NEW YORK
CLARKSTOWN FIELD OFFICE
166 ROUTE 303
WEST NYACK, NY 10994

LAB #: FOB-001
REPORT #: MC-108

PROJECT: CLARKSTOWN LANDFILL REMEDIATION
SOURCE: IN SITU (SB-3)
SAMPLED BY: CLIENT

SEMI-VOLATILE STARS MEMO ANALYSIS DATA SHEET (SOIL)

Lab Identification:		53159	MDL
Client Identification:		TS - 04	
File Identification:		D2424	
Percent Moisture:		18.0	
Dilution Factor:		1	
Date Sample Received:		10/14/97	
Date Sample Prepared:		10/15/97	
Date Sample Analyzed:		10/16/97	
CAS NO.	ANALYTE	µg/Kg	µg/Kg
91-20-3	Naphthalene	U	240
120-12-7	Anthracene	U	240
86-73-7	Fluorene	U	240
85-01-8	Phenanthrene	270	240
129-00-0	Pyrene	270	240
83-32-9	Acenaphthene	U	240
56-55-3	Benzo(a)anthracene	U	240
206-44-0	Fluoranthene	560	240
205-99-2	Benzo(b)fluoranthene	U	240
207-08-9	Benzo(k)fluoranthene	U	240
218-01-9	Chrysene	U	240
50-32-8	Benzo(a)pyrene	U	240
191-24-2	Benzo(g,h,i)perylene	U	240
193-39-5	Indenol(1,2,3-cd)pyrene	U	240
53-70-3	Dibenz(a,h)anthracene	U	240

CDX

U = UNDETECTED

MDL = METHOD DETECTION LIMIT

Analysis run according to EPA Method 8270.

John Chen, Ph. D.
Laboratory Director

NOTE:

ANALYSIS WAS RUN ACCORDING TO EPA 8270. ONLY COMPOUNDS REQUIRED BY NYSDEC STARS MEMO#1 HAVE BEEN REPORTED.

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M&T/NAMOW/TCL J.V.

CLIENT: ROY F. WESTON OF NEW YORK
CLARKSTOWN FIELD OFFICE
166 ROUTE 303
WEST NYACK, NY 10994

LAB #: FOB-001
Report #: MC-124

PROJECT: CLARKSTOWN LANDFILL REMEDIATION
SOURCE: CH 7 AREA IN-SITU
SAMPLED BY: CLIENT

VOLATILE STARS MEMO ANALYSIS DATA SHEET (SOIL)

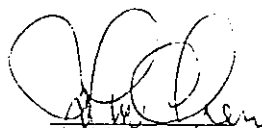
Lab Identification:		53826	MDL
Client Identification:		TS-06	
File Identification:		E0991	
Percent Moisture:		13.11	
Dilution Factor:		NA	
Date Sample Received:		11/11/97	
Date Sample Prepared:		11/11/97	
Date Sample Analyzed:		11/11/97	
CAS NO.	ANALYTE	µg/Kg	µg/Kg
71-43-2	Benzene	U	2
100-41-4	Ethylbenzene	U	2
108-88-3	Toluene	U	2
1724	o-Xylene	U	2
108-38-3	m-Xylene	U	2
	m & p-Xylene	U	2
	Mixed Xylene	U	2
98-82-8	Isopropylbenzene	U	2
103-65-1	n-Propylbenzene	U	2
99-87-6	p-Isopropyltoluene	U	2
95-63-6	1,2,4-Trimethylbenzene	U	2
108-67-8	1,3,5-Trimethylbenzene	U	2
104-51-8	n-Butylbenzene	U	2
135-98-8	sec-Butylbenzene	U	2
98-06-6	t-Butylbenzene	U	2

CD97

U = UNDETECTED (FALLING BELOW THE METHOD DETECTION LIMIT)

MDL = METHOD DETECTION LIMIT

Analysis run according to EPA Method 8260.


John Chen, Ph. D.
Laboratory Director

NOTE: ANALYSIS WAS RUN ACCORDING TO EPA 8260. ONLY COMPOUNDS REQUIRED BY NYSDEC STARS MEMO#1 (EPA METHOD 8030/8021 HAVE BEEN REPORTED).

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M&T/NAMOW/TCL □ J.V.

CLIENT: ROY F. WESTON OF NEW YORK
CLARKSTOWN FIELD OFFICE
166 ROUTE 303
WEST NYACK, NY 10994
PROJECT: CLARKSTOWN LANDFILL REMEDIATION
SOURCE: CH 7 IN-SITU
SAMPLED BY: CLIENT

LAB #: FOB-001
Report #: MC-125

SEMI-VOLATILE STARS MEMO ANALYSIS DATA SHEET (SOIL)

Lab Identification:		53826	MDL
Client Identification:		TS-06	
File Identification:		D2503	
Percent Moisture:		13.11	
Dilution Factor:		1	
Date Sample Received:		11/11/97	
Date Sample Prepared:		11/11/97	
Date Sample Analyzed:		11/12/97	
CAS NO.	ANALYTE	µg/Kg	µg/Kg
91-20-3	Naphthalene	U	230
120-12-7	Anthracene	U	230
86-73-7	Fluorene	U	230
85-01-8	Phenanthrene	620	230
129-00-0	Pyrene	910	230
83-32-9	Acenaphthene	U	230
56-55-3	Benzo(a)anthracene	470	230
206-44-0	Fluoranthene	1200	230
205-99-2	Benzo(b)fluoranthene	490	230
207-08-9	Benzo(k)fluoranthene	400	230
218-01-9	Chrysene	600	230
50-32-8	Benzo(a)pyrene	500	230
191-24-2	Benzo(g,h,i)perylene	310	230
193-39-5	Indenol(1,2,3-cd)pyrene	250	230
53-70-3	Dibenz(a,h.)anthracene	U	230

CD97

U = UNDETECTED

MDL = METHOD DETECTION LIMIT

Analysis run according to EPA Method 8270.


John Chen, Ph. D.
Laboratory Director

NOTE: ANALYSIS WAS RUN ACCORDING TO EPA 8270. ONLY COMPOUNDS REQUIRED BY NYSDEC STARS MEMO#1 HAVE BEEN REPORTED.

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M&T/NAMOW/TCL J.V.

CLIENT: ROY F. WESTON OF NEW YORK
CLARKSTOWN FIELD OFFICE
166 ROUTE 303
WEST NYACK, NY 10994

LAB #: FOB-001
REPORT #: MC-139

PROJECT: CLARKSTOWN LANDFILL REMEDIATION
SOURCE: SAMPLE BAG
SAMPLED BY: CLIENT

VOLATILE STARS MEMO ANALYSIS DATA SHEET (SOIL)

Lab Identification:		54413	MDL
Client Identification:		TS-07	
File Identification:		E 1149	
Percent Moisture:		10.6	
Dilution Factor:		NA	
Date Sample Received:		1/23/98	
Date Sample Prepared:		1/23/98	
Date Sample Analyzed:		1/23/98	
CAS NO.	ANALYTE	ug/Kg	ug/Kg
71-43-2	Benzene	U	2
100-41-4	Ethylbenzene	U	2
108-88-3	Toluene	U	2
1724	o-Xylene	U	2
108-38-3	m-Xylene	U	2
	m & p-Xylene	U	2
	Mixed Xylene	U	2
98-82-8	Isopropylbenzene	U	2
103-65-1	n-Propylbenzene	U	2
99-87-6	p-Isopropyltoluene	U	2
95-63-6	1,2,4-Trimethylbenzene	U	2
108-67-8	1,3,5-Trimethylbenzene	U	2
104-51-8	n-Butylbenzene	U	2
135-98-8	sec-Butylbenzene	U	2
98-06-6	t-Butylbenzene	U	2

CDM

U = UNDETECTED (FALLING BELOW THE METHOD DETECTION LIMIT)

MDL = METHOD DETECTION LIMIT

Analysis run according to EPA Method 8260.

John Chen, Ph.D.
Laboratory Director

NOTE: ANALYSIS WAS RUN ACCORDING TO EPA 8260. ONLY 17 COMPOUNDS REQUIRED BY NYSDC STARS MEMO (EPA METHOD 8260/821 HAVE BEEN REPORTED)

--



M&T/NAMOW/TCL-J.V.

CLIENT: ROY F. WESTON OF NEW YORK

CLARKSTOWN FIELD OFFICE

166 ROUTE 303

WEST NYACK, NY 10994

PROJECT: CLARKSTOWN LANDFILL REMEDIATION

SOURCE: SAMPLE BAG

SAMPLED BY: CLIENT

LAB #: FOB-001

REPORT #: MC-140

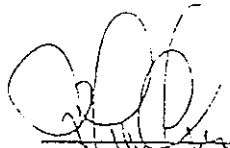
SEMI-VOLATILE STARS MEMO ANALYSIS DATA SHEET (SOIL)

Lab Identification:		54413	MDL
Client Identification:		TS-07	
File Identification:		D2635	
Percent Moisture:		10.60	
Dilution Factor:		1	
Date Sample Received:		1/23/98	
Date Sample Prepared:		1/26/98	
Date Sample Analyzed:		1/27/98	
CAS NO.	ANALYTE	ug/Kg	ug/Kg
91-20-3	Naphthalene	U	220
120-12-7	Anthracene	U	220
86-73-7	Fluorene	U	220
85-01-8	Phenanthrene	370	220
129-00-0	Pyrene	610	220
83-32-9	Acenaphthene	U	220
56-55-3	Benzo(a)anthracene	320	220
206-44-0	Fluoranthene	880	220
205-99-2	Benzo(b)fluoranthene	490	220
207-08-9	Benzo(k)fluoranthene	U	220
218-01-9	Chrysene	390	220
50-32-8	Benzo(a)pyrene	230	220
191-24-2	Benzo(g,h,i)perylene	U	220
193-39-5	Indenol(1,2,3-cd)pyrene	U	220
53-70-3	Dibenz(a,h)anthracene	U	220

U = UNDETECTED

MDL = METHOD DETECTION LIMIT

Analysis run according to EPA Method 8270.


John Chen, Ph. D.
Laboratory Director

NOTE:

ANALYSIS WAS RUN ACCORDING TO EPA 8270. ONLY COMPOUNDS REQUIRED BY NYSDEC STARS MEMO-1 HAVE BEEN REPORTED.

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M&T/NAMOW/TCL □ J.V.

LETTER OF TRANSMITTAL

TO: Roy F. Weston of NY Clarkstown Office	Lab #: FOB-001
166 Route 303	Date: 01/29/1998
West Nyack, NY 10994	Attention: John C. Woodley
	Project: Clarkstown Landfill Cap Site

We are sending you: ☒ Attached ☐ Under separate cover via _____ the following items:

☒ Lab Reports ☐ Specifications ☐ Samples ☐ Bldg. Dept. Forms ☐ Copy of Letter

☐ Design Mix ☐ Other _____

Copies	Date	No.	Description
1	-	MC-139-140	Volatile Stars Memo Analysis Data Sheet (SOIL)

These are transmitted as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit ___ copies for approval

☒ For your use ☐ Approved as noted ☐ Submit ___ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return ___ corrected prints

☐ For review and comment: _____

Remarks: _____

cc: rfwoy 1, file 1, bill 1/mp

Signed: Marcelo Pedreira
Marcelo Pedreira



M&T/NAMOW/TCL □ J.V.

CLIENT: ROY F. WESTON OF NEW YORK
CLARKSTOWN FIELD OFFICE
166 ROUTE 303
WEST NYACK, NY 10994

LAB #: FOB-001
REPORT #: MC-139

PROJECT: CLARKSTOWN LANDFILL REMEDIATION
SOURCE: SAMPLE BAG
SAMPLED BY: CLIENT

VOLATILE STARS MEMO ANALYSIS DATA SHEET (SOIL)

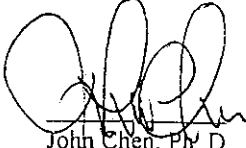
Lab Identification:		54413	MDL
Client Identification:		TS-07	
File Identification:		E 1149	
Percent Moisture:		10.6	
Dilution Factor:		NA	
Date Sample Received:		1/23/98	
Date Sample Prepared:		1/23/98	
Date Sample Analyzed:		1/23/98	
CAS NO.	ANALYTE	µg/Kg	µg/Kg
71-43-2	Bezene	U	2
100-41-4	Ethylbenzene	U	2
108-88-3	Toluene	U	2
1724	o-Xylene	U	2
108-38-3	m-Xylene	U	2
	m & p-Xylene	U	2
	Mixed Xylene	U	2
98-82-8	Isopropylbenzene	U	2
103-65-1	n-Propylbenzene	U	2
99-87-6	p-Isopropyltolune	U	2
95-63-6	1,2,4-Trimethylbenzene	U	2
108-67-8	1,3,5-Trimethylbenzene	U	2
104-51-8	n-Butylbenzene	U	2
135-98-8	sec-Butylbenzene	U	2
98-06-6	i-Butylbenzene	U	2

CD 1106

U = UNDETECTED (FALLING BELOW THE METHOD DETECTION LIMIT)

MDL = METHOD DETECTION LIMIT

Analysis run according to EPA Method 8260.


John Chen, Ph. D.
Laboratory Director

NOTE: ANALYSIS WAS RUN ACCORDING TO EPA 8260. ONLY COMPOUNDS REQUIRED BY NYSDEC STARS MEMO#1 (EPA METHOD 8020/8021 HAVE BEEN REPORTED).

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M&T/NAMOW/TCL □ J.V.

CLIENT: ROY F. WESTON OF NEW YORK
CLARKSTOWN FIELD OFFICE
166 ROUTE 303
WEST NYACK, NY 10994

LAB #: FOB-001
REPORT #: MC-140

PROJECT: CLARKSTOWN LANDFILL REMEDIATION
SOURCE: SAMPLE BAG
SAMPLED BY: CLIENT

SEMI-VOLATILE STARS MEMO ANALYSIS DATA SHEET (SOIL)

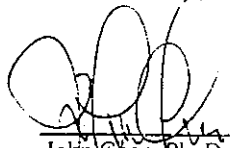
Lab Identification:		54413	MDL
Client Identification:		TS-07	
File Identification:		D2635	
Percent Moisture:		10.60	
Dilution Factor:		1	
Date Sample Received:		1/23/98	
Date Sample Prepared:		1/26/98	
Date Sample Analyzed:		1/27/98	
CAS NO.	ANALYTE	µg/Kg	µg/Kg
91-20-3	Naphthalene	U	220
120-12-7	Anthracene	U	220
86-73-7	Fluorene	U	220
85-01-8	Phenanthrene	370	220
129-00-0	Pyrene	610	220
83-32-9	Acenaphthene	U	220
56-55-3	Benzo(a)anthracene	320	220
206-44-0	Fluoranthene	880	220
205-99-2	Benzo(b)fluoranthene	490	220
207-08-9	Benzo(k)fluoranthene	U	220
218-01-9	Chrysene	390	220
50-32-8	Benzo(a)pyrene	230	220
191-24-2	Benzo(g,h,i)perylene	U	220
193-39-5	Indenol(1,2,3-cd)pyrene	U	220
53-70-3	Dibenz(a,h)anthracene	U	220

CD110

U = UNDETECTED

MDL = METHOD DETECTION LIMIT

Analysis run according to EPA Method 8270.


John Chen, Ph. D.
Laboratory Director

NOTE: ANALYSIS WAS RUN ACCORDING TO EPA 8270. ONLY COMPOUNDS REQUIRED BY NYSDEC STARS MEMO#1 HAVE BEEN REPORTED.

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Via FedEx 806670919484



M&T/NAMOW/TCL J.V.

LETTER OF TRANSMITTAL

TO: Roy F. Weston of NY Clarkstown Office	Lab #: FOB-001
166 Route 303	Date: 09/24/1998
West Nyack, NY 10994	Attention: Bruce La Penta
	Project: Clarkstown Landfill Cap Site

We are sending you: ☒ Attached ☐ Under separate cover via _____ the following items:

☒ Lab Reports ☐ Specifications ☐ Samples ☐ Bldg. Dept. Forms ☐ Copy of Letter

☐ Design Mix ☐ Other _____

Copies	Date	No.	Description
1	-	MC-171	Semi-Volatile Stars Memo Analysis
		MC-172	Volatile Stars Memo Analysis

These are transmitted as checked below:

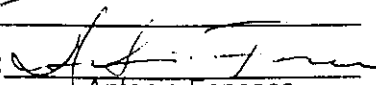
☐ For approval ☐ Approved as submitted ☐ Resubmit ___ copies for approval

☒ For your use ☐ Approved as noted ☐ Submit ___ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return ___ corrected prints

☐ For review and comment: _____

Remarks: _____

Signed: 
Antonio Fonseca

cc: rfwoy 1, rfwi 1, file 1, bill 1/ajf



M&T/NAMOW/TCL □ J.V.

CLIENT: ROY F. WESTON OF NEW YORK
CLARKSTOWN FIELD OFFICE
166 RTE. 303, WEST NYACK, NY 10994

PROJECT: CLARKSTOWN LANDFILL REMEDIATION

SOURCE: IN-SITU

SAMPLED BY: CLIENT

LAB#: FOB-001
REPORT#: MC-171

SEMI-VOLATILE STARS MEMO ANALYSIS DATA SHEET

Lab Identification:		56928	MDL
Client Identification:		TS-10	
File Identification:		D3575	
Percent Moisture:		20	
Dilution Factor:		1	
Date Sample Received:		09/18/98	
Date Sample Prepared:		09/22/98	
Date Sample Analyzed:		09/22/98	
CAS NO.	ANALYTE(S)	µg/Kg	µg/Kg
91-20-3	Naphthalene	U	250
120-12-7	Anthracene	U	250
86-73-7	Fluorene	U	250
85-01-8	Phenanthrene	U	250
129-00-0	Pyrene	520	250
83-32-9	Acenaphthene	U	250
56-55-3	Benzo(a)anthracene	280	250
206-44-0	Fluoranthene	560	250
205-99-2	Benzo(b)fluoranthene	290	250
207-08-9	Benzo(k)fluoranthene	270	250
218-01-9	Chrysene	400	250
50-32-8	Benzo(a)pyrene	U	250
191-24-2	Benzo(g,h,i)perylene	U	250
193-39-5	Indenol(1,2,3-cd)pyrene	U	250
53-70-3	Dibenz(a,h)anthracene	U	250

U = UNDETECTED (FALLING BELOW THE METHOD DETECTION LIMIT)

MDL = METHOD DETECTION LIMIT

Analysis run according to EPA Method 8270

SAMPLE LOCATION/DESCRIPTION:

56926 SOIL SAMPLE


John Chen, Ph. D.
Laboratory Director

NOTE: ANALYSIS WAS RUN ACCORDING TO EPA 8270. ONLY COMPOUNDS REQUIRED BY NYSDEC STARS MEMO#1 HAVE BEEN REPORTED.

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M&T/NAMOW/TCL □ J.V.

CLIENT:

ROY F. WESTON OF NEW YORK
CLARKSTOWN FIELD OFFICE
166 RTE. 303, WEST NYACK, NY 10994

LAB#: FOB-001
REPORT#: MC-172

PROJECT:

CLARKSTOWN LANDFILL REMEDIATION
IN-SITU

SOURCE:

SAMPLED BY:

CLIENT

VOLATILE STARS MEMO ANALYSIS DATA SHEET

Lab Identification:		56928	MDL
Client Identification:		TS-10	
File Identification:		E1987	
Percent Moisture:		20	
Dilution Factor:		1	
Date Sample Received:		09/18/98	
Date Sample Prepared:		09/22/98	
Date Sample Analyzed:		09/22/98	
CAS NO.	ANALYTE(S)	µg/Kg	µg/Kg
71-43-2	Benzene	U	2
100-41-4	Ethylbenzene	U	2
108-88-3	Toluene	U	2
95-47-6	o-Xylene	U	2
108-38-3	m-Xylene	U	2
	Mixed Xylene	U	2
98-82-8	Isopropylbenzene	U	2
103-65-1	n-Propylbenzene	U	2
99-87-6	p-Isopropyltoluene	U	2
95-63-6	1,2,4-Trimethylbenzene	U	2
108-67-8	1,3,5-Trimethylbenzene	U	2
104-51-8	n-Butylbenzene	U	2
135-98-8	sec-Butylbenzene	U	2
91-20-3	Naphthalene	U	2
1634-04-4	Methyl-tert-butyl ether	U	2

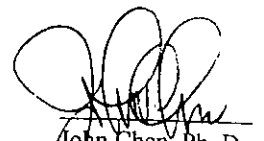
U = UNDETECTED (FALLING BELOW THE METHOD DETECTION LIMIT)

MDL = METHOD DETECTION LIMIT

Analysis run according to EPA Method 8260

SAMPLE LOCATION/DESCRIPTION:

56926 SOIL SAMPLE


John Chen, Ph. D.
Laboratory Director

NOTE:

ANALYSIS WAS RUN ACCORDING TO EPA 8260. ONLY COMPOUNDS REQUIRED BY NYSDEC STARS MEMO#1 (EPA METHOD 8020/8021 HAVE BEEN REPORTED).

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TO Roy F. Weston of New York, Inc. (RFW)

Raritan Plaza III, Suite 2B

101 Fieldcrest Ave.

Edison, NJ 08837

(732) 417-5800/5801 (fax)

Date: 10/7/98

OE&C Project No. 60010 0000 0050 8000

Attention: Bruce LaPenta

Re: Remediation of Clarkstown Sanitary LF & LF Capping

Town of Clarkstown, Rockland County, New York

Ogden Engineering & Construction, Inc. (OE&C)

Submittal Item # 114.07

Subcontractor/Supplier:

We Are Sending You (Fedex):

- ☒ Attached
 ☐ Prints
 ☐ Under separate cover via _____ the following items:
☐ Shop drawings
 ☐ Change order
 ☐ Plans
 ☐ Samples
 ☐ Specifications
☒ Copy of letter
 ☐ Reviewed & Approved
 ☐

COPIES	DATE	NO. of Pgs	DESCRIPTION
5		16	Topsoil Tests, Sample Nos. TS-TAY-10 (Taylor Recycling), TS-HS/S&L-10 (Highland Sand & S&L), TS-HS-4 (Highland Sand / Servidone Peat), TS-HS/S&L-20 (Highland Sand & S&L)
			Applicable Spec. Section: 02935, 2.01

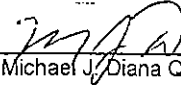
These are transmitted as checked below:

- ☐ For approval
 ☐ Approved as submitted
 ☐ Resubmit ____ copies for approval
☒ For your use
 ☐ Approved as noted
 ☐ Submit ____ copies for distribution
☐ As requested
 ☐ Returned for corrections
 ☐ Return ____ corrected prints
☐ For review and comment
 ☐
☐ For Bids Due on
 ☐ For Record Purposes
 ☐ Prints Returned After Loan to Us

Remarks: Forwarded are topsoil EPA 8020 test results for the above samples.

OCT 8 1998

Copies To: CDS/TL/KK, RFW w/attachment
FF.NY144 w/att.; CF.PM, CL

Signed: 
Michael J. Diana Quality Control

Ogden Engineering & Construction, Inc.
166 Route 303
West Nyack, NY 10994
(914) 358-2720 (EST)
(914) 358-2720 (fax)

Received: 09/17/98

Results by Sample

SAMPLE ID IS-TAY-10FRACTION 02ATEST CODE 8020NAME PURGEABLE AROMATICSDate & Time Collected 09/16/98 12:00:00Category SOILEPA 8020

	RESULT	LIMIT
BENZENE	<u>ND</u>	<u>1.0</u>
TOLUENE	<u>ND</u>	<u>2.0</u>
ETHYLBENZENE	<u>ND</u>	<u>2.0</u>
XYLENES (TOTAL)	<u>ND</u>	<u>2.0</u>

Notes and Definitions for this Report:

DATE RUN: 09/22/98ANALYST: KLCINSTRUMENT: V5DIL. FACTOR: 1UNITS: ug/Kg

ND = not detected at detection limit

五、四、三、二、一

REEDATION SERVICES CO., INC.

Clarkston L.F. & L.F. Capping

Project No.: 60060000

Table 2

9/16/98

Project Name/Client:

WEST HYACK

M. Diarra

Purchase Order No.:

Lab Comm:

Quipped via

MacArthur

Samples
 (Signatures)

APPENDIX B

[illegible]

Community/Social Organization:

Taylor Recycling Topsoil

Sample taken from LFP-8, 60' N.E. of DI-4

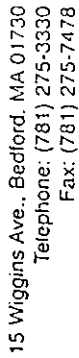
pink copy - Attach to Daily Report

White Copy - Lrb

Yellow Copy - File:

Pink Copy - Attached to Daily Report

SECRET



WORK ORDER #:

DUE DATE : 9-23-98

COMPANY: Oden Remediation Services Co.
ADDRESS: 166 Route 303
West Nyack, NY 10994
PHONE #: (914) 358-2720 FAX #: (914) 358-2790
P.O. #: 752 P 212450
PROJECT MANAGER: Mike Dianna
PROJECT ID/LOCATION: Clarkstown LF

TOXIKON #	SAMPLE IDENTIFICATION	SAMPLE TYPE	CONTAINER		SAMPLING		PRESERVATIVE	CRA	SPECIAL INSTRUCTIONS COMMENTS
			SIZE	TYPE	DATE	TIME			
①	EPA 8020 - TS-HS/SL-10	Z			9/16/98	12 PM	100	+	
②	EPA 8020 - TS-TAY-10	Z			9/16/98	12 PM		X	
③	EPA 8020 - 8020 CS-SB-30	Z			9/16/98	3 PM		X	
④	EPA 8020 - TS-115-4	Z			9/16/98	3 PM		X	
⑤	EPA 8020 - CS-TLC-20	Z			9/16/98	11 AM		X	
⑥	EPA 8020 - SF-WMX-190	Z			9/16/98	11 AM		X	
⑦	EPA 8020 - TS-HS/SL-20	Z			9/16/98	3 PM		X	

SAMPLED BY:	DATE: See above	QUOTATION #:	
M. Diane	TIME: 9 - 16 - 98	RECEIVED BY:	DATE: 9 - 17 - 98
M. Diana	DATE: 9 - 16 - 98	M. Dufredo	TIME: 1040-
	TIME: 4 - 30 - PM	RECEIVED FOR LAB BY:	DATE: 09 - 17 - 98
	DATE:		TIME: 11:00
	TIME:		

Page,9

TOXIKON CORP.

REPORT

Work Order # 98-09-323

Received: 09/17/98

Test Methodology

TEST CODE 8020 NAME PURGEABLE AROMATICS

EPA Method: 8020. Volatile Aromatic Compounds.

Reference: Test Methods for Evaluating Solid Waste: Physical/Chemical
Methods. EPA SW-846 (Third Edition) 1986.
Office of Solid Waste, USEPA.

Received: 09/17/98

Results by Sample

SAMPLE ID TS-HS/S&L-10 FRACTION 01A TEST CODE 8020 NAME PURGEABLE AROMATICS
Date & Time Collected 09/16/98 12:00:00 Category SOIL

EPA 8020

	RESULT	LIMIT
BENZENE	<u>ND</u>	<u>1.0</u>
TOLUENE	<u>ND</u>	<u>2.0</u>
ETHYLBENZENE	<u>ND</u>	<u>2.0</u>
XYLENES (TOTAL)	<u>ND</u>	<u>2.0</u>

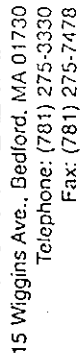
Notes and Definitions for this Report:

DATE RUN: 09/22/98ANALYST: NLCINSTRUMENT: V5DIL. FACTOR: 1UNITS: ug/Kg

ND = not detected at detection limit

Gold Standard Test Request Record

[illegible]



WORK ORDER #: 98-09-323
DUE DATE : 9-23-98

COMPANY: Chadon Remediation Services Co.
ADDRESS: 106 Route 303
West Nyack, NY 10994
PHONE #: (914) 358-2720 FAX #: (914) 358-2790
P.O. #: 752 P2112450
PROJECT MANAGER: Mike Dianna
PROJECT ID/LOCATION: Clarkstown 6F

COMPANY: <u>Ozden Remediation Services Co.</u> ADDRESS: <u>106 Route 303</u> <u>West Nyack, NY 10994</u> PHONE #: <u>(914) 358-2720</u> FAX #: <u>(914) 358-2790</u> P.O. #: <u>752 P2 112450</u> PROJECT MANAGER: <u>Mike Diana</u> PROJECT ID/LOCATION: <u>Clarkstown L6F</u>										ANALYSES									
TOXIKON #		SAMPLE IDENTIFICATION		SAMPLE TYPE		CONTAINER SIZE		CONTAINER #		SAMPLING DATE		SAMPLING TIME		SAMPLE TYPE		CONTAINER TYPE		ANALYSES	
														1. WASTEWATER		P - PLASTIC			
														2. SOIL		G - GLASS			
														3. SLUDGE		V - VOA			
														4. OIL					
														5. DRINKING WATER					
														6. WATER (GWMWISW)					
														7. OTHER (SPECIFY)					
														PRESERVATIVE					
①	EPA 8020 - TS-HSISL-10	Z								9/16/98	12 PM			100					
②	EPA 8020 - TS-TAY-10	Z								9/16/98	12 PM								
③	EPA 8020 - 800 CS-SB-30	Z								9/16/98	3 PM								
④	EPA 8020 - TS-115-4	Z								9/16/98	3 PM								
⑤	EPA 8020 - CS-716-20	Z								9/16/98	11 AM								
⑥	EPA 8020 - SF-WMX-A90	Z								9/16/98	11 AM								
⑦	EPA 8020 - TS-115/316-20	Z								9/16/98	3 PM								

SAMPLED BY:	M. Diana	DATE: 9-16-98 - 9-16-98	TIME: 9:00 - 10:00	QUOTATION #:
RELINQUISHED BY:	M. Diana	DATE: 9-16-98	TIME: 4:30 - PM	
RELINQUISHED BY:		DATE: - -	TIME: - -	RECEIVED BY:
		DATE: - -	TIME: - -	RECEIVED FOR LAB BY:
		DATE: 9-17-98	TIME: 10:40-	DATE: 9-17-98
		DATE: - -	TIME: - -	TIME: - -

Page,9

TOXIKON CORP.

REPORT

Work Order # 98-09-323

Received: 09/17/98

Test Methodology

TEST CODE 8020 NAME PURGEABLE AROMATICS

EPA Method: 8020. Volatile Aromatic Compounds.

Reference: Test Methods for Evaluating Solid Waste: Physical/Chemical
Methods. EPA SW-846 (Third Edition) 1986.
Office of Solid Waste, USEPA.

Received: 09/17/98

Results by Sample

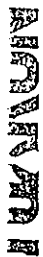
SAMPLE ID TS-HS-4FRACTION 04ATEST CODE 8020NAME PURGEABLE AROMATICSDate & Time Collected 09/16/98 15:00:00Category SOILEPA 8020

	RESULT	LIMIT
BENZENE	<u>ND</u>	<u>1.0</u>
TOLUENE	<u>ND</u>	<u>2.0</u>
ETHYLBENZENE	<u>ND</u>	<u>2.0</u>
XYLENES (TOTAL)	<u>ND</u>	<u>2.0</u>

Notes and Definitions for this Report:

DATE RUN: 09/22/98ANALYST: NLCINSTRUMENT: V5DIL. FACTOR: 1UNITS: ug/Kg

ND = not detected at detection limit



15 Wiggins Ave., Bedford, MA 01730
Telephone: (781) 275-3330
Fax: (781) 275-7478

CHAIN OF CUSTODY RECORD

WORK ORDER #: 98-09-322

DUE DATE : 9-23-98

COMPANY: Oden Remediation Services Co.
ADDRESS: 106 Route 303
West Nyack, NY 10994
PHONE #: (914) 358-2720 FAX #: (914) 358-2790
P.O. #: 752 P 2 112450
PROJECT MANAGER: Mike Diana
PROJECT ID/LOCATION: Clarkstown L.F

ANALYSES

SAMPLE TYPE CONTAINER TYPE
1. WASTEWATER P - PLASTIC
2. SOIL G - GLASS
3. SLUDGE V - VOA
4. OIL
5. DRINKING WATER
6. WATER (GWMW/SW)
7. OTHER (SPECIFY)

PRESERVATIVE
EPA 8020
100

SPECIAL INSTRUCTIONS COMMENTS

TOXIKON #	SAMPLE IDENTIFICATION	SAMPLE TYPE	CONTAINER SIZE	CONTAINER TYPE	#	DATE	SAMPLING TIME
①	EPA 8020 - TS-HS/SL-10	Z				9/16/98	12 PM
②	EPA 8020 - TS-TAY-10	Z				9/16/98	12 PM
③	EPA 8020 - CS-SB-30	Z				9/16/98	3 PM
④	EPA 8020 - TS-HS-4	Z				9/16/98	3 PM
⑤	EPA 8020 - CS-TL-20	Z				9/16/98	11 AM
⑥	EPA 8020 - SF-WMX-90	Z				9/16/98	11 AM
⑦	EPA 8020 - TS-HS/SL-20	Z				9/16/98	3 PM

QUOTATION #:

SAMPLED BY:	DATE: <u>See above</u>
RELINQUISHED BY:	TIME: <u>9-20-98</u>
RELINQUISHED BY:	DATE: <u>9-16-98</u>
RELINQUISHED BY:	TIME: <u>4-30-PM</u>
RELINQUISHED BY:	DATE: <u>9-16-98</u>
RELINQUISHED BY:	TIME: <u>4-30-PM</u>

☐ RUSH BUSINESS DAY TURN AROUND
☒ ROUTINE
Sample disposal information
Are there any other known or suspected

DATE: 9-17-98
TIME: 1040-
DATE: 09-17-98
TIME: 11

Page,9

TOXIKON CORP.

REPORT

Work Order # 98-09-323

Received: 09/17/98

Test Methodology

TEST CODE 8020 NAME PURGEABLE AROMATICS

EPA Method: 8020. Volatile Aromatic Compounds.

Reference: Test Methods for Evaluating Solid Waste: Physical/Chemical
Methods. EPA SW-846 (Third Edition) 1986.
Office of Solid Waste, USEPA.

Received: 09/17/98

Results by Sample

SAMPLE ID TS-HS/S&L-20FRACTION 07ATEST CODE 8020NAME PURGEABLE AROMATICSDate & Time Collected 09/16/98 15:00:00Category SOILEPA 8020

	RESULT	LIMIT
BENZENE	<u>ND</u>	<u>1.0</u>
TOLUENE	<u>3.9</u>	<u>2.0</u>
ETHYLBENZENE	<u>ND</u>	<u>2.0</u>
XYLENES (TOTAL)	<u>5.5</u>	<u>2.0</u>

Notes and Definitions for this Report:

DATE RUN: 09/22/98ANALYST: NLCINSTRUMENT: V5DIL. FACTOR: 1UNITS: ug/Kg

ND = not detected at detection limit

1,001,000,000

Index Size:

Shipped Via FedEx

9/16/98

WEST NyACK

Purchase Order No.:

Michael Dancer

References

Sampled By:
(Signature)

[illegible]

Comments/Special Instructions:

So. N of GE-10

1. Project Name - Project Name

520

Page,9

TOXIKON CORP.

REPORT

Work Order # 98-09-323

Received: 09/17/98

Test Methodology

TEST CODE 8020 NAME PURGEABLE AROMATICS

EPA Method: 8020. Volatile Aromatic Compounds.

Reference: Test Methods for Evaluating Solid Waste: Physical/Chemical
Methods. EPA SW-846 (Third Edition) 1986.
Office of Solid Waste, USEPA.

777

APPENDIX H3:

Seed Mixture and Certificates of Compliance

GATES ROAD, BALDWINVILLE, NEW YORK 13027
TELEPHONE: 315-638-0610 FAX: 315-638-0071

May 18, 1997

General Contractor: Ogden Remediation Services Co., Inc
Clarkstown Project Office
166 Route 303
W. Nyack, NY 10994

Sub Contractor: Farr Crest Excavating
Box 197 Davis Road
New Kingston, NY 12459

To whom it may concern:

This is to verify the seed mixture that Merritt Seed Company will supply, upon receipt of order, for use on the Permanent Seeding areas at the Clarkstown Landfill project conforms to the following specifications.

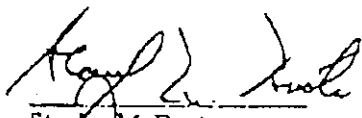
<u>Pounds</u> <u>Per Acre</u>	<u>Percent</u> <u>In mix</u>	<u>Variety</u>	<u>Min</u> <u>Purity</u>	<u>Min</u> <u>Germ</u>
35 lbs	70%	Kentucky 31 Tall Fescue	95%	80%
5 lbs	10%	Redtop	92%	80%
5 lbs	10%	Empire Birdsfoot Trefoil	98%	70%
5 lbs	10%	Leo Birdsfoot Trefoil	98%	80%

50 lbs/acre

Note: Viking Birdsfoot trefoil is not available nor are any imported European varieties. Birdsfoot trefoil originated in Europe therefore varieties raised in the U.S. and Canada are originally of an European source.

The seed will be delivered in sealed packages with labels bearing the Lot Number MB 425, the Title: Permanent Seeding Mixture, the Job: Clarkstown Landfill, the percentages of the mixture, purity, germination, hard seed, weed seed content, and inert material.

I certify that the above information is correct to the best of my knowledge.


Stanley M. Boots
Owner**FINN**

Merritt Seed Company

STANLEY M. BOOTS, TURF CONSULTANT

GRASS SEED MIXTURES • FERTILIZERS • SOIL GUARD • EROSION CONTROL PRODUCTS • CONWED HYDROMULCH DISTRIBUTOR

GATES ROAD, BALDWINVILLE, NEW YORK 13027
TELEPHONE 315-638-0610 FAX 315-638-0071

May 18, 1997

General Contractor: Ogden Remediation Services Co., Inc
Clarkstown Project Office
166 Route 303
W. Nyack, NY 10994Sub Contractor: Farr Crest Excavating
Box 197 Davis Road
New Kingston, NY 12459

To whom it may concern:

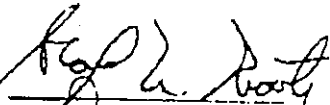
This is to verify the herbaceous seed mixture that Merritt Seed Company will supply, upon receipt of order, for use on the wetland mitigation areas at the Clarkstown Landfill project conforms to the following specifications:

<u>Pounds Per Acre</u>	<u>Percent In mix</u>	<u>Variety</u>	<u>Min Purity</u>	<u>Min Germ</u>
1 lbs	6.67%	Redtop	92%	80%
1 lbs	6.67%	Creeping Bentgrass	95%	85%
3 lbs	20.00%	Meadow Foxtail	95%	85%
5 lbs	33.33%	Annual Ryegrass	97%	90%
3 lbs	20.00%	Deertongue grass	95%	85%
2 lbs	13.33%	Rough Stalk Bluegrass	97%	85%

15 lbs/acre

The seed will be delivered in sealed packages with labels bearing the Lot Number MB 427, the Title: Wetland Mitigation Mixture, the Job: Clarkstown Landfill, the percentages of the mixture, purity, germination, hard seed, weed seed content, and inert material.

I certify that the above information is correct to the best of my knowledge.

Stanley M. Boots
Owner**FINN**

☎ 3156380071

MERRITT SEED CO.

05/20/97 17:02

P03

Merritt Seed Company

STANLEY M. BOOTS, TURF CONSULTANT

GRASS SEED MIXTURES - FERTILIZERS - SOIL GUARD - EROSION CONTROL PRODUCTS - CONWED HYDROMULCH DISTRIBUTOR

GATES ROAD, BALDWINVILLE, NEW YORK 13027
TELEPHONE 315-638-0610 FAX 315-638-0071

May 15, 1997

General Contractor: Ogden Remediation Services Co., Inc.
166 Route 303
West Nyack, NY 10994Sub-Contractor: Farr Crest Excavating
Box 197 Davis Rd.
New Kingston, NY 12459

To whom it may concern.

This is to verify the fertilizer that Merritt Seed Company will supply, upon receipt of order, for use on the permanent seeding areas of the Clarkstown Landfill is as follows:

10-20-20

The manufacturer guarantees 10 lbs of available Nitrogen per cwt which is which is derived from Diammonium Phosphate and/or Urea and/or Sulfate of Ammonia.

The manufacturer guarantees 20 lbs of available P2O5 per cwt which is derived from Diammonium Phosphate and/or Monammonium Phosphate and/or Superphosphate.

The manufacturer guarantees 20 lbs of available K2O per cwt which is derived from muriate of Potash.

The product is packaged by the manufacturer in 50 pound bags bearing the 10-20-20 marking. An application rate of 300 pounds per acre will supply the equivalent of 600 pounds per acre of 5-10-10.

I certify that the above information is correct to the best of my knowledge.

Stanley M. Boots
Owner**FINN**

FARR CREST EXCAVATING CORP.

SITE DEVELOPERS



BOX 197 DAVIS ROAD
NEW KINGSTON, NY 12459
(914) 586-2351 FAX (914) 586-4838

July 15, 1997

Ogden Remediation Services Co., Inc.
166 Route 303
W. Nyack, NY 10994

Attention: Mike Dianna

Re: Recommending Hay Mulch Instead of Straw Mulch at Clarkstown Landfill

Dear Mike:

Farr Crest Excavating Corp. would like to use hay mulch instead of straw mulch at the Clarkstown Landfill. In our experience hay mulch is superior to straw because it holds more moisture, binds to the soil and breaks down better than straw mulch. We also recommend crimping the hay mulch instead of tackifier. In our experience mechanically crimping the hay mulch insures a much better attachment of the hay to the soil.

Yours truly,

A handwritten signature in black ink, appearing to read 'Robert Hancock'.

Robert Hancock

Engineering & Construction, Inc.

Letter of Transmittal # 1132

TO Roy F. Weston of New York, Inc. (RFW)

Raritan Plaza III, Suite 2B

101 Fieldcrest Ave.

Edison, NJ 08837

(732) 417-5800/5801 (fax)

Date: 11/17/98

OE&C Project No. 60010 0000 0050 8000

Attention: Bruce LaPenta

Re: Remediation of Clarkstown Sanitary LF & LF Capping

Town of Clarkstown, Rockland County, New York

Ogden Engineering & Construction, Inc. (OE&C)

Submittal Item # 108.15

Subcontractor/Supplier:

We Are Sending You (Fedex):

☒ Attached

Prints

☐ Under separate cover via _____ the following items:

☐ Shop drawings☐ Change order

Plans

☐ Samples

Specifications

☒ Copy of letter

☐ Reviewed & Approved[illegible]

These are transmitted as checked below:

☐ For approval

☐ Approved as submitted☐ Resubmit _____ copies for approval

☒ For your use

☐ Approved as noted

☐ Submit _____ copies for distribution

☐ As requested

☐ Returned for corrections☐ Return corrected prints☐ For review and comment

11

☐ For Bids Due on

☐ For Record Purposes

☐ Prints Returned After Loan to Us

Remarks:

Copies To: CDS/TL/KK, RFW w/attachment
FF.NY144 w/att.; CF.PM, CL

Signed: Michael J. Diana
Michael J. Diana Quality Control

Ogden Engineering & Construction, Inc.
166 Route 303
West Nyack, NY 10994
(914) 358-2720 (EST)
(914) 358-2720 (fax)

Merritt Seed Company

STANLEY M. BOOTS, TURF CONSULTANT

GRASS SEED MIXTURES · FERTILIZERS · SOIL GUARD · EROSION CONTROL PRODUCTS · CONWED HYDROMULCH DISTRIBUTOR

GATES ROAD, BALDWINVILLE, NEW YORK 13027
TELEPHONE: 315-638-0610 FAX: 315-638 0071

July 18, 1997

General Contractor: Ogden Remediation Services Co., Inc
Clarkstown Project Office
166 Route 303
W. Nyack, NY 10994

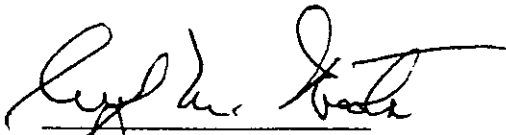
Sub Contractor: Farr Crest Excavating
Box 197 Davis Road
New Kingston, NY 12459

To whom it may concern:

This is to verify the inoculant Merritt Seed Company will use to inoculate the Birdsfoot Trefoil in the Permanent Seeding Mixture and the Outslope Seed Mixture for use on the Clarkstown Landfill Project conforms to the following specifications.

The inoculant, *Rhizobium loti*, containing a minimum of 200,000,000 Infective Viable Cells per Gram is manufactured by Urbana Laboratories, St Joseph, Missouri, with the Lot Number: D19 and an expiration date of December 31, 1997. Each 6 ounce package will treat 50-60 pounds of trefoil.

I certify that the above information is correct to the best of my knowledge.


Stanley M. Boots
Owner

FINN

TO: Roy F. Weston of New York, Inc. (RFW)

Clarkstown Field Office

166 Route 303

West Nyack, NY 10994

(914) 353-5221/5491 (fax)

Date: 9/11/97 ORSC Project No. 60010 0000 0050 8000

Attention: John Woodley

Re: Remediation of Clarkstown Sanitary LF & LF Capping

Town of Clarkstown, Rockland County, New York

Ogden Remediation Services Co., Inc. (ORSC)

Submittal Item # 127.10 A

Subcontractor/Supplier:

We Are Sending You (by hand):

- ☒ Attached ☐ Prints ☐ Under separate cover via _____ the following items:
- ☐ Shop drawings ☐ Change order ☐ Plans ☐ Samples ☐ Specifications
- ☐ Copy of letter ☐ Reviewed & Approved ☒ Seed Mix Certs.

COPIES	DATE	NO. of Pgs	DESCRIPTION
5			Wetland Mitigation Mixture Certification
			Applicable Spec. Section: 02990, 1.02, A

These are transmitted as checked below:

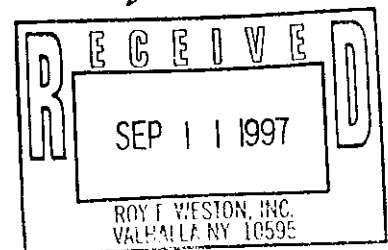
- ☒ For approval ☐ Approved as submitted ☐ Resubmit ____ copies for approval
- ☐ For your use ☐ Approved as noted ☐ Submit ____ copies for distribution
- ☐ As requested ☐ Returned for corrections ☐ Return ____ corrected prints
- ☐ For review and comment ☐ ☐
- ☐ For Bids Due on ☐ For Record Purposes ☐ Prints Returned After Loan to Us

Remarks:

Copies To: CDS/TL/KK, RFW w/attachment
FF.NY144 w/att.; CF.PM, ORSC w/att.; CL

Signed: *James Beatty*
James Beatty Quality Control

Ogden Remediation Services Co., Inc. (ORSC)
166 Route 303
W. Nyack, NY 10994
(914) 358-2720 (EST)
(914) 358-2790 (fax)



Remediation of Clarkstown Sanitary Landfill and Landfill Capping
Town of Clarkstown

Spec. Section O2990, 2.02, A.

In response to Weston's comments to ORSC submittal no. 127.10, Wetland Mitigation Seeding Mixture, forwarded are the Reports of Seed Analysis certifying the seed purity. The laboratory qualifications of the certifying labs may be forwarded at the request of Weston. Since the purity analysis has already been completed, certification by the Seed Investigation of the New York State Agricultural Experimental Station located in Geneva, NY is not necessary.

Society of Commercial
Seed TechnologistsHalsey, OR 97348
Phone/FAX 541-369-2582

seed testing

Report of Seed Analysis

NAMES AND ADDRESSES: SMITH SEED SERVICES P.O. BOX 208 HALSEY OR 97348	DATE RECEIVED AUG 7	DATE COMPLETED 5/12/97	TEST NO. BV7794
	SENDERS INFORMATION: KIND: RED TOP BENTGRASS VARIETY: RETON LOT NUMBER: M-6-8021 SIZE OF LOT: 2200X 11,450# GROWER: PICKSEED WEST OTHER INFORMATION: AND		

The information provided here is that of the sender and not of the laboratory.

PURITY ANALYSIS

(0.2440 GRAMS ANALYZED)

PURE SEED COMPONENT(S):

BENTGRASS

99.00%

OTHER CROP SEED
INERT MATTER
WEED SEED

0.00%

0.80%

0.20%

VIABILITY ANALYSIS							
Germ- ination %	Hard Seed %	Test Fluor- escence %	No. Seeds (Germ)	Days Tested	TZ %	No. Seeds (TZ)	Pure Live Seed
82.25	XXXX	XXXX	400	28	XXXX	XXXX	XXXX

COMMENTS:

N/A

OTHER CROP SEED (per lb.):
NONE FOUNDALL STATES NOX. WEEDS (per lb.). Except Hawaii and States
having undesirable Grass Seeds listed as noxious weeds.
2.510 GMS ANALYZED:

382 WILD CARROT (DALCUS CAROTA)

INERT MATTER:
CHAFF, STEMS

WEED SEED (per lb.):

1.868 VELVETGRASS

OTHER DETERMINATIONS:

N/A

RECEIVED

MAY 13 1997

TEST CODES AND FEES: PGS

\$62.00

ISSUE DATE 5/12/97

RULES FOLLOWED OTHER THAN AOSA: XXXXXX



SIGNATURE

Zoe Callahan

TOTAL P.02

REGISTERED MEMBER SOCIETY OF COMMERCIAL SEED TECHNOLOGISTS

Report of Seed Analysis

1000#
4/95
ASP

NAMES AND ADDRESSES:

AMERICAN SEED
36040 TENNESSEE
ALBANY OR 97321DATE RECEIVED
04/10/94DATE COMPLETED
06/29/94TEST NO.
87778

SENDERS INFORMATION*

KIND: CREEPER BENTGRASS
VARIETY: NOT STATED
GENUS/SPECIES:
LOT NUMBER: 400
SIZE OF LOT: 5,325 LB.
FIELD NUMBER:
SAMPLE TYPE:
OTHER INFORMATION: JENSEN SEED & GRAIN

PURITY ANALYSIS

PURITY NOT CONDUCTED

(GRAMS ANALYZED)

PURE SEED COMPONENT(S): 96.63%
HOSTIS SP.OTHER CROP SEED 0.00%
INERT MATTER 3.36%
WEED SEED 0.01%

VIABILITY ANALYSIS

Germ- ination %	Dormant %	Hard Seed %	Total Viable %	No. Seeds (Germ)	Days Tested	Fluor- escent %	Non- Fluor. %	TZ %
96.75	X	X	96.75	400	28+7PC	X	X	X

COMMENTS:

OTHER CROP SEED:
NOT CONDUCTED

ALL STATES (EXCEPT HAWAII) NOX. WEED SEEDS _____ QMG. ANALYSIS:

NOT CONDUCTED

INERT MATTER NOT CONDUCTED

OTHER DETERMINATIONS:
NOT CONDUCTEDWEED SEED:
NOT CONDUCTED

TEST CODE AND FEES:

RULES FOLLOWED OTHER THAN AOSA:



SIGNATURE

Sharon K. Luck

REGISTERED SEED TECHNOLOGIST - SEAL NO. 107

Purity and germination test results reported on this form have been carried out in accordance with AOSA rules unless otherwise specified. Test results reflect the condition of the submitted sample and may not be the condition of the seed lot from which the sample was taken.

hulsey seed laboratory, inc.

ALL ANALYSIS ACCORDING TO AOSA PROCEDURES

p.o. box 132
decatur georgia, 30031-0132
404-294-5450
FAX: 404-294-TEST

MEMBER AMERICAN SEED TRADE ASSOCIATION - SOUTHERN SEEDSMEN'S ASSOCIATION
SOCIETY OF COMMERCIAL SEED TECHNOLOGISTS

lab. number 094-2306

WHEN REFERRING TO THIS REPORT, PLEASE GIVE LAB. NO.

ERNST CONSERVATION SEEDS

659

9006 MERCER PIKE

MEADVILLE, PA 16335

date 10/05/96

kind and variety BENTGRASS

variety CREEPING

purity and germination
analysis of seed sample

pure seed %

inert matter %

other crop %

weed seeds %

germination 90.00 %

hard seed %

total crop %

dormant seed %

total azollum %

name and no. of noxious weed seeds per lb.
(all size) (only count unless otherwise indicated.)

name of other crop

GERM ONLY

name of weeds



Jerry Hulsey
registered seed technologist

we have no control over the manner in which the sample was taken, our analysis is based upon the sample received and does not guarantee the uniformity of the lot. Our liability in all instances is limited to the sample received and only for malice analysis on same. This analysis does not refer to true-to-type of variety in instances where the varieties are indistinguishable from the seed characteristics.

TOTAL P. 05

Overvolden RST

of Commercial
and Technologists

Ever
Screen
Seed Lab

259 W. Main
Hillsboro, Oregon 97101
Phone (503) 640-6229
Fax (503) 640-6229

Report of Seed Analysis

NAMES AND ADDRESSES: McDANIEL SEED CO. P. O. BOX 828 McMinnville, Oregon 97128	DATE RECEIVED 6-30-94	DATE COMPLETED 8-11-94	TEST NO 4861
	SENDERS INFORMATION: KIND: MEADOW FOXTAIL VARIETY: NOT STATED LOT NUMBER: Y2-94-MF9 SIZE OF LOT: NOT STATED GROWER: NOT STATED OTHER INFORMATION:		

PURITY ANALYSIS

(3.281 GRAMS ANALYZED)

* The information provided here is that of the sender and not of the laboratory

PURE SEED COMPONENT(S):

MEADOW FOXTAIL 96.04%

OTHER CROP SEED .06%
 INERT MATTER 3.90%
 WEED SEED .00%

Germ- ination %	Hard Seed %	Total Viable %	No Seeds (Germ)	Days Tested	TZ %	Fluor- escent %	No Flu %
93	-	93	400	14 CH-7			

COMMENTS:

OTHER CROP SEED:

RYEGRASS 138/1b.

ALL STATES (except Hawaii) NOX WEED SEEDS 30.0GMS. ANAL
 This sample has _____, or has not ☒ been examined for the
 presence of undesirable grass seeds.

NONE FOUND

INERT MATTER:

STEMS, EMPTY FLORETS, DIRT

WEED SEED:

NONE FOUND

OTHER DETERMINATIONS:

TEST CODES AND FEES:

RULES FOLLOWED OTHER THAN AOSA: ☒ X

SIGNATURE

Emily Vandercell

The purity and germination test results reported on this form have been carried out in accordance with AOSA rules unless otherwise specified. Test results reflect condition of the submitted sample and may not reflect the condition of the seed lot from which the sample was taken.

Registered Seed Technologist-Seed No. 081

hulsey seed laboratory, inc.

ALL ANALYSIS ACCORDING TO AUSA PROCEDURES
 p.o. box 132
 decatur georgia, 30031-0132
 404-294-5450
 FAX: 404-294-TEST

MEMBER AMERICAN SEED TRADE ASSOCIATION - SOUTHERN SEEDSMEN'S ASSOCIATION
 SOCIETY OF COMMERCIAL SEED TECHNOLOGISTS

lab number 01- 3500

WHEN REFERRING TO THIS REPORT, PLEASE GIVE LAB. NO.
 659

ERNST CONSERVATION SEEDS
 9006 MERCER PIKE
 MEADVILLE, PA 16335

(814) 236-2404
 FAX: (814) 425-2228
 lot no. Y2-4-MF9

no. bags

6

name of weeds

date 02/12/97

kind and

variety FOXTAIL MEADOW

pure and germination
 analysis of seed sample

pure seed % GERM ONLY

inert matter %

other crop %

weed seeds %

germination 88.00 %

flare seed %

oil seeds %

dominant seed %

tetrazolium %

name and no. of noxious weed seeds per lb.
 (if less than noxious count unless otherwise indicated.)



registered seed technologist

Seed analysis is performed on the number of seeds in which the sample was taken. Our analysis is based upon the sample received and does not guarantee the accuracy of the analysis. This analysis does not reflect the quality of the seed. The seed is not guaranteed to be free of noxious weeds. The seed is not guaranteed to be free of noxious weeds. The seed is not guaranteed to be free of noxious weeds.

TEST CODES AND FEES: P/G/PLC \$42.00
ISSUE DATE: 8/7/96 YYYYYY



Mr. C. L. L. L. L.

JUL-15-1997 13:56

AMPAC

541 928 2430 P.06/10

**Southern
VALLEY
seed testing**

P.O. Box 165
Halsey, OR 97348
Phone/FAX 541-369-2502

Report of Seed Analysis

ADDRESSES: LaBRIE RANCH 7505 GARDEN VALLEY RD. ROSEBURG OR 97470	DATE RECEIVED 7/30/96	DATE COMPLETED 8/23/96	TEST NO. SV81543
	SENDER'S INFORMATION: ANNUAL RYEGRASS KIND: VARIETY: GULF LOT NUMBER: D3-6-A-115 SIZE OF LOT: N/6X52,800# GROWER: LaBRIE OTHER INFORMATION: CO: AMPAC		

* The information provided here is that of the sender and not of the laboratory.

PURITY ANALYSIS

5.082
(GRAMS ANALYZED)

VIABILITY ANALYSIS

PURE SEED COMPONENT(S):		Germ- ination %	Hard Seed %	Test Por- escence %	No. Seeds (Germ)	Days Tested	TZ %	No. Seeds (TZ)	Pure Live Seed
ANNUAL RYEGRASS		98.15%	98.60	XXXX	98.95	400	14	XXXX	XXXX
OTHER CROP SEED		1.03%							
INERT MATTER		0.82%							
WEED SEED		0.00%							
COMMENTS:		7 DAY PRECHILL							

OTHER CROP SEED (per lb.):
1.03% PERENNIAL RYEGRASS-----

ALL STATES NOX. WEEDS (per lb.) Except Hawaii and States
having undesirable Grass Seeds listed as noxious weeds, ---
50.28 GMS ANALYZED:

NONE FOUND

INERT MATTER:
CHAFF, STEMS, EMPTY FLORETS

OTHER DETERMINATIONS:

WEED SEED (per lb.):
NONE FOUND

N/A



JUL-15-97 WED 10:33 SOUTH VALLEY SEED LAB

5413492502

P.01

Zoe Callahan, RST
Member
Society of Commercial
Seed Technologists

*South
Valley
seed testing*

P.O. Box 155
Halsey, OR 97348
Phone/FAX 541-369-2502

Report of Seed Analysis

NAMES AND ADDRESSES: LADRIE RANCH 7505 GARDEN VALLEY RD. ROSEBURG OR 97470	DATE RECEIVED 4/17/97	DATE COMPLETED 7/16/97	TEST NO. SV01012
	SENDERS INFORMATION: ANNUAL RYEGRASS KIND: VARIETY: GULF LOT NUMBER: D3-6-AM-4 SIZE OF LOT: 1/6X32,600# GROWER: LADRIE OTHER INFORMATION: NS		

* The information provided here is that of the sender and not of the laboratory.

PURITY ANALYSIS		VIABILITY ANALYSIS							
5.0g (GRAMS ANALYZED)		Germ- ination %	Hard Seed %	Test Flu- orescence %	No. Seeds (Germ)	Days Tested	TZ %	No. Seeds (TZ)	Pure Live Seed
PURE SEED COMPONENT(S):									
RYEGRASS	0.00%	97.00	XXXX	XXXX	400	14	XXXX	XXXX	XXXX
* PURITY TEST NOT CONDUCTED									
OTHER CROP SEED	0.00%								
INERT MATTER	0.00%								
WEED SEED	0.00%								
COMMENTS:		N/A							

OTHER CROP SEED (per lb.):

N/A

ALL STATES NOX. WEEDS (per lb.). Except Hawaii and States
having undesirable Grass Seeds listed as noxious weeds.

GMS ANALYZED:

N/A

INERT MATTER:

N/A

WEED SEED (per lb.):

N/A

OTHER DETERMINATIONS:

N/A

TEST COSES AND FEES: REGERM (DISCOUNTED) \$15.00

ISSUE DATE 7/15/97

XXXXXX



SIGNATURE

Zoe Callahan

Real #110

Inrisey seed laboratory, inc.

registered seed technologists

p.o. box 132
decatur, georgia 30031-0132
404-294-5450

FAX: 404-294-TEST

MEMBER AMERICAN SEED TRADE ASSOCIATION - SOUTHERN SEEDSMEN'S ASSOCIATION
SOCIETY OF COMMERCIAL SEED TECHNOLOGISTS



lab. number 05-1986

WHEN REFERRING TO THIS REPORT, PLEASE GIVE LAB. NO.

659

05A

ACKNOWLEDGEMENT

OF
SEED
SAMPLE

ERNST CONSERVATION SEENS
9006 MERCER PIKE
MEADVILLE, PA 15335

(814) 336-2404

FAX: (814) 425-2228

lot no. 10753

no. bags

date

05/30/97

kind and

variety

JIOGA DEER TONGUE

purity and germination
analysis of seed sample

name of other crop

name of weeds

FZ

pure seed

99.28 %

PURITY ONLY

inert matter

0.46 %

TZ TEST:

86.00%

other crop

0.00 %

FAX RESULTS

weed seeds

0.26 %

germination

%

hard seed

%

total germ. &
hard seed

%

dormant seed

%

tetrazolium

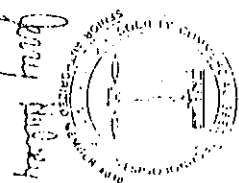
%

name and no. of noxious weed seeds per lb.
(all states noxious count unless otherwise indicated.)

54 CURLED DOCK

18 BARNYARDGRASS

registered seed technologist



This will acknowledge with thanks receipt of your seed sample. The germination analysis has been started and will be sent as soon as completed. Since we have no control over the manner in which the sample was taken, our analysis is based upon the sample received and does not guarantee the uniformity of the lot. Our liability in all instances is limited to the sample received and price for making analysis on same. This analysis does not refer to insects or diseases of variety in instances where the varieties are indistinguishable from the seed characteristics.

PHL (503) 585-1440

AGRI SEED TESTING, INC.

1930 DAYCOR CT. S.E., SALEM, OR 97302

J6-4-L1

FAX (503) 881

Report of Seed Analysis

NAMES AND ADDRESSES: GREAT WESTERN SEED PO BOX 387 ALBANY OR 97321	DATE RECEIVED 02/14/96	DATE COMPLETED 03/29/96	TEST NO. 13
	SENDER'S INFORMATION KIND: POA TRIVIALIS VARIETY: Not stated GENUS/SPECIES: LOT NUMBER: J6-4-LA2E SIZE OF LOT: Not stated FIELD NUMBER: SAMPLE TYPE: OTHER INFORMATION:		

PURITY ANALYSIS

(5.0400 GRAMS ANALYZED)

 PURE SEED COMPONENT(S):
 POA TRIVIALIS

98.33 %

 OTHER CROP SEED .00 %
 INERT MATTER 1.67 %
 WEED SEED .00 %

 OTHER CROP SEED:
 None found

INERT MATTER: empty florets, stems, chaff

 WEED SEED:
 None found

TEST CODE AND FEES:

RULES FOLLOWED OTHER THAN AOSA:

The purity and germination test results reported on this form have been carried out in accordance with AOSA rules unless otherwise specified. It is understood that the condition of the seed lot from which the sample was taken may not reflect the condition of the entire lot.

*The information provided here is that of the sender and not of the laboratory.

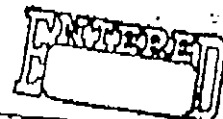
VIABILITY ANALYSIS

Germ-ination %	Dormant %	Hard Seed %	Total Viable %	No. Seeds (Germ)	Days Tested	TFL %	T. %
89.25	x	x	89.25	400	28 + 7pc	1.1	1.1

COMMENTS:

 ALL STATES NOX. WEED SEEDS 5.1630 GMS. ANALYZED:
 (EXCEPT HAWAII)
 None found

OTHER DETERMINATIONS: Not conducted



Date issued: 03/29/96



SIGNATURE

 Sharon K. Smith
 REGISTERED SEED TECHNOLOGIST - SEAL NO. 107
 INTERNATIONAL ASSOCIATION OF CEREAL AND OIL SEED TECHNOLOGISTS

33045 Hwy. 99 E
P.O. Box 253
Tangent, OR 97389

TOWNSEND SEED TESTING
Commercial Seed Laboratory

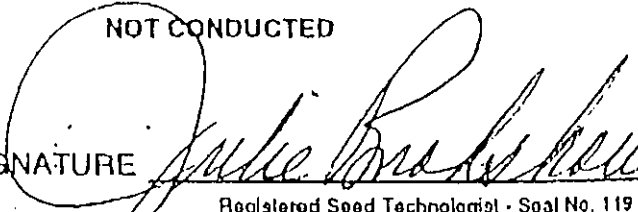
Phone: (503) 928-882
Fax: (503) 928-266

Report of Seed Analysis

NAMES AND ADDRESSES: Proseeds Marketing P.O. Box 1045 250 Broadalbin SW Albany, OR 97321	DATE RECEIVED April 17 1997	DATE COMPLETED April 28 1997	TEST NO T-6469
	SENDERS INFORMATION* KIND: Poa trivialis VARIETY: Not stated LOT NUMBER: J6-4-LA2E SIZE OF LOT: Not stated GROWER: Not stated OTHER INFORMATION: Not stated		

* The information provided here is that of the sender and not of the laboratory.

PURITY ANALYSIS (XXX GRAMS ANALYZED)		VIABILITY ANALYSIS						
PURE SEED COMPONENT(S): PURITY NOT CONDUCTED		Germ - ination %	Test Flour- escence %	Hard Seed %	No Seeds (Gorm)	Days Tested	No Seeds (TZ)	TZ %
GERMINATION ONLY:	Poa trivialis (Rough bluegrass)	91%	XXXXXXXXXXXX		400	7	XXXXXXXXXXXX	
OTHER CROP SEED	NOT CONDUCTED	%	COMMENTS: Not stated					
INERT MATTER	NOT CONDUCTED	%						
WEED SEED	NOT CONDUCTED	%						

OTHER CROP SEED: NOT CONDUCTED	ALL STATES NOX. WEEDS. Except Hawaii and states having Undesirable Grass Seeds listed as noxious weed. XXX grams analyzed.
INERT MATTER: NOT CONDUCTED	NOT CONDUCTED
WEED SEED: NOT CONDUCTED	OTHER DETERMINATIONS: NOT CONDUCTED
TEST CODES AND FEES: Germ Only \$ 15.00	SIGNATURE  Registered Seed Technologist - Seal No. 119 Registered Member of Society of Commercial Seed Technologists
RULES FOLLOWED OTHER THAN AOSA:	

The purity and germination test results reported on this form have been carried out in accordance with AOSA rules unless otherwise specified. Test results reflecting condition of the submitting sample and may not reflect the condition of the seed lot from which the sample was taken.

TO: Roy F. Weston of New York, Inc. (RFW)

Clarkstown Field Office

166 Route 303

West Nyack, NY 10994

(914) 353-5221/5491 (fax)

Date: 9/11/97	ORSC Project No. 60010 0000 0050 8000
Attention: John Woodley	
Re: Remediation of Clarkstown Sanitary LF & LF Capping	
Town of Clarkstown, Rockland County, New York	
Ogden Remediation Services Co., Inc. (ORSC)	
Submittal Item # 127.15 A	
Subcontractor/Supplier:	

We Are Sending You (by hand):

- ☒ Attached
 ☐ Prints
 ☐ Under separate cover via _____ the following items:
 ☐ Shop drawings
 ☐ Change order
 ☐ Plans
 ☐ Samples
 ☐ Specifications
 ☐ Copy of letter
 ☐ Reviewed & Approved
 ☒ Seed Mix Certs.

COPIES	DATE	NO. of Pgs	DESCRIPTION
5			Special Outslope Seed Certs.
			Applicable Spec. Section: 02990, 1.02, A

These are transmitted as checked below:

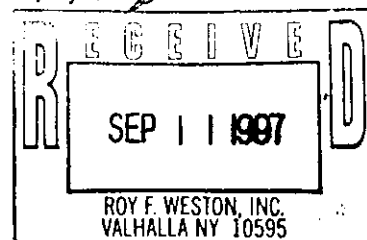
- ☒ For approval
 ☐ Approved as submitted
 ☐ Resubmit ____ copies for approval
 ☐ For your use
 ☐ Approved as noted
 ☐ Submit ____ copies for distribution
 ☐ As requested
 ☐ Returned for corrections
 ☐ Return ____ corrected prints
 ☐ For review and comment
 ☐ For Bids Due on
 ☐ For Record Purposes
 ☐ Prints Returned After Loan to Us

Remarks:

Copies To: CDS/TL/KK, RFW w/attachment
FF.NY144 w/att.; CF.PM, ORSC w/att.; CL

Signed: *James Beatty*
James Beatty Quality Control

Ogden Remediation Services Co., Inc. (ORSC)
166 Route 303
W. Nyack, NY 10994
(914) 358-2720 (EST)
(914) 358-2790 (fax)



Remediation of Clarkstown Sanitary Landfill and Landfill Capping
Town of Clarkstown

Spec. Section O2990, 2.02, A.

In response to Weston's comments to ORSC submittal no. 127.15, Outslope Seeding Mixture, forwarded are the Reports of Seed Analysis certifying the seed purity. The laboratory qualifications of the certifying labs may be forwarded at the request of Weston. Since the purity analysis has already been completed, certification by the Seed Investigation of the New York State Agricultural Experimental Station located in Geneva, NY is not necessary.

seed testing

Report of Seed Analysis

NAMES AND ADDRESSES: SMITH SEED SERVICES P.O. BOX 208 HALSEY OR 97348	DATE RECEIVED: 4/10/97	DATE COMPLETED: 5/12/97	TEST NO. RV7734
	SENDERS INFORMATION: KIND: RED TOP BENTGRASS VARIETY: RITON LOT NUMBER: M-8-0021 SIZE OF LOT: 2200X 11,4500 GROWER: PICKSEED WEST OTHER INFORMATION: MW		

The information provided here is that of the sender and not of the laboratory.

PURITY ANALYSIS

0.2440 GRAMS ANALYZED

PURE SEED COMPONENT(S):	
BENTGRASS	99.00%
OTHER CROP SEED	0.00%
INERT MATTER	0.80%
WEED SEED	0.20%

VIABILITY ANALYSIS								
Germ- ination %	Hard Seed %	Test Flour- occurrence %	No. Seeds (Germ)	Days Tested	TZ %	No. Seeds (TZ)	Pure Live Seed	
82.25	XXXX	XXXX	400	28	XXXX	XXXX	XXXX	

COMMENTS: N/A

OTHER CROP SEED (per lb.):
NONE FOUND

ALL STATES NOX. WEEDS (per lb.). Except Hawaii and States
having undesirable Grass Seeds listed as noxious weeds.
2.310 GMS ANALYZED:

382 WILD CARROT (DAUCUS CAROTA)

INERT MATTER:
CHAFF, STEM3

SEED SEED (per lb.):
1,000 VELVETGRASS

OTHER DETERMINATIONS:

N/A

RECEIVED

MAY 13 1997

ST CORDS AND FEES: PKG

ISSUE DATE 5/12/97
LES FOLLOWED OTHER THAN AOSA: XXXXXX

\$102.00



SIGNATURE

Zoe Callahan

TOTAL P.02

Seed

Phone: 614-889-1136

01/14/1997

0884

Variety and Kind (Market Class)

EMPIRE TREFOIL, BIRDSFOOT

Lot Identification Number

442-7-18135

Test Request Codes

MP 1SG NX

Improvement

Ernst Conservation Seeds
9006 Mercer Pike
Meadville, PA 16335

Association

INFORMATION ONLY SAMPLE
OHIO DEPT OF TRANS. TEST

Seed Analysis

	Moisture:	Bushel Wt.:	Seeds/Pound:	Test Date: 01/24/1997
Pure Seed:	99.44	TREFOIL, BIRD		
Inert:	0.07 %	STONE, SEED COATS		
Weeds:	0.00 %	Obj/Nox.: NONE		
		Other Weeds: NONE		
Other Crop:	0.49 %	4 ALFALFA, 3 RED CLVR., 2 ALSIKE		
Other Varieties:				

3.00 grams used for mech. purity

30 GM. OHIO NOXIOUS EXAM, NONE FOUND

Note: But that physical seed characteristics alone do not always absolutely and reliably distinguish cultivars from off-type seeds of the same species, OSIA disclaims any warranty whatsoever of the variety stated.

Standard	Final	Abnrm.	Disd.	Dead	Hd/Dorm.	Date	Comment
STANDARD GERM.	52.75	9.50	0.00	6.50	31.25	02/03/1997	

PaDot

Mulsey seed laboratory, inc.

registered seed technologist

MEMBER AMERICAN SEED TRADE ASSOCIATION - SOUTHERN SEEDSMEN'S ASSOCIATION
SOCIETY OF COMMERCIAL SEED TECHNOLOGISTS

P.O. box 132
decatur, georgia 30031-0132
404-294-5450
FAX: 404-294-TEST

lab. number 05-1966

WHEN REFERRING TO THIS REPORT, PLEASE GIVE LAB. NO.

659

ERNST CONSERVATION SEEDS
9006 HERCER FINE
MEADVILLE, PA 16335

date 05/30/97

(814)336-2404
FAX: (814)425-2228
lot no. T1153

kind and variety

T1106A DEER TONGUE

purity and germination analysis of seed sample

name of other crop

no. bags

PZ

name of weeds

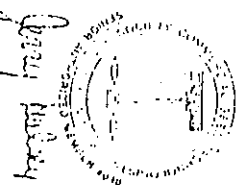
KNOTWEED
FAMICUM SPP.
SMARTWEEH
YELLOW FOXTAIL
CATCHFLY

pure seed 99.28 %
inert matter 0.46 %
other crop 0.00 %
weed seeds 0.26 %
germination %
hard seed %
total germ. & hard seed %
dormant seed %
tetrazolium %
name and no. of noxious weed seeds per lb.
(all states noxious count unless otherwise indicated)

PURITY ONLY
TZ TEST: 86.00%
FAX RESULTS

54 CURLED DOCK
13 EARLYAARUGRASS

registered seed technologist



This will acknowledge with thanks receipt of your seed sample. The germination analysis has been started and will be sent as soon as completed.
Since we have no control over the manner in which the sample was taken, our analysis is based upon the sample received and does not guarantee the uniformity of the lot. Our liability in all instances is limited to the sample received and price for making analysis on same. This analysis does not refer to freshness of variety in instances where the varieties are indistinguishable from the seed characteristics.

hulsey seed laboratory, inc.

ALL ANALYSIS ACCORDING TO AOSA PROCEDURES

p.o. box 132
decatur georgia, 30031-0132
404-294-5450
FAX: 404-294-TEST

MEMBER AMERICAN SEED TRADE ASSOCIATION - SOUTHERN SEEDSMEN'S ASSOCIATION
SOCIETY OF COMMERCIAL SEED TECHNOLOGISTS

lab. number 01-993

WHEN REFERRING TO THIS REPORT, PLEASE GIVE LAB. NO. 098

ERNST CONSERVATION SEEDS
9006 MERCER PIKE
HEADVILLE, PA 16335

859

date 01/18/97
kind and TIMOTHY
variety VNS

(814)236-2404
FAX: (814)425-2228
lot no. T521

no. bags

purity and germination
analysis of seed sample

name of other crop

name of weeds

pure seed	99.83 %
inert matter	0.14 %
other crop	0.02 %
weed seeds	0.01 %
germination	89.00 %
hard seed	%
seed prep. A	%
hard test	%
dormant seed	%
tetrazolium	%

PURITY & GERM
CLOVER

UNIDENTIFIED COMMON WEED SE

name and no. of noxious weed seeds per lb.
(all states noxious count unless otherwise indicated)

NONE



Jerry Hulsey
registered seed technologist

Since we have no control over the manner in which the sample was taken, our analysis is based upon the sample received and does not guarantee the uniformity of the lot. Our liability in all instances is
TOTAL P. 01

Ohio
Seed
Improvement
Association

FROM ERNST CONSERVATION SEEDS TO
Dublin, OH 43017-0477
Phone: 614-889-1136
Ernst Conservation Seeds
9006 Mercer Pike
Meadville, PA 16335

13156380071 P.04/04
01/14/1997
VARIETY AND KIND (MARKET CLASS)
SHELTER SWITCHGRASS
Lot Identification Number
BSQ95
Test Request Codes
MP 1SG NX

LABORATORY REPORT

INFORMATION ONLY SAMPLE

Seed Analysis

Molsture:	Bushel Wt.:	Seeds/Pound:	Test Date: 01/21/1997
Pure Seed: 99.86 %			
Inert: 0.02 %	BROKEN SEED, STEM		
Weeds: 0.12 %	Obj/Nox.: 3 GIANT FOXTAIL		
Other Crop: 0.00 %	Other Weeds: NONE		
Other Varieties:	NONE		

4.00 grams used for mach. purity

40 GM. MD, OH, PA, AND VA NOXIOUS EXAM, 20 SETARIA FABERI
(GIANT FOXTAIL) MD, VA 227/LB., 2 GALIUM SPP. (BEDSTRAW) PA 23/LB.

The fact that physical seed characteristics alone do not always absolutely and reliably distinguish cultivars from off-type seeds of the same species. OSHA disclaims any warranty whatsoever of the variety listed.

Genetic Donor Exam	Final	Abnrm.	Disd.	Dead	Hd/Dorm.	Date	Comment
STANDARD GERM.	85.50	2.75	0.00	11.75	0.00	02/19/1997	

LABORATORY