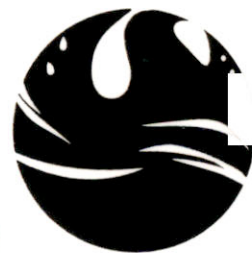


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ISLIP RESOURCE RECOVERY AGENCY

REMEDIAL INVESTIGATION / FEASIBILITY STUDY

REMEDIAL INVESTIGATION REPORT

SONIA ROAD LANDFILL
WEST BRENTWOOD, NEW YORK
SITE REGISTRY NO. 152013

APPENDICES A - R



Dvirka and Bartilucci
Consulting Engineers

APRIL 1998

**REMEDIAL INVESTIGATION REPORT
APPENDICES A-R**

**SONIA ROAD LANDFILL
WEST BRENTWOOD, NEW YORK**

(SITE REGISTRY No. 152013)

**PREPARED FOR

ISLIP RESOURCE RECOVERY AGENCY**

**BY

DVIRKA AND BARTILUCCI
CONSULTING ENGINEERS
WOODBURY, NEW YORK**

APRIL 1998

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APPENDIX A

SAMPLE INFORMATION RECORDS



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. LF (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Surficial soil sample ~~SS-S-1 (0-2")~~ #1 off-site
FIELD SAMPLE I.D. NUMBER SS-S-1 (0-2") DATE 2/26/97
TIME 2:15 WEATHER Sunny, windy TEMPERATURE 35°+

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL ✓ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR DK. br. pH - ODOR none
TEMPERATURE (°F) - SPECIFIC CONDUCTANCE (umhos/cm) -
TURBIDITY -

(PID) FID READING 0.0 ppm VISUAL DESCRIPTION DK. br. organic rich f-m sand,
little f-m gravel & roots & silt,
moist

CONSTITUENTS TO BE ANALYZED:

_____ TCL+30 _____
_____ _____ _____

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977 1-1/2" = 0.19	2" = 0.16 2-1/2" = 0.24	3" = 0.37 3-1/2" = 0.50	4" = 0.65 6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. LF SAMPLE CREW D. Obradorich
SAMPLE LOCATION/WELL NO. Surficial Soil Sample #2 (off-site)
FIELD SAMPLE I.D. NUMBER SS-S-2 (0-2") DATE 2/26/97
TIME 3⁰⁰ WEATHER Sunny, windy TEMPERATURE 40

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL ✓ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR DK. br. pH _____ ODOR none
TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE (umhos/cm) _____
TURBIDITY _____

✓ TID/TID READING 0.0 ppm VISUAL DESCRIPTION Organic rich f-m sand
little f-m gravel, roots, silt,
moist

CONSTITUENTS TO BE ANALYZED:

TCL+30

REMARKS: _____

GAL/FT		WELL CASING VOLUMES			
		1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
		1-1/2" = 0.10	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. LF SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Surficial Soil sample #3 (0-2") off-site
FIELD SAMPLE I.D. NUMBER SS-S-3-(0-2") DATE 2/26/97
TIME 3¹⁵ WEATHER Sunny, windy TEMPERATURE 40°+

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL ✓ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR DK. br. - blk. pH _____ ODOR none
TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE (umhos/cm) _____
TURBIDITY _____

PID/FID READING 0.0 ppm VISUAL DESCRIPTION DK. br. - blk. organic silt,
f. m sand, little f. gravel, v. moist

CONSTITUENTS TO BE ANALYZED:

TCL + 30

REMARKS: _____

WELL CASING VOLUMES				
GAL/FT	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46

SAMPLE INFORMATION RECORD

SITE Sonia Rd. LF SAMPLE CREW P. Obradovich
 SAMPLE LOCATION/WELL NO. Surficial Soil Sample # 4 (on-site)
 FIELD SAMPLE I.D. NUMBER SS-S-4 (0-2") + MS/MSD DATE 2/27/97
 TIME 11⁰⁰ WEATHER P. Cloudy, warm calm winds TEMPERATURE 50°

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
 SURFACE WATER _____ AIR _____
 SOIL ✓ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
 DEPTH OF WELL _____ MEASUREMENT METHOD _____
 VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR Brown pH — ODOR none
 TEMPERATURE (°F) — SPECIFIC CONDUCTANCE (umhos/cm) —
 TURBIDITY —

PID/FID READING — VISUAL DESCRIPTION Organic silt + peat, little v.f.-m sand, tr. f.-c gravel, roots v. moist

CONSTITUENTS TO BE ANALYZED:

TCL + 30

REMARKS: Collected MS/MSD here
SS-S-4 (0-2")
SS-S-4 (0-2")-MS
SS-S-4 (0-2")-MSD

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Surficial Soil Sample #5 (on-site)
FIELD SAMPLE I.D. NUMBER SS-S-5 (0-2") DATE 2/27/97
TIME 11:45 WEATHER P. Cloudy, calm winds TEMPERATURE 55°

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL ✓ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR Red-br. (orange) pH — ODOR none
TEMPERATURE (°F) — SPECIFIC CONDUCTANCE (umhos/cm) _____
TURBIDITY —

PID/FID READING — VISUAL DESCRIPTION F-C SAND, little organic
silt + f-c gravel, tr. clay, moist

CONSTITUENTS TO BE ANALYZED: TCL + 30

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.34	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Santa Rd. LP SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Surficial Soil Sample #6 (on-site)
FIELD SAMPLE I.D. NUMBER SS-S-6 (0-2") DATE 2/27/97
TIME 1215 WEATHER P. Sunny TEMPERATURE 55°

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL ✓ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR Brown pH — ODOR none
TEMPERATURE (°F) — SPECIFIC CONDUCTANCE (umhos/cm) —
TURBIDITY —

PID/FID READING — VISUAL DESCRIPTION F-C SAND, little organic
silt & roots, tr. f-c gravel, moist

CONSTITUENTS TO BE ANALYZED:

_____ TCL + 30 _____
_____ _____

REMARKS: _____

WELL CASING VOLUMES				
GAL/FT	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. LF SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Surficial Soil sample #7 (on-site)
FIELD SAMPLE I.D. NUMBER SS-S-7(0-2") DATE 2/27/97
TIME 12⁴⁵ WEATHER M. Sunny calm winds TEMPERATURE 65' +

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL ✓ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR Br., blk., tan pH - ODOR none
TEMPERATURE (°F) - SPECIFIC CONDUCTANCE (umhos/cm) -
TURBIDITY -

PID/FID READING - VISUAL DESCRIPTION F-m SAND, some silt
(organic), tr. f. gravel + roots, sl. moist

CONSTITUENTS TO BE ANALYZED:

_____ TCL + 30 _____

REMARKS: _____

WELL CASING VOLUMES

GAL/FT	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill-RI SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Soil Vapor Sample #1 Collected at SUP-9 temp. pt.
(450 N + 600 E)
FIELD SAMPLE I.D. NUMBER SV-V-1 (IEA #241) DATE 3/6/97
TIME 3²⁰ WEATHER M. Sunny TEMPERATURE 30°

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage, leachate) Soil Vapor

WELL INFORMATION (fill out for groundwater samples): N/A

DEPTH TO WATER _____ MEASUREMENT METHOD _____

DEPTH OF WELL _____ MEASUREMENT METHOD _____

VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR _____ pH _____ ODOR _____

TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE (umhos/cm) _____

TURBIDITY _____

PID/FID READING 0.0 ppm VISUAL DESCRIPTION _____

CONSTITUENTS TO BE ANALYZED:

TO1/TO2 (Volatile Organics)REMARKS: Purged sample @ 40th flowmeter = 287 ml/min.
for 5 min.

GAL/FT 1-1/4" = 0.077
1-1/2" = 0.10

WELL CASING VOLUMES

2" = 0.16
2-1/2" = 0.24

3" = 0.37
3-1/2" = 0.50

4" = 0.65
6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill-RI SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Soil Vapor Sample #2 collected at SVP-7
@ 150N + 600E stake
FIELD SAMPLE I.D. NUMBER SV-V-2 (IEA #272) DATE 3/6/97
TIME 3⁴⁰ WEATHER M. Sunny TEMPERATURE 30°

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., seepage, leachate)
Soil Vapor

WELL INFORMATION (fill out for groundwater samples): N/A

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR — pH — ODOR —
TEMPERATURE (°F) — SPECIFIC CONDUCTANCE (umhos/cm) —
TURBIDITY —

PID/FID READING 0.0 ppm VISUAL DESCRIPTION _____

CONSTITUENTS TO BE ANALYZED:

TO1/TO2 (Volatile Organics)

REMARKS: Purged sample @ 40^{on} flowmeter = 287 ml/min.
for 5 min.

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.877	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.34	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill-RI SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Soil Vapor Sample #3 Collected at SVP-16
@ 750N+900E location
FIELD SAMPLE I.D. NUMBER SV-V-3 (IEA #140) DATE 3/6/97
TIME 4:00 WEATHER M. Sunny TEMPERATURE 30°

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage, leachate)
Soil Vapor

WELL INFORMATION (fill out for groundwater samples): N/A

DEPTH TO WATER _____ MEASUREMENT METHOD _____

DEPTH OF WELL _____ MEASUREMENT METHOD _____

VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR _____ pH _____ ODOR _____

TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE (umhos/cm) _____

TURBIDITY _____

PID/FID READING 0.0 ppm VISUAL DESCRIPTION _____

CONSTITUENTS TO BE ANALYZED:

TO1/TO2 (Volatile Organics)

REMARKS: Purged sample @ 40th flowmeter = 287 ml/min.
for 5 min.

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.80	4" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill-KI SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Soil Vapor Sample #4 collected at SUP-28
@ 750 N + 1500 E location
FIELD SAMPLE I.D. NUMBER SV-V-4 (IEA #267) DATE 3/6/97
TIME 440 WEATHER M. Sunny TEMPERATURE 30°

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., seepage leachate)
Soil Vapor

WELL INFORMATION (fill out for groundwater samples): N/A

DEPTH TO WATER _____ MEASUREMENT METHOD _____

DEPTH OF WELL _____ MEASUREMENT METHOD _____

VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR _____ pH _____ ODOR _____

TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE (umhos/cm) _____

TURBIDITY _____

PID/FID READING 0.0 ppm VISUAL DESCRIPTION _____

CONSTITUENTS TO BE ANALYZED:

_____ TO1/TO2 (Volatile Organics)

REMARKS: purged sample @ 40th flowmeter = 287 ml/min.
for 5 min.

GAL/FT

1-1/4" = 0.077
1-1/2" = 0.10

WELL CASING VOLUMES

2" = 0.16
2-1/2" = 0.24

3" = 0.37
3-1/2" = 0.50

4" = 0.65
6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill-RI SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Soil Vapor Sample #5 Collected at SVP-26
at 150 N + 1500 E location
FIELD SAMPLE I.D. NUMBER SV-V-5 (IEA # 218) DATE 3/6/97
TIME 5⁰⁰ WEATHER M. Sunny TEMPERATURE 30°

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage, leachate)
Soil Vapor

WELL INFORMATION (fill out for groundwater samples): N/A

DEPTH TO WATER _____ MEASUREMENT METHOD _____

DEPTH OF WELL _____ MEASUREMENT METHOD _____

VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR _____ pH _____ ODOR _____

TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE (umhos/cm) _____

TURBIDITY _____

PID/FID READING 0.0 ppm VISUAL DESCRIPTION _____

CONSTITUENTS TO BE ANALYZED:

TO1/TO2 (Volatile Organics)

REMARKS: Purged sample @ 40⁰⁰ flowmeter = 287 ml/min.
for 5 min.

GAL/FT

1-1/4" = 0.877
1-1/2" = 0.19

WELL CASING VOLUMES

2" = 0.16
2-1/2" = 0.24

3" = 0.37
3-1/2" = 0.49

4" = 0.65
6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill-RI SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Soil Vapor Sample #6 (collected at SUP-21 @ 450 N + 1200 E location)
FIELD SAMPLE I.D. NUMBER SV-V-6 (DEA #221) DATE 3/6/97
TIME 5²⁰ WEATHER M. Sunny TEMPERATURE 30°

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage/leachate)
Soil Vapor

WELL INFORMATION (fill out for groundwater samples): N/A

DEPTH TO WATER _____ MEASUREMENT METHOD _____

DEPTH OF WELL _____ MEASUREMENT METHOD _____

VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR _____ pH _____ ODOR _____

TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE (umhos/cm) _____

TURBIDITY _____

PID/FID READING 0.0 ppm VISUAL DESCRIPTION _____

CONSTITUENTS TO BE ANALYZED:

TO1/TO2 (Volatile Organics)

REMARKS: Purged sample @ 40^{on} flowmeter = 287 ml/min.
for 5 min.

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.34	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. SAMPLE CREW Petrella
SAMPLE LOCATION/WELL NO. Soil vapor Sample #16 Collected at SVP-21
@ 450N + 1200E location.
FIELD SAMPLE I.D. NUMBER SV-16 (lead #242) DATE 5/28/97
TIME 1:27 to 1:35 WEATHER Sunny TEMPERATURE 75°
SD6 1:35 - 1:43

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER/STREAM _____ AIR X SOIL VAPOR
SOIL _____ OTHER (Describe, i.e., seepage,
leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR _____ pH _____ ODOR _____
TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE (umhos/cm) _____
OTHER (OVA, Methane meter, etc.) _____

PID - 0 ppm ΣXOTOX - 55% LEL

CONSTITUENTS SAMPLED:

VOA TO1/TO2

REMARKS: Sample was collected in duplicate
SV-6 #242
DUP #506

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill RI SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Soil Vapor Field Blank Sample
FIELD SAMPLE I.D. NUMBER SV-V-FB IEA #15 DATE 3/6/97
TIME — WEATHER Sunny, windy TEMPERATURE 30°

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage, leachate):
SOIL VAPOR

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____

DEPTH OF WELL _____ MEASUREMENT METHOD _____

VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR _____ pH _____ ODOR _____

TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE (umhos/cm) _____

TURBIDITY _____

PID/FID READING _____ VISUAL DESCRIPTION _____

CONSTITUENTS TO BE ANALYZED:

REMARKS: * Field Blank for soil vapor samples

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.34	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Soil boring SB-3

FIELD SAMPLE I.D. NUMBER SB-3-1 DATE 7/31/97

TIME 145 WEATHER Sunny, calm winds TEMPERATURE 80 + °F

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____

SURFACE WATER _____ AIR _____

SOIL ☒ _____ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____

DEPTH OF WELL _____ MEASUREMENT METHOD _____

VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR _____ pH _____ ODOR _____

TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE (umhos/cm) _____

TURBIDITY _____

PID/FID READING 0.0 ppm VISUAL DESCRIPTION D.Br. - blk. organic silt, some

grey f-c sand, wood, plastic, brick, metal
v. moist - wet

CONSTITUENTS TO BE ANALYZED: (TCLP) _____

REMARKS: * collected from 18-20' by submitted

" " - 20-22' & separate jars sent to

to lab in case they need more sample - they could

Composite 18-22' by

WELL CASING VOLUMES

GAL/FT	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RT) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Soil Boring SB-1 (20-22')
FIELD SAMPLE I.D. NUMBER SB-1-1 DATE 8/1/97
TIME 2⁰⁰ WEATHER Sunny TEMPERATURE 85°

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL ✓ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR Blk. + br pH _____ ODOR _____
TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE (umhos/cm) _____
TURBIDITY _____

✓ PID/FID READING 0.0 ppm VISUAL DESCRIPTION silk + wood, for waste

CONSTITUENTS TO BE ANALYZED:

TCL +30, TAL metals

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. SB-2 (40-42')
FIELD SAMPLE I.D. NUMBER SB-2-1 (~~SB-2~~) DATE 8/5/97
TIME 930 WEATHER Sunny TEMPERATURE 85°

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL ✓ OTHER (Describe, e.g., seepage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR Grey-H.br pH _____ ODOR _____
TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE (umhos/cm) _____
TURBIDITY _____

PID/FID READING 0.0 ppm VISUAL DESCRIPTION Sand, some silt, wet, no odor

CONSTITUENTS TO BE ANALYZED:

TCLP MS/MSD

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



DVIRKA
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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. SB-04 (44'-46')

FIELD SAMPLE I.D. NUMBER _____ DATE 8-15-97

TIME _____ WEATHER Hazy HOT, TEMPERATURE 80'S
Sunny to Partly Cloudy

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____

SURFACE WATER _____ AIR _____

SOIL ✓ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER NA MEASUREMENT METHOD NA

DEPTH OF WELL _____ MEASUREMENT METHOD _____

VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR DRK-Lite Gray pH NA ODOR Faint leachate

TEMPERATURE (°F) NA SPECIFIC CONDUCTANCE (umhos/cm) NA

TURBIDITY NA

PID/FID READING OPPM PID VISUAL DESCRIPTION DRK to lite gray fine SAND
fr S.H. wet.

CONSTITUENTS TO BE ANALYZED:

_____TCL+30_____
_____TAL metals_____

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H1

FIELD SAMPLE I.D. NUMBER GW-H1-01 (23') on bottles DATE 8/22/97
GW-H1-01 on COC form

TIME 10⁴⁵ WEATHER M. Cloudy, calm wind TEMPERATURE 80°
humid

SAMPLE TYPE:

GROUNDWATER ✓ from 23' bg SEDIMENT _____

SURFACE WATER _____ AIR _____

SOIL _____ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 20' MEASUREMENT METHOD Estimated

DEPTH OF WELL screen @ 23' bg MEASUREMENT METHOD _____

VOLUME REMOVED _____ REMOVAL METHOD Hydropunch ^{II} sampler

FIELD TEST RESULTS:

COLOR Red-br - turbid pH 5.16 ODOR none

TEMPERATURE (°F) 18.7 SPECIFIC CONDUCTANCE (umhos/cm) 0.598 mS/cm

TURBIDITY 784 NTUs

PID/FID READING 0.0 VISUAL DESCRIPTION _____

CONSTITUENTS TO BE ANALYZED:

portable G.C.
VOCs (601)

REMARKS:

Collected GW samples from Hydropunch sampler
" MS/MSD also
GW-H1-01-MS
GW-H1-01-MSD

WELL CASING VOLUMES

GAL/FT	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H1-02

FIELD SAMPLE I.D. NUMBER GW-H1-02 (33') - sample bottles DATE 8/22/97

TIME 1125 WEATHER M. Cloudy TEMPERATURE 80°

SAMPLE TYPE:

GROUNDWATER ☒ from Hydropunch sampler SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD

FIELD TEST RESULTS:

COLOR Brown - turbid pH 6.17 ODOR none

TEMPERATURE (°F) 17.8 SPECIFIC CONDUCTANCE 0.598 0.268
mS/cm (umho/cm)

TURBIDITY > 1,000 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION

CONSTITUENTS TO BE ANALYZED:

VOCs by Port. G.C. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H1-03

FIELD SAMPLE I.D. NUMBER GW-H1-03 (43') DATE 8/22/97

TIME 12:15 WEATHER M. Cloudy TEMPERATURE 85°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER - MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch ^{II} Sampler

FIELD TEST RESULTS:

COLOR Brown pH 5.91 ODOR none

TEMPERATURE (°F) 18.1 SPECIFIC CONDUCTANCE 0.341
mS/cm (umhos/cm)

TURBIDITY >1000 NTUs

(P)IDED READING 0.0ppm VISUAL DESCRIPTION

CONSTITUENTS TO BE ANALYZED: VOCs by Port. GC (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H1-04

FIELD SAMPLE I.D. NUMBER GW-H1-04 (53') DATE 8/22/97

TIME 1:45 WEATHER M. Cloudy TEMPERATURE 85°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II sampler

FIELD TEST RESULTS:

COLOR Brown - turbid pH 6.10 ODOR none

TEMPERATURE (°F) 19.0 SPECIFIC CONDUCTANCE (µmhos/cm) 0.104

TURBIDITY >1000 NTUs

PID/FID READING 0 ppm VISUAL DESCRIPTION

CONSTITUENTS TO BE ANALYZED: VOCs Port GC (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch H1-05
FIELD SAMPLE I.D. NUMBER GW-H1-05 (63') DATE 8/22/97
TIME 2⁴⁰ WEATHER M. Sunny TEMPERATURE 85°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch

FIELD TEST RESULTS:

COLOR _____ pH _____ ODOR none
TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE ($\mu\text{mhos/cm}$) mS/cm
TURBIDITY >1000 NTUs
PID/FID READING 0.0 ppm VISUAL DESCRIPTION _____

CONSTITUENTS TO BE ANALYZED: VOCs by Port. G.C. (601)

REMARKS: _____

WELL CASING VOLUMES				
GAL/FT	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H1-06 (73'bg)

FIELD SAMPLE I.D. NUMBER GW-H1-06 DATE 8/25/97

TIME 11¹⁵ WEATHER Mr. Sunny TEMPERATURE 70°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Br.-red pH 5.65 ODOR none

TEMPERATURE (°F) 19.7 SPECIFIC CONDUCTANCE (umhos/cm) 0.225 mS/cm

TURBIDITY > 1,000 NTUS

PID/FID READING 0 ppm VISUAL DESCRIPTION

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46

SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
 SAMPLE LOCATION/WELL NO. Hydropunch H1-07 (83'bg)
 FIELD SAMPLE I.D. NUMBER GW-H1-07 DATE 8/25/97
 TIME 12⁰⁰ WEATHER M. sunny TEMPERATURE 80°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
 SURFACE WATER _____ AIR _____
 SOIL _____ OTHER (Describe, e.g., seepage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
 DEPTH OF WELL _____ MEASUREMENT METHOD _____
 VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Br.-red pH 5.23 ODOR none
 TEMPERATURE (°F) 19.7 SPECIFIC CONDUCTANCE (umhos/cm) 0.209 nS/cm
 TURBIDITY > 1000 NTU3
 PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H1-08 (93')

FIELD SAMPLE I.D. NUMBER GW-H1-08 DATE 8/25/97

TIME 130 WEATHER M. Sunny TEMPERATURE 80°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR br. turbid pH 4.81 ODOR none

TEMPERATURE (°F) 19.2 °C SPECIFIC CONDUCTANCE (µmhos/cm) 0.210 mS/cm

TURBIDITY > 1000 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION

CONSTITUENTS TO BE ANALYZED: VOCs Headspace by portable GC. (601)

REMARKS: * Collected 2 add'l 40 ml samples & delivered to HAM Labs on 8/26/97 for analysis → TCL VOCs

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H1-09 (103')

FIELD SAMPLE ID. NUMBER GW-H1-09 DATE 8/25/97

TIME 3¹⁵ WEATHER M. Sunny TEMPERATURE 80°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown pH 6.92 ODOR none

TEMPERATURE (°F) 20.4 °C SPECIFIC CONDUCTANCE (umhos/cm) 6.094 mS/cm

TURBIDITY > 1000 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION

CONSTITUENTS TO BE ANALYZED: VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.24	3-1/2" = 0.60	4" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H2-01-23

FIELD SAMPLE ID. NUMBER GW-H2-01 DATE 8/27/97

TIME 1045 WEATHER Sunny TEMPERATURE 70°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown-red turbid pH 6.10 ODOR none

TEMPERATURE (°F) SPECIFIC CONDUCTANCE (umhos/cm)

TURBIDITY > 1000 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION

CONSTITUENTS TO BE ANALYZED: VOCs Headspace by portable GC. (601)

REMARKS: * Minimal sample recovery - only enough to fill

2-40 ml vials completely

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.80	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H2-02 33'

FIELD SAMPLE ID. NUMBER GW-H2-02 DATE 8/27/97

TIME 1:40 WEATHER Sunny TEMPERATURE 70°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Br.-tan turbid pH 6.82 ODOR none

TEMPERATURE (°F) 23.2 SPECIFIC CONDUCTANCE ($\mu\text{mhos/cm}$) 0.193 mS/cm

TURBIDITY > 1000 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION

CONSTITUENTS TO BE ANALYZED: VOCs Headspace by (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H2-03 (43')

FIELD SAMPLE I.D. NUMBER GW-H2-03 DATE 8/27/97

TIME 12⁴⁵ WEATHER Sunny TEMPERATURE 75°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Lt. brown pH 6.62 ODOR none

TEMPERATURE (°F) 18.9 SPECIFIC CONDUCTANCE (umhos/cm) 0.464 mS/cm

TURBIDITY 923 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION Lt. br. turbid

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by
portable GC (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.50	4" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H2-04 (53')

FIELD SAMPLE I.D. NUMBER GW-H2-04 DATE 8/27/97

TIME 2¹⁵ WEATHER Sunny TEMPERATURE 80°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown pH 6.76 ODOR none

TEMPERATURE (°F) 19.9 SPECIFIC CONDUCTANCE (umhos/cm) 0.099 mS/cm

TURBIDITY 590 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H2-05 (63')

FIELD SAMPLE I.D. NUMBER GW-H2-05 DATE 8/27/97

TIME 3:00 WEATHER Sunny TEMPERATURE 80°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown pH 6.90 ODOR none

TEMPERATURE (°C) 18.8 SPECIFIC CONDUCTANCE (umhos/cm) 0.138 mS/cm

TURBIDITY 860 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H2-06 73'bg

FIELD SAMPLE I.D. NUMBER GW-H2-06 DATE 8/28/97

TIME 945 WEATHER Overcast, drizzle, TEMPERATURE 70°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Tan-brown pH 6.48 ODOR none

TEMPERATURE (°F) 18.3 SPECIFIC CONDUCTANCE (umho/cm) 0.110 mS/cm

TURBIDITY 928 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION Brown-turbid

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT

1-1/4" = 0.977

1-1/2" = 0.19

WELL CASING VOLUMES

2" = 0.16

2-1/2" = 0.24

3" = 0.37

3-1/2" = 0.60

4" = 0.65

6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch H2-07 83'bg
FIELD SAMPLE I.D. NUMBER GW-H2-07 DATE 8/28/97
TIME 10:11⁰⁰ WEATHER Overcast rain/driizzle TEMPERATURE 70°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown Tan pH 6.63 ODOR none
TEMPERATURE (°F) 17.3 °C SPECIFIC CONDUCTANCE (umho/cm) 0.220 nS/cm
TURBIDITY 730 NTUs
PID/FID READING 0.0 ppm VISUAL DESCRIPTION Tan Brown turbid

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.40	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch H2-08 (93')
FIELD SAMPLE I.D. NUMBER GW-H2-08 DATE 8/28/97
TIME 120 WEATHER Overcast rain/drizzle TEMPERATURE 70-75°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Tan-br. pH 7.55 ODOR none
TEMPERATURE (°F) 17.6 SPECIFIC CONDUCTANCE (umhos/cm) 0.083 nS/cm
TURBIDITY > 1000 NTUs
P/FID READING 0.0 ppm VISUAL DESCRIPTION Tan-turbid

CONSTITUENTS TO BE ANALYZED: VOCs Headspace by portable GC. (601)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch H2-09
FIELD SAMPLE I.D. NUMBER GW-H2 - 09 (105') DATE 9/18/97
TIME 3:45 pm WEATHER Sunny TEMPERATURE 80°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED NA REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown pH 6.39 ODOR None
TEMPERATURE (°F) 18.2 SPECIFIC CONDUCTANCE (umhos/cm) 0.250 ^{ms/cm}
TURBIDITY >999 ntus
PID/FID READING 0.0 ppm VISUAL DESCRIPTION Silty

CONSTITUENTS TO BE ANALYZED: VOCs Headspace by portable GC. (601)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.877	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



DVIRKA
AND
BARTILUCCI

SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H3-01 25'

FIELD SAMPLE I.D. NUMBER GW-H3-01 DATE 9/2/97

TIME 11³⁰ WEATHER Overcast, humid, hazy TEMPERATURE 80

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown pH 6.58 ODOR none

TEMPERATURE (°F) 22.1 SPECIFIC CONDUCTANCE ($\mu\text{mhos/cm}$) 0.501 mS/cm

TURBIDITY > 1000 NTU₃

PID/FID READING 0.0 ppm VISUAL DESCRIPTION Br. turbid

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.69	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H3-02 (35')

FIELD SAMPLE I.D. NUMBER GW-H3-02 DATE 9/2/97

TIME 1245 WEATHER M. Cloudy, hot humid TEMPERATURE 80°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown pH 6.87 ODOR none

TEMPERATURE (°F) 21.3 SPECIFIC CONDUCTANCE (umhos/cm) 0.561 mS/cm

TURBIDITY 71000 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION Brs turbid

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H3-03 (45')

FIELD SAMPLE ID. NUMBER GW-H3-03 DATE 9/2/97

TIME 145 WEATHER M. Sunny, hot, humid TEMPERATURE 85°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR dk. Grey-br. pH 6.82 ODOR none

TEMPERATURE (°F) 20.1 °C SPECIFIC CONDUCTANCE (umhos/cm) 0.586 mS/cm

TURBIDITY > 1000 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION

CONSTITUENTS TO BE ANALYZED: VOCs Headspace by (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H3-04(55')

FIELD SAMPLE I.D. NUMBER GW-H3-04 DATE 8/2/97

TIME 3⁰⁰ WEATHER M. Sunny, hot, humid TEMPERATURE 90°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Tan pH 6.77 ODOR none

TEMPERATURE (°F) 18.6 SPECIFIC CONDUCTANCE (umhos/cm) 0.538 mS/cm

TURBIDITY >1000 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION Tan silty/forged

CONSTITUENTS TO BE ANALYZED: VOCs Headspace by portable GC. (601)

REMARKS: * Collected add'l 2 - 40ml vials for analysis by HAM labs for TCL VOCs

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.40	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H3-05 (64')

FIELD SAMPLE ID. NUMBER GW-H3-05 DATE 8/2/97

TIME 4³⁰ WEATHER Hazy, but humid TEMPERATURE 90°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____

DEPTH OF WELL _____ MEASUREMENT METHOD _____

VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR lt. brown pH 6.79 ODOR none

TEMPERATURE 19.8 °C SPECIFIC CONDUCTANCE (umho/cm) 0.496 mS/cm

TURBIDITY > 1000 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION Br. turbid

CONSTITUENTS TO BE ANALYZED: VOCs Headspace by (601)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich/KR

SAMPLE LOCATION/WELL NO. Hydropunch H-3

FIELD SAMPLE I.D. NUMBER GW-H-3-06-(75') DATE 8/15/97

TIME 3:15 pm WEATHER Sunny TEMPERATURE 80°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER NA MEASUREMENT METHOD ☐

DEPTH OF WELL NA MEASUREMENT METHOD ☐

VOLUME REMOVED NA REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown pH 5.78 ODOR NO

TEMPERATURE (°F) 18.9 SPECIFIC CONDUCTANCE (umhos/cm) 0.185 ^{ms/cm}

TURBIDITY > 999 ntus

PID/FID READING 0.0 ppm VISUAL DESCRIPTION Turbid Brown

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by
portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	4" = 1.46

SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich/KR
 SAMPLE LOCATION/WELL NO. Hydropunch H-3
 FIELD SAMPLE ID. NUMBER GW-H-3-07(85') DATE 8/15/97-9/15/97
 TIME 500pm WEATHER Sunny TEMPERATURE 85°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
 SURFACE WATER _____ AIR _____
 SOIL _____ OTHER (Describe, e.g., seepage leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER NA MEASUREMENT METHOD _____
 DEPTH OF WELL NA MEASUREMENT METHOD _____
 VOLUME REMOVED NA REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown pH 7.70 ODOR None
 TEMPERATURE (°F) 19.9 SPECIFIC CONDUCTANCE (umhos/cm) 0.112 mS/cm
 TURBIDITY 2999 ntus
 PID/FID READING 0.0 ppm VISUAL DESCRIPTION Brown

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by
portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	1" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch H-3
FIELD SAMPLE I.D. NUMBER GW-H-3-08-(95) DATE 9/16/97
TIME 11:50am WEATHER Sunny TEMPERATURE 110.7/85°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER NA MEASUREMENT METHOD _____
DEPTH OF WELL NA MEASUREMENT METHOD _____
VOLUME REMOVED NA REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown pH 6.73 ODOR None
TEMPERATURE (°F) 18.8 SPECIFIC CONDUCTANCE (umhos/cm) 0.138 mS/cm
TURBIDITY >999 ntus
PID/FID READING 0.0 ppm VISUAL DESCRIPTION Silty Brown

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by (601)
portable GC.

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.60	4" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch H-3
FIELD SAMPLE ID. NUMBER GW-H-3-09-(105) DATE 9/16/97
TIME 400pm WEATHER Sunny, Hot TEMPERATURE 85

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., seepage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER NA MEASUREMENT METHOD _____
DEPTH OF WELL NA MEASUREMENT METHOD _____
VOLUME REMOVED NA REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown pH 6.87 ODOR none
TEMPERATURE (°F) 19.5 SPECIFIC CONDUCTANCE (umhos/cm) 0.146 mS/cm
TURBIDITY >999 ntus
PID/FID READING 0.0 ppm VISUAL DESCRIPTION Silty Brown

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H4-01 (26')

FIELD SAMPLE I.D. NUMBER GW-H4-01 DATE 9/5/97

TIME 11⁰⁰ WEATHER Sunny TEMPERATURE 65

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER ~ 23' bg ^{nearby well 22.6' bg} MEASUREMENT METHOD water level meter

DEPTH OF WELL ☐ MEASUREMENT METHOD ☐

VOLUME REMOVED ☐ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Grey-br. pH 6.39 ODOR none

TEMPERATURE (°F) 19.2 SPECIFIC CONDUCTANCE (umhos/cm) 0.980 mS/cm

TURBIDITY > 1000 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS: ☐

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H4-02 (36')

FIELD SAMPLE ID. NUMBER GW-H4-02 DATE 9/5/97

TIME 1145 WEATHER Sunny TEMPERATURE 70°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 23' by MEASUREMENT METHOD water meter on nearby MW-35

DEPTH OF WELL ☐ MEASUREMENT METHOD ☐

VOLUME REMOVED ☐ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Grey-br. pH 6.53 ODOR none

TEMPERATURE 18.5°C SPECIFIC CONDUCTANCE ($\mu\text{mhos/cm}$) 0.741 ^{MS}/cm

TURBIDITY > 1000 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid

CONSTITUENTS TO BE ANALYZED: VOCs Headspace by (601)

REMARKS: ☐

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H4-03 (46')

FIELD SAMPLE I.D. NUMBER GW-H4-03 DATE 9/5/97

TIME 12:45 WEATHER Sunny TEMPERATURE 75°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 23' bg MEASUREMENT METHOD water meter on nearby MW-3s

DEPTH OF WELL ☐ MEASUREMENT METHOD ☐

VOLUME REMOVED ☐ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Br. pH 6.79 ODOR none

TEMPERATURE (°F) ☐ SPECIFIC CONDUCTANCE (umhos/cm) 0.605 mS/cm

TURBIDITY >1000 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC (601)

REMARKS:

GAL/FT

1-1/4" = 0.977

1-1/2" = 0.19

WELL CASING VOLUMES

2" = 0.16

2-1/2" = 0.24

3" = 0.37

3-1/2" = 0.50

4" = 0.65

6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch H4-04 (56')
FIELD SAMPLE I.D. NUMBER GW-H4-04 DATE 9/5/97
TIME 145 WEATHER Sunny TEMPERATURE 80°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 23' bg MEASUREMENT METHOD water meter on nearby MW-3
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Br. pH 6.74 ODOR none
TEMPERATURE 17.6 °C SPECIFIC CONDUCTANCE (umhos/cm) 0.476 mS/cm
TURBIDITY >1000 NTUs NTUs _____
PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	1" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW K. Robins
D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch #4
FIELD SAMPLE I.D. NUMBER GL-H-4(05)-(66') DATE 9/19/97
TIME 1130am WEATHER Sunny TEMPERATURE 80°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., seepage leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED NA REMOVAL METHOD Hydropunch G.W. discrete
Sampler

FIELD TEST RESULTS:

COLOR Brown pH 6.53 ODOR None
TEMPERATURE (°F) 17.5 SPECIFIC CONDUCTANCE (umhos/cm) 0.352 mS/cm
TURBIDITY >999 ntus
PID/FID READING PID = 0.0 ppm VISUAL DESCRIPTION Silty

CONSTITUENTS TO BE ANALYZED:

Vocs (Headspace by portable G.C. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.60	4" = 1.46



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SAMPLE INFORMATION RECORD

K. Robbins

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H-4

FIELD SAMPLE I.D. NUMBER GW-H4-06(76) DATE 9/19/97

TIME 125 pm WEATHER Sunny / Warm TEMPERATURE 80°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED NA REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown pH 6.56 ODOR None

TEMPERATURE (°F) 18.4 SPECIFIC CONDUCTANCE (umhos/cm) 0.192 mS/cm

TURBIDITY >999 ntu

PID/FID READING 0.10 ppm VISUAL DESCRIPTION Silty

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by (601)
portable GC.

REMARKS:

GAL/FT

1-1/4" = 0.977

1-1/2" = 0.19

WELL CASING VOLUMES

2" = 0.16

2-1/2" = 0.34

3" = 0.37

3-1/2" = 0.59

4" = 0.65

6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch - #4

FIELD SAMPLE I.D. NUMBER GW-H-4-7(86) DATE 9/19/97

TIME 230pm WEATHER Sunny/Warm TEMPERATURE 80°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED NA REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown pH 6.69 ODOR None

TEMPERATURE (°F) 19.2 SPECIFIC CONDUCTANCE (umhos/cm) 0.176 mS/cm

TURBIDITY >999 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION Silty

CONSTITUENTS TO BE ANALYZED:

Vocs (headspace by GC, portable (601) method)

REMARKS:

GAL/FT

1-1/4" = 0.977

1-1/2" = 0.19

WELL CASING VOLUMES

2" = 0.16

2-1/2" = 0.24

3" = 0.37

3-1/2" = 0.49

4" = 0.65

6" = 1.46



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SAMPLE INFORMATION RECORD

Keith Robins

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H-4

FIELD SAMPLE I.D. NUMBER GW-H-4-08(96) DATE 8/20/97

TIME 3:00 pm WEATHER Sunny TEMPERATURE 80°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED NA REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown pH 6.75 ODOR None

TEMPERATURE (°F) 18.6 SPECIFIC CONDUCTANCE (umhos/cm) 0.215 mS/cm

TURBIDITY >999 ntu

PID/FID READING 0.0 ppm VISUAL DESCRIPTION Silty

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

Keith Robins
D. Obradovich

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H-4

FIELD SAMPLE I.D. NUMBER GW-H-4-09(104) DATE 8/22/97

TIME 330 pm WEATHER Sunny TEMPERATURE 70°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER ☐ MEASUREMENT METHOD ☐

DEPTH OF WELL ☐ MEASUREMENT METHOD ☐

VOLUME REMOVED NA REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown pH 6.61 ODOR None

TEMPERATURE (°C) 18.6 SPECIFIC CONDUCTANCE (umhos/cm) 0.097 ^{MS/cm}

TURBIDITY 421 ntrs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION Br. silty - sl. turbid

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.59	4" = 1.46



DVIRKA
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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H5-01 (27')

FIELD SAMPLE I.D. NUMBER GW-H5-01 DATE 9/8/97

TIME 11⁰⁰ WEATHER M. Cloudy TEMPERATURE 65°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Br.-dk. br.-sl. grey pH 6.45 ODOR none

TEMPERATURE (°F) 17.9°C SPECIFIC CONDUCTANCE (umhos/cm) 1.23 ms/cm

TURBIDITY > 999 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid

CONSTITUENTS TO BE ANALYZED: VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	1" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch H5-02 (37')
FIELD SAMPLE ID. NUMBER GW-H5-02 DATE 9/8/97
TIME 11³⁰ WEATHER M. Cloudy TEMPERATURE 65°-70°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Br.-grey pH 6.53 ODOR none
TEMPERATURE (°F) 16.2 °C SPECIFIC CONDUCTANCE (umhos/cm) 0.715 mS/cm
TURBIDITY >1000 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid several small spots - non-colorful sheen on sample in can.

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch H5-03 (47')
FIELD SAMPLE I.D. NUMBER GW-H5-03 DATE 9/8/97
TIME 1:00 WEATHER M. Cloudy TEMPERATURE 70°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown pH 6.70 ODOR none
TEMPERATURE 17.5°C SPECIFIC CONDUCTANCE ($\mu\text{mhos/cm}$) 0.646 mS/cm
TURBIDITY 795 NTUs
PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid v. sl. sheen - non-color
sheen/spots on surface
of sample in cup

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by
portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H5-04 (57')

FIELD SAMPLE I.D. NUMBER GW-H5-04 DATE 9/8/97

TIME 3:30 WEATHER M. Cloudy TEMPERATURE 65°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____

DEPTH OF WELL _____ MEASUREMENT METHOD _____

VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown-sl. grey pH 6.55 ODOR none

TEMPERATURE (°F) 17.3 °C SPECIFIC CONDUCTANCE (umhos/cm) 1.00 mS/cm

TURBIDITY 796 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by
portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.877	2" = 0.16	3" = 0.37	4" = 0.63
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.59	4" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch HS-05 (67')
FIELD SAMPLE I.D. NUMBER GW-HS-05 DATE 9/15/97
TIME 2⁰⁰ WEATHER Sunny TEMPERATURE 80°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., seepage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Tan-grey pH 6.61 ODOR none
TEMPERATURE (°F) 20.6 °C SPECIFIC CONDUCTANCE (umhos/cm) 0.150 mS/cm
TURBIDITY 859 NTUs
PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by (601)
portable GC.

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46	



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H5-06 (72')

FIELD SAMPLE ID. NUMBER GW-H5-06 DATE 9/15/97

TIME 2⁵⁵ WEATHER Sunny TEMPERATURE 80

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Tan-grey pH 6.82 ODOR none

TEMPERATURE (°F) 21.2 °C SPECIFIC CONDUCTANCE (umhos/cm) 0.170 mS/cm

TURBIDITY 868 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT
1-1/4" = 0.977
1-1/2" = 0.19

WELL CASING VOLUMES

2" = 0.16
2-1/2" = 0.24
3" = 0.37
3-1/2" = 0.60

4" = 0.65
6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch H5-07 (87')
FIELD SAMPLE I.D. NUMBER GW-H5-07 DATE 9/16/97
TIME 9⁰⁰ WEATHER M. Sunny TEMPERATURE 65°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., seepage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR br.-sl. red pH 6.36 ODOR none
TEMPERATURE (°F) 17.7°C SPECIFIC CONDUCTANCE (umhos/cm) 0.277 mS/cm
TURBIDITY >1000 NTUs
PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H5-08 (97')

FIELD SAMPLE ID. NUMBER GW-H5-08 DATE 9/16/97

TIME 10⁵⁰ WEATHER M. Sunny TEMPERATURE 65-70°

SAMPLE TYPE:

GROUNDWATER ✓ SEDIMENT _____

SURFACE WATER _____ AIR _____

SOIL _____ OTHER (Describe, e.g., septage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____

DEPTH OF WELL _____ MEASUREMENT METHOD _____

VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Grey pH 6.88 ODOR none

TEMPERATURE (°F) 18.2 °C SPECIFIC CONDUCTANCE (umhos/cm) 0.145 mS/cm

TURBIDITY 966 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid / silty

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H5-09 (106')

FIELD SAMPLE I.D. NUMBER GW-H5-09 DATE 9/16/97

TIME 1255 WEATHER Sunny TEMPERATURE 80°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Grey pH 7.09 ODOR none

TEMPERATURE (°F) 19.8°C SPECIFIC CONDUCTANCE (umhos/cm) 0.073 mS/cm

TURBIDITY 503 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION sl. turbid - no sheen

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch Gw-H5-10 (117')
FIELD SAMPLE I.D. NUMBER Gw-H5-10 DATE 9/17/97
TIME 945 WEATHER Sunny TEMPERATURE 80°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Grey-tan pH 6.37 ODOR none
TEMPERATURE (°F) 17.1 °C SPECIFIC CONDUCTANCE (umhos/cm) 0.090 mS/cm
TURBIDITY > 1000 NTUs
(PID/FID) READING 0.0 ppm VISUAL DESCRIPTION V. turbid/silty

CONSTITUENTS TO BE ANALYZED:

Select VOCs (Method 601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.59	6" = 1.46

SAMPLE INFORMATION RECORD

SITE Sonia Rd. Lundhill (RT) **SAMPLE CREW** D. Obradovich

SAMPLE LOCATION/WEILNO. Hydropunch Hb-01 (27')

FIELD SAMPLE ID. NUMBER Gw-Hb-01

DATE 9/9/97

TIME 10⁰⁰ **WEATHER** M. Cloudy

TEMPERATURE 60°F

SAMPLE TYPE:

☒ **GROUNDWATER**

☐ **SEDIMENT**

☐ **SURFACE WATER**

☐ **AIR**

☐ **SOIL**

☐ **OTHER (Describe, e.g., seepage/leachate)**

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER

MEASUREMENT METHOD

DEPTH OF WELL

MEASUREMENT METHOD

VOLUME REMOVED

REMOVAL METHOD

Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Gray-sil. brown

pH 6.28

ODOR

u sl. solvent?

TEMPERATURE (°F) 16.4°C

SPECIFIC CONDUCTANCE (umhos/cm)

1.48 mS/cm

TURBIDITY > 1000 NTUs

VISUAL DESCRIPTION

turbid, many small blue spots/shen on surface of water in sample cup

CONSTITUENTS TO BE ANALYZED:

VOCs

Head space by (601) portable G.C.

REMARKS:

WELL CASING VOLUMES

GAL/FT 1-1/4" = 0.077 2" = 0.16 3" = 0.37 3-1/2" = 0.50 4" = 0.65 6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H6-02 (37)

FIELD SAMPLE I.D. NUMBER GW-H6-02 DATE 8/9/97

TIME 10⁴⁵ WEATHER M. Cloudy TEMPERATURE 65

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Grey-br. pH 6.23 ODOR none

TEMPERATURE (°F) 15.1 SPECIFIC CONDUCTANCE (umhos/cm) 1.35 mS/cm

TURBIDITY >1000 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid w/ many small blue spots (sheen)

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.877	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H6-03 (47') lg

FIELD SAMPLE I.D. NUMBER GW-H6-03 DATE 9/9/97

TIME 12⁰⁰ WEATHER M. Cloudy TEMPERATURE 65°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____

DEPTH OF WELL _____ MEASUREMENT METHOD _____

VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brown-grey pH 6.36 ODOR v.s.l. solvent odor

TEMPERATURE 16.1°C SPECIFIC CONDUCTANCE (umhos/cm) 1.43 mS/cm

TURBIDITY >1000 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION forbid #

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H6-04 (57') bg

FIELD SAMPLE I.D. NUMBER GW-H6-04 DATE 9/9/97

TIME 1:15 WEATHER M. Cloudy TEMPERATURE 65°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Brownish pH 6.39 ODOR none

TEMPERATURE 15.9 SPECIFIC CONDUCTANCE (umhos/cm) 142 mS/cm

TURBIDITY > 1000 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch GW-H6-05 (67')
FIELD SAMPLE I.D. NUMBER GW-H6-05 DATE 9/22/97
TIME 9³⁰ WEATHER Sunny TEMPERATURE 65°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., seepage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 23' 6" MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch ^{HP} sampler

FIELD TEST RESULTS:

COLOR Grey-slt. br. pH 5.60 ODOR none
TEMPERATURE 14.3°C SPECIFIC CONDUCTANCE (umhos/cm) 0.308 mS/cm
TURBIDITY 710 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION slt. turbid - no sheen

CONSTITUENTS TO BE ANALYZED:

Select VOCs by H-S. Port GC
Method (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch GW-H6-06 (77')

FIELD SAMPLE I.D. NUMBER GW-H6-06 DATE 9/22/97

TIME 10²⁵ WEATHER Sunny TEMPERATURE 65-70°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER ~23' bg MEASUREMENT METHOD ☐

DEPTH OF WELL ☐ MEASUREMENT METHOD ☐

VOLUME REMOVED ☐ REMOVAL METHOD Hydropunch & sampler

FIELD TEST RESULTS:

COLOR grey-sl. br. pH 6.23 ODOR none

TEMPERATURE (°F) 14.9°C SPECIFIC CONDUCTANCE (umhos/cm) 0.497 mS/cm

TURBIDITY >1000 NTUs

PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid - no sheen

CONSTITUENTS TO BE ANALYZED:

Select VOCs by HS by Part. GC
(Method 601)

REMARKS: ☐

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch GW-H6-07 (87')
FIELD SAMPLE I.D. NUMBER GW-H6-07 DATE 9/22/97
TIME 1115 WEATHER Sunny TEMPERATURE 65°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II sampler

FIELD TEST RESULTS:

COLOR Grey- pH 8.61 ODOR none
TEMPERATURE ☒ 15.8°C SPECIFIC CONDUCTANCE (umhos/cm) 0.066 mS/cm
TURBIDITY 675 NTUs
PID/FID READING 0.0 ppm VISUAL DESCRIPTION sl. turbid- no sheen

CONSTITUENTS TO BE ANALYZED:

Select VOCs by HHS by Port GC
(Method 601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch GW-H6-08 (97')
FIELD SAMPLE I.D. NUMBER GW-H6-08 DATE 9/22/97
TIME 12⁰⁰ WEATHER Sunny TEMPERATURE 70°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER ~ 23' b.g. MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch ~~it~~ sampler

FIELD TEST RESULTS:

COLOR Grey pH 6.39 ODOR none
TEMPERATURE (°C) 16.8 SPECIFIC CONDUCTANCE (umhos/cm) 0.433
TURBIDITY > 1000 NTUs
PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid - no sheen

CONSTITUENTS TO BE ANALYZED:

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.60	4" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch GW-46-09 (104')
FIELD SAMPLE I.D. NUMBER GW-46-09 DATE 9/22/97
TIME 2⁰⁰ WEATHER Sunny TEMPERATURE 70°

SAMPLE TYPE:

GROUNDWATER ✓ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., seepage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Grey-br. pH 6.29 ODOR none
TEMPERATURE (°F) _____ °C _____ SPECIFIC CONDUCTANCE (umhos/cm) 0.281 mS/cm
TURBIDITY >1000 NTUs
PID/FID READING 0.0 ppm VISUAL DESCRIPTION V. turbid/cloudy - clay?
no sheen

CONSTITUENTS TO BE ANALYZED:

Select VOCs by HS w/ Port GC
(Method 601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch H7-01 (27')
FIELD SAMPLE ID. NUMBER GW-H7-01 DATE 9/10/97
TIME 10⁵⁰ WEATHER M. Cloudy TEMPERATURE 60°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Dk. grey-dk. brown pH 6.46 ODOR none
TEMPERATURE (°F) 17.5 °C SPECIFIC CONDUCTANCE (umhos/cm) 1,49 mS/cm
TURBIDITY >1000 NTUs
PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid - no sheen

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by
portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.34	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H7-02 (37')

FIELD SAMPLE I.D. NUMBER GW-H7-02 DATE 9/10/97

TIME 11⁵⁰ WEATHER M. Cloudy TEMPERATURE 65°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR DK grey-dk. brown pH 6.45 ODOR none

TEMPERATURE 16.3°C SPECIFIC CONDUCTANCE (umhos/cm) 1.39 mS/cm

TURBIDITY >1000 NTUs

☒ FID READING 0.10 ppm VISUAL DESCRIPTION turbid - no odor or sheen

CONSTITUENTS TO BE ANALYZED: VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch H7-03 (47')
FIELD SAMPLE ID. NUMBER GW-H7-03 DATE 9/10/97
TIME 1⁴⁵ WEATHER M. Cloudy TEMPERATURE 65°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., seepage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR Grey-br. pH 6.58 ODOR none
TEMPERATURE (°F) 17.6 °C SPECIFIC CONDUCTANCE (umhos/cm) 0.698 mS/cm
TURBIDITY > 1000
PID/FID READING 0.0 ppm VISUAL DESCRIPTION v. turbid - no sheen

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by (601)
portable GC.

REMARKS:

GAL/FT	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Hydropunch H7-04

FIELD SAMPLE I.D. NUMBER GW-H7-04 DATE 9/10/97

TIME 3⁰⁰ WEATHER M. Cloudy TEMPERATURE 70°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER MEASUREMENT METHOD

DEPTH OF WELL MEASUREMENT METHOD

VOLUME REMOVED REMOVAL METHOD Hydropunch II Sampler

FIELD TEST RESULTS:

COLOR tan pH 6.68 ODOR none

TEMPERATURE (~~°F~~) 17.5 °C SPECIFIC CONDUCTANCE (~~umhos/cm~~) 0.136 mS/cm

TURBIDITY 373 NTUs

☒ PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid - no odor or sheen

CONSTITUENTS TO BE ANALYZED:

VOCs Headspace by portable GC. (601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch 6W-H7-05 (67')
FIELD SAMPLE I.D. NUMBER GW-H7-05 ~~67-05~~ DATE 9/18/97
TIME 10⁴⁵ WEATHER Sunny TEMPERATURE 85°

SAMPLE TYPE:

GROUNDWATER ✓ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II sampler

FIELD TEST RESULTS:

COLOR Br-sl. grey pH 6.48 ODOR none
TEMPERATURE (°F) 19.4 SPECIFIC CONDUCTANCE (umho/cm) 0.397 mS/cm
TURBIDITY >1000 NTUs
(PID/FID) READING 0.0 ppm VISUAL DESCRIPTION turbid - no sheen

CONSTITUENTS TO BE ANALYZED:

_____ select VOCs (Method 601) _____

REMARKS: _____

WELL CASING VOLUMES

GAL/FT	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch H7-06 (77')
FIELD SAMPLE I.D. NUMBER GW-H7-06 DATE 9/18/97
TIME 11²⁵ WEATHER Sunny TEMPERATURE 65°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II sampler

FIELD TEST RESULTS:

COLOR Grey-sl. br. pH 6.59 ODOR none
TEMPERATURE (°C) 18.4 SPECIFIC CONDUCTANCE (umhos/cm) 0.182
TURBIDITY >1000 NTUs
FID/FID READING 0.0 ppm VISUAL DESCRIPTION Turbid / silty - no sheen

CONSTITUENTS TO BE ANALYZED:

Select VOCs (method 601)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	1" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	1-1/2" = 0.24	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch GW-H7-07 87'
FIELD SAMPLE I.D. NUMBER GW-H7-07 ~~88~~ DATE 9/18/97
TIME 12¹⁵ WEATHER Sunny TEMPERATURE 70°

SAMPLE TYPE:

GROUNDWATER ✓ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch IF sampler

FIELD TEST RESULTS:

COLOR DK. grey-green pH 6.52 ODOR none
TEMPERATURE (°F) 18.2°C ~~100.0~~ SPECIFIC CONDUCTANCE (umhos/cm) 0.828 mS/cm
TURBIDITY >1000 NTU₂
TID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid - no sheen

CONSTITUENTS TO BE ANALYZED:

Select VOCs (Method 601)

REMARKS: _____

WELL CASING VOLUMES				
GAL/FT	1-1/4" = 0.877	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch H7-08 (97')
FIELD SAMPLE I.D. NUMBER Gw-H7-08 DATE 9/18/97
TIME 140 WEATHER Sunny TEMPERATURE 70°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II sampler

FIELD TEST RESULTS:

COLOR Grey pH 6.53 ODOR none
TEMPERATURE 18.6°C SPECIFIC CONDUCTANCE ($\mu\text{mhos/cm}$) 0.125
TURBIDITY 715 NTUs
PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid - no sheen

CONSTITUENTS TO BE ANALYZED:

Select VOCs (Method 601)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Hydropunch H7-09 (107')
FIELD SAMPLE I.D. NUMBER GW-H7-09 DATE 9/18/97
TIME 2³⁵ WEATHER Sunny TEMPERATURE 75°

SAMPLE TYPE:

GROUNDWATER ✓ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD Hydropunch II sampler

FIELD TEST RESULTS:

COLOR Grey-sl. br. pH 6.73 ODOR none
TEMPERATURE (°F) 18.4 °C SPECIFIC CONDUCTANCE (µmhos/cm) 0.298 mS/cm
TURBIDITY >1000 NTUs
PID/FID READING 0.0 ppm VISUAL DESCRIPTION turbid - no sheen

CONSTITUENTS TO BE ANALYZED:

_____ Select VOCs _____
_____ (method 601) _____

REMARKS:

		WELL CASING VOLUMES			
GAL/FT	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65	
	1-1/2" = 0.10	2-1/2" = 0.34	3-1/2" = 0.50	6" = 1.46	



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill SAMPLE CREW D. Obradorich / D. Stahl

SAMPLE LOCATION/WELL NO. Monitoring well MW-01D

FIELD SAMPLE I.D. NUMBER MW-01D (10-2-95) DATE 10/24/97

TIME 10:00 WEATHER P. Sun 50°F TEMPERATURE 50°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 7.64 MEASUREMENT METHOD Water Level Meter

DEPTH OF WELL 98.19 MEASUREMENT METHOD " " "

VOLUME REMOVED 250 gals. REMOVAL METHOD Dedicated polyethylene bailer

FIELD TEST RESULTS:

COLOR none pH 5.89 ODOR no

TEMPERATURE (°F) 13.8 SPECIFIC CONDUCTANCE (umhos/cm) 0.610 mS/cm

TURBIDITY 16 NTUs

PID/FID READING 0.0 VISUAL DESCRIPTION clear

DO 3.36 mg/L

CONSTITUENTS TO BE ANALYZED:

TCL + 30, TAL
Expanded Leachate Parameters

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill SAMPLE CREW D. Obradovich / D. Stahl
SAMPLE LOCATION/WELL NO. Monitoring well MW-01I
FIELD SAMPLE I.D. NUMBER MW-01I (10-24-95) DATE 10/24/97
TIME 1:45 WEATHER M-Sun TEMPERATURE 55°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐
SURFACE WATER ☐ AIR ☐
SOIL ☐ OTHER (Describe, e.g., septage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 8.19 MEASUREMENT METHOD Water Level Meter
DEPTH OF WELL 70.28 MEASUREMENT METHOD " " "
VOLUME REMOVED 180 gals. REMOVAL METHOD Dedicated polyethylene bailer

FIELD TEST RESULTS:

COLOR none pH 5.73 ODOR no
TEMPERATURE (°C) 14.3 SPECIFIC CONDUCTANCE (umhos/cm) 0.627 mS/cm
TURBIDITY 13 NTUs

(P)ID READING D.O ppm VISUAL DESCRIPTION Clear
D.O - 2.34 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL + 30, TAL
Expanded Leachate Parameters

REMARKS: _____

GAL/FT		WELL CASING VOLUMES			
1-1/4"	= 0.077	2"	= 0.16	3"	= 0.37
1-1/2"	= 0.10	2-1/2"	= 0.24	3-1/2"	= 0.59
				4"	= 0.65
				6"	= 1.46

SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill SAMPLE CREW D. Obradovich / D. Stahl
SAMPLE LOCATION/WELL NO. Monitoring well MW-015
FIELD SAMPLE I.D. NUMBER MW-015 (10-24-95) DATE 10/24/97
TIME 13:45 WEATHER M. Sun TEMPERATURE 60°F

SAMPLE TYPE:

GROUNDWATER ✓ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 8.31 MEASUREMENT METHOD Water Level Meter
DEPTH OF WELL 20.15 MEASUREMENT METHOD " " "
VOLUME REMOVED 120 gals REMOVAL METHOD Dedicated polyethylene bailer

FIELD TEST RESULTS:

COLOR none pH 6.69 ODOR slight
TEMPERATURE (°F) 15.2 SPECIFIC CONDUCTANCE (umhos/cm) 0.565 mS/cm
TURBIDITY 26 NTUs

(PID) FID READING 0.0 VISUAL DESCRIPTION Clear
D.O. 4.24 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL + 30, TAL
Expanded Leachate parameter

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Monitoring Well MW-025
FIELD SAMPLE I.D. NUMBER MW-025 (10-27-97) DATE 10/27/97
TIME 09:45 WEATHER overcast, rain TEMPERATURE 50°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., seepage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 28.11 MEASUREMENT METHOD Water Level Meter
DEPTH OF WELL 41.50 MEASUREMENT METHOD " " "
VOLUME REMOVED 120 gals. REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR clear pH 6.33 ODOR none
TEMPERATURE (°F) 13.5 SPECIFIC CONDUCTANCE (umhos/cm) 0.237 mS/cm
TURBIDITY 24 NTUs
(P)ID/FID READING 0.0 ppm VISUAL DESCRIPTION clear
D.O. 3.21 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: * Collected MS/MSD here

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46

SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Monitoring Well MW-02J
FIELD SAMPLE I.D. NUMBER MW-02J (10-27-97) DATE 10/27/97
TIME 11:47 WEATHER Overcast, rain TEMPERATURE 50°F

SAMPLE TYPE:

GROUNDWATER ✓ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 28.12 MEASUREMENT METHOD Water Level Meter
DEPTH OF WELL 70.05 MEASUREMENT METHOD " " "
VOLUME REMOVED 250 gals REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR none pH 5.96 ODOR none
TEMPERATURE (°F) 13.5 SPECIFIC CONDUCTANCE (umhos/cm) 0.128 mS/cm
TURBIDITY 28 NTUs
(PID/FID) READING 0.0 ppm VISUAL DESCRIPTION clear
D.O. 7.25 mg/L

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.49	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-02D

FIELD SAMPLE I.D. NUMBER MW-02D (10-27-97) DATE 10/27/97

TIME 12:10 WEATHER overcast, int. rain TEMPERATURE 55°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 28.42 MEASUREMENT METHOD Water Level Meter

DEPTH OF WELL 114' MEASUREMENT METHOD " " "

VOLUME REMOVED 330 gals. REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR none pH 6.07 ODOR none

TEMPERATURE (°F) 13.4 SPECIFIC CONDUCTANCE (umhos/cm) 0.081 ^{ms/cm}

TURBIDITY 14 NTUs

(PID/FID) READING 0 ppm VISUAL DESCRIPTION clear
D.O. 6.84 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.877	2" = 0.16	3" = 0.37	4" = 0.63
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.49	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Monitoring well MW-075
FIELD SAMPLE I.D. NUMBER MW-075 (10-27-97) DATE 10/27/97
TIME 14:10 WEATHER overcast, int. rain TEMPERATURE 55°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 24.25 MEASUREMENT METHOD Water Level Meter
DEPTH OF WELL 32.8 MEASUREMENT METHOD " " "
VOLUME REMOVED 170 gals REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR hw pH 6.53 ODOR none
TEMPERATURE (°F) 15.7 SPECIFIC CONDUCTANCE (umhos/cm) 0.232 mS/cm
TURBIDITY 22 NTUs

PID/FID READING 0 ppm VISUAL DESCRIPTION clear
D.O 5.06 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.877	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-07D

FIELD SAMPLE I.D. NUMBER MW-07D (10-27-97) DATE 10/27/97

TIME 3:25 WEATHER Overcast TEMPERATURE 55

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 24.73 MEASUREMENT METHOD Water Level Meter

DEPTH OF WELL 119' MEASUREMENT METHOD " " "

VOLUME REMOVED 350 gals REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR clear pH 6.52 ODOR none

TEMPERATURE (°F) 13.6 SPECIFIC CONDUCTANCE (umhos/cm) 0.082 mS/cm

TURBIDITY 48 NTUs

PID/FID READING 0 ppm VISUAL DESCRIPTION clear

D.O. 6.74 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL

Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT

1-1/4" = 0.977
1-1/2" = 0.19

WELL CASING VOLUMES

2" = 0.16
2-1/2" = 0.24

3" = 0.37
3-1/2" = 0.49

4" = 0.65
6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-07I

FIELD SAMPLE I.D. NUMBER MW-07I (10-28-97) DATE 10/28/97

TIME 9⁰⁰ WEATHER M. Cloudy, very windy TEMPERATURE 40

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 21.81' MEASUREMENT METHOD Water level meter

DEPTH OF WELL 70.20' MEASUREMENT METHOD " " "

VOLUME REMOVED ~140 gals. REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR clear pH 6.09 ODOR non.

TEMPERATURE (°F) 13.6 SPECIFIC CONDUCTANCE (umhos/cm) 0.112 mS/cm

TURBIDITY 33 NTUs

PID/FID READING 0 ppm VISUAL DESCRIPTION clear

D.O. 2.06 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.63
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-065

FIELD SAMPLE I.D. NUMBER MW-065 (10-28-97) DATE 10/28/97

TIME 10²⁰ WEATHER M. cloudy TEMPERATURE 40-45

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 32.66 MEASUREMENT METHOD Water level meter

DEPTH OF WELL 32.35 MEASUREMENT METHOD " " "

VOLUME REMOVED 120 gals REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR sl. orange-tan pH 6.45 ODOR sl. landfill gas odor

TEMPERATURE (°F) 13.3 SPECIFIC CONDUCTANCE (umhos/cm) 1.09 mS/cm

TURBIDITY (69) NTUs

(PID/FID) READING 0 ppm VISUAL DESCRIPTION v. sl. silty
P.O. 2.36 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS:

Collected metals sample @ 1³⁰ final turb. (29) NTUs

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.63
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring well MW-06 I

FIELD SAMPLE I.D. NUMBER MW-06 I (10-2897) DATE 10/28/97

TIME 11¹⁵ WEATHER M. Cloudy TEMPERATURE 45

SAMPLE TYPE:

GROUNDWATER ✓ SEDIMENT _____

SURFACE WATER _____ AIR _____

SOIL _____ OTHER (Describe, e.g., septage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 22.83 MEASUREMENT METHOD Water Level meter

DEPTH OF WELL 71.1 MEASUREMENT METHOD " " "

VOLUME REMOVED 170 gals REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR clear pH 6.61 ODOR str. odor

TEMPERATURE (°F) 13.9 SPECIFIC CONDUCTANCE (umhos/cm) 0.290 mS/cm

TURBIDITY 29 NTUs

(PID/FID) READING 0 ppm VISUAL DESCRIPTION clear

P.O. 2.79 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-06D

FIELD SAMPLE I.D. NUMBER MW-06D (10-28-97) DATE 10/28/97

TIME 1:30 WEATHER M. Cloudy TEMPERATURE 45-50

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 23.26 MEASUREMENT METHOD Water Level Meter

DEPTH OF WELL 112 MEASUREMENT METHOD " " "

VOLUME REMOVED 240 gals. REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR clear pH 6.78 ODOR none

TEMPERATURE (°F) 13.8 SPECIFIC CONDUCTANCE (umhos/cm) 0.129 mS/cm

TURBIDITY 46 NTUs

☒ PID/FID READING 0 ppm VISUAL DESCRIPTION clear
P.O. 6.22 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46

SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RT) **SAMPLE CREW** D. Obradovich
SAMPLE LOCATION/WEILNO. Monitoring well MW-04D
FIELD SAMPLE ID. NUMBER MW-04D (10-2897) **DATE** 10/28/97
TIME 2:55 **WEATHER** M. Cloudy **TEMPERATURE** 50

SAMPLE TYPE:

☒ **GROUNDWATER**
☐ **SURFACE WATER**
☐ **AIR**
☐ **SEDIMENT**

SOIL _____ **OTHER (Describe, e.g., seepage/leachate)** _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 22.11 **MEASUREMENT METHOD** Water level meter
DEPTH OF WELL 113.6 **MEASUREMENT METHOD** "
VOLUME REMOVED ~310 gals **REMOVAL METHOD** Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR 5/ line 444 **pH** 6.73 **ODOR** landfill gas odor
TEMPERATURE (°C) 13.6 **SPECIFIC CONDUCTANCE (umhos/cm)** 0.661 ms/cm
TURBIDITY 144 NTUs
PID/FID READING 0 ppm **VISUAL DESCRIPTION** line color
D.O. 4.24 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
 Extended leachate Parameters
 (part 360)

REMARKS:

Collected metals sample on 10/29/97 @ 7:30 am.
 final trip was 16 NTUs

WELL CASING VOLUMES
 1-1/4" = 0.977
 1-1/2" = 0.19
 2" = 0.16
 3" = 0.57
 3-1/2" = 0.59
 4" = 0.65
 6" = 1.45

SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
 SAMPLE LOCATION/WELL NO. Monitoring well MW-045
 FIELD SAMPLE I.D. NUMBER MW-045 (10-29-97) DATE 10/29/97
 TIME 09:00 WEATHER sun TEMPERATURE 45°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
 SURFACE WATER _____ AIR _____
 SOIL _____ OTHER (Describe, e.g., seepage leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 23.29 MEASUREMENT METHOD Water Level Meter
 DEPTH OF WELL 32.00 MEASUREMENT METHOD " " "
 VOLUME REMOVED ~ 110 gals. REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR clear brownish pH 6.12 ODOR moderate sdv't odor?
 TEMPERATURE (°F) 13.9 SPECIFIC CONDUCTANCE (umhos/cm) 1.42 mS/cm
 TURBIDITY 24 NTUs _____
 PID/FID READING 0 ppm VISUAL DESCRIPTION sl. br. - sl. foamy
D.O. 2.22 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	1" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-04I

FIELD SAMPLE I.D. NUMBER MW-04I (10-29-97) DATE 10/29/97

TIME 10:30 WEATHER McSunny TEMPERATURE 50°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 22.31 MEASUREMENT METHOD Water Level Meter

DEPTH OF WELL 70.23 MEASUREMENT METHOD " " "

VOLUME REMOVED 190 gals. REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR Brown-clear pH 6.21 ODOR v. sl. landfill gas odor

TEMPERATURE (°F) 14.0 SPECIFIC CONDUCTANCE (umhos/cm) 1.12 mS/cm

TURBIDITY # 7 NTUs

PID/FID READING ppm VISUAL DESCRIPTION Clear -
D.O. 3.92 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-055

FIELD SAMPLE I.D. NUMBER MW-055 (10-27-97) DATE 10/29/97

TIME 12:00 WEATHER Sunny TEMPERATURE 50°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 24.27 MEASUREMENT METHOD Water Level Meter

DEPTH OF WELL 33.58 MEASUREMENT METHOD " " "

VOLUME REMOVED 10 gals. REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR too sl. green - tint pH 6.17 ODOR yes sl. landfill gas odor

TEMPERATURE (°F) 14.6 SPECIFIC CONDUCTANCE (umhos/cm) 1.09 mS/cm

TURBIDITY 8 NTUs

(PID/FID) READING 0 ppm VISUAL DESCRIPTION D.O. 1.86 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-05I

FIELD SAMPLE I.D. NUMBER MW-05I (10-2997) DATE 10/29/97

TIME 130 WEATHER Sunny TEMPERATURE 50

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 24.22 MEASUREMENT METHOD Water level meter

DEPTH OF WELL 70.5 MEASUREMENT METHOD " " "

VOLUME REMOVED 740 gals REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR clear pH 6.29 ODOR none

TEMPERATURE (°F) 13.7 SPECIFIC CONDUCTANCE (umhos/cm) 0.159 mS/cm

TURBIDITY 11 NTUs

PID/FID READING 0 ppm VISUAL DESCRIPTION clear

D.O. 2.21 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	1" = 0.16	3" = 0.37	4" = 0.63
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.40	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring well MW-05D

FIELD SAMPLE I.D. NUMBER MW-05D (10-2997) DATE 10/29/97

TIME 2:55 WEATHER Sunny TEMPERATURE 50

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 24.72 MEASUREMENT METHOD Water level meter

DEPTH OF WELL 116.0' MEASUREMENT METHOD " " "

VOLUME REMOVED 400 gals. REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR clear pH 6.38 ODOR sl. land fill gas odor

TEMPERATURE (°F) 14.0 SPECIFIC CONDUCTANCE (umhos/cm) 0.676 mS/cm

TURBIDITY 3 NTUS

PID/FID READING 0 ppm VISUAL DESCRIPTION clear

D.O. 5.07 mS/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL

Expanded Leachate Parameters
(Part 360)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.877	2" = 0.16	3" = 0.37	4" = 0.69
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.59	4" = 1.46

SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-035

FIELD SAMPLE I.D. NUMBER MW-035 (10-30-97) DATE 10/30/97

TIME 8³⁰ WEATHER M. Sunny TEMPERATURE 45°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., seepage leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 23.50 MEASUREMENT METHOD Water Level Meter

DEPTH OF WELL 31.62 MEASUREMENT METHOD " " "

VOLUME REMOVED 180 gals. REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR clear pH 6.47 ODOR none

TEMPERATURE (°F) 14.5 SPECIFIC CONDUCTANCE (umhos/cm) 0.524 mS/cm

TURBIDITY 7 NTUs

PID/FID READING 0 ppm VISUAL DESCRIPTION clear
P.O. 3.31 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.59	6" = 1.46

SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELLNO. Monitoring Well MW-03I

FIELD SAMPLE I.D. NUMBER MW-03I (10-3697) DATE 10/30/97

TIME 9⁵⁰ WEATHER M. Sunny TEMPERATURE 45

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 23.48 MEASUREMENT METHOD Water Level Meter

DEPTH OF WELL 82.6 MEASUREMENT METHOD " " "

VOLUME REMOVED 200 gals REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR clear pH 6.59 ODOR none

TEMPERATURE (°F) 14.1 SPECIFIC CONDUCTANCE (umhos/cm) 0.151 mS/cm

TURBIDITY 6 NTUs

(PID/FID) READING 0 ppm VISUAL DESCRIPTION clear

D.O. 4.32 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL

Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.63
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-03D

FIELD SAMPLE I.D. NUMBER MW-03D (10-3097) DATE 10/30/97

TIME 11⁰⁰ WEATHER M. Sunny TEMPERATURE 50

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 23.43 MEASUREMENT METHOD Water level meter

DEPTH OF WELL 107.5 MEASUREMENT METHOD " " "

VOLUME REMOVED 250 gals. REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR clear pH 6.62 ODOR none

TEMPERATURE (°F) 14.0 SPECIFIC CONDUCTANCE (umhos/cm) 0.177 mS/cm

TURBIDITY 41 NTUs

PID/FID READING 0 ppm VISUAL DESCRIPTION clear

D.O. 2.79 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL

Expanded Leachate Parameters
(Part 360)

REMARKS:

GAL/FT

1-1/4" = 0.977
1-1/2" = 0.19

WELL CASING VOLUMES

2" = 0.16
2-1/2" = 0.24

3" = 0.37
3-1/2" = 0.60

4" = 0.65
6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Monitoring Well MW-105
FIELD SAMPLE I.D. NUMBER MW-105 (10-30-97) DATE 10/30/97
TIME 12⁴⁰ WEATHER M. Sunny TEMPERATURE 50

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., seepage leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER ~~15.8~~ 7.41 MEASUREMENT METHOD Water level meter
DEPTH OF WELL 18.90 MEASUREMENT METHOD " " "
VOLUME REMOVED ~ 130 gals REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR clear pH 6.91 ODOR none
TEMPERATURE (°F) 16.1 SPECIFIC CONDUCTANCE (umhos/cm) 0.623 mS/cm
TURBIDITY 32 NTUs
PID/FID READING 0 ppm VISUAL DESCRIPTION clear
D.O. 23.2 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS:

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-10I

FIELD SAMPLE I.D. NUMBER MW-10I (1030-97) DATE 10/30/97

TIME 2⁰⁰ WEATHER M, Sunny TEMPERATURE 50

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 6.93 MEASUREMENT METHOD Water Level Meter

DEPTH OF WELL 69.62 MEASUREMENT METHOD " " "

VOLUME REMOVED 400 gals REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR Clear pH 6.29 ODOR none

TEMPERATURE (°F) 13.9 SPECIFIC CONDUCTANCE (umhos/cm) 6.714 mS/cm

TURBIDITY 8 NTU'S

(PID/FID) READING 0 ppm VISUAL DESCRIPTION clear
D.O. 2.01 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.877	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.50	4" = 1.46

SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Monitoring well MW-10D
FIELD SAMPLE I.D. NUMBER MW-10D (103097) DATE 10/30/97
TIME 2⁵⁵ WEATHER M. Sunny TEMPERATURE 50°

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., seepage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 7.13 MEASUREMENT METHOD Water level meter
DEPTH OF WELL 96.25 MEASUREMENT METHOD " " "
VOLUME REMOVED 430 REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR Clear pH 6.28 ODOR none
TEMPERATURE (°F) 14.1 SPECIFIC CONDUCTANCE (umhos/cm) 4.68 mS/cm
TURBIDITY 7 NTUs

PID/FID READING 0 ppm VISUAL DESCRIPTION clear
D.O. 7.12 mg/L

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-115

FIELD SAMPLE I.D. NUMBER MW-115 (10-31-97) DATE 10/31/97

TIME 9³⁰ WEATHER Sunny TEMPERATURE 50

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 8.18 MEASUREMENT METHOD Water Level Meter

DEPTH OF WELL 18.91 MEASUREMENT METHOD " " "

VOLUME REMOVED 260 gals. REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR br. - tan cloudy pH 6.74 ODOR Sl. odor

TEMPERATURE (°F) 17.3 SPECIFIC CONDUCTANCE (umhos/cm) 0.471 mS/cm

TURBIDITY 16.2 NTUs

ⓅPID/FID READING 0 ppm VISUAL DESCRIPTION br. tan - cloudy
D.O. 6.45 mg/L

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: Collected metals sample @ 11³⁵ am.
final turb. 42 NTUs

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.69	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Monitoring well MW-11I
FIELD SAMPLE I.D. NUMBER MW-11I (103197) DATE 10/31/97
TIME 10¹⁵ WEATHER Sunny TEMPERATURE 50

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage/leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 7.80 MEASUREMENT METHOD Water Level Meter
DEPTH OF WELL 69.73 MEASUREMENT METHOD " " "
VOLUME REMOVED 155 REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR clear pH 6.22 ODOR none
TEMPERATURE (°F) 15.8 SPECIFIC CONDUCTANCE (umhos/cm) 0.188 mS/cm
TURBIDITY 4 NTUs

PID/FID READING 0 ppm VISUAL DESCRIPTION clear
D.O. 2.31 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.60	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring well MW-11D

FIELD SAMPLE I.D. NUMBER MW-11D (10-31-97) DATE 10/31/97

TIME 11:30 WEATHER Sunny TEMPERATURE 55

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 72.95 MEASUREMENT METHOD Water level meter

DEPTH OF WELL 93.50' MEASUREMENT METHOD " " "

VOLUME REMOVED 500 gals. REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR clear pH 6.03 ODOR none

TEMPERATURE (°F) 13.7 SPECIFIC CONDUCTANCE (umhos/cm) 0.112 mS/cm

TURBIDITY 6 NTUs

PID/FID READING 0 ppm VISUAL DESCRIPTION clear

D.O. 8.11 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.877	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.59	6" = 1.46

SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Monitoring well MW-125
FIELD SAMPLE I.D. NUMBER MW-125 (10-3-97) DATE 10/31/97
TIME 140 WEATHER Sunny TEMPERATURE 50

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., seepage leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 9.18 MEASUREMENT METHOD Water level meter
DEPTH OF WELL 18.89 MEASUREMENT METHOD " " "
VOLUME REMOVED 130 gals REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR Clear pH 6.42 ODOR none
TEMPERATURE (°F) 16.5 SPECIFIC CONDUCTANCE (umhos/cm) 0.297 mS/cm
TURBIDITY 4 NTUs
(PID/FID) READING 0 ppm VISUAL DESCRIPTION Clear
D.O. - 2.53 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.40	6" = 1.46

SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-12I

FIELD SAMPLE I.D. NUMBER MW-12I (10-31-97) DATE 10/31/97

TIME 2¹⁰ WEATHER Sunny TEMPERATURE 55

SAMPLE TYPE:

GROUNDWATER ✓ SEDIMENT _____

SURFACE WATER _____ AIR _____

SOIL _____ OTHER (Describe, e.g., seepage leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 9.32 MEASUREMENT METHOD Water level meter

DEPTH OF WELL 69.98 MEASUREMENT METHOD " " "

VOLUME REMOVED 155 gals. REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR clear pH 5.64 ODOR none

TEMPERATURE (°F) 14.1 SPECIFIC CONDUCTANCE (umhos/cm) 0.187 mS/cm

TURBIDITY 9 NTUs

PID/FID READING 0 ppm VISUAL DESCRIPTION clear

D.O. 6.67 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL

Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.34	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-12D

FIELD SAMPLE I.D. NUMBER MW-12D (10-31-97) DATE 10/31/97

TIME 2⁵⁵ WEATHER Sunny TEMPERATURE 50

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 9.04 MEASUREMENT METHOD Water Level Meter

DEPTH OF WELL 98.70 MEASUREMENT METHOD " " "

VOLUME REMOVED 310 gals. REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR clear pH 6.27 ODOR none

TEMPERATURE (°F) 14.4 SPECIFIC CONDUCTANCE (umhos/cm) 6.109 ^{ms/cm}

TURBIDITY 8 NTUs

PID/FID READING 0 ppm VISUAL DESCRIPTION clear

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich
SAMPLE LOCATION/WELL NO. Monitoring Well MW-145
FIELD SAMPLE I.D. NUMBER MW-145 (11-3-97) DATE 11/3/97
TIME 09:00 WEATHER Sunny TEMPERATURE 50°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT _____
SURFACE WATER _____ AIR _____
SOIL _____ OTHER (Describe, e.g., septage, leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 20.86 MEASUREMENT METHOD Water Level Meter
DEPTH OF WELL 30.3 MEASUREMENT METHOD " " "
VOLUME REMOVED 180 gals. REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR no pH 5.44 ODOR no
TEMPERATURE (°F) 14.5 SPECIFIC CONDUCTANCE (umhos/cm) 128 ^{ms/cm}
TURBIDITY 22 NTUs
PID/FID READING 0 ppm VISUAL DESCRIPTION clear
D.O. 6.50 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS:

GAL/FT

1-1/4" = 0.077
1-1/2" = 0.10

WELL CASING VOLUMES

2" = 0.16
2-1/2" = 0.24

3" = 0.37
3-1/2" = 0.50

4" = 0.63
4" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-14T

FIELD SAMPLE I.D. NUMBER MW-14T (11-3-97) DATE 11/3/97

TIME 10:00 WEATHER Sunny TEMPERATURE 55°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 20.90 MEASUREMENT METHOD Water Level Meter

DEPTH OF WELL 71.50 MEASUREMENT METHOD " " "

VOLUME REMOVED 230 gals. REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR yell-br initially pH 6.53 ODOR yes

TEMPERATURE (°F) 13.5 SPECIFIC CONDUCTANCE (umhos/cm) .594 mS/cm

TURBIDITY 18 NTUs

(PID/FID) READING 0 ppm VISUAL DESCRIPTION v. sl. yellow hnt

D.O. 6.27 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL

Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.40	4" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-14D

FIELD SAMPLE I.D. NUMBER MW-14D (11-3-97) DATE 11/3/97

TIME 11:00 WEATHER Sunny TEMPERATURE 55°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 20.84 MEASUREMENT METHOD Water Level Meter

DEPTH OF WELL 104.5 MEASUREMENT METHOD " " "

VOLUME REMOVED 480 gals REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR yellow-brown pH 6.52 ODOR slight

TEMPERATURE (°F) 14.5 SPECIFIC CONDUCTANCE (umhos/cm) .633 mS/cm

TURBIDITY 1436 NTUs

PID/FID READING 0 ppm VISUAL DESCRIPTION sl. yellow-br. color
D.O. 1.88 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.59	6" = 1.46

SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-135

FIELD SAMPLE I.D. NUMBER MW-135 (11-3-97) DATE 11/3/97

TIME 13:30 WEATHER Sunny TEMPERATURE 60°F

SAMPLE TYPE:

GROUNDWATER ✓ SEDIMENT _____

SURFACE WATER _____ AIR _____

SOIL _____ OTHER (Describe, e.g., seepage leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 27.90 MEASUREMENT METHOD Water Level Meter

DEPTH OF WELL 37.00 MEASUREMENT METHOD " " "

VOLUME REMOVED 250 gals. REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR brown pH 5.24 ODOR NO

TEMPERATURE (°F) 13.4 SPECIFIC CONDUCTANCE (umhos/cm) 104 mS/cm

TURBIDITY 6 NTUs

(PID/FID) READING 0 ppm VISUAL DESCRIPTION clear

DO 7.60 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL

Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.63
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-13I

FIELD SAMPLE I.D. NUMBER MW-13I (11-3-97) DATE 11/3/97

TIME 14:30 WEATHER Sunny TEMPERATURE 68°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage, leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 27.60 MEASUREMENT METHOD Water Level Meter

DEPTH OF WELL 69.90 MEASUREMENT METHOD " " "

VOLUME REMOVED ~180 gals REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR none pH 6.42 ODOR no

TEMPERATURE (°F) 13.6 SPECIFIC CONDUCTANCE (umhos/cm) .409 mS/cm

TURBIDITY 16 NTUs

PID/FID READING 0 ppm VISUAL DESCRIPTION clear

D.O. 6.20 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: collected MS/MSD at this location

GAL/FT	WELL CASING VOLUMES			
	1-1/4" = 0.977	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.19	2-1/2" = 0.24	3-1/2" = 0.59	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonia Rd. Landfill (RI) SAMPLE CREW D. Obradovich

SAMPLE LOCATION/WELL NO. Monitoring Well MW-13D

FIELD SAMPLE I.D. NUMBER MW-13D (11-3-97) DATE 11/3/97

TIME 15:10 WEATHER Sunny TEMPERATURE 55°F

SAMPLE TYPE:

GROUNDWATER ☒ SEDIMENT ☐

SURFACE WATER ☐ AIR ☐

SOIL ☐ OTHER (Describe, e.g., septage/leachate) ☐

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER 27.70 MEASUREMENT METHOD Water Level Meter

DEPTH OF WELL 119 MEASUREMENT METHOD " " "

VOLUME REMOVED 370 gals REMOVAL METHOD Polyethylene disposable bailer

FIELD TEST RESULTS:

COLOR yellow - none pH 6.48 ODOR yes

TEMPERATURE (°F) 12.8 SPECIFIC CONDUCTANCE (umhos/cm) 526 mS/cm

TURBIDITY 6 NTUs

PID/FID READING 0 ppm VISUAL DESCRIPTION clear

D.O. 1.92 mg/l

CONSTITUENTS TO BE ANALYZED:

TCL+30, TAL
Expanded Leachate Parameters
(Part 360)

REMARKS: _____

GAL/FT		WELL CASING VOLUMES			
1-1/4"	= 0.977	2"	= 0.16	3"	= 0.37
1-1/2"	= 0.19	2-1/2"	= 0.34	3-1/2"	= 0.50
				4"	= 0.63
				6"	= 1.46



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SAMPLE INFORMATION RECORD

SITE Sonic Road Landfill SAMPLE CREW Keith Robins
SAMPLE LOCATION/WELLNO. TT-35(0-2")
FIELD SAMPLE I.D. NUMBER TT-35(0-2") DATE 1/14/98
TIME 1130 hrs WEATHER Cold TEMPERATURE 30°F

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER/STREAM _____ AIR _____
SOIL X _____ OTHER (Describe, i.e., septage,
leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR _____ pH _____ ODOR _____
TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE (umhos/cm) _____
OTHER (OVA, Methane meter, etc.) PID = 0.50 ppm TURBIDITY (NTUs) _____
Black tur-like sand

CONSTITUENTS SAMPLED: Full TCL, TAL metals, plus cyanide

REMARKS: Area of stressed vegetation

WELL CASING VOLUMES

GAL/FT	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Jonas Road SAMPLE CREW Keith Robins
SAMPLE LOCATION/WELLNO. TT-35 (1-2')
FIELD SAMPLE I.D. NUMBER TT-35 (1-2') DATE 1/14/98
TIME 1140 am WEATHER Cold TEMPERATURE 30°F

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER/STREAM _____ AIR _____
SOIL X _____ OTHER (Describe, i.e., septage,
leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR _____ pH _____ ODOR _____
TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE (umhos/cm) _____
OTHER (OVA, Methane meter, etc.) PID = 0.0 ppm TURBIDITY (NTUs) _____
(1-2') waste, soil brown-sand, gravel

CONSTITUENTS SAMPLED:

Full TCL, plus TAL metals, and cyanide

REMARKS:

Area of stressed vegetation

WELL CASING VOLUMES

GAL/FT	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE Sonnia Road Landfill SAMPLE CREW Keith Robins
SAMPLE LOCATION/WELL NO. T7-35A (0-2")
FIELD SAMPLE ID. NUMBER T7-35A (0-2") DATE 1/14/98
TIME 1200pm WEATHER Cold TEMPERATURE 30°F

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER/STREAM _____ AIR _____
SOIL X _____ OTHER (Describe, i.e., septage,
leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR _____ pH _____ ODOR _____
TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE (umhos/cm) _____
OTHER (OVA, Methane meter, etc.) PID = 0.0 TURBIDITY (NTUs) _____

Black sand, trace tar-like substance

CONSTITUENTS SAMPLED:

Full TCL, TAL metals, plus cyanide

REMARKS:

Area of stressed vegetation

WELL CASING VOLUMES

GAL/FT	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46



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SAMPLE INFORMATION RECORD

SITE 5 DNIA Road Landfill SAMPLE CREW Keith Robins
SAMPLE LOCATION/WELL NO. TT-35A (1-2')
FIELD SAMPLE ID. NUMBER TT-35A (1-2') DATE 1/14/98
TIME 1230 pm WEATHER Cloud TEMPERATURE 30°F

SAMPLE TYPE:

GROUNDWATER _____ SEDIMENT _____
SURFACE WATER/STREAM _____ AIR _____
SOIL _____ OTHER (Describe, i.e., septage,
leachate) _____

WELL INFORMATION (fill out for groundwater samples):

DEPTH TO WATER _____ MEASUREMENT METHOD _____
DEPTH OF WELL _____ MEASUREMENT METHOD _____
VOLUME REMOVED _____ REMOVAL METHOD _____

FIELD TEST RESULTS:

COLOR _____ pH _____ ODOR _____
TEMPERATURE (°F) _____ SPECIFIC CONDUCTANCE (umhos/cm) _____
OTHER (OVA, Methane meter, etc.) PID = 0.0 pm TURBIDITY (NTUs) _____
Waste (1-2') / Sand / Gravel mixed with waste

CONSTITUENTS SAMPLED: Full TCL, Plus TAL metals / cyanide

REMARKS: Area of stressed vegetation

WELL CASING VOLUMES

GAL/FT	1-1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1-1/2" = 0.10	2-1/2" = 0.24	3-1/2" = 0.50	6" = 1.46

APPENDIX B

LOCATION SKETCHES



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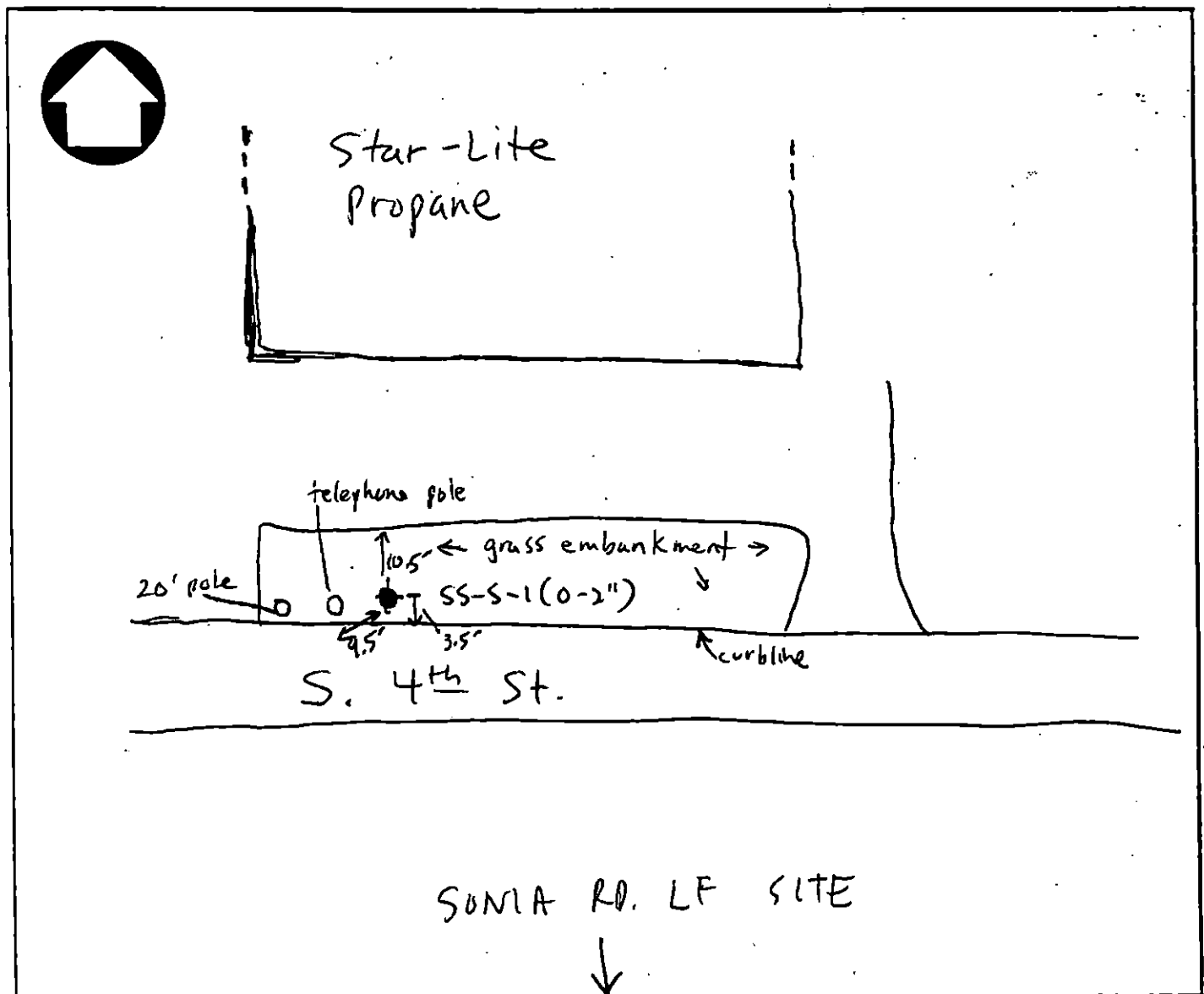
LOCATION SKETCH

Project Sonia Rd. LP Sample Crew D. Obradovich

Sample(s) Location(s) Surficial soil sample #1 (off-site).

Sample(s) and/or Well Number(s) SS-S-1 (0-2")

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.





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LOCATION SKETCH

Project SONIA Rd- LF Sample Crew D. Obradovich

Sample(s) Location(s) SS-S-2 (0-2") Surficial soil sample #2

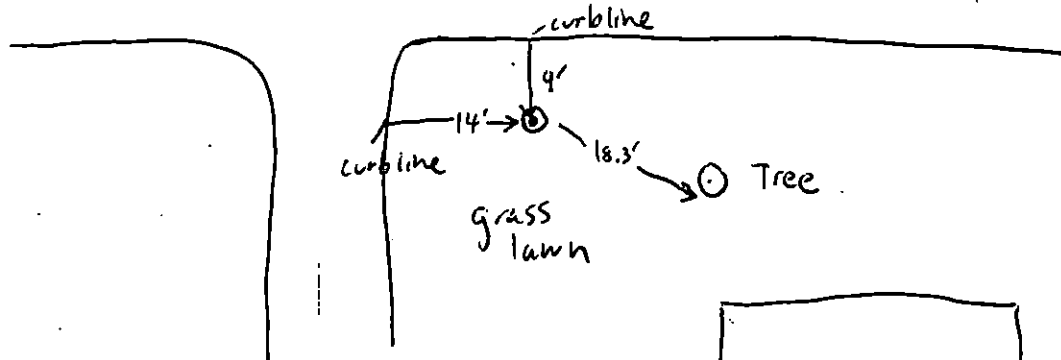
Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



SONIA RD LF
SITE

Deer Park St.



20
(residential)

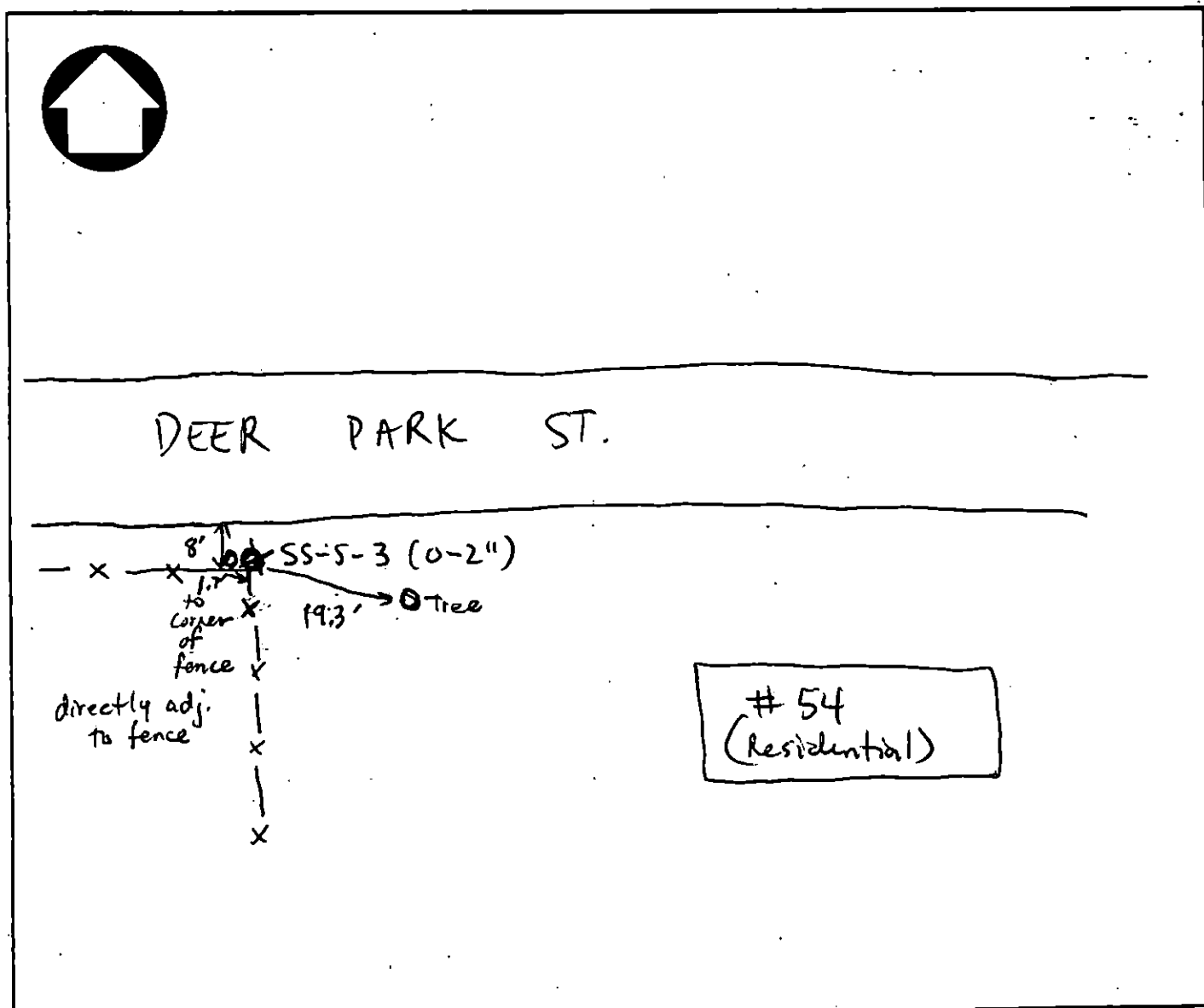
LOCATION SKETCH

Project Sonia Rd. LF Sample Crew D. Obradovich

Sample(s) Location(s) Surface Soil Sample #3

Sample(s) and/or Well Number(s) SS-5-3-(0-2")

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



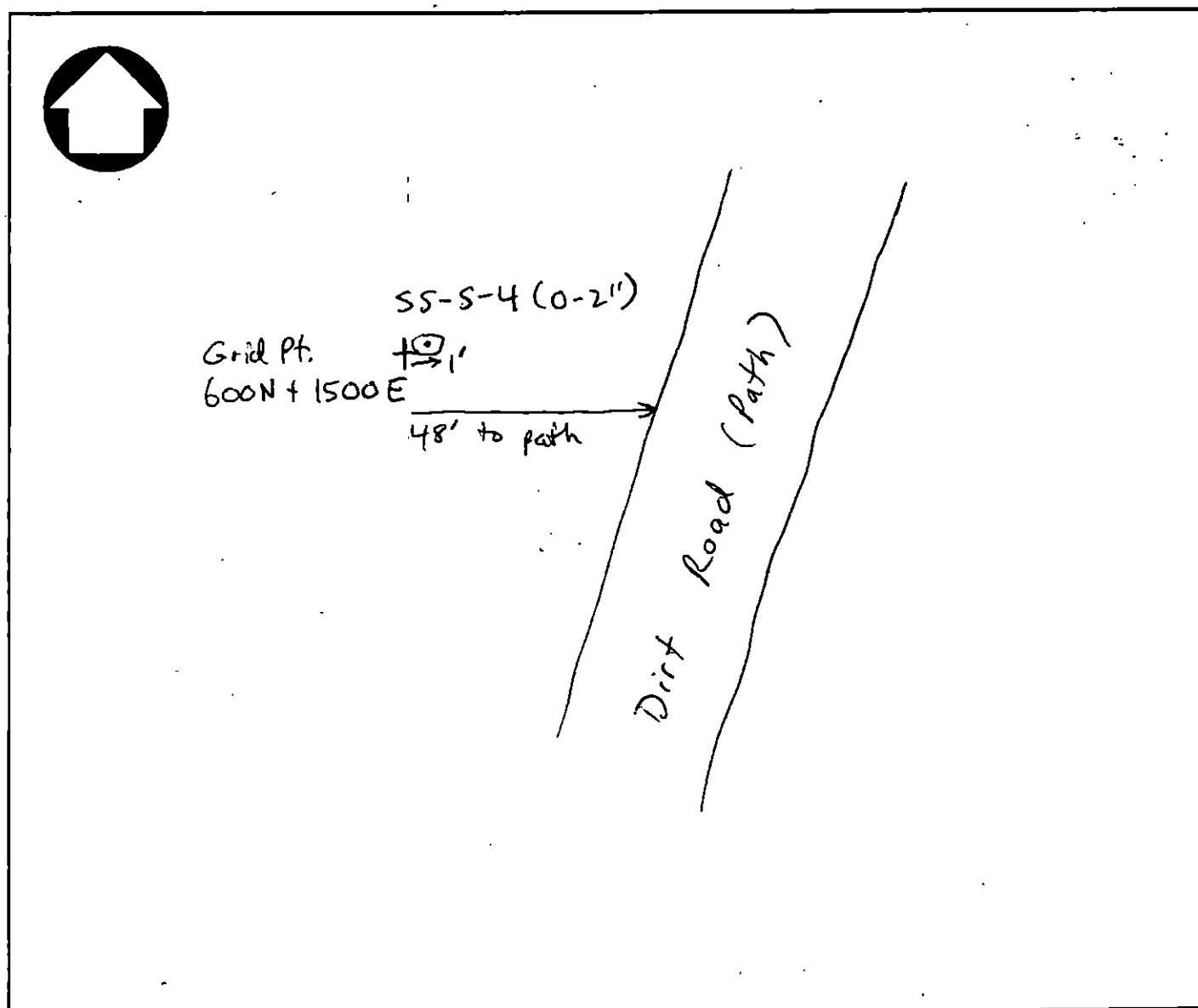
LOCATION SKETCH

Project Sonla Rd. Landfill RI Sample Crew D. Obradovich

Sample(s) Location(s) Surficial Soil Sample #4 (on-site)

Sample(s) and/or Well Number(s) SS-S-4 (0-2") + MS/MSD
(collected directly adjacent to staked grid pt.)

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.





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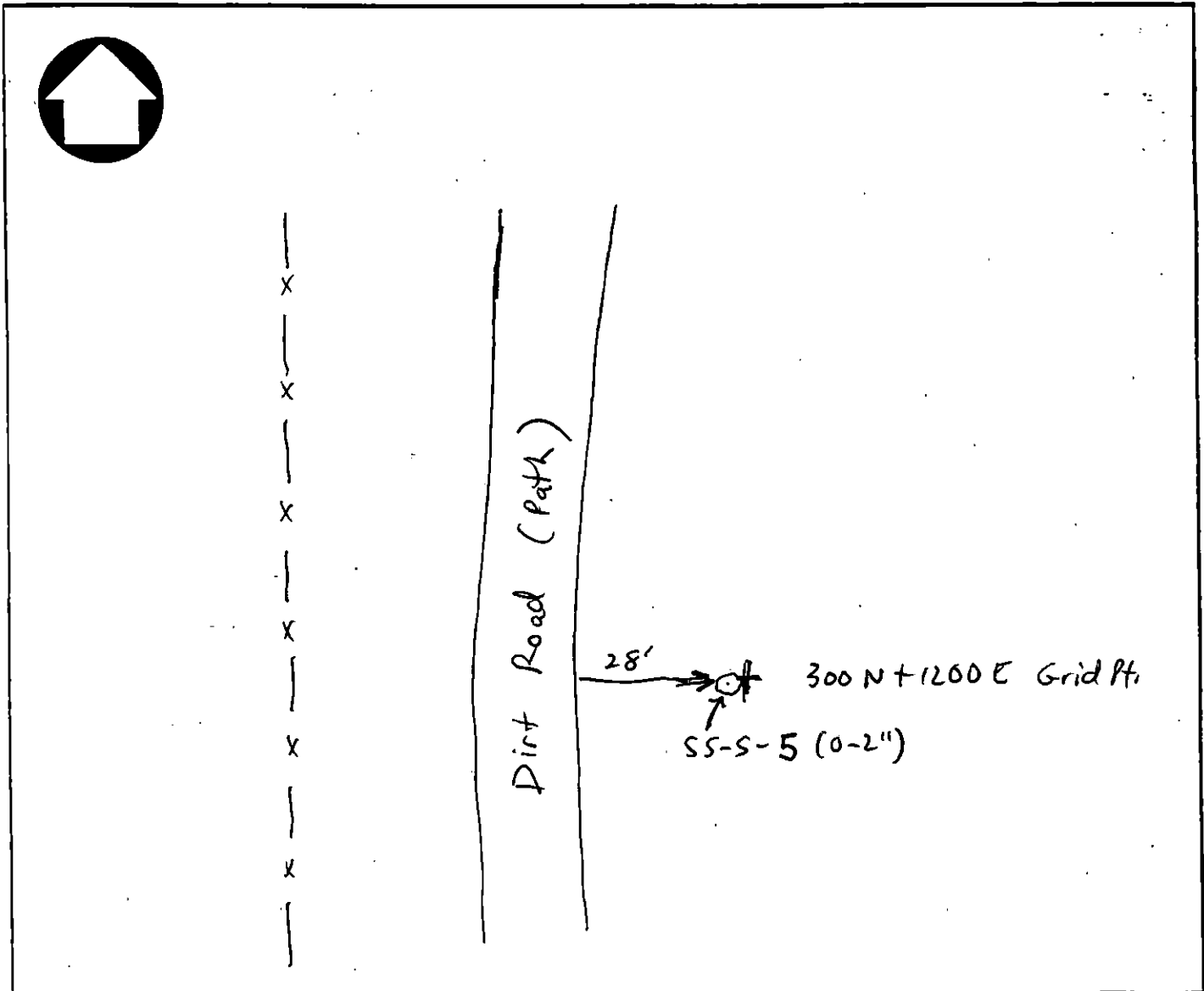
LOCATION SKETCH

Project Sonia Rd. LF (RI) Sample Crew D. Obradovich

Sample(s) Location(s) Surficial Soil Sample #5 (on-site)

Sample(s) and/or Well Number(s) SS-S-5 (0-2")

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



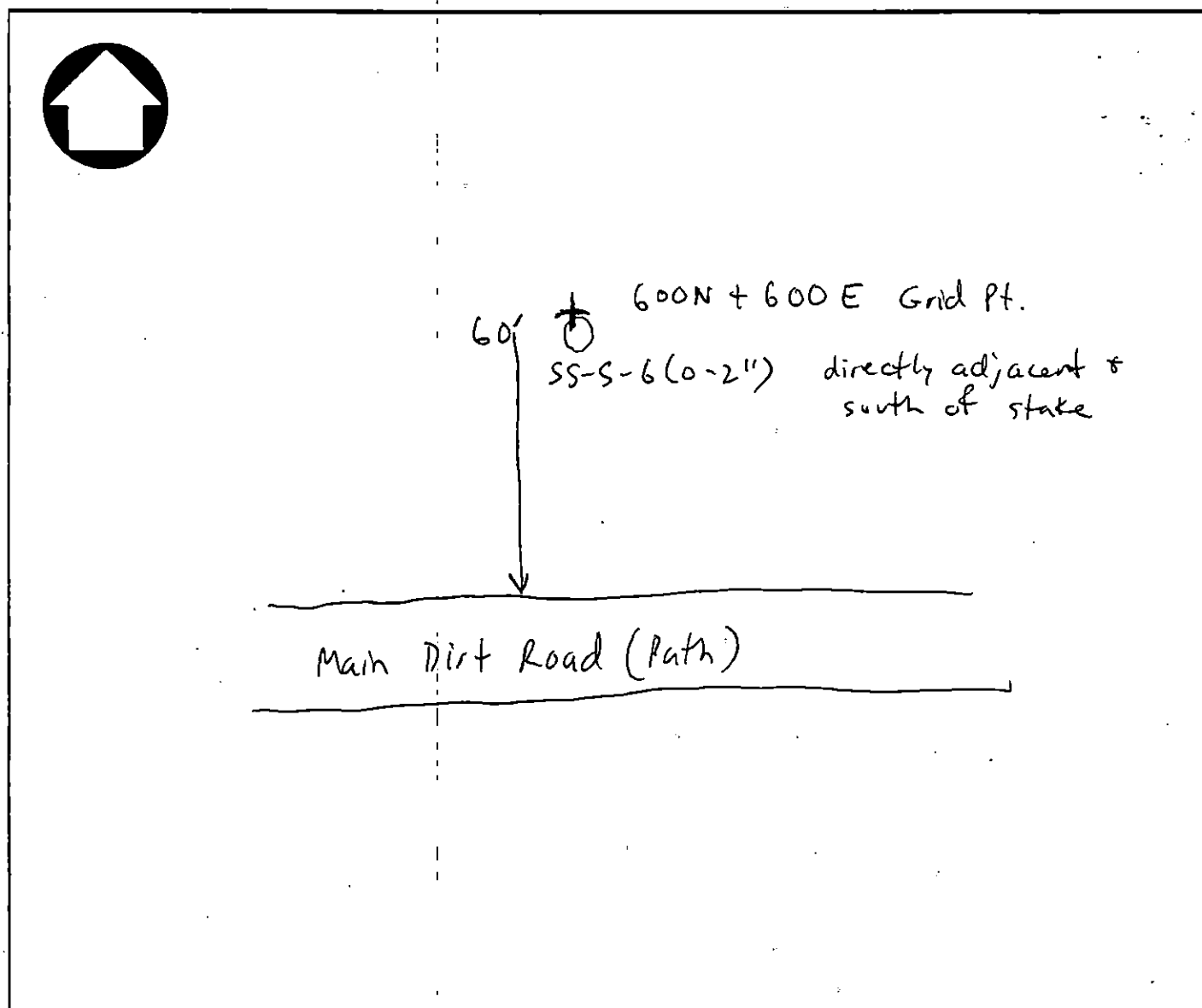
LOCATION SKETCH

Project Sonia Rd. LF (RI) Sample Crew D. Obradovich

Sample(s) Location(s) Surficial Soil Sample #6 (on-site)

Sample(s) and/or Well Number(s) SS-S-6 (0-2")

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.





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LOCATION SKETCH

Project Sonia Rd. LF (RI) Sample Crew D. Obradovich

Sample(s) Location(s) Surficial Soil sample #7 (on-site)

Sample(s) and/or Well Number(s) SS-S-7(0-2")

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



Main Dirt Road (Path)

←
Corbin Dr.

SS-S-7(0-2") sample
⊕ 300 N + 300 E Grid Pt.

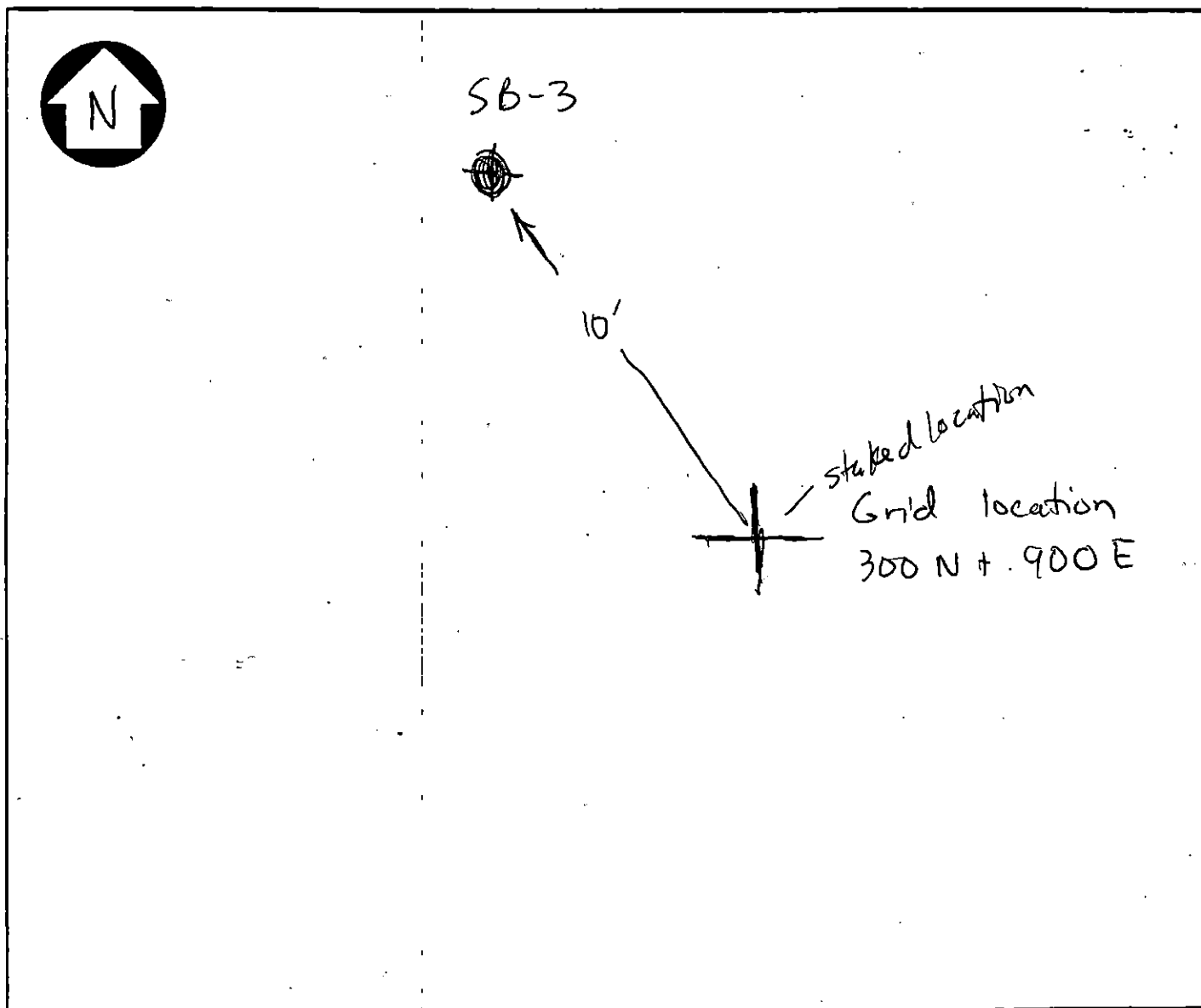
LOCATION SKETCH

Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) Soil boring SB-3

Sample(s) and/or Well Number(s) SB-3-1 (18-20')

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.





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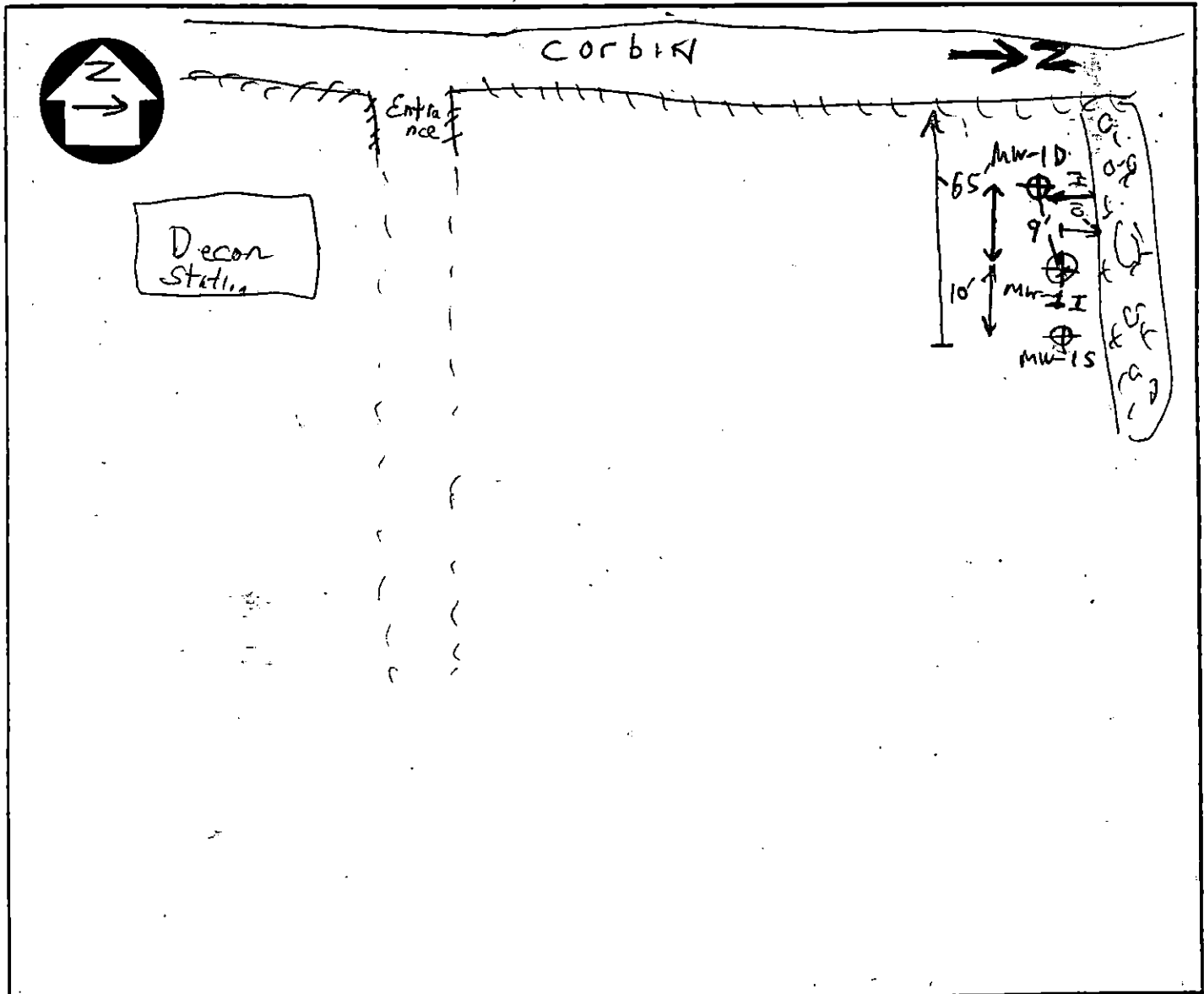
LOCATION SKETCH

Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) MW-01 Cluster (Formerly MW-a)

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



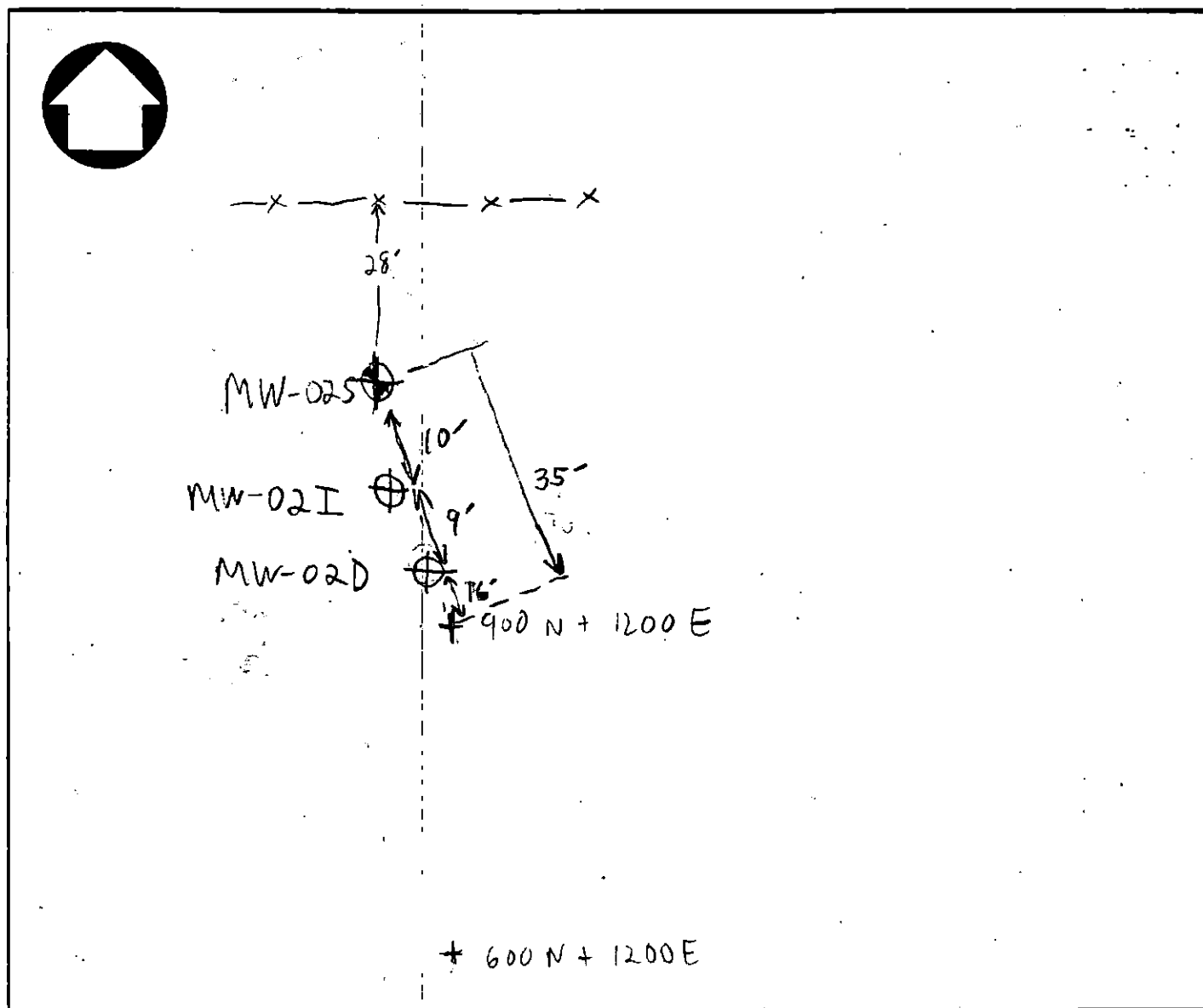
LOCATION SKETCH

Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) MW-2 26.86 DTW 115 8/12/97 (0.6' bg - TOC)

Sample(s) and/or Well Number(s) 41.6 TD DTW @ MW-2 is 27 1/2' bg

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



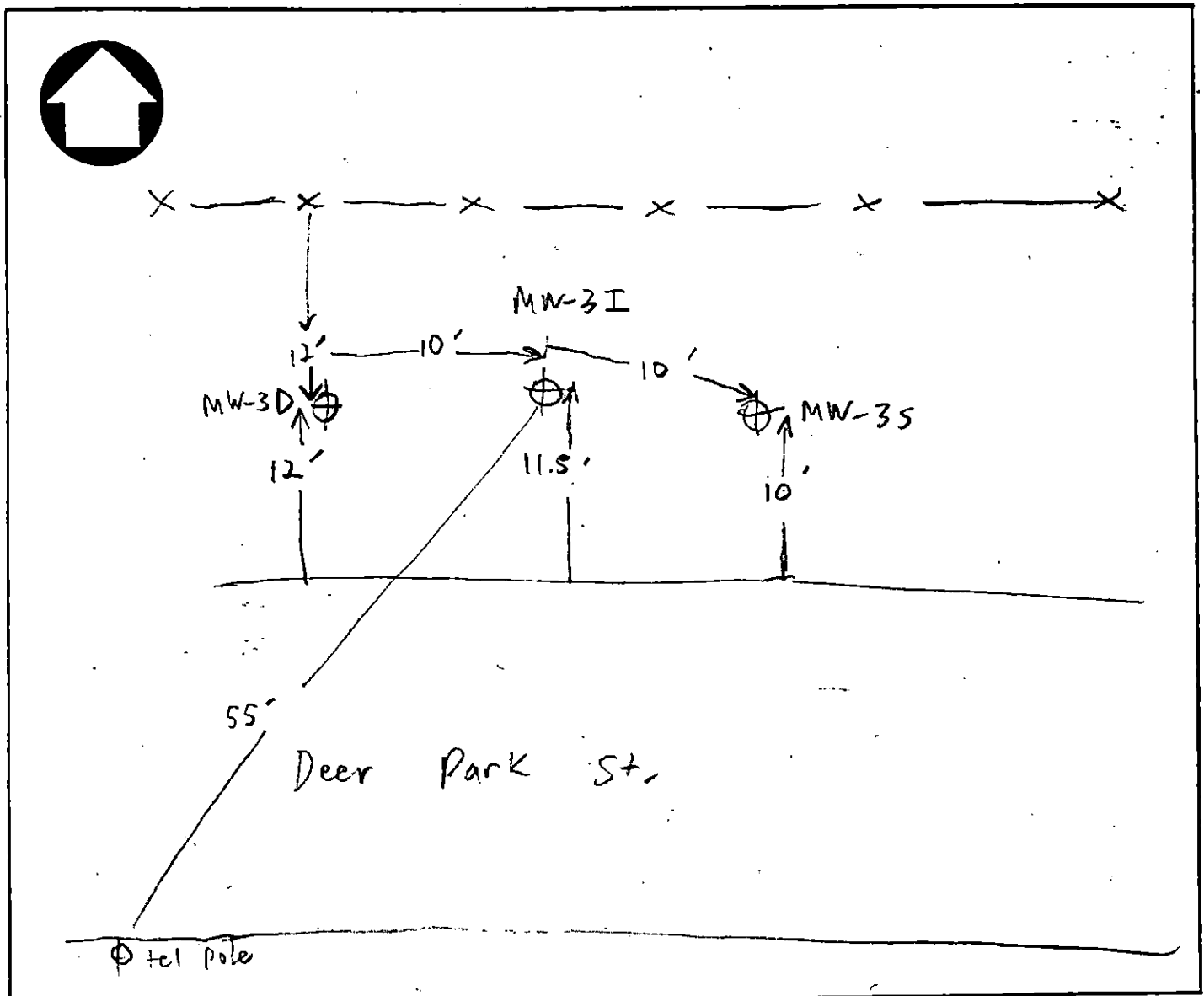
LOCATION SKETCH

Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) MW-3 Cluster

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



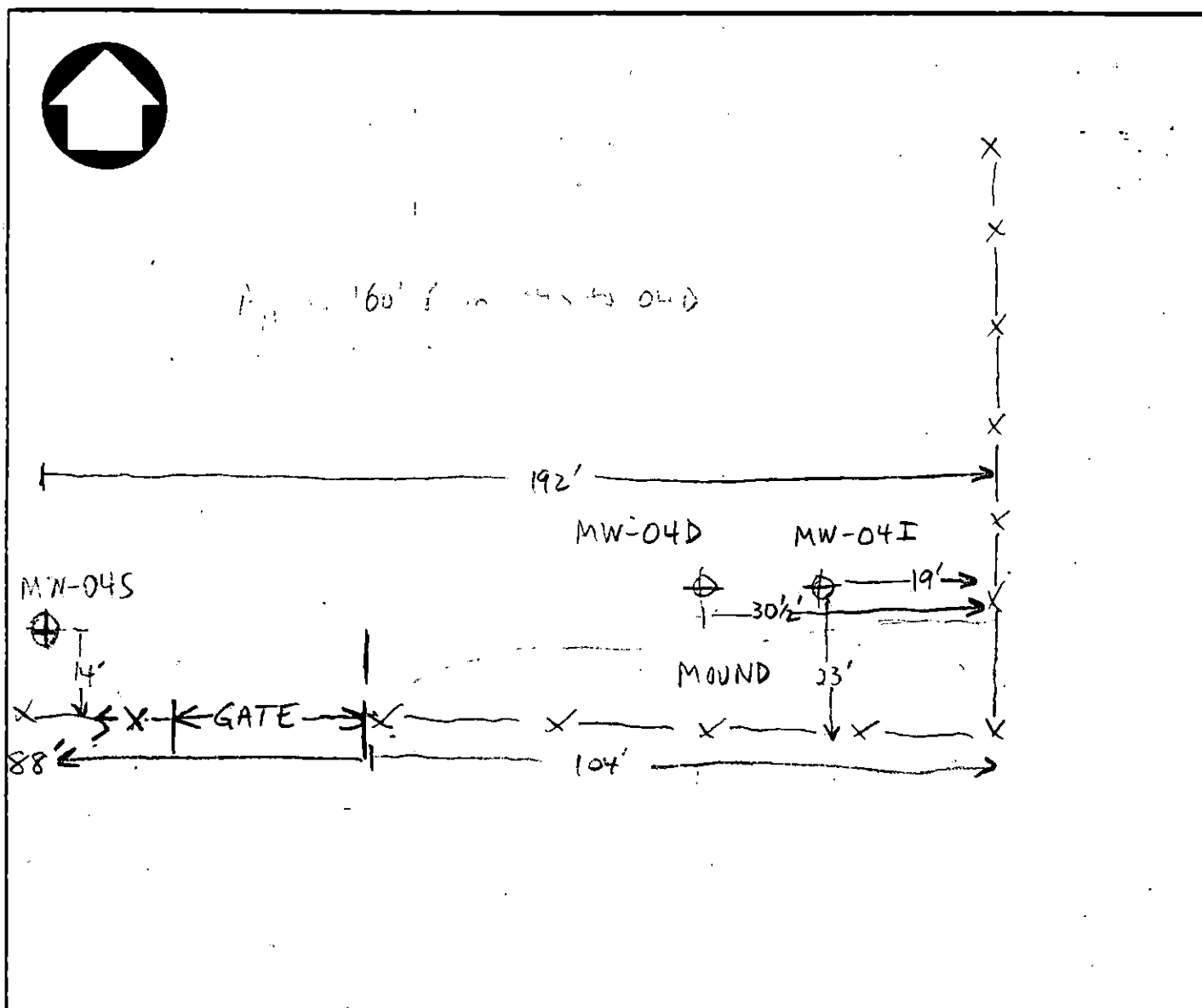
LOCATION SKETCH

Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) MW-04 Cluster

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.





Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) MW-05 cluster

Sample(s) and/or Well Number(s) _____

A hand-drawn site map showing the intersection of Deer Park Street and Martinstein Ave. The map includes a north arrow pointing up. A utility line, represented by a dashed line with 'X' markers, runs horizontally across the top. Below this line, a vertical line labeled 'TALL WEEDS' leads to a 'Fire Hydrant' marked with a circle and a cross. To the left of the hydrant is a monitoring well labeled 'MW-05D'. To the right is 'MW-05I', and further right is 'MW-05S'. Distances are marked in feet: 8' from the hydrant to MW-05D, 10' from the hydrant to MW-05I, 16.5' from MW-05I to MW-05S, and 27' from MW-05D to MW-05S. A vertical distance of 7' is marked from the street level to the hydrant, and 9.5' from the street level to MW-05S. The area is labeled 'WOODS' on both sides of the utility line. The intersection is labeled 'DEER PARK STREET' and 'MARTINSTEIN AVE.'.



DVIRKA
AND
BARTILUCCI

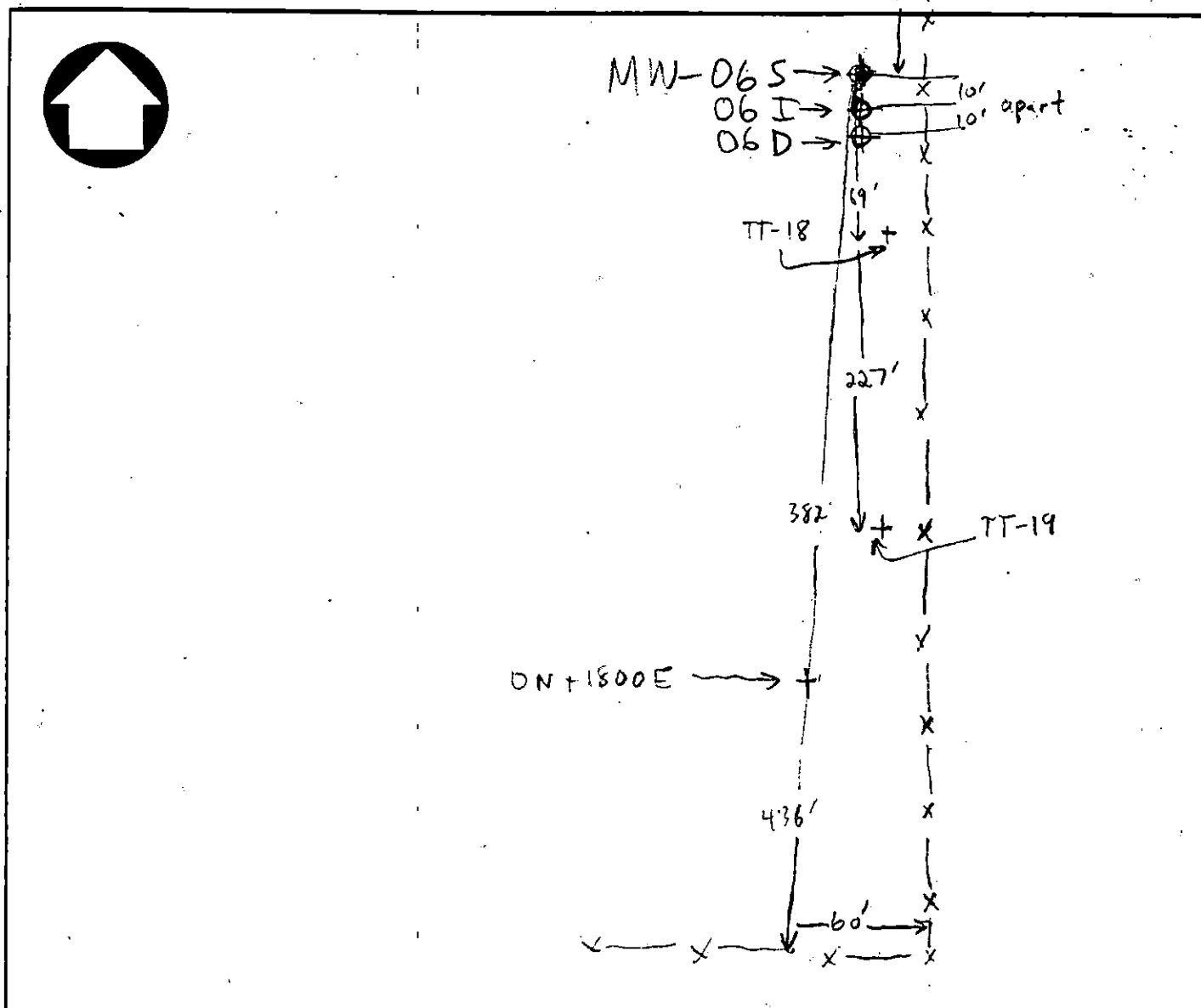
LOCATION SKETCH

Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) MW-06 Cluster

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.





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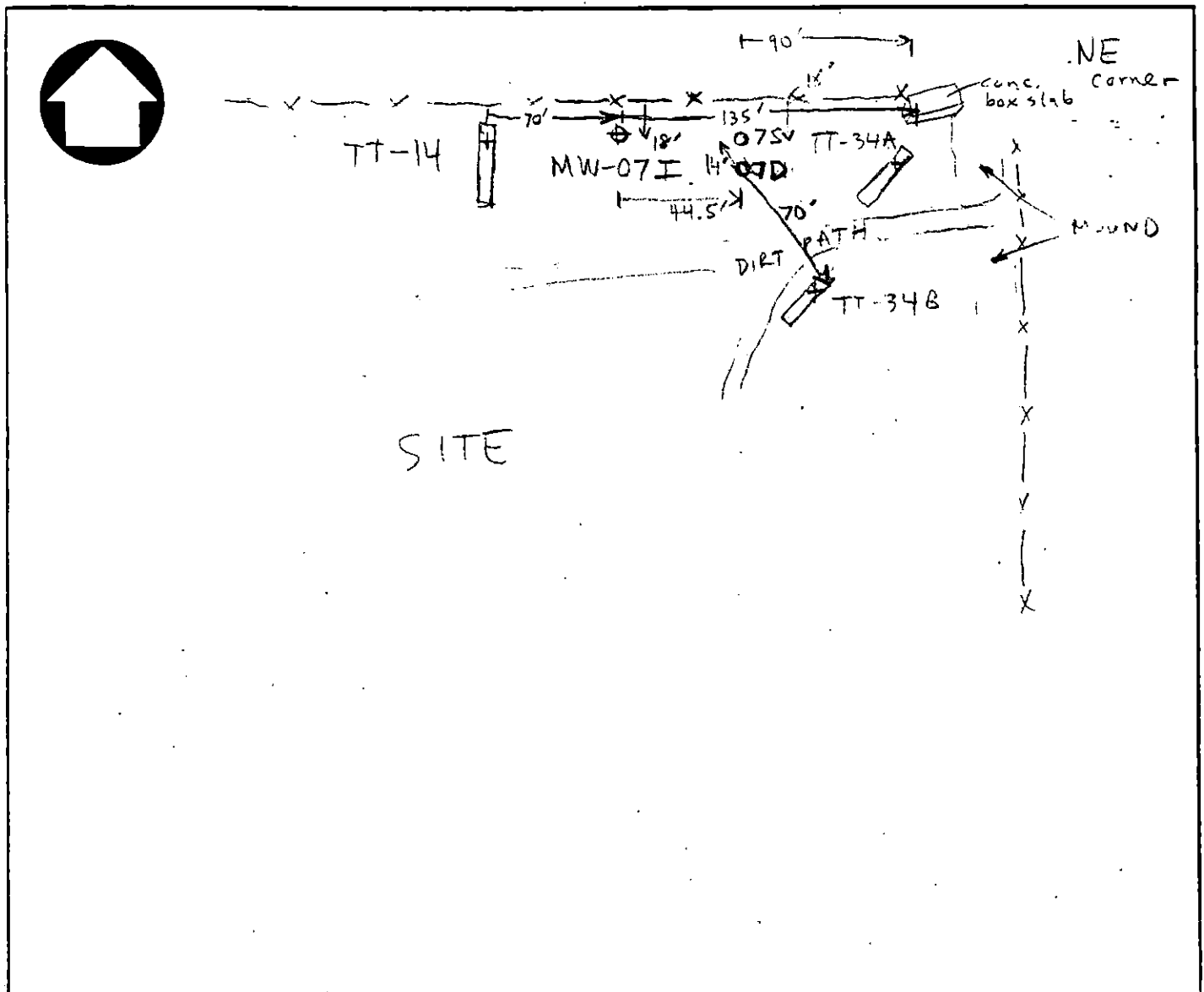
LOCATION SKETCH

Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) MW-07 Cluster

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



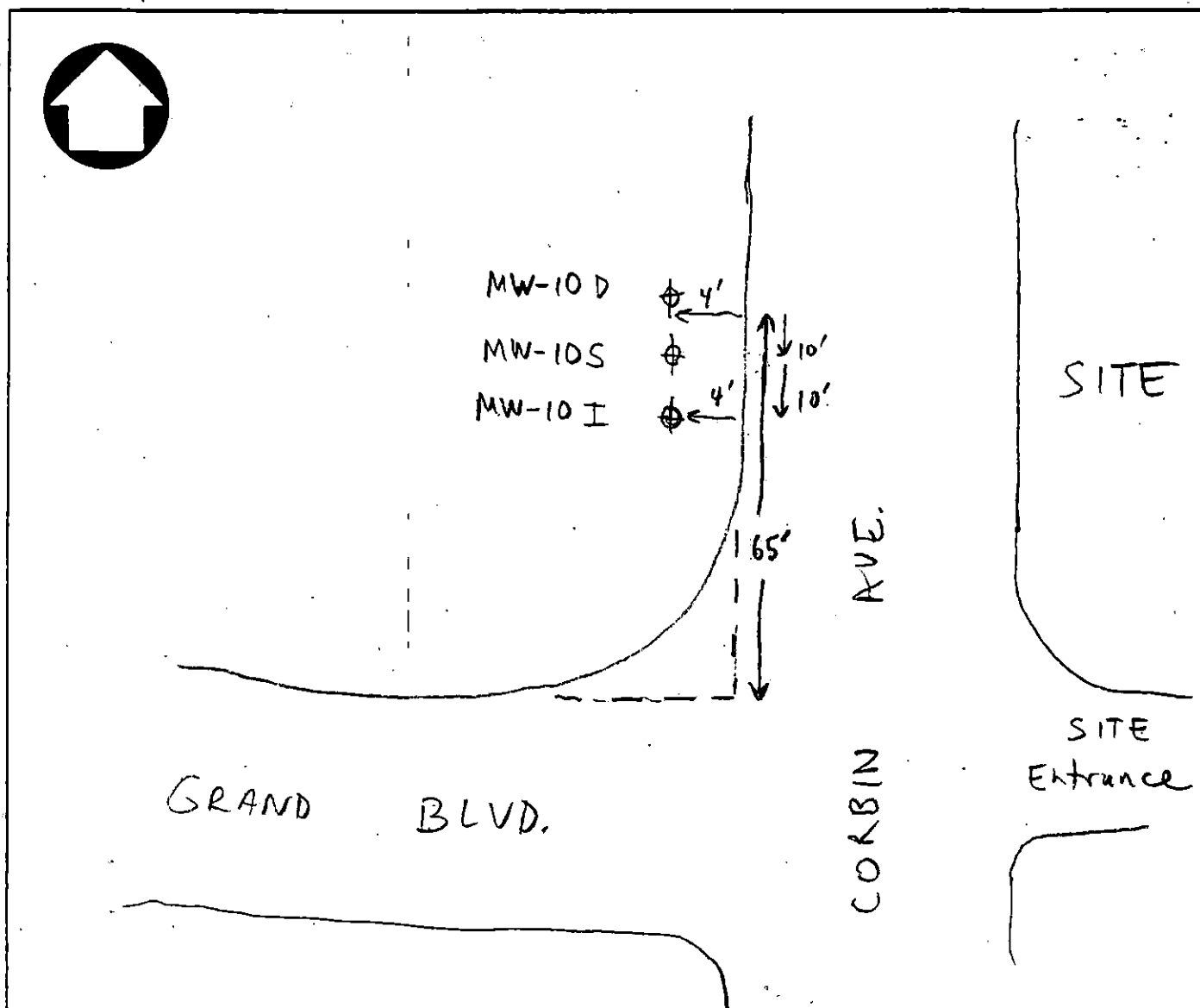
LOCATION SKETCH

Project Sonia Rd. LP Sample Crew D. Obradovich

Sample(s) Location(s) MW-10 Cluster

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.





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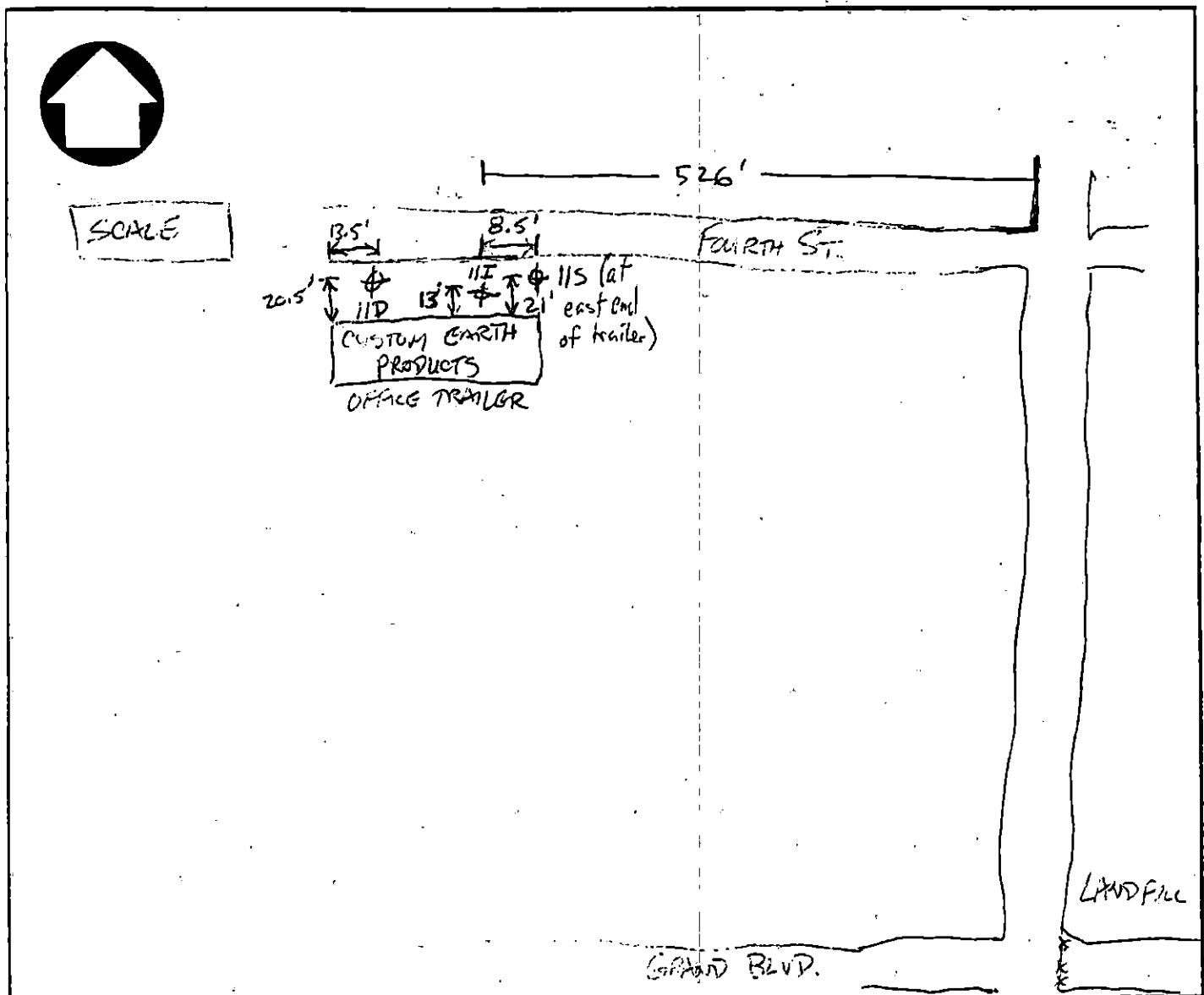
LOCATION SKETCH

Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) MW-11 cluster

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



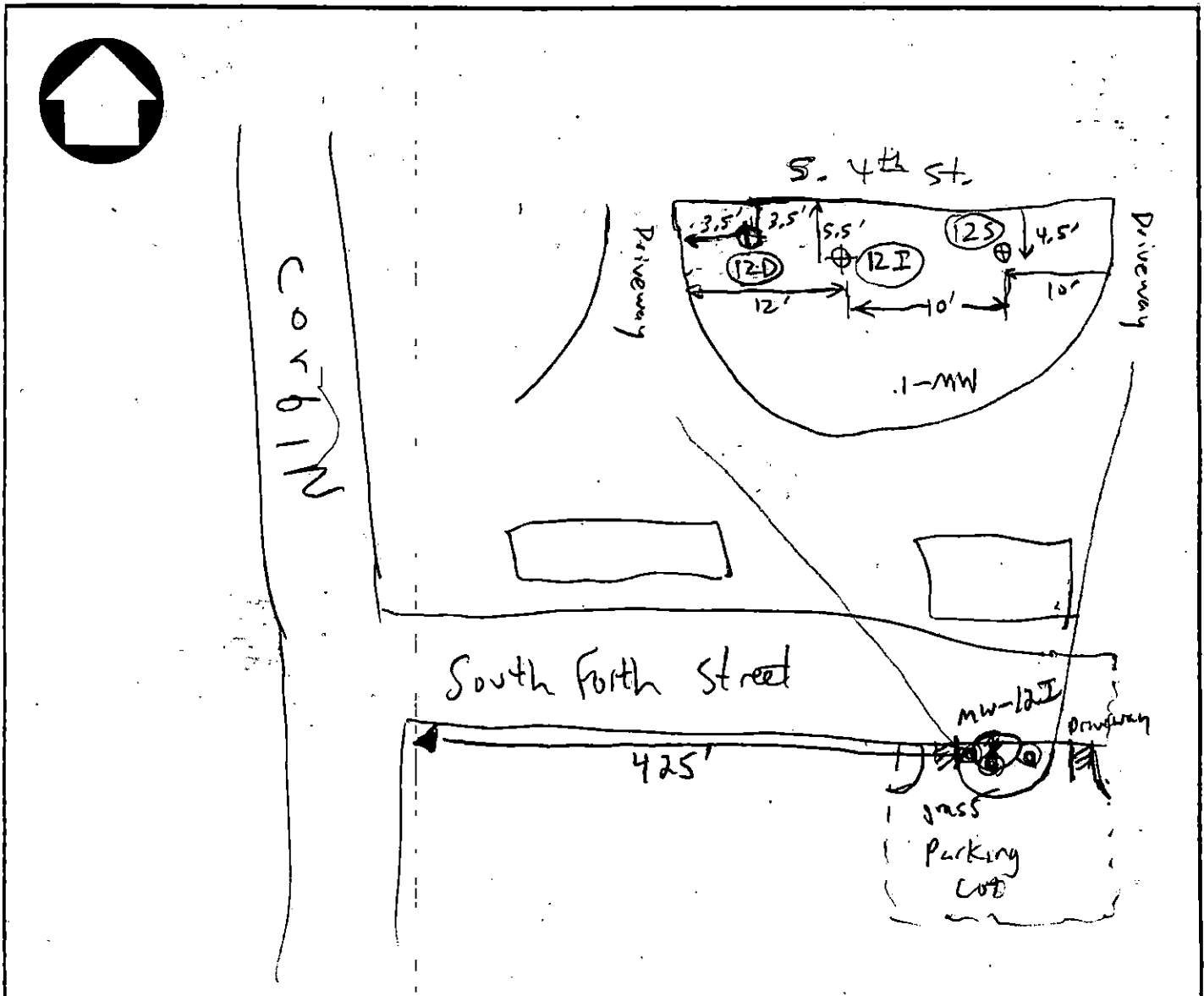
LOCATION SKETCH

Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) MW-12 Cluster

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.





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BARTILUCCI

LOCATION SKETCH

Project Sonia Rd. LF Sample Crew D. Obradovich

Sample(s) Location(s) MW-13 Cluster

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



1001
EOP

Brentwood St.

no curb

MW-13I

SW

7

NW-13S

7

NW-13I

Nugent Rd.



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AND
BARTILUCCI

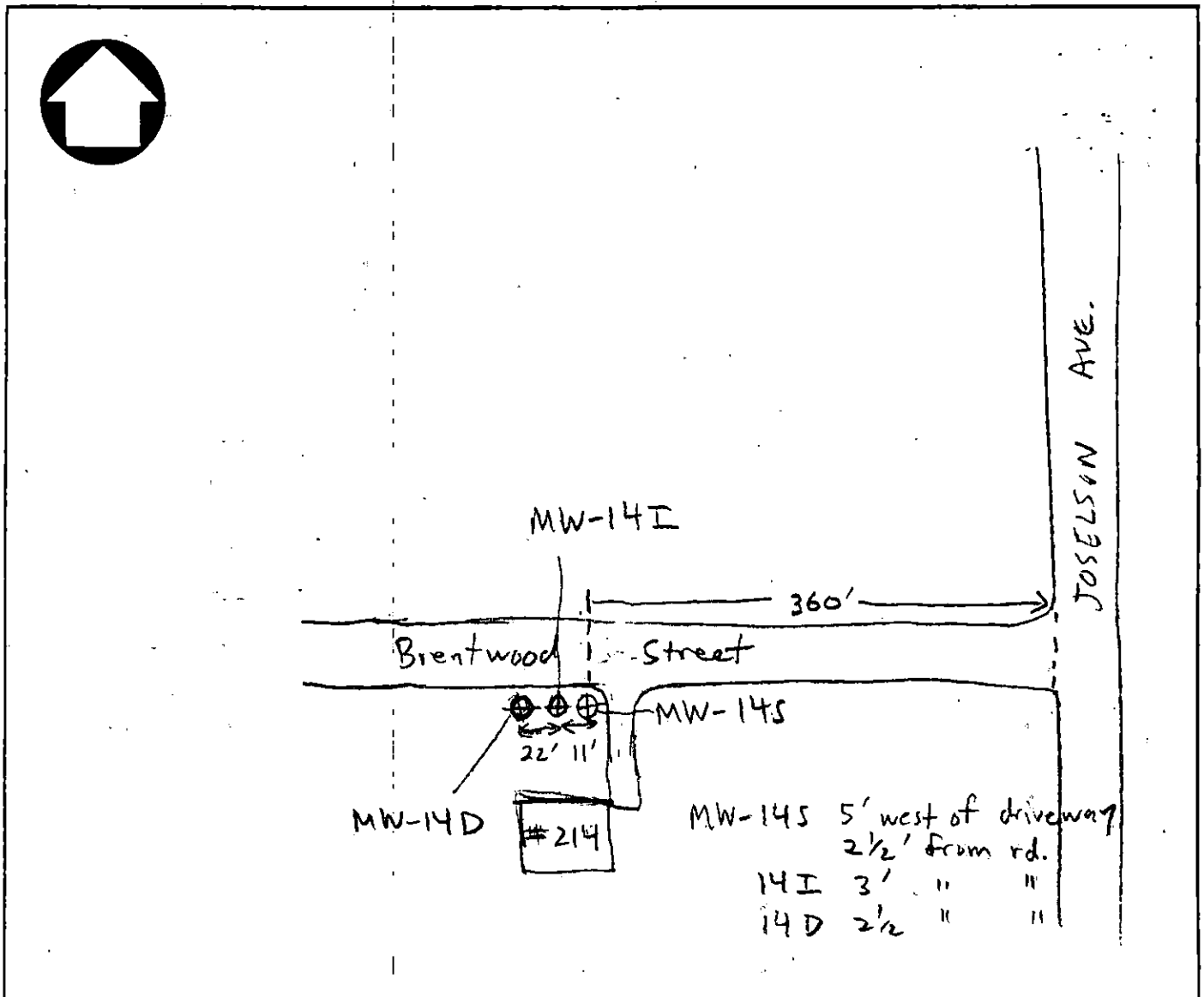
LOCATION SKETCH

Project Sonia Rd. LF Sample Crew D. Obradovich

Sample(s) Location(s) MW-14 Cluster

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



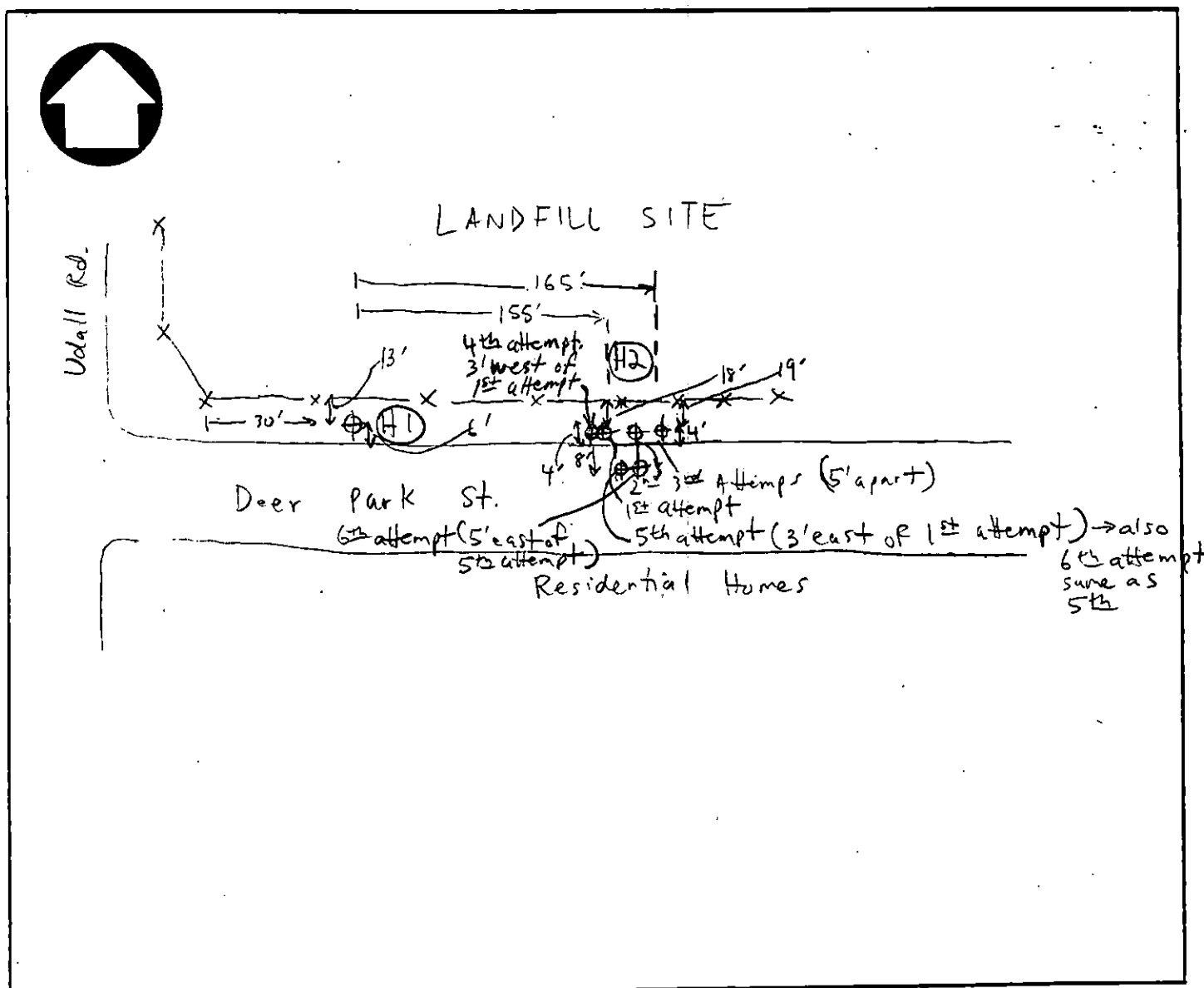


Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) Hydropunch H1, H2 (1st thru 6th attempt)

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points. Measure all distances, clearly label roads, wells and permanent features.





Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) Hydropunch H3 H4

Sample(s) and/or Well Number(s)

Location of sample points, wells, borings, etc., with reference to three permanent reference points. Measure all distances, clearly label roads, wells and permanent features.





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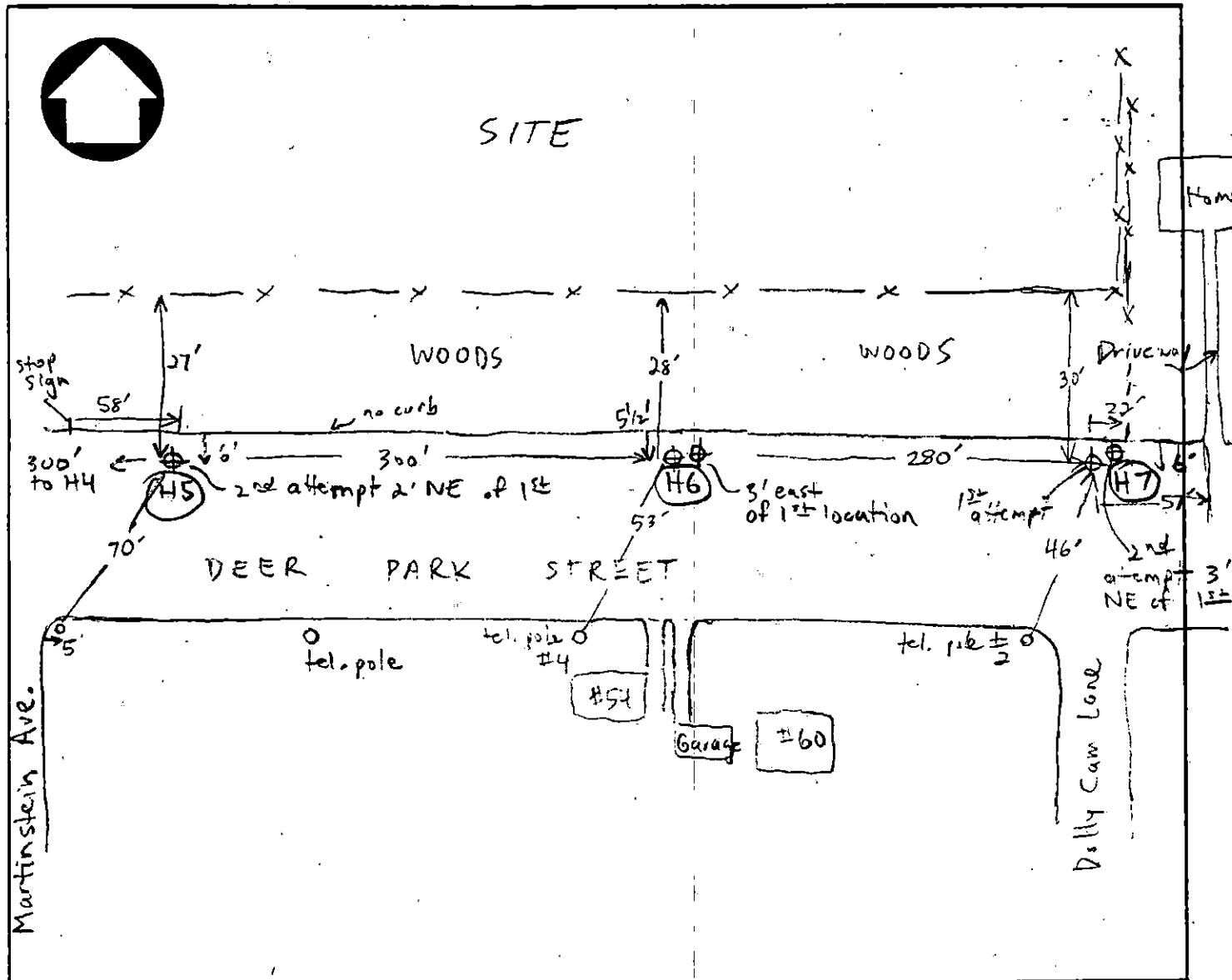
LOCATION SKETCH

Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) Hydropunch H5, H6, H7

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



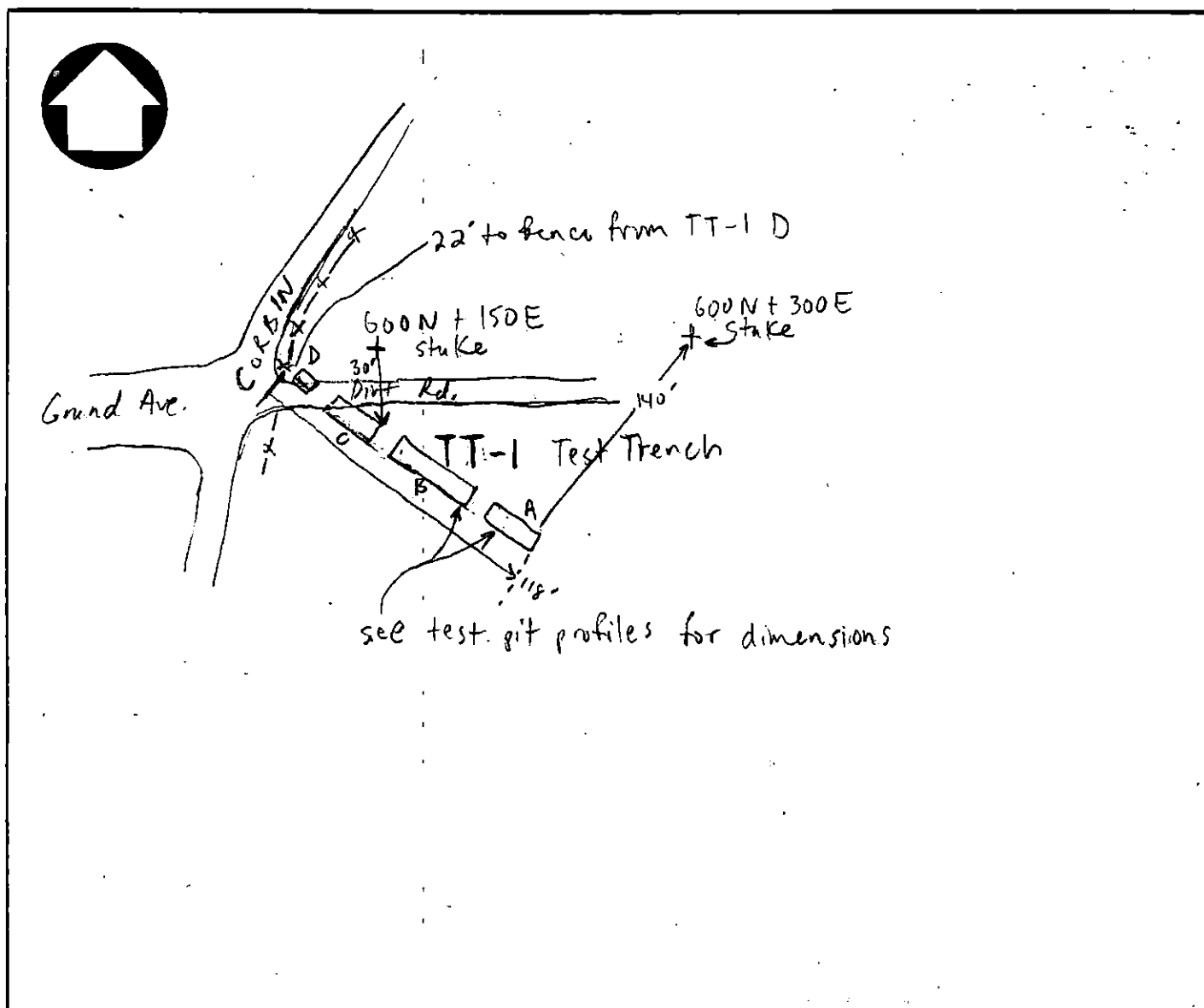
LOCATION SKETCH

Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) Test Trench TT-1 A, B, C, D

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.





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BARTILUCCI

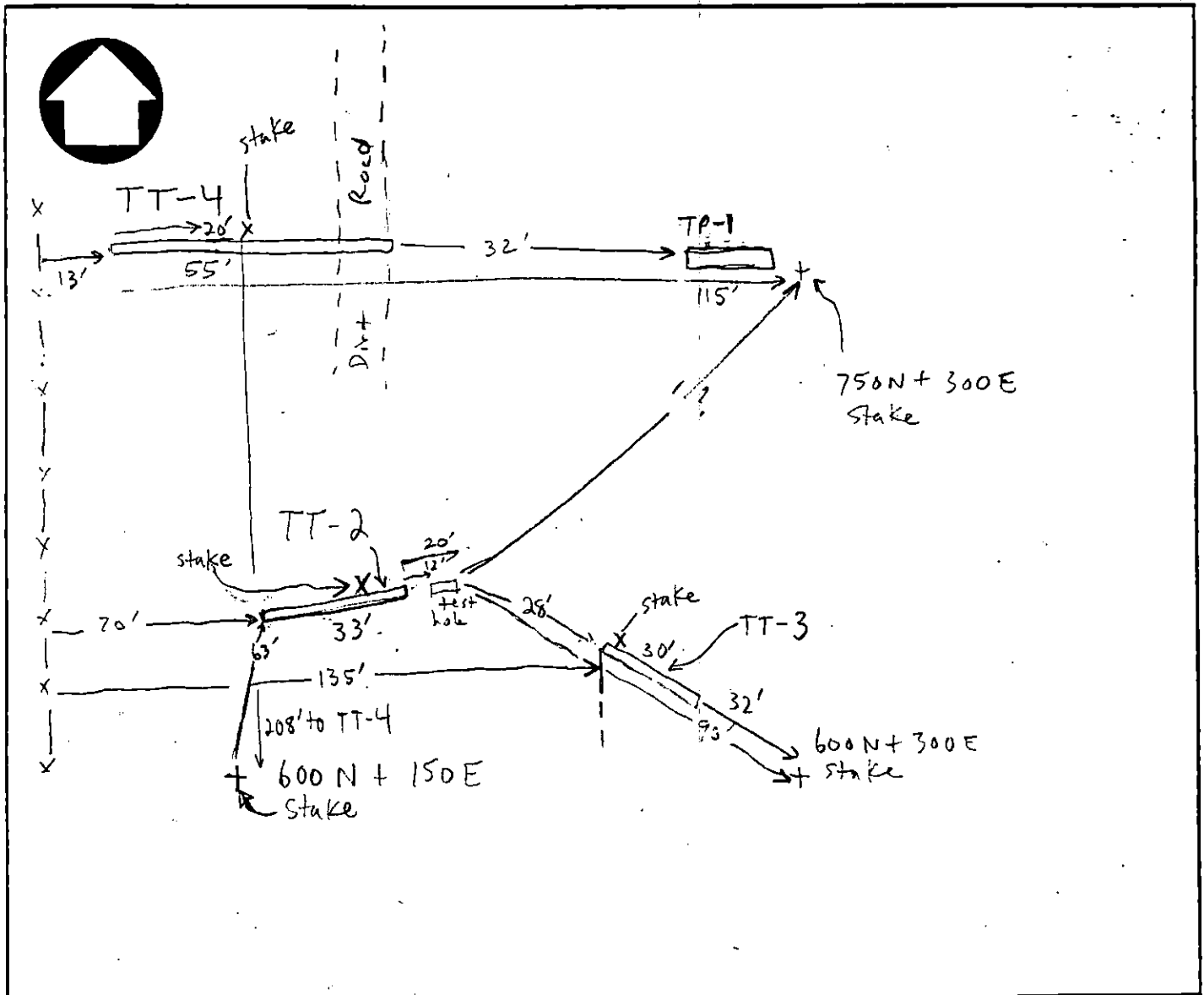
LOCATION SKETCH

Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) TT-2, TT-3, TT-4

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



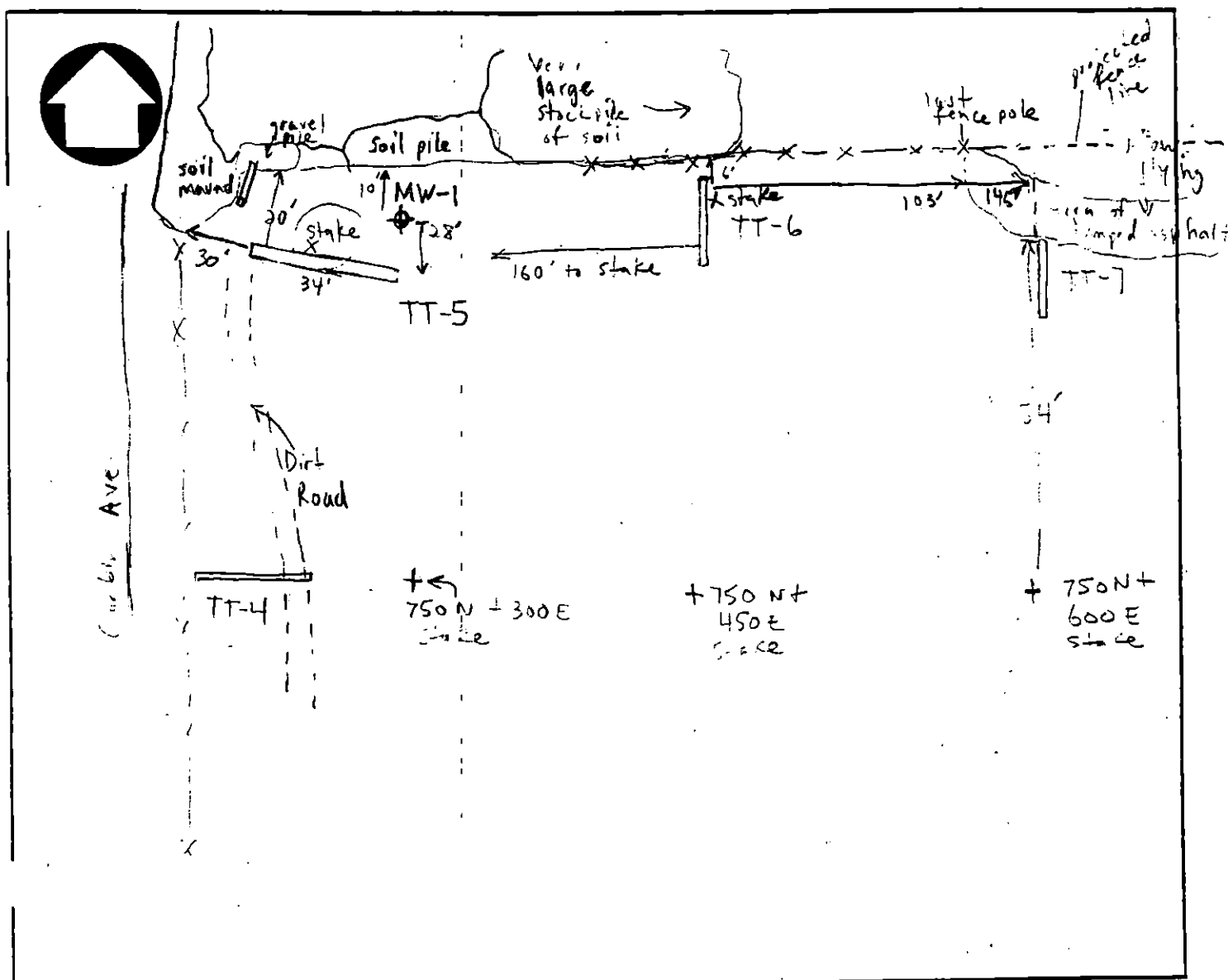
LOCATION SKETCH

Project Sonia Rd. Landfil - RI Sample Crew D. Obradovich

Sample(s) Location(s) TT-5, TT-6, TT-7

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



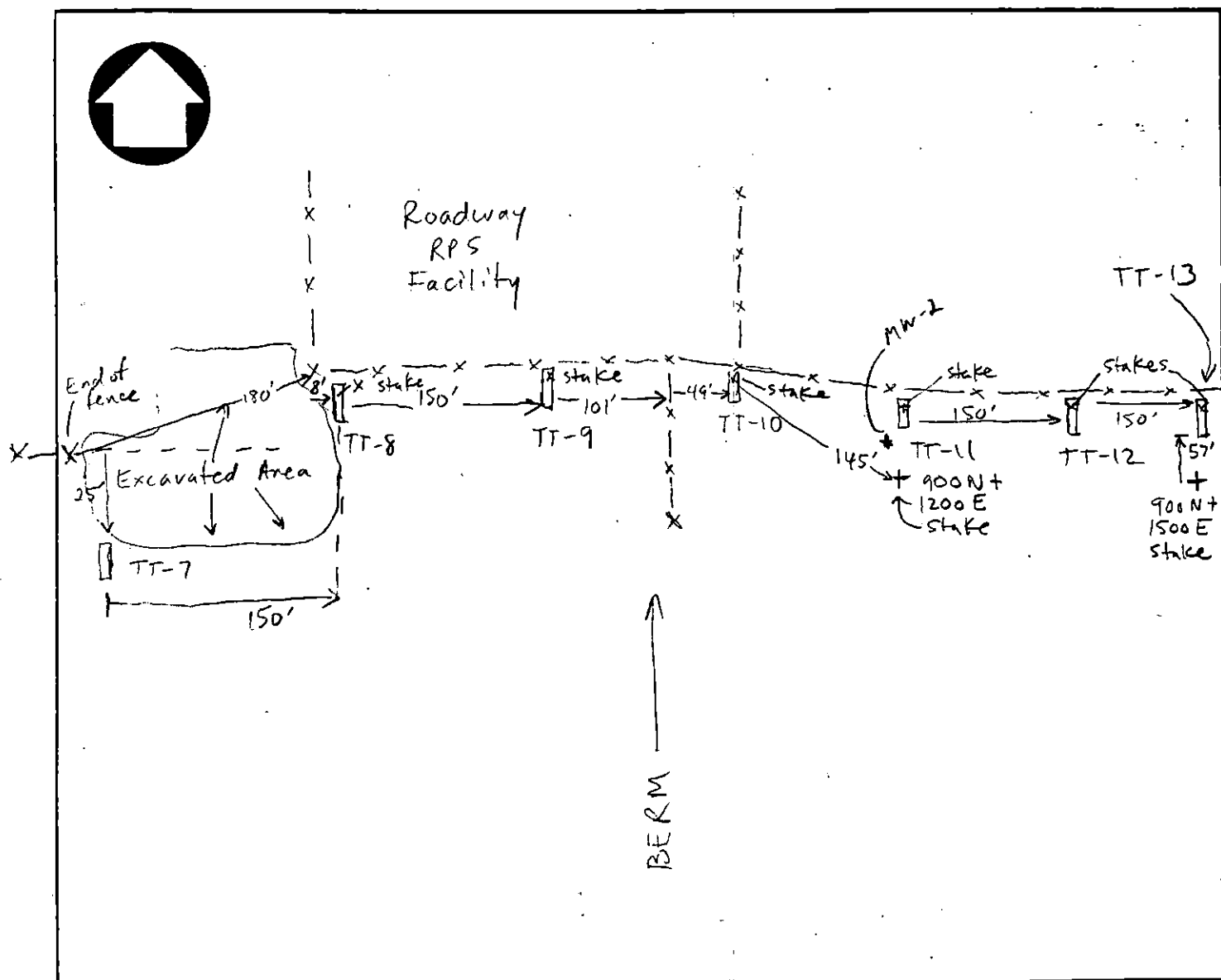
LOCATION SKETCH

Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) TT-9, TT-10, TT-11, TT-12, TT-13

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



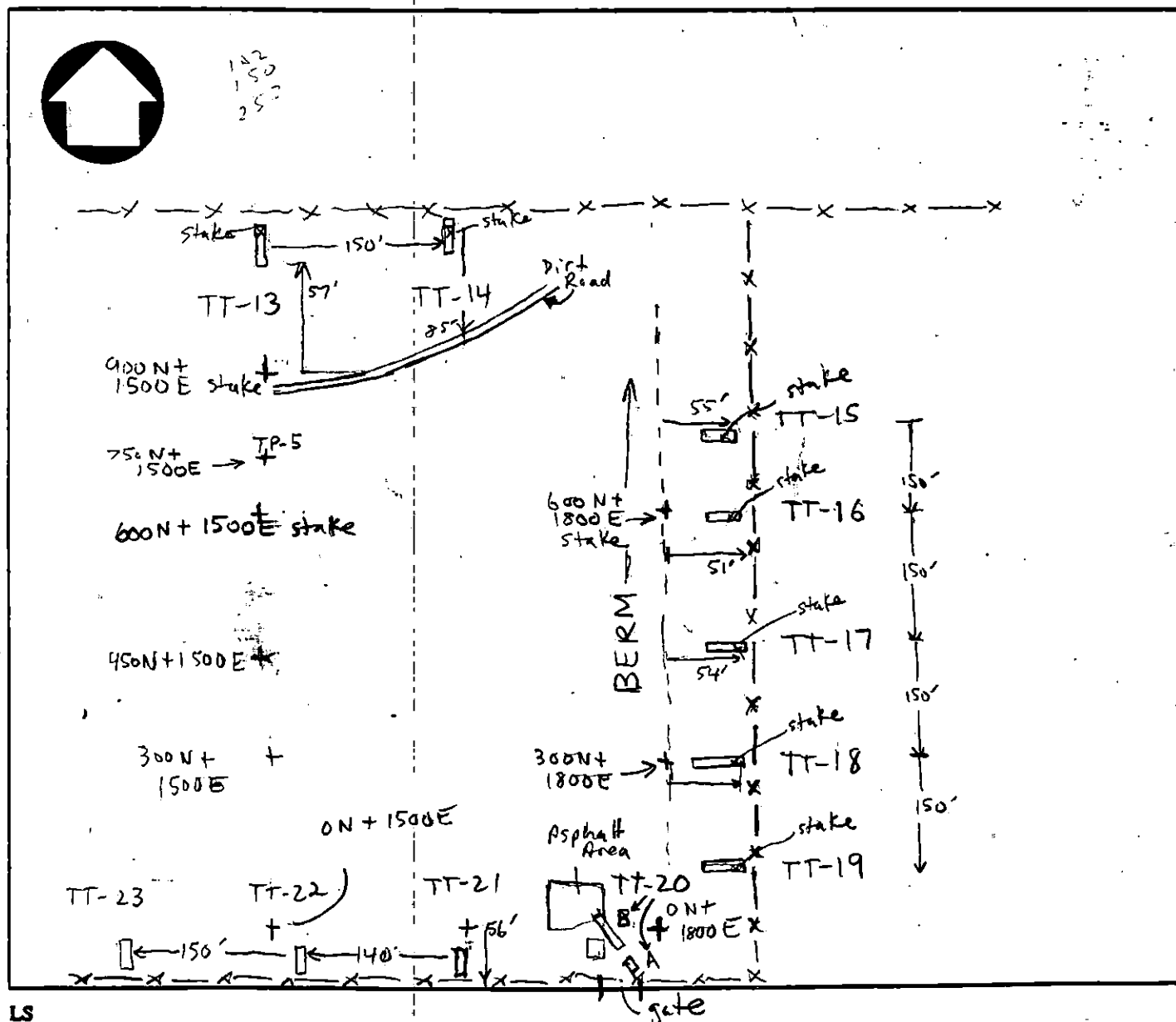
LOCATION SKETCH

Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) TT-14, TT-15, TT-16, TT-17, TT-18, TT-19, TT-20,

Sample(s) and/or Well Number(s) TT-21, TT-22, TT-23

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



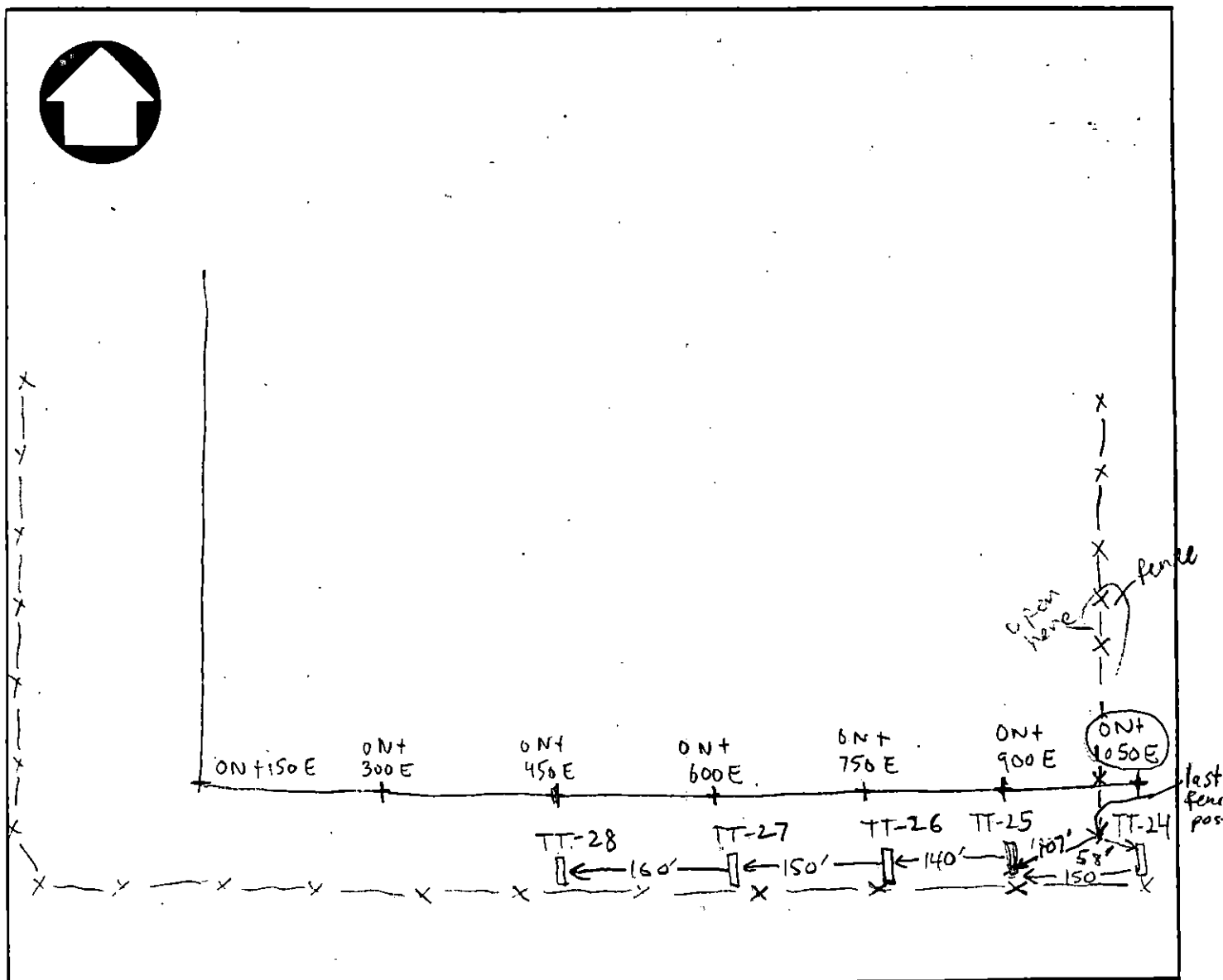
LOCATION SKETCH

Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) TT-24, TT-25, TT-26, TT-27, TT-28

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



Appendix C

APPENDIX C

TEST PIT LOGS AND PROFILES

TEST PIT LOG

TEST PIT NO. TP-1

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

INSPECTOR/OFFICE

K. Robins

START/FINISH DATE

8/5/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

Unstable

REMARKS:

750 N / 350 East

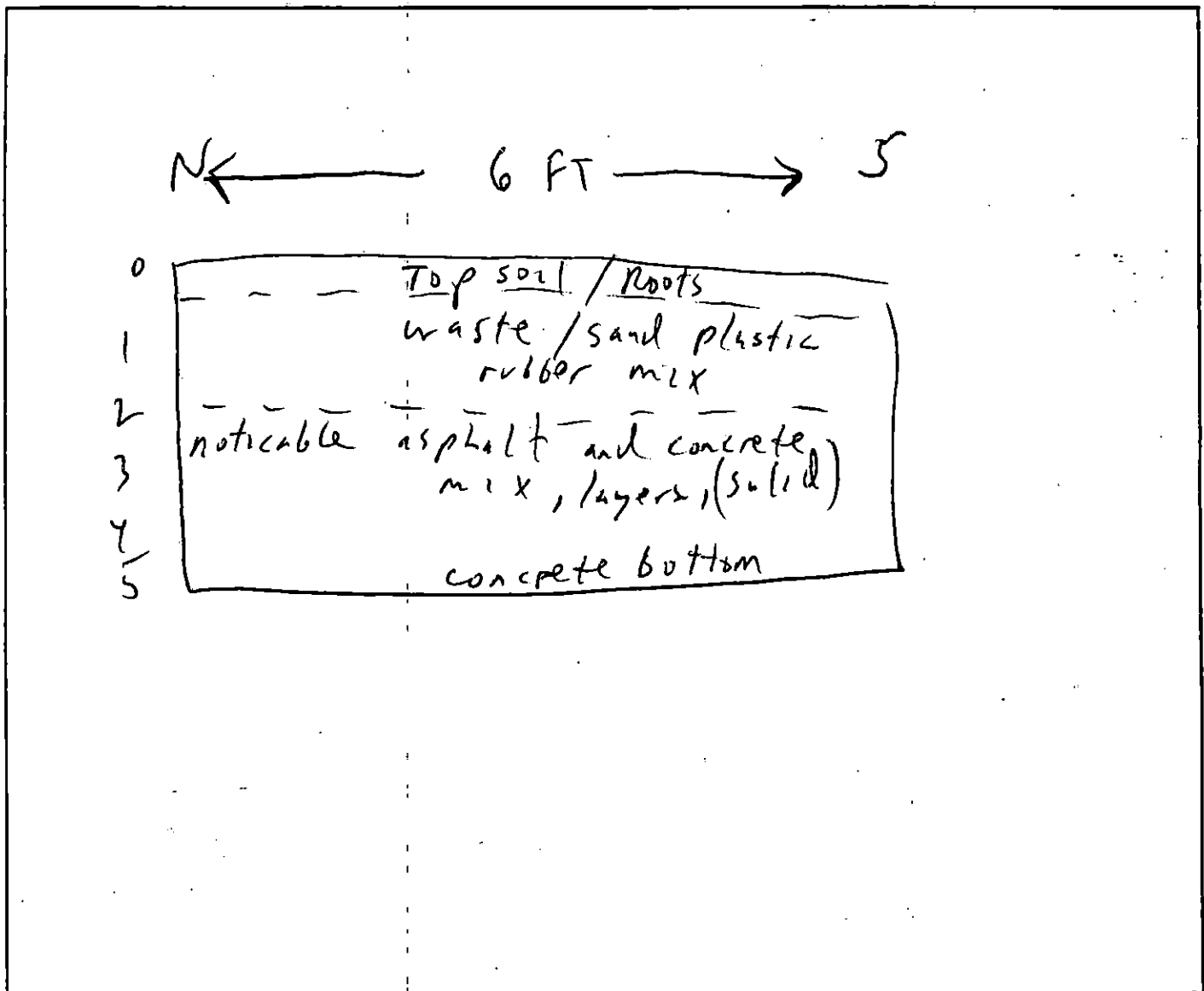
DEPTH	SAMPLE INTERVAL	OVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-6"	0	Top soil Roots	
1	6"-5'	0	Brown soil mixed with plastic, garden hose, asphalt, concrete, plastic pipes, foam pads, metal scraps	(at about 2-3 FT) side walls asphalt and concrete bottom
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

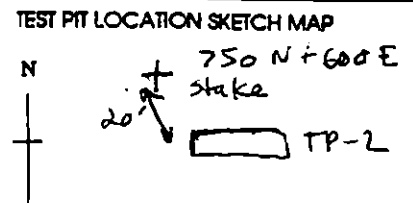
Project Sonia Road Landfill - RI Project Number 1445

Sample(s) Interval(s) _____ Test Pit Number TP-1

adjacent to 750N/350 East stake



Remarks Topsoil 0-6"
waste 6"-5' alot of concrete and asphalt



TEST PIT LOG

TEST PIT NO. TP-2

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

INSPECTOR/OFFICE

K. Robins D. Obrudovich

START/FINISH DATE

8/6/97 8am

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

N. Good - ^{un}stable

REMARKS:

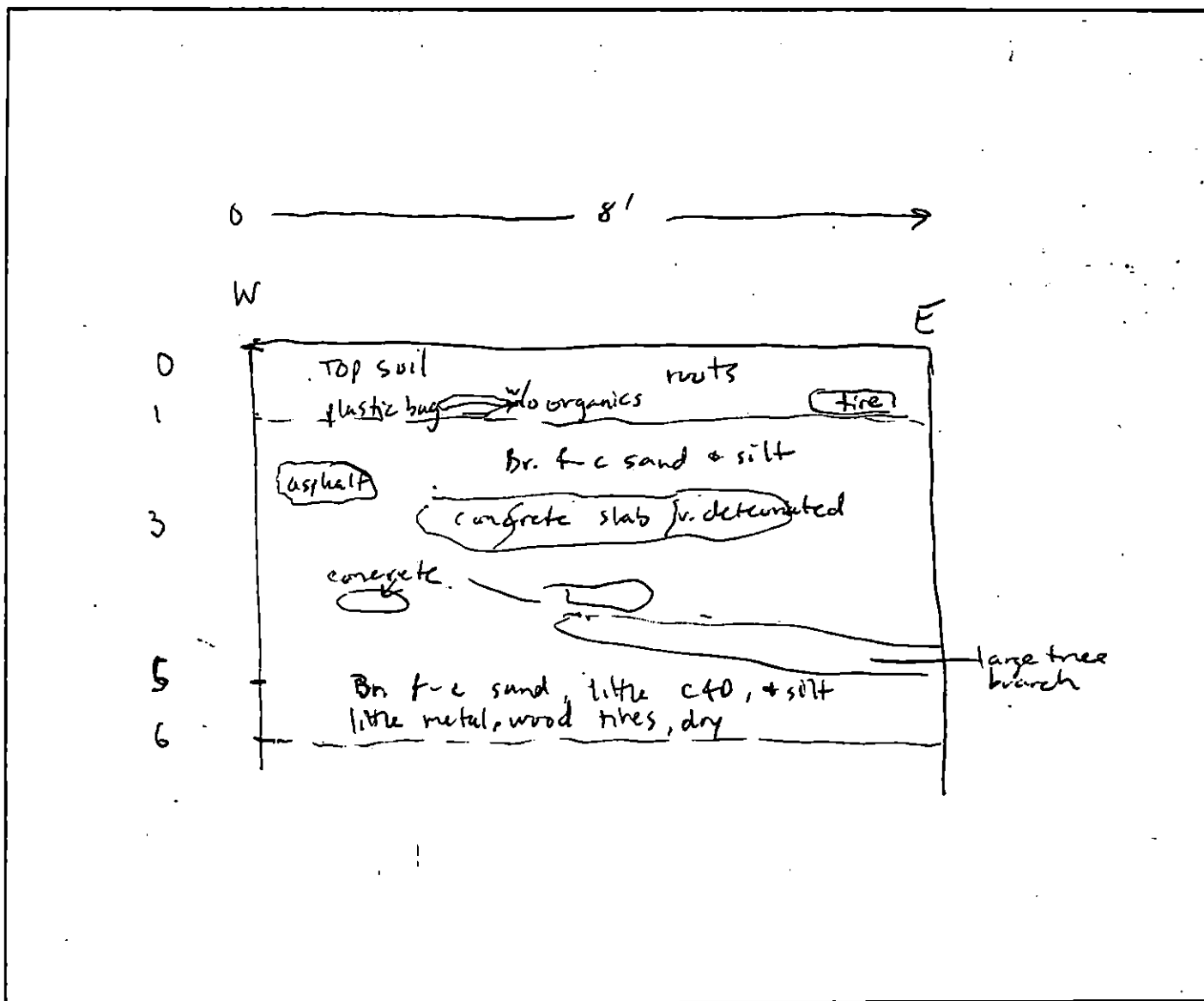
DEPTH	SAMPLE INTERVAL	~~OVER~~ SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-1	0	Top soil cover w/ many roots in plastic bags, @ btm (and tires)	8" cover mat! Dry PID 0.0 ppm
1	1-3	0	Br. f-c sand, some large concrete chunks 2'x2' + asphalt pieces 1'x1', plastic bags (tr.)	waste from 1" down
2	4-6	0	little wood + silt, tire, some metal, dry	rotten fruit odor
3			large tree branch, br. f-c sand, some concrete pieces, metal silt	
4			END OF TEST PIT	
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

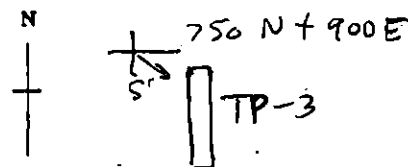
Project Sonia Road Landfill - RI Project Number 1445

Sample(s) Interval(s) 0-6' Test Pit Number TP-2

20' SE of 750 N + 600 E stake



Remarks _____



TEST PIT LOG

TEST PIT NO.
TP-3

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

C&E 588 E 4-wheel drive backhoe

INSPECTOR/OFFICE

K. Robias D. Dbradovich

START/FINISH DATE

8/6/97 130-215

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL) **-**

CONDITION OF PIT

Fair - sl. stable

REMARKS:

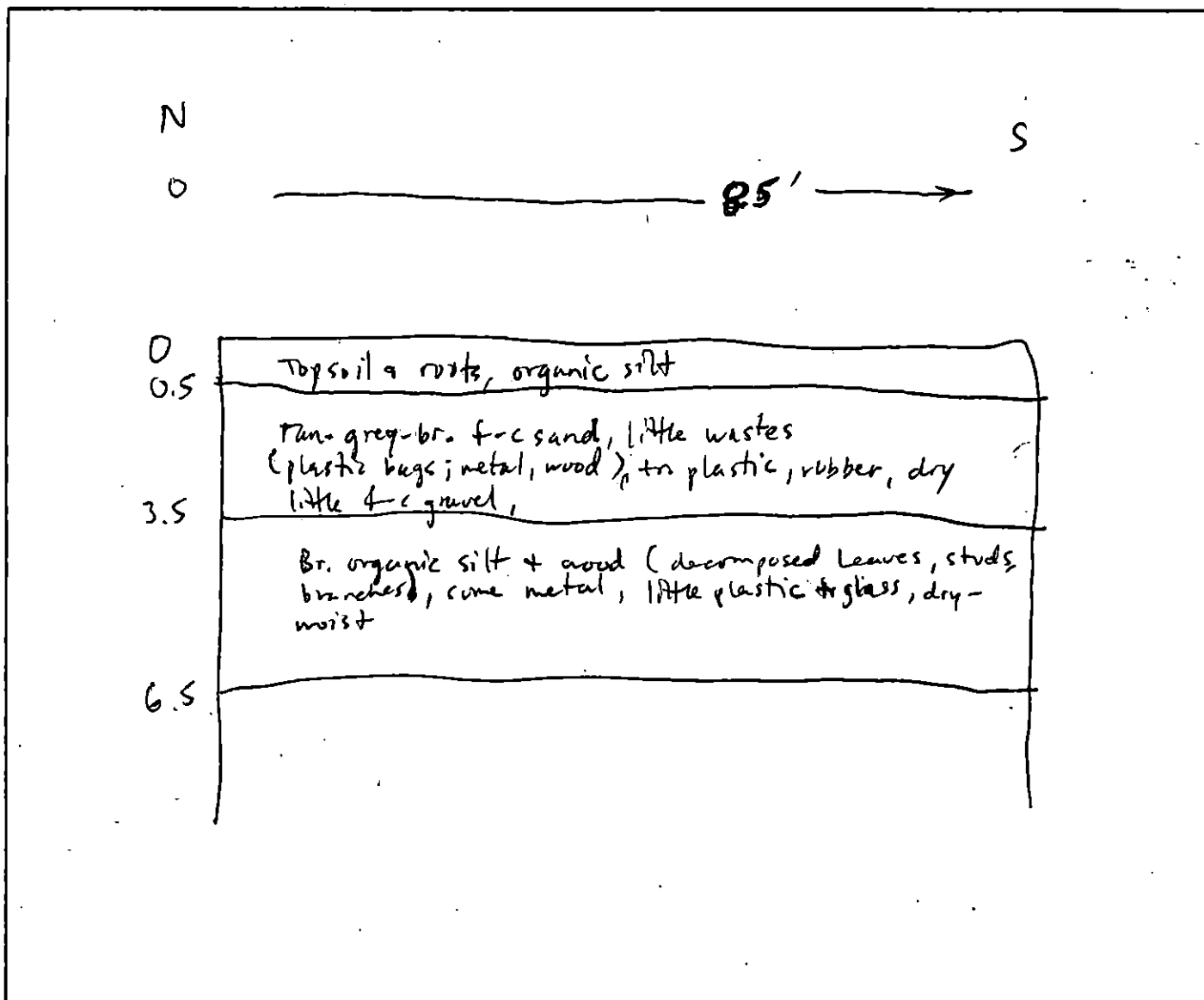
DEPTH	SAMPLE INTERVAL	No. LEAKS OVER PPM SCREEN		DESCRIPTION OF MATERIALS	REMARKS
0	0-0.5'	0	0	Topsoil w/ roots	6" topsoil cover / waste below
1	0.5-3.5	0	0	tan-grey-br. f-c sand, little bagged plastic, gravel, silt, metal, wood fr. glass, dry	6"-3.5' sand w/ some waste
2					
3					
4	3.5-6.5	0	0	Br. organic silt + wood debris (leaves (mulch) & wood pieces), some sand, metal, little plastic, fr. glass,	3.5-6.5' predominately waste vs sl. landfill odor
5					
6					
7				END OF TEST PIT	* 0-20 ppm peak on multi-gas meter
8					
9					
10					
11					
12					
13					
14					
15					

TEST PIT PROFILE

Project Sonia Road Landfill - RT Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TP-3

Adjacent to (5' SE of) 750 N + 900 E stake



Remarks _____



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TEST PIT LOCATION SKETCH MAP

N

TEST PIT LOG

TEST PIT NO. TP-4

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

INSPECTOR/OFFICE

K. Robins

START/FINISH DATE

8/4/97 10:00 am

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

unstable

REMARKS:

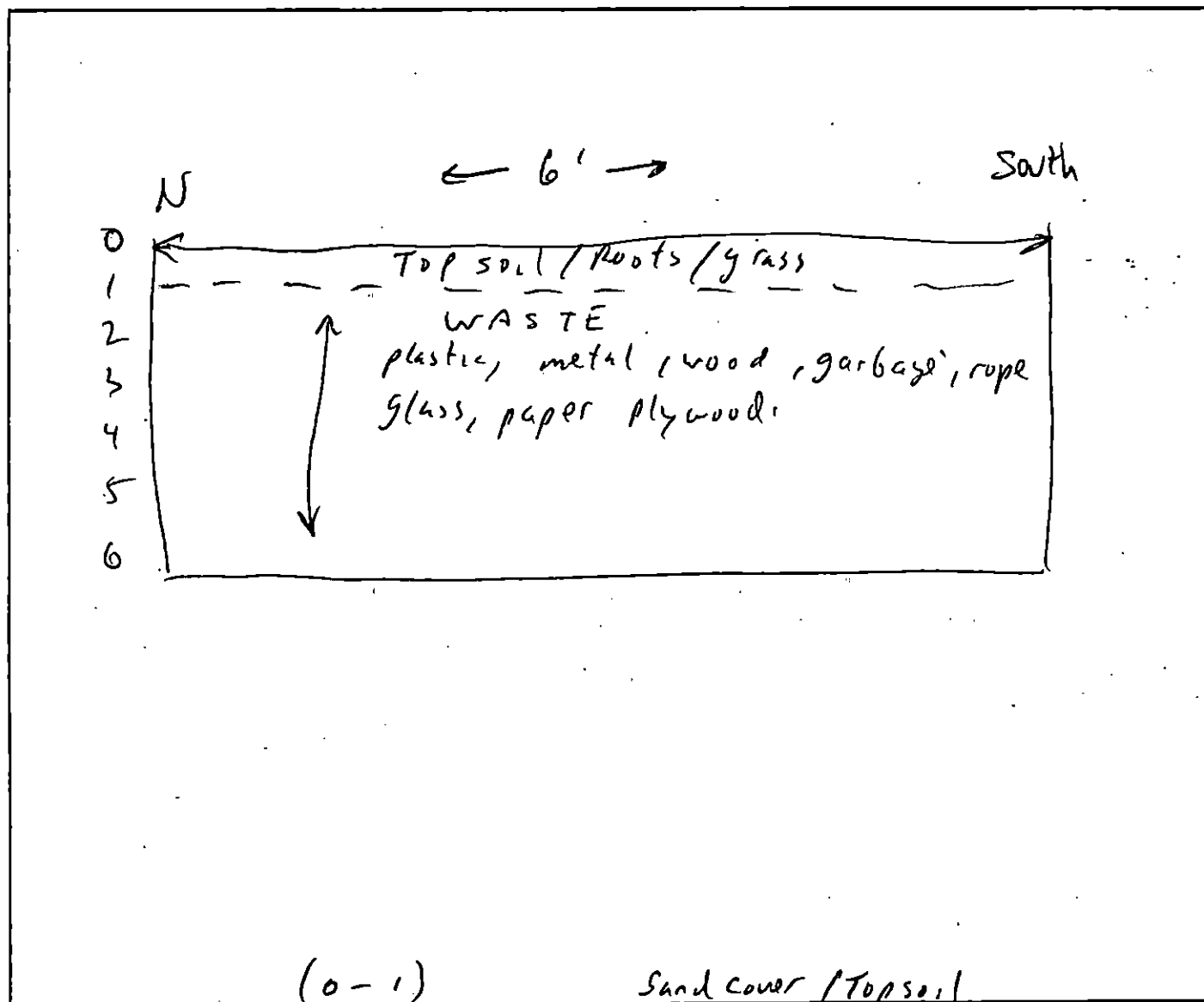
adjacent to 750 N / 1200 E stake

DEPTH	SAMPLE INTERVAL	~~DATA~~ SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-1	0.0	0-1' Sand Top soil	
1	1-6'	0.0	Garbage metal, wire, wood rope, glass, ply wood plastic, paper mixed with brown sand & gravel and black sand	Landfill gas odor ~ 15% LEL Landfill garbage odor
2				
3				
4				
5			--- END at 6' ---	
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445

Sample(s) Interval(s) _____ Test Pit Number TP-4



Remarks (0-1) Sand cover / Top soil
(1-6) Garbage / WASTE



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TEST PIT LOCATION SKETCH MAP

N

TEST PIT LOG

TEST PIT NO. TP-5

PROJECT NO./NAME:

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

INSPECTOR/OFFICE

K. Robins

START/FINISH DATE

8/4/97 10.30

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

51466

REMARKS:

750 E / 1200 E

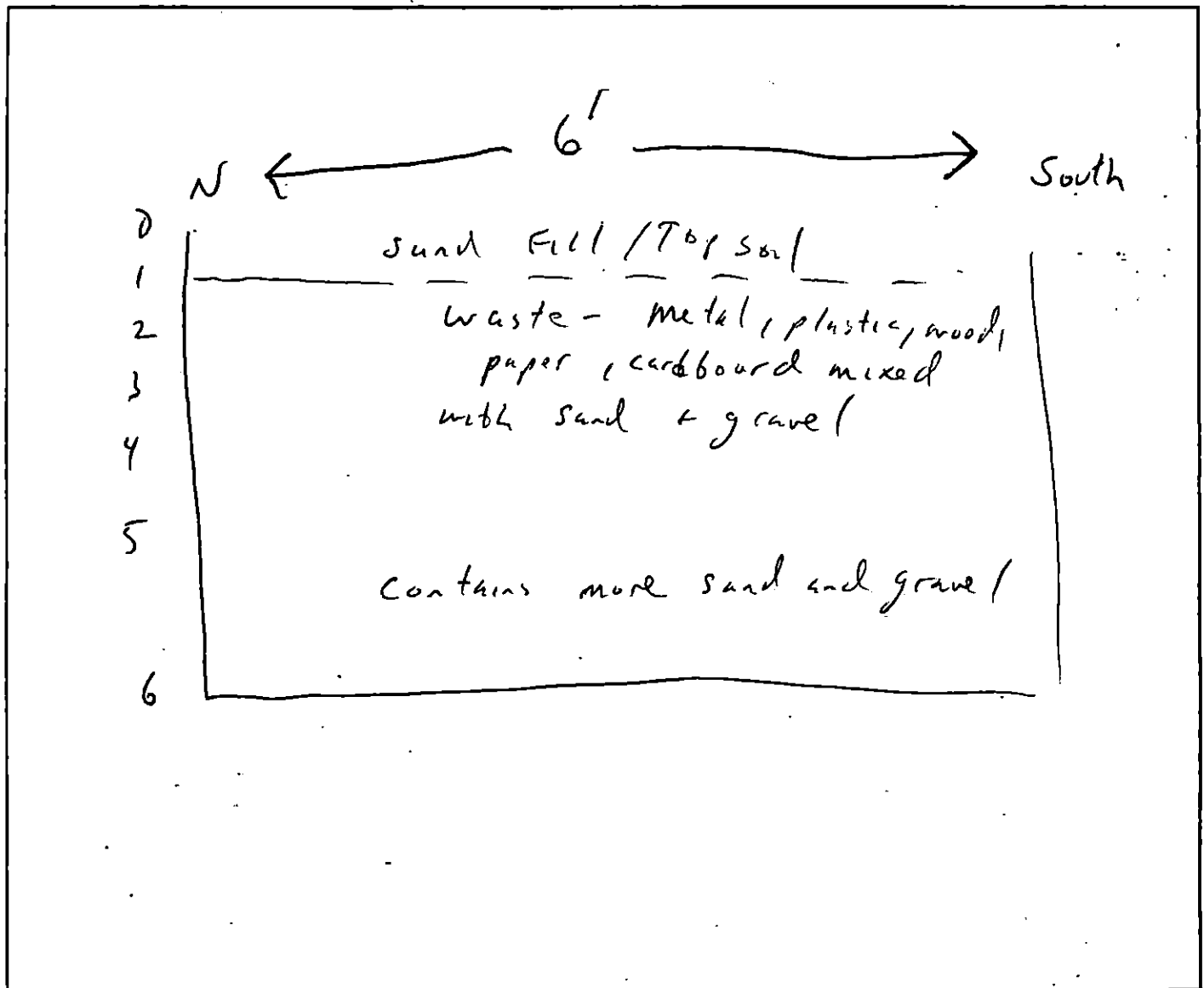
DEPTH	SAMPLE INTERVAL	(PIT) GVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-1	0.0	Sand Fill / Top soil	
1	1-6	0.0	waste cardboard / wood, paper plastic - metal scraps - car doors mixed with Dark Brown - Black	more sand - Gray-Brown
2			Sand / gravel / cobbles	3% LEZ
3				
4				
5			END - - 6' - - -	
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

NJDEPTPL

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445

Sample(s) Interval(s) _____ Test Pit Number TP-5



Remarks Top soil (0-1)
waste (1-6)

TEST PIT LOG

TEST PIT NO. TP-6

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

INSPECTOR/OFFICE

K. Robins

START/FINISH DATE

8/5/97 200PM

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

unstable

REMARKS:

Adjacent to 600 E / 600 N stake

DEPTH	SAMPLE INTERVAL	~~OVA~~ SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-1	0.0	Top soil cover	dry
1			with roots	
2	1-4'	0.0	Brown sand gravel	- WASTE
3			mix with plastic bags,	
4			leaves, wood, lumber	
5			trees trunks - car tires	~ 1% LEL
6	4-6'	0.0	Scrap metal	
7			Dark Brown - Black	
8			Soil / silt / Trees, roots	
9			plastic - organic color	
10			END at 6'	
11				
12				
13				
14				
15				

TEST PIT PROFILE

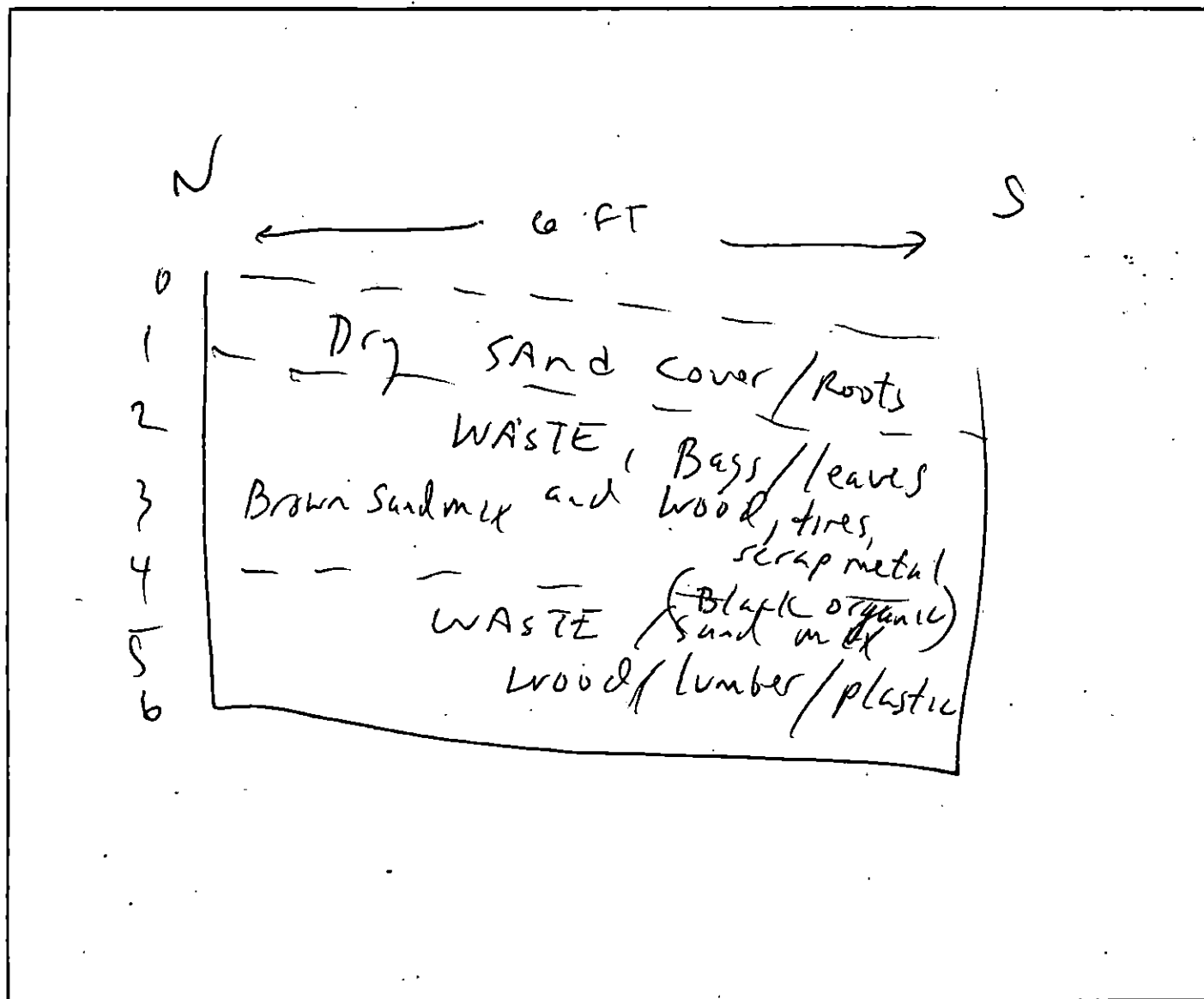
Project Sonia Road Landfill - RI

Project Number 1445

Sample(s) Interval(s) _____

Test Pit Number TP-6

adjacent to 600 E / 600 N



Remarks _____

TEST PIT LOG

TEST PIT NO. TP-7

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Bobby

INSPECTOR/OFFICE

K. Robins

START/FINISH DATE

8/4/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

600 N / 1200 E

CONDITION OF PIT

Unstable

REMARKS:

PID - background 0.0 ppm

DEPTH	SAMPLE INTERVAL	PID OVR SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0 - 1'	0.0	Dark brown / Roots / grass -	TOP SOIL
1	1 - 2'		Sand & gravel / cobbles	- loose
2	3' - 4'	0.0	tan sand & gravel	
3			Scrap metal pieces	30% LEL in hole
4			plastic bags - black	land fill gas odor
5	4 - 6'	0.0	wood mixed with	↓
6			sand and gravel	20% LEL in hole
7			Black soil fill mixed	
8			with wood, plastic, paper	
9			glass.	
10			--- End of Test Pit	
11				
12				
13				
14				
15				

TEST PIT PROFILE

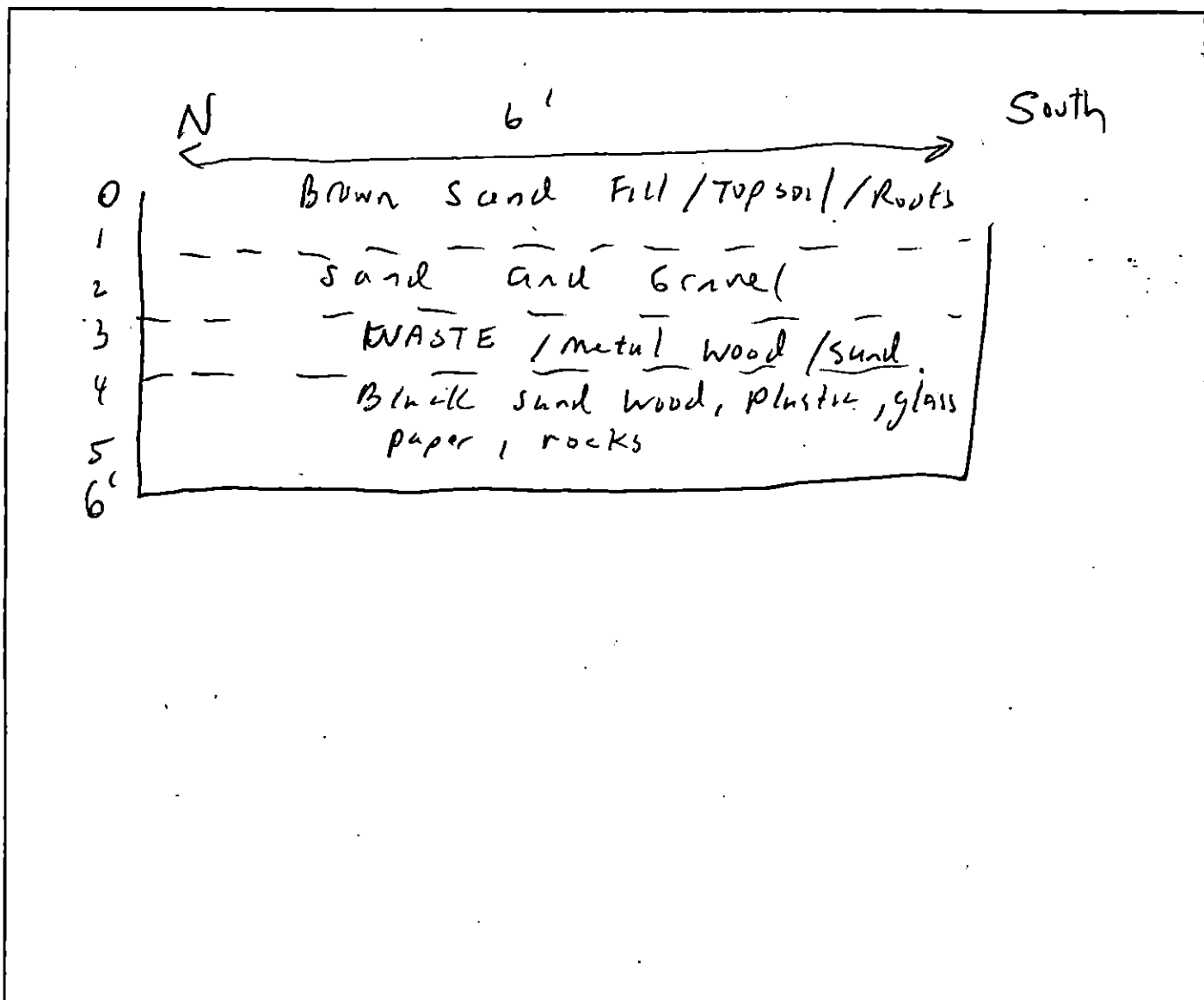
Project Sonia Road Landfill - RT

Project Number 1445

Sample(s) Interval(s) _____

Test Pit Number TP-7

adjacent to 600 N / 1200 E



Remarks _____

Summary Sand Fill 0-3'
waste 3'-6'

TEST PIT LOG

TEST PIT NO. *TP-8*

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

INSPECTOR/OFFICE

K. Robins

START/FINISH DATE

8/5/97 1000 am

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

Unstable

REMARKS:

DEPTH	SAMPLE INTERVAL	PIT OVER SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	<i>0 - 6"</i>	<i>0.0</i>	<i>Sand and grass</i>	<i>Top soil.</i>
1	<i>1/2 - 6'</i>	<i>0.0</i>	<i>Waste) DK Brown sand and gravel, cobbles mixed with rubber hose, plastic, wood, concrete, cloth, tarps, lumber, plastic, scrap metal soda cans</i>	<i>0% - LEL slight gas odor present</i>
2				
3				
4				
5				
6				
7			<i>END 6' - - -</i>	
8				
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

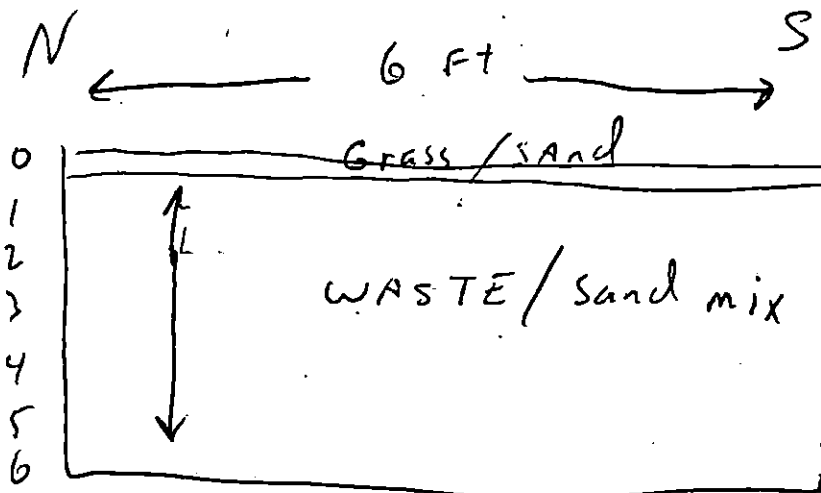
Project Sonia Road Landfill - RI

Project Number 1445

Sample(s) Interval(s) _____

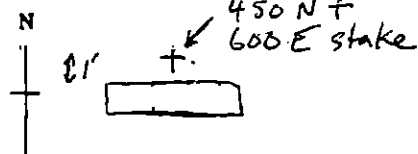
Test Pit Number TP-8

Adjacent to 450 N / 300 E stake



Remarks _____

WASTE mostly starting about 6" below
grade - no real sand cover on top.



TEST PIT LOG

TEST PIT NO. TP-9

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580 E 4-wheel drive backhoe / Bobby Durham

INSPECTOR/OFFICE

K. Robins D. O'bradovich

START/FINISH DATE

8/6/97 9³⁰

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL) -

CONDITION OF PIT

Fair - sl. stable

REMARKS:

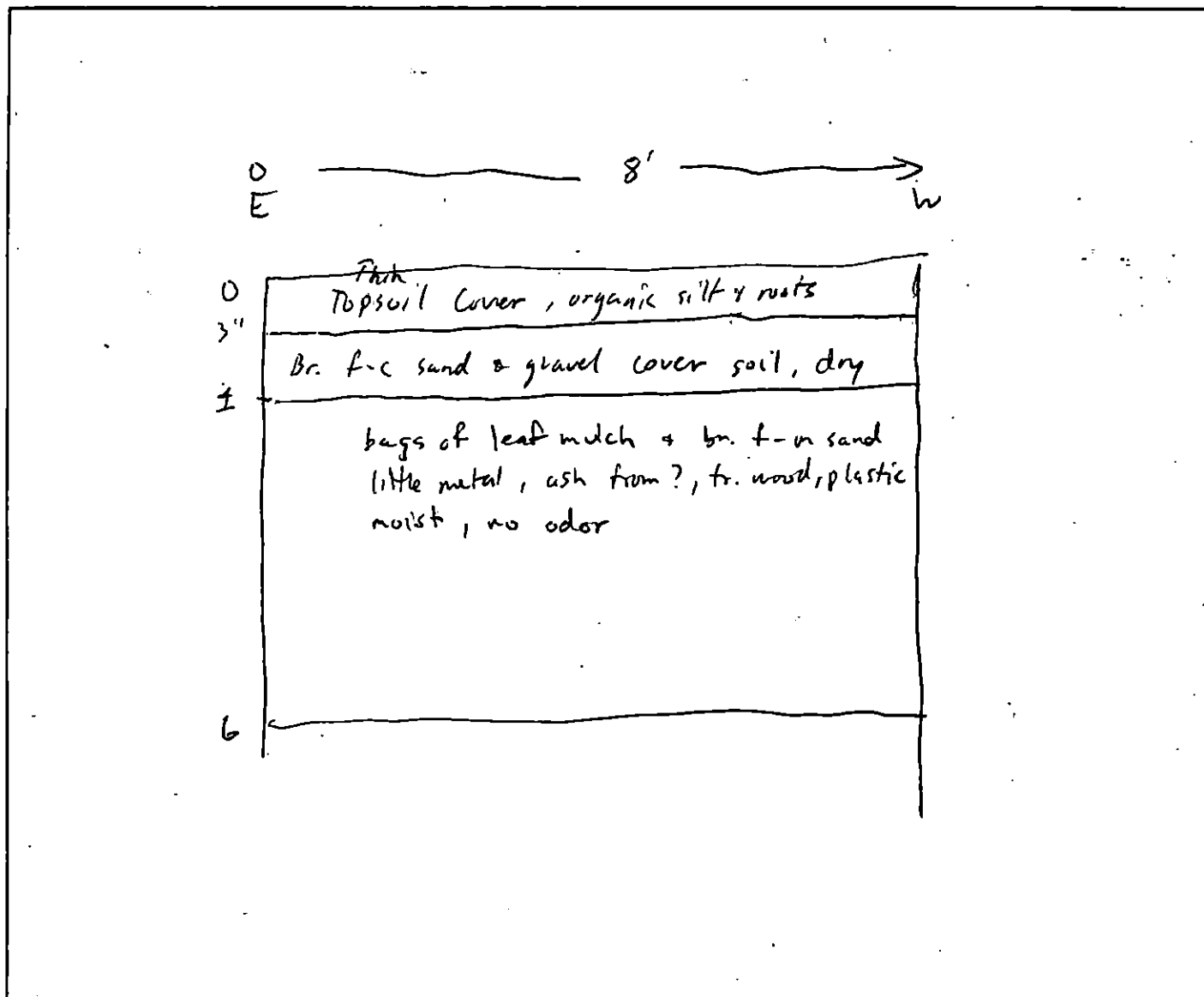
DEPTH	SAMPLE INTERVAL	9.1.1.1 PID SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0 - 3"	0 0	Organic top soil + roots	1' cover
1	3" - 1'	0 0	Lt. br f-c sand, some f-c gravel	
2	1 - 6'	0 0	Leaf mulch, plastic bag waste w/ leaves. + Br - dk. br. f-c sand, little metal (sheet metal) glass, wood tr. plastic, moist	waste from 1' down
3			(little grey-white-blk. ash?) @ 3-4' by	No organic landfill odor
4				Kppm combustible gas meter - peak 140 ppm
5				
6			END OF TEST PIT	
7				
8				
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TP-9

Adjacent to 450 N + 600 E stake



Remarks _____



DVIRKA
AND
BARTILUCCI

TEST PIT LOCATION SKETCH MAP

N

450 N + 900 E
stake



TP-10

TEST PIT LOG

TEST PIT NO. TP-10	
PROJECT NO./NAME 1445 / Sonia Road Landfill - RI	LOCATION Sonia Rd. Landfill, W. Brentwood, NY.
EXCAVATOR/EQUIPMENT/OPERATOR Case 580 E 4-wheel drive backhoe	
INSPECTOR/OFFICE K. Robins D. Obradovich	START/FINISH DATE 8/6/97 2 ¹⁵ - 3 ⁰⁰
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL) —	CONDITION OF PIT fair - sl. stable
REMARKS:	

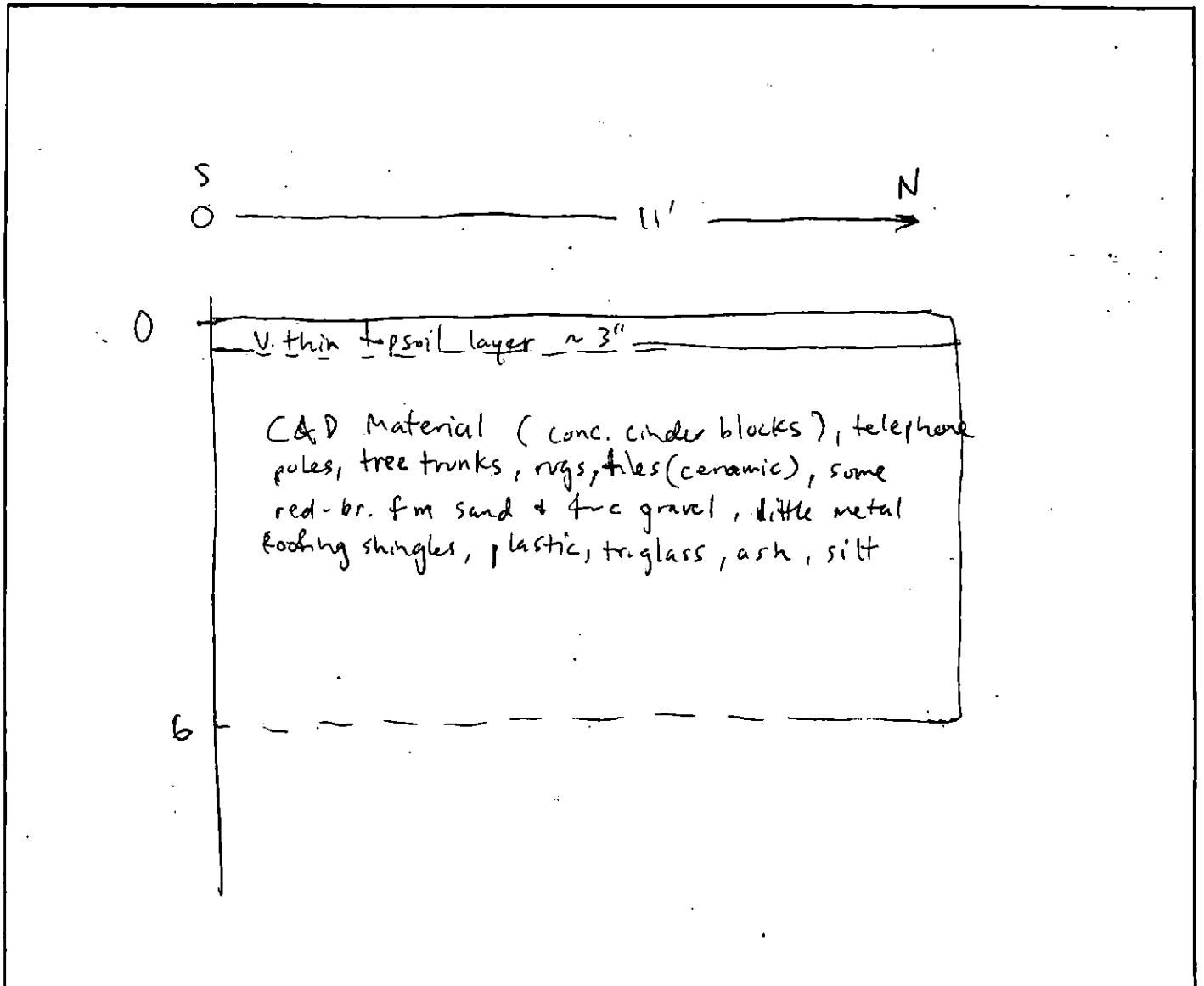
DEPTH	SAMPLE INTERVAL	TOE OF PIT SCREEN (ft)	DESCRIPTION OF MATERIALS	REMARKS
0	0-3"	0	Top soil roots organic silt	3" topsoil cover
1	3"-6'	0	C&D mat'l conc., wood, ceramic tiles, metal sheet-metal, some f-c sand & f-c gravel, ~~fine~~ glass plastic silt + ash	waste from 3"-down mostly C&D, some soil ↓
2		0.2		
3				
4				
5				
6				
7			END OF TEST PIT	* peak multi-gas reading of 20 ppm
8				
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TP-10

Adjacent to 450 N + 900 E stake



Remarks _____

TEST PIT LOG

TEST PIT NO. *TP-11*

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

INSPECTOR/OFFICE

K. Robins

START/FINISH DATE

8/4/97 130pm

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

unstable

REMARKS:

450 N / 1200 E

DEPTH	SAMPLE INTERVAL	OVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	<i>0 - 2</i>		<i>Brown - Tan Top</i>	
1			<i>Soil, gravel-sand fill</i>	
2	<i>2' - 6'</i>		<i>Black - Brown waste</i>	<i>> 60% LEL land gas odor</i>
3			<i>sand mixed with</i>	
4			<i>cloth, wood, cobbles</i>	
5			<i>& metal, cement blocks</i>	
6			<i>scraps of metal, wire, rope</i>	
7			<i>END at 6'</i>	
8				
9				
10				
11				
12				
13				
14				
15				

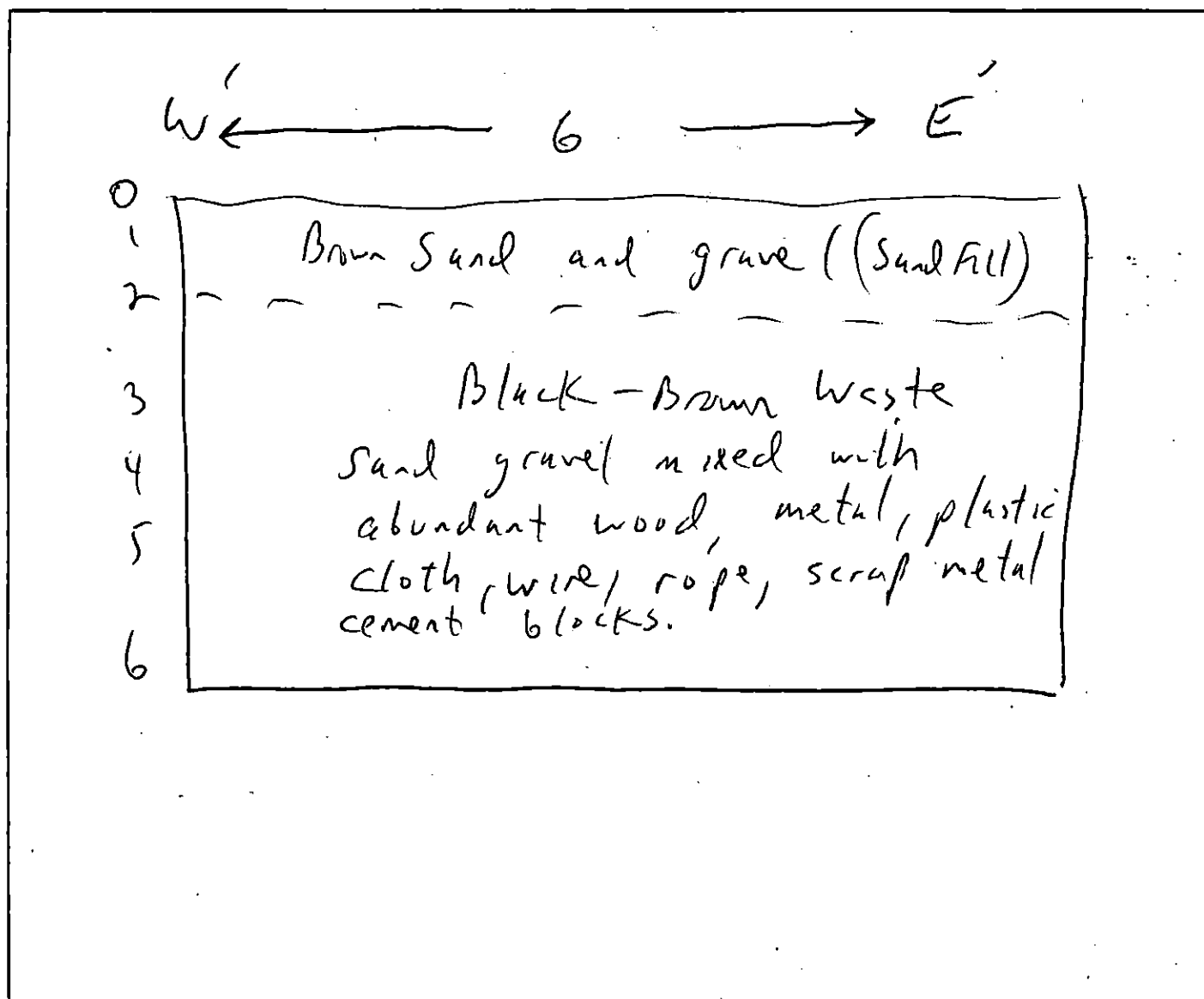
TEST PIT PROFILE

Project Sonia Road Landfill - RI

Project Number 1445

Sample(s) Interval(s) _____

Test Pit Number TP-11



Remarks _____

(0-2')

Sand Fill / roots, grass

(2-6')

Waste / Garbage

TEST PIT LOG

TEST PIT NO. TP-12

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

INSPECTOR/OFFICE

K. Robins

START/FINISH DATE

8/4/97 1130am

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

unstable -

REMARKS:

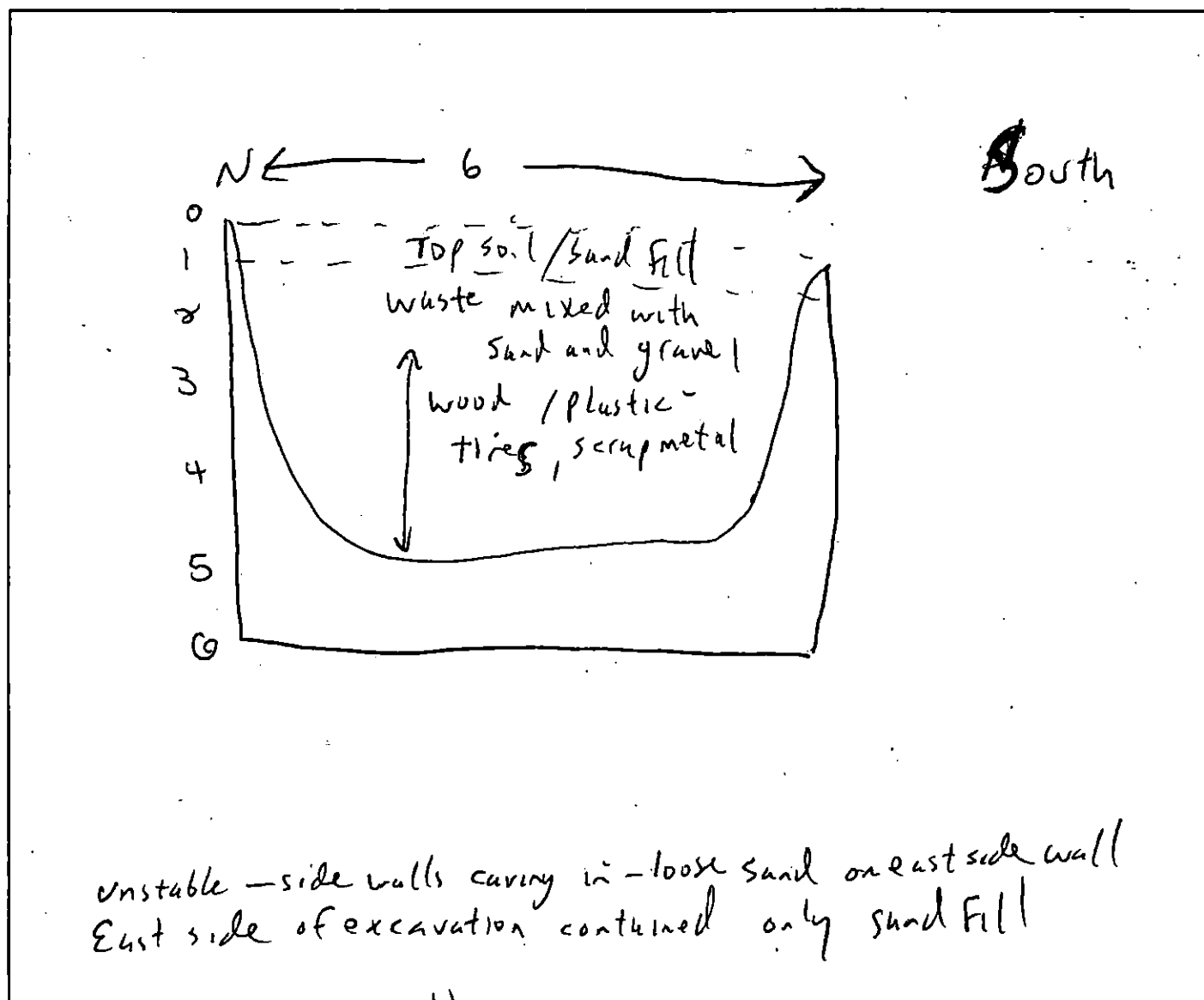
450 N / 1500 East

DEPTH	SAMPLE INTERVAL	~~Pit~~ SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-1	0-0	Top soil / sand fill	
1			Light Tan - white	
2	1-5	0-0	F-C Qtz Sand and gravel, some rubber plastic, wood, scrap metal	Loose/unstable 2% LEL
3			Car tires, Trace glass	
4				
5				East side of excavate consisted of sand.
6				
7			--- End 5' ---	
8				
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

Project Sonia Road Landfill - RT Project Number 1445

Sample(s) Interval(s) _____ Test Pit Number TP-12



unstable - side walls caving in - loose sand on east side wall
East side of excavation contained only sand fill

Remarks (0-1') sand fill
(1-5') waste mixed with sand fill

TEST PIT LOG

TEST PIT NO. TP-13

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

INSPECTOR/OFFICE

K. Robins

START/FINISH DATE

8/5/17 900 am

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

unstable

REMARKS:

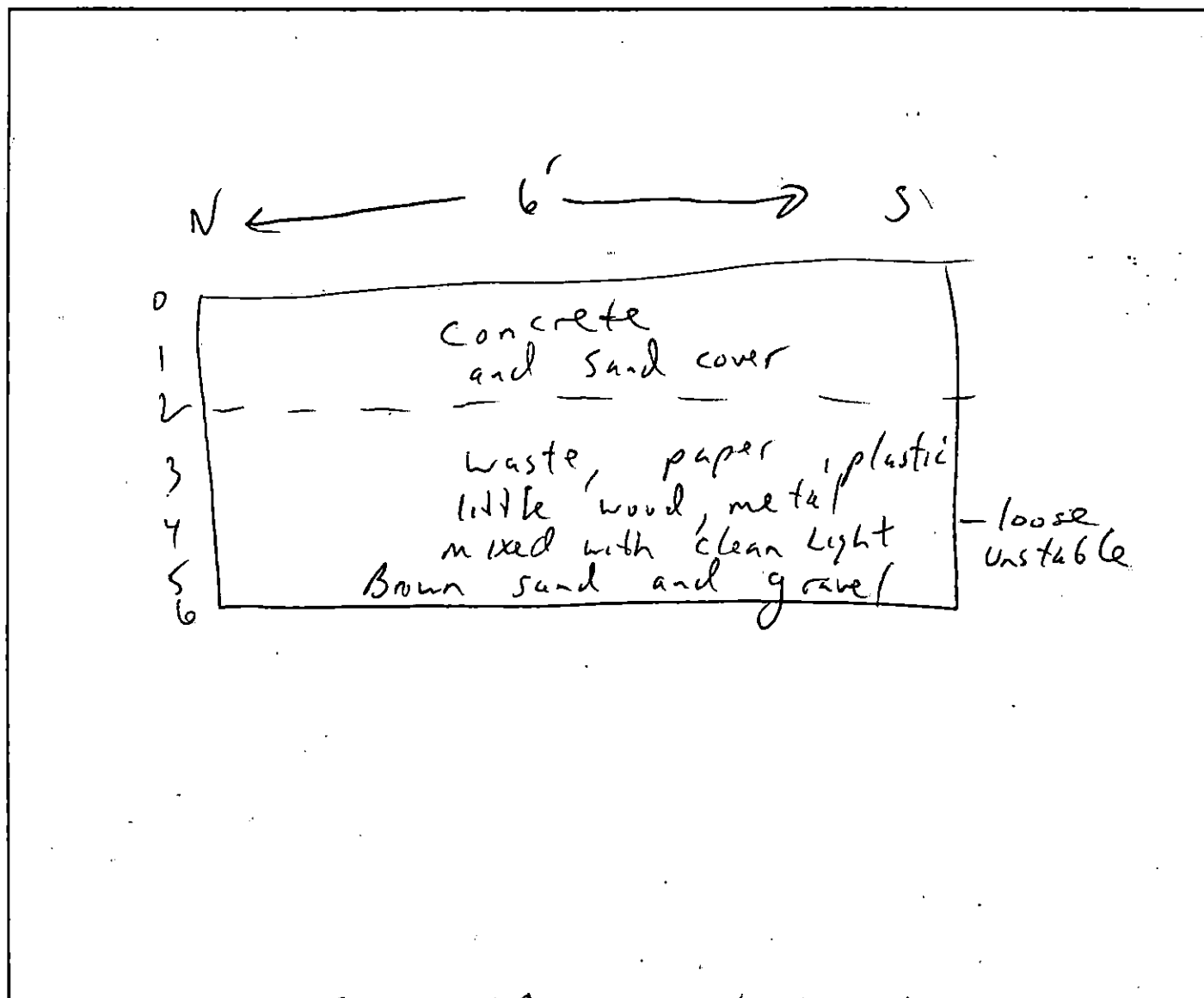
300 N / 150 E

DEPTH	SAMPLE INTERVAL	OVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-2	0.0	Sand and concrete very large pieces	- Loose
1				
2	2-6'	0.0	Light Brown, Sand, Some plastic, little wood, metal, paper sand appears to be clean	0-1% LEL slight gas odor released sand cover
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

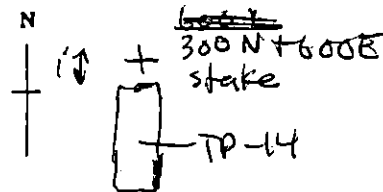
TEST PIT PROFILE

Project Sonia Road Landfill - RT Project Number 1445

Sample(s)-Interval(s) _____ Test Pit Number TP-13



Remarks (0 - 2') concrete / sand
(2 - 6') waste / sand cover m x



TEST PIT LOG

TEST PIT NO. TP-14	
PROJECT NO./NAME 1445 / Sonia Road Landfill - RI	LOCATION Sonia Rd. Landfill, W. Brentwood, NY.
EXCAVATOR/EQUIPMENT/OPERATOR Case 580	
INSPECTOR/OFFICE K. Robins D. Dbrudovich	START/FINISH DATE 8/6/97 10 ⁰⁰
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL) -	CONDITION OF PIT stable
REMARKS:	

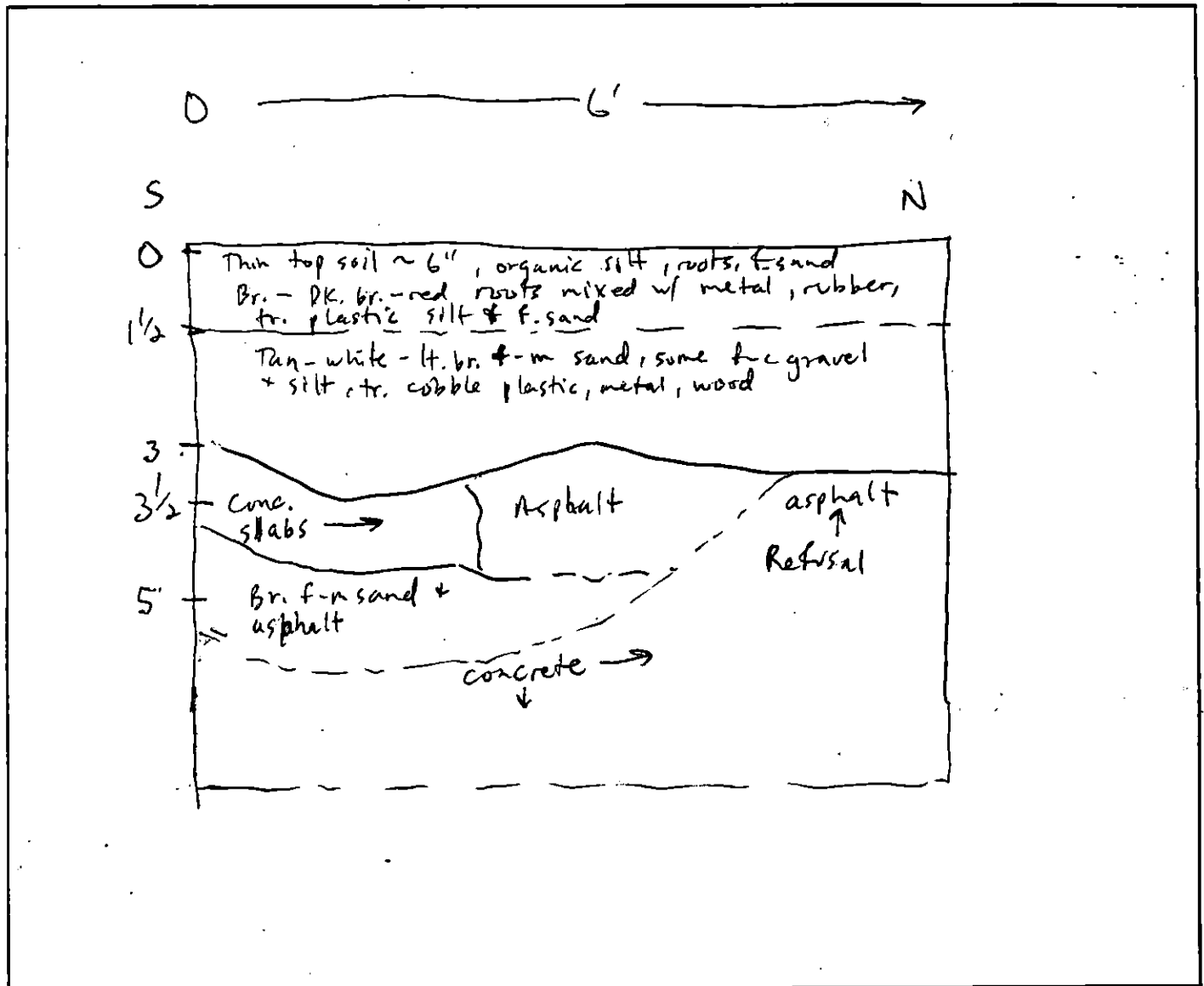
DEPTH	SAMPLE INTERVAL	LEL / PID % OVA / ppm	SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-1.5	0	0	Top soil 6"	waste @ 6" b.g
1				DK. br. organic silt + roots mixed w/ metal, plastic, rubber wood	
2	1.5-3	0	0	Lt. br. f-m sand + silt + gravel, tr. wastes (metal)	mostly sand
3					
4	3-5.5	0	0	Large chunks of Asphalt + conc. w/ metal, plastic, & wood wastes	C & D * peak. 20 ppm multi-gas meter
5				some f-m sand & gravel	
6				Refusal @ 5.5' b.g	
7				END OF TEST PIT	
8					
9					
10					
11					
12					
13					
14					
15					

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TP-14

Adjacent to 300 N + 600 E stake



Remarks _____



DVIRKA
AND
BARTILUCCI

TEST PIT LOCATION SKETCH MAP

N

TEST PIT LOG

TEST PIT NO. TP-15

PROJECT NO./NAME:

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

INSPECTOR/OFFICE

K. Robins

START/FINISH DATE

8/4/97 2:20 pm

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

REMARKS:

Adjacent to 3002/1200 E
pip

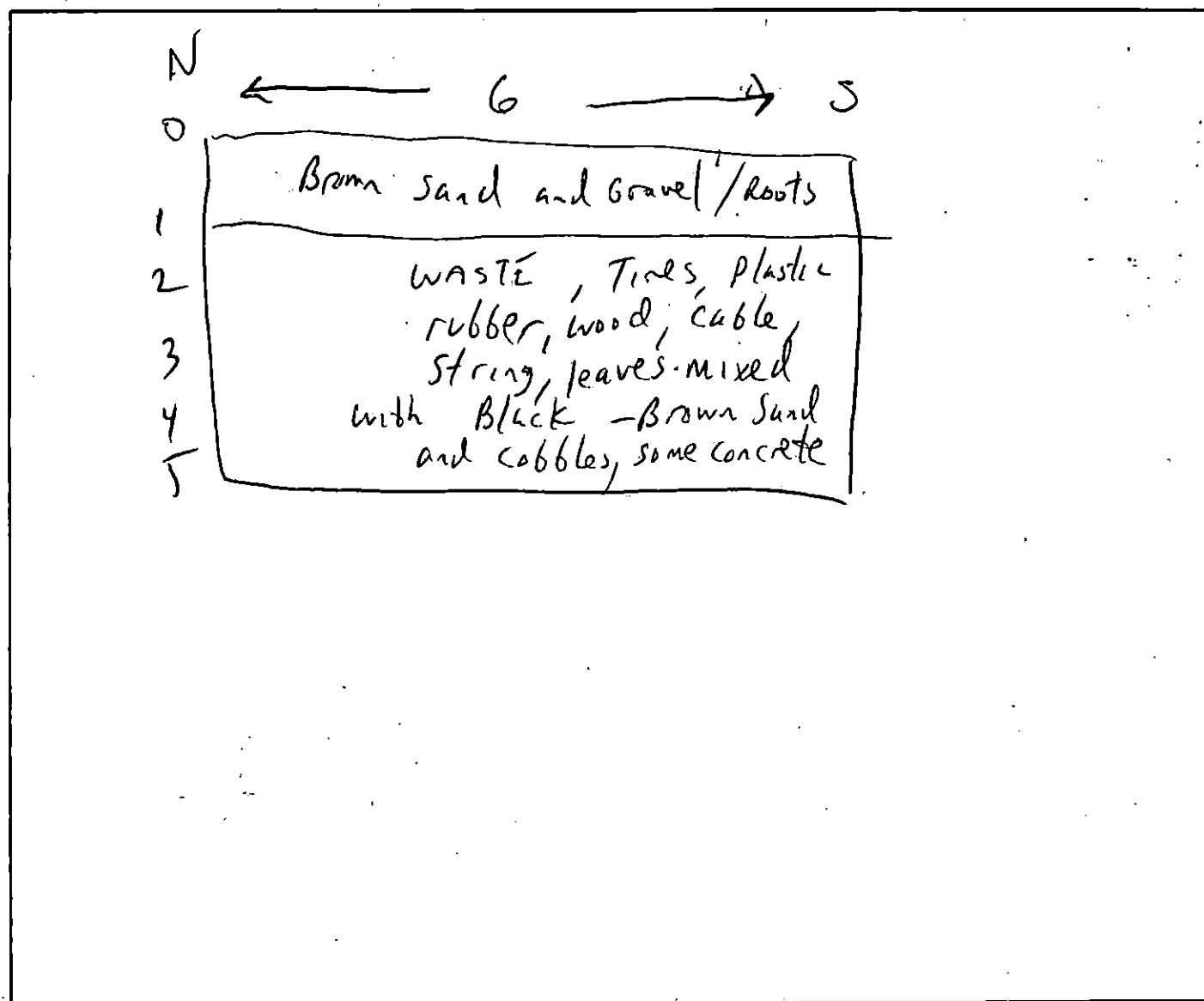
DEPTH	SAMPLE INTERVAL	~~OVA~~ SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-1	0.0	Brown sand and gravel	dry
1	1'-5'	0.0	roots/grass	
2			WASTE Brown	3% LEL
3			Black sand cobbles,	
4			wood, string, cable	
5			tires, leaves	
6			--- end 5' ---	
7				
8				
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445

Sample(s) Interval(s) _____ Test Pit Number TP-15

adjacent to 300 n / 1200 E stake.



Remarks 0-1' Sand Fill
1-5' waste.

TEST PIT LOG

TEST PIT NO. *TP-16*

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

INSPECTOR/OFFICE

K. Robins

START/FINISH DATE

8/5/97 100pm

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

unstable - dry

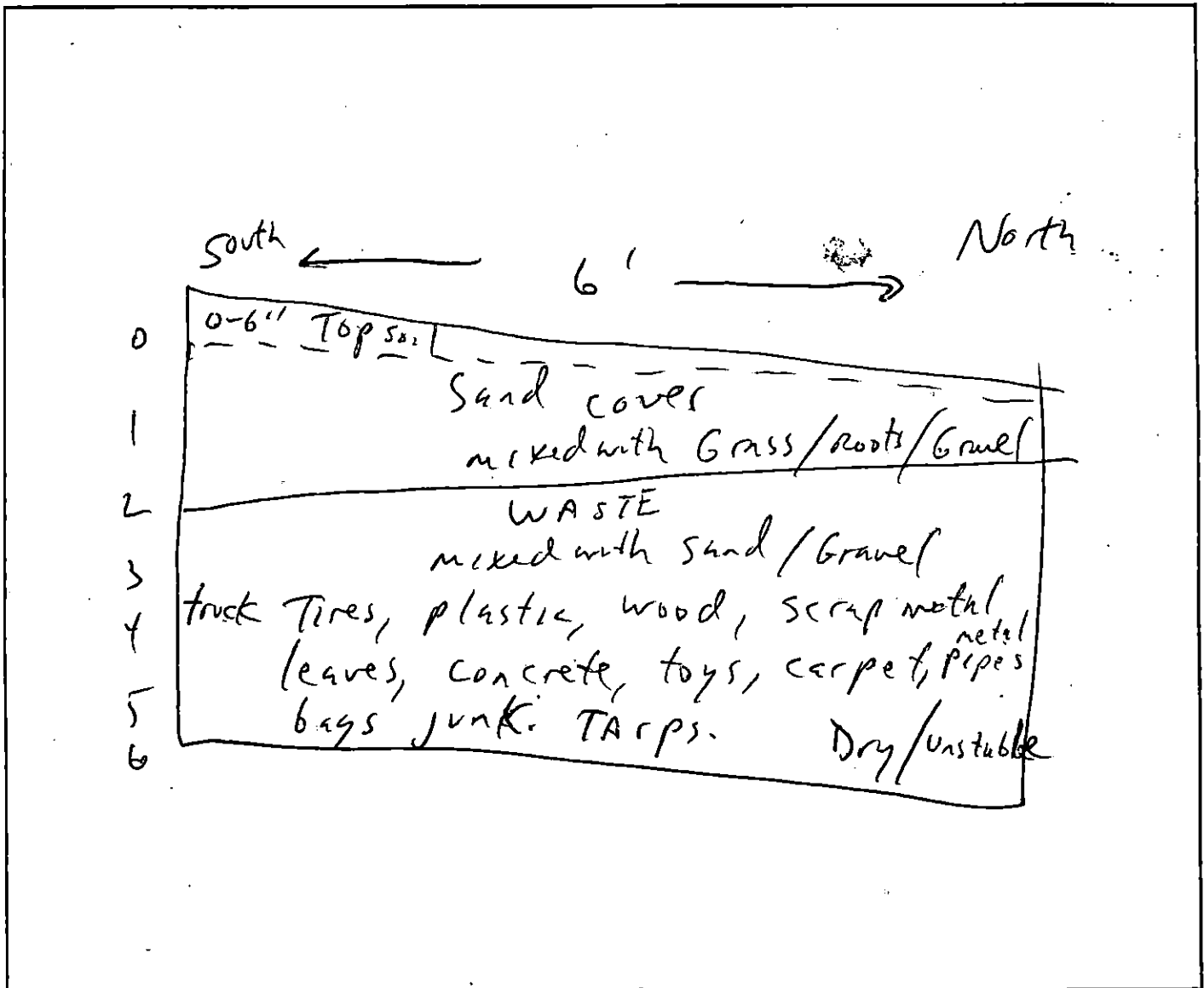
REMARKS:

PID				
DEPTH	SAMPLE INTERVAL	~~OVA~~ SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-1	0	Dry sand / Rocks / Gravel	0% LEL
1			loose top soil (0-6")	
2	1-6'	0	WASTE, Brown sand	
3			gravel mixed with tires	
4			plastic, large scrap metal	
5			wood, lumber, plastic	
6			bags, leaves, carpet	
7			concrete, toys, metal pipes	
8			- - - 6' END - -	
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

Project Sonia Road Landfill - RT Project Number 1445

Sample(s) Interval(s) _____ Test Pit Number TP-16



Remarks sand cover (1-2')



DVIRKA
AND
BARTILUCCI

TEST PIT LOCATION SKETCH MAP

N

+ 150 N + 600 E
state

TEST PIT LOG

TEST PIT NO.

TP-17

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580 E 4-wheel drive backhoe

INSPECTOR/OFFICE

K. Robins D. Obradovich

START/FINISH DATE

8/6/97 11⁰⁰ - 12⁰⁰

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL) -

CONDITION OF PIT

stable

REMARKS:

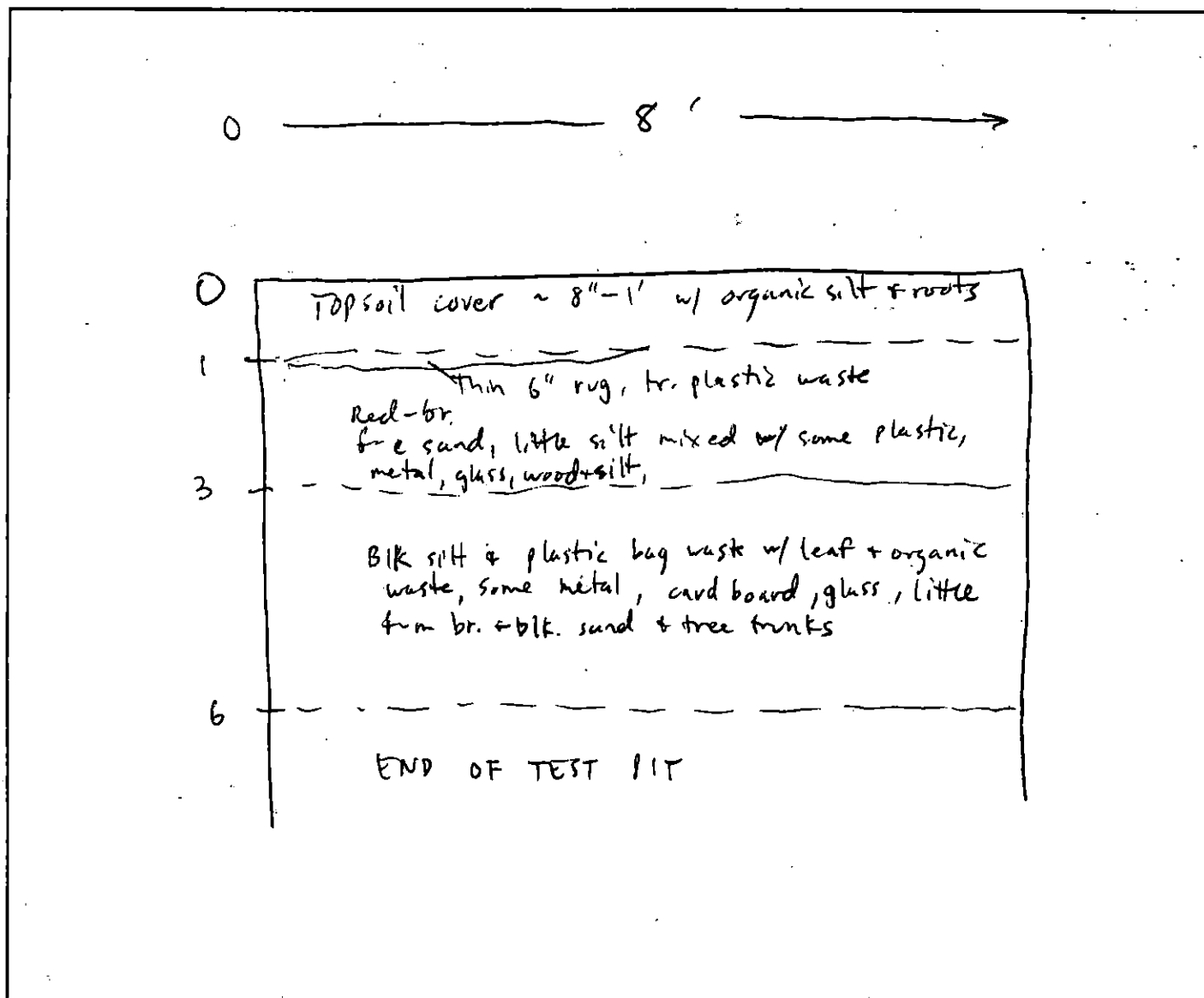
DEPTH	SAMPLE INTERVAL	TOE OF SCREEN	PID ppm	DESCRIPTION OF MATERIALS	REMARKS
0	0-8"	0	0	Topsoil + roots	Cover soil ~ 8" waste below top soil
1	8"-3'	0	0	Br. - red sand, some waste incl. ng, plastic bags, metal, wood, leaves, tr. glass + silt	Mostly sand: however some waste
2					
3					
4	3-6'	0	0	Brk. silt + plastic bag wastes (organic), metal sheet, tr. glass some wood	Mostly waste moderate landfill gas odor
5					
6					
7				END OF TEST PIT	* 60 ppm w/ multingss meter was peak
8					
9					
10					
11					
12					
13					
14					
15					

TEST PIT PROFILE

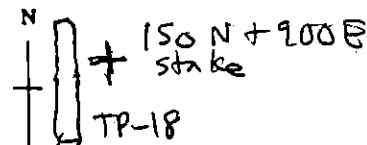
Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TP-17

Adjacent to 150 N + 600 E stake



Remarks _____



TEST PIT LOG

TEST PIT NO. TP-18	
PROJECT NO./NAME 1445 / Sonia Road Landfill - RI	LOCATION Sonia Rd. Landfill, W. Brentwood, NY.
EXCAVATOR/EQUIPMENT/OPERATOR Case 580 E 4-wheel drive backhoe	
INSPECTOR/OFFICE ~~K. Robins~~ D. Obrudovich	START/FINISH DATE 8/7/97 9 ⁰⁰ -10 ¹⁵
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL) -	CONDITION OF PIT unstable
REMARKS:	

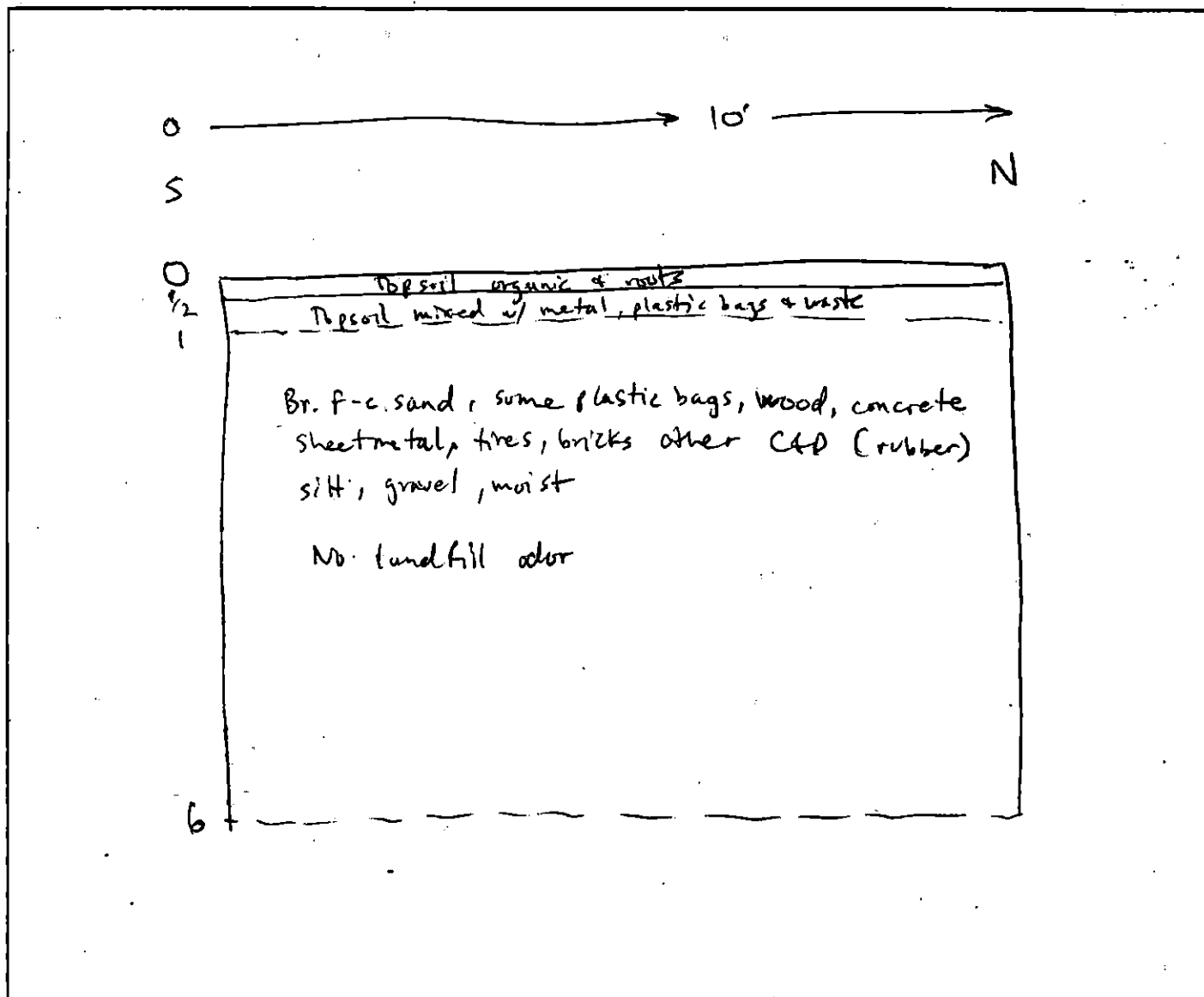
DEPTH	SAMPLE INTERVAL	% LEAD Pb SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-5"	0	Topsoil (v. thin) w/ roots organic silt	0-5" topsoil cover (5" thick cover)
1	5"-1'	0	Topsoil mixed w/ metal, conc. waste	topsoil/waste to 1' lg
2	1'-6'	0	Br. f-c sand, some plastic bags, wood planks, branches, concrete, metal sheets + scraps, tires, plastic, bricks, no organic odor (fence) rubber	Mostly C4D waste w/ sand
3				
4				
5				
6				
7			END OF TEST PIT	* peak 0-10 ppm multi-gas readings
8				
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TP-18

Adjacent to 150N + 900E stake



Remarks _____

TEST PIT LOG

TEST PIT NO. TP-19

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

INSPECTOR/OFFICE

K. Robins

START/FINISH DATE

8/4/97 245 pm

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

REMARKS:

location 150 N / 1200 E (adjacent)

DEPTH	SAMPLE INTERVAL	~~OVA~~ SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	<u>0 - 2 1/2</u>	<u>0.0</u>	<u>wood / shingles / fill</u> <u>Brown - Tan Sand & gravel - Roots / grass</u>	<u>Fill</u> <u>SAND FILL</u>
1				
2				
3	<u>2 1/2 - 6</u>	<u>0.0</u>	<u>Brown - Black</u> <u>waste - paper,</u> <u>leaves, metal, cloth.</u> <u>wood plywood, cobbles</u> <u>(low mower) End at 6'</u>	<u>WASTE</u> <u>3% LEL</u>
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

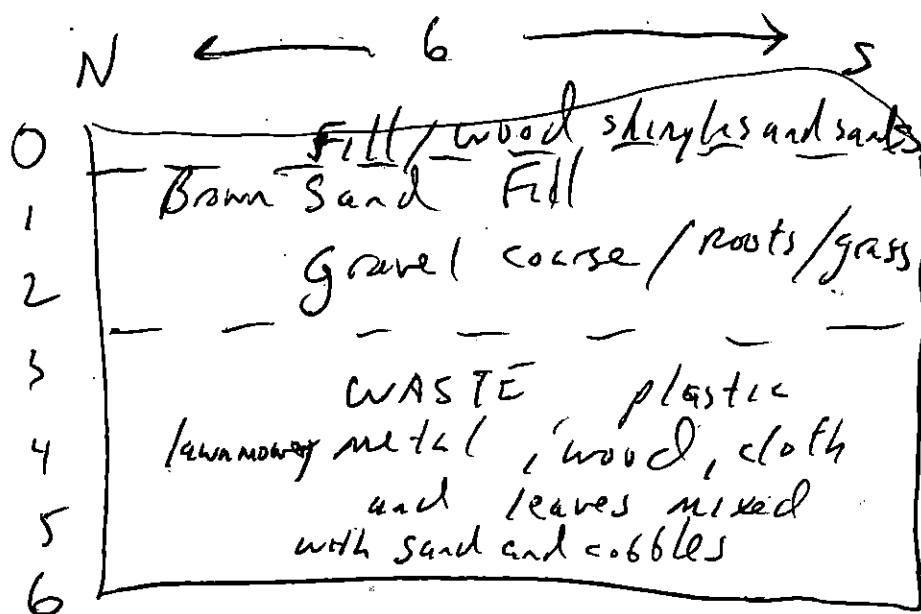
TEST PIT PROFILE

Project Sonia Road Landfill - RI

Project Number 1445

Sample(s) Interval(s) _____

Test Pit Number TP-19



Remarks _____

Fill (0 - 1)

Sand Fill (1 - 2 1/2)

WASTE (2 1/2 - 6')

TEST PIT LOG

TEST PIT NO. TP-20

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

INSPECTOR/OFFICE

K. Robins

START/FINISH DATE

8/4/97 100pm

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

unstable -

REMARKS:

150 N / 1500 E

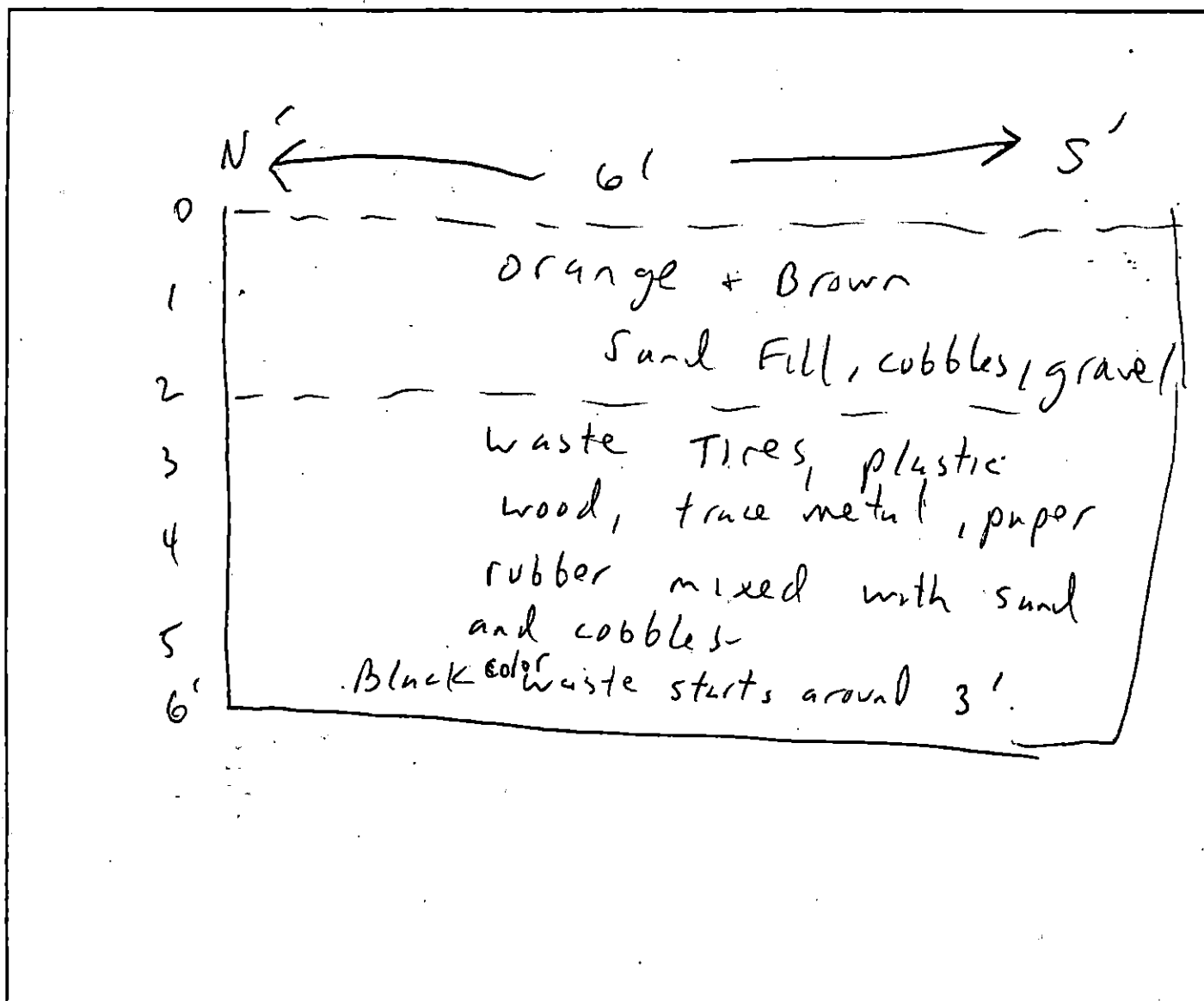
DEPTH	SAMPLE INTERVAL	~~OVA~~ SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-2'	0.0	Sand fill orange-brown cobbles / gravel	
1	2'-6'	0.0	Waste - Truck tire, rubber a lot of plastic - wood, cobbles, trace metal	- loose / unstable
2			Mixed with orange-brown Sand at top - Black	5% LEL
3			Sandy water towards bottom	
4			END 6'	
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445

Sample(s) Interval(s) _____ Test Pit Number TP-20

Adjacent to 150N/1500E stake



Remarks 0-2' Sand Fill
2'-6' waste / Garbage

APPENDIX D

AIR MONITORING FORMS



PROJECT NAME: Sonia Road Landfill - RI DATE: 2/26
PROJECT NUMBER: 1445-3B INSTRUMENT: MTIP
RECORDED BY: D. Obradovich CALIBRATION DATE: 2/26/97
WEATHER CONDITIONS: Sunny, sl. windy, cold

[illegible]

RECORDING PROCEDURES/REMARKS: _____



AIR MONITORING FORM

PROJECT NAME: Sonia Road Landfill - RI DATE: 3/4 - 3/6/97

PROJECT NUMBER: 1445-38 INSTRUMENT: PID

RECORDED BY: D. Obradovich CALIBRATION DATE: 3/4-3/6

WEATHER CONDITIONS: Overcast - clearing - rain - windy (3/4 - 2/6)

[illegible]

RECORDING PROCEDURES/REMARKS: _____

AMF



PROJECT NAME: Sonia Road Landfill - RI DATE: 7/30
PROJECT NUMBER: 1445-3B INSTRUMENT: P10 x LEL meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 7/30
WEATHER CONDITIONS: Sunny, hot low humidity

[illegible]**RECORDING PROCEDURES/REMARKS:**

signed : LWB



PROJECT NAME: Sonia Road Landfill - RI DATE: 7/31/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & ^{LEL} meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 7/31/97
WEATHER CONDITIONS: Sunny, calm winds

RECORDING PROCEDURES/REMARKS: _____



PROJECT NAME: Sonia Road Landfill - RI DATE: 8/1/97
PROJECT NUMBER: 1445-3B INSTRUMENT: P10 + LEL meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 8/1/97
WEATHER CONDITIONS: Sunny, calm winds, low humidity ~85°

RECORDING PROCEDURES/REMARKS: _____



PROJECT NAME: Sonia Road Landfill - RI DATE: 8/4/97
PROJECT NUMBER: 1445-3B INSTRUMENT: 810 & 9112 meters
RECORDED BY: D. Obradovich CALIBRATION DATE: 8/4/97
WEATHER CONDITIONS: Sunny

TIME	LOCATION	WIND SPEED AND DIRECTION	% LEL READING	PID ppm	OBSERVATIONS
7 ⁰⁰	West Gate	0-2 W	0	0	Ambient / Background (^{Bg})
7 ³⁰	Upwind " "				
7 ³⁰	Downwind " "				
8 ³⁰	SB-2				
9 ⁰⁰	Upwind SB-2				
9 ⁰⁰	Downwind SB-2				
12 ⁰⁰	" "				
12 ⁰⁵	Upwind				
2 ⁰⁰	" "				
2 ⁰⁵	Downwind	↓ ↓	↓ ↓	↓ ↓	↓ ↓
X SB-2 @ 20' bg - 10% LEL					
25-30' " 10% LEL - in ladders					
down to 40' bg					
Used suppressant - breathing zone					
was always 0% LEL					
Upwind / Down wind of all TP's - 0% LEL & 0 ppm					
Michiran readings ranged from 0.05 to 0.12 mg/m³					

RECORDING PROCEDURES/REMARKS: Done.

Added poly foam



PROJECT NAME: Sonia Road Landfill - RI DATE: 8/5/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID + 2.0 LEL meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 8/5/97
WEATHER CONDITIONS: ~~Clear~~ Overcast

RECORDING PROCEDURES/REMARKS: _____



PROJECT NAME: Sonia Road Landfill - RI DATE: 8/6/97
PROJECT NUMBER: 1445-3B INSTRUMENT: P10 & 90 LER meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 8/6/97
WEATHER CONDITIONS: Sunny

[illegible]**RECORDING PROCEDURES/REMARKS:**

~~Done~~



DVIRKA
AND
BARTILUCCI

AIR MONITORING FORM

PROJECT NAME: Sonia Road Landfill - RI DATE: 8/7/97

PROJECT NUMBER: 1445-38 INSTRUMENT: PID & %LEL meter

RECORDED BY: D. Obradovich CALIBRATION DATE: 8/7/97

WEATHER CONDITIONS: Sunny, calm winds, ground dry

TIME	LOCATION	WIND SPEED AND DIRECTION	PID ppm READING	%LEL	OBSERVATIONS
7 ³⁰	West Gate	0-5 - W	0.2	0	Ambient / background (bg)
7 ³⁵	Upwind of dirt road	0-5 -	0	0	" "
8 ⁰⁰	" " TP-1	0-5 -	0	0	" "
8 ⁰⁵	Downwind "	0-5 -	0	0	" "
10 ⁰⁰	Upwind "	0-5 -	0	0	" "
11 ⁰⁰	West Gate	0-5 -	0	0	" "
11 ¹⁵	Upwind of TT-1	0-5 -	0.4	0	" " (0.4 bg)
11 ¹⁵	Downwind of TT-1	0-5 -	0.3	0	" " (0.3 bg)
11 ³⁰	Upwind of TT-1	0-5 -	0.1	0	" " (0.1 bg)
11 ³⁰	TT-1	0-5 -	0.0	0	Breathing zone above TT-1
11 ⁴⁰	TT-1	0-5 W	0.8	3	In trench @ 8' Lg
1 ⁰⁰	TT-1	0-5 W	0.1	0	Breathing zone
1 ³⁰	"	0-5 W	0.1	0	" "
3 ⁰⁰	"	" "	0.0	0	" "
3 ³⁰	West Gate	" "	0	0	" "
Michrom readings ranged from 0.00 to 1.22 mg/m ³					
1.22 reading was peak during TT-1 not sustained					

RECORDING PROCEDURES/REMARKS: _____

AMF



PROJECT NAME: Sonia Road Landfill - RI DATE: 8/8/97
PROJECT NUMBER: 1445-38 INSTRUMENT: CEL meter
(Multi-gas) + PID
RECORDED BY: D. Obradovich CALIBRATION DATE: 8/8/97
WEATHER CONDITIONS: M. cloudy, calm winds ~70°

[illegible]**RECORDING PROCEDURES/REMARKS:**

SwD



PROJECT NAME: Sonia Road Landfill - RI DATE: 8/11/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & %LEL meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 8/11/97
WEATHER CONDITIONS: Sunny, v. warm, high humidity

RECORDING PROCEDURES/REMARKS:

Duo



PROJECT NAME: Sonia Road Landfill - RI DATE: 8/12/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID + Multi-gas meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 8/12/97
WEATHER CONDITIONS: Overcast, drizzle (in am), ^{M.} Sunny in afternoon, hot humid

RECORDING PROCEDURES/REMARKS:

DWA



PROJECT NAME: Sonia Road Landfill - RI DATE: 8/13/97

PROJECT NUMBER: 1445-38 INSTRUMENT: PID & %LEL Meter

RECORDED BY: D. Obradovich CALIBRATION DATE: 8/13/97

WEATHER CONDITIONS: Overcast, winds change from E to S, heavy periods of rain in afternoon

[illegible]

RECORDING PROCEDURES/REMARKS: _____

2400.

AIR MONITORING FORM

PROJECT NAME: Sonia Road Landfill - RI

DATE: 8/15/97

PROJECT NUMBER: 1445-38

RECORDED BY: D. Obradovich

WEATHER CONDITIONS: W. Sunny, lazy, hot

TIME	LOCATION	WIND SPEED AND DIRECTION	%LEL READING ppm PID	OBSERVATIONS
8-930	TT-25	0-2 N	24	Ambient/Background
10-103	TT-26		24	In trench @ 8' below ground
11-1130	TT-27		0	Ambient/bg
12-1200	TT-28		0	
	Downwind side			
	Downwind side			

All reading in breathing zone were 0% LEL + 0.00 ppm PID

Mainstem readings ranged from 0.00 to 1.35 mg/m³

RECORDING PROCEDURES/REMARKS:

Am

AIR MONITORING FORM

PROJECT NAME: Sonia Road Landfill - RI DATE: 8/18/97

PROJECT NUMBER: 1445-3B INSTRUMENT: PID + %LEL Meter

RECORDED BY: D. Obradovich CALIBRATION DATE: 8/18/97

WEATHER CONDITIONS: Raining heavy in am; Sunny in afternoon

TIME	LOCATION	WIND SPEED AND DIRECTION	PID (PPM) %LEL READING		OBSERVATIONS
7:30	West Gate	0-10 NW	0	0	Ambient / Background (bg)
	Upwind " "				
	Downwind " "				
	Upwind SB-1				
	Downwind "		↓	↓	
	Upwind TT-29	raining	—	—	
	Down " "		—	—	
	Up " TT-30		—	—	
	Down " "	↓ ↓	—	—	
	Up " TT-31	0-10 NW	0	0	
	Down " "				
	Up " TT-32				
	Down " "				
	All %LEL + PID readings were 0 in the bg				
	Upwind TT-33				
	Down " "				
	Up " TT-34 A+B				
	Down "				
	Upwind SB-3				
3:30	Down " "	↓ ↓	↓	↓	↓ ↓
	Minimum readings ranged from 0.00 to 0.33 mg/m ³ after noon				

RECORDING PROCEDURES/REMARKS: DUB



PROJECT NAME: Sonia Road Landfill - RI DATE: 8/19/97

RECORDED BY: D. Obradovich CALIBRATION DATE: 8/19/97

WEATHER CONDITIONS: Sunny, warm, breezy low humidity

[illegible]

RECORDING PROCEDURES/REMARKS: _____

AMF



PROJECT NAME: Sonia Road Landfill - RI DATE: 8/21/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID + %LEL Meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 8/21/97
WEATHER CONDITIONS: Overcast, drizzle, ~60°

RECORDING PROCEDURES/REMARKS:

DWO



PROJECT NAME: Sonia Road Landfill - RI DATE: 8/22/97
PROJECT NUMBER: 1445-38 INSTRUMENT: PID & % LEL Meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 8/22/97
WEATHER CONDITIONS: M. Cloudy am / M. Sunny pm calm winds (am) / 0-5 W (pm)

RECORDING PROCEDURES/REMARKS: bz = breathing zone
DWD



DVIRKA
AND
BARTILUCCI

AIR MONITORING FORM

PROJECT NAME: Sonia Road Landfill - RI DATE: 8/25/97
PROJECT NUMBER: 1445-38 INSTRUMENT: PID + %LEL meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 8/25/97
WEATHER CONDITIONS: M. Sunny

TIME	LOCATION	WIND SPEED AND DIRECTION	%LEL READING	PID ppm	OBSERVATIONS
715	West Gate	0-2 N	0	0	Ambient / Background (45)
745	" " Upwind				
↓	Downwind				
830	Hydropunch H1				
↓	Upwind "				
↓	Downwind "				
930	Up "				
↓	Down "				
1130	Up "				
↓	Down "				
1230	Up				
↓	Down				
130	Up				
↓	Down	↓	↓	↓	↓
330	Up				
↓	Down				
430	Up				
↓	Down	↓	↓	↓	↓
No Miniram readings measured over 0.00 mg/m ³					

RECORDING PROCEDURES/REMARKS:

Red

PROJECT NAME: Sonia Road Landfill - RI
DATE: 8/26/97
PROJECT NUMBER: 1445-38
INSTRUMENT: PID + %LEL
RECORDED BY: D. Obradovich
CALIBRATION DATE: 8/26/97
WEATHER CONDITIONS: M. Sunny / calm winds

M. Sunny / calm winds

D. Obradovich

1445-38

Sonia Road Landfill - RI

AIR MONITORING FORM

**DYRKA
AND
BARTLUCCI**

TIME	LOCATION	WIND SPEED AND DIRECTION	READING ppm	OBSERVATIONS
730	West Gate	0-2	0	0.6 Ambient/Background (p.p.m.)
815	Downwind H1		0	" " " " " "
815	Up "		0	" " " " " "
930	Down			
↑	Up			
1030	Down			
↓	Up			
1230	Down			
↓	Up			
330	Down			
↑	Up			

All readings measured w/ mirror were 0.00 m/m³

RECORDING PROCEDURES/REMARKS:

and



DVIRKA
AND
BARTILUCCI

AIR MONITORING FORM

PROJECT NAME: Sonia Road Landfill - RI DATE: 8/27/97
PROJECT NUMBER: 1445-38 INSTRUMENT: PID + %LEL Meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 8/27/97
WEATHER CONDITIONS: Sunny,

TIME	LOCATION	WIND SPEED AND DIRECTION	%LEL READING	PID ppm	OBSERVATIONS
7 ¹⁵	West Gate ^{up/down} wind ↓	0-5 SW	0	0.0	Ambient/Background (bg)
7 ⁴⁵	" " Down				
9 ¹⁵	HQ Up wind				
↓	Down "				
11 ⁰⁰	Up "				
↓	Down "				
12 ⁰⁰	Up "				
↓	Down "				
2 ⁰⁰	Up "				
↓	Down "				
3 ⁰⁰	Up "	↓	↓	↓	↓
	All readings w/ microman were 0.00 mg/m ³				

RECORDING PROCEDURES/REMARKS: _____

DWO.



PROJECT NAME: Sonia Road Landfill - RI DATE: 8/28/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & %LEL Meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 8/28/97
WEATHER CONDITIONS: Overcast - drizzle/rain

[illegible]**RECORDING PROCEDURES/REMARKS:**

Amo



DVIRKA
AND
BARTILUCCI

AIR MONITORING FORM

PROJECT NAME: Sonia Road Landfill - RI DATE: 8/29/97

PROJECT NUMBER: 1445-3B INSTRUMENT: PID & %LEL Meter

RECORDED BY: D. Obradovich CALIBRATION DATE: 8/29/97

WEATHER CONDITIONS: M-Cloudy, drizzle in am, clearing in pm.

TIME	LOCATION	WIND SPEED AND DIRECTION		%LEL READING	PID ppm	OBSERVATIONS
7 ²⁰	West Gate	0-6	NW	0	0	Ambient / Background
7 ³⁰	Upwind H2	↓	↓	↓	↓	↓
↓	Down " "					
8 ²⁰	Up "					
↓	Down					
10 ³⁰	Up					
↓	Down					
11 ³⁰	Up					
↓	Down					
1 ³⁰	Up					
↓	Down					
2 ³⁰	Up					
↓	Down					
3 ³⁰	Up					
↓	Down					
All readings w/ miniram were 0.00 mg/m ³						

RECORDING PROCEDURES/REMARKS: D. Obradovich



DVIRKA
AND
BARTILUCCI

AIR MONITORING FORM

PROJECT NAME: Sonia Road Landfill - RI DATE: 9/2/97

PROJECT NUMBER: 1445-3B INSTRUMENT: PID + 9.1.EL Meter

RECORDED BY: D. Obradovich CALIBRATION DATE: 9/2/97

WEATHER CONDITIONS: Overcast, high humidity, hazy, breezy

TIME	LOCATION	WIND SPEED AND DIRECTION	9.1.EL READING	PID ppm	OBSERVATIONS
7 ¹⁵	West Gate	0-8 W	0	0	Ambient / Background (bg)
8 ⁰⁰	Upwind H3				
8 ⁰⁰	Downwind				
9 ³⁰	Up "				
↓	Down "				
10 ³⁰	Up "				
↓	Down "				
11 ³⁰	Up "				
↓	Down "				
1 ³⁰	Up "				
↓	Down "				
2 ³⁰	Up "				
↓	Down "				
	All readings w/ mihiram were		0.00	mg/m ³	

RECORDING PROCEDURES/REMARKS: _____

D. Obradovich



PROJECT NAME: Sonia Road Landfill - RI DATE: 9/3/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PIP + %LEL Meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/3/97
WEATHER CONDITIONS: Overcast, drizzle in am. (70°)

[illegible]**RECORDING PROCEDURES/REMARKS:**

DWD.



PROJECT NAME: Sonia Road Landfill - RI DATE: 9/4/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & %LEL Meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/4/97
WEATHER CONDITIONS: M. Sunny, v. cool ~55° winds NW 5-12 chng. to W 5-12 by 10:00

TIME	LOCATION	WIND SPEED AND DIRECTION	70 LEL READING	PID ppm	OBSERVATIONS
7 ¹⁵	West Gate	5-12 NW	0	0	Ambient/Background (Lg)
8 ³⁰	H3 location				
↓	Upwind H3				
↓	Downwind H3				
10 ⁰⁰	Up " "	W			
↓	Down " "				
12 ⁰⁰	Up				
↓	Down				
1 ⁰⁰	Up				
↓	Down				
2 ⁰⁰	Up				
↓	Down				
3 ⁰⁰	Up				
↓	Down				
	All methane readings were		0.00 mg/m ³		

RECORDING PROCEDURES/REMARKS:

NWQ



DVIRKA
AND
BARTILUCCI

AIR MONITORING FORM

PROJECT NAME: Sonia Road Landfill - RI DATE: 9/5/97
PROJECT NUMBER: 1445-3B INSTRUMENT: P10 + %LEL meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/5/97
WEATHER CONDITIONS: Sunny,

TIME	LOCATION	WIND SPEED AND DIRECTION	%LEL READING	P10 (ppm)	OBSERVATIONS
7 ¹⁵	West Gate	0-8 WNW	0	0	Ambient/Background (bg)
7 ³⁰	↓	↓	↓	↓	↓
9 ⁰⁰	Upwind #4				
↓	Downwind				
10 ⁰⁰	Up "				
↓	Down "				
11 ⁰⁰	Up "				
↓	Down "				
12 ⁰⁰	Up "				
↓	Down				
1 ³⁰	Up "				
↓	Down "				
2 ³⁰	Up "				
↓	Down "				
3 ³⁰	Up "				
↓	Down "				
	All readings w/ mirham were 0.00 mg/m ³				

RECORDING PROCEDURES/REMARKS:

D.O.



AIR MONITORING FORM

PROJECT NAME: Sonia Road Landfill - RI DATE: 9/8/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & %LEL Meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/8/97
WEATHER CONDITIONS: M. Sunny (M. Cloudy in am)

[illegible]

RECORDING PROCEDURES/REMARKS:

JWB-



PROJECT NAME: Sonia Road Landfill - RI DATE: 9/9/97
PROJECT NUMBER: 1445-38 INSTRUMENT: P10 & P2EL Meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/9/97
WEATHER CONDITIONS: M. Cloudy

[illegible]

RECORDING PROCEDURES/REMARKS:

AME



PROJECT NAME: Sonia Road Landfill - RI DATE: 9/10/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & %LEL meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/10/97
WEATHER CONDITIONS: M. Cloudy

[illegible]**RECORDING PROCEDURES/REMARKS:**

DEB



PROJECT NAME: Sonia Road Landfill - RI DATE: 9/11/97
PROJECT NUMBER: 1445-38 INSTRUMENT: %LEL & PID Meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/11/97
WEATHER CONDITIONS: Overcast, rain

[illegible]**RECORDING PROCEDURES/REMARKS:**

Amo



PROJECT NAME: Sonia Road Landfill - RI DATE: 9/15/97
PROJECT NUMBER: 1445-3B INSTRUMENT: P10 & 2 EL Meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/15/97
WEATHER CONDITIONS: Sunny

[illegible]**RECORDING PROCEDURES/REMARKS:**

Two.



PROJECT NAME: Sonia Road Landfill - RI DATE: 9/16/97
PROJECT NUMBER: 1445-38 INSTRUMENT: PID + 1/2 LEL Meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/16/97
WEATHER CONDITIONS: M. Sunny

[illegible]

200



PROJECT NAME: Sonia Road Landfill - RI DATE: 9/17/97
PROJECT NUMBER: 1445-38 INSTRUMENT: PID + %LEL Meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 2/17/97
WEATHER CONDITIONS: Sunny

[illegible]**RECORDING PROCEDURES/REMARKS:**

And

AMP



PROJECT NAME: Sonia Road Landfill - RI DATE: 9/18/97
PROJECT NUMBER: 1445-38 INSTRUMENT: PID & 7.1 EL Meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/18/97
WEATHER CONDITIONS: Sunny

[illegible]

RECORDING PROCEDURES/REMARKS: See



PROJECT NAME: Sonia Road Landfill - RI DATE: 9/19/97
PROJECT NUMBER: 1445-3B INSTRUMENT: P108 9. LEL meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/19/97
WEATHER CONDITIONS: Sunny

[illegible]**RECORDING PROCEDURES/REMARKS:**

AMP



PROJECT NAME: Sonia Road Landfill - RI DATE: 9/22/97
PROJECT NUMBER: 1445-38 INSTRUMENT: P10 & % LBL meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/22/97
WEATHER CONDITIONS: Sunny

[illegible]

RECORDING PROCEDURES/REMARKS:

AWB.



PROJECT NAME: Sonia Road Landfill - RI DATE: 9/23/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID + 7% LEL Meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/23/97
WEATHER CONDITIONS: P. Sunny - then M. Cloudy

[illegible]**RECORDING PROCEDURES/REMARKS:**

AMF



PROJECT NAME: Sonia Road Landfill - RI DATE: 9/24/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PW + 7.66L meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/24/97
WEATHER CONDITIONS: P. Sunny (am) M. Sunny (pm)

[illegible]

RECORDING PROCEDURES/REMARKS:

And



PROJECT NAME: Sonia Road Landfill - RI DATE: 9/25/97
PROJECT NUMBER: 1445-38 INSTRUMENT: PIIP + 7.0 LBL meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/25/97
WEATHER CONDITIONS: Sunny

[illegible]**RECORDING PROCEDURES/REMARKS:**

Qud



PROJECT NAME: Sonia Road Landfill - RI DATE: 9/26/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & 90 LEL Meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/26/97
WEATHER CONDITIONS: Sunny (am) . P-Mr. Sunny (pm)

[illegible]

RECORDING PROCEDURES/REMARKS: DWD-



PROJECT NAME: Sonia Road Landfill - RI DATE: 9/29/97
PROJECT NUMBER: 1445-38 INSTRUMENT: PID & Multi-g
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/29/97
WEATHER CONDITIONS: P. Sunny (am), M. Sunny (pm)

[illegible]

RECORDING PROCEDURES/REMARKS:

SUB



PROJECT NAME: Sonia Road Landfill - RI DATE: 9/30/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & Multi-gas meters
RECORDED BY: D. Obradovich CALIBRATION DATE: 9/30/97
WEATHER CONDITIONS: M. Sunny

[illegible]**RECORDING PROCEDURES/REMARKS:**

~~gwd~~



PROJECT NAME: Sonia Road Landfill - RI DATE: 10/1/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID + Multi-g
RECORDED BY: D. Obradovich CALIBRATION DATE: 10/1/97
WEATHER CONDITIONS: M sunny, windy

[illegible]**RECORDING PROCEDURES/REMARKS:**

[Signature]

TIME	LOCATION	WIND SPEED AND DIRECTION	READING	OBSERVATIONS
				All readings w/ PID Multi-gas meters were 0 ppm & 0% LEL in and around barges today including breathing zone up & downwind 0.00 w/ min/max
				0.08 to 2.20 near gate on S. side of site high dust readings only when vehicles enter & exit @ gate

TIME	LOCATION	WIND SPEED AND DIRECTION	READING	OBSERVATIONS

PROJECT NAME: Sonia Road Landfill - RI
DATE: 10/2/97

dp
DYRKA
AND
BARTLUCCI



PROJECT NAME: Sonia Road Landfill - RI DATE: 10/3/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & Multi-G
RECORDED BY: D. Obradovich CALIBRATION DATE: 10/3/97
WEATHER CONDITIONS: M. Sunny

[illegible]

RECORDING PROCEDURES/REMARKS: _____

AMF



PROJECT NAME: Sonia Road Landfill - RI DATE: 10/7/97

PROJECT NUMBER: 1445-38 INSTRUMENT: PID & Multi-g

RECORDED BY: D. Obradovich CALIBRATION DATE: 10/7/97

WEATHER CONDITIONS: Sunny

[illegible]

RECORDING PROCEDURES/REMARKS: _____

AMF



PROJECT NAME: Sonia Road Landfill - RI DATE: 10/8/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID + Multi-gas meter.
RECORDED BY: D. Obradovich CALIBRATION DATE: 10/8/97
WEATHER CONDITIONS: Sunny

[illegible]**RECORDING PROCEDURES/REMARKS:**

[Signature]



PROJECT NAME: Sonia Road Landfill - RI DATE: 10/9/97
PROJECT NUMBER: 1445-38 INSTRUMENT: PID & Multi-g
RECORDED BY: D. Obradovich CALIBRATION DATE: 10/9/97
WEATHER CONDITIONS: Sunny

[illegible]

RECORDING PROCEDURES/REMARKS:

END



PROJECT NAME: Sonia Road Landfill - RI DATE: 10/10/97

PROJECT NUMBER: 1445-3B INSTRUMENT: PID & Multi-gas

RECORDED BY: D. Obradovich CALIBRATION DATE: 10/10/97

WEATHER CONDITIONS: Sunny

[illegible]

RECORDING PROCEDURES/REMARKS: _____

~~QWQ~~



PROJECT NAME: Sonia Road Landfill - RI DATE: 10/11/97
PROJECT NUMBER: 1445-38 INSTRUMENT: PID & Multi-g
RECORDED BY: D. Obradovich CALIBRATION DATE: 10/11/97
WEATHER CONDITIONS: Sunny

[illegible]

RECORDING PROCEDURES/REMARKS: _____

_____ JWD.



PROJECT NAME: Sonia Road Landfill - RI DATE: 10/13/97
PROJECT NUMBER: 1445-38 INSTRUMENT: PID & Multi-gas meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 10/13/97
WEATHER CONDITIONS: M. Sunny

[illegible]**RECORDING PROCEDURES/REMARKS:**

Two



PROJECT NAME: Sonia Road Landfill - RI DATE: 10/14/97
PROJECT NUMBER: 1445-38 INSTRUMENT: PID & Multi-gas meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 10/14/97
WEATHER CONDITIONS: M. Sunny

[illegible]**RECORDING PROCEDURES/REMARKS:**

Aut.



PROJECT NAME: Sonia Road Landfill - RI DATE: 10/15/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID + Multi-gas
RECORDED BY: D. Obradovich CALIBRATION DATE: 10/15/97 ^{Meter}
WEATHER CONDITIONS: Overcast, drizzle

[illegible]**RECORDING PROCEDURES/REMARKS:**

QW0-



PROJECT NAME: Sonia Road Landfill - RI DATE: 10/16/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & Multi-g
RECORDED BY: D. Obradovich CALIBRATION DATE: 10/16/97
WEATHER CONDITIONS: Overcast, sl. drizzle, light winds

[illegible]**RECORDING PROCEDURES/REMARKS:****AMP**



PROJECT NAME: Sonia Road Landfill - RI DATE: 10/17/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & Multi-gas
RECORDED BY: D. Obradovich CALIBRATION DATE: 10/17/97
WEATHER CONDITIONS: _____

[illegible]

RECORDING PROCEDURES/REMARKS: AWD



PROJECT NAME: Sonia Road Landfill - RI DATE: 10/21/97

PROJECT NUMBER: 1445-3B INSTRUMENT: PID & Multi-gas

RECORDED BY: D. Obradovich CALIBRATION DATE: 10/21/97

WEATHER CONDITIONS: Sunny

[illegible]

RECORDING PROCEDURES/REMARKS: _____

~~Devd-~~



PROJECT NAME: Sonia Rd. Landfill DATE: 10/23/97
PROJECT NUMBER: 1445-3B INSTRUMENT: P10 & Multi-gas
RECORDED BY: D. Obradovich CALIBRATION DATE: 10/23/97
WEATHER CONDITIONS: M. Sunny

[illegible]

QUB



PROJECT NAME: Sonia Rd. Landfill DATE: 10/24/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & Multi-gas
RECORDED BY: D. Obradovich CALIBRATION DATE: 10/24/97
WEATHER CONDITIONS: Sunny

[illegible]

RECORDING PROCEDURES/REMARKS: _____

AMF



PROJECT NAME: Sonia Rd. Landfill DATE: 10/27/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & Multi-gas
RECORDED BY: D. Obradovich CALIBRATION DATE: 10/27/97
WEATHER CONDITIONS: Overcast

[illegible]

DWA



PROJECT NAME: Sonia Rd. Landfill DATE: 10/28/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & Multi-gas
RECORDED BY: D. Obradovich CALIBRATION DATE: 10/28/97
WEATHER CONDITIONS: M. Cloudy

[illegible]

~~Sub~~



PROJECT NAME: Sonia Rd. Landfill DATE: 10/29/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & Multi-gas
RECORDED BY: D. Obradovich CALIBRATION DATE: 10/29/97
WEATHER CONDITIONS: M. Sunny

[illegible]**RECORDING PROCEDURES/REMARKS:**

200

AMF



PROJECT NAME: Sonia Road Landfill - RI DATE: 10/30/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & Multi-gas meter
RECORDED BY: D. Obradovich CALIBRATION DATE: 10/30/97
WEATHER CONDITIONS: Sunny

[illegible]

~~Two~~



DVIRKA
AND
BARTILUCCI

AIR MONITORING FORM

PROJECT NAME: Sonia Rd. Landfill DATE: 11/3/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & Multi-gas
RECORDED BY: D. Obradovich CALIBRATION DATE: 11/3/97
WEATHER CONDITIONS: Sunny

TIME	LOCATION	WIND SPEED AND DIRECTION	READING	OBSERVATIONS
7 ⁵⁰	Recon area	calm -		
	All readings w/ PID & Multi-gas meters were			
	0 today ~~except~~ including breathing zone up &			
	down wind except @			
	TT-8A	1% LEL @ 8-10' bg		
	TT-10A	3% " " 11' bg		

RECORDING PROCEDURES/REMARKS: _____

DWB

AMF



PROJECT NAME: Sonia Rd. Landfill DATE: 11/4/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & Multi-gas
RECORDED BY: D. Obradovich CALIBRATION DATE: 11/4/97
WEATHER CONDITIONS: Sunny, breezy

[illegible]**RECORDING PROCEDURES/REMARKS:**

AWB



PROJECT NAME: Sonia Rd. Landfill DATE: 11/5/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & Multi-gas
RECORDED BY: D. Obradovich CALIBRATION DATE: 11/5/97
WEATHER CONDITIONS: Sunny

[illegible]

0000



PROJECT NAME: Sonia Rd. Landfill DATE: 11/10/97
PROJECT NUMBER: 1445-3B INSTRUMENT: PID & Multi-gas
RECORDED BY: D. Obradovich CALIBRATION DATE: 11/10/97
WEATHER CONDITIONS: Sunny, v. cool, breezy

[illegible]

And:



PROJECT NAME: Sonia Road Land Fill DATE: 1/14/98
PROJECT NUMBER: 1475 INSTRUMENT: PID
RECORDED BY: Kr. Rubins CALIBRATION DATE: 1/13/98
WEATHER CONDITIONS: Co lcl, windy 20-30°

RECORDING PROCEDURES/REMARKS: _____

APPENDIX E

DAILY EQUIPMENT CALIBRATION LOGS

DAILY EQUIPMENT CALIBRATION LOG

Project Name: Sonia Road Landfill - RI

Date: 2/26/97

Project Number: 1445-3B

Calibrated By: D. Obradovich

[illegible]

DECL

$b_g = \text{background}$





DVIRKA
AND
BARTILUCCI

DAILY EQUIPMENT CALIBRATION LOG

Project Name: Sonia Road Landfill - RI

Date: 7/30 - 8/15

Project Number: 1445-3B

Calibrated By: D. Obradovich

Date	Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
7/30	Neotronics Exotox Gas ^{model 400 AH} Monitor S/N 1035639	20% Methane LEL	8 ⁰⁰ am	Responded to 20% LEL Meth. - 0-1% bg
	Microtip MP-100 ~~PID~~ meter S/N NA900192	100 ppm Isobutylene	8 ¹⁰ am	102 ppm response / 0.0 ppm background (bg)
7/31	Neotronics Exotox	20% LEL	7 ⁴⁵	20%-21%-0-1% bg
	Microtip PID	100 ppm Iso	7 ⁵⁰	100 ppm / 0.0 bg
8/1	Exotox	same as above	8 ¹⁵	20% response 0-1% bg
	Microtip	" " "	8 ²⁰	100+ ppm / 0.0 bg
8/4	Gastech GT-402 Multi-gas meter S/N 0062	20% LEL	9 ⁰⁰	19-20% response
	Exotox Meter (same as above)	↓	↓	20% ppm response / 0-1% bg
	Microtip PID HL-2000 S/N PK920080 (rental)	100% Isobutylene	9 ¹⁰	100 ppm response / 0.0 bg
8/5	Gastech Exotox	20% Methane	7 ³⁰	20-22% response / 0 bg
	Microtip	↓	↓	19-20% " / 0 bg
	Photovac 2020 PID Meter S/N	100 ppm Isobutylene	↓	100 ppm response / 0.0 bg
(8/4)	Microtip PID MP-100 (same as above)	↓	9 ¹⁵	↓
8/6	Photovac 2020 PID	↓	7 ³⁰	100 ppm resp. / 0.0 bg
	Microtip PID HL-2000	↓	↓	↓
	Exotox Meter	20% LEL methane	↓	19-21% resp. 0-1% bg
	Gastech "	"	↓	20% resp. 0 bg
8/7	" "	"	7 ¹⁵	" " "
	Microtip PID	100 ppm Isobutylene	↓	100 ppm resp. / 0.0 bg
8/8	" "	" "	7 ³⁰	" " " "
	Gastech	20% LEL	↓	20% resp. / 0.0 bg
8/11	"	"	7 ¹⁵	24% " "
	Microtip	100 ppm Isobutylene	↓	100 ppm " "
8/12	Gastech	20% LEL	↓	22% " "
	Microtip	100 ppm Isobutylene	↓	100 ppm " "
8/13	"	"	↓	" " " "
	Gastech	20% LEL	↓	22-26% " "
8/14	"	"	↓	21-24% " "
	Microtip HL-2000	100 ppm Isobutylene	↓	100 ppm " "
8/15	" MP-100	" "	↓	" " "
	Gastech	20% LEL	↓	20-21% " "
	DECL Exotox	"	↓	19-21% " "



DVIRKA
AND
BARTILUCCI

DAILY EQUIPMENT CALIBRATION LOG

Project Name: Sonia Road Landfill - RI

Date: 8/18 - 9/3/97

Project Number: 1445-3B

Calibrated By: D. Obradovich

	Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
8/18	Microtip HL-2000	100 ppm Iso. butylene	7:10	100 ppm response / 0.0 Lg
	" MP-100	" "		" " "
	Exotox	20% LEL Methane		20-21% " "
	Gastech	" "		20% " "
8/19	Microtip HL-2000	100 ppm Iso.		100 ppm " "
	Gastech	20% LEL		20% " "
8/20	"	"		" " "
	Microtip HL-2000	100 ppm		100 ppm / " "
8/21	"	"		" " "
	Gastech	20% LEL		23% " "
	Exotox	"		21% " "
	"	"		20% " "
8/22	Microtip HL-2000	100 ppm Iso.		100 ppm " "
8/25	"	"	8:00	" " "
	Exotox	20% LEL		20% (up to 22%) "
8/25	Horiba U-10 water Quality Checker MFG. No 664022	Auto Cal Sol ²		✓
8/22	Horiba	Auto Cal Sol ²	7:30	✓
8/26	"	" " "	8:00	✓
	Exotox	20% LEL		20% ✓ Response / 0.0 Lg
	Microtip	100 ppm Iso.		100 ppm " "
8/27	"	"	7:10	" " " "
	Exotox	20% LEL		20-22% " "
	Horiba	Auto Cal Sol ²		✓
8/28	"	" " "	7:15	✓
	Exotox	20% LEL		21% LEL " "
	Microtip	100 ppm Isobutylene		100 ppm " "
8/29	"	"	7:00	" " " "
	Exotox	20% LEL		20-22% " "
	Horiba	Auto Cal Sol ²		✓
9/2	"	" " "	7:10	✓
	Microtip	100 ppm Isobutylene		100 ppm " "
	Exotox	20% LEL Methane		20% LEL " "
9/3	"	"	7:15	" " " "
	Microtip	100 ppm Iso.		100 ppm " "
	Horiba	Auto Cal Sol ²		✓
9/4	"	" " "	7:15	✓

DECL Microtip
Exotox
" Microtip
Horiba

100 ppm Isobutylene
20% LEL
" 100 ppm Isobutylene
Auto Cal Sol²

100 ppm
20% LEL
" " " "
100 ppm
✓

Calibrated By: D. O'Bradovich

Date: 9/8/97 - 9/19/97

[illegible]



DVIRKA
AND
BARTILUCCI

DAILY EQUIPMENT CALIBRATION LOG

Project Name: Sonia Road Landfill - RI

Date: 9/22 - 10/3

Project Number: 1445-3B

Calibrated By: D. Obradovich

	Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
9/22	Photovac Microtlyp ^{S/N} #1-2000	100 ppm Isobutylene	800	100 ppm response / D.O background (bg)
	" " ^{S/N}	" "		" " " "
	Exotox Multi-gas Meter	20% Methane LEL		20% LEL
	Horiba U-10 Water Quality Checker	Auto Cal Sol ²		✓
9/23	HL-2000	100 ppm Iso.	730	100 ppm resp. / 0.0 bg
	" "	" "		" " " "
	Horiba	Auto Cal Sol ²		✓
	EXOTOX	20% LEL Methane		20% LEL " "
9/24	" "	" " "	745	" " " "
	Horiba	Auto Cal Sol ²		✓
	Microtlyp PID	100 ppm Iso.		100 ppm resp. " " "
	" " 2nd unit	" " "		" " " " "
9/25	" " " "	" " "	800	" " " " "
	" " "	" " "		" " " " "
	Horiba	Auto Cal Sol ²		✓
9/26	Exotox	20% LEL Methane		20% " " " "
	" "	" " "	810	" " " " "
	Horiba	Auto Cal Sol ²		
	Microtlyp PID	100 ppm Iso.		100 ppm resp. " " "
	" " 2nd Unit	" " "		" " " " "
9/29	" " " "	" " "	730	" " " " "
	" " 3rd Unit 2020 ^{S/N} 10377	" " "		" " " " "
	Microtlyp	" " "		" " " " "
	Exotox	20% LEL Methane		20% resp. " " "
9/30	" "	" " "	710	" " " " "
	Microtlyp #1, #2, #3	100 ppm Iso.		All 100 ppm " " "
10/1	" #1, #2, #3	" " "	720	" " " " "
	Exotox	20% LEL Methane	710	20-21% " " "
10/2	" "	" " "	700	" " " " "
	Microtlyp #1, #2, #3	100 ppm Iso.		100 ppm " " " "
10/3	" " " "	" " "	745	" " " " "
	EXOTOX	20% LEL Methane		20-22% " " " "
10/6	" "	" " "	700	20% " " " "
	Microtlyp #1, #2, #3	100 ppm Iso.		100 ppm " " " "

DECL



DVIRKA
AND
BARTILUCCI

DAILY EQUIPMENT CALIBRATION LOG

Project Name: Sonia Road Landfill - RI

Date: 10/6 - 10/24/97

Project Number: 1445-3B

Calibrated By: D. Obradovich

10/6
↓
10/7
↓
10/8
↓
10/9
↓
10/10
↓
10/11
↓
10/13
↓
10/14
↓
10/15
↓
10/16
↓
10/17
↓
10/20
↓
10/21
↓
10/22
↓
10/23
↓
10/24
↓

Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
Photovac Microtip HL-2000	100 ppm Isobutylene	715	100 ppm Response / 0.0 background (bg)
S/N 1st unit } PID			
Photovac Microtip H1			
S/N 2nd unit			
Photovac 2020 Mini 3rd unit			
Exotox Multi-gas Meter	20% LEL Methane	720	20-23% resp. / 0.0 bg
Photovac #1, #2, #3 units	100 ppm Iso.	800	100 ppm " " "
Exotox	20% LEL Methane	↓	20-21% " " "
↓	" " "	720	20% " " "
Photovac PID #1, 2, 3	100 ppm Iso.	↓	100 ppm " " "
" " " " "	" " "	800	" " " " "
Exotox	20% LEL	↓	20-23% " " "
"	"	800	20% " " "
Photovac PID #1, 2, 3	100 ppm Isobutylene	↓	100 ppm " " "
" " " 1+2	" " "	730	" " " " "
Exotox	20% LEL	↓	20% " " "
"	"	720	" " " " "
Microtip #1, #2, #3	100 ppm Iso.	↓	100 ppm " " "
" " " "	" " "	705	" " " " "
Exotox	20% LEL	↓	20% " " "
"	"	715	" " " " "
Microtip #1, #2, #3	100 ppm "	↓	100 ppm " " "
" " " "	"	700	" " " " "
Exotox	20% LEL	↓	20% " " "
"	"	730	" " " " "
Microtip #1, #2, #3	100 ppm Iso.	↓	100 ppm " " "
" " " "	" " "	730	" " " " "
Exotox	20% LEL	↓	20% LEL " " "
"	"	745	" " " " "
Microtip #1, #2	100 ppm Iso.	↓	100 ppm " " "
" " "		705	" " " " "
" " #2		700	" " " " "
Exotox	20% LEL	↓	20-22% LEL " " "
"		730	20% " " "
Microtip #1, #2	100 ppm Iso.	↓	100 ppm " " "

DECL

Horiba calibrated 10/9-10/11, 10/13-10/17-10/23 & 10/24 w/ Auto Cal soln
always calibrated OK ✓

DAILY EQUIPMENT CALIBRATION LOG

Project Name: Sonia Road Landfill - RI

Date: 10/27 - 11/5/97

Project Number: 1445-3B

Calibrated By: D. Obradovich

Instrument Name and Model Number	Calibration Method	Time	Readings and Observations
Microtip PIP	100 ppm Isobutylene	715	600 ppm response / 0.0 background (bg)
Exotox	20% LEL Methane	↓	20% LEL " "
"	" "	700	" " " "
Microtip	100 ppm	↓	180 ppm " " "
"	"	700	" " " "
Exotox	20% LEL		20-21% " " "
"	20% LEL		" " " " "
Microtip	~~100 ppm~~ = 100 ppm	↓	100 ppm " " "
"	100 ppm	715	" " " "
Exotox	20% LEL	↓	18-20% " " "
"	" "	705	10-12% recalibrated again needs work
Microtip	100 ppm	↓	100 ppm Resp. / 0.0 bg
"	" "	730	" " " "
Exotox	20% LEL	↓	15-17% " "
"	"	715	14-16% " "
Microtip	100 ppm Iso.	↓	100 ppm " "
Honiba U-LO used	10/27 - 10/31 & 11/3	Calibrated w/ Auto Cal Soln each day - always	" OK

DECL

APPENDIX F

TEST TRENCH LOGS AND PROFILES

TEST PIT PROFILE

Project Sonia Road Landfill - RI

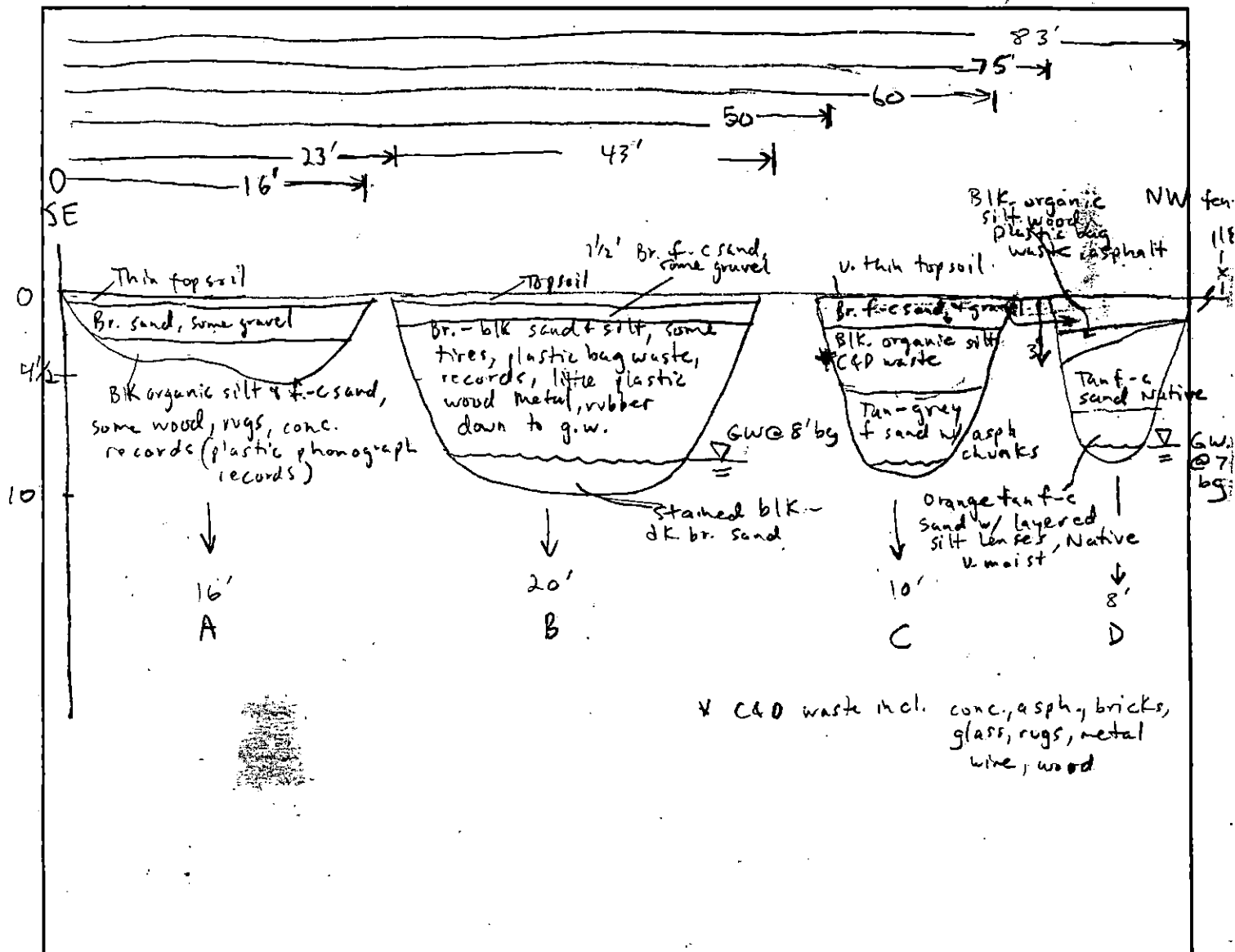
Project Number 1445-3B

Sample(s) Interval(s) _____

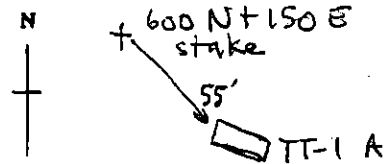
Test Pit Number TT-1

South of 600N+150E stake

See test pit logs A, B, C, D



Remarks Limit of waste ~20' from fence line



TEST PIT LOG
Test Trench Log

TEST PIT NO. TT-1 A	
PROJECT NO./NAME: 1445 / Sonia Road Landfill - RI	LOCATION Sonia Rd. Landfill, W. Brentwood, NY.
EXCAVATOR/EQUIPMENT/OPERATOR Case 580 E 4WD backhoe / B. Durham	
INSPECTOR/OFFICE K. Robins D. Obradovich / D4B	START/FINISH DATE 8/7/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL) -	CONDITION OF PIT Sl. stable
REMARKS: -	

DEPTH	SAMPLE INTERVAL	% OPEN SCREEN	PIB ppm	DESCRIPTION OF MATERIALS	REMARKS
0	0-5"	0	0	Topsoil, roots	Thin cover above waste top soil
1	5"-1.5'	0	0.2	Br. f- sand, some gravel	Waste from 1.5' down to 1.5' of soil cover
2	1.5'-4.5'	0	1.0	Blk. organic silt & f-c Sand, some wood, concrete pieces (large), plastic, records (disks), other debris incl. rugs	Waste from 1.5' down to 4.5' bg
3					
4					
5				END OF TEST PIT	* maximum multi-gas reading was 40 ppm @ 4' bg
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					



TEST PIT LOG

TEST PIT NO.
TT-1 B

PROJECT NO./NAME:

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 586 E 4WD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich / D&B

START/FINISH DATE

8/7/97

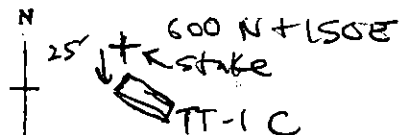
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL) ~

CONDITION OF PIT

stable

REMARKS:

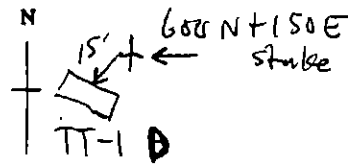
DEPTH	SAMPLE INTERVAL	% LEAKY OVER SCREEN	PID OVER PPM	DESCRIPTION OF MATERIALS	REMARKS
0	0-1.5'	0	0	Thin topsoil above	1.5' of silt cover
1				Br. - f - sand; some gravel	
2	1.5-9'	3	211	Br. - blk. sand + silt, some tires, plastic bag waste, many plastic phonograph records, little plastic wood metal, rubber down to G.W.	6.5' of waste over groundwater
3					
4					
5					
6					
7					
8					
9	END OF TEST PIT			END OF TEST PIT	∇ G.W. @ 8' bg - still recharging hole * maximum multi-gas reading 2,800 ppm @ 5-8' bg
10					
11					
12					
13					
14					
15					



TEST PIT LOG

TEST PIT NO. TT-1C	
PROJECT NO./NAME: 1445 / Sonia Road Landfill - RI	LOCATION Sonia Rd. Landfill, W. Brentwood, NY.
EXCAVATOR/EQUIPMENT/OPERATOR Case 580E 4WD Backhoe / B. Durham	
INSPECTOR/OFFICE K. Robins D. Obradovich / DAB	START/FINISH DATE 8/7/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL) _	CONDITION OF PIT sl. stable
REMARKS: _	

DEPTH	SAMPLE INTERVAL	% LEL OVER SCREEN	PID ppm	DESCRIPTION OF MATERIALS	REMARKS
0	0-1.5'	0	0	Very thin 1" topsoil above Br. f-c sand, some gravel	1.5' of cover soil
1					
2	1.5-3'	0	0.4	Bk. organic silt + C&D mat'l (conc., asph., bricks, rogs, metal, wire)	waste from 1.5' bg
3					
4					
5	3'-8'	0	0	Tan-grey f sand w/ asphalt chunks	mostly sand, little C&D
6					
7					▽ G.W. 8' bg
8					
9				END OF TEST PIT	* maximum multi-gas reading was 120 ppm @ 3' bg
10					
11					
12					
13					
14					
15					



TEST PIT LOG

TEST PIT NO.
TT-1 **D**

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580E 4WD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich / D&B

START/FINISH DATE

8/7/97

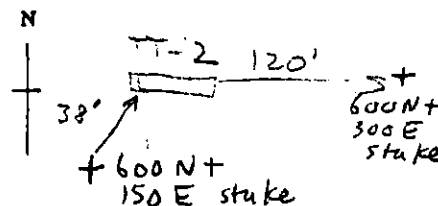
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL) -

CONDITION OF PIT

unstable

REMARKS:

DEPTH	SAMPLE INTERVAL	9.15 PID OVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-1.5'	0	Br. fnc sand + gravel no top soil	1.5' of br. sand + gravel cover
1				
2	1.5-3'	0	Blk. organic silt, wood, plastic bag waste, asphalt, no odor	Limit of waste Thinned to 0 in NW side of trench
3				
4	3-7'	0	Tan f-c sand (reworked?) w/ Orange-fan f-c sand w/ layered silt lenses below, Native, moist wet @ btm	Native Mat'l GW. @ 7' by ▽
5				
6				
7				
8			END OF TEST PIT	* Multi-gas meter open throughout TT-1 D
9				
10				
11				
12				
13				
14				
15				



TEST PIT LOG

TEST PIT NO. TT-2	
PROJECT NO./NAME 1445 / Sonia Road Landfill - RI	LOCATION Sonia Rd. Landfill, W. Brentwood, NY.
EXCAVATOR/EQUIPMENT/OPERATOR Case 580E 4WD Backhoe / B. Durham	
INSPECTOR/OFFICE K. Robins D. Obradovich / D&B	START/FINISH DATE 8/8/97 7 ³⁰
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL) -	CONDITION OF PIT stable
REMARKS: Slope of C&D waste 6' 35° C&D W	

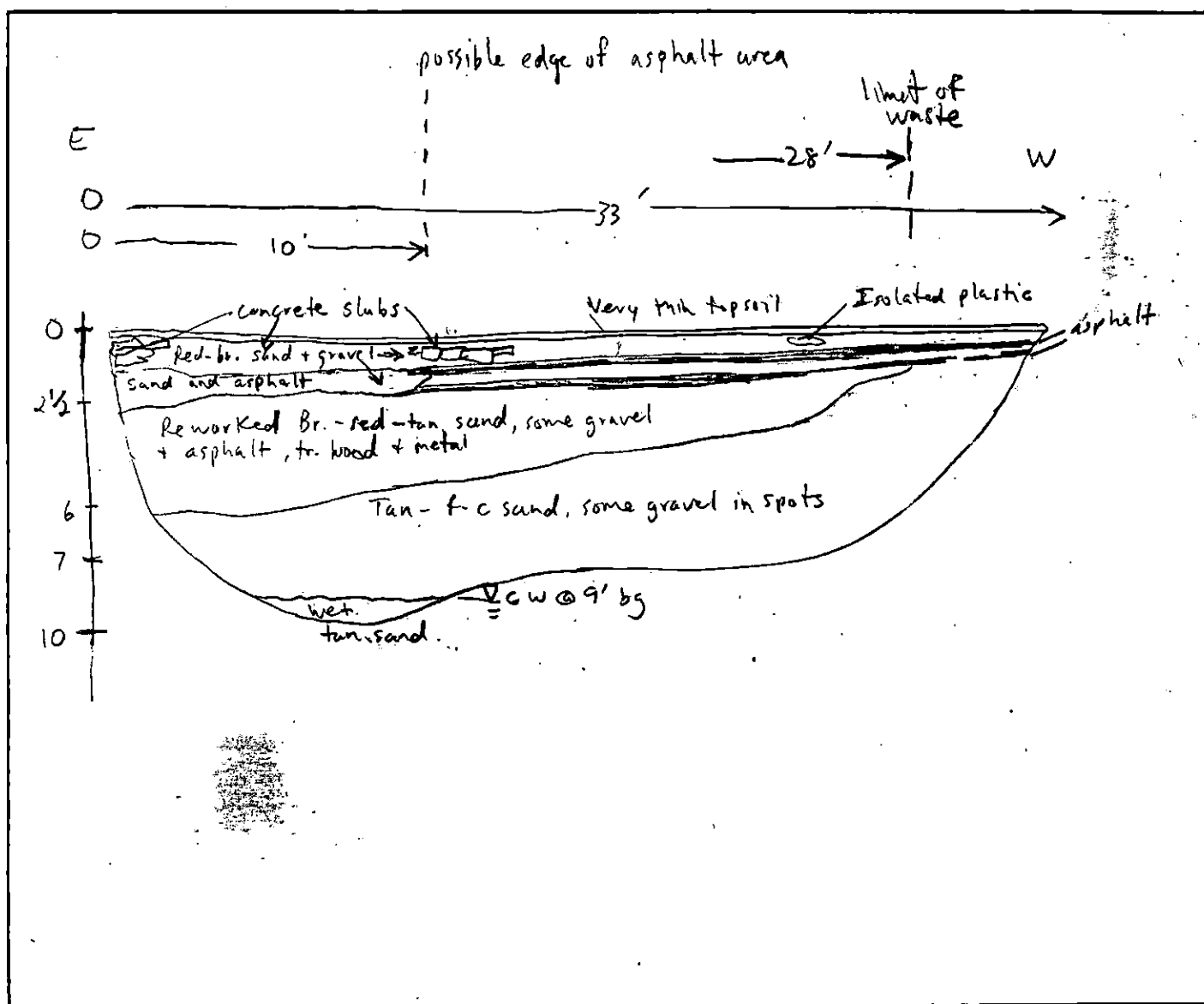
DEPTH	SAMPLE INTERVAL	% EL. PID OVER SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0 - 2 1/2'	0 0	Red-br. sand over btwn and under 2 former asphalt roads. Some conc. slabs @ grade on East side (1/2) of trench	C&D waste from grade to 2 1/2' by former asphalt roads present @ 1' by
1				
2				
3	2 1/2 - 6	0 0	Reworked sand + gravel mixed w/ asphalt debris, fr. wood + metal	C&D & sand
4				
5				
6	6 - 9	0 0	Tan f-c sand, little gravel	Into Native C&D waste ~ 0-6' by ± GWO ~ 8' by (8-9')
7				
8				
9				
10			END OF TEST PIT	* Maximum multi-gas meter reading 10 ppm @ 3' by (0-10 was background) ppm
11				
12				
13				
14				
15				

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TT-2

38' north-northeast of 600 N + 150 E stake



Remarks Asphalt did not thin out to 0 on west side of trench



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TEST PIT LOCATION SKETCH MAP

N

+ 750N+
300E
Stake

+ 600N+150E
Stake

+ 600N+
300E
Stake

TEST PIT LOG

TEST PIT NO.
TT-3

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580 E 4WD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich / D&B

START/FINISH DATE

8/8/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL) -

CONDITION OF PIT

stable

REMARKS:

DEPTH	SAMPLE INTERVAL	7.1 LEL P.D. OVER SCREEN		DESCRIPTION OF MATERIALS	REMARKS
0	0-1'	0	0.1	very thin topsoil above gravel ~1' Br. f-c sand, little C&D waste	1' of cover sand over C&D waste
1					
2	1-3'	0	0.1	Br. sand, little C&D waste incl. conc., asphalt, gravel, tr. plastic, moist no odor	2' of sand w/ little C&D waste
3					
4					
5					
6	3-11'	0	* 18.7	Blk. organic silt, dk. br. sand and plastic bag waste (no organic odor) - v. weak odor metal, conc., asphalt) few little appliances, 55 gal. drum (crushed) wood, tires, tr. ash. wet @ btm. Fishy odor (also solvent?) from 7-10' bg	Over 10' thick waste - still into waste at btm
7					
8					
9					
10					
11					
12				END OF TEST PIT	* maximum multi-gas reading was 140 ppm @ 10' bg
13					
14					
15					

* peak reading was 42 ppm PID at ~ 10' bg (18.7 steady reading)
* PID range from 0.2-5 ppm from 3-11' (avg.)

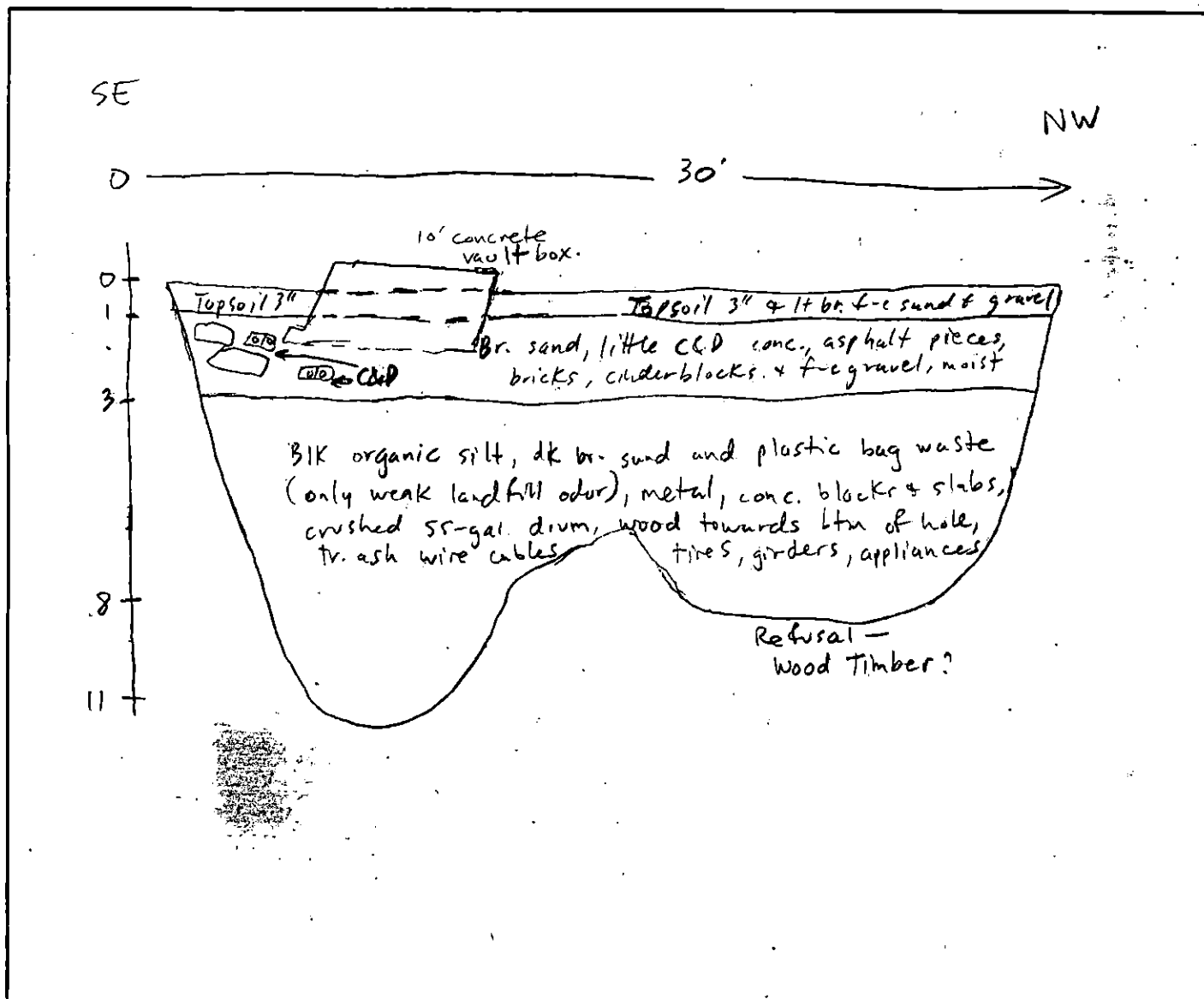
NJDEPTPL

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TT-3

NW from 600 N + 300 E stake - going NW away from stake



Remarks waste @ 10' bg on both sides (SE & NW) sides of trench
to west - zero limit of waste

TEST PIT LOG

TEST PIT NO.

TT-4

PROJECT NO./NAME:

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580 E 4WD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robbins D. Obradovich / D&B

START/FINISH DATE

8/8/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

sl. stable

REMARKS:

limit of waste 33' from fence line - some isolated waste up to
20' " " "

DEPTH	SAMPLE INTERVAL	90% EL. PID SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-3'	0	- Very thin topsoil - Br. grey f-c sand, some silt tr. - little metal, plastic waste	3' cover, however tr. - little waste (metal, plastic)
1				
2				
3	3-10'	19	Blk. organic silt + sand (stained) and waste incl. wood, metal car parts, conc. & asph. (C&D) & tires, w/ some reworked sand & gravel Tan native sand @ west side of trench	∇ GW @ 8' bgs
4				
5				
6				
7				
8				
9				
10				
11			END OF TEST PIT	maximum ppm reading were over limit >10,000 ppm w/ multi-gas meter
12				
13				
14				
15				



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BARTILUCCI

TEST PIT PROFILE

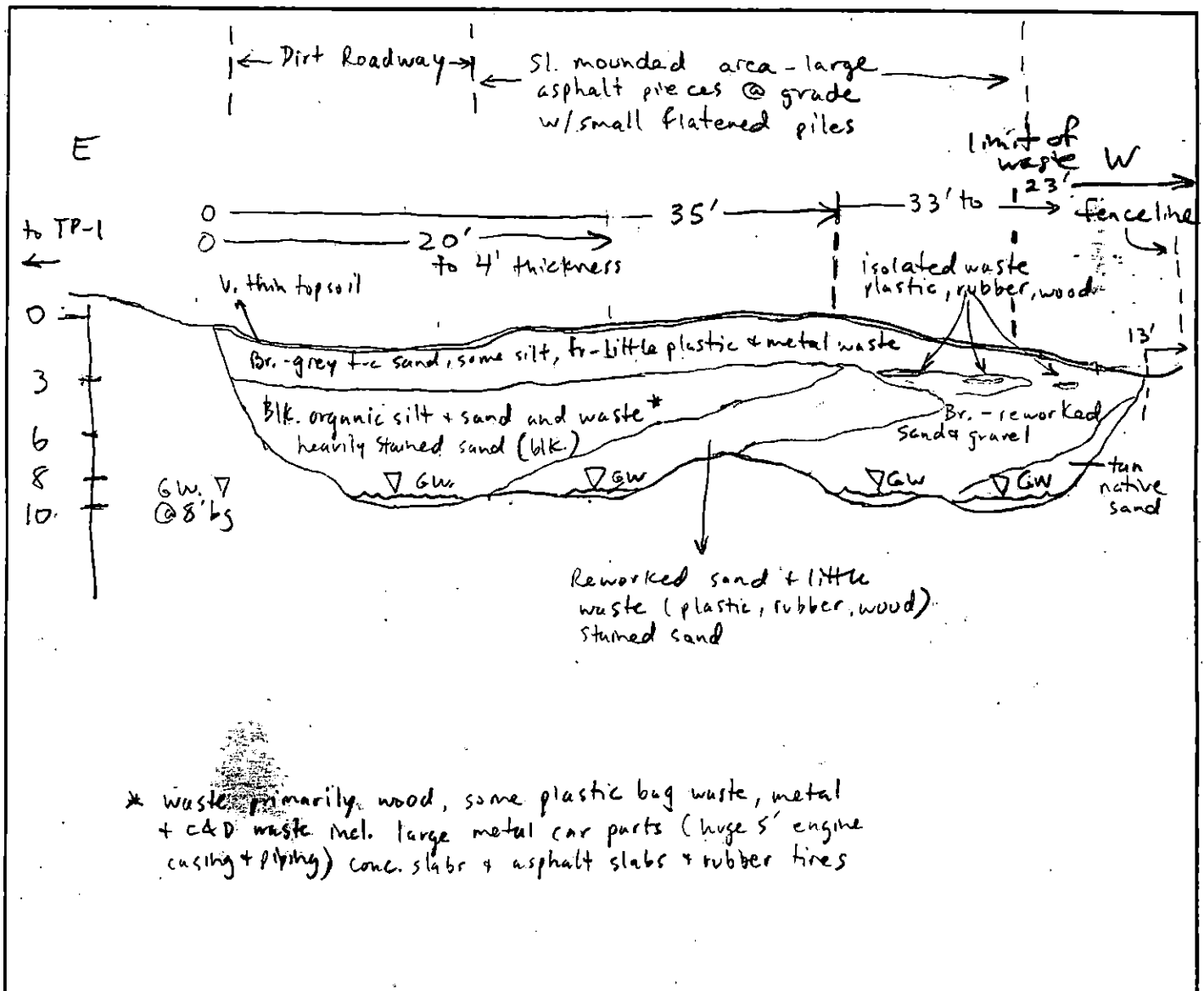
Project Sonia Road Landfill - RI

Project Number 1445 - 3B

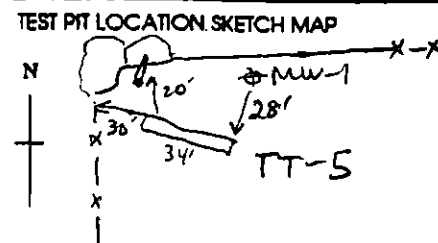
Sample(s) Interval(s) _____

Test Pit Number T.T-4

47' West of 750 N + 300 E stake



Remarks _____



TEST PIT LOG

TEST PIT NO.
TT-5

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580 E 4WD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich / D4B

START/FINISH DATE

8/11/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL) -

CONDITION OF PIT

Stable

REMARKS:

No landfill gas odor - limit of C&D waste 40' from property line

DEPTH	SAMPLE INTERVAL	%LEL O ₂ A	PID PPM SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-3'	0	0	Topsoil 3" cover w/ ^{few} tires & plastic below topsoil. Tan-br. sand w/ blue-grey chalky material (cement powdery like) 1' thick layer & stained br. sand on bottom, dry	Only 3" topsoil cover
1					3"-3' reworked sand & tr. - little waste
2					
3	3-4 1/2'	0	0	wood & br sand & silt, little metal & plastic, dry	1 1/2' of C&D waste
4					
5	4 1/2 - 8'	0	0	Native tan-br. fine sand v. moist wet @ 8' bg (G.W.)	Native sands below waste
6					
7					
8				END OF TEST PIT	maximum multi-gas reading 0-10 ppm (same as background)
9					
10					
11					
12					
13					
14					
15					

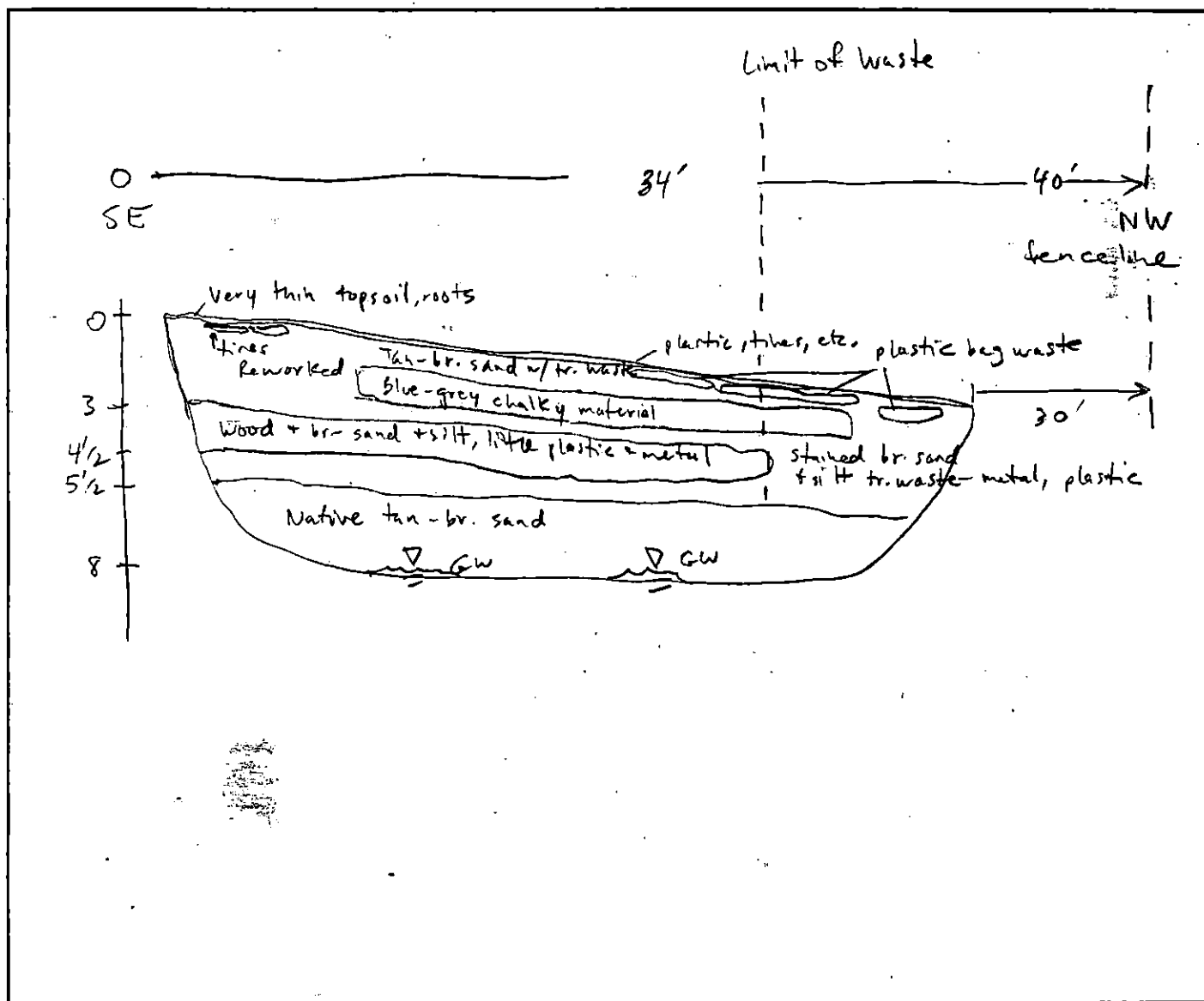
TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TT-5

30' from west fence line 20' from north border of site

In northwest corner of site

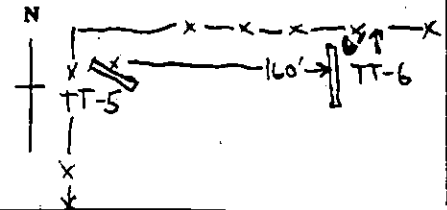


Remarks Limit of waste (primarily C&D) defined



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TEST PIT LOCATION SKETCH MAP



TEST PIT LOG

TEST PIT NO.
TT-6

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR
Case 580E 4WD Backhoe

INSPECTOR/OFFICE

K. Robins D. Obradovich

START/FINISH DATE

8/11/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL) -

CONDITION OF PIT

unstable

REMARKS:

C&D waste from fence line of n. boundary of site @ grade

DEPTH	SAMPLE INTERVAL	%CEI GVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-3'	0	Br. sand + silt w/ thin topsoil little plastic, metal, conc.	* Thin topsoil cover over C&D waste
1				
2				
3	3-10'	0	Br. sand & dk. br. organic silt, some conc. slabs, vault boxes, plastic bag waste, metal (including very large metal bin w/ conc. inside), wood, tires, cables, piping, dry	B. sand & C&D waste from 3' to 10' by
4				
5				
6				
7				
8				
9				
10				
11			* No landfill odor	
12				
13				
14				
15				
			END OF TEST PIT	maximum multigas reading is 0 ppm

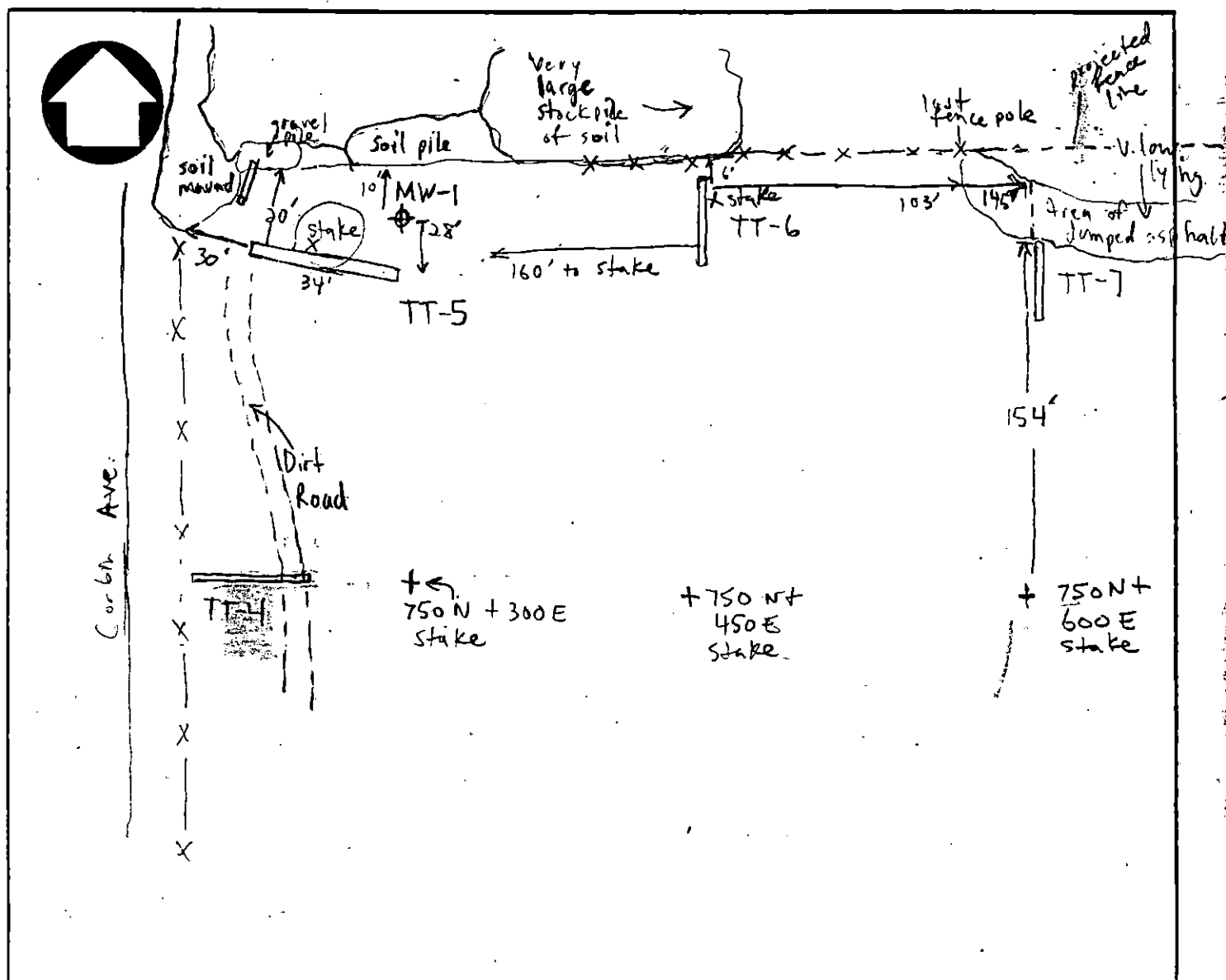
LOCATION SKETCH

Project Sonia Rd. Landfill - RI Sample Crew D. Obradovich

Sample(s) Location(s) TT-5, TT-6,

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



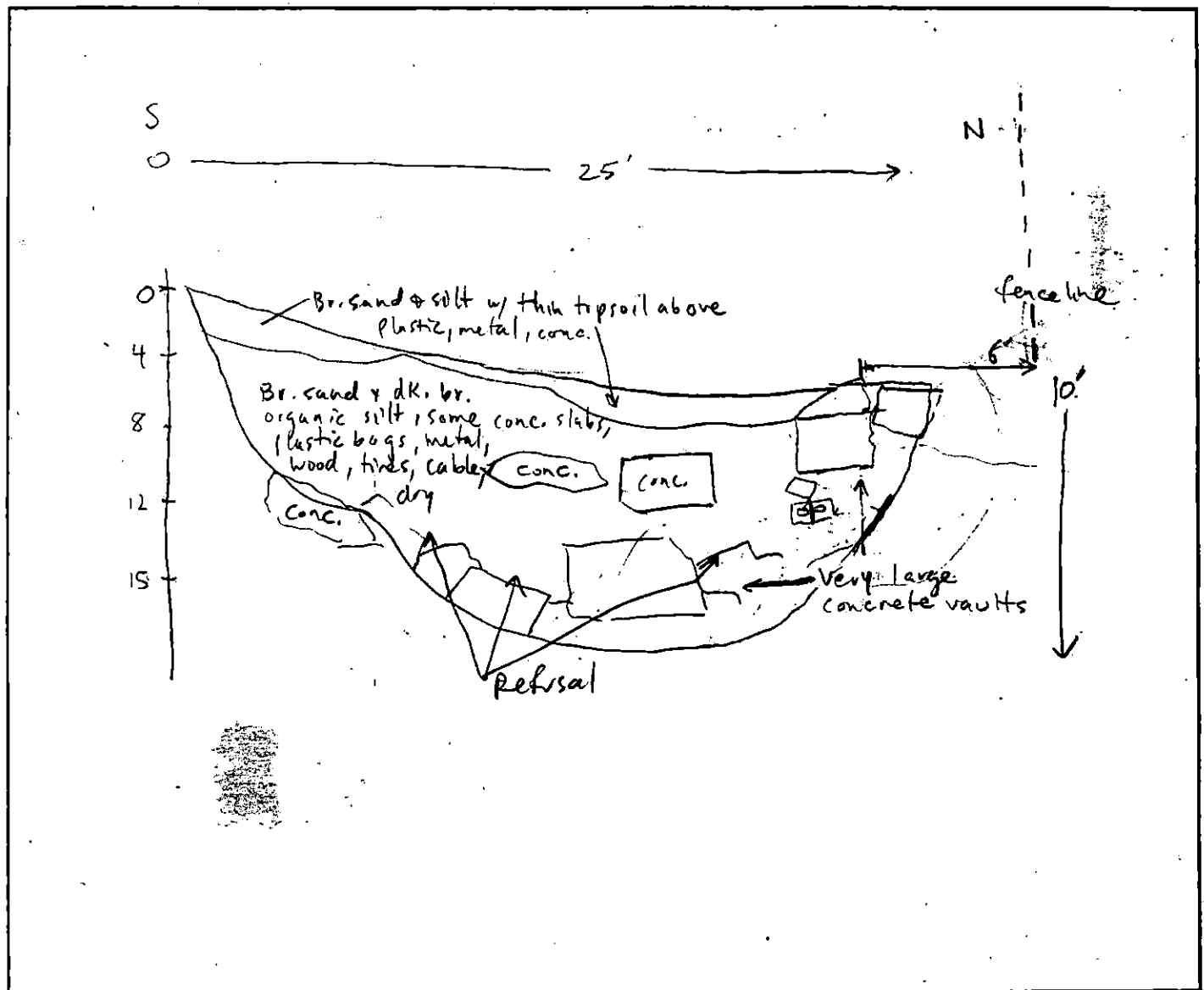
TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TT-6

8' south of N. fence line 160' east from TT-5

(can't locate 750 N + 450 E stake)



Remarks No GW. @ btm

TEST PIT PROFILE

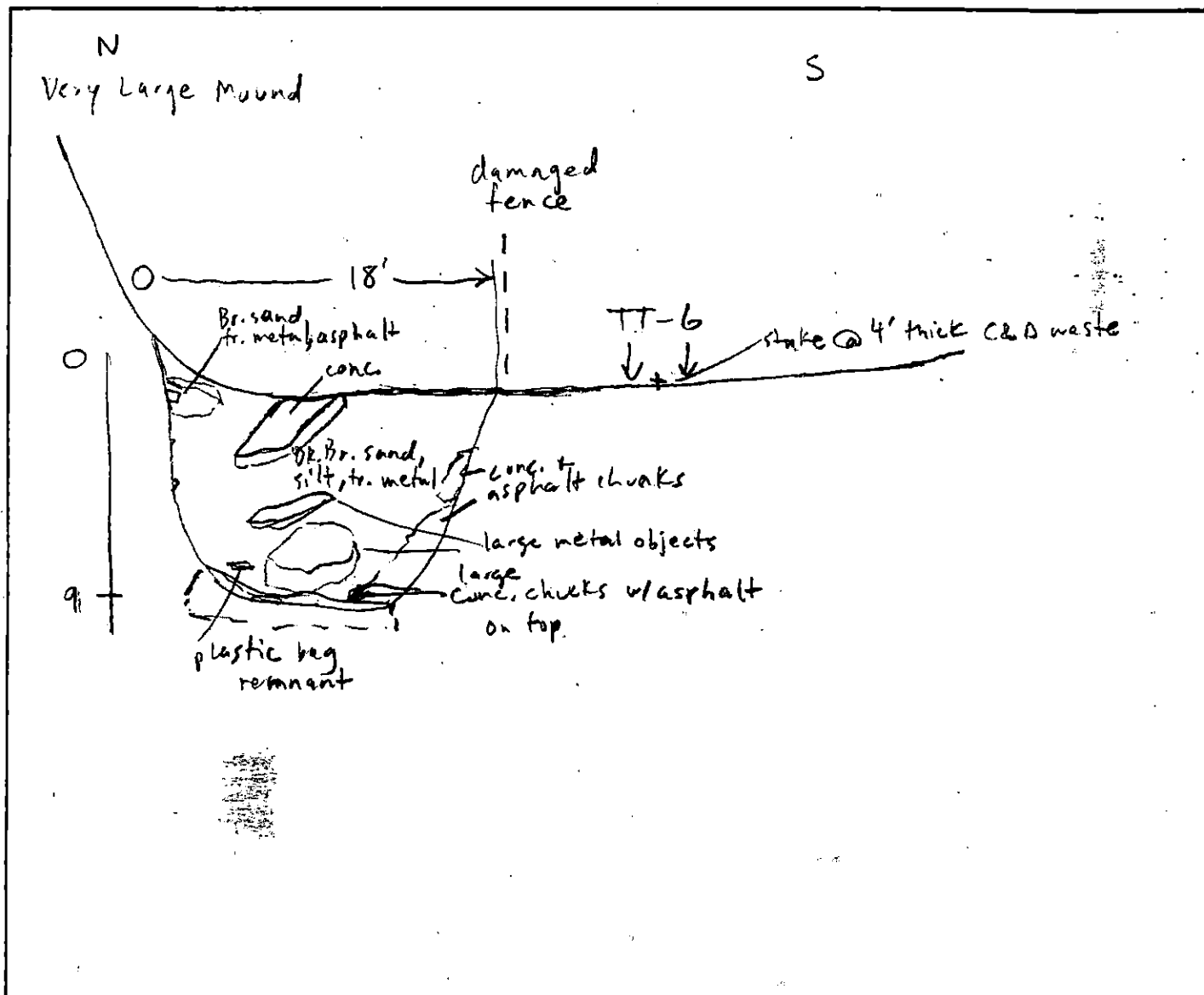
Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-6A

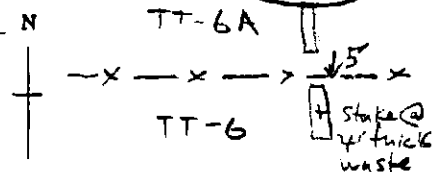
Extends north from TT-6 (22')



Remarks Large conc. slabs & asphalt slabs 9' by (may be
separate waste from that which was landfilled)

TEST PIT LOG

TEST PIT LOCATION SKETCH MAP



TEST PIT NO.
TT-6A

PROJECT NO./NAME

Sonia Rd. LF / 1445-3B

LOCATION

Sonia Rd., W. Brentwood N.Y.

EXCAVATOR/EQUIPMENT/OPERATOR

J. Palmeri / Case 680 E Backhoe / F&N

INSPECTOR/OFFICE

D. Obradovich / D&B

START/FINISH DATE

10/24/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

~~Stable~~ Very Unstable

REMARKS:

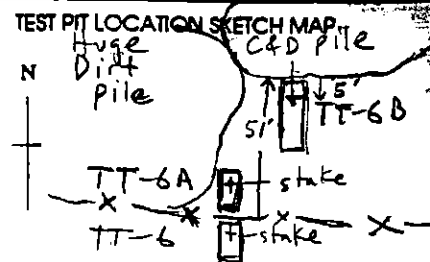
Dimensions 18' x 9' x 8' wide

DEPTH	SAMPLE INTERVAL	% LEL PID % OVA ppm SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-9'	0 0	DK. br. sand, organic silt some large conc. & asphalt slabs, large metal crushed objects, tr. plastic, wood	Mostly sand however large C&O waste
1				
2				
3				
4				
5				
6			Refusal @ 9' bg	* No PID or %LEL readings above 0
7			END OF TEST PIT @ 9' bg	
8				
9				
10				
11				
12				
13				
14				
15				



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TEST PIT LOG



TEST PIT NO.
TT-6B

PROJECT NO./NAME

Sonia Rd. LF / 1445-3B

LOCATION

Sonia Rd., W. Brentwood N.Y.

EXCAVATOR/EQUIPMENT/OPERATOR

~~J. Palmeri / Case 680 E Backhoe~~ / F&N / B. Durham

INSPECTOR/OFFICE Komatsu

D. Obradovich / D&B

START/FINISH DATE

10/3/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT

(FT. ABOVE MSL) Dimensions 29' long x 16' deep x 6' wide

CONDITION OF PIT

Unstable

REMARKS:

significant
waste @ 11-16' bg (near property line)

DEPTH	SAMPLE INTERVAL	% LEL	PID OVA ppm	DESCRIPTION OF MATERIALS	REMARKS
0	0-4 1/2'	0	0	N. side of trench B. sand + C&D (conc., some asphalt)	No cover soil on n. side
1				S. side of trench - topsoil;	Thin cover soil over waste on s. side
2				tr. plastic over gray-dk. br. sand (reworked) w/ silt	
3				little asphalt, conc., tr. plastic + metal	
4	4 1/2 - 9'	0	0	Gray - dk. br. sand, silt (reworked), little asphalt, conc., tr. plastic + metal	Mostly sand little C&D
5					
6					
7					
8	9-11'	0	0	plastic bag waste over large conc. slab. (former road?)	C&D and waste
9					
10					
11	11-16+'	0	0	Tan and br. sand and plastic bag waste, tires, wood, metal scraps, moderate landfill odor	* No readings above 0 on PID + Multi-gas meter
12					
13					
14					
15					

END OF TEST PIT @ 16+ 'bg

TEST PIT PROFILE

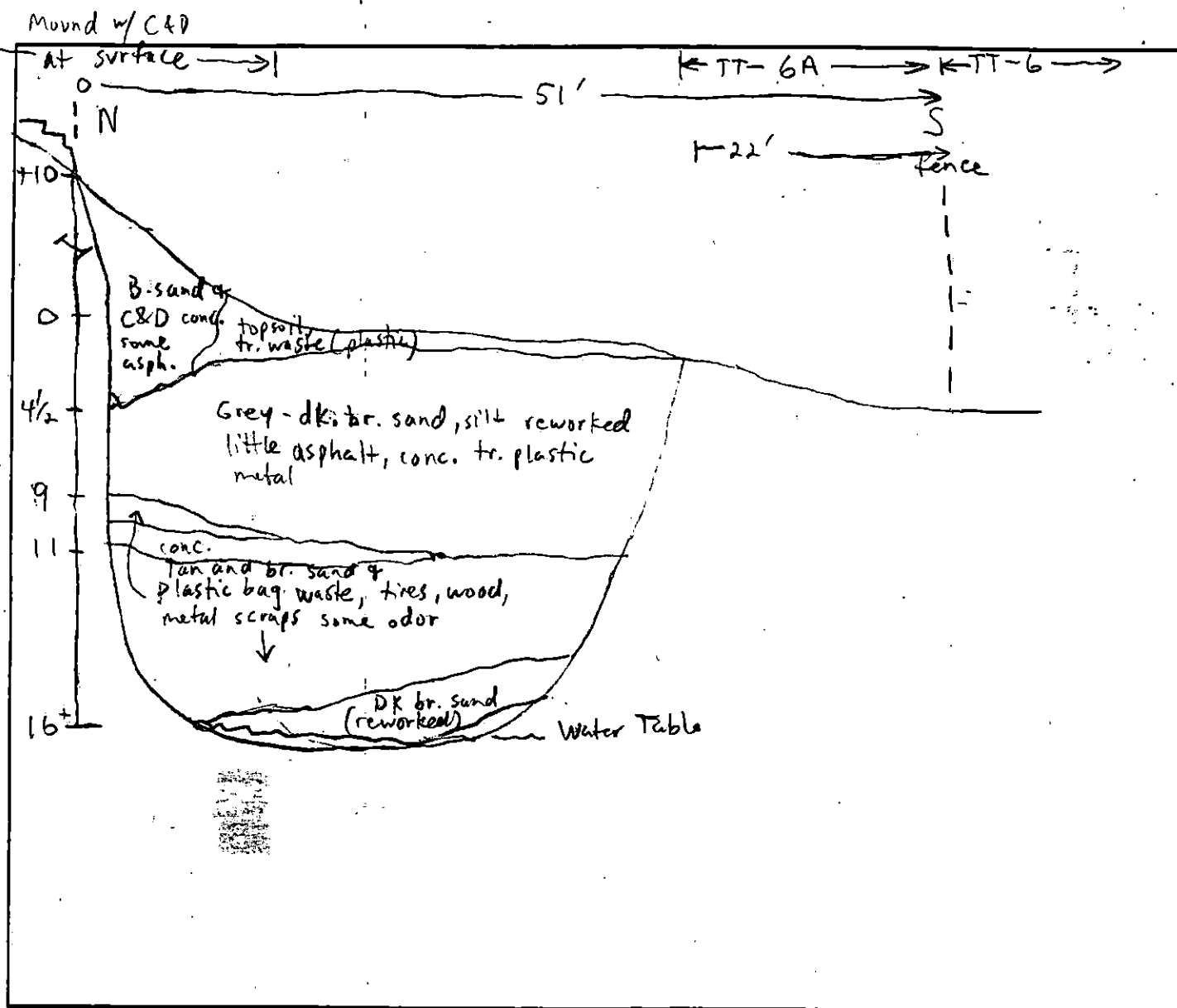
Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-~~6~~6B

51' north of fence just east of TT-6 location

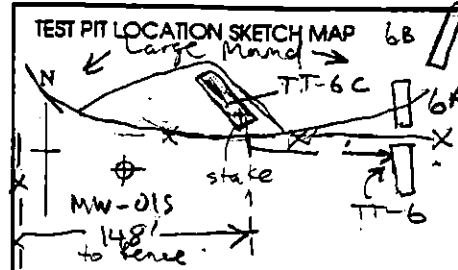


Remarks Waste continues @ north end of trench @ 9-16' by



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TEST PIT LOG



TEST PIT NO.
TT-6C

PROJECT NO./NAME

Sonia Rd. LF / 1445-3B

LOCATION

Sonia Rd., W. Brentwood N.Y.

EXCAVATOR/EQUIPMENT/OPERATOR

~~J. Palomari / Case 645 Backhoe~~ / F&N / Komatsu / B. Durham

INSPECTOR/OFFICE

D. Obradovich / D&B

START/FINISH DATE

10/5/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT

(FT. ABOVE MSL)

Dimensions: 26' long x 8' deep x 8' wide

CONDITION OF PIT

Unstable

REMARKS:

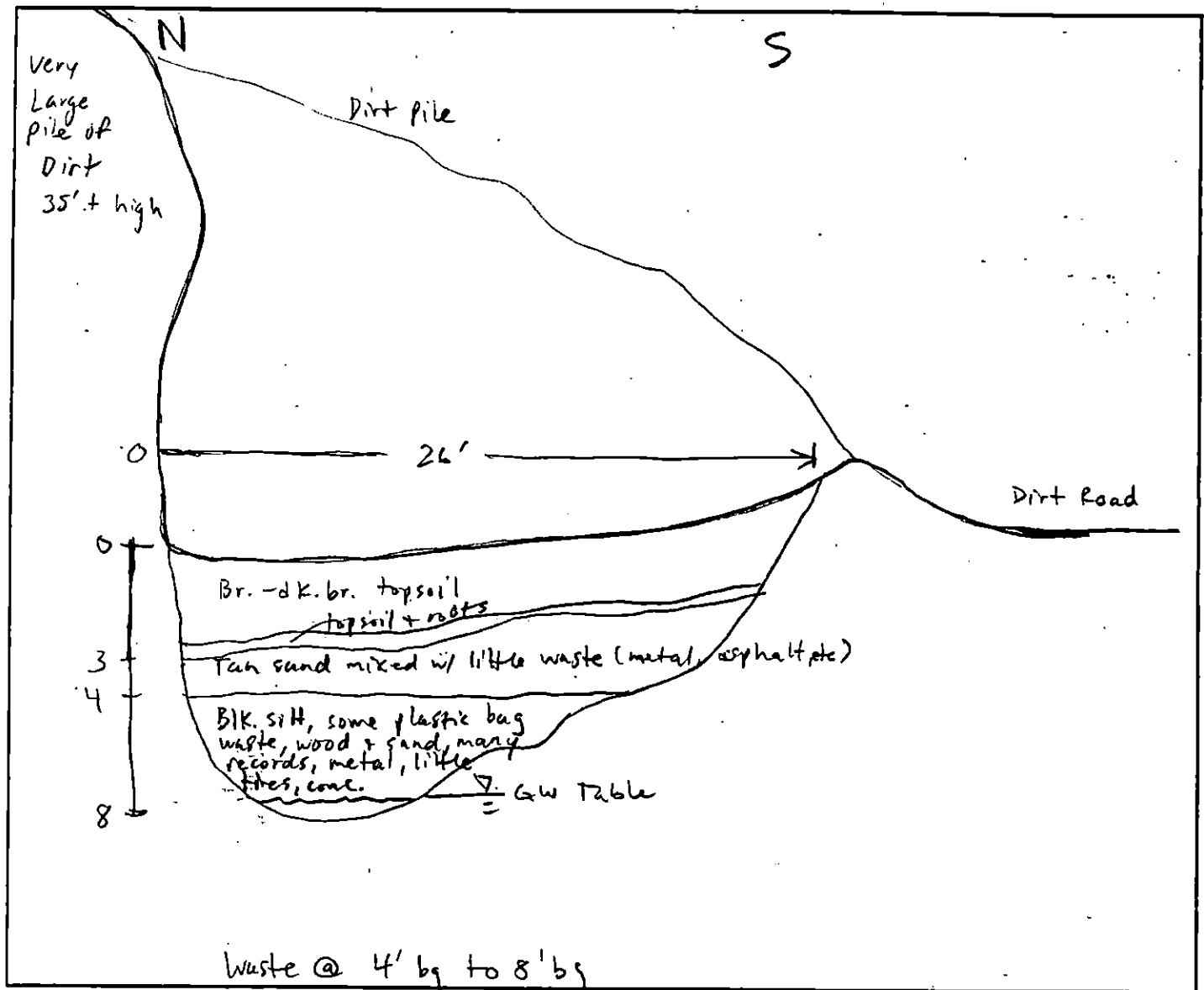
DEPTH	SAMPLE INTERVAL	%LEL OVA SCREEN	PID PPM	DESCRIPTION OF MATERIALS	REMARKS
0	0-3'	0	0	Br.-dk. br. topsoil over	3' cover
1				original layer of topsoil &	
2				roots	
3	3-4'	0	0	Tan sand mixed w/ some C&D	Add'l cover - not
4				waste	
5	4-8'	0	0	Blk. silt, some plastic bag	waste down to
6				waste, wood & sand, many	
7				records, metal, tires	
8				END OF TEST PIT @ 8'bg	* No readings above 0 w/ multigas & PID meters
9				G.W. table @ 8'bg	
10				* Waste not deposited below	
11				G.W. table	
12					
13					
14					
15					

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

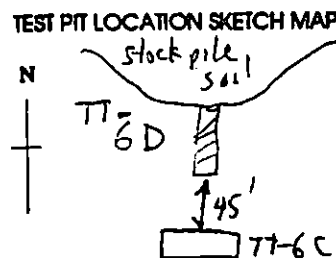
Sample(s) Interval(s) _____ Test Pit Number TT-~~6~~ 6C

143' East of West boundary fence ^{site} 55' west of TT-6



Remarks Waste continues north past trench- did not define
limit to the north - large mound restricts further trenching
to the north.

TEST PIT LOG



TEST PIT NO. **TT-6D**

PROJECT NO./NAME

1445-38 Sunia Road Landfill

LOCATION

NE corner of property

EXCAVATOR/EQUIPMENT/OPERATOR

Bobby / F&N

INSPECTOR/OFFICE

Keith Robins / D+B

START/FINISH DATE

1/14/98

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL) **NA**

CONDITION OF PIT

unstable

REMARKS:

located 45' North of TT-6C

DEPTH	SAMPLE INTERVAL	PIT GVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0			(0-1 1/2)	<u>Waste 0-12'</u>
1	—	0.0	Garbage with soil cover	
2			(1 1/2-12')	
3		0.0	Waste, with tires,	
4	—		plastic, wood, tree stumps,	
5			concrete, wire, rubber,	
6			carpet, rugs, records,	
7			mixed with sand and gravel	
8				
9				
10				
11				
12			12' Sand and gravel	NATIVE material
13	—	0.0	Loose	
14			WATER TABLE at (12')	
15				

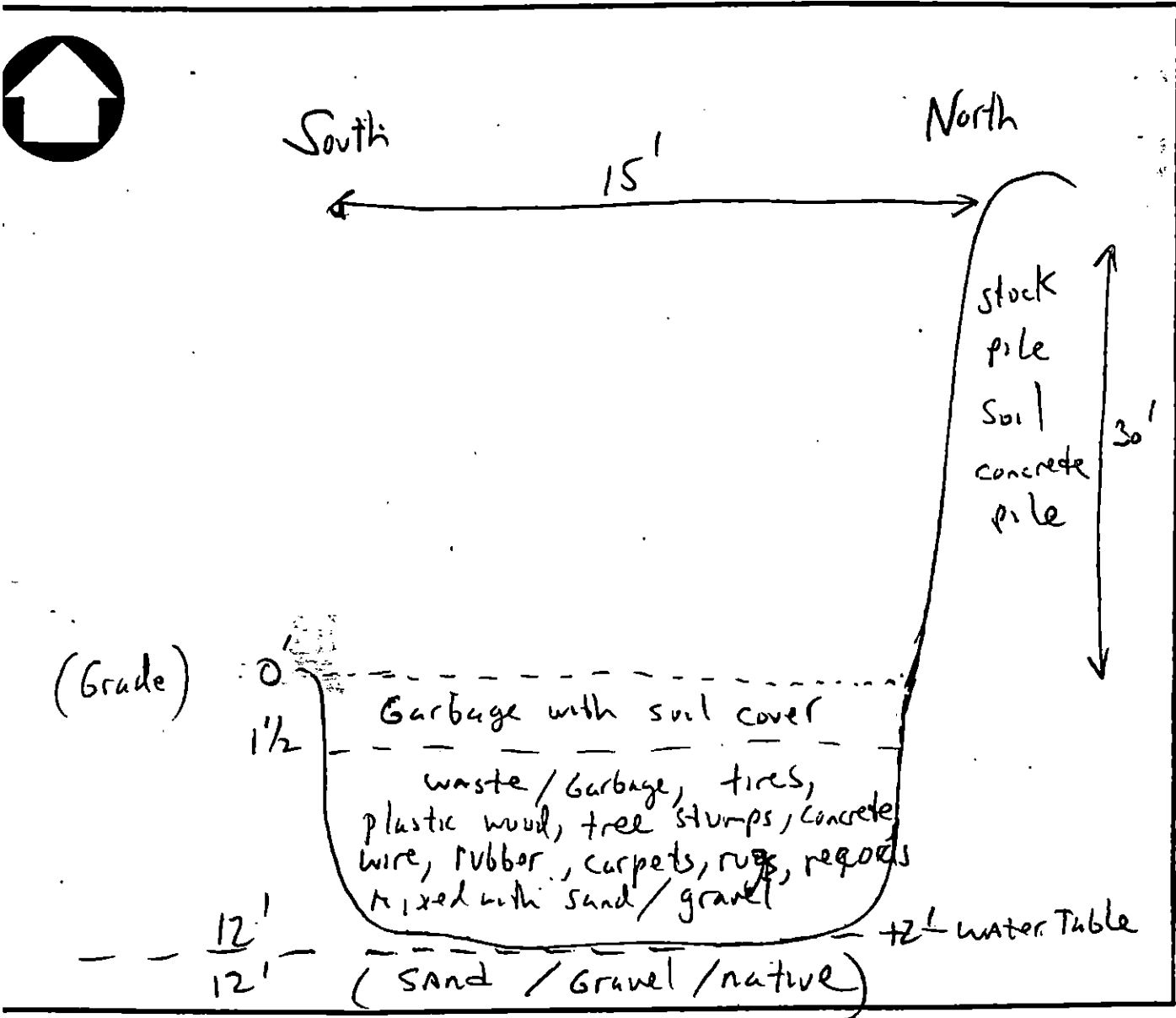
TEST PIT PROFILE

Project Sonic Road Landfill Sample Crew Keith Robins

Sample(s) Location(s) Number # TT-6D

Sample(s) and/or Well Number(s) located 45 Feet north of TT-6C

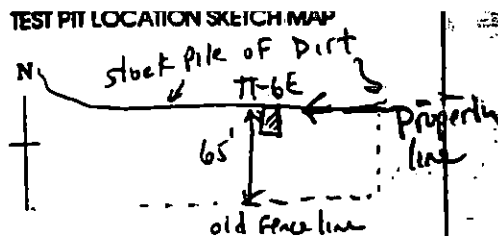
Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.





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TEST PIT LOG



TEST PIT NO. **TT-6E**

PROJECT NO./NAME

1445-3B / Sunia Road Landfill

LOCATION

65' North of old fence line

EXCAVATOR/EQUIPMENT/OPERATOR

Bobby / F&N

INSPECTOR/OFFICE

Keith Robins / D+B

START/FINISH DATE

1/14/98

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL) **NA**

CONDITION OF PIT

Unstable

REMARKS:

NE corner of property / adjacent to stockpile soil

DEPTH	SAMPLE INTERVAL	~~PIT~~ ~~GRA~~ SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	—	0.0	0-3' Sand, concrete, asphalt	
1	—			
2	—			
3	—			
4	—	0.0	(3-10') <u>WASTE</u> , plastic, concrete, rubber, tires, metal scraps, wood, lumber, mixed with sand and gravel.	waste slopes from North to South from (3-10') in depth below grade
5	—			
6	—			
7	—			
8	—			
9	—	0.0	10-13' Brown-Tan sand and gravel	NATIVE MATERIAL
10	—		Encountered water at 13'	
11	—			
12	—			
13	—			
14	—			
15	—			

TEST PT PROFILE

Object

Sonia Road

Sample Crew

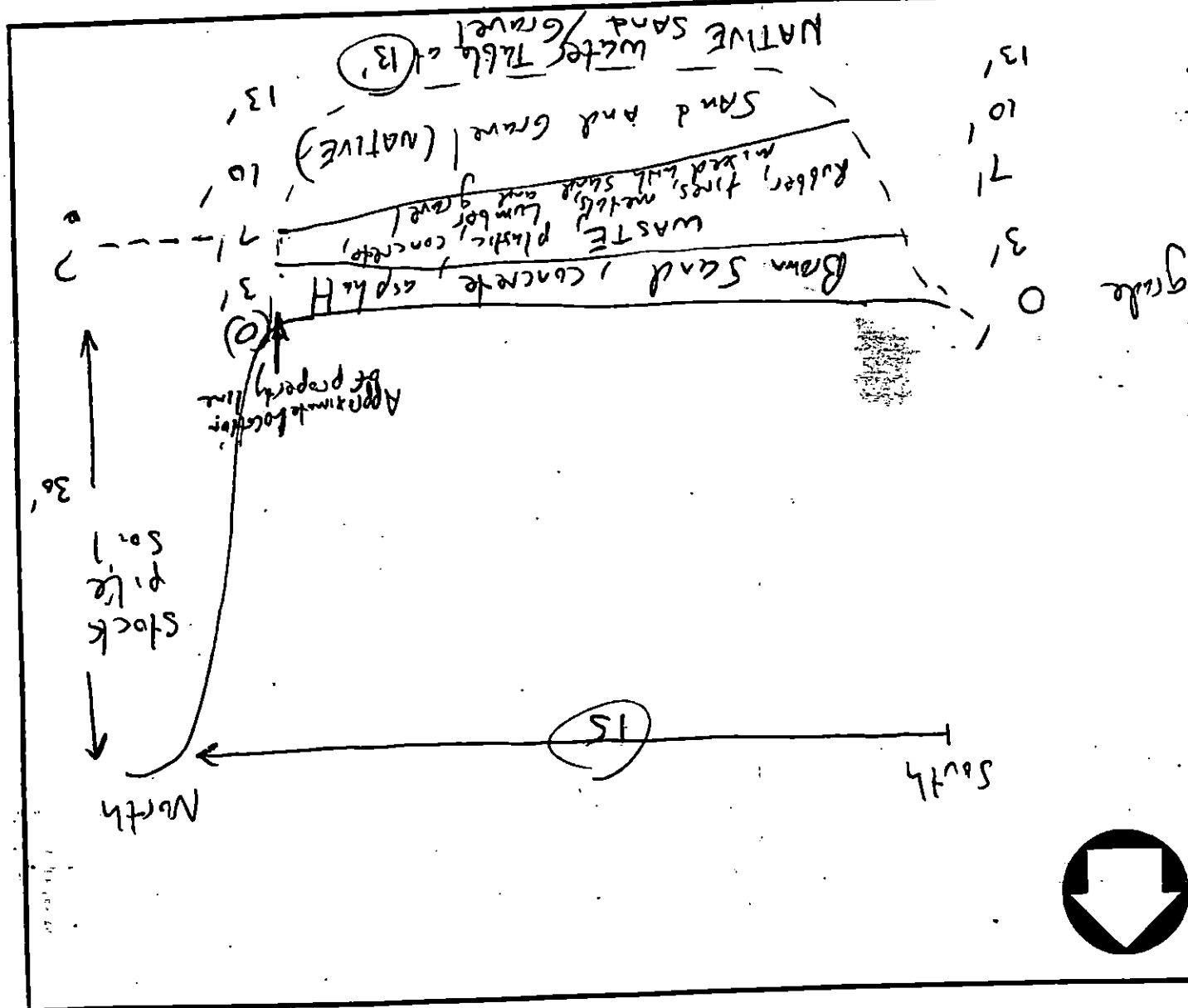
Keith Robbins

Sample(s) Location(s)

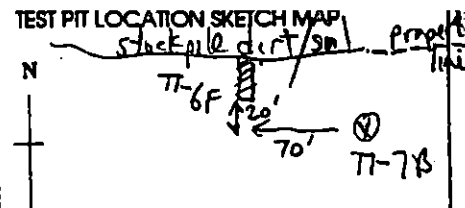
Example(s) and/or Well Number(s)

located 65 FT North of old fence property line
Limit of waste not defined / past property boundary

location of sample points, wells, borings, etc., with reference to three permanent reference points. Measure all distances, clearly label roads, wells and permanent features.



TEST PIT LOG



TEST PIT NO. TT-6F	
PROJECT NO./NAME 1445-3B / Sonia Road Landfill	LOCATION Adjacent to property line 70' west / 20' N of TT-7B.
EXCAVATOR/EQUIPMENT/OPERATOR Bobby / F&N	
INSPECTOR/OFFICE Keith Robins / D+B	START/FINISH DATE 1/14/98
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL) NA	CONDITION OF PIT Unstable
REMARKS: Located NE corner of property	

DEPTH	SAMPLE INTERVAL	OVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0		D.O.	0-1' waste, plastic, metal, concrete	(limit of waste) / <i>property boundary</i>
1			(1'-13') waste slopes towards the south approximately 20' horizontally.	NATIVE Sand Tan / with gravel present at property boundary
2			waste includes - plastic, lumber rebar, metal, tires, concrete mixed with sand / gravel	
3		D.O.		
4				
5				
6				
7				
8				
9				
10				
11				
12				
13			water table at 13'	
14				
15				

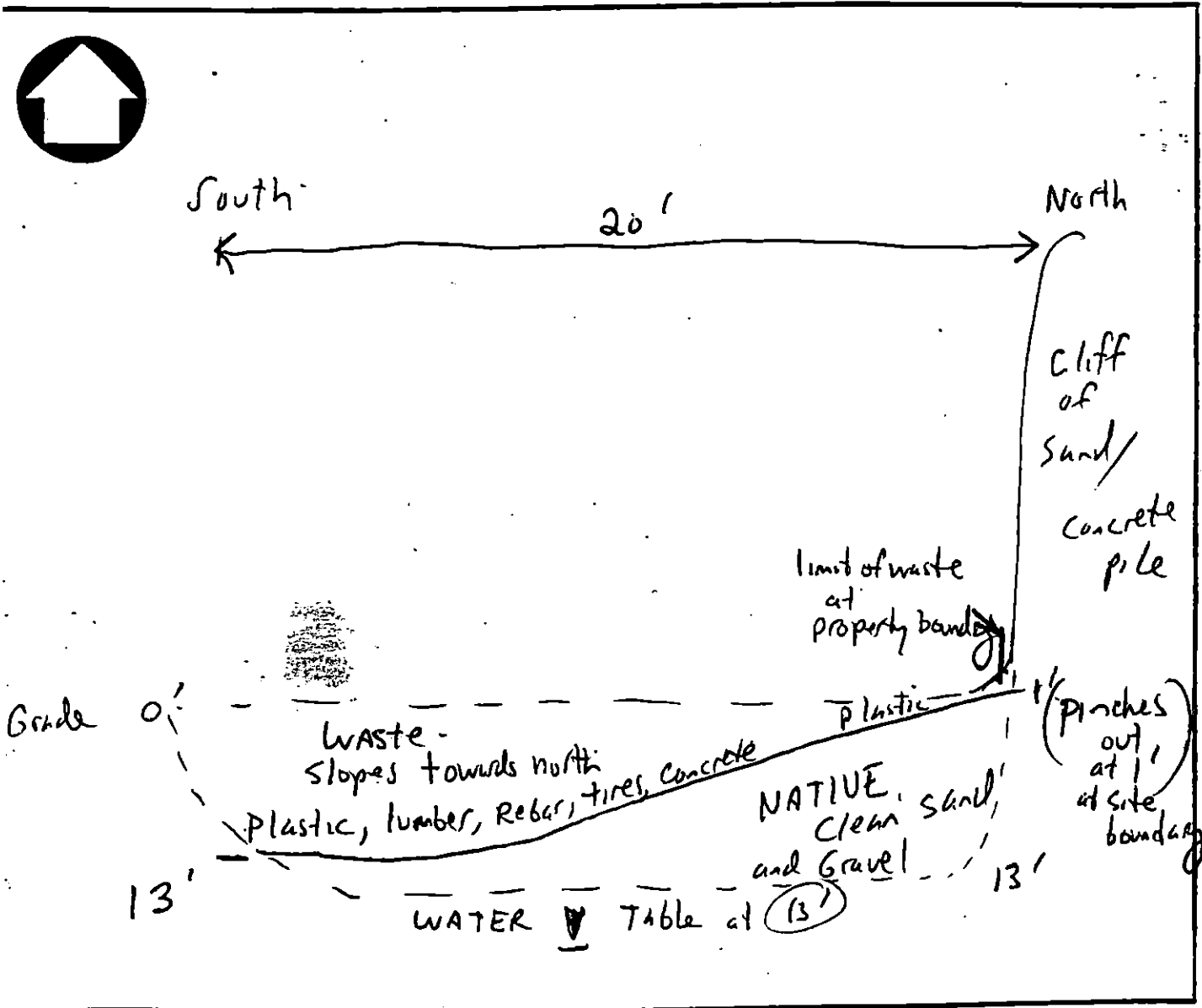
TEST PIT PROFILE

Project Sonic Road Land Fill Sample Crew Keith Robins

Sample(s) Location(s) Number TT-6F

Sample(s) and/or Well Number(s) 70' ~~west~~ of TT-7B:
located at property boundary on North side

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.

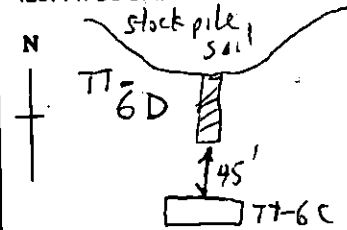




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TEST PIT LOG

TEST PIT LOCATION SKETCH MAP



TEST PIT NO. TT-6D

PROJECT NO./NAME

144538/ Santa Road Landfill

LOCATION

NE corner of property

EXCAVATOR/EQUIPMENT/OPERATOR Bobby / F&N

INSPECTOR/OFFICE Keith Robins / D+B

START/FINISH DATE

1/14/98

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL) NA

CONDITION OF PIT
unstable

REMARKS: located 45' North of TT-6C

DEPTH	SAMPLE INTERVAL	PTS ~~OVA~~ SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0			(0-1 1/2)	<u>Waste 0-12'</u>
1	—	0.0	Garbage with soil cover	
2			(1 1/2-12')	
3		0.0	Waste, with tires,	
4	—		plastic, wood, tree stumps,	
5			Concrete, wire, rubber,	
6			Carpet, rugs, records,	
7			mixed with sand and gravel.	
8				
9				
10				
11				
12			12' Sand and gravel	NATIVE material
13	—	0.0	Loose	
14			WATER TABLE at (12')	
15				

TEST PIT PROFILE

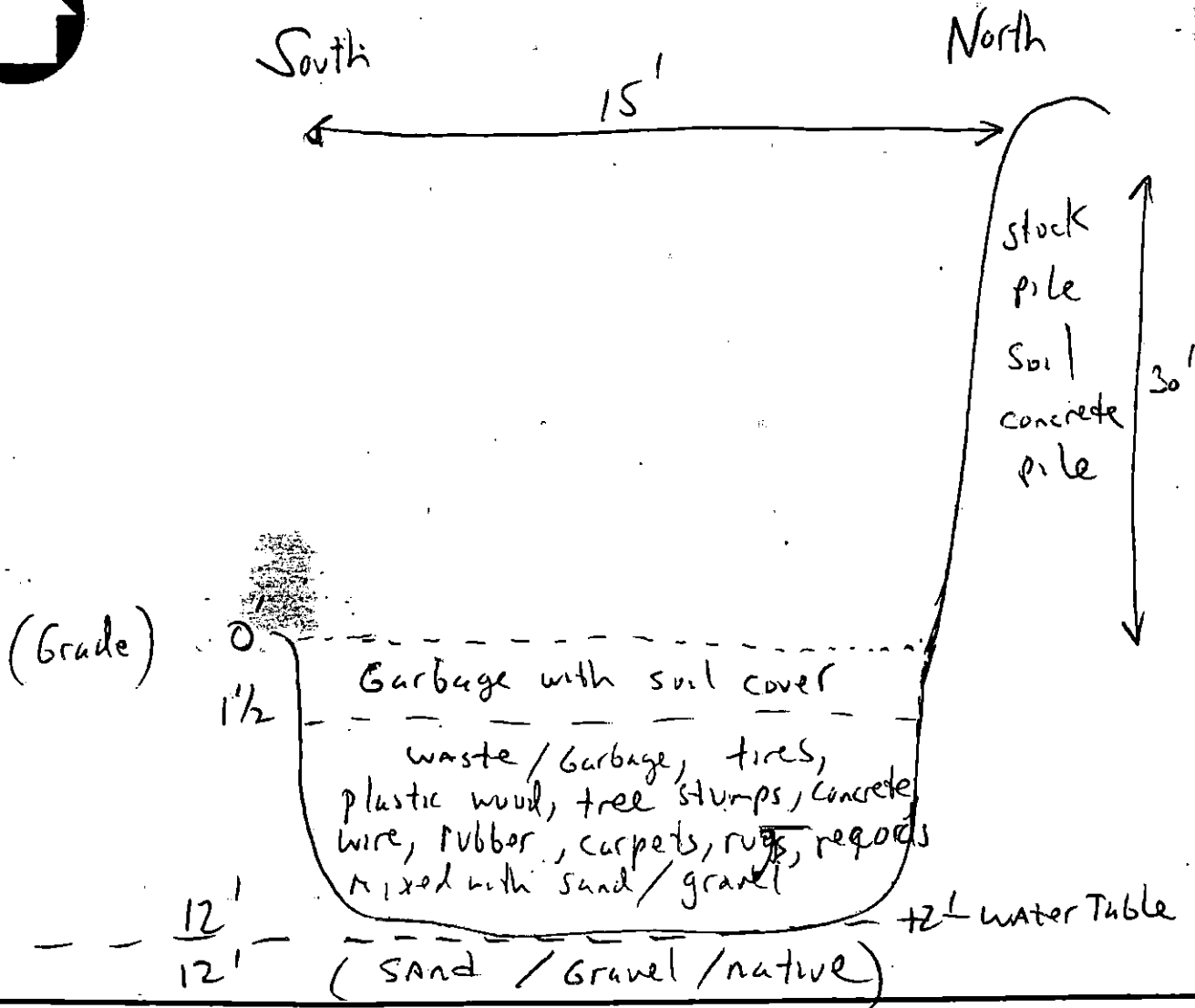
Project Sonja Road Landfill Sample Crew Keith Robins

Sample(s) Location(s) Number # TT-6D

Sample(s) and/or Well Number(s) _____

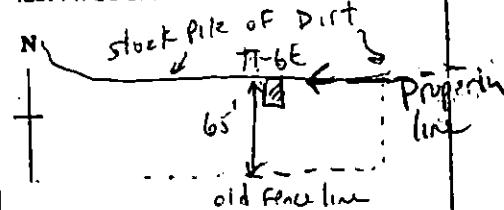
located 45 Feet north of TT-6C

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



TEST PIT LOG

TEST PIT LOCATION SKETCH MAP



TEST PIT NO. **TT-6E**

PROJECT NO./NAME
1445-3B / Sunco Road Landfill

LOCATION
65' North of old fence line

EXCAVATOR/EQUIPMENT/OPERATOR
Bobby / F&N

INSPECTOR/OFFICE
Keith Robins / D+B

START/FINISH DATE

1/14/98

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL) **NA**

CONDITION OF PIT
Unstable

REMARKS: **NE corner of property / adjacent to stockpile soil**

DEPTH	SAMPLE INTERVAL	PIT GVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	—	0.0	0-3' Sand, concrete, asphalt	
1	—			
2	—			
3	—	0.0	(3-10') <u>WASTE</u> , plastic, concrete, rubber, tires, metal scraps, wood, lumber, mixed with sand and gravel.	waste slopes from North to South from 0 - 10' in depth below grade
4	—			
5	—			
6	—			
7	—			
8	—		10-13' Brown-Tan sand and gravel	NATIVE MATERIAL
9	—	0.0		
10	—		Encountered water at 13'	
11	—			
12	—			
13	—			
14	—			
15	—			

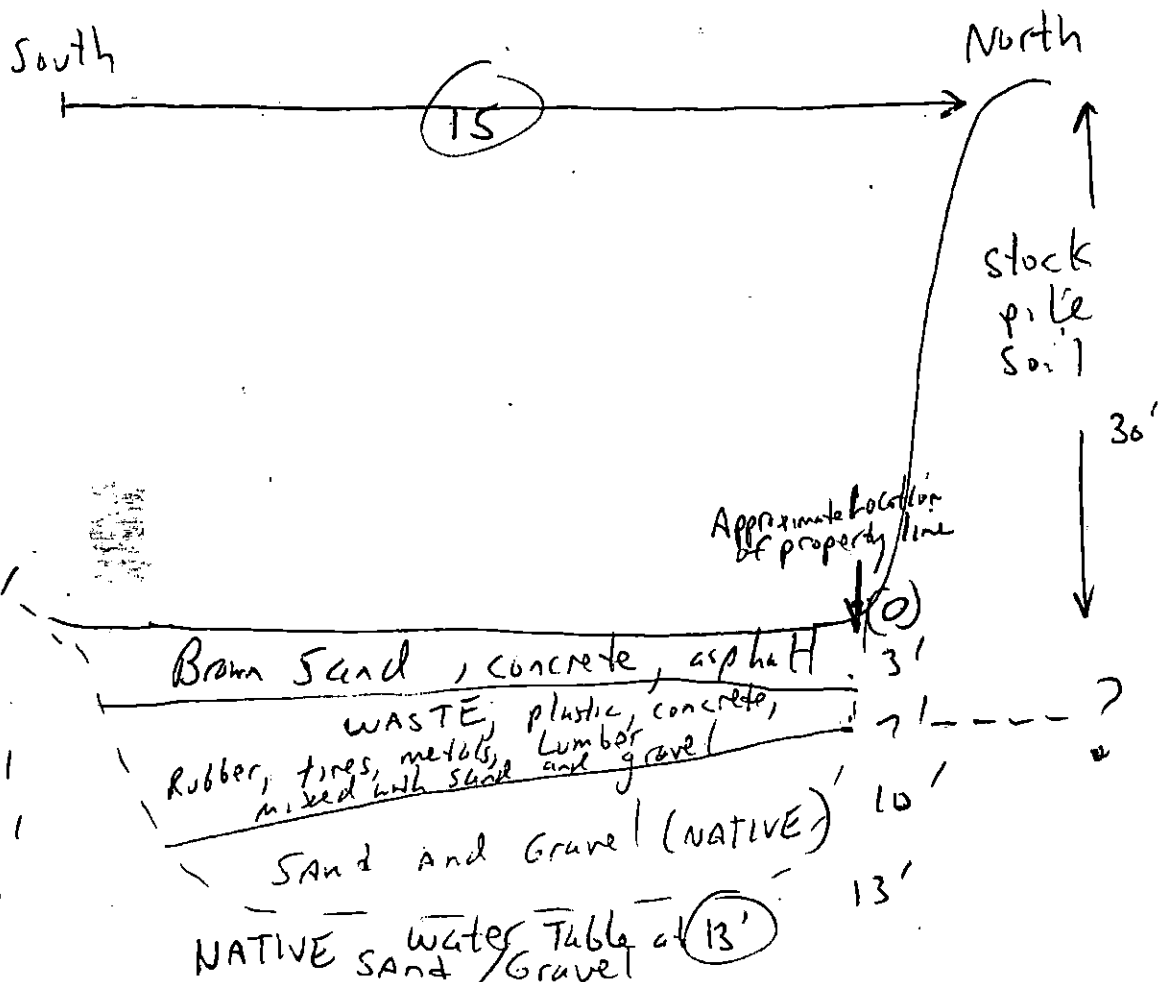
TEST PIT PROFILE

Project Sonia Road Sample Crew Keith Robins

Sample(s) Location(s) Number T7-6E

Sample(s) and/or Well Number(s) Located 65 FT North of old fence property line
Limit of waste not defined/past property boundary

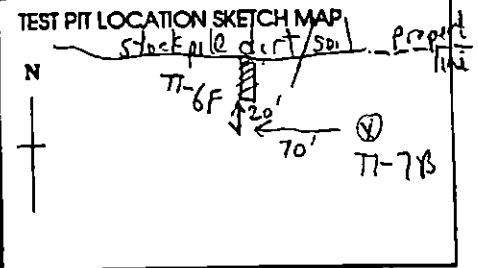
Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.





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TEST PIT LOG



TEST PIT NO. 77-6F

PROJECT NO./NAME

1445-3B / Sonin Road Landfill

LOCATION

Adjacent to property line 70' west / 20' N of TT-7B.

EXCAVATOR/EQUIPMENT/OPERATOR

Bobby / F&N

INSPECTOR/OFFICE

Keith Robins / DHB

START/FINISH DATE

1/14/98

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

NA

CONDITION OF PIT

Unstable

REMARKS:

Located NE corner of property

DEPTH	SAMPLE INTERVAL	OVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0		D.O.	0-1' waste, plastic, metal, concrete	(limit of waste) / property boundary
1				
2			(1'-13') waste slopes towards the south approximately 20' horizontally.	NATIVE sand Tan / with gravel present at property boundary
3		D.O.		
4				
5			waste includes - plastic, lumber rebar, metal, tires, concrete mixed with sand / gravel	
6				
7				
8				
9				
10				
11				
12				
13			water table at 13'	
14				
15				

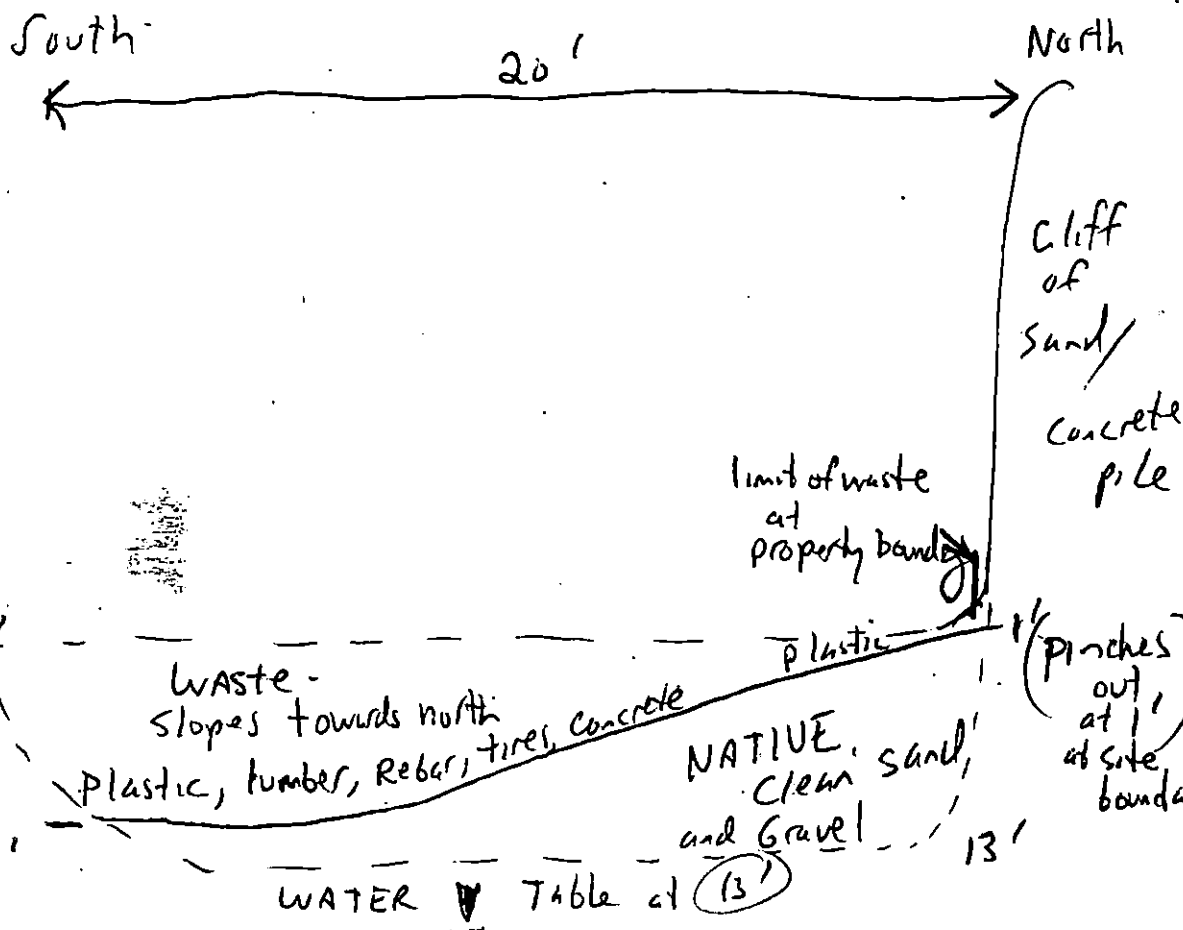
TEST PIT PROFILE

Project Sonia Road Landfill Sample Crew Keith Robins

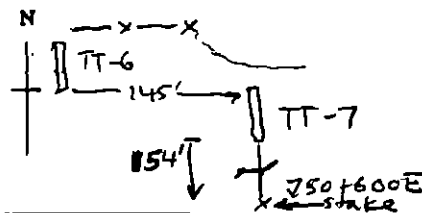
Sample(s) Location(s) Number TT-6F

Sample(s) and/or Well Number(s) 70' west of TT-7B
located at property boundary on North side

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



TEST PIT LOG



TEST PIT NO. TT-7	
PROJECT NO./NAME 1445 / Sonia Road Landfill - RI	LOCATION Sonia Rd. Landfill, W. Brentwood, NY.
EXCAVATOR/EQUIPMENT/OPERATOR Case 580E 4WD Backhoe / B. Durham	
INSPECTOR/OFFICE K. Robins D. Obradovich / D&B	START/FINISH DATE 8/11/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT Unstable
REMARKS: Waste under topsoil	

DEPTH	SAMPLE INTERVAL	70% LEL PIP O2A ppm SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-3'	0	Topsoil + roots (3")	Thin 3" cover over C&D waste
1			Concrete slabs + sand	
2			reworked sand w/ metal & tr. asphalt	
3	3-7'	0	Reworked sand, some gravel & C&D waste (conc. metal tr. asphalt)	C&D waste & sand
4				
5				
6				
7	7-10'	0	Blue chalky material w/ reworked sand	C&D waste
8				
9				
10			END OF TEST PIT	
11				
12				
13				
14				
15				

TEST PIT PROFILE

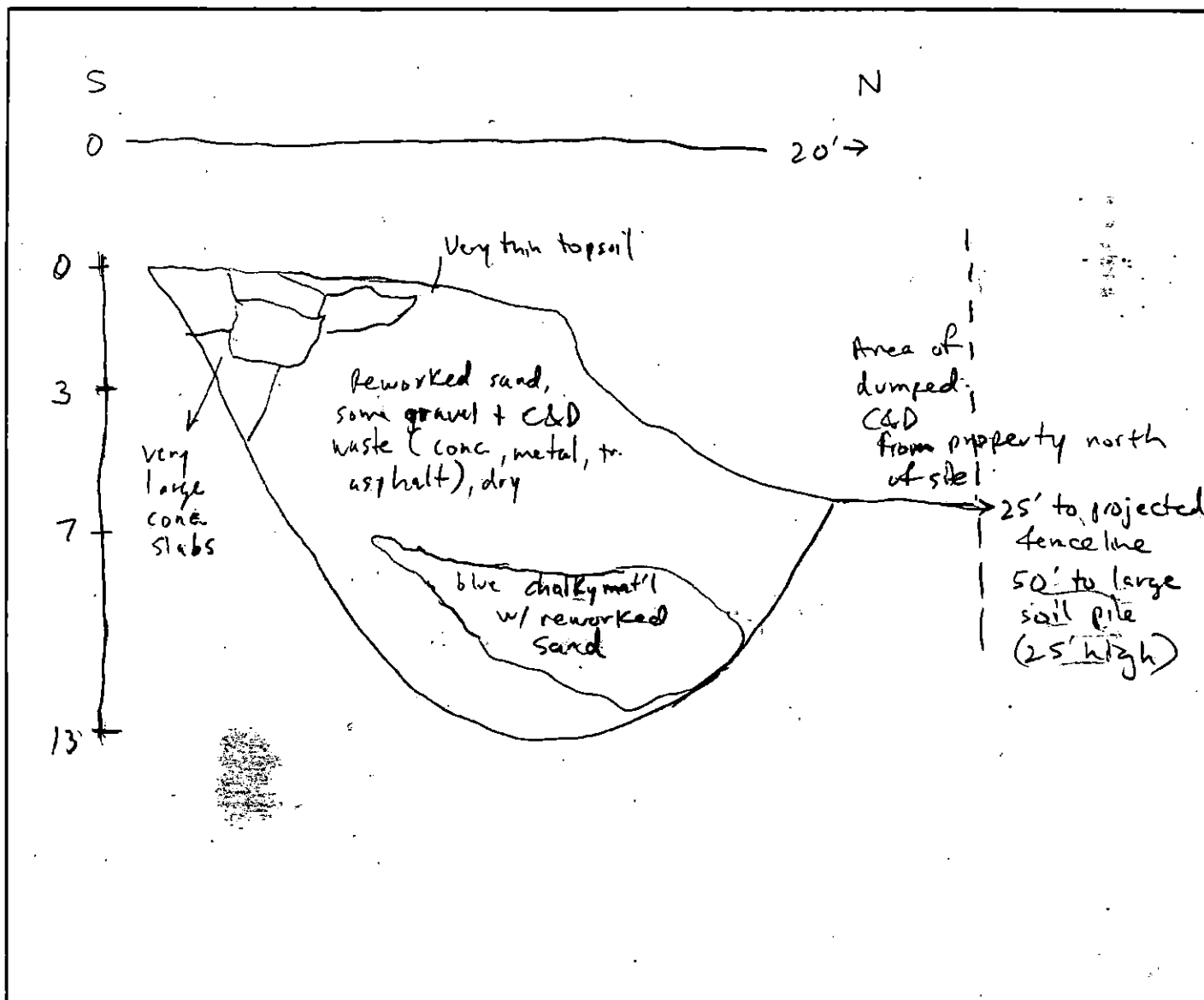
Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-7

154' North of 750' N + 600' E to 25' south of fence
on north border of site (projected fence line)

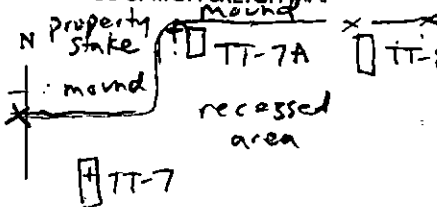


Remarks _____



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TEST PIT LOCATION SKETCH MAP



TEST PIT LOG

TEST PIT NO. TT-7A	
PROJECT NO./NAME Sonja Rd. LF / 1445-3B	LOCATION Sonja Rd., W. Brentwood N.Y.
EXCAVATOR/EQUIPMENT/OPERATOR ~~V. Palamini / CAT 620 L backhoe~~ / F&N / Komatsu / B. Durham	
INSPECTOR/OFFICE D. Obradovich / D&B	START/FINISH DATE 10/4/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL) Dimensions 15' long X 8' deep X 8' wide	CONDITION OF PIT Unstable
REMARKS: Little C&D over native mat'l	

DEPTH	SAMPLE INTERVAL	LEL PIP % OVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-2'	0	Br. sand + asphalt debris- mixed over dk. br. sand w/ little asphalt + gravel	C&D
1				
2				
3	2-3+	0	Tan sand + gravel	Reworked sand
4	3+-8'	0	Native tan sand	Native
5				
6				
7				
8			END OF TEST PIT @ 8' lg	* No readings above 0 on multi-gas + PID meters
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

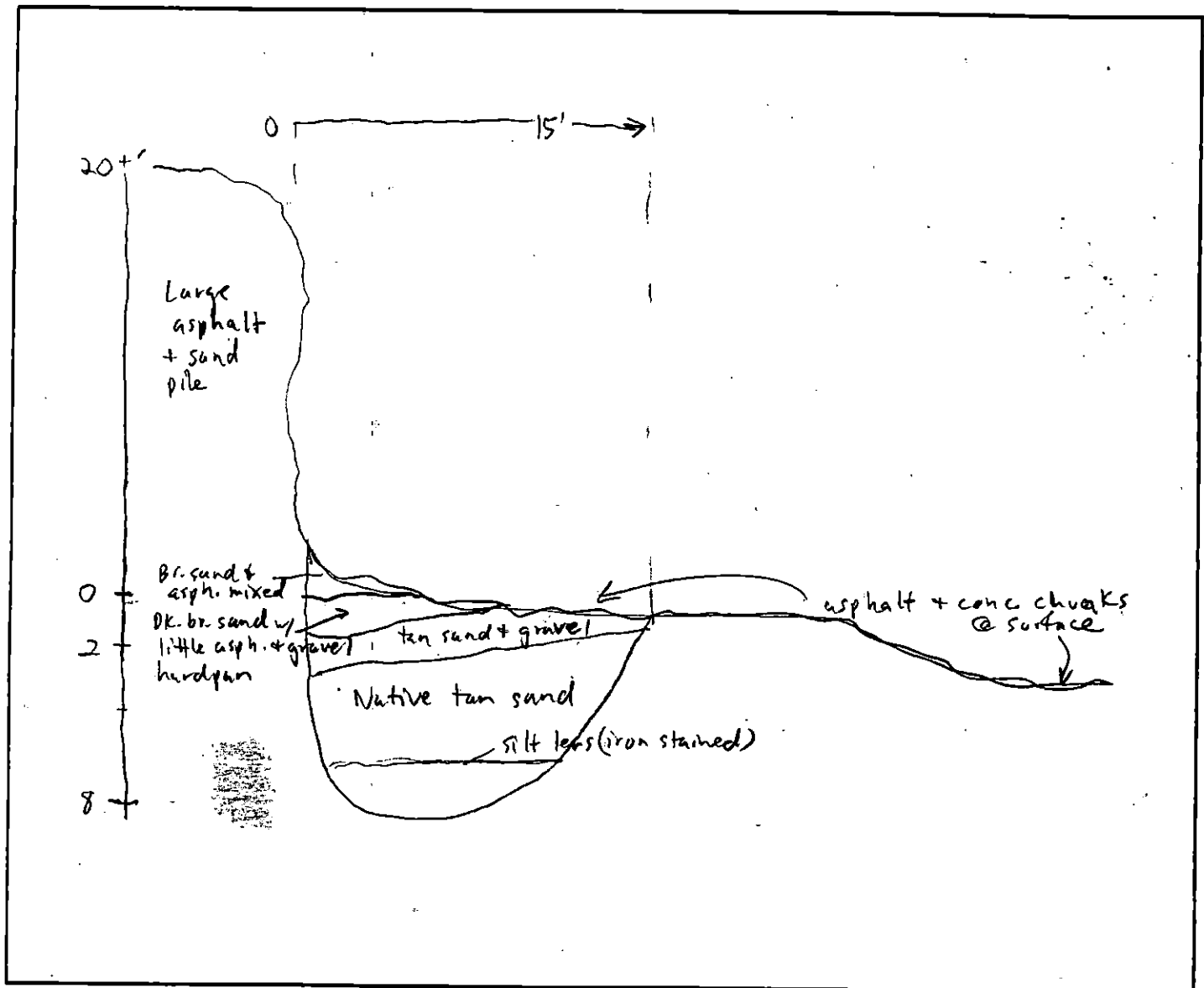
Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-7A

NE of TT-7 directly west of TT-8

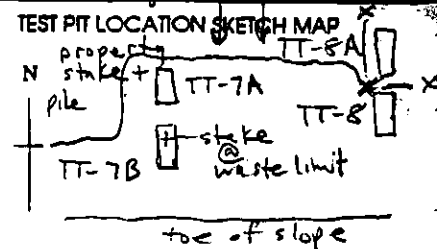


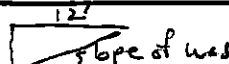
Remarks _____



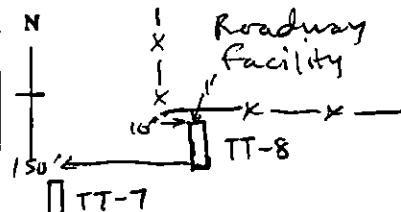
DVIRKA
AND
BARTILUCCI

TEST PIT LOG



TEST PIT NO. TT-7B	
PROJECT NO./NAME Sonia Rd. LF / 1445-3B	LOCATION Sonia Rd., W. Brentwood N.Y.
EXCAVATOR/EQUIPMENT/OPERATOR ~~J. F. Falcetti / Case 680 E Backhoe~~ / F&N / Komatsu / B. Durham	
INSPECTOR/OFFICE D. O. Bradovich / D&B	START/FINISH DATE 11/5/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL) Dimensions 26' long x 9' deep x	CONDITION OF PIT St. stable
REMARKS: Limit of waste 22' south of prop. line slope of waste 	

DEPTH	SAMPLE INTERVAL	% LEL PID OVA PIN SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0 - 1/2	0	C&D from surface to 1/2' by conc. & asphalt chunker	no soil cover C&D @ surface down to waste
1				
2				
3	1/2 - 8'	0-1	BLK, stained sand & silt & plastic bag waste, rugs, rags, some wood, little metal scraps, paper, glass & tires	waste starts @ 1-1/2' by (excl. C&D) down to G.W. table ~ 7 1/2' by
4				
5				
6				
7				
8	8-9'	0-1	stained grey-tan sand	Native ?
9				
10			END OF TEST PIT @ 9' by	
11				* No reading above 0 w/ PID 0-1% LEL w/ multi-gas meter in waste ~ 6' by
12			G.W. Table @ 7 1/2' by	
13				
14				
15				



TEST PIT LOG

TEST PIT NO.
TT-8

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

FtN / Komatsu / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich / D&B

START/FINISH DATE

8/11/97 & 11/3/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL) -

CONDITION OF PIT

unstable

REMARKS:

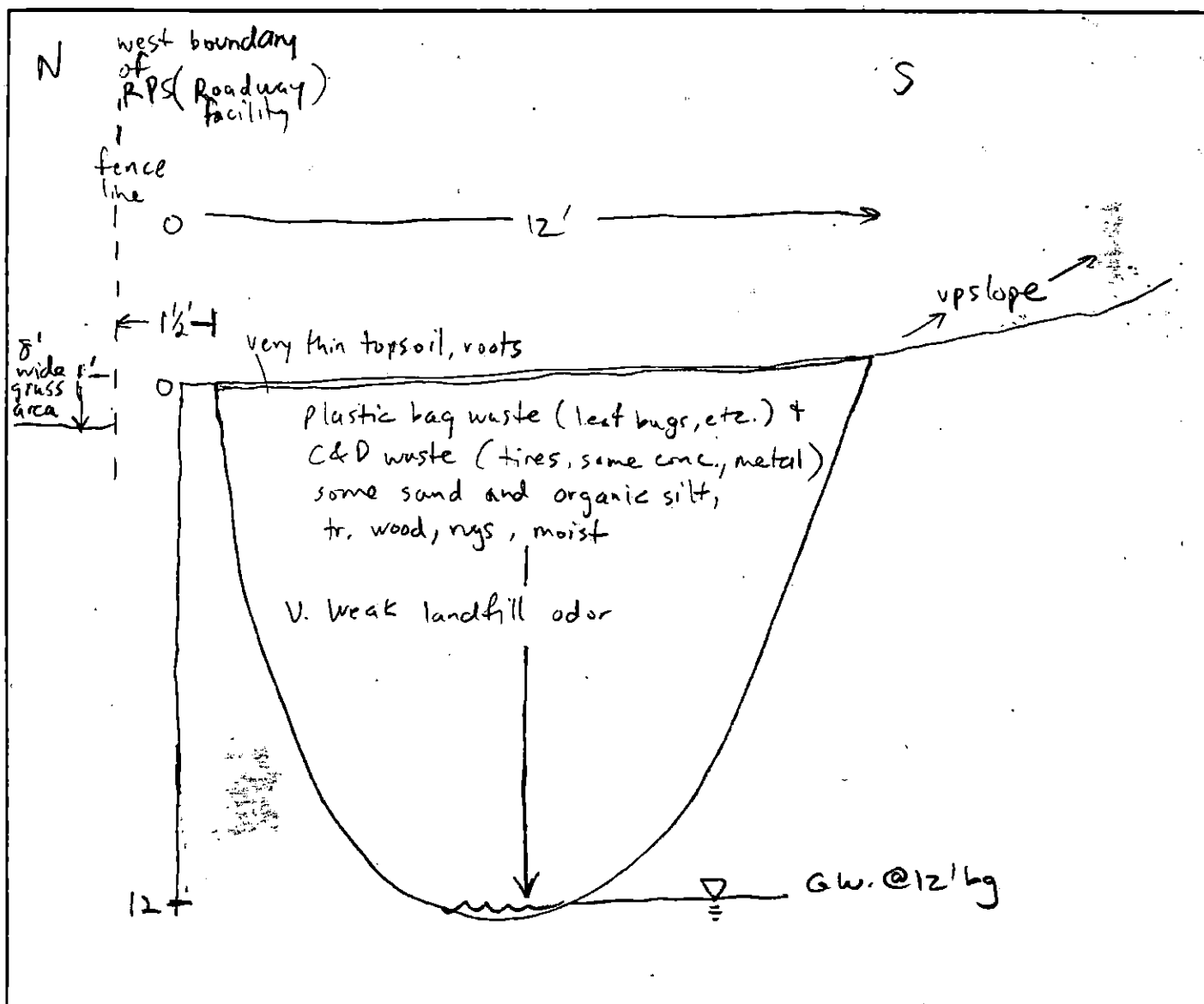
Waste from grade to 10' bg at fence line! (down to G.W. table) at least

DEPTH	SAMPLE INTERVAL	% LEL / 10 ppm O ₂ / A SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0			very thin topsoil	
1				
2				
3	0 - 10'	0 0	Plastic bag waste + C&D waste + sand	C&D waste + sand + MSW down to 10' bg from grade
4				
5			Very weak landfill odor @ 8-10' bg	
6				
7				
8				
9				
10				
11			END OF TEST PIT @ 12' bg	Multi-gas reading 0 ppm 0% LEL
12				
13				
14			+ MSW - municipal solid waste	
15				
Re-excavated on 11/3/97 down to 12' bg				

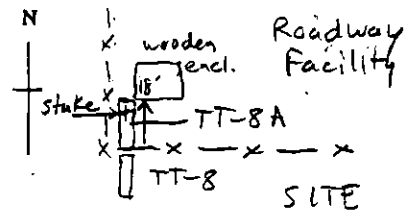
TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TT-8



Remarks * Excavated same test trench down to g.w. table on 11/3/97 - waste down to g.w. table (at least 12' bg)



TEST PIT LOG

TEST PIT NO. TT-8A	
PROJECT NO./NAME Sonja Rd. LF /1445-3B	LOCATION Sonja Rd., W. Brentwood N.Y.
EXCAVATOR/EQUIPMENT/OPERATOR ~~J. Palmeri / Case 670 E Backhoe~~ / F&N / B. Durham	
INSPECTOR/OFFICE D. O'Bradovich / D&B	START/FINISH DATE 10/3/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL) Dimensions 18' long X 10' deep X 6' wide	CONDITION OF PIT Very Unstable
REMARKS: waste limits 15' north of fence	

DEPTH	SAMPLE INTERVAL	7. LEL PID SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0 - 1/2'	0 / 0	Topsoil	topsoil cover
1	1/2 - 10'	1 / 0	N. side - Tan-white sand over b. sand & waste (see profile)	cover on n. side waste on s. side
2				
3				
4				
5			S. side - All waste (see profile)	
6				
7				
8				
9				
10				
11			END OF TEST PIT @ 10' bg	* Max. multi-gas reading of 19% LEL @ 8' bg - a 0 ppm PID
12				
13				
14				
15				

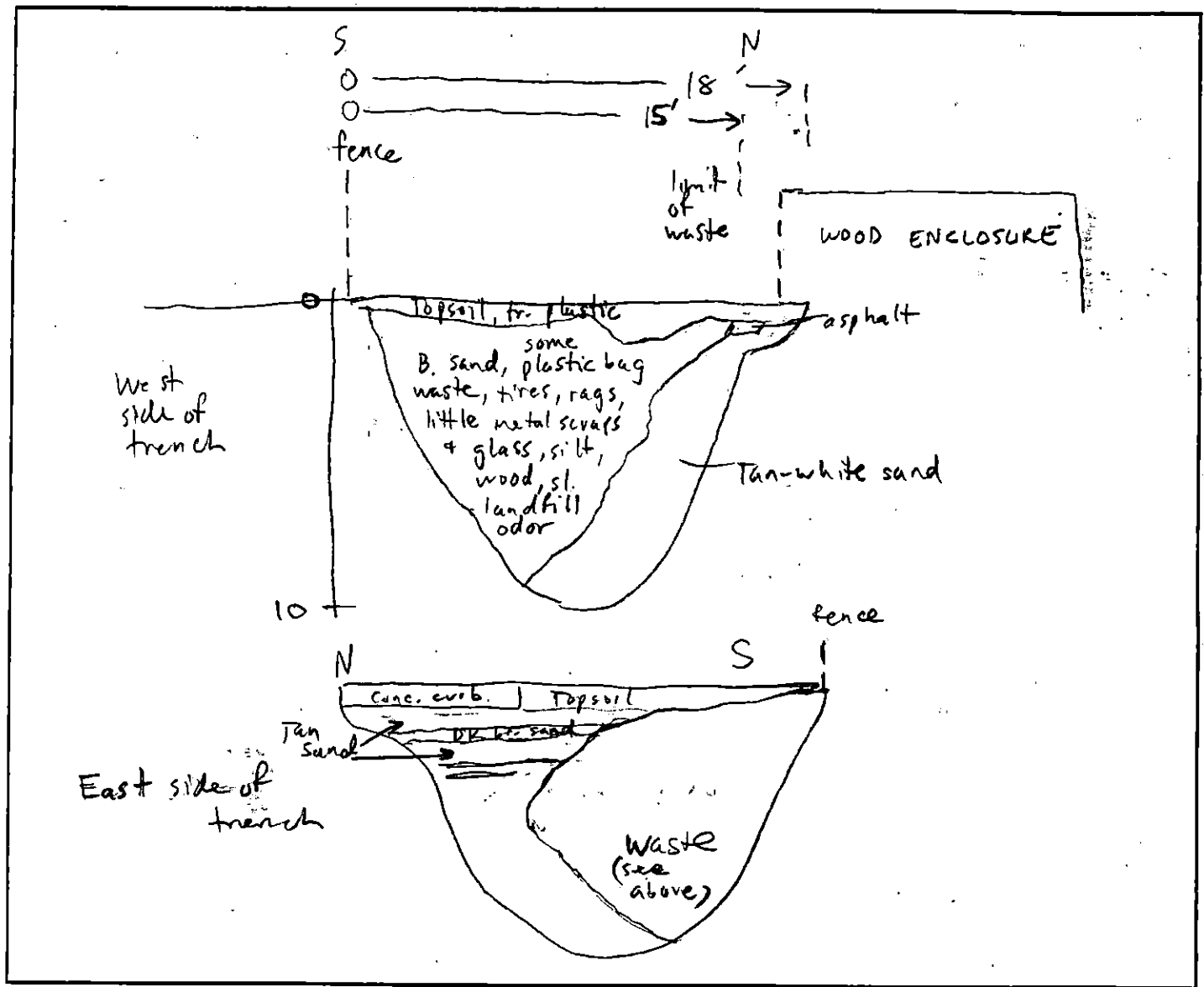
TEST PIT PROFILE

Project Sonia Road Landfill - RI

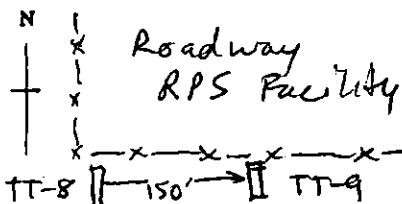
Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-8A



Remarks _____



TEST PIT LOG

TEST PIT NO.
TT-9

PROJECT NO./NAME:

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580E 4WD backhoe / B. Durham

INSPECTOR/OFFICE

~~K. Robins~~ D. Obradovich / Dvirka & Bartilucci

START/FINISH DATE

8/12/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT

(FT. ABOVE MSL) Dimensions 15' long x 12' deep x 7' wide

CONDITION OF PIT

Unstable

REMARKS:

Waste directly @ fence line to north

DEPTH	SAMPLE INTERVAL	% OPEN P.D. OVER SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0				
1			Very thin 4-5" topsoil, roots	Very thin topsoil over waste
2				
3			Plastic bag waste, br. sand & silt, some tires, metal, paper, fr. glass	
4	0-10'	0 0.2	moist.	
5				
6			No noticeable landfill odor * rotten fruit odor	
7				
8				
9				
10				
11			END OF TEST PIT @ 10' bg	* Maximum multi-gas reading 120 ppm
12				
13				
14				
15				



DVIRKA
AND
BARTILUCCI

TEST PIT LOCATION SKETCH MAP

N

see log from
8/12/97

TEST PIT LOG

TEST PIT NO.
TT-~~8~~9

PROJECT NO./NAME

Sonia Rd. LF / 1445-3B

LOCATION

Sonia Rd., W. Brentwood N.Y.

EXCAVATOR/EQUIPMENT/OPERATOR

J. Palmeri / Case 680 E Backhoe / F&N

INSPECTOR/OFFICE

D. Obradovich / D&B

START/FINISH DATE

10/5/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT

(FT. ABOVE MSL)

Dimensions 15' long x 12' deep x 6' wide

CONDITION OF PIT

St. stable

REMARKS:

Retrenched over TT-9 originally trenched on 8/12/97

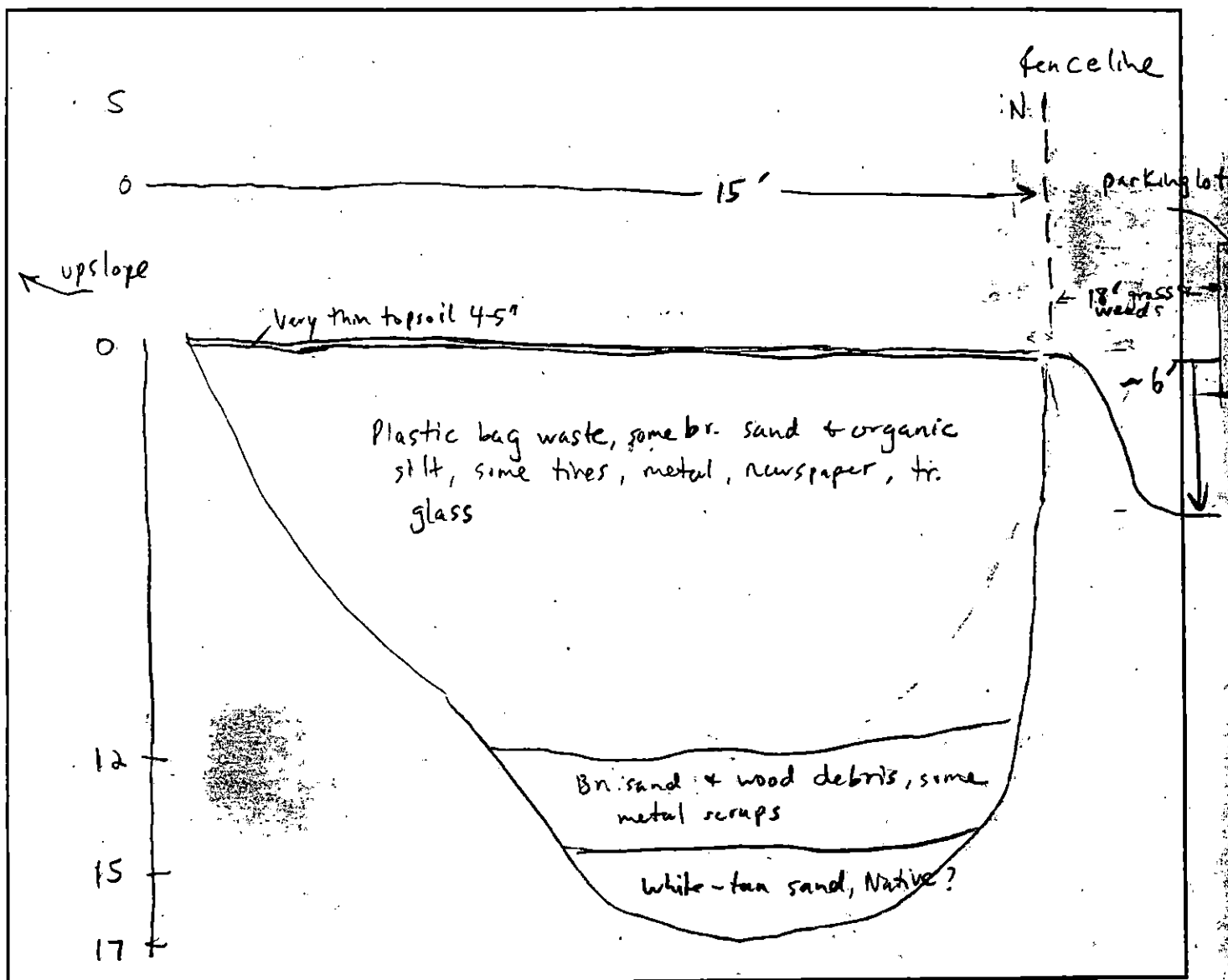
DEPTH	SAMPLE INTERVAL	% LEL OVA SCREEN	PID ppm	DESCRIPTION OF MATERIALS	REMARKS
0					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11	10-12'	0-1	0	Plastic bag waste, some br. sand + organic Mlt, tires, metal, paper	waste from surface
12	12-15'	0-1	0	Br sand + wood debris, some metal scraps	to 15' by
13	15-17'	0-1	0	White-tan sand, Native?	↓ sand
14					
15					* Max reading on multi-gas meter was 0-1% LEL - 0 w/ PID

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

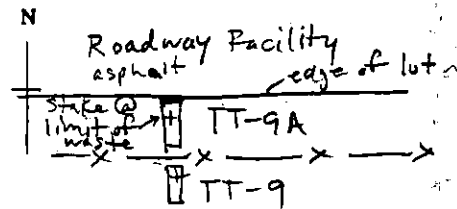
Sample(s) Interval(s) _____ Test Pit Number TT-9

150' East of TT-8 immediately south of fence



Remarks * Did not determine contents of metal bags -
no noticeable landfill gas odor - possible non-petroleum waste

TEST PIT LOG



TEST PIT NO.
TT-9A

PROJECT NO./NAME

Sonia Rd. LF / 1445-3B

LOCATION

Sonia Rd., W. Brentwood N.Y.

EXCAVATOR/EQUIPMENT/OPERATOR

~~F. Palmer / Komatsu~~ / F&N / Komatsu / B. Durham

INSPECTOR/OFFICE

D. O. Bradovich / D&B

START/FINISH DATE

10/4/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT

(FT. ABOVE MSL) Dimensions 18' long x 11' deep x 8' wide

CONDITION OF PIT

Very Unstable

REMARKS: Limit of waste 1' south of n. property corner

DEPTH	SAMPLE INTERVAL	7. LEL PID % OVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-3 1/2'	0	Top soil over DK-br. sand over reworked tan sand	3 1/2' soil cover
1				
2				
3	3 1/2-7 1/2'	0-1	plastic bag waste, some sand, metal, wood, glass, little paper, rubber	waste 3 1/2-7' bg ↓
4				
5				
6	7 1/2-11'	0	N. side Tan reworked sand S. side Native tan sand	Native
7				
8				
9			END OF TEST PIT @ 11' bg	* Max 1% LEL w/ multigas & 0 ppm PID
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

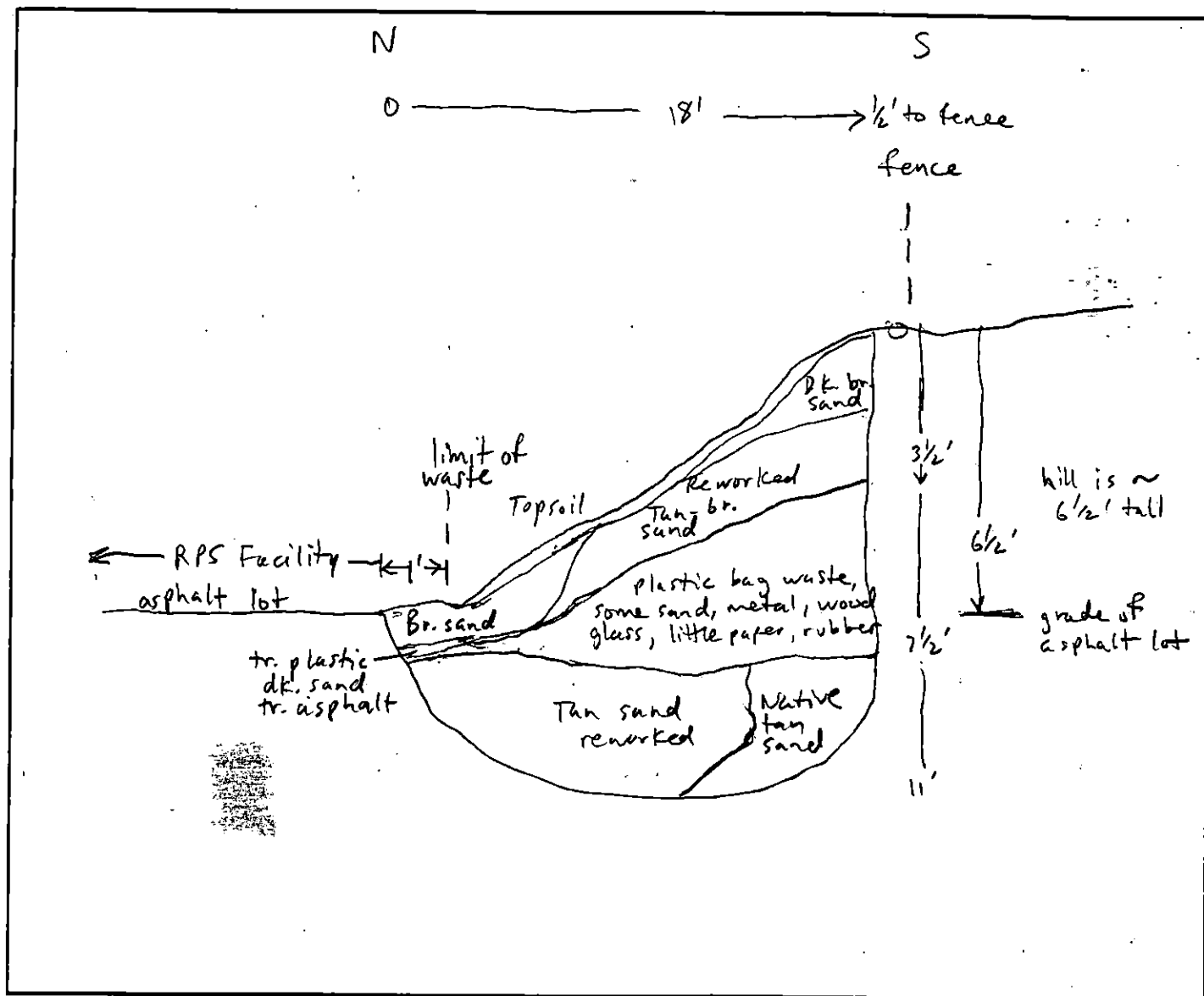
Project Sonia Road Landfill - RI

Project Number 1445-3B

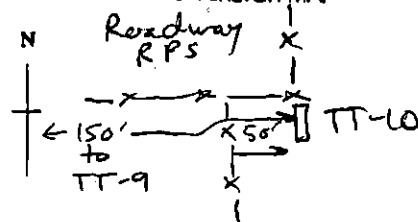
Sample(s) Interval(s) _____

Test Pit Number TT-29A

North of TT-9



Remarks Waste limit 17' north of Town fence 1' south
of n. prop. owner



TEST PIT LOG

TEST PIT NO. TT-10	
PROJECT NO./NAME 1445 / Sonia Road Landfill - RI	LOCATION Sonia Rd. Landfill, W. Brentwood, NY.
EXCAVATOR/EQUIPMENT/OPERATOR Case 580 E. 4WD Buckhoe / B. Durham	
INSPECTOR/OFFICE ~~K. Robins~~ D. Obradovich / D&B	START/FINISH DATE 8/12/97 & 11/3/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT Unstable
REMARKS: Limit of waste may be to the north of site - waste is 18' thick here	

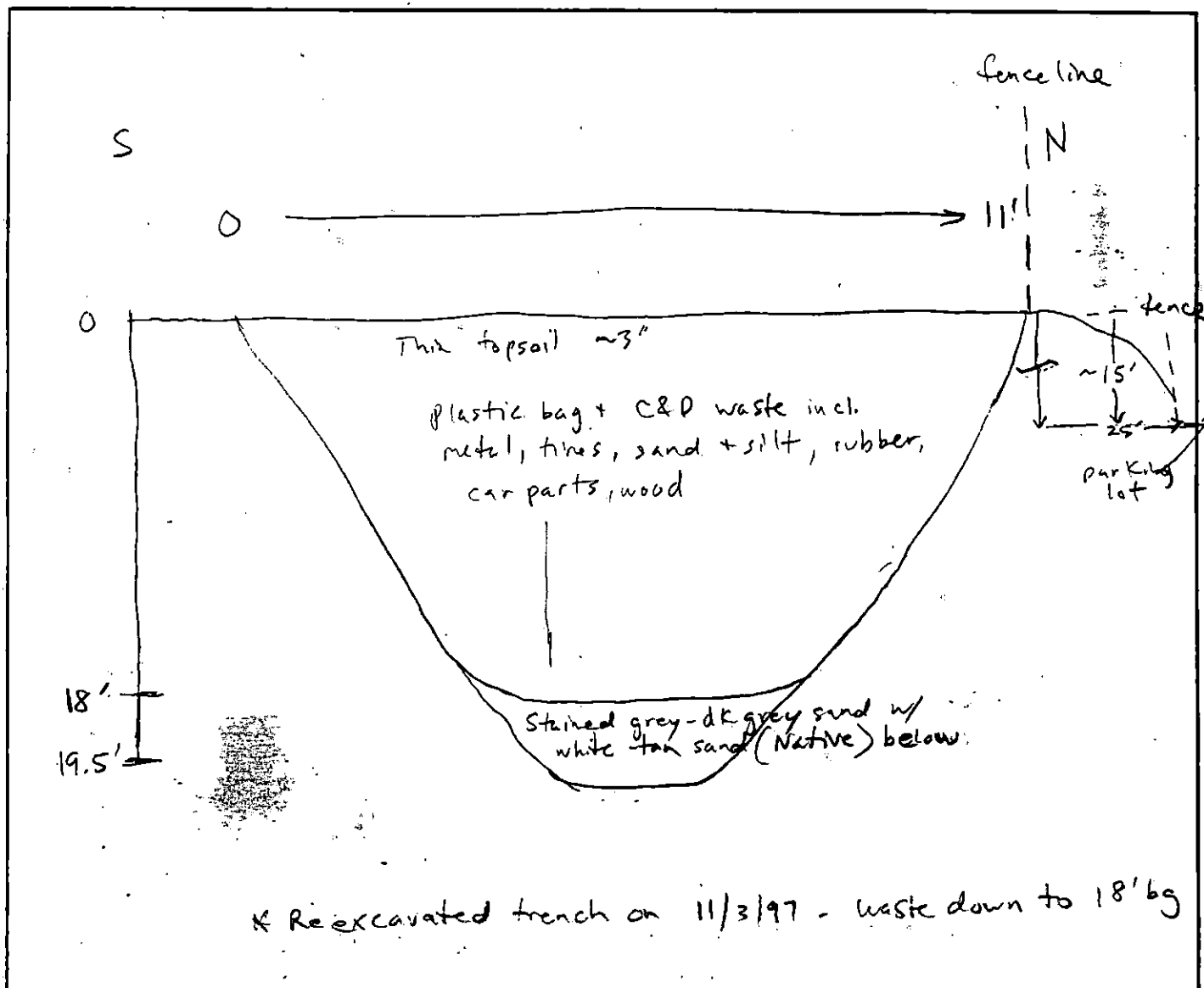
DEPTH	SAMPLE INTERVAL	% LEAK PID GVA ppm SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-10'	0 0.3	Plastic bag & C&D waste incl. metal, plastic, wood, rubber, tires, sand & silt	Very thin topsoil w/ waste directly below
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11	18-19 1/2'	1 0	END OF TEST PIT @ 19.5' bg	* Maximum multihuges reading is 140 ppm
12			* Reexcavated on 11/3 down to 19 1/2' bg waste to 18' bg	Native white tan
13				
14				
15			Grey stained sand mixed w/ sand strong fruit odor rotten	

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TT-10

50' East of berm, 150' East of TT-9, directly south of fence
waste is 18' thick here

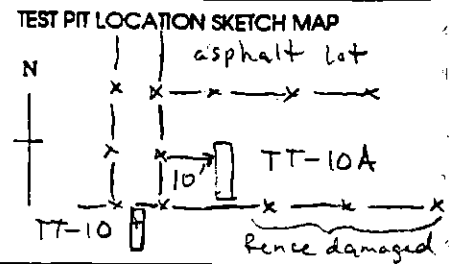


Remarks Limit of waste not defined - may be to the north
of site (n. side)
(other side of fence line)



DVIRKA
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TEST PIT LOG



TEST PIT NO.
TT-10A

PROJECT NO./NAME

Sonia Rd. LF / 1445-3B

LOCATION

Sonia Rd., W. Brentwood N.Y.

EXCAVATOR/EQUIPMENT/OPERATOR

~~J. F. Fattori / Case 680 E Backhoe~~ / F&N / B. Durham

INSPECTOR/OFFICE Komatsu PC 300 LC backhoe (track mounted)

D. O. Bradovich / D&B

START/FINISH DATE

10/3/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT

(FT. ABOVE MSL)

Dimensions 17' long x 10' wide x 15' deep

CONDITION OF PIT

Very Unstable

REMARKS:

Limit of waste 5' south of J. P. Express prop. fence & 25' north of Landfill prop. fence

DEPTH	SAMPLE INTERVAL	%LEL PID OVA 11m SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-11'	37% 0	<u>N. side of trench -</u> Reworked sand, tr. plastic over dk. br. sand + silty gravel over Native sand & layered silt	No cover sand on most of slope (S. side) waste down to 11' by from top of slope
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12	11-15'	0 0	tan native sand	Native
13				
14				
15				
			END OF TEST PIT @ 15' by	* Max. reading was 37% LEL - Open PID



TEST PIT PROFILE

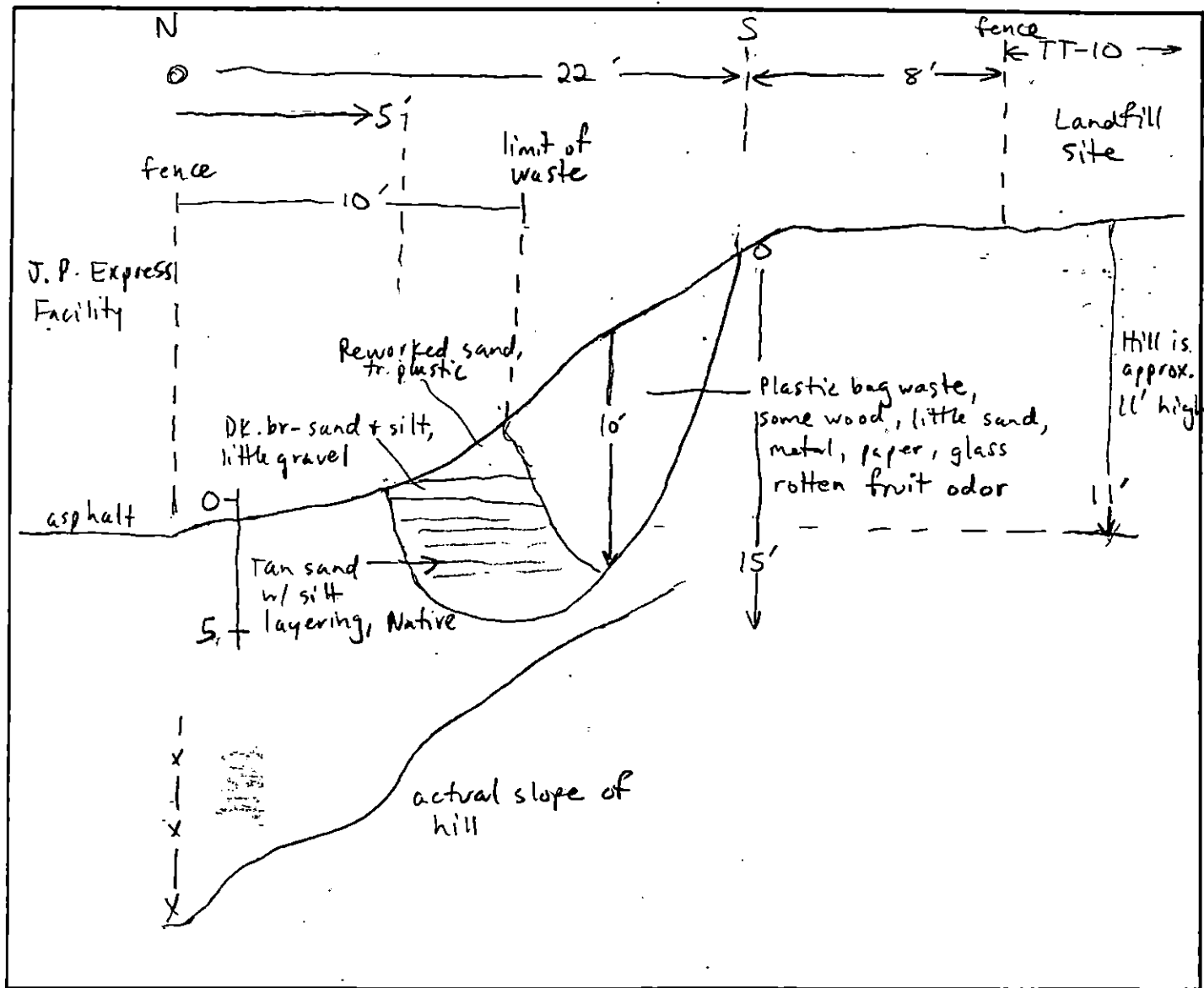
Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-~~10~~ 10A

10' East of TT-10 8' north of fence going 17'



Remarks Limit of waste S. side of N. prop. owner

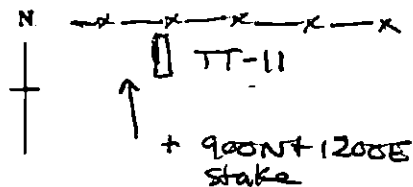


DVIRKA
AND
BARTILUCCI

page 1 of 24

TEST PIT LOG

TEST PIT LOCATION SKETCH MAP



TEST PIT NO.
TT-11

PROJECT NO./NAME:

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580 E 4WD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robbins D. Obradovich / D&B

START/FINISH DATE

8/12/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL) -

CONDITION OF PIT

St. stable

REMARKS:

waste may exist north of fence

DEPTH	SAMPLE INTERVAL	% LEAKY PIT SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-2 1/2'		Br. sand & silt, deep roots mixed w/ plastic, bricks, other C&D	waste mixed w/ cover @ grade soil
1				
2				
3	2 1/2-10'		Plastic bag waste, Some C&D incl. wood metal, piping, car parts, sand & silt No odor	Waste from grade to 10' by
4				
5				
6				
7				
8				
9				
10				
11	10-15'		END OF TEST PIT @ 10' by	* Maximum multi-gas reading was 20 ppm
12				
13				
14				
15				



DVIRKA
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BARTILUCCI

page 2 of 24

TEST PIT PROFILE

Project Sonia Road Landfill - RI

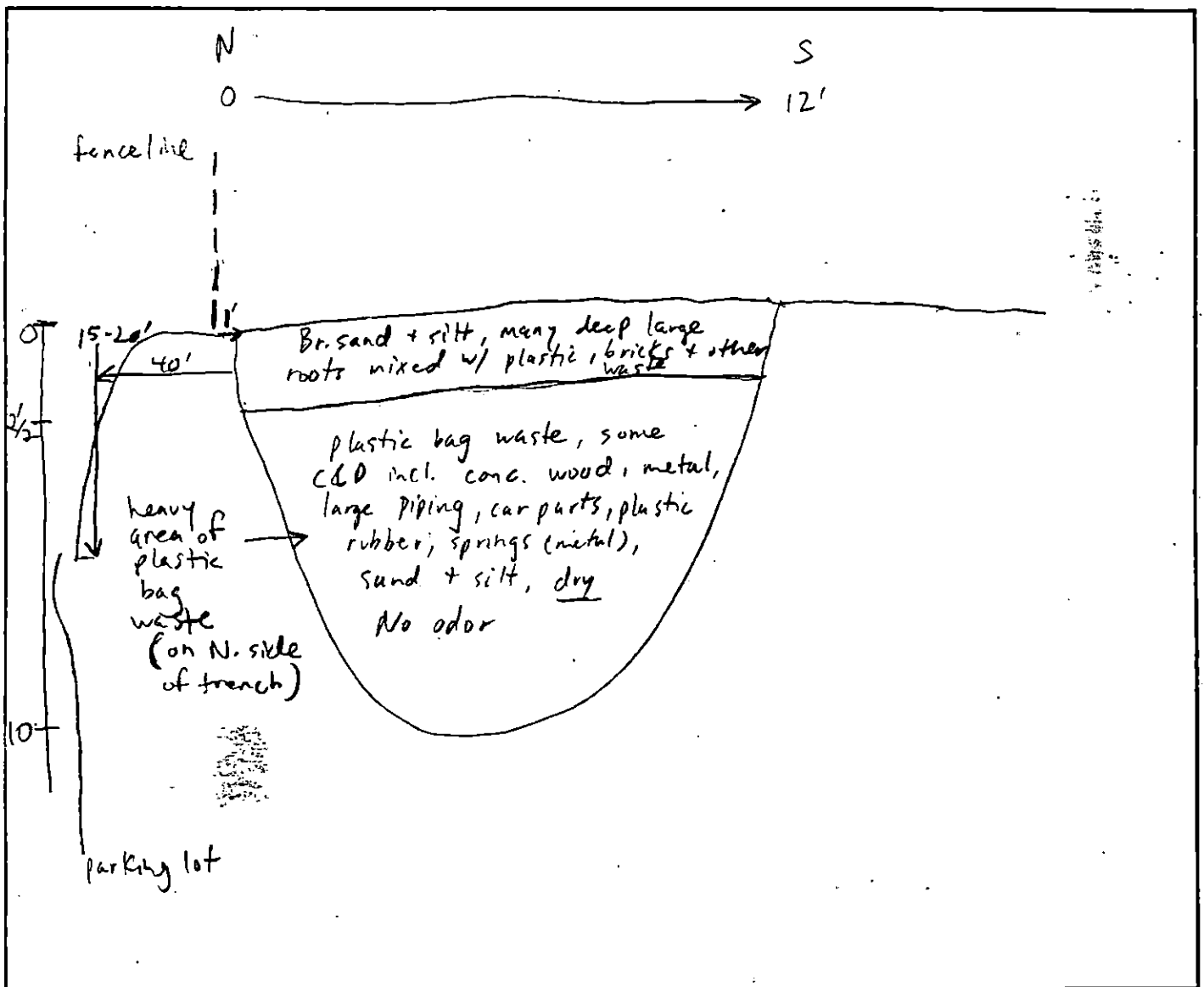
Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-11

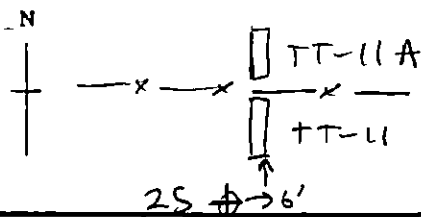
150' East of TT-9, 1' North of 900 N + 1200 E stake

directly south of fence



Remarks

Waste may exist north of fence



TEST PIT LOG

TEST PIT NO. TT-11	
PROJECT NO./NAME Sonja Rd. LF / 1445-3B	LOCATION Sonja Rd., W. Brentwood N.Y.
EXCAVATOR/EQUIPMENT/OPERATOR ~~F. Palatieri / Case 645 E Backhoe~~ / F&N / Komatsu / B. Durham	
INSPECTOR/OFFICE D. Obradovich / D&B	START/FINISH DATE 11/5/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL) Dimensions 15' long x 18' deep x 7' wide	CONDITION OF PIT Very Unstable
REMARKS:	

DEPTH	SAMPLE INTERVAL	% LEL PID OVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-3'	0	Br. topsoil over white-sand w/ little waste	2' cover soil on n. side. no cover on s. side
1				
2				
3	3-8'	0	Br. wood; some sand, plastic bag waste, rubber, little paper, glass	Waste down to 15' by
4				
5				
6	8-11'	1-2	White-tan sand mixed w/ conc. powder	
7				
8				
9	11-15'	1-2	Blk. tar paper on N. side wood, tar paper, metal, plastic on s. side	
10				
11				
12	15-18'	0	White-tan-grey sand	sand
13				
14				
15				

18'

END OF TEST PIT @ 18' by

* Max. multi-gas
reading of 1-2%
LEL 0 ppm PID



DVIRKA
AND
BARTILUCCI

page 4 of 4

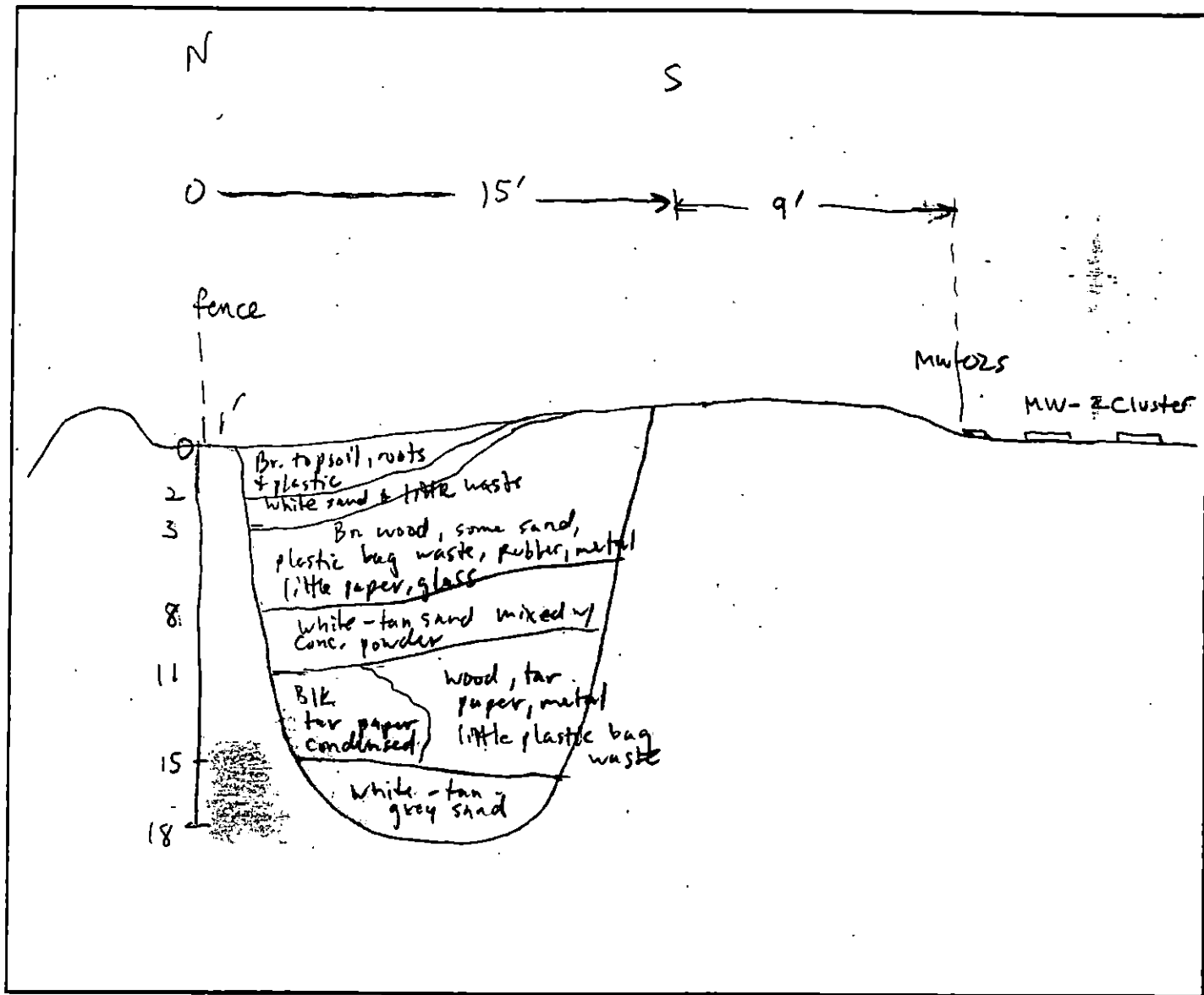
TEST PIT PROFILE

Project Sonia Road Landfill - RI

Project Number 1445-3B

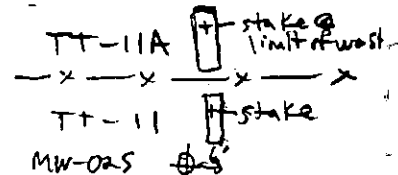
Sample(s) Interval(s) _____

Test Pit Number TP-11



Remarks Waste down to 15' by

Retrenched on 11/5/97



TEST PIT LOG

TEST PIT NO.
TT-11A

PROJECT NO./NAME

Sonia Rd. LF / 1445-3B

LOCATION

Sonia Rd., W. Brentwood N.Y.

EXCAVATOR/EQUIPMENT/OPERATOR

~~F. B. B. / Case 800 E. Buckhite~~ / F&N / Komatsu / B. Durham

INSPECTOR/OFFICE

D. O. Bradovich / D&B

START/FINISH DATE

10/5/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT

(FT. ABOVE MSL) Dimensions 13' long x 10' deep x 10' wide

CONDITION OF PIT

V, Unstable.

REMARKS:

Limit of waste 11' north of Town prop. fence

DEPTH	SAMPLE INTERVAL	% LEL PID OVA / PPM SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-1 1/2	0 0	Topsoil, roots, tr. plastic	1 1/2' soil cover
1				
2	1 1/2 - 4'	0 0	Br. sand some plastic (not bags)	Waste down to 4' by
3				
4				
5				
6	4-10'	0 0	Tan sand & gravel, Native	Native
7				
8				
9				
10				
11			END OF TEST PIT @ 10' by	*No readings above 0 w/ multi-gas & PID meters
12				
13				
14				
15				

TEST PIT PROFILE

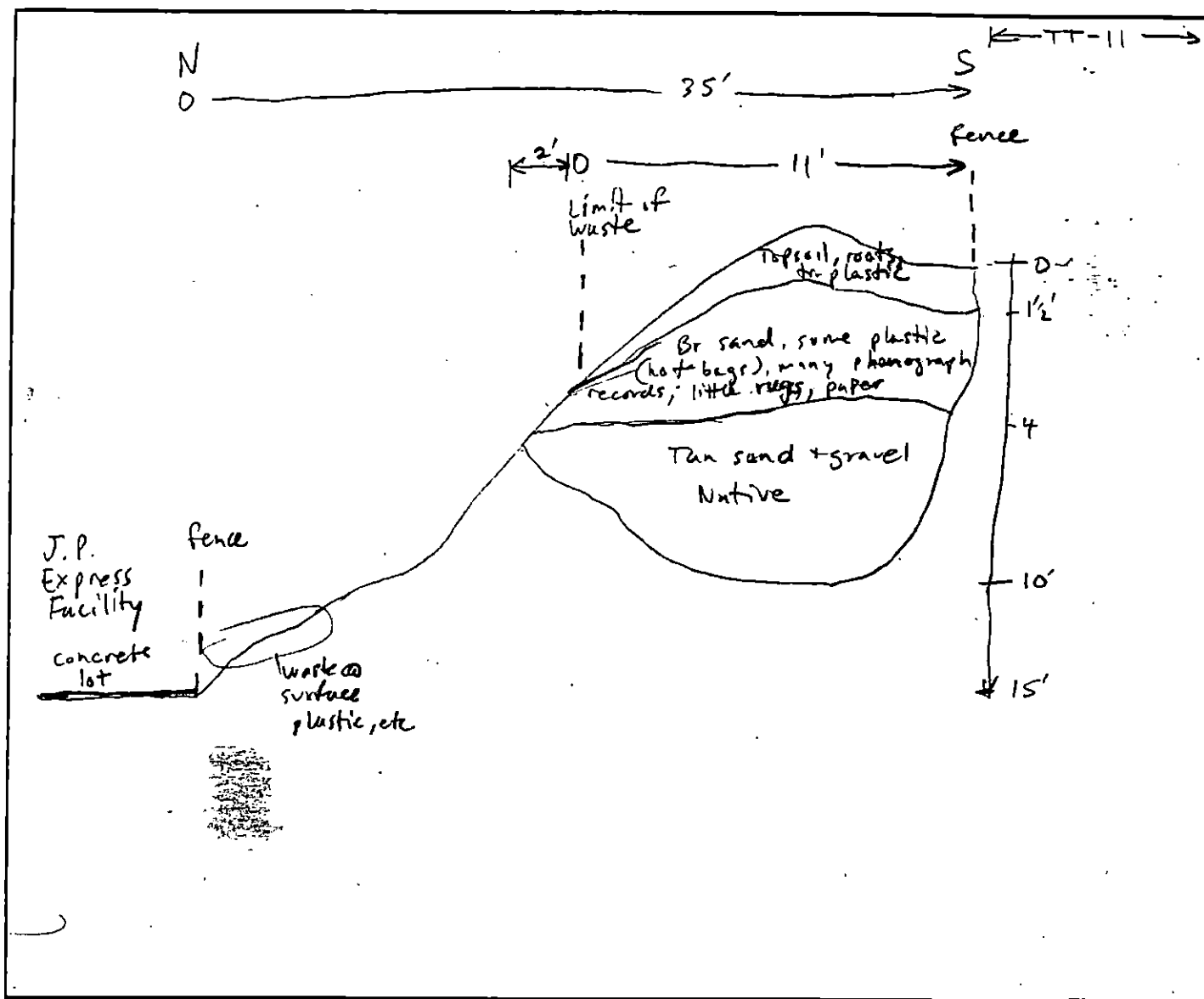
Project Sonia Road Landfill - RI

Project Number 1445-3B

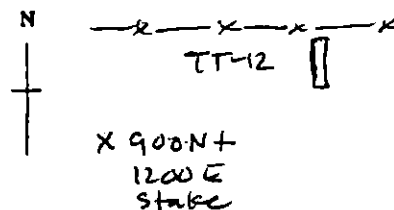
Sample(s) Interval(s) _____

Test Pit Number TT-11A

North of TT-11



Remarks Limit of waste 24' from n. prop. owner 11' north of Town's prop. line


TEST PIT LOG

 TEST PIT NO.
TT-12

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580E 4WD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. O'bradovich / D&B

START/FINISH DATE

8/12/97 + 11/4/97

 ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL) -

CONDITION OF PIT

Stable - sl. unstable

REMARKS:

waste may exist north of site

DEPTH	SAMPLE INTERVAL	9.2% OVA SCREEN	10 ppm	DESCRIPTION OF MATERIALS	REMARKS
0	0-2'	0	0	Br. sand, gravel, roots (fr. - little plastic & metal)	primarily sand & gravel tr. waste cover mat'l
1					
2	2-3'	0	0.1	plastic bag waste - no odor	plastic bag & other waste down to 4' bg
3					
4				<u>N. side</u> plastic bag waste	
5	3-15 1/2	10-	0.1	Tan-br. sand, some wood, many, many records (plastic)	
6		14%		wood, conc., rubber, ~~day~~	
7				little glass, paper	
8				~~to odor~~	
9				Moderate landfill odor	
10				<u>S. side</u> - waste down to 14' bg	
11				~~END OF TEST PIT~~	* Max. multi-gas reading 280 ppm @ 8' bg
12				<u>N. side</u> tan sand over grey stained sand	14% LEL @ 14' bg
13				<u>S. side</u> - waste (see above)	
14					
15	15 1/2 - 16'			grey stained sand	stained sand

END OF TEST PIT @ 16' bg

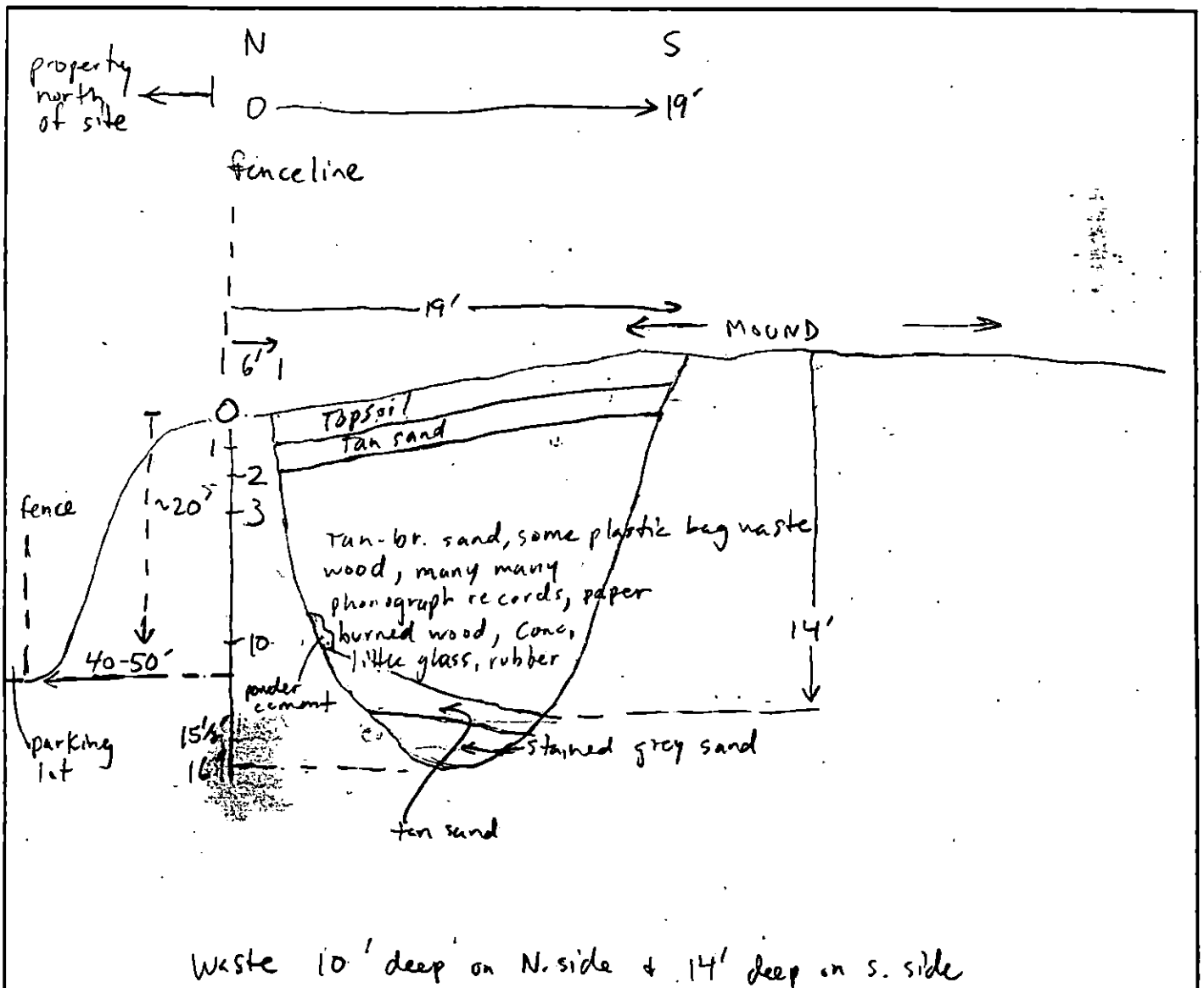
Retrenched on 11/4/97

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

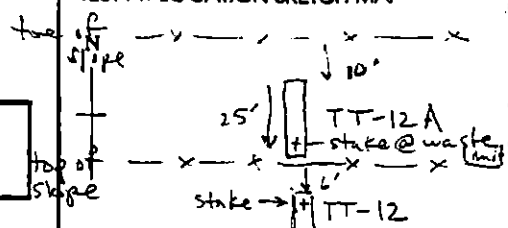
Sample(s) Interval(s) _____ Test Pit Number TT-12

150' East of TT-11 directly south of fence



Remarks Waste may exist north of fence and site

Retrenched on 11/4/97 down from 10' to 16' bg



TEST PIT LOG

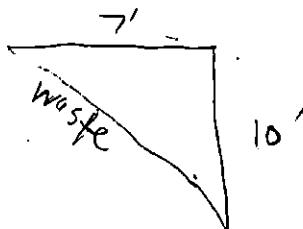
TEST PIT NO. TT-12A	
PROJECT NO./NAME Sonia Rd. LF / 1445-3B	LOCATION Sonia Rd., W. Brentwood N.Y.
EXCAVATOR/EQUIPMENT/OPERATOR ~~W. Paterni / Case 645 E Buckhoe~~ / F&N / Komatsu backhoe / B. Durham	
INSPECTOR/OFFICE D. Obradovich / D&B	START/FINISH DATE 11/4/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL) Dimensions 25' long x 16' deep x 6' wide	CONDITION OF PIT SI stable
REMARKS: Waste at fence ~ 4 1/2' thick - 1' north of fence at top of slope waste thins to limit	

DEPTH	SAMPLE INTERVAL	%LEL OVA SCREEN	PID ppm	DESCRIPTION OF MATERIALS	REMARKS
0	0 - 4 1/2'	0	0	<u>S. side</u> - topsoil over tan sand, to plastic over plastic waste, some wood & metal down to 4 1/2' bg.	Topsoil over waste on S. side 1' from fence.
1				<u>N. side</u> - Topsoil over tan sand w/ tr. waste	Tan sand on n. side under topsoil cover
2					
3					
4	4 1/2 - 7'	0	0	Reworked sand, some gravel	Reworked sand
5					
6					
7	7 - 10'	0	0	pulverized conc. powder over iron-stained red-br. sand & gravel	some C&P waste
8					
9					
10	10 - 15 1/2'	0	0	Br. sand, silt, little gravel, Native	Native 10-15' bg
11					
12					
13					
14					
15					
					* No readings above 0 on PID or Multi-gas meters

END OF TEST PIT @ 16' bg

NJDEPTPL

slope of waste



TEST PIT PROFILE

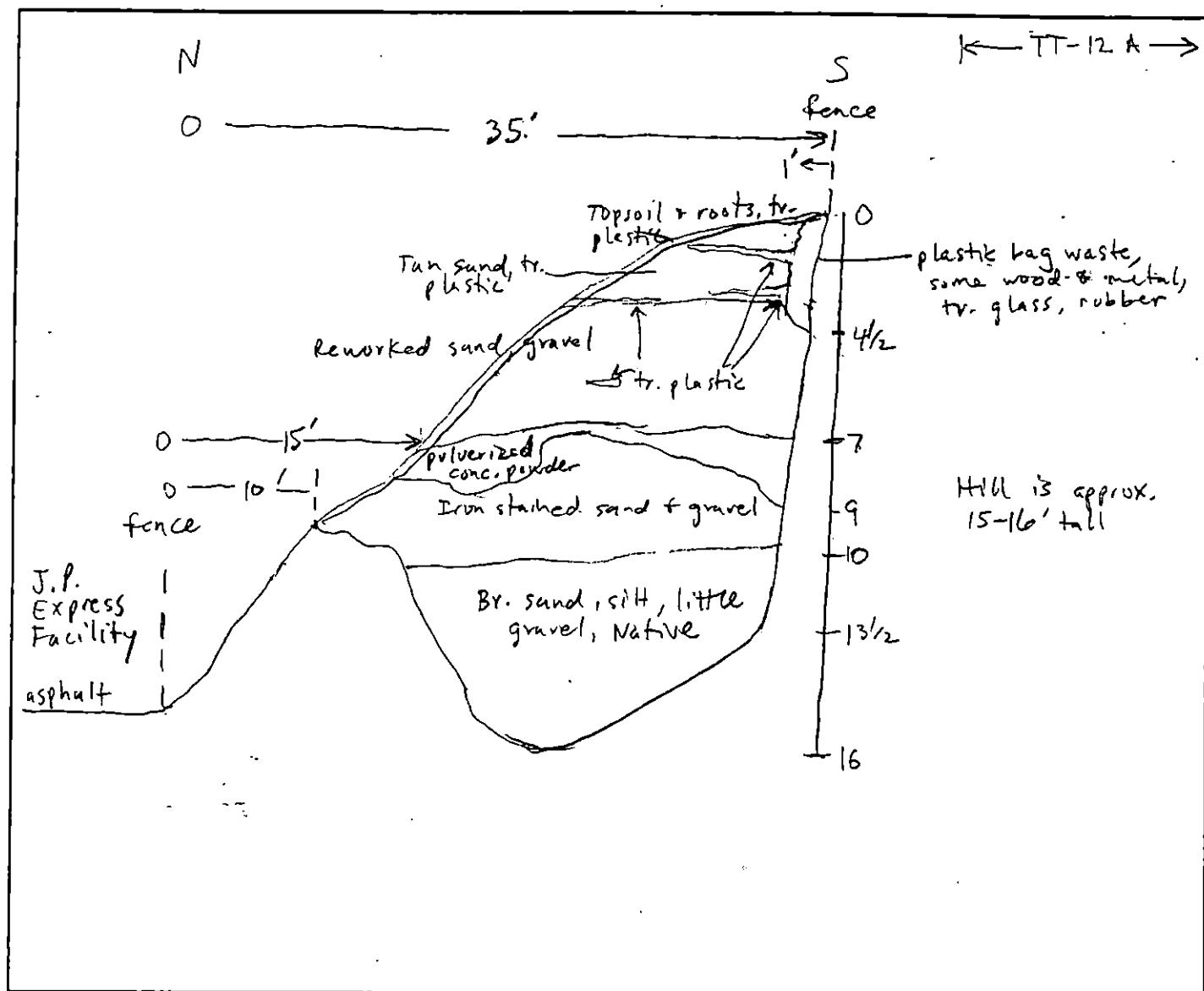
Project Sonia Road Landfill - RT

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-12 A

North of TT-12

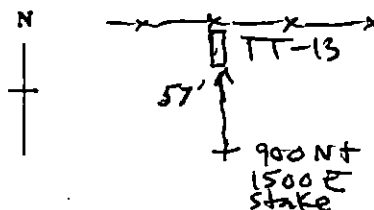


Remarks Limit of significant waste is 1' north of Town fence
however conc. powder goes to 15' south of n. prop. owners fence



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TEST PIT LOCATION SKETCH MAP



TEST PIT LOG

TEST PIT NO. TT-13	PROJECT NO./NAME: 1445 / Sonia Road Landfill - RI		LOCATION Sonia Rd. Landfill, W. Brentwood, NY.
EXCAVATOR/EQUIPMENT/OPERATOR Case 580 E 4WD Backhoe / B. Durham			
INSPECTOR/OFFICE K. Robias D. Obradovich / D&B		START/FINISH DATE 8/12/97	
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL) -		CONDITION OF PIT Unstable	
REMARKS: Waste all the way to fence line 10' bg and didn't define thickness			

DEPTH	SAMPLE INTERVAL	TOLE P/D OVA /mm SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-2'	0	Br. sand roots, little gravel + plastic, metal, wood, dry	Mostly sand ^{little} some waste @ grade
1				
2				
3	2-10'	0	Br. sand, some metal, wood, little plastic bag waste, other C&D incl. FUGS, cables, dry	Waste to 10' bg
4				
5				
6				
7				
8				
9				
10				
11			END OF TEST PIT See 11/5/97 test pit log for 10-20.5' bg data.	* Maximum multi-gas reading 40 ppm → retrenched to 20.5' bg on 11/5/97
12				
13				
14				
15				



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TEST PIT LOCATION SKETCH MAP

N
Old
Dominion
property
x x x
state
TT-13A
TT-13
Site

TEST PIT LOG

TEST PIT NO. TT-13	
PROJECT NO./NAME Sonja Rd. LF / 1445-3B	LOCATION Sonja Rd., W. Brentwood N.Y.
EXCAVATOR/EQUIPMENT/OPERATOR ~~F. Palmeri / Case 645 E Backhoe~~ / F&N / Komatsu / B. Durham	
INSPECTOR/OFFICE D. O. Bradovich / D&B	START/FINISH DATE 11/5/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL) Dimensions 16' long x 20 1/2' deep x 7' wide	CONDITION OF PIT Unstable ~ sl. stable
REMARKS: Waste @ 20' bg here 0.5' south of fence	

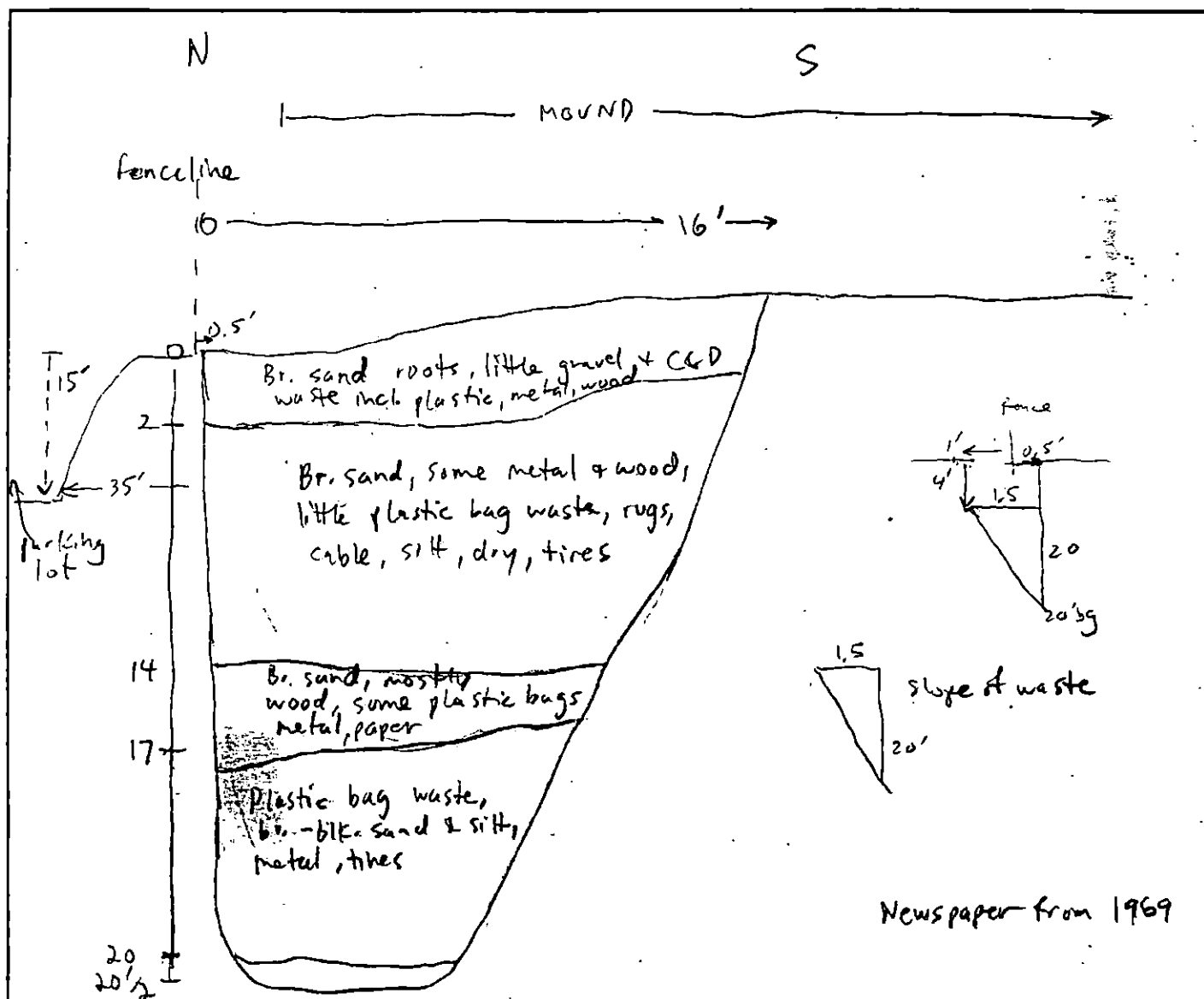
DEPTH	SAMPLE INTERVAL	9% LEL PD OVA p/m SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-2'	0 0	Br. sand, roots, little gravel + c&d waste incl. plastic, metal, wood	Top soil & roots covered in 1/2' thick over waste
2				
4				
6				
8				
10				
12				
14				
16	2-14'	0-1 0	Br. sand, some metal & wood, little plastic bag waste, rugs cable, silt, tires, dry	waste down to 20' bg
18				
20	14-17'	4-9 0	Br. sand, some wood, little plastic bag waste, metal, paper	
22	17-20'	4-9 0	Plastic bag waste br.-blk. sand & silt, metal, tires	
24	20-20.5'	- -	Grey-dk. grey sand - reworked?	reworked sand - Native
26			END OF TEST PIT @ 20.5' bg	* Max multi-gas reading of 9% LEL @ 20' bg. 0 p/m w/ PID meter
28				
30				
32				
34				
36				
38				
40				
42				
44				
46				
48				
50				

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TT-13

57' North of 900N+1500E state directly south of fence

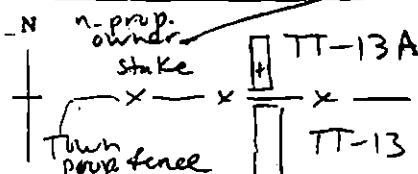


Remarks Waste all the way to fence line 10' bg

Retrenched on 11/5/97 from 10' to 20 1/2 (8/12/97 trench went down 10' bg



TEST PIT LOCATION SKETCH MAP



TEST PIT NO.
TT- 13A

PROJECT NO./NAME

Sonia Rd. LF / 1445-3B

LOCATION

Sonia Rd., W. Brentwood N.Y.

EXCAVATOR/EQUIPMENT/OPERATOR

EXCAVATOR/EQUIPMENT/OPERATOR
J. Palmeri / ~~Site Exp~~ / ~~John Deere~~ / F&N / Komatsu / B. Durham

INSPECTOR/OFFICE

START/FINISH DATE

D. Obradovich / D&B

14/5/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT

CONDITION OF PIT

(FT. ABOVE MSL) Dimensions 18' long x 20.5' deep x 8' wide

Stable

REMARKS:

DEPTH	SAMPLE INTERVAL	% LCL	PID OVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-2'	0	0	Br. sand, roots + topsoil	2' Soil cover
1					
2	2-4'	0	0	White sand over Br. wood, metal, tires, plastic	waste down to 4'
3					↓
4					
5	4-7'	0	0	White sand + gravel	Reworked sand to 7' by
6					↓
7					
8	7-10'	0	0	Yellow-tan sand + conc. powder on N side	waste on s. side
9				Metal scraps + plastic (rubber also) on s. side	Reworked sand on n. side
10					↓
11	10-13'	0	0	Thin br. sand native @ btm	Native
12					
13					
14				END OF TEST PIT @ 13' by	* NO readings above 0 w/ multi-gas & PID meters
15					

TEST PIT PROFILE

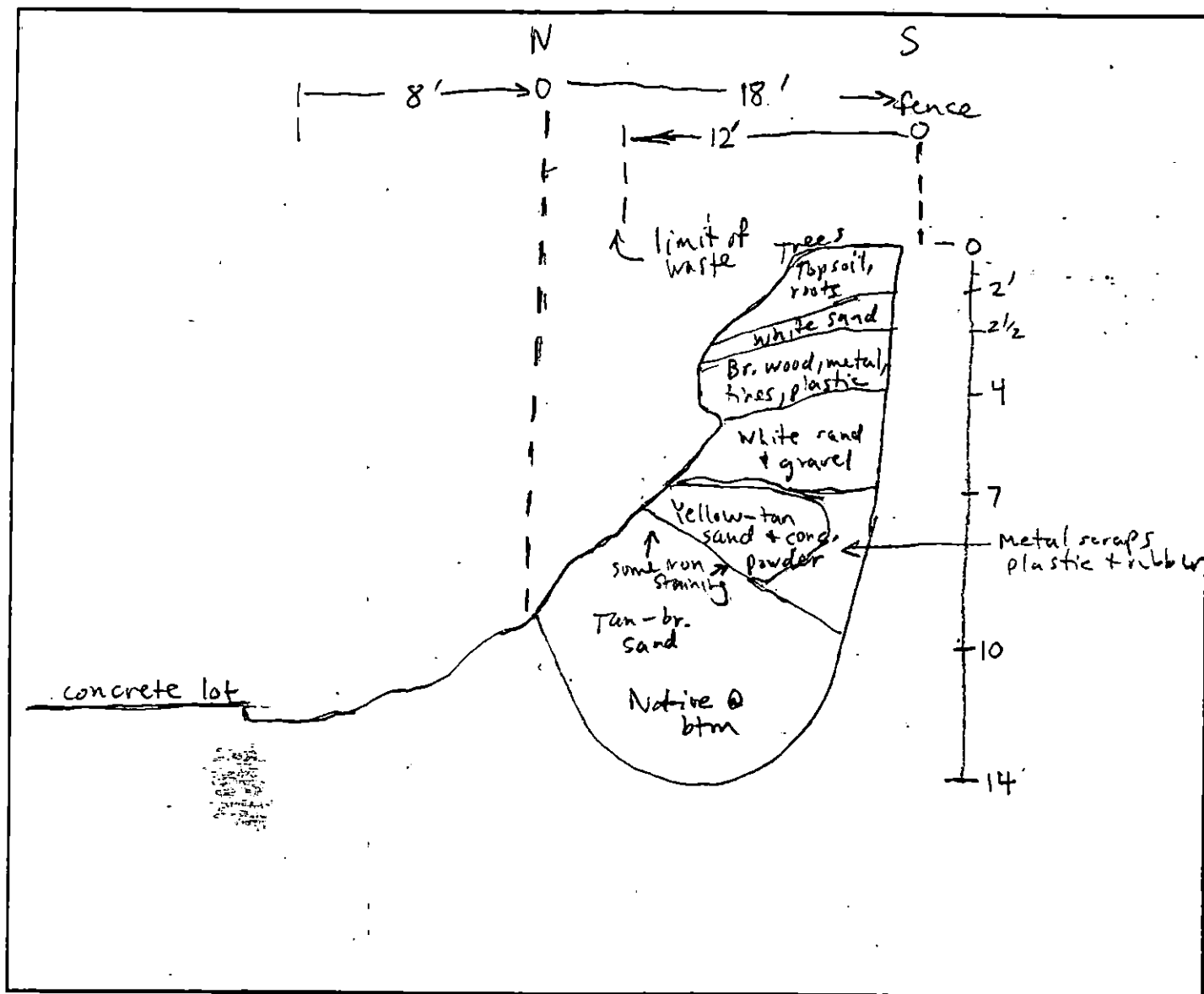
Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-~~12~~ 13A

North of TT-13

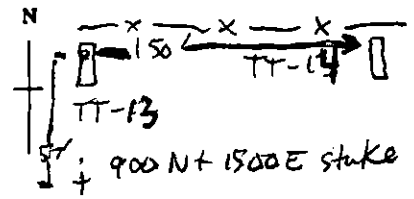


Remarks Limit of waste 18' from fence



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TEST PIT LOCATION SKETCH MAP



TEST PIT LOG

TEST PIT NO.
TT-14

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580 E 4WD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich / D&B

START/FINISH DATE

8/12/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

Unstable

REMARKS:

Waste all the way to fence line

DEPTH	SAMPLE INTERVAL	% LEAK PID SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0 - 1 1/2'	0	0	Br. topsoil over br. sand, gravel, tr. waste
1				
2	1 1/2 - 4 1/2'	0	0	Plastic bag waste, some sand, silt, wood, tires, asphalt debris, dry - area of cardboard waste
3				
4				
5	4 1/2 - 8'	0	0	DK. br - blk stained sand + silt, little metal waste, asphalt wood, fr. glass rubber
6				
7				
8				
9	8 - 10'	0	0	BLK. heavily stained soil. + asphalt possible ash mixed in sand
10				
11				
12				
13				
14				
15				
			END OF TEST PIT @ 10' b	* Max. multi-gas reading 360 ppm

TEST PIT PROFILE

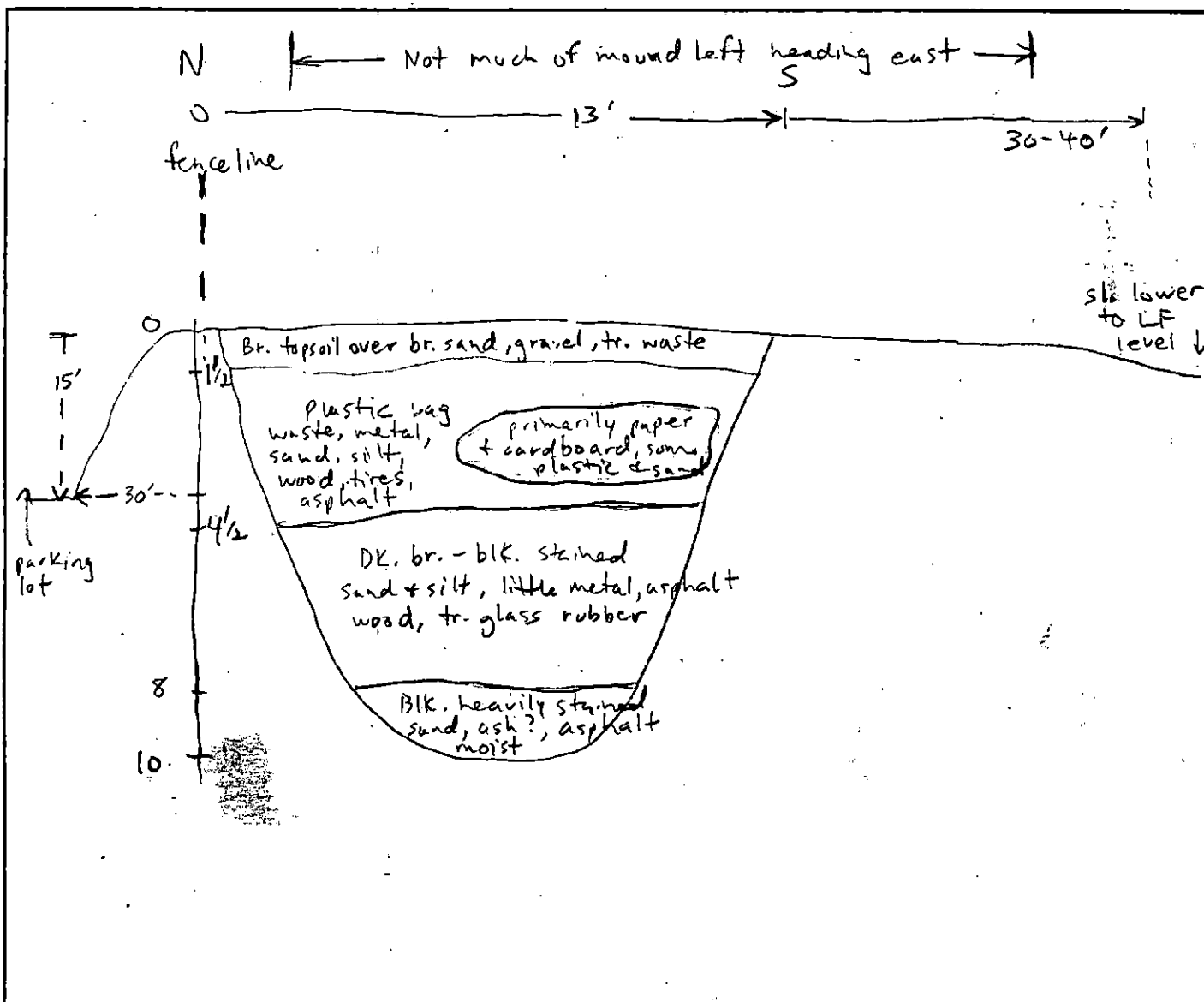
Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

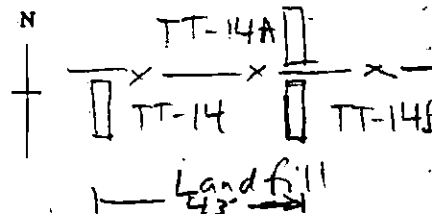
Test Pit Number TT-14

150' East of TT-13 directly south of fence



Remarks _____

TEST PIT LOG



TEST PIT NO.
TT-14A

PROJECT NO./NAME

Sonia Rd. LF / 1445-3B

LOCATION

Sonia Rd., W. Brentwood N.Y.

EXCAVATOR/EQUIPMENT/OPERATOR

~~J. Patrone / Case 680 E Backhoe~~ / F&N / Komatsu / B. Durham

INSPECTOR/OFFICE

D. Obradovich / D&B

START/FINISH DATE

10/4/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

Dimensions 15' long x 12' deep x 10' wide

CONDITION OF PIT

Unstable

REMARKS:

DEPTH	SAMPLE INTERVAL	7.6' OVA SCREEN	PID	DESCRIPTION OF MATERIALS	REMARKS
0	0 - 1/2'	0	0	Topsoil	Topsoil cover
1					
2					
3					
4					
5					
6		0	0	Br. sand, some wood, plastic bag waste, metal, scraps, little silt, tr. glass, rubber (less waste on n. side)	Waste down to 11' bg ↓
7	1 1/2 - 11'				
8					
9					
10					
11					
12	11 - 12'	0	0	Tan native sand	Native
13				END OF TEST PIT @ 12' bg	*No readings above 0 w/ PID + multi-gas meters
14					
15					

TEST PIT PROFILE

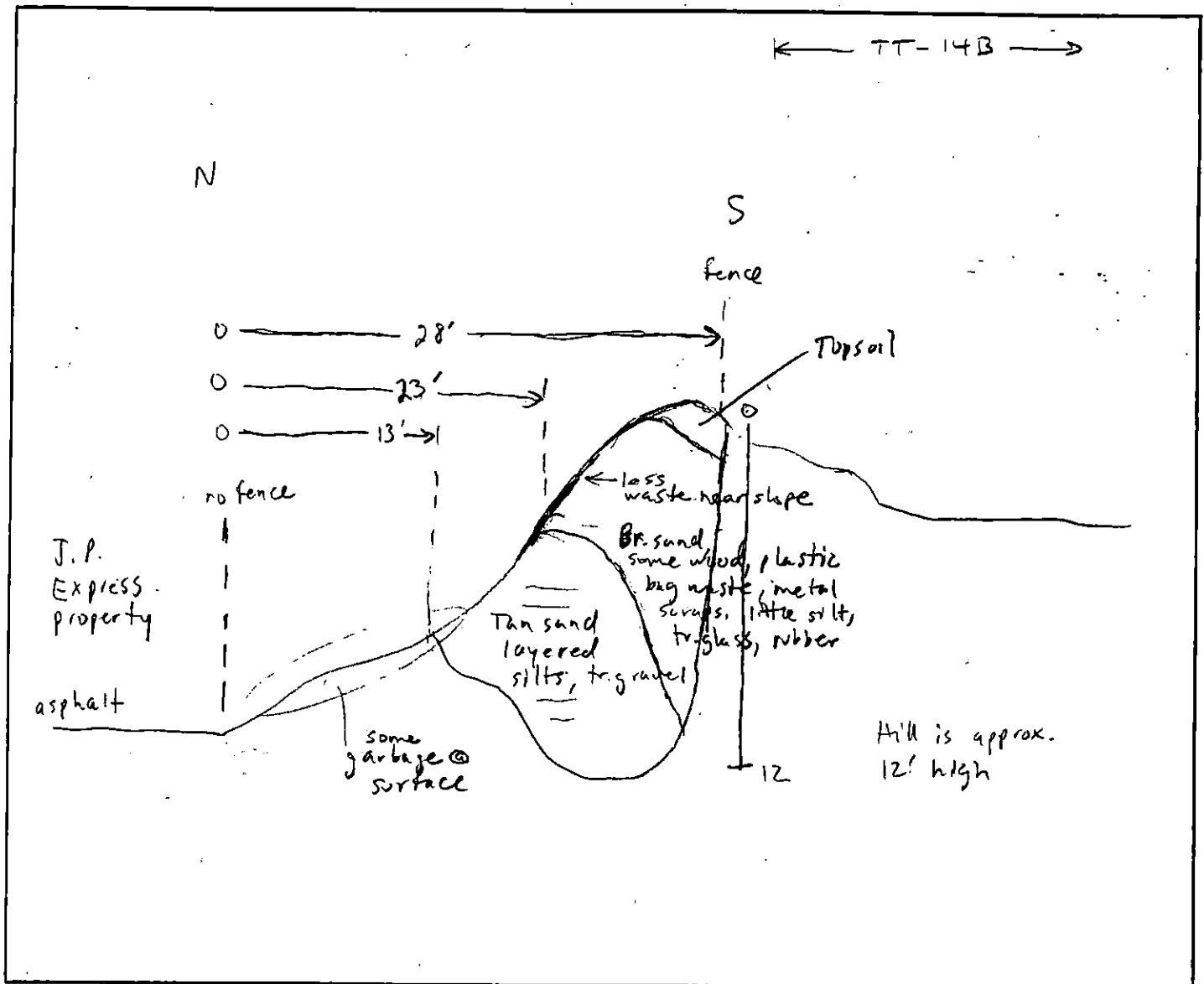
Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s)

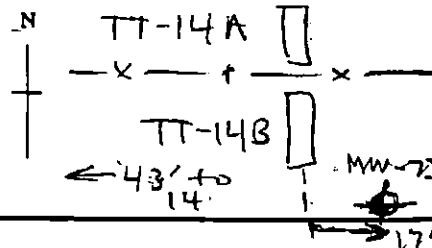
Test Pit Number TT-14A

North of TT-14 B



Remarks Waste 5' north of fence - significant waste starts @
2' n. of fence

TEST PIT LOG



TEST PIT NO.
TT-14B

PROJECT NO./NAME

Sonia Rd. LF / 1445-3B

LOCATION

Sonia Rd., W. Brentwood N.Y.

EXCAVATOR/EQUIPMENT/OPERATOR

~~J. Palmer / Case 645 E Backhoe~~ / F&N / Komatsu / B. Durham

INSPECTOR/OFFICE

D. Obradovich / D&B

START/FINISH DATE

10/4/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

Dimensions 11' long x 15 1/2' deep x 7' wide

CONDITION OF PIT

Very Unstable

REMARKS:

DEPTH	SAMPLE INTERVAL	% LEL PIP OVA 117	SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-1'	0	0	Thin topsoil over br. sand	1' cover sand
1	1-1 1/2'	0	0.6	DK. br. sandy plastic bag waste, some wood, metal scraps, rubber tires, little paper	Waste down to 1 1/2' on N. side 14 1/2' on S. side
2					
3					
4					
5					
6					
7	1 1/2-15 1/2'	4	4.1	Tan sand	Native sand?
8					
9					
10					
11					
12					
13					
14					
15					

END OF TEST PIT @ 15 1/2' lg

N/DEPTPL

*Max 4% LEL
on Multi-gas
meter 4.1 ppm
on PID

TEST PIT PROFILE

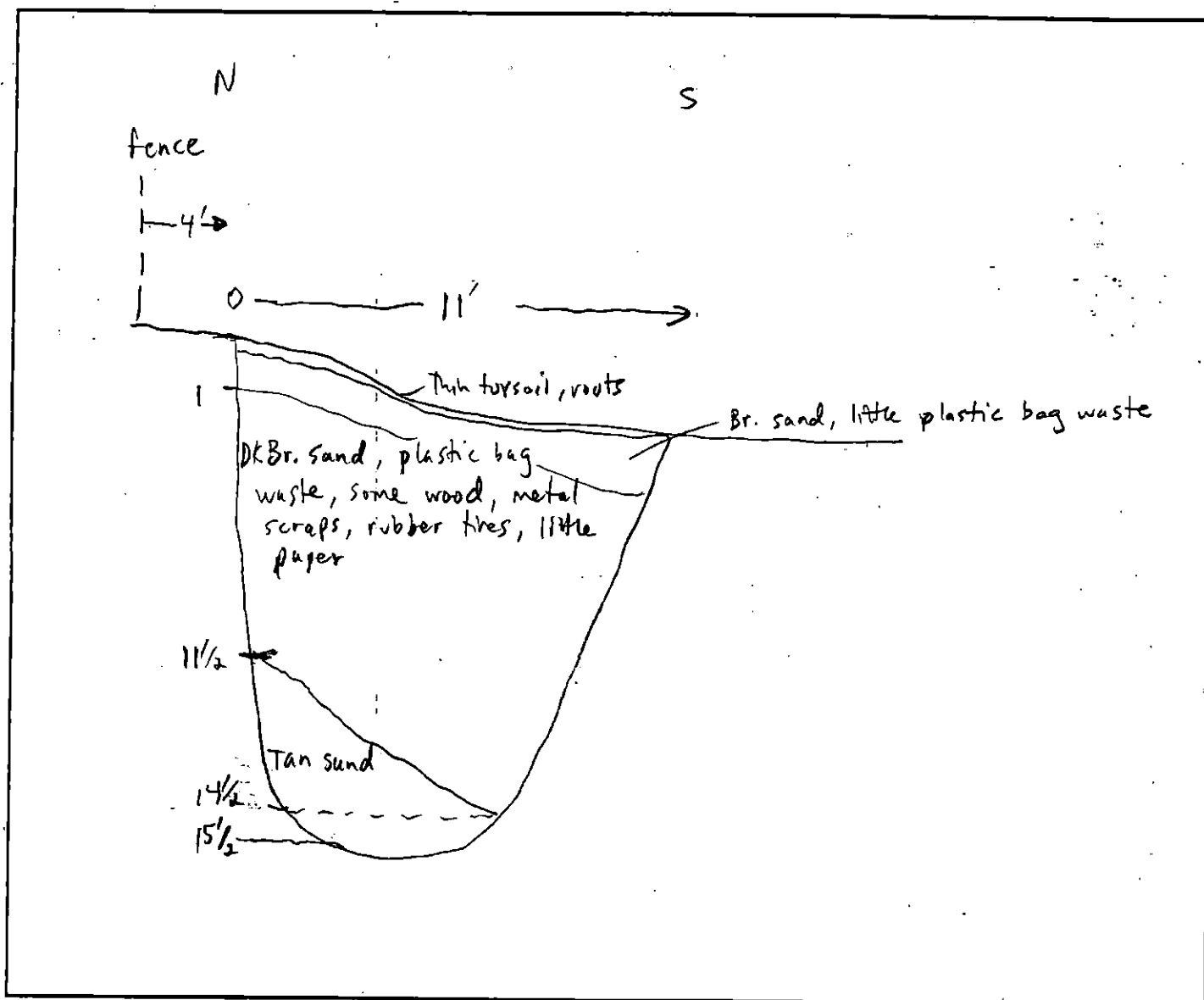
Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-~~14~~14B

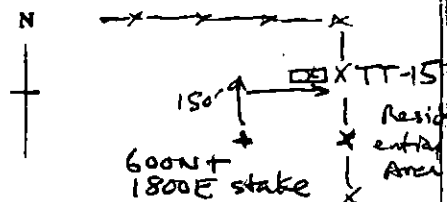
26' west of MW-07I well



Remarks _____

TEST PIT LOG

TEST PIT LOCATION SKETCH MAP



TEST PIT NO.
TT-15

PROJECT NO./NAME:

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 550 E 4WD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich / DCB

START/FINISH DATE

8/13/97

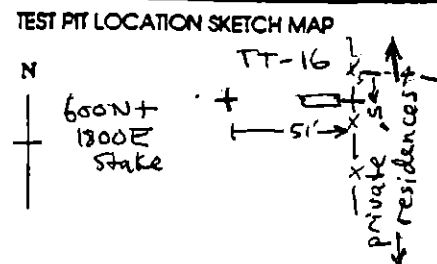
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL) -

CONDITION OF PIT

Very Unstable

REMARKS: Slope of waste $\frac{6}{3}$ very steep waste w/in 4' of property (fence)

DEPTH	SAMPLE INTERVAL	% LEAK PID SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0 - 1/2'	0	Leaf mulch over f. br. sand	1/2' leaf mulch
1	1/2 - 4'	0	Lt. br. f-m sand, some gravel tr. plastic (bricks, wood & sand on west side of trench)	on west side 2' cover sand - 1/4' cover sand (on east side)
2				
3				
4				
5	4 - 10'	0	plastic bag waste, wood, some tan f. sand & silt, little metal; rags, carpeting, tr. glass, dry	waste from 4' down past 10' log
6				
7				
8				
9				
10				
11			END OF TEST PIT	* Max. Multi-gas reading 0 ppm
12				
13				
14				
15				



TEST PIT LOG

TEST PIT NO. TT-16	
PROJECT NO./NAME 1445 / Sonia Road Landfill - RI	LOCATION Sonia Rd. Landfill, W. Brentwood, NY.
EXCAVATOR/EQUIPMENT/OPERATOR Case 580 E 4WD Backhoe / B. Durham	
INSPECTOR/OFFICE K. Robins D. Obradovich / D&B	START/FINISH DATE 8/13/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT Unstable.
REMARKS: Waste w/in 3' of fence 10' by @ 5' from fence steep grade of waste	

DEPTH	SAMPLE INTERVAL	% EL. PID GTA PPM SCREEN	DESCRIPTION OF MATERIALS	REMARKS	
0	0 - 1 1/2'	0	0	Top soil, roots, w/ Br. sand tr. plastic	1 1/2 - 2' cover soil over waste
1					
2					
3					
4	1 1/2 - 10'	0	0	Plastic bag waste and C&D incl. wood, metal, small appliances, carpeting, grey f. sand, little br. sand glass, dry	Waste down past 10' by
5					
6					
7					
8					
9					
10					
11				END OF TEST PIT	* Max. multi-gas reading 0 ppm
12					
13					
14					
15					

TEST PIT PROFILE

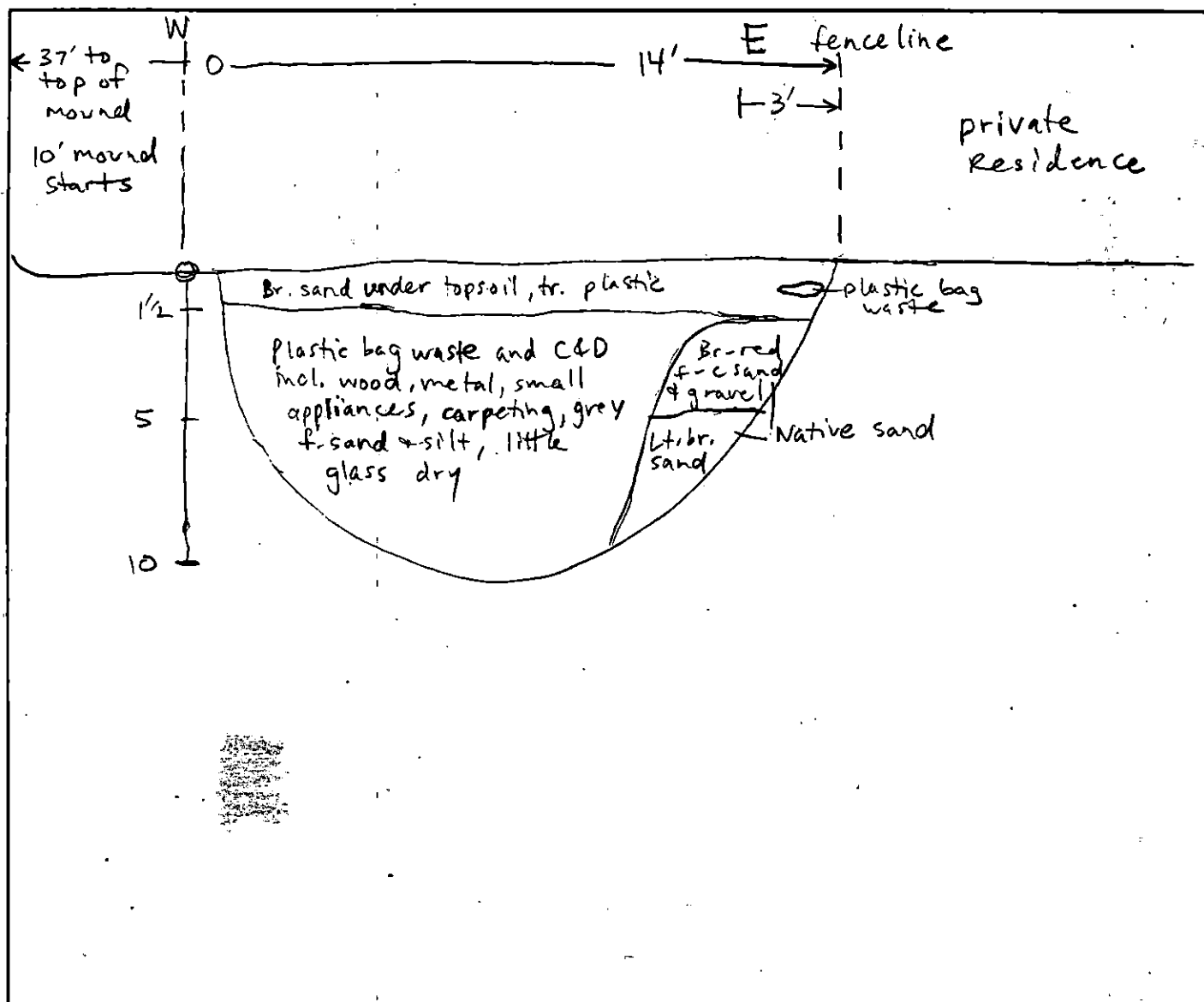
Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-16

51' east of 600 N + 1800 E stake directly west of fence



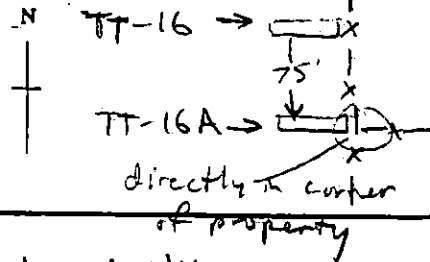
Remarks Waste starts 3' west of fence



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TEST PIT LOG

TEST PIT LOCATION SKETCH MAP



TEST PIT NO.
TT-16A

PROJECT NO./NAME

Sonia Rd. LF / 1445-3B

LOCATION

Sonia Rd., W. Brentwood N.Y.

EXCAVATOR/EQUIPMENT/OPERATOR

J. Palmeri / Case 680 E Buckhoe / F&N

INSPECTOR/OFFICE

D. Obradovich / D&B

START/FINISH DATE

10/21/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

Unstable

REMARKS: **Waste down to at least 6' by 2' from fence some waste @ fence**

DEPTH	SAMPLE INTERVAL	FILE PID OVA PPM SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-2'	0 0	Topsoil over br. sand, tr. plastic on e. side	~ 1' cover soil over waste
1				
2				
3	2-3 1/2'	0 0	Tan sand, large wood timber, tree trunks, metal, conc., little tires, plastic	tree not 1' down to ~ 6' by
4				
5			END OF TEST PIT AT 3' by	* No PID or Multi-gas readings
6			Refusal @ 3' by due to wood timber	(@ PPM PID 109.6 EL)
7			tree trunks, & possible metal	
8				
9				
10				
11				
12				
13				
14				
15				



DVIRKA
AND
BARTILUCCI

TEST PIT PROFILE

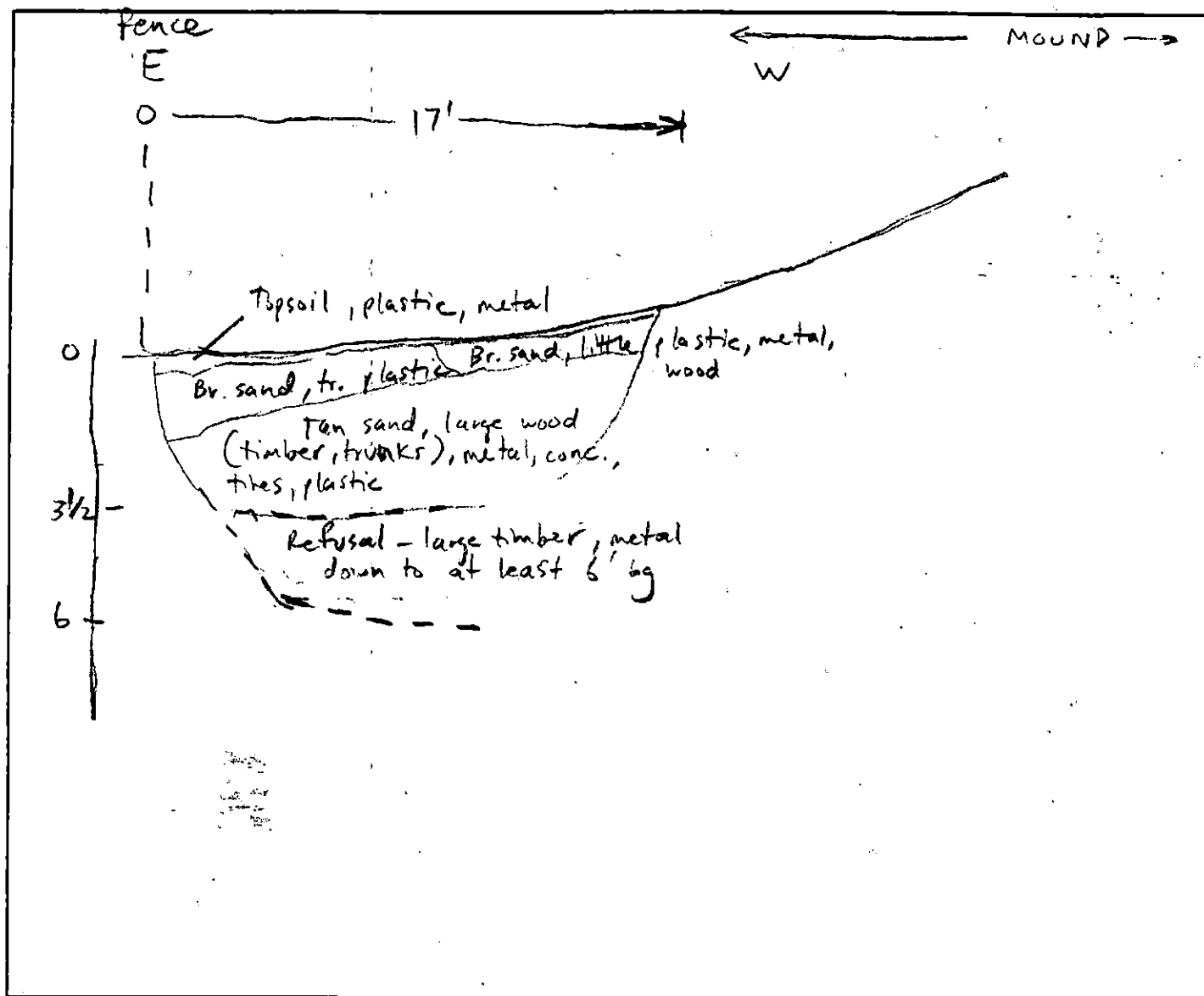
Project Sonia Road Landfill - RI

Project Number 1445-3B

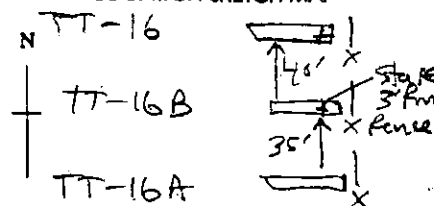
Sample(s) Interval(s) _____

Test Pit Number TT-2 16 A

75' South of TT-16



Remarks Waste at fence primarily wood, some plastic & metal
down to at least 6' bg 2' away from fence



TEST PIT LOG

TEST PIT NO. TT-16B	
PROJECT NO./NAME Sonja Rd. LF / 1445-3B	LOCATION Sonja Rd., W. Brentwood N.Y.
EXCAVATOR/EQUIPMENT/OPERATOR J. Palmeri / Case 680 E Buckhore / F&N	
INSPECTOR/OFFICE D. Obradovich / D&B	START/FINISH DATE 10/23/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT St. stable
REMARKS: Limit of waste @ 3' bg	

DEPTH	SAMPLE INTERVAL	9 LEL PID 11 OVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-2 1/2'	0 0	Topsoil over reworked tan-br. sand, tr. waste (plastic bag remnants)	topsoil cover + sand waste starts @ 2 1/2' W. side @ 2 1/2' bg
1				
2	2 1/2-5'	0 0	E-side - Red.-br. sand, possibly native / possibly reworked W. side - metal waste, some plastic, tires, wood	waste @ 2 1/2' bg
3				
4				
5			END OF TEST PIT @ 5' bg	* No PID or 9 LEL readings above 0.
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

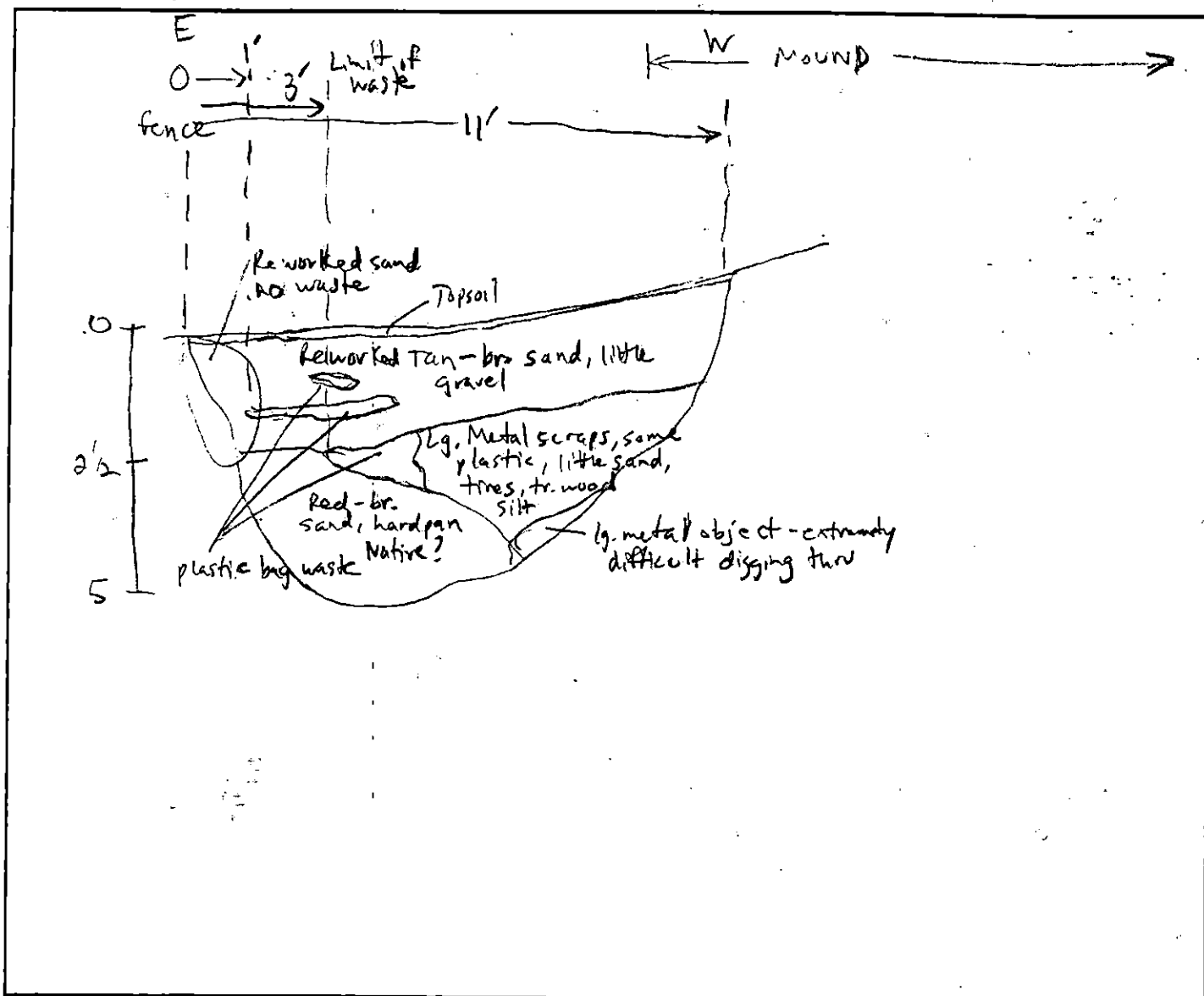
Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-~~16~~ 16B

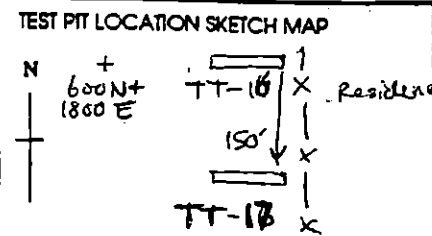
35' north from TT-16A



Remarks Limit of plastic waste (tr. @ 1' from fence) ~ 3' from fence



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TEST PIT LOG

TEST PIT NO. TT-17	
PROJECT NO./NAME 1445./ Sonia Road Landfill - RI	LOCATION Sonia Rd. Landfill, W. Brentwood, NY.
EXCAVATOR/EQUIPMENT/OPERATOR Case 580 E 4WD Backhoe / B. Durham	
INSPECTOR/OFFICE K. Robins D. Obradovich / D&B	START/FINISH DATE 8/13/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT Unstable
REMARKS: Waste at fence line - steep slope of waste towards landfill	

DEPTH	SAMPLE INTERVAL	% EL. PID GVA ppm SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-1/2'	0	Topsoil, leaf mulch, over br. sand, gravel, tr. waste	1- 1/2 soil cover
1	1/2 - 10'	0	plastic bag waste and wood (timber, paneling, planks), some tires, br. sand, little silt, metal, tr. glass	Waste from 1/2 - past 10' bg
2				
3				
4				
5				
6				
7				
8				
9				
10				
11	10' - 15'		END OF TEST PIT	* Max. multi-gas reading 10 ppm
12				
13				
14				
15				

NJDEPTPL



DVIRKA
AND
BARTILUCCI

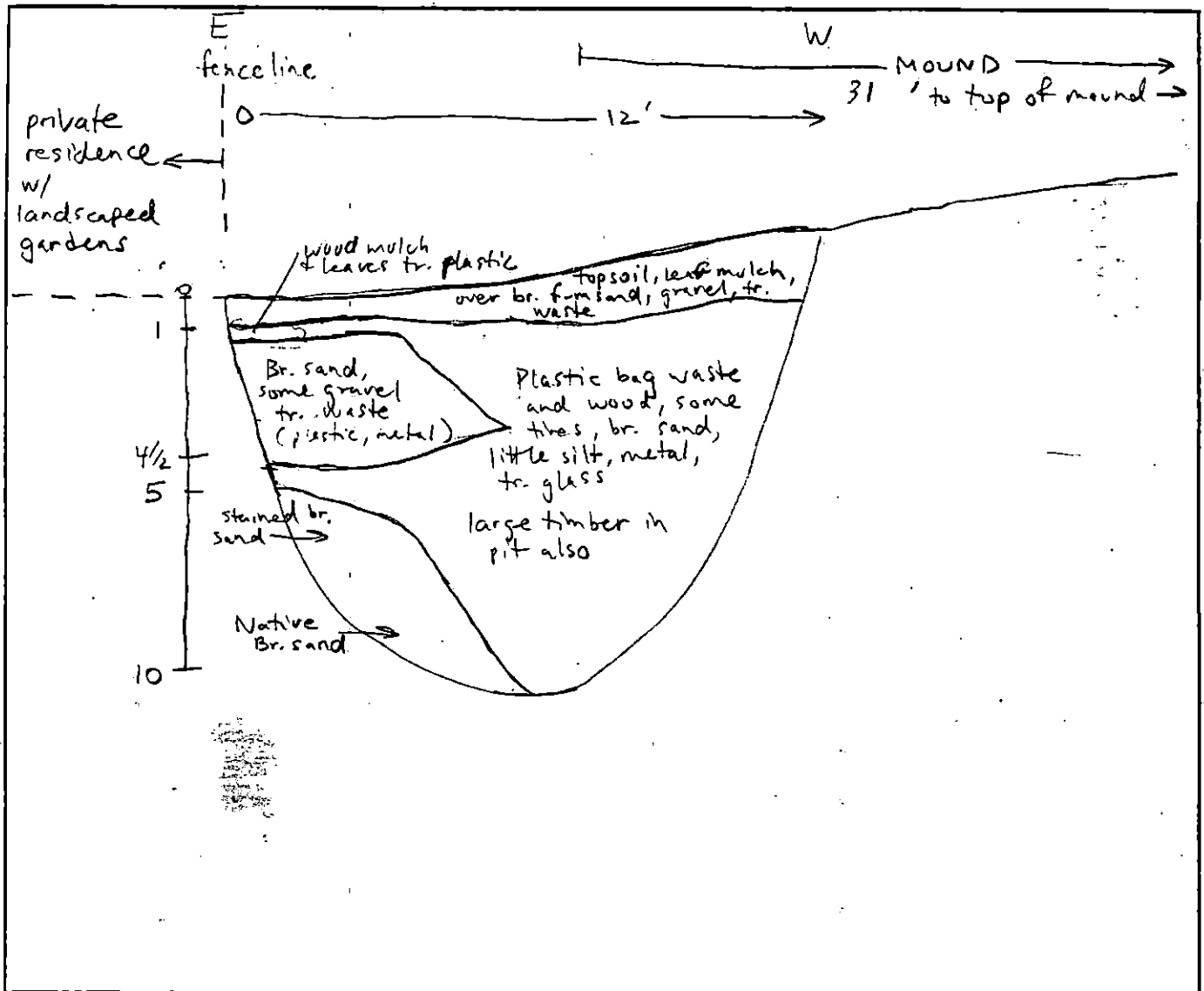
TEST PIT PROFILE

Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-17

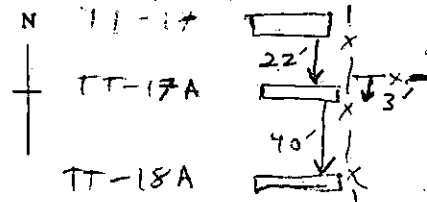


Remarks _____



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TEST PIT LOCATION SKETCH MAP



TEST PIT LOG

TEST PIT NO. TT-17A	
PROJECT NO./NAME Sonja Rd. LF / 1445-3B	LOCATION Sonja Rd., W. Brentwood N.Y.
EXCAVATOR/EQUIPMENT/OPERATOR J. Palmeri / Case 680 E. Buckhoe / F&N	
INSPECTOR/OFFICE D. O'Bradovich / D&B	START/FINISH DATE 10/23/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT Sl. Unstable/stable
REMARKS:	

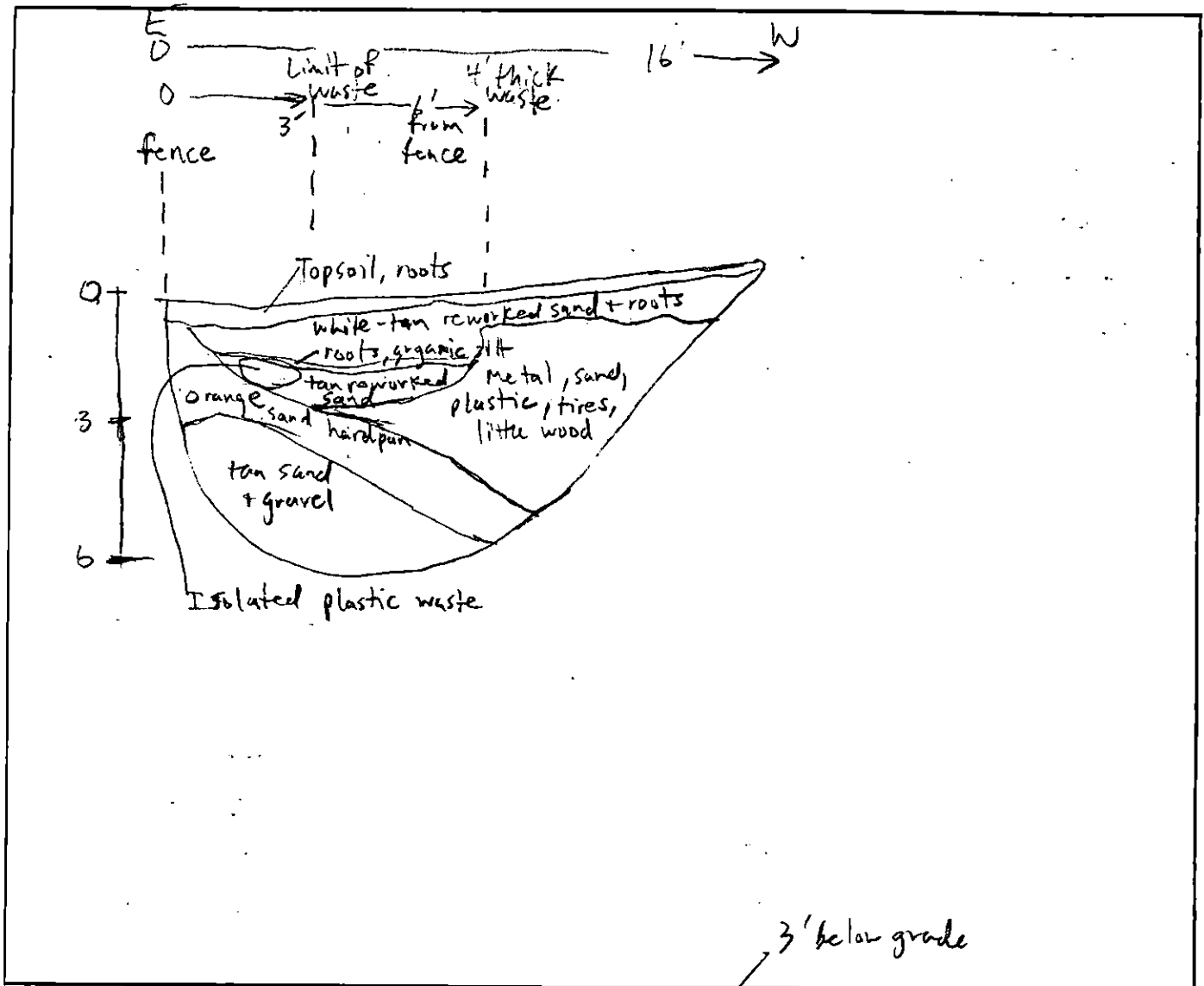
DEPTH	SAMPLE INTERVAL	7.0 LEL O.V.A. SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-3'	0 0	E. side Topsoil over white-tan sand (reworked) over tr. plastic waste @ 3' from fence	E. side - topsoil over reworked sand, tr. waste
1			W. side Topsoil over tan sand (1/2') over metal waste (litter plastic & wood)	W. side - topsoil over sand over waste
2				
3	3-6'	0 0	E. side tan sand & gravel	waste on W. side
4			W. side - waste incl. metal, plastic, tires, wood	
5				
6			END OF TEST PIT @ 6' bg	* No P.O. or 9.0 LEL readings above 0
7				
8				
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TT-~~18~~ 17A

40' north of TT-18A + 22' south of TT-17



Remarks Limit of waste 3' from fence, 4' thick waste @ 6' from fence

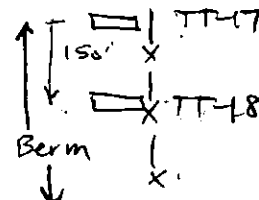


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BARTILUCCI

TEST PIT LOG

TEST PIT LOCATION SKETCH MAP

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↑
+
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TEST PIT NO.
TT-18

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580 E HWD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich

START/FINISH DATE

8/13/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL) -

CONDITION OF PIT

Unstable

REMARKS:

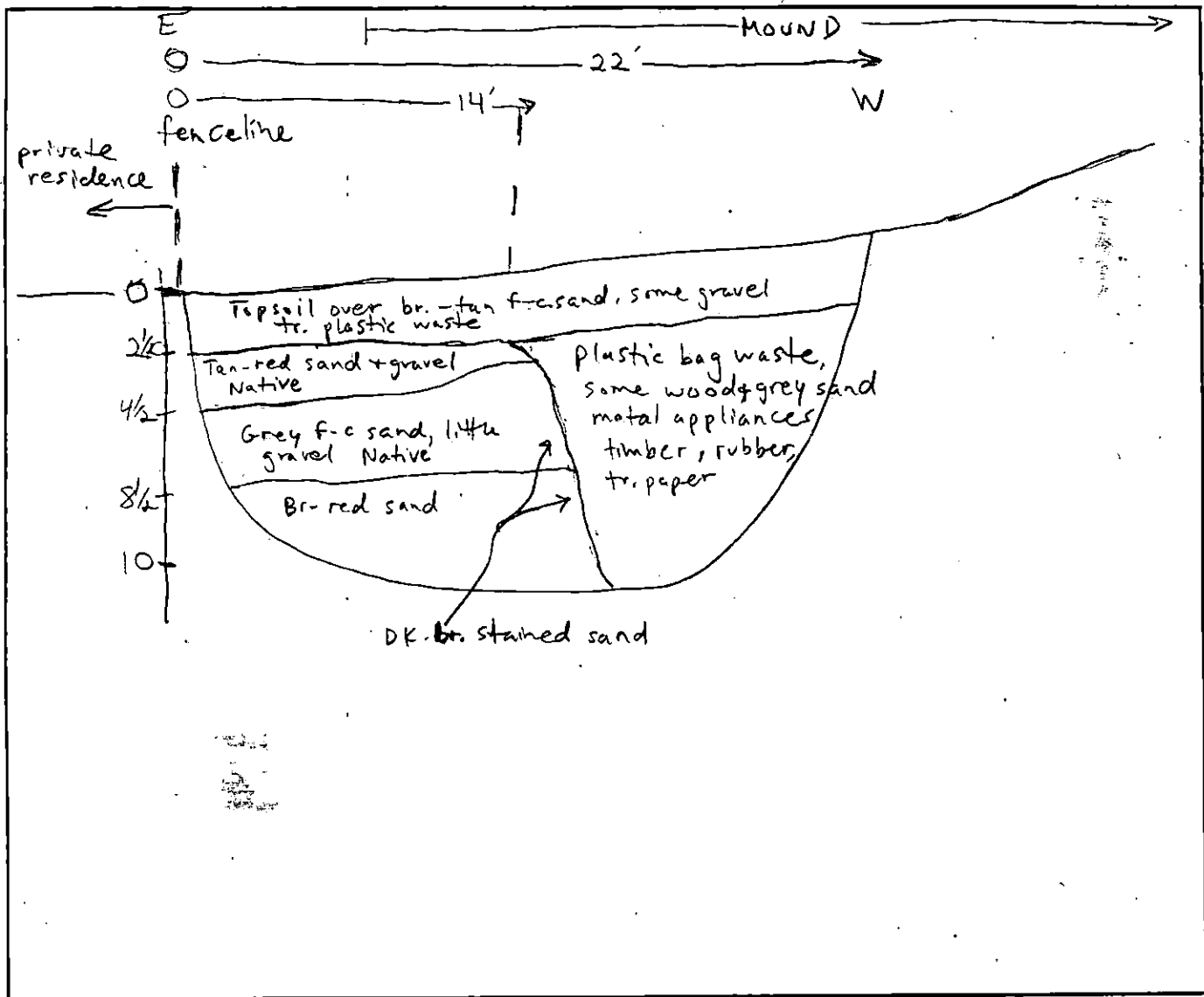
DEPTH	SAMPLE INTERVAL	REL. PID OZA ppm SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0 - 2 1/2'	0	Topsoil over br-tan sand, some gravel, tr waste (plastic, wood)	2 1/2' of soil cover (tr. waste)
1				
2				
3	2 1/2 - 10'	0	West side of trench plastic bag waste, some wood + grey sand, metal, timber, rubber, tr. paper East side of trench tan-red sand + gravel over: Grey f-c sand over: Br-red sand	waste from 2 1/2 to past 10' bg } native
4				
5				
6				
7				
8				
9				
10				
11			END OF TEST PIT	* Max. multi-gas reading 0 ppm
12				
13				
14				
15				

NJDEPTPL

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TT-18

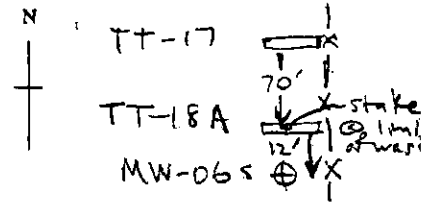


Remarks waste starts 14' from fence line - very steep slope of waste



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TEST PIT LOCATION SKETCH MAP



TEST PIT LOG

TEST PIT NO. TT-18A	
PROJECT NO./NAME Sonja Rd. LF / 1445-3B	LOCATION Sonja Rd., W. Brentwood N.Y.
EXCAVATOR/EQUIPMENT/OPERATOR J. Palmeri / Case 680 E Backhoe / F&N	
INSPECTOR/OFFICE D. O'Bradovich / D&B	START/FINISH DATE 10/21/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT SL: stable
REMARKS: Limit of waste 12' from fence	

DEPTH	SAMPLE INTERVAL	% LEL PIP OVA 11"		DESCRIPTION OF MATERIALS	REMARKS
0	0 - 1 1/2	0	0	Br.-red sand + gravel, tr. waste	side Thick topsoil over br.-red sand 1' cover over waste on W. side
1					
2	1 1/2 - 4	0	0	Tan sand, little gravel waste including wood, metal, plastic near center of trench	waste from 1-3' bg in center
3					
4				END OF TEST PIT AT 4' bg	* No PIP or multi- gas readings (0 ppm + 0.7 LEL)
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

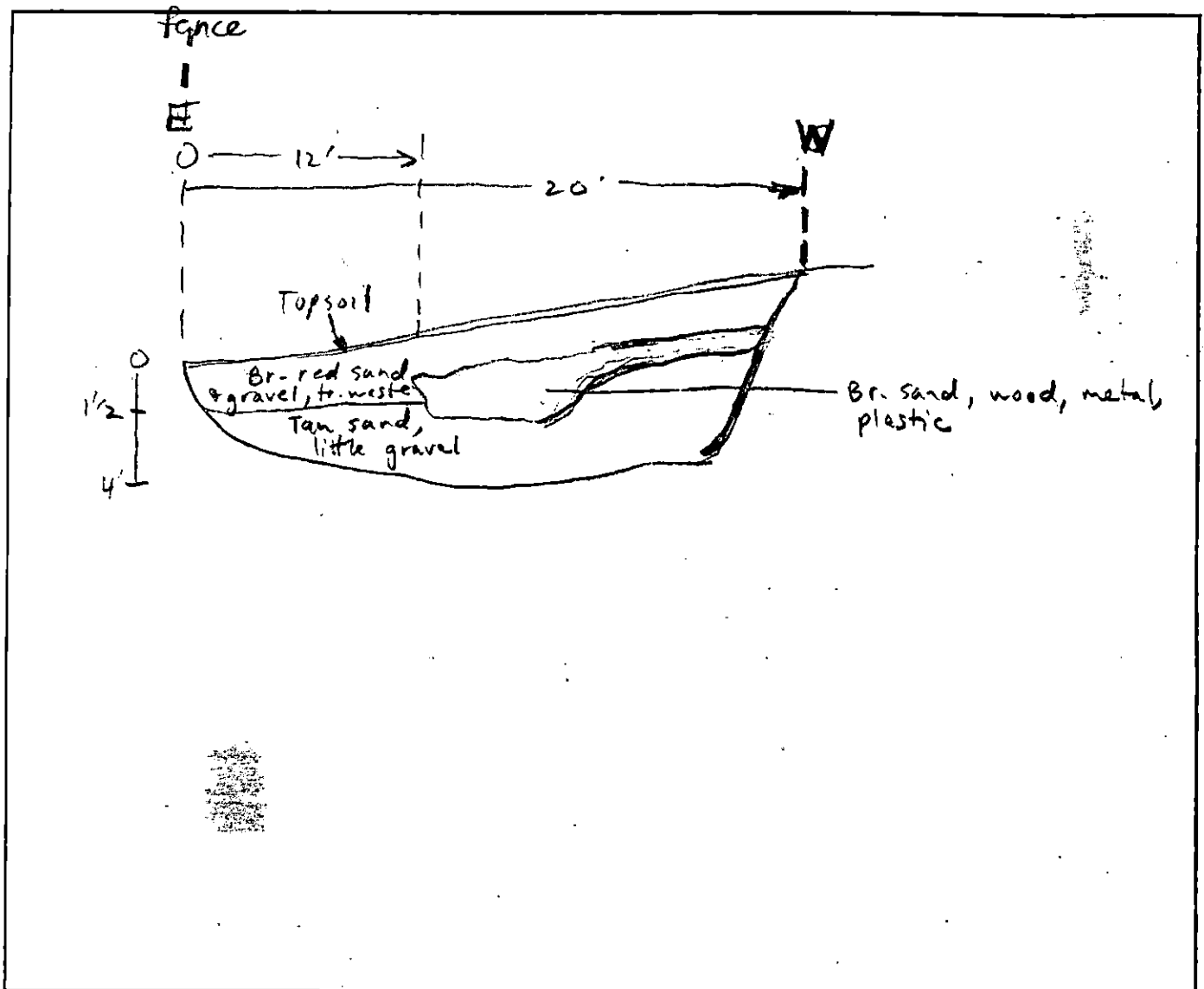
NJDEPTPL

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TT-~~18~~18A

70' south of TT-17 20' north of M.W-65

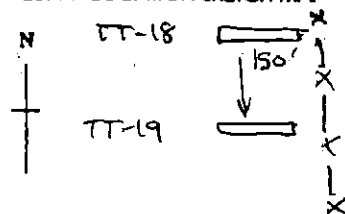


Remarks Limit of waste 12' from fence



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TEST PIT LOCATION SKETCH MAP



TEST PIT LOG

TEST PIT NO. TT-19	
PROJECT NO./NAME 1445 / Sonia Road Landfill - RI	LOCATION Sonia Rd. Landfill, W. Brentwood, NY.
EXCAVATOR/EQUIPMENT/OPERATOR Case 580 E 4WD Backhoe / B. Durham	
INSPECTOR/OFFICE K. Robins D. Obradovich / D&B	START/FINISH DATE 8/13/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT Sl. stable (W. end) <u>E end</u> Very Stable
REMARKS: Waste starts 21' from fence thick waste starts 32' from fence	

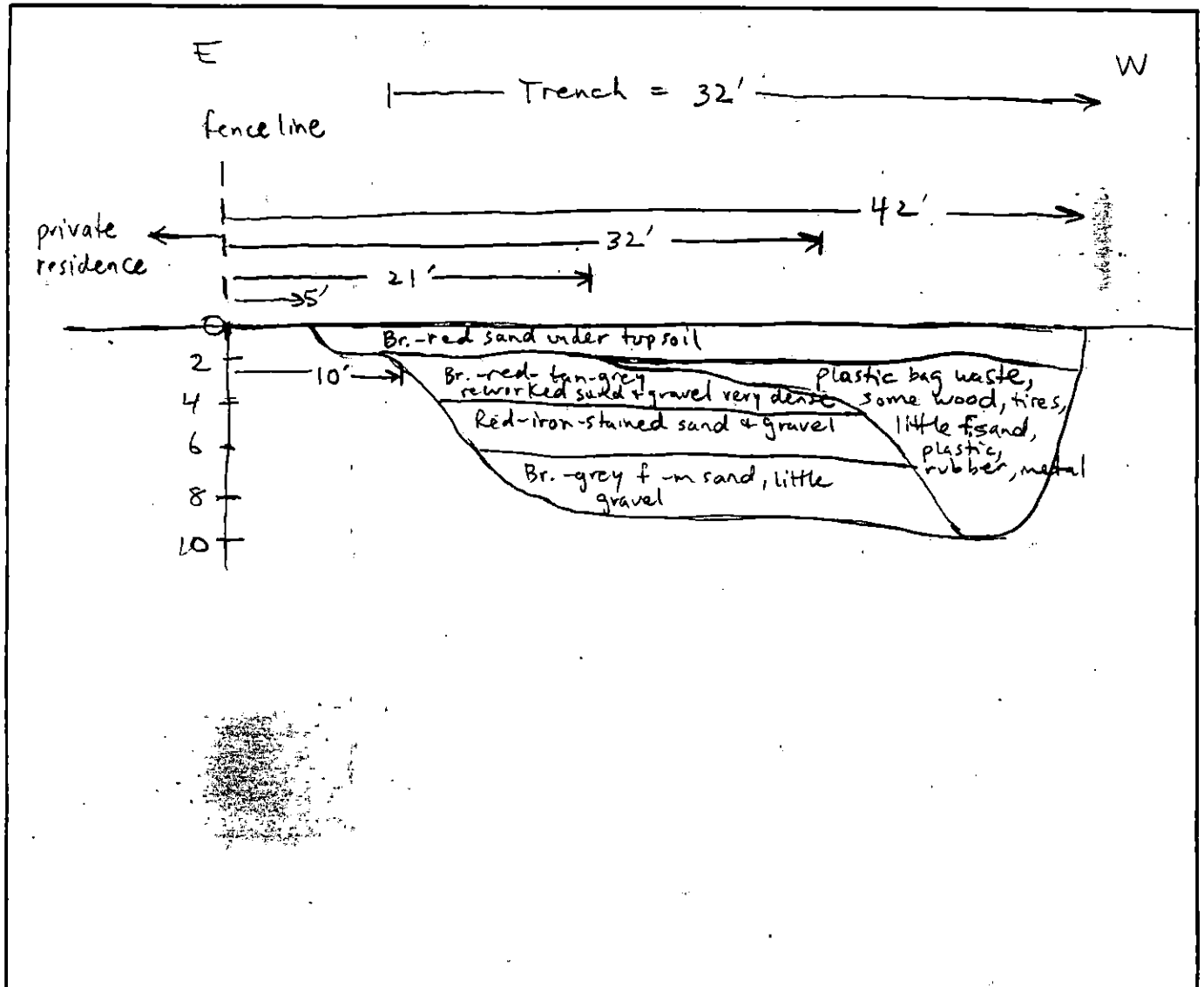
DEPTH	SAMPLE INTERVAL	9.1 LEL PID % O ₂ A ppm SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	0-2'	0 0	Topsoil over Br.-red sand	2' cover mat'l (sand)
	2-10'	0 0	West half of trench Plastic bag waste, some wood, tires, little f. sand + plastic, rubber, metal East half of trench hard-pan sand + gravel over Br-grey sand	waste grades from 2-10' by thin minor grade of slope of waste compared to further north
			END OF TEST PIT	Max. multi-gas reading 0 ppm

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TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TT-19



Remarks Waste starts 21' from fence 2' thick 11' away

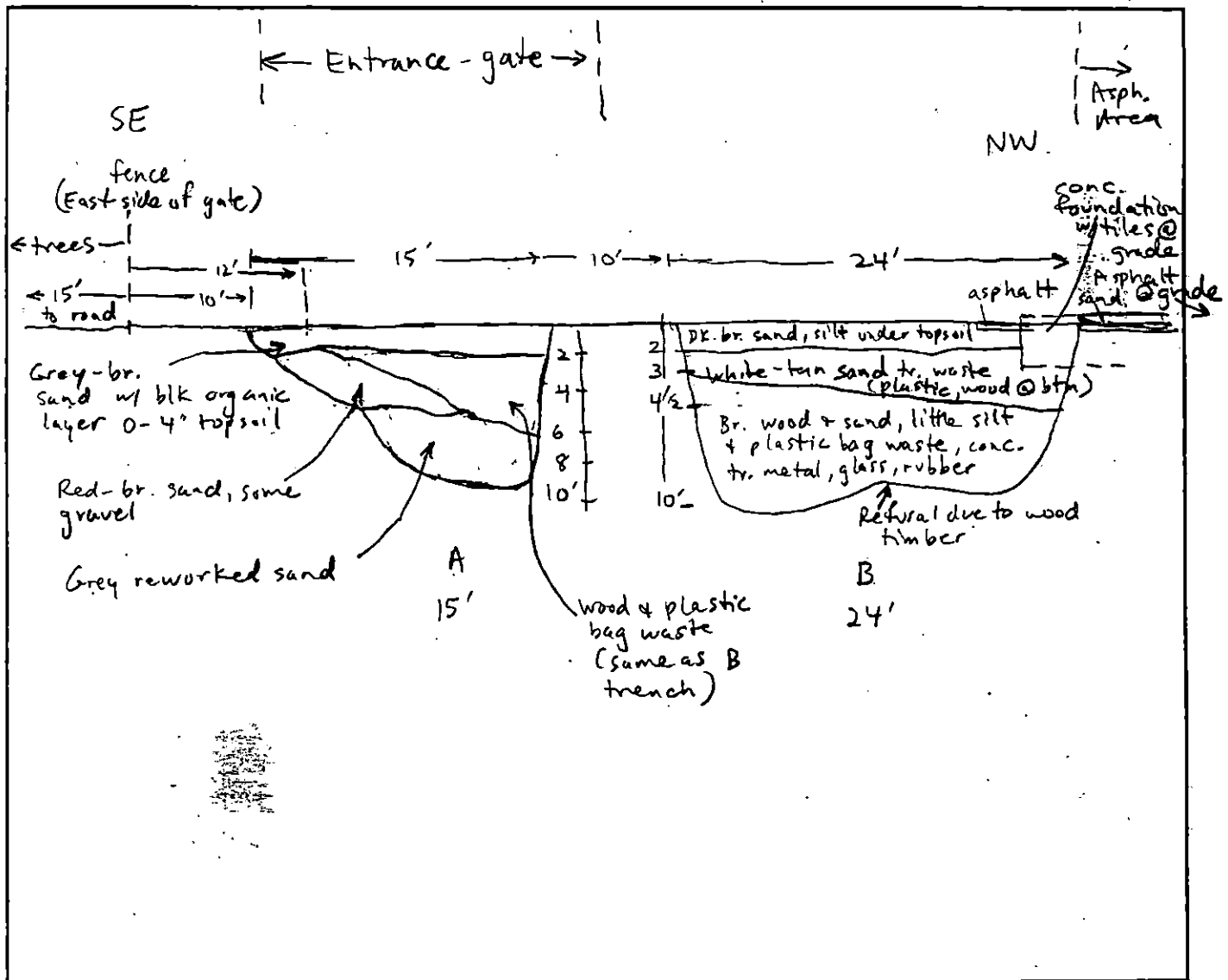
TEST PIT PROFILE

Project Sonia Road Landfill - RI

Project Number 1445-3B

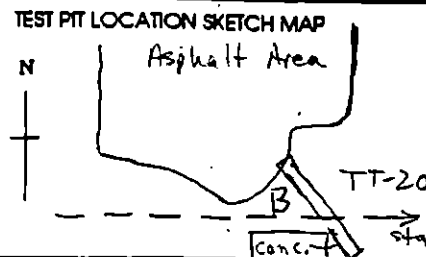
Sample(s) Interval(s) _____

Test Pit Number TT-20



Remarks _____

TEST PIT LOG



TEST PIT NO.
TT-20 A

PROJECT NO./NAME

LOCATION

1445 / Sonia Road Landfill - RI

Sonia Rd. Landfill, W. Brentwood, NY

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580 E 4WD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich / D&B

START/FINISH DATE

8/14/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

sl. stable

REMARKS:

Waste 12' from gate (fence)

Bitter ~~hydrocarbon~~ odor (solvent)? in trench however 0.0 ppm P10

DEPTH	SAMPLE INTERVAL	TOLEL P10 SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-2'	0 0	Grey-br. sand under thin topsoil	2' cover soil
1			3" gravel layer near ~~asphalt~~ NY side 1' down	
2				
3	2-6'	0 0	wood & little Plastic bag waste, + sand, little silt, conc. fr. metal, glass	* waste from 2-6'
4				
5			* Bitter solvent odor. no P10 readings	
6				
7	6-10'	0 0	Grey reworked sand	Reworked sand
8				
9				
10				
11			END OF TEST PIT	* Max. multi-gas reading 40 ppm in waste @ 6' bg
12				
13				
14				
15				



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TEST PIT LOCATION SKETCH MAP

N

see TT-20 A

TEST PIT LOG

TEST PIT NO.
TT-20-B

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580 E 4WD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich / D&B

START/FINISH DATE

8/14/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

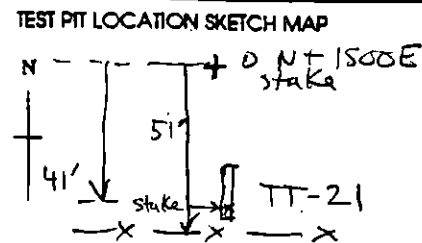
CONDITION OF PIT

Very Unstable

REMARKS:

DEPTH	SAMPLE INTERVAL	% EL PID OVA ppm SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-2'	0	DK. br. sand, silt under top soil 3" gravel layer ~ 1' by near asphalt area	4' Cover sand ↓ white-tan sand
1				
2	2-4 1/2'	0	white-tan sand tr. plastic wood @ btm	waste from ~4-10' by
3				
4	4 1/2'-10'	0	wood + plastic bag waste + sand, little silt, conc., fr metal glass bitter solvent odor - no PID readings	* Max. multi-gas reading 140-160 ppm
5				
6	END OF TEST PIT			
7				
8				
9				
10				
11				
12				
13				
14				
15				

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TEST PIT LOG

TEST PIT NO. TT-21	
PROJECT NO./NAME 1445 / Sonia Road Landfill - RI	LOCATION Sonia Rd. Landfill, W. Brentwood, NY.
EXCAVATOR/EQUIPMENT/OPERATOR Case 580 E 4WD. Backhoe / B. Durham	
INSPECTOR/OFFICE K. Robins D. Obradovich / D&B	START/FINISH DATE 8/14/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT Very Unstable
REMARKS: Trench was wide ~6-7' at two pts. along trench	

DEPTH	SAMPLE INTERVAL	%LEL OVA	PID SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-1'	0	0	Br-grey sand, roots (thin topsoil)	~ 1- 1 1/2' soil cover
1					
2	1-8'	0	0	wood timber, some metal (appliances). + car parts, sand silt, moist <u>S. half of trench</u> Orange-tan + tan-grey sand, little gravel	1 1/2 - 8' waste
3					
4					
5					
6					
7					
8					
9				END OF TEST PIT	* Max. multi-gas reading 40 ppm
10					
11					
12					
13					
14					
15					

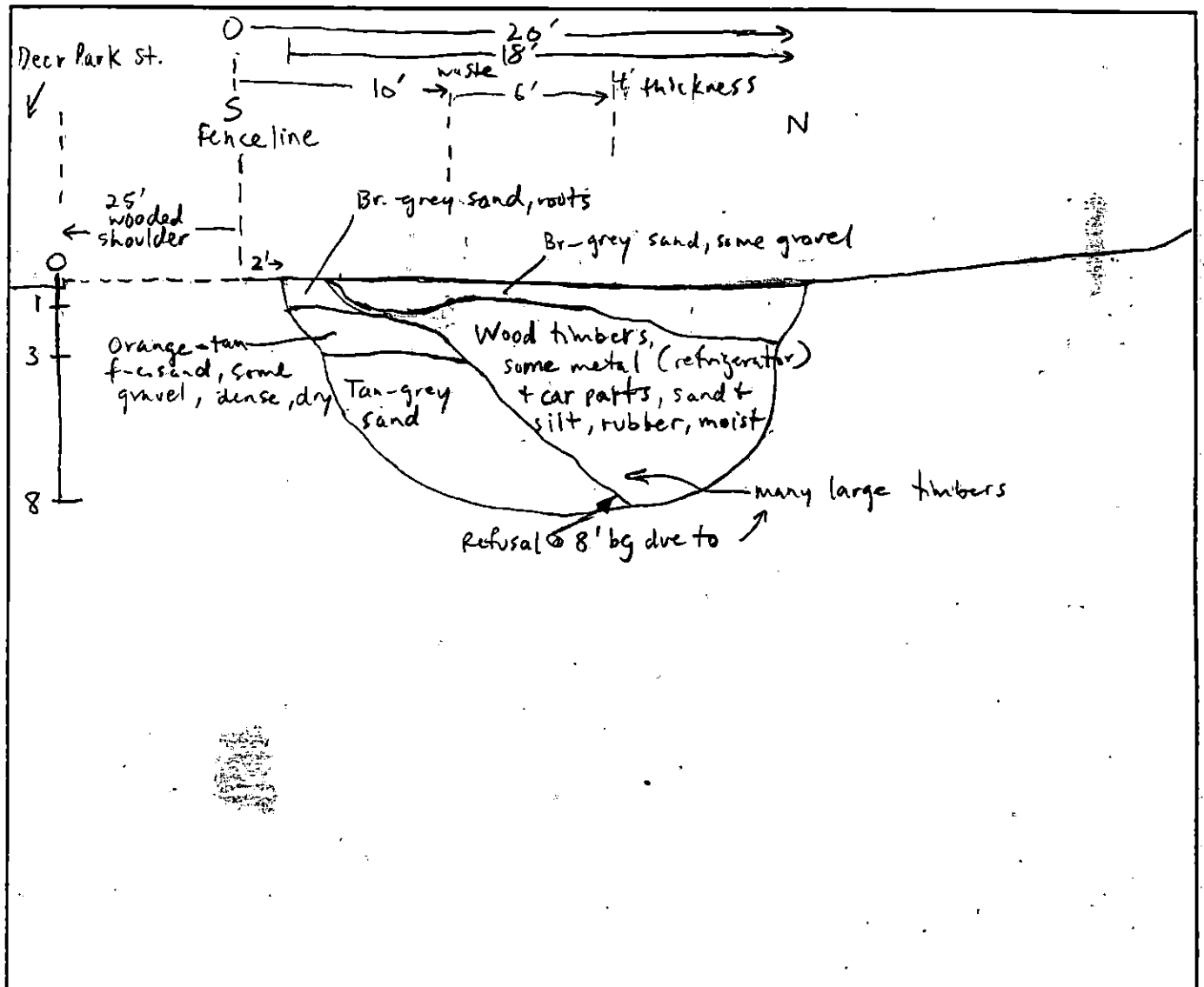
TEST PIT PROFILE

Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-21



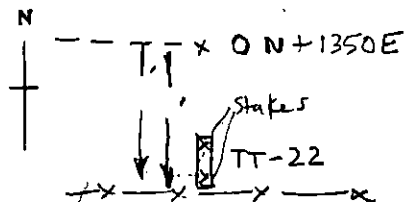
Remarks _____



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TEST PIT LOG

TEST PIT LOCATION SKETCH MAP



TEST PIT NO.
TT-22

PROJECT NO./NAME:

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580 E HWD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich

START/FINISH DATE

8/14/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

Unstable

REMARKS:

Waste starts 18' north of fence

6' 10' Slope of waste

DEPTH	SAMPLE INTERVAL	LEL GVA SCREEN	PPM	DESCRIPTION OF MATERIALS	REMARKS
0	0-2'	0	0	Tan sand under thin organic topsoil	2' cover sand mat
1					
2					
3	2-8'	0	0	N. half trench Plastic bag waste + wood, little sand, metal, tires	Waste 2-8' by
4				S. half trench	
5				Br-orange + tan sand	
6				little gravel	
7	8-10'	0	0	Tan - lt. br. sand	Tan sand Native mat
8					
9					
10				END OF TEST PIT	* Max. multi-gas reading 0 ppm
11					
12					
13					
14					
15					

TEST PIT PROFILE

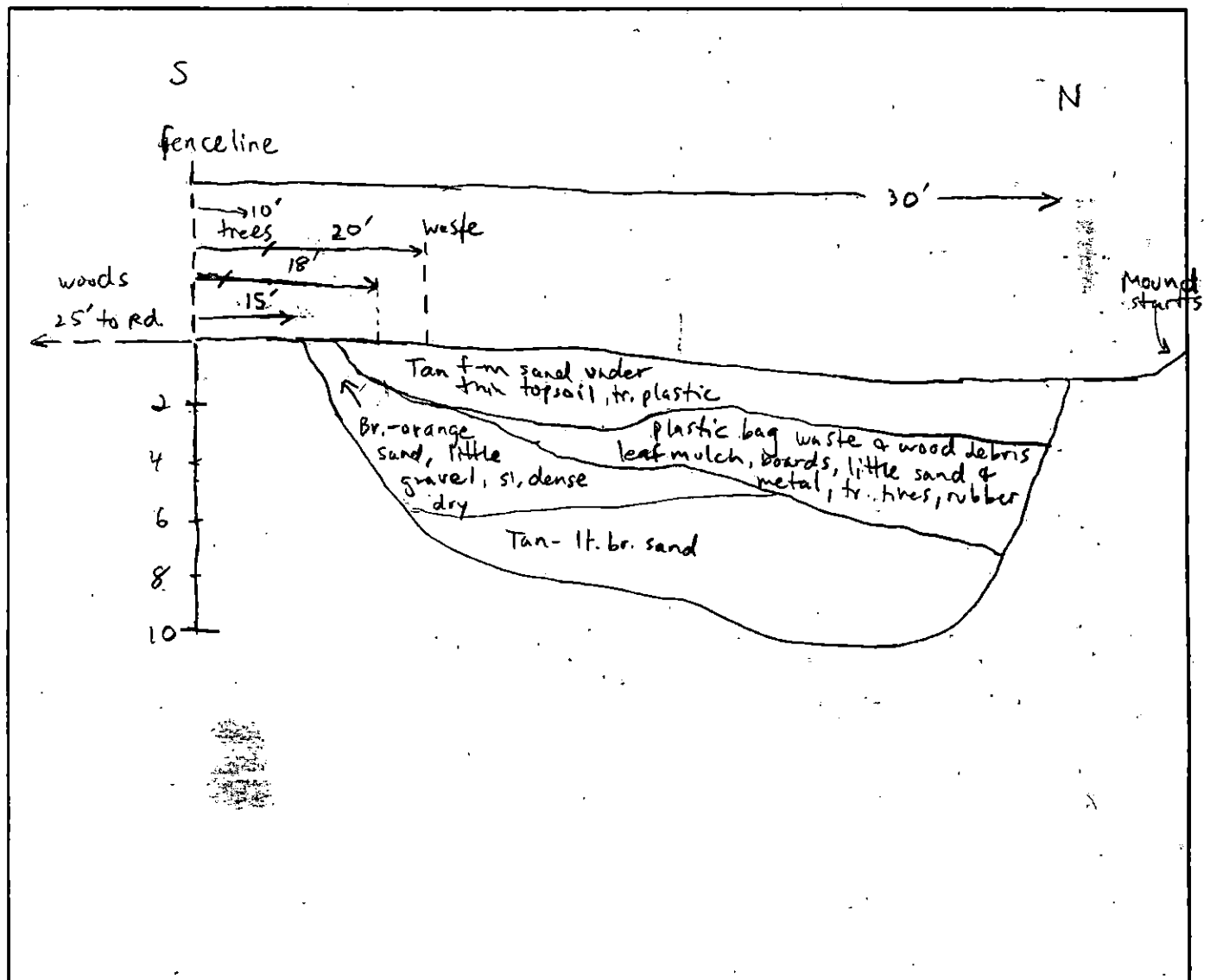
Project Sonia Road Landfill - RI

Project Number 1445-3B

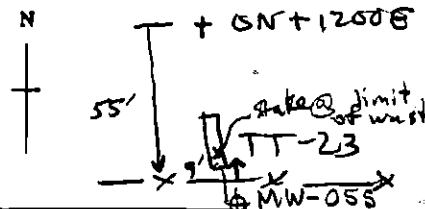
Sample(s) Interval(s) _____

Test Pit Number TT-22

140' west of TT-21 - 15' from (north) of fence



Remarks Waste limit 18' North of fence



TEST PIT LOG

TEST PIT NO. TT-23	
PROJECT NO./NAME 1445 / Sonia Road Landfill - RI	LOCATION Sonia Rd. Landfill, W. Brentwood, NY.
EXCAVATOR/EQUIPMENT/OPERATOR Case 580E 4WD Backhoe / B. Durham	
INSPECTOR/OFFICE K. Robins D. O'Bradovich / D&B	START/FINISH DATE 8/14/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT Sl. stable
REMARKS:  4' slope of waste limit of waste 72' north of fence	

DEPTH	SAMPLE INTERVAL	% LEL PID OVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS	
0	0-1	0	0	Br- blk. sand & silt under thin topsoil	~1' cover sand
1	1-9'	42	0	Br. wood & sand, little metal, plastic & Rubber tires dry No odor	waste from 1-9' deeper on N. side of trench
2					
3					
4					
5					
6					
7					
8					
9	9-10'	42	0	Tan-grey sand	waste to 10' bg on N. side
10				END OF TEST PIT	* Max. multi-gas reading was over limit > 10,000
11					
12					
13					
14					
15					

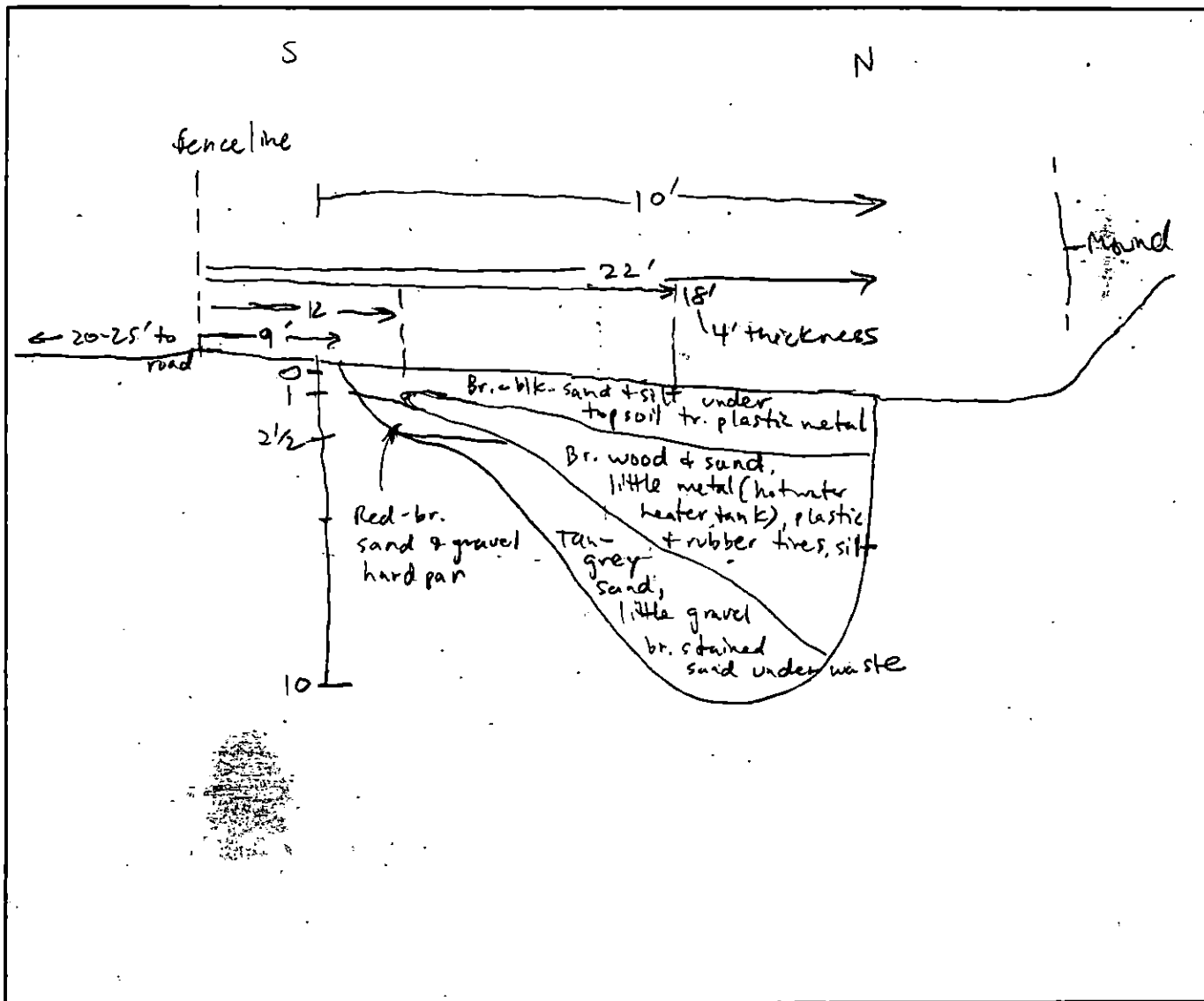
TEST PIT PROFILE

Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-23



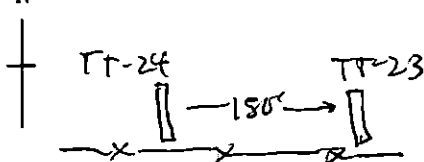
Remarks _____



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TEST PIT LOCATION SKETCH MAP

N



TEST PIT LOG

TEST PIT NO.
TT-24

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580 E 4WD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich / D&B

START/FINISH DATE

8/14/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

Unstable

REMARKS:

Waste 4' thick @ fence line

DEPTH	SAMPLE INTERVAL	%LEL PID SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-1/2'	0	Br. sand, roots under topsoil w/ deep roots organic silt	1 1/2' cover sand 3' on S. end of tree
1				
2				
3				
4	1 1/2'-9'	24%	Wood & metal, some leaf mulch, little plastic bag waste, fiber, sand, dry	4' waste on N. side 7 1/2'-8' on S. "
5				
6				
7				
8				
9				
10			END OF TEST PIT	* Max. multi-gas reading over 10K
11				
12			* 24% LEL read from pile	
13			17% in hole @ 8' bg	
14				
15				

NJDEPTPL

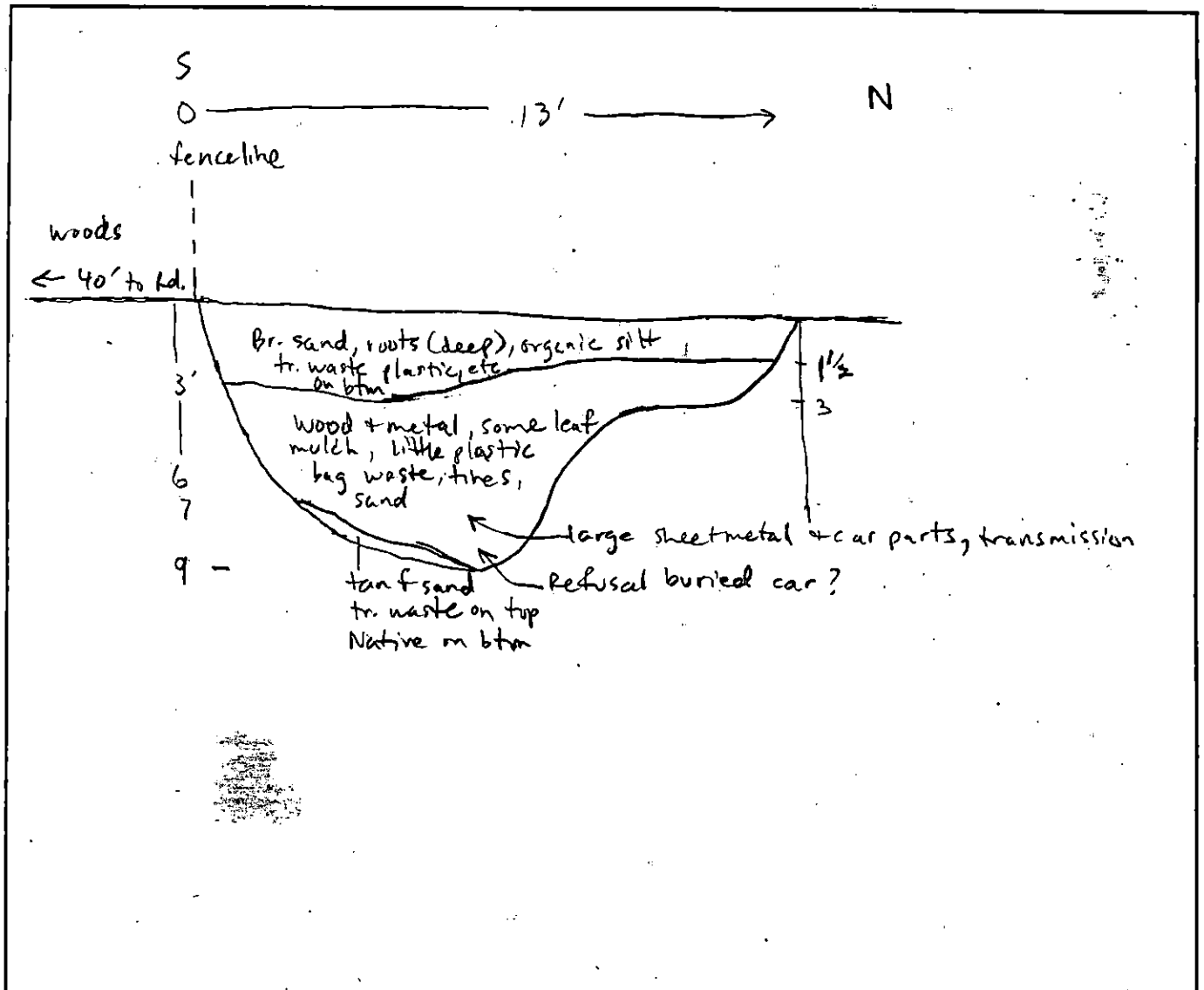
TEST PIT PROFILE

Project Sonia Road Landfill - RI

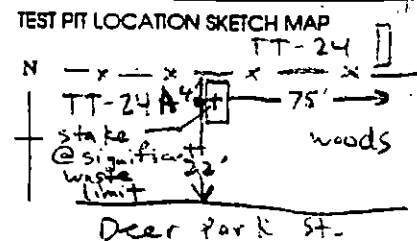
Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-24



Remarks Waste @ fence 3-7' bg



TEST PIT LOG

TEST PIT NO. TT-24A	
PROJECT NO./NAME Sonja Rd. LF / 1445-3B	LOCATION Sonja Rd., W. Brentwood N.Y.
EXCAVATOR/EQUIPMENT/OPERATOR J. Palmeri / Case 680 E Backhoe / F&N	
INSPECTOR/OFFICE D. O'Bradovich / D&B	START/FINISH DATE 10/21/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT Unstable
REMARKS: Limit of waste 4' from fence 3 1/2' thick waste @ fence from 1/2' 4'	

DEPTH	SAMPLE INTERVAL	% LEL PID OVA ppm SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-3'	0	N. side - Topsoil over waste incl. wood, tires, metal, household waste odor (rotten fruit odor), little plastic rubber tr. glass - down to 4'	1/2' topsoil cover over waste down to 4'
1			S. side Topsoil & tr. waste over tan sand	
2				
3	3-4'	0-1	N. side - waste S. side - Reworked sand & tr. waste	Native
4	4-6'	0-1	Br - red sand w/ some gravel native	
5				
6			END OF TEST PIT	* Max. multi-gas & PID was 0-1 % LEL @ 1-6' bg - 0 ppb PID
7				
8				
9			* Rotten fruit odor in test trench	
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

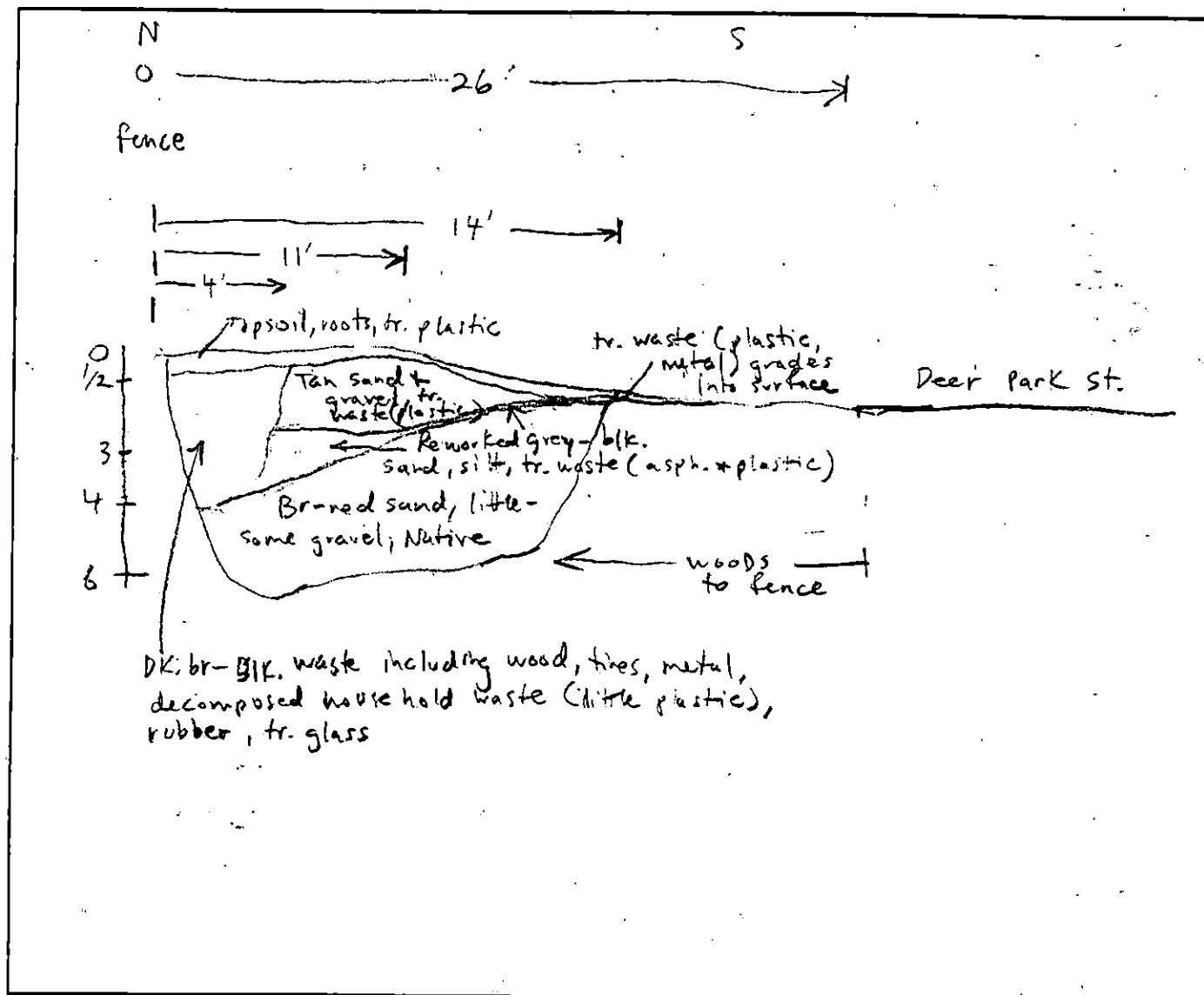
Project Sonia Road Landfill - RT

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-24A

75' west of TT-24 + 24 B



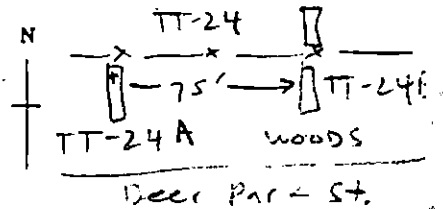
Remarks Limit of waste (appreciable waste) 4' from fence (s. of)

22' from road. Trace waste^{buried} 12' from road



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TEST PIT LOCATION SKETCH MAP



TEST PIT LOG

TEST PIT NO.
TT-24B

PROJECT NO./NAME

Sonia Rd. LF / 1445-3B

LOCATION

Sonia Rd., W. Brentwood N.Y.

EXCAVATOR/EQUIPMENT/OPERATOR

J. Palmeri / Case 680 E Buckhoe / F&N

INSPECTOR/OFFICE

D. O. Bradovich / D&B

START/FINISH DATE

10/20/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

St. stable

REMARKS:

Limit of waste 3' from fence (not appreciable waste) just tr.
plastic, wood, rubber,

DEPTH	SAMPLE INTERVAL	%LEL OVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS	
0	0-1'	0	0	Topsoil, roots	1' cover topsoil
1					
2					
3	1-4'	0	0	<u>N side</u> Br. sand, tr. wood, plastic, rubber over br.-red sand <u>S. side</u> Br.-red sand, hard pan	Tr. waste over sand on n. side S. side - native
4					
5	4-6'	0	0	tan loose sand & gravel	Native
6					
7				END OF TEST PIT @ 6' by	No PID or multigages readings
8					
9					
10					
11					
12					
13					
14					
15					

TEST PIT PROFILE

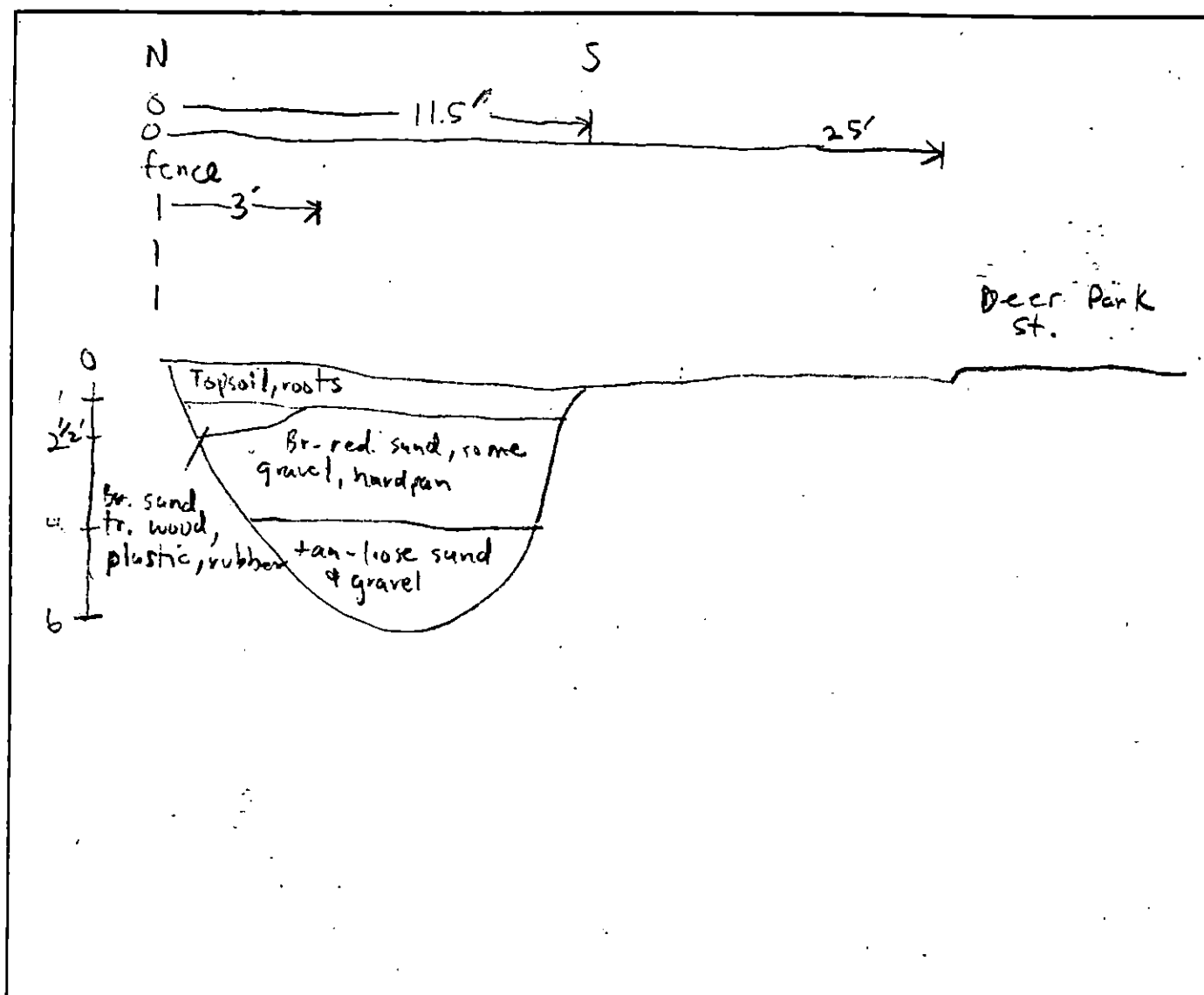
Project Sonia Road Landfill - RI

Project Number 1445-3B

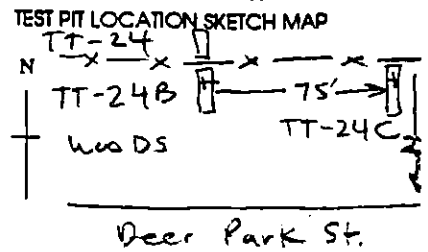
Sample(s) Interval(s) _____

Test Pit Number TT-24B

75' east of TT-24A ~~TT-24B~~ + other side of fence from TT-24



Remarks Little waste @ fence from 1-2' by 3' from fence



TEST PIT LOG

TEST PIT NO. TT-24C	
PROJECT NO./NAME Sonja Rd. LF / 1445-3B	LOCATION Sonja Rd., W. Brentwood N.Y.
EXCAVATOR/EQUIPMENT/OPERATOR J. Palmeri / Case 680 E Buckhoe / F&N	
INSPECTOR/OFFICE D. O'Bradovich / D&B	START/FINISH DATE 10/21/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT Stable
REMARKS: No ~~test~~ waste encountered (minor surface C&D -)	

DEPTH	SAMPLE INTERVAL	% LEL PID OVA ppm SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-1	0 0	Topsoil over C&D waste on N. side - topsoil & roots on S. side	Minor surface C&D waste
1				
2	1-4	0 0	Native Br-orange sand	Native
3				
4				
5			END OF TEST PIT @ 4' 2"	* No PID or multi-gas readings (0)
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

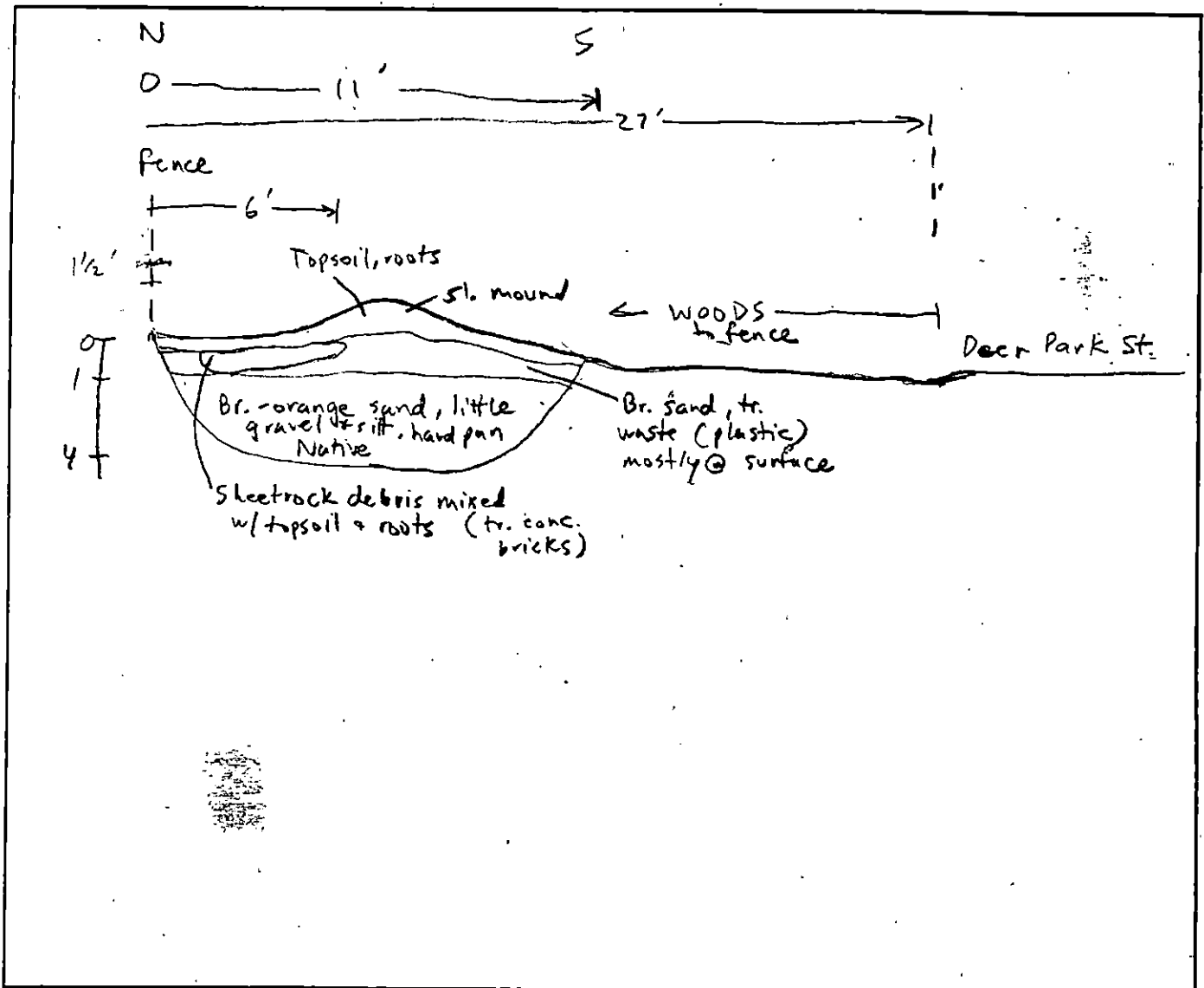
Project Sonia Road Landfill - RT

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-24C

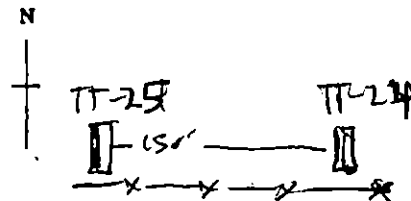
75' East of TT-24 & 24B



Remarks Minor surface waste only (c&o)

TEST PIT LOG

TEST PIT NO.
TT-25



PROJECT NO./NAME

LOCATION

1445 / Sonia Road Landfill - RI

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580 E 4WD Backhoe / B. Durham

INSPECTOR/OFFICE

~~Robins~~ D. Obradovich

START/FINISH DATE

8/15/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

Unstable

REMARKS: **waste 5' from fence (in it of waste)**

4 5 slope of waste

DEPTH	SAMPLE INTERVAL	LEL PPM GVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-2'	0	Topsoil w/roots little waste rel. plastic, conc, & metal near surface on	2' topsoil to sand/ cover w/ little waste on n. north side - each
1				
2				
3	2-9'	24	wood + bn sand, concrete, and silt, some tires & metal little plastic, tr. ~~bag~~ plastic bag waste, glass Native orange br. sand & gravel + tan sand on southern end of trench	waste from 2-9' by
4				
5				
6				
7				
8				
9	9-10'	24	Tan. sand little gravel	
10				
11			END OF TEST PIT	* 24% LEL - multi-ga > 10,000 ppm
12				
13				
14				
15				

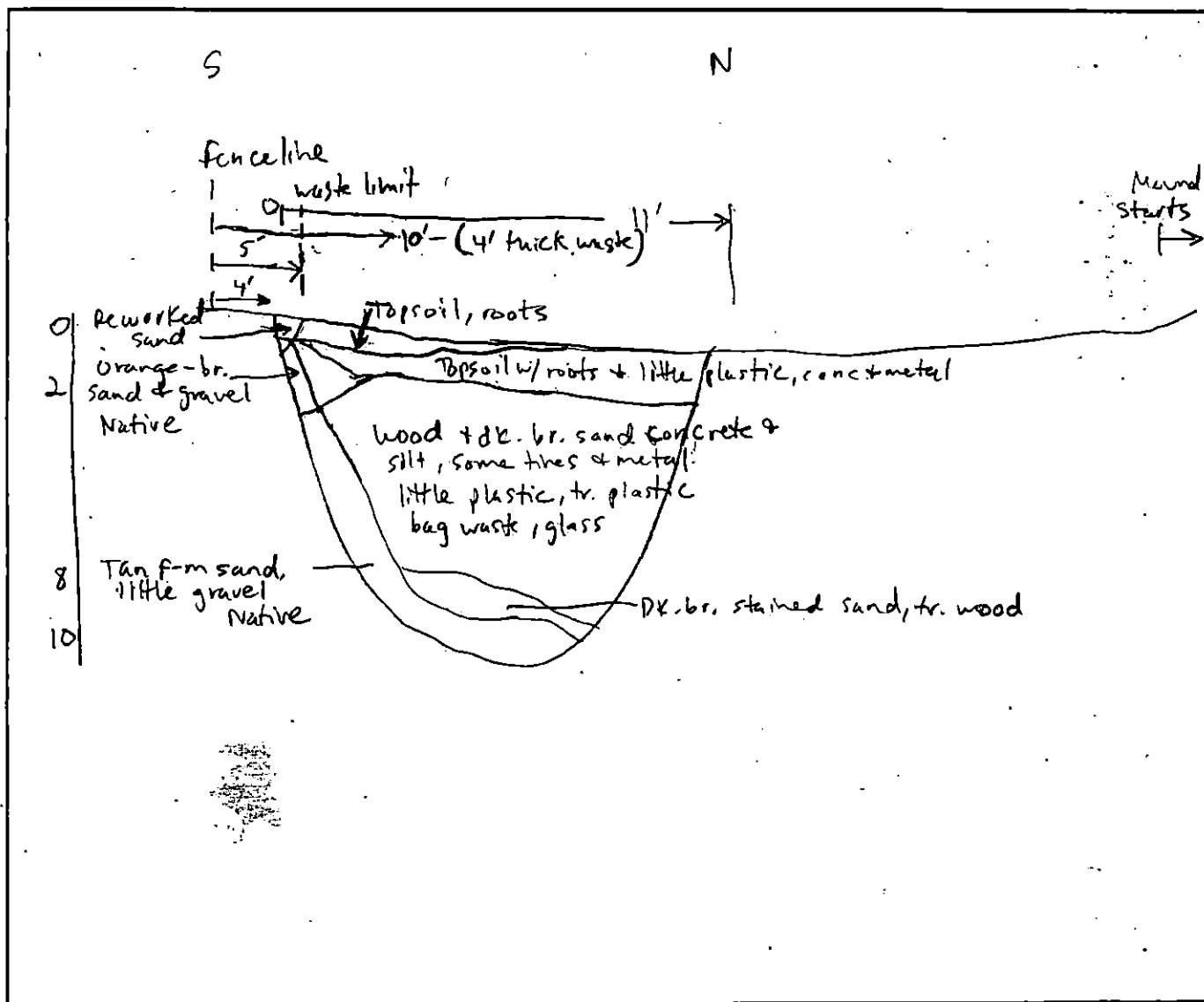
TEST PIT PROFILE

Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-25



Remarks waste @ 5' from fence steep slope of waste @ 10' from fence
4' thick

TEST PIT LOG

TEST PIT NO.
TT-26

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580 E 4w D Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich / D&B

START/FINISH DATE

8/15/97

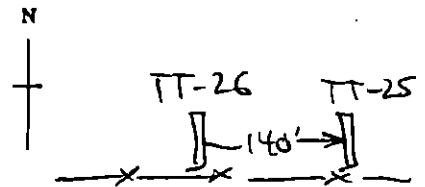
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

Unstable

REMARKS:

5' thick waste @ 4' level

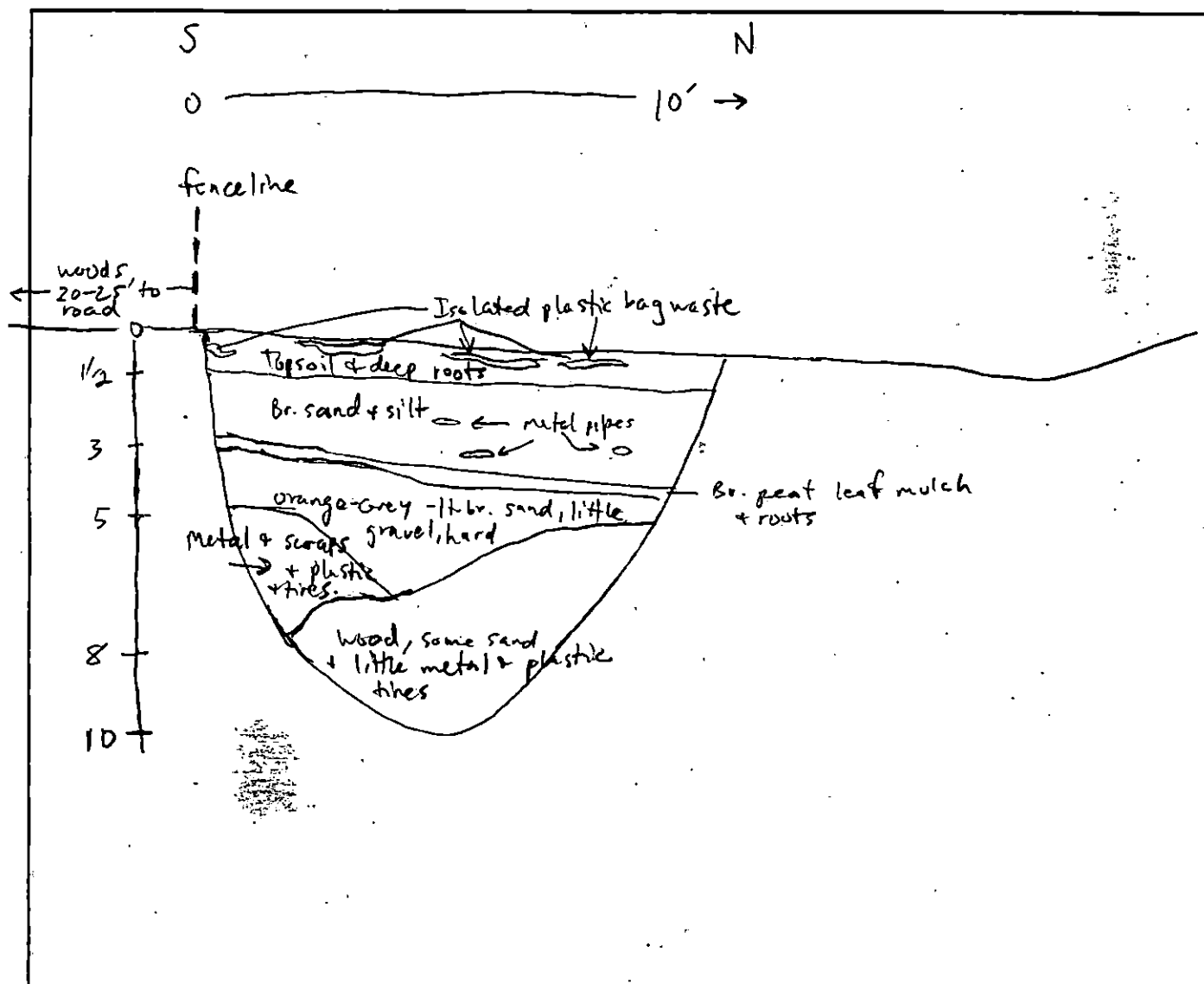


DEPTH	SAMPLE INTERVAL	O/L P/L P/D 1/2" 1/4" 1/8" PPM SCREEN		DESCRIPTION OF MATERIALS	REMARKS
0	0-1 1/2'	0	0	Topsoil deep roots w/ isolated plastic bag waste	1 1/2' soil cover however tr. waste
1					
2	1 1/2-3'	0	0	Br. sand + silt, tr. metal	+ 1 1/2' soil cover w/ tr. metal
3					
4	3-5'	0	0	Br. pent/leaf mulch layer over orange-grey-br. sand gravel, hard	+ 2' hard pan sand cover
5					
6	5-10'	0	0	Wood, some sand & little metal & plastic, tires (metal scraps on S. end of trench)	waste from 5-10' bg ↓
7					
8					
9					
10					
11				END OF TEST PIT	Max multi-gas reading was 720 ppm @ 6-10' bg
12					
13					
14					
15					

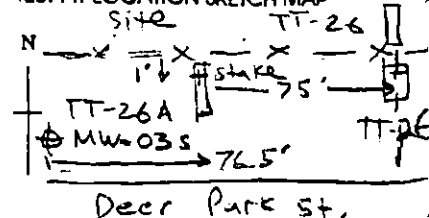
TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TT-26



Remarks _____



TEST PIT LOG

TEST PIT NO. TT-26A	
PROJECT NO./NAME Sonja Rd. LF / 1445-3B	LOCATION Sonja Rd., W. Brentwood N.Y.
EXCAVATOR/EQUIPMENT/OPERATOR J. Palmeri / Case 680 E Buckhig / F&N	
INSPECTOR/OFFICE D. O'Bradovich / D&B	START/FINISH DATE 10/20/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT Stable
REMARKS: Limit of Waste @ fence - tr. waste to 6' from fence towards south	

DEPTH	SAMPLE INTERVAL	% LEL PID OVA ppm SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-5'	0 0	1-1 1/2' Topsoil over B. sand	1-1 1/2' cover topsoil over reworked B. sand
1			1-2' Reworked grey-tan sand, some gravel, tr. waste	
2			up to 6' south of fence	
3			some waste @ fence	
4			plastic, rubber, asphalt	
5			from 1-3' 3-5' Native Br. red sand	
6			END OF TEST PIT @ 5' b.g.	Max Multi-gas reading of 0% + PID - 0.0 ppm
7				
8				
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

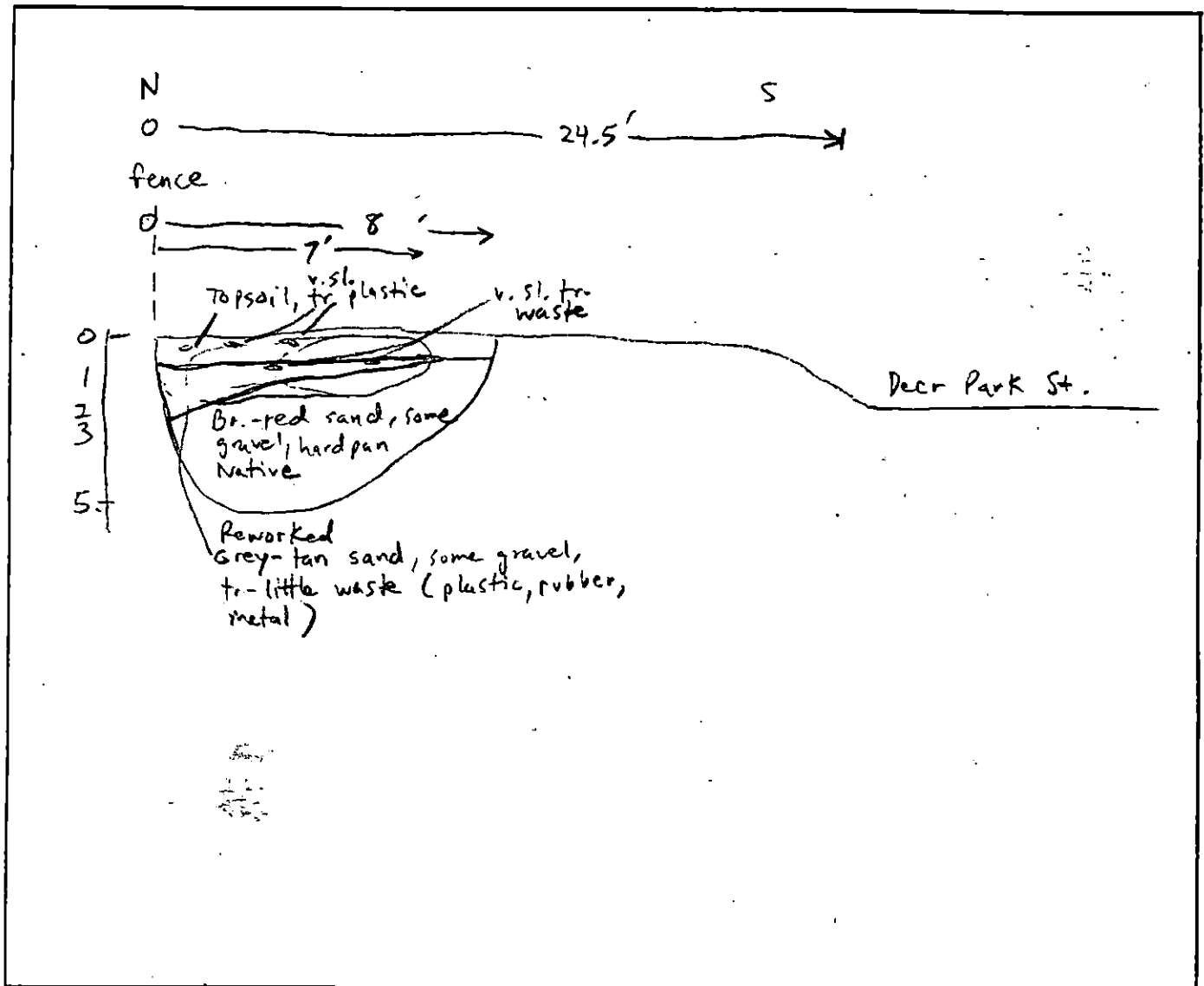
Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-26A

75' West of TT-26 + TT-26B

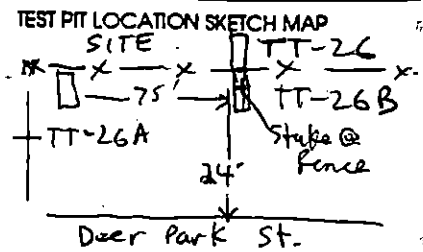


Remarks Limit of waste @ fence Trace Plastic asphalt pieces up to
6' from fence



DVIRKA
AND
BARTILUCCI

TEST PIT LOG



TEST PIT NO. TT-26B	
PROJECT NO./NAME Sonia Rd. LF / 1445-3B	LOCATION Sonia Rd., W. Brentwood N.Y.
EXCAVATOR/EQUIPMENT/OPERATOR J. Palmeri / Case 680 E Backhoe / F&N	
INSPECTOR/OFFICE D. Obradovich / D&B	START/FINISH DATE 10/20/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT Sl. stable
REMARKS: Limit of waste 6' from fence (not significant or appreciable waste)	

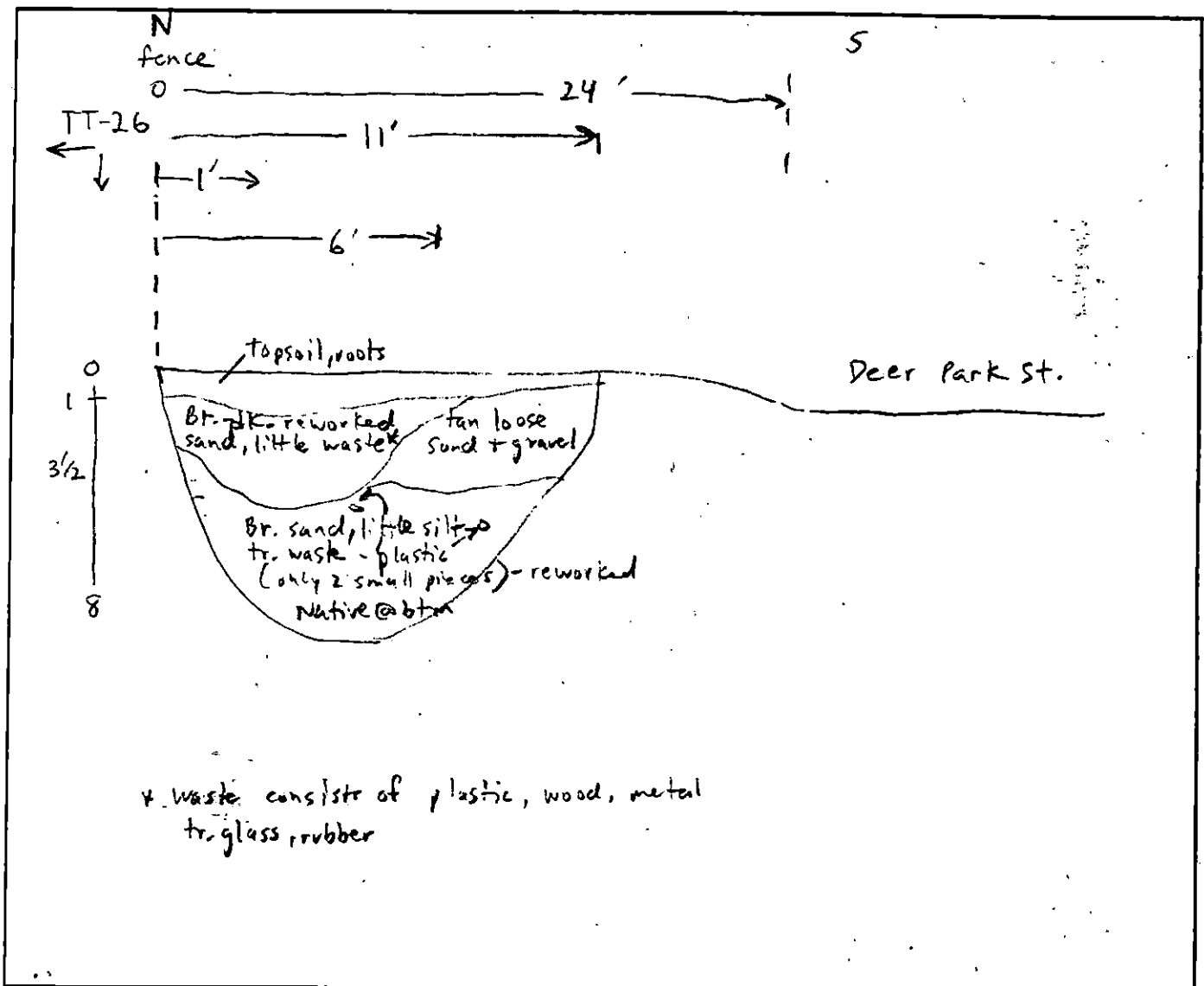
DEPTH	SAMPLE INTERVAL	% LCL OVA SCREEN	PID ppm	DESCRIPTION OF MATERIALS	REMARKS
0	0-1'	0	0	Topsoil, roots	1' cover
1					
2	1-3 1/2'	0	0	N. side DK-br. reworked sand, little plastic, wood, metal S. side tan sand	Br. sand - tr. waste
3					
4					
5	3 1/2-8'	0	0	Br. sand, little silt, tr. plastic @ top - Native @ btm	Tr. waste @ top
6					
7					
8					
9				END OF TEST PIT @ 8' bg	* Max. PID & Multi-g reading was 0
10					
11					
12					
13					
14					
15					

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TT-26B

Adjacent (other side of fence - s. side) of TT-26

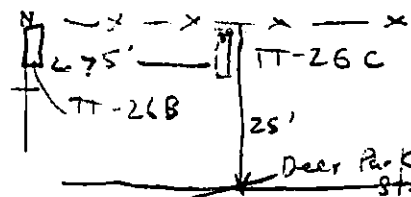


Remarks Waste at fence from 1 1/2 - 3 1/2' by
Appreciable waste up to 1' south of fence (~ 2' thick)



DVIRKA
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BARTILUCCI

TEST PIT LOCATION SKETCH MAP



TEST PIT LOG

TEST PIT NO. TT-26C	
PROJECT NO./NAME Sonja Rd. LF / 1445-3B	LOCATION Sonja Rd., W. Brentwood N.Y.
EXCAVATOR/EQUIPMENT/OPERATOR J. Palmeri / Case 680 E Backhoe / F&N	
INSPECTOR/OFFICE D. Obradovich / D&B	START/FINISH DATE 10/20/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT Stable
REMARKS: Limit of waste @ 5' from fence	

DEPTH	SAMPLE INTERVAL	9.1 LEI PID OVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS	
0	0-1 1/2'	0	0	Topsoil over reworked tan sand	Topsoil + reworked sand 1 1/2' cover
1					
2	1 1/2 - 4'	0	0	<u>N side</u> DK br. sand, wood, little metal, plastic, grass <u>S. side</u> Br sand + gravel	sand, some wood + little waste on n. side waste down to 4' by rear fence
3					
4					
5	4-7'	0	0	Br. Sand + gravel	Native
6					
7					
8				END OF TEST PIT @ 7' by	* No readings w/ PID + multi-gas meter above 0
9					
10					
11					
12					
13					
14					
15					

TEST PIT PROFILE

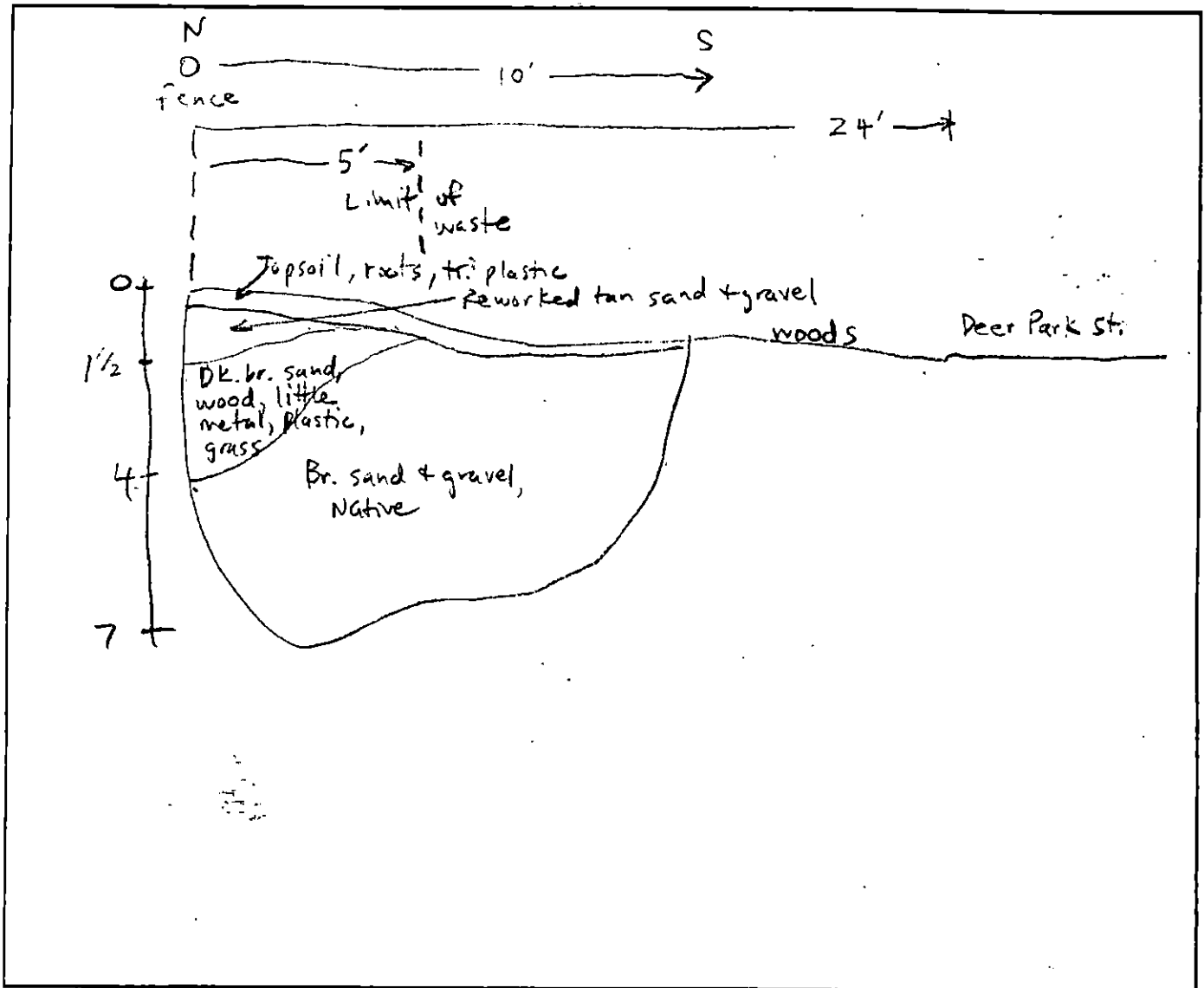
Project Sonia Road Landfill - RT

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-26C

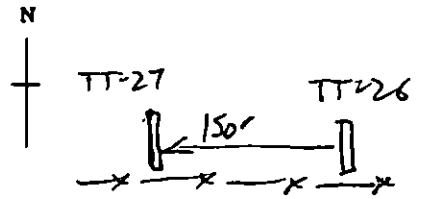
15' east of TT-26 + 26B



Remarks Limit of waste 5' from fence @ 1/2 - 4' by
19' from Deer Park St.

TEST PIT LOG

TEST PIT NO.
TT-27



PROJECT NO./NAME

LOCATION

1445 / Sonia Road Landfill - RI

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580 E 4WD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich / D&B

START/FINISH DATE

8/15/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

Very Unstable

REMARKS:

limit of waste 6' from fence - 9' from fence 4' thick already

Slope of waste

DEPTH	SAMPLE INTERVAL	% OF PIT SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-4 1/2'	0	very thin top soil Lt. tan & br. sand, little gravel, in metal waste on ^{north} end of french from 1-4 1/2' by	Thin topsoil over tan-br sand. w/ wood & metal near center of trench towards s end
1				
2				
3				
4				
5	4 1/2 - 10'	0	Plastic bags, wood & sand little metal, leaf mulch, silt, in glass from center to N. end of trench (Br. sand & gravel, loose on s. end)	Native sand on s. end. waste from 4 1/2 - 10' by on n. end
6				
7				
8				
9				
10			END OF TEST PIT	* Max multi gas reading was 0 ppm
11				
12				
13				
14				
15				

TEST PIT PROFILE

Project Sonia Road Landfill - RI

Project Number 1445-3B

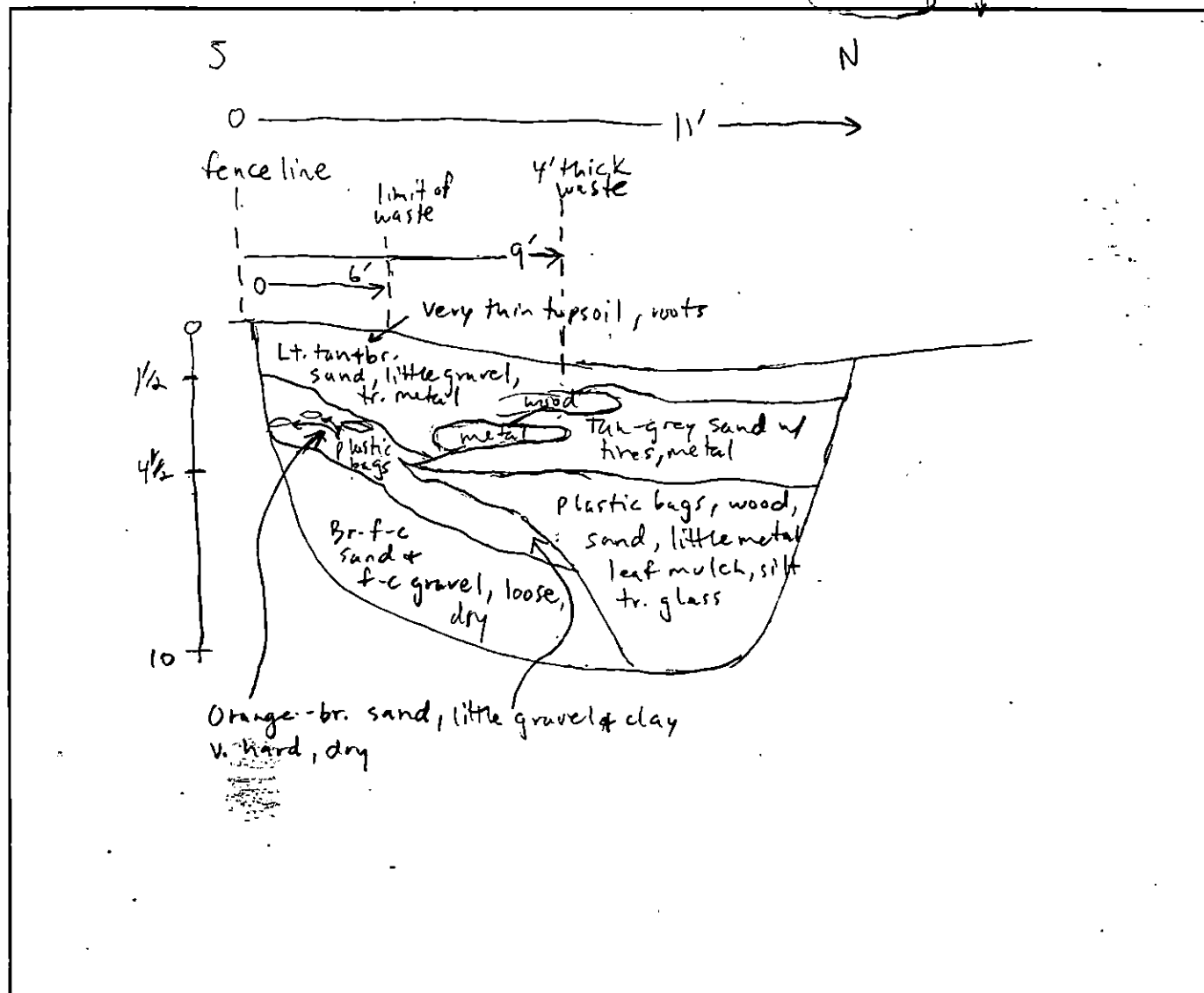
Sample(s) Interval(s) _____

Test Pit Number TT-27

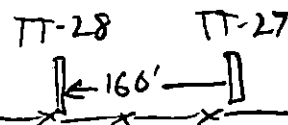
* Trench was 9' wide in middle

TT-27

↑ 9' wide down 1st 6' bg



Remarks _____



TEST PIT LOG

TEST PIT NO.
TT-28

PROJECT NO./NAME:

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580 E 4WD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich

START/FINISH DATE

8/15/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

Very very Unstable

REMARKS:

Waste @ fence from 1 1/2 - 9' bg

DEPTH	SAMPLE INTERVAL	1/2" PLD GWA SCREEN	DESCRIPTION OF MATERIALS	REMARKS	
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	0 - 1/2'	0	0	Topsoil, roots, tr. plastic + metal @ btm	1 1/2 soil cover w/ no waste @ btm
	1 1/2' - 9'	0	0	Tires, some plastic bag waste & sand, little metal, tr. glass	waste from 1 1/2 - 9' bg
	9 - 10'	0	0	← Tan sand on s. end of trench →	
				END OF TEST PIT	* Max. multi-gas reading was 0 ppm

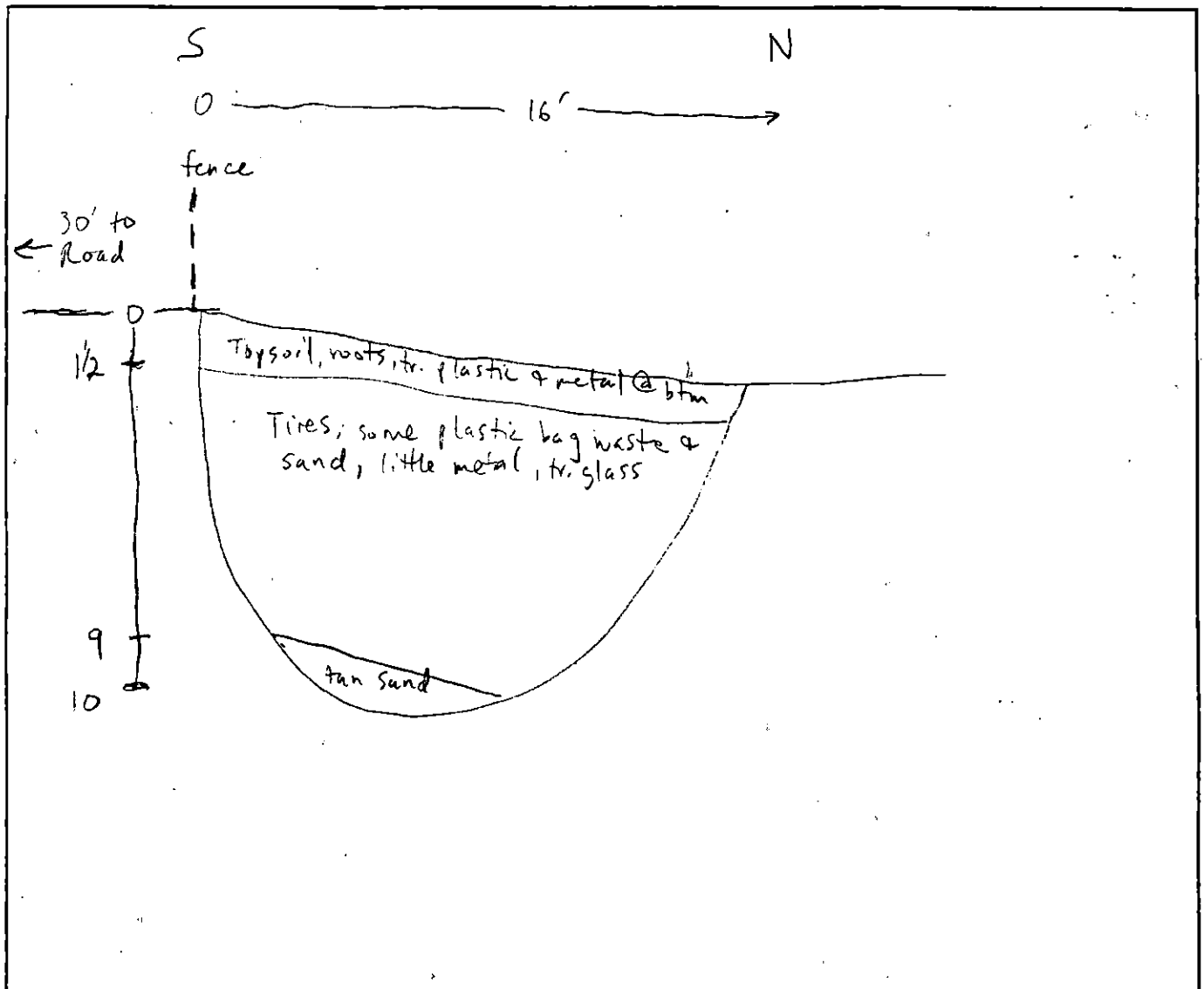
TEST PIT PROFILE

Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-28



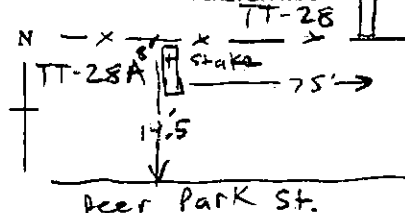
Remarks * Trench was 8' wide in middle 3/4 the way down



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TEST PIT LOG

TEST PIT LOCATION SKETCH MAP



TEST PIT NO.
TT-28A

PROJECT NO./NAME

Sonia Rd. LF / 1445-3B

LOCATION

Sonia Rd., W. Brentwood N.Y.

EXCAVATOR/EQUIPMENT/OPERATOR

J. Palmeri / Case 680 E Buckhoe / F&N

INSPECTOR/OFFICE

D. O. Bradovich / D&B

START/FINISH DATE

10/20/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

St. stable

REMARKS:

Limit of waste 8' from fence

DEPTH	SAMPLE INTERVAL	% LEAK P10 OVA ppm SCREEN		DESCRIPTION OF MATERIALS	REMARKS
0	0 - 1 1/2'	0	0	Topsoil over Lt. tan sand & gravel, loose	1 1/2' cover
1					
2	1 1/2 - 3 1/2'	0	0	Br. sand & waste on n. side Lt. tan sand & gravel on s. side	waste on n. side Sand on s. "
3					
4	3 1/2 - 8'	0	0	<u>N. side</u> Br. sand & waste (conc., wood, tires, metal, leaf mulch, plastic, rugs <u>S. side</u> DK. br. sand & silt, hard pan	waste down to 8'
5					
6					
7					
8				END OF TEST PIT @ 8' bg	* Max. multi-gas & P10 reading = 0
9					
10					
11					
12					
13					
14					
15					

TEST PIT PROFILE

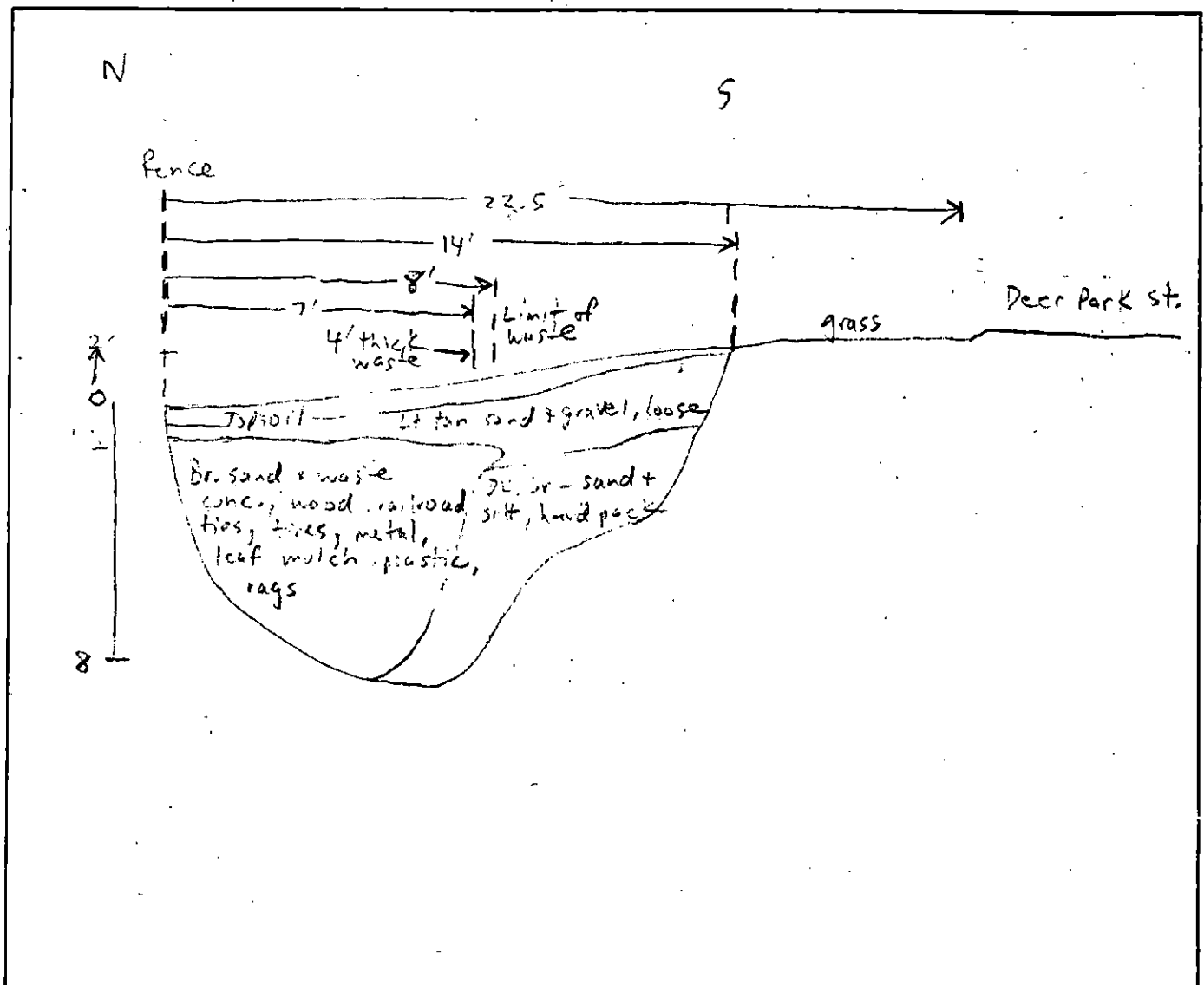
Project Sonia Road Landfill - RT

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-28A

75' West of TT-28 & TT-28B



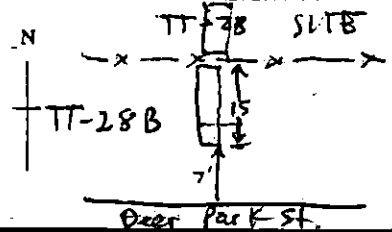
Remarks Limit of waste 14 1/2' from Deer Park St.

8' from fence



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TEST PIT LOCATION SKETCH MAP



TEST PIT LOG

TEST PIT NO. TT-28B	
PROJECT NO./NAME Sonja Rd. LF / 1445-3B	LOCATION Sonja Rd., W. Brentwood N.Y.
EXCAVATOR/EQUIPMENT/OPERATOR J. Palmeri / Case 680 E Backhoe / F&N	
INSPECTOR/OFFICE D. Obradovich / D&B	START/FINISH DATE 10/20/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT Very Unstable
REMARKS: Limit of waste 12' from fence 10.5' from Deer Park St.	

DEPTH	SAMPLE INTERVAL	PID OVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-5'	D. D	<u>N side of trench</u> br. sand, large conc. debris, little metal scraps + tires, tr. silt, rags, plastic, paper, moist no odor (tr. glass)	See TT-28 for depth + description of waste on the other side of fence waste here (S. side of trench) tr. plastic + metal
1			<u>S. side of trench</u> tr. plastic + metal w/ br. sand	
2			hard pan, lt. tan sand + gravel below	
3				
4				
5			END OF TEST PIT	* Max. multi-gas reading is 0% - 0ppm PID large transmission buried here
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

Project Sonia Road Landfill - RT

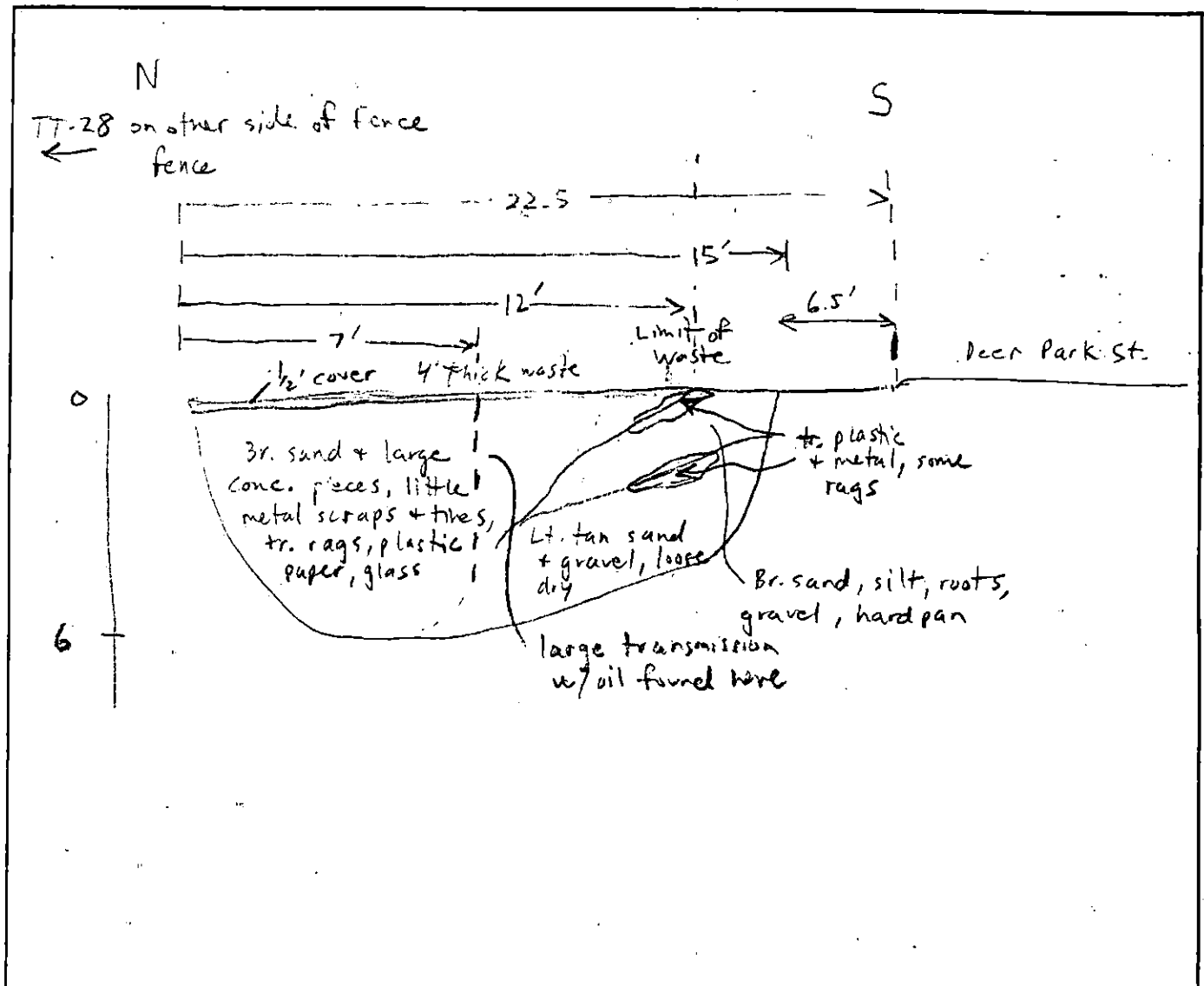
Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-28B

Adjacent (on s. side of fence from) to TT-28

Test trench was 15' long x 6' deep x 4' wide (8' wide near fence)

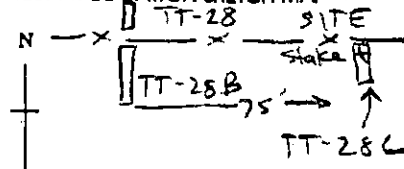


Remarks Limit of Waste 12' from fence 10.5' from Deer Park St.



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TEST PIT LOCATION SKETCH MAP



TEST PIT LOG

TEST PIT NO. TT-28B	
PROJECT NO./NAME Sonja Rd. LF / 1445-3B	LOCATION Sonja Rd., W. Brentwood N.Y.
EXCAVATOR/EQUIPMENT/OPERATOR J. Palmeri / Case 680 E Backhoe / F&N	
INSPECTOR/OFFICE D. O'Bradovich / D&B	START/FINISH DATE 10/20/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT Very Unstable
REMARKS: Limit of waste 2' from fence - however appreciable waste stops near fence	

DEPTH	SAMPLE INTERVAL	% LEAK PID SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-2 1/2'	0 0	N. Side Topsoil over Tan-white sand, tr. waste plastic, rubber, apph.	2 1/2' soil cover tr. waste @ btm
1			over tan native sand	
2			S. side - Topsoil over Br-red hard pan over ~~Tan native sand~~	
3	2 1/2 - 5'	0 0	Tan-lt. br. sand & gravel	tr. waste w/ soil down to 3 1/2'
4			tr-little waste on N. side	
5	5' - 15'		END OF TEST. PIT @ 5' 6"	*Max. multi-gas + PID readings 0
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

TEST PIT PROFILE

Project Sonia Road Landfill - RT

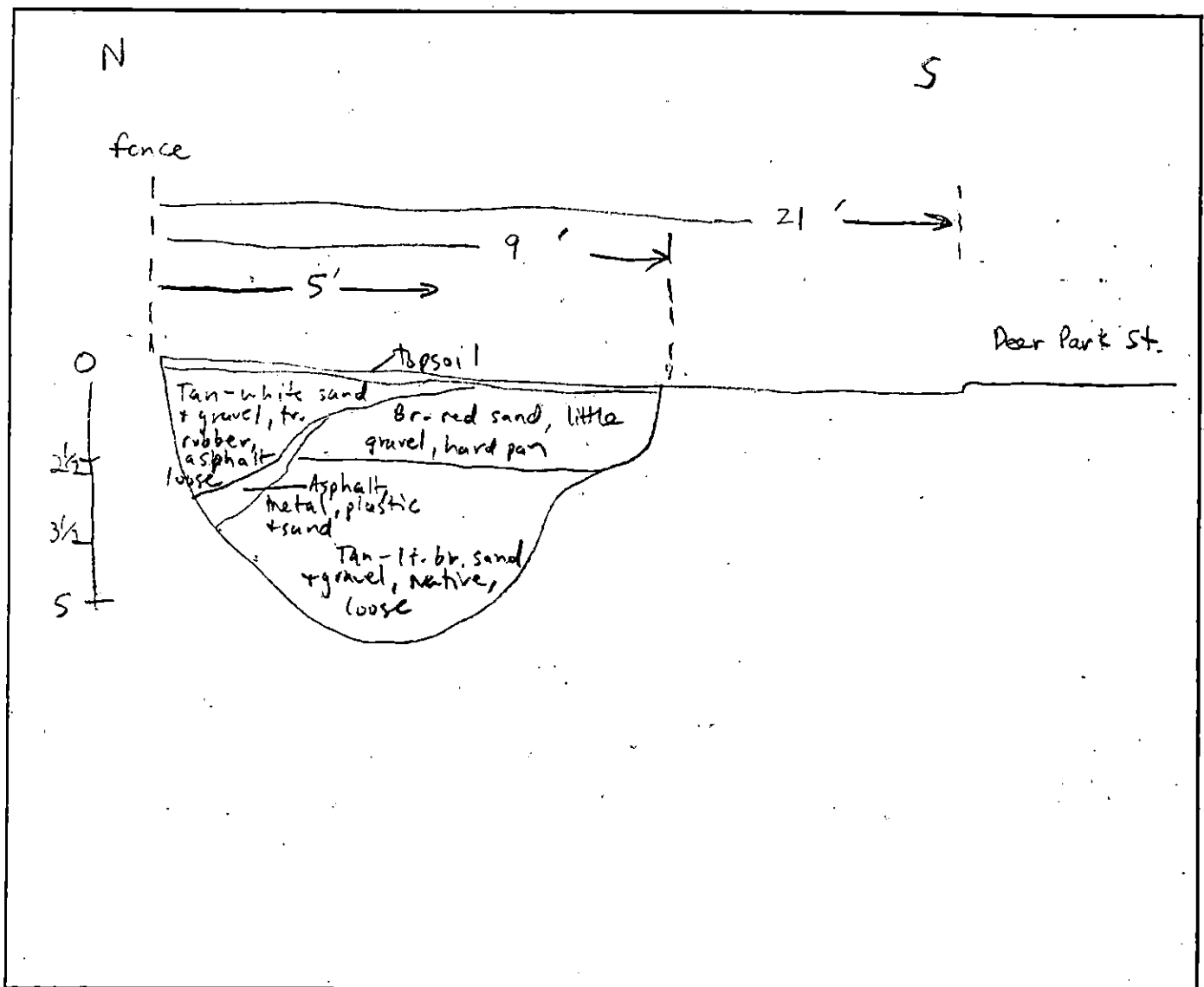
Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-28C

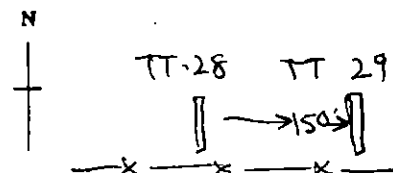
75' East of TT-28 + 25B

9' long X 5' deep X 4' wide (7' wide @ fence)



Remarks Waste mostly @ fence - fr. waste asph. metal, plastic
~ 2' from fence

TEST PIT LOG



TEST PIT NO.

TT-29

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

CASE 580 E Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robbins D. Obradovich

START/FINISH DATE

8/18/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

Unstable

REMARKS:

DEPTH	SAMPLE INTERVAL	DOLE @ 10 ppm SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0 - 1/2-2'	0	Br. - blk. sand + top soil	2' cover sand + leaf mulch
1				
2	2-10'	0	Wood + sand, some plastic bag waste, little metal & rubber tires & silt, no glass tan sand w/ red-br. silt lenses (- 1/2" thick) above on south side of trench	Waste from 2' down ↓
3				
4				
5				
6				
7				
8				
9				
10			END OF TEST PIT	*max. multi-gas reading was 720 ppm (raining out)
11				
12				
13				
14				
15				

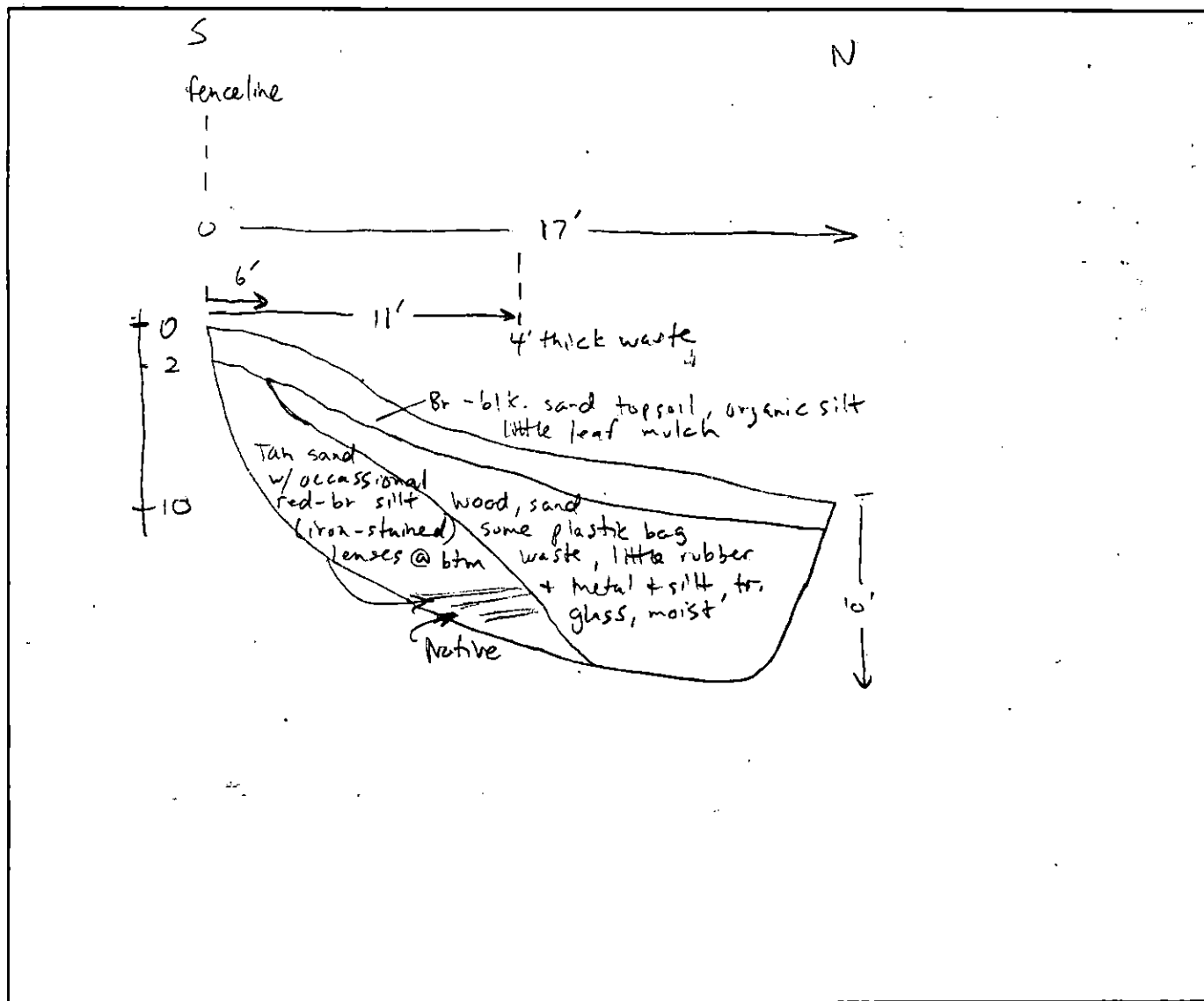
TEST PIT PROFILE

Project Sonia Road Landfill - RI

Project Number 1445-3B

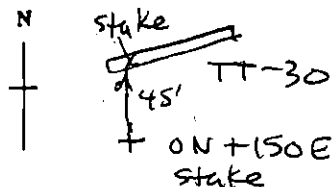
Sample(s) Interval(s) _____

Test Pit Number TT-29



Remarks _____

TEST PIT LOG



TEST PIT NO.
TT-30

PROJECT NO./NAME:

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580E Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich

START/FINISH DATE

8/18/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

Sl. stable

REMARKS:

DEPTH	SAMPLE INTERVAL	% OVA SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-1'	0 0	Topsoil over red-tan Sand + roots (hard sand)	1' cover soil
1	1-6'	0 0	Sand, some plastic bag waste, little silt + fines + wood, tr. glass * Red-tan sand gravel roots above tan-grey sand + gravel on W side of trench	1' cover soil above waste on east side of trench
2				
3				
4				
5				
6	6-8'	0 0	~~tan-grey sand~~ tan-grey sand, little gravel	
7				
8			END OF TEST PIT	*Max. multi-gas reading 0 ppm
9				
10				
11				
12				
13				
14				
15				

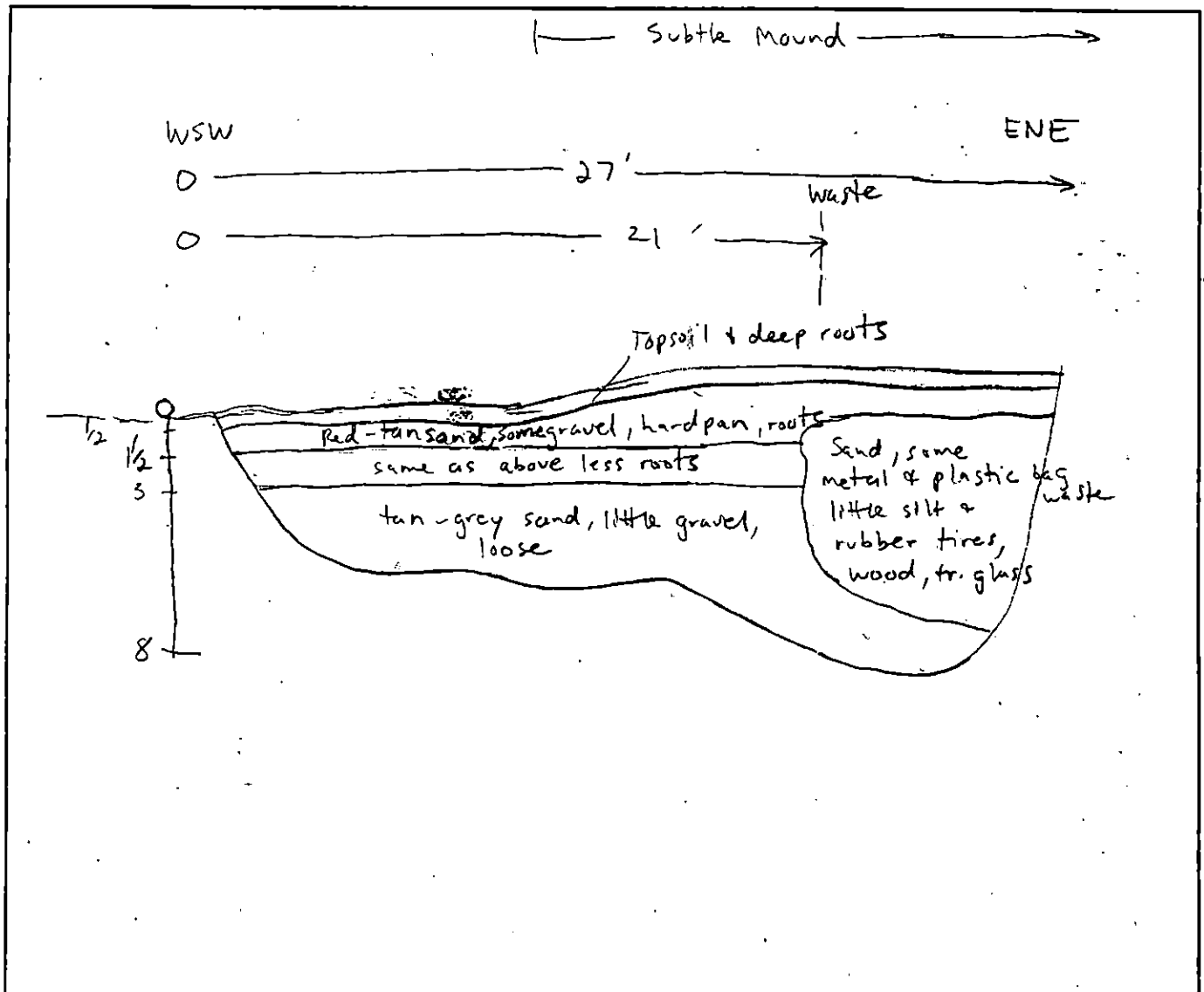
TEST PIT PROFILE

Project: Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-30



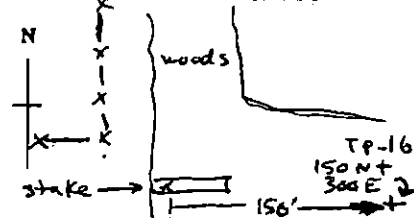
Remarks _____



DVIRKA
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BARTILUCCI

TEST PIT LOG

TEST PIT LOCATION SKETCH MAP



TEST PIT NO.
TT-31

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

CASE 580 E 4WD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich / D4B

START/FINISH DATE

8/18/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

Sl. stable

REMARKS:

DEPTH	SAMPLE INTERVAL	1/2" PL. P.D. SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0 - 1/2'	0	Topsoil over reworked orange-br. sand + red-br. hardpan on w. half of trench - Topsoil over Br. sand + roots on e. side of trench	Topsoil over sand w/ the waste down to 1 1/2' bg
1				
2				
3				
4	1 1/2 - 10'	0	Plastic bag waste, some sand and wood, little glass, plastic, metal + tires silt + concrete on East side of trench	waste 1 1/2 - 10' bg on east side of trench
5				
6			Tan - lt. br. sand, little gravel over some waste on west side of trench	
7				
8				
9				
10				
11			END OF TEST PIT	* Max. multi-gas reading of 80 ppm @ 5-8' bg
12				
13				
14				
15				

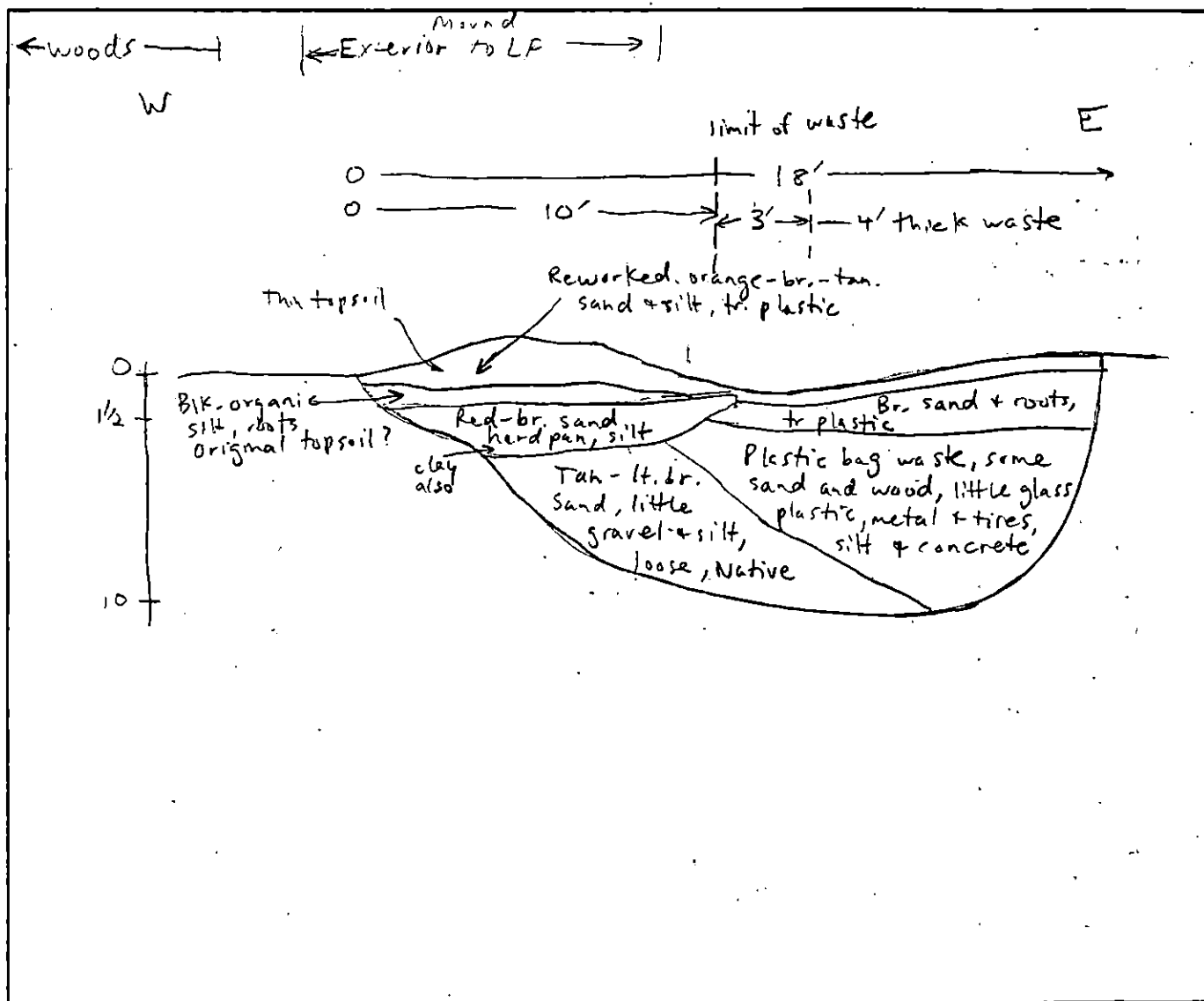
TEST PIT PROFILE

Project Sonia Road Landfill - RI

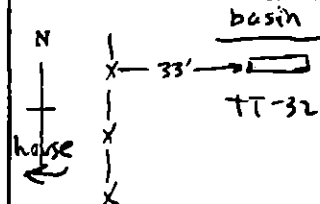
Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-31



Remarks _____



TEST PIT LOG

TEST PIT NO.
TT-32

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580 E 4WD Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich / D&B

START/FINISH DATE

8/18/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

sl. stable

REMARKS:

DEPTH	SAMPLE INTERVAL	%LEL PID SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-2'	0	Topsoil + deep roots, fr. waste @ btm (plastic, metal scraps, cable wire)	2' soil cover
1				
2				
3	2-9'	0	Sand, some plastic bag waste, wood, little metal, rubber below 2' cover on east side of trench Tan sand, fr. gravel on w. side of trench grading into waste quickly	waste from 2' down to > 9' by
4				
5				
6				
7				
8				
9			END OF TEST PIT	# max. multi-gas reading was 0 ppm
10				
11				
12				
13				
14				
15				

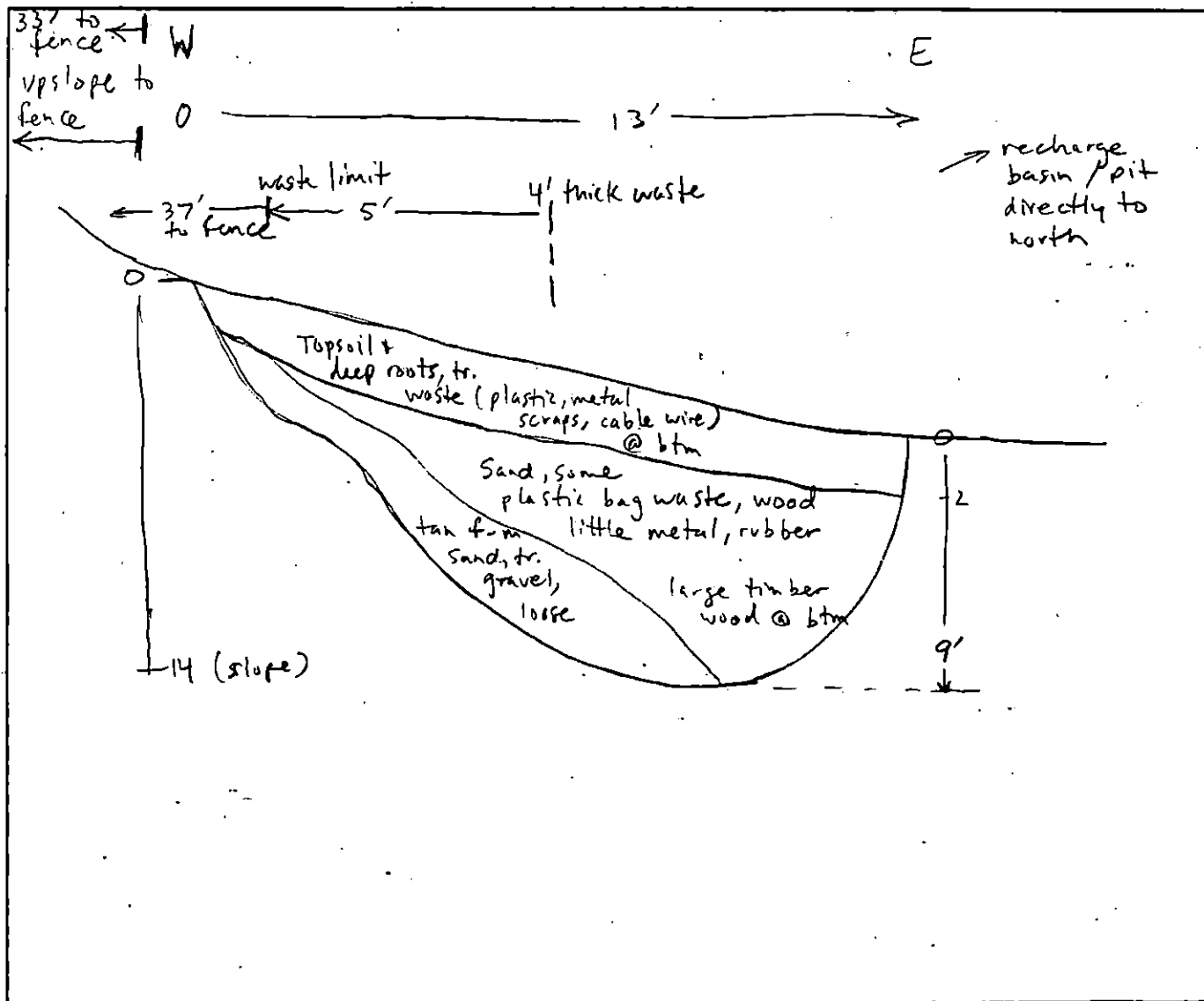
TEST PIT PROFILE

Project Sonia Road Landfill - RI

Project Number 1445-3B

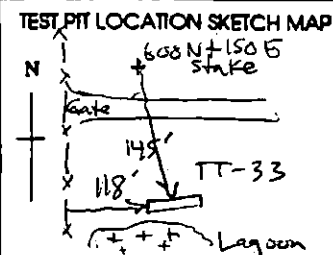
Sample(s) Interval(s) _____

Test Pit Number TT-32



Remarks _____

TEST PIT LOG



TEST PIT NO. TT-33	
PROJECT NO./NAME: 1445 / Sonia Road Landfill - RI	LOCATION Sonia Rd. Landfill, W. Brentwood, NY.
EXCAVATOR/EQUIPMENT/OPERATOR Case 580 E Baethoe / B. Durham	
INSPECTOR/OFFICE ~~K. Robins~~ D. Obradovich	START/FINISH DATE 8/18/97
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL)	CONDITION OF PIT St. Stable
REMARKS: waste deposited on g.w. - 118' from fence	

DEPTH	SAMPLE INTERVAL	% EL. P.D. BY P.D. SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0 - 1/2'	0 0	DK. br. sand + silt, roots	1/2' of silt cover
1				
2	1/2 - 5 1/2'	0 0	wood and sand waste, some plastic + linoleum strips + rolls, little concrete + tires Tan-grey f-c sand little gravel on west side of trench	waste on ~~west~~ east side of trench
3				
4				
5				
6	5 1/2 - 8'	0 0	Tan-grey - f-c sand little gravel, wet @ 7' by	G.W. @ 7' by on east side of trench 3' by on west side of trench
7				
8				
9			END OF TEST PIT	* Max. multi-gas reading of 320 ppm
10				
11				
12				
13				
14				
15				

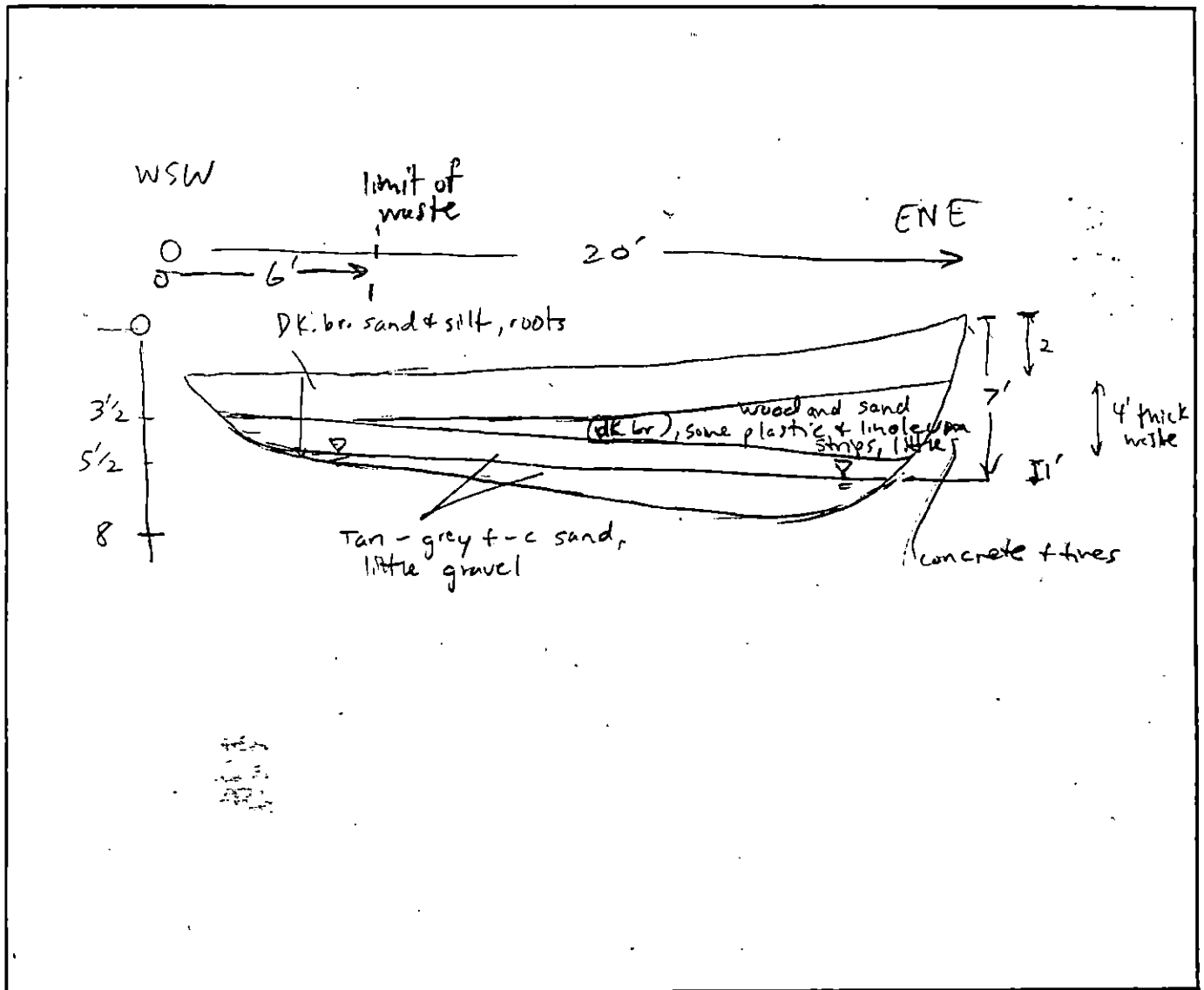
TEST PIT PROFILE

Project Sonia Road Landfill - RI

Project Number 1445-3B

Sample(s) Interval(s) _____

Test Pit Number TT-33



Remarks _____



DVIRKA
AND
BARTILUCCI

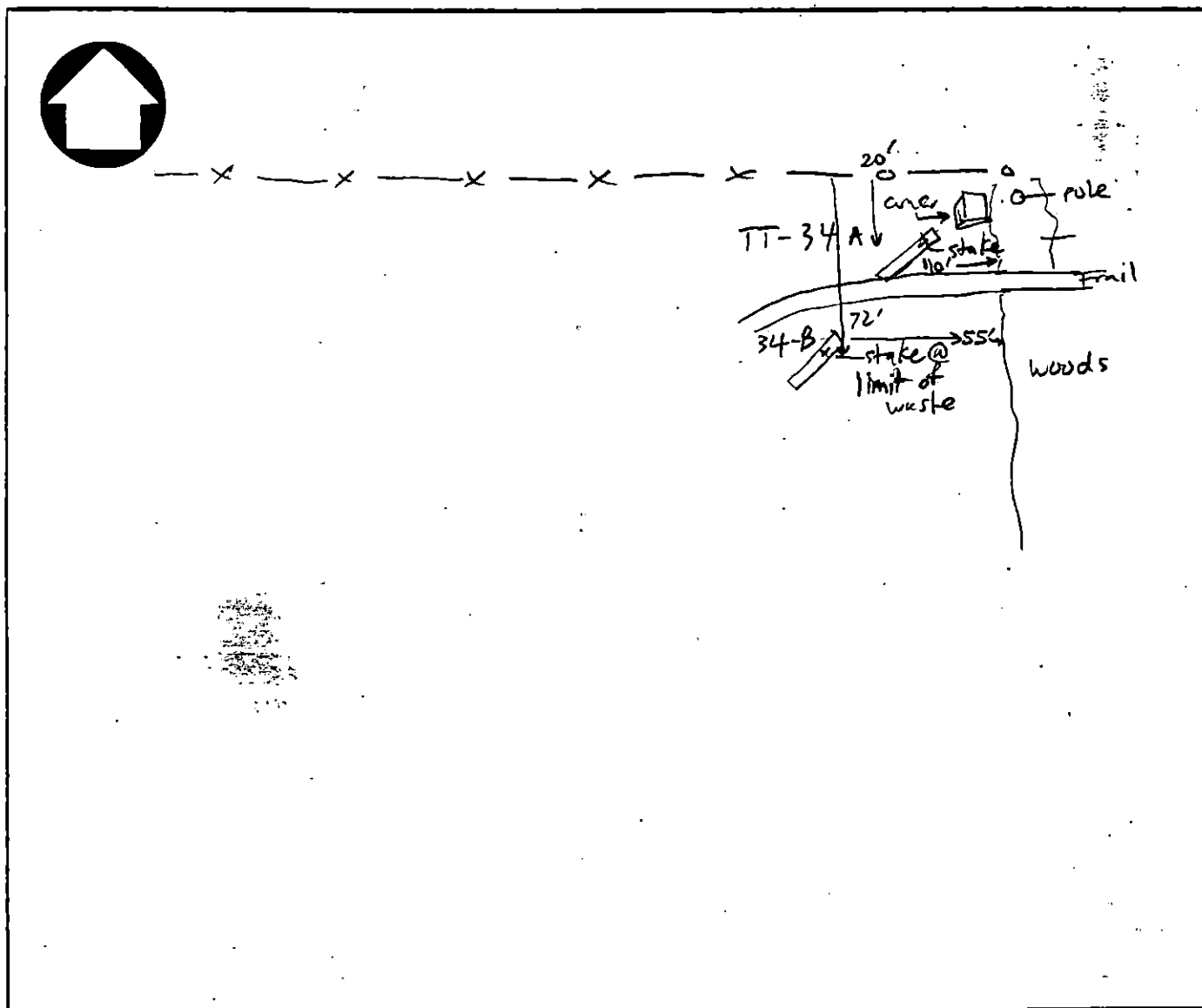
LOCATION SKETCH

Project Sonia Rd. Landfil - RI Sample Crew D. O'bradovich

Sample(s) Location(s) TT-34 A + B

Sample(s) and/or Well Number(s) _____

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.

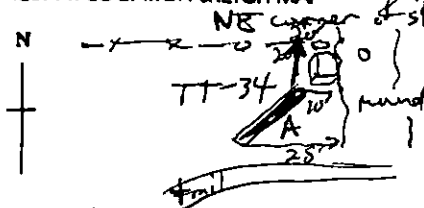




DVIRKA
AND
BARTILUCCI

TEST PIT LOG

TEST PIT LOCATION SKETCH MAP



TEST PIT NO.

TT-34 A

PROJECT NO./NAME

1445 / Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Cox 580E Backhoe / B. Durham

INSPECTOR/OFFICE

K. Robins D. Obradovich

START/FINISH DATE

8/18/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

Sl. Unstable

REMARKS:

No waste in NE corner of site @ TT-34 A

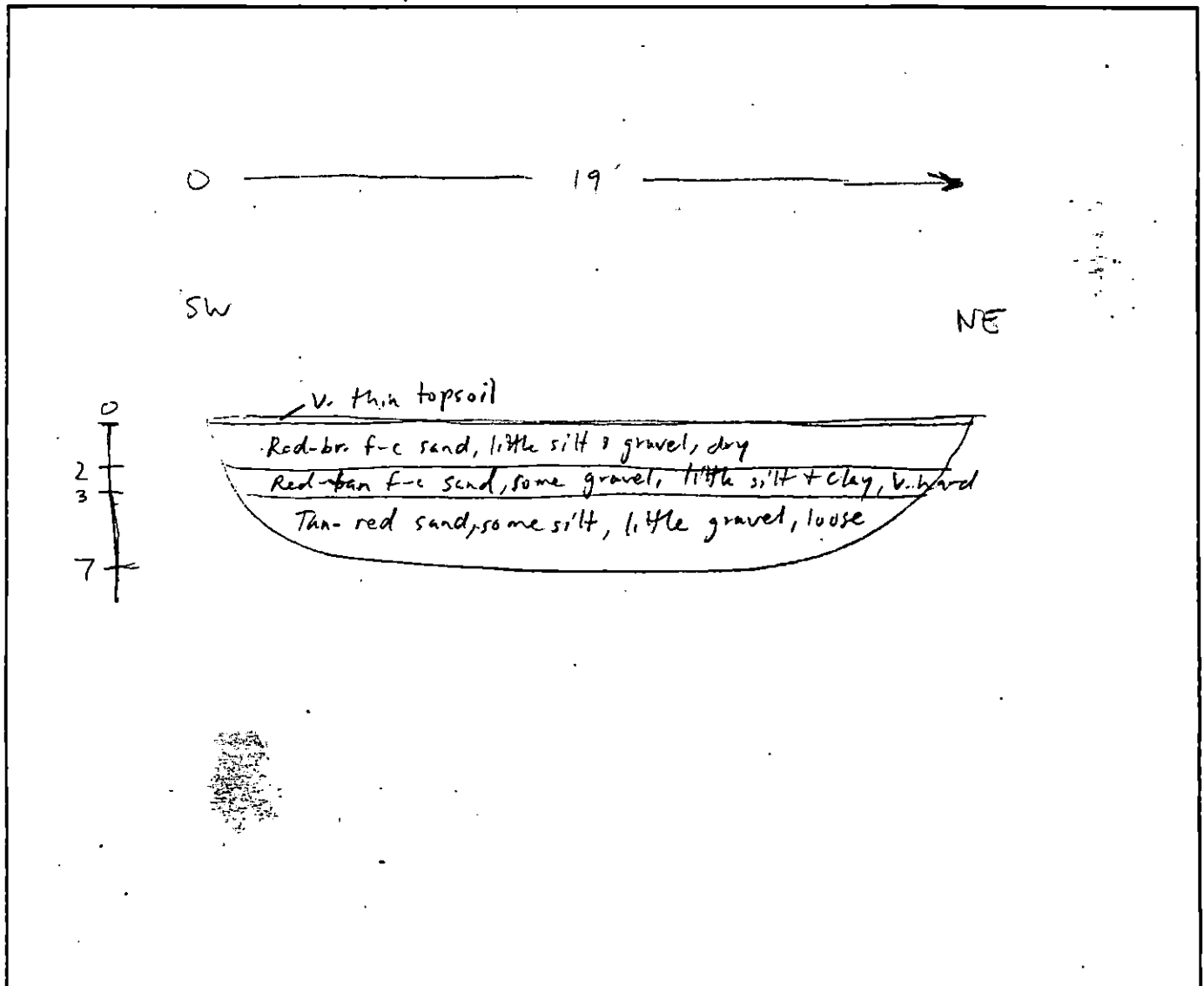
DEPTH	SAMPLE INTERVAL	% LEL PID O ₂ A ppm SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-2'	0 0	V. thin topsoil, grass, roots over red-br. sand, little silt & gravel	No waste. ↓
1				
2	2-3'	0 0	Hard pan sand & gravel	
3				
4	3-7'	0 0	Native tan-red sand, some silt, little gravel, loose	
5				
6				
7			END OF TEST PIT	* Max. multi-gas reading was 0 ppm
8				
9				
10				
11				
12				
13				
14				
15				

NJDEPTPL

TEST PIT PROFILE

Project Sonia Road Landfill - RT Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TT-34A



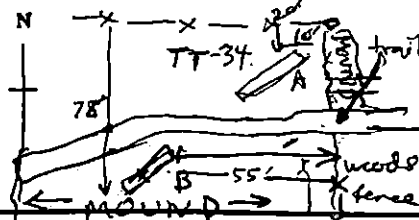
Remarks _____



DVIRKA
AND
BARTILUCCI

TEST PIT LOG

TEST PIT LOCATION SKETCH MAP



TEST PIT NO.
TT-34B

PROJECT NO./NAME

1445/ Sonia Road Landfill - RI

LOCATION

Sonia Rd. Landfill, W. Brentwood, NY.

EXCAVATOR/EQUIPMENT/OPERATOR

Case 580E / B. Durham

INSPECTOR/OFFICE

~~K. Robins~~ D. Obradovich

START/FINISH DATE

8/18/97

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

CONDITION OF PIT

St. Stable

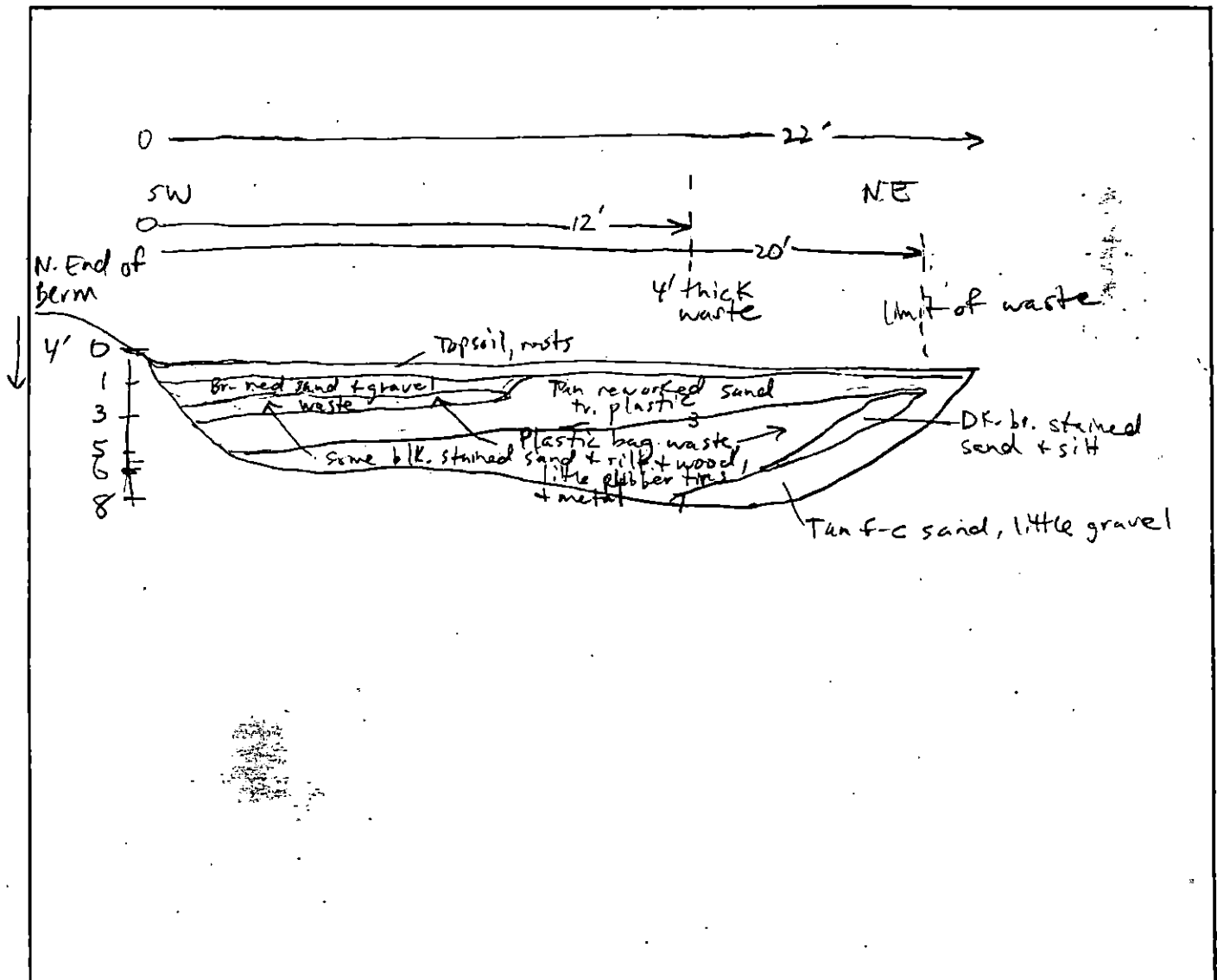
REMARKS:

DEPTH	SAMPLE INTERVAL	%LEL PPD ATA 11m SCREEN		DESCRIPTION OF MATERIALS	REMARKS
0	0-6"	0	0	Topsoil	V. thin cover
1	6"-2'	0	0	Br.-red sand + gravel + tan reworked sand on SW end. waste starts @ NE end	Add 1 1/2 soil cover on SW end. Waste @ NE end
2	2-8'	0	0	Plastic bag waste, blk stained silt + sand + wood, little rubber (tires) + metal on NE end w/ br. stained sand underneath	waste from 2-8'
3					
4					
5					
6					
7					
8				END OF TEST PIT	Max. multi-gas reading of 80 ppm
9					
10					
11					
12					
13					
14					
15					

TEST PIT PROFILE

Project Sonia Road Landfill - RI Project Number 1445-3B

Sample(s) Interval(s) _____ Test Pit Number TT-34B

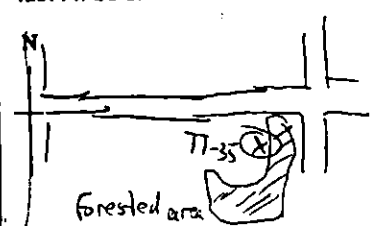


Remarks _____



DVIRKA
AND
BARTILUCCI

TEST PIT LOCATION SKETCH MAP



TEST PIT LOG

TEST PIT NO. T1-35

PROJECT NO./NAME

1345-3B - Sonca Rd Landfill

LOCATION

Area of stressed vegetation

EXCAVATOR/EQUIPMENT/OPERATOR

Bobby/F&N

INSPECTOR/OFFICE

Kr. Robbins/D+B

START/FINISH DATE

1/14/68

ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT
(FT. ABOVE MSL)

NA

CONDITION OF PIT

stable

REMARKS:

In area stressed vegetation located in central portion of site

DEPTH	SAMPLE INTERVAL	~~OVER~~ SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-2"	0 or 0	Black sand mixed with trace tar-like substance	Lab sample
1	2"-2'	0 or 0	WASTE MATERIAL mixed with soil, sand, gravel	Lab sample (sand only) at 1'-2')
2			End of Test Trench 2'	
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

NIDEPTPL

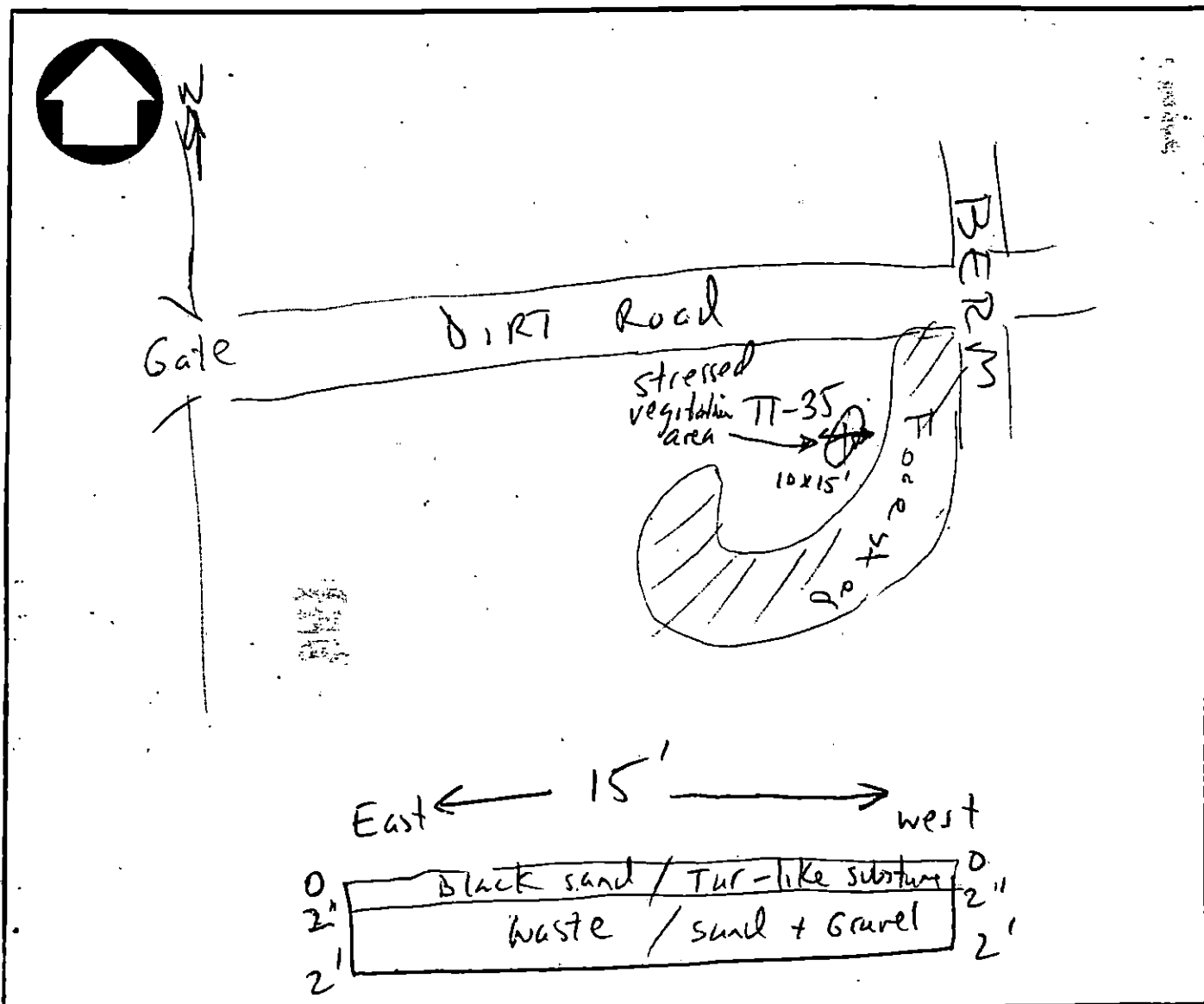
TEST PIT PROFILE

Project Sonia Road Sample Crew K. Robins

Sample(s) Location(s) TT-35

Sample(s) and/or Well Number(s) In location of stressed vegetation
in central area of site

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.

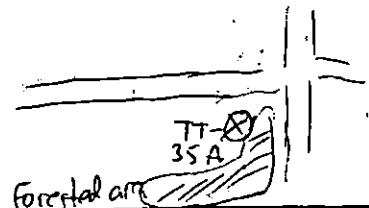




DVIRKA
AND
BARTILUCCI

TEST PIT LOCATION SKETCH MAP

N



TEST PIT LOG

TEST PIT NO. TT-35A		
PROJECT NO./NAME 1445-3A-Sonia Rd LF	LOCATION In area of stressed vegetation	
EXCAVATOR/EQUIPMENT/OPERATOR Bobby / F&N		
INSPECTOR/OFFICE Kr Robins / D+B		START/FINISH DATE 1/17/98
ELEVATION OF: GROUND SURFACE/BOTTOM OF PIT (FT. ABOVE MSL) NA		CONDITION OF PIT 5746/E
REMARKS: In area of stressed vegetation, central portion of site		

DEPTH	SAMPLE INTERVAL	~~QVA~~ PID SCREEN	DESCRIPTION OF MATERIALS	REMARKS
0	0-2"	0.0	Black sand mixed with	Laboratory
1			trace tar-like substance	Sample
2	2"-2'	0.0	Waste mixed with	Laboratory sample
3			Brown Sand/gravel	(Soil only)
4				(1'-2')
5			END of Test Trench	
6			at 2'	
7				
8				
9				
10				
11				
12				
13				
14				
15				

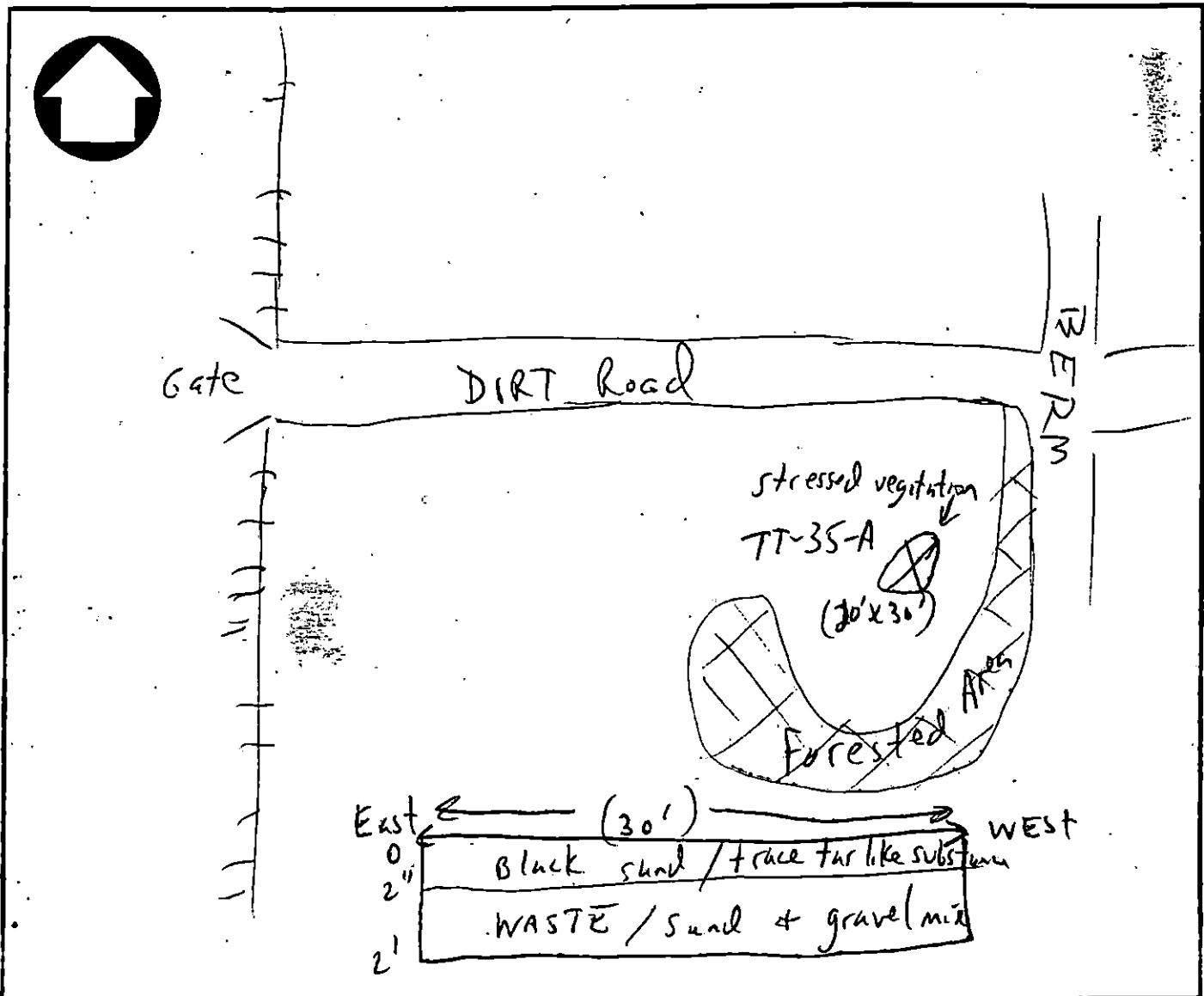
TEST PIT PROFILE

Project SONIA Road Sample Crew Keith Robins

Sample(s) Location(s) _____

Sample(s) and/or Well Number(s) Located in area of stressed
vegetation in central portion of site

Location of sample points, wells, borings, etc., with reference to three permanent reference points.
Measure all distances, clearly label roads, wells and permanent features.



APPENDIX G

DRILL LOGS FOR SOIL BORINGS



DYRKA
AND
BARTILUCCI

DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>F&N / C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>1</u> of <u>2</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>RI</u>		Boring Location <u>9' SE of</u>		
Rig Type <u>Canterra CT-250</u>				Location/Address <u>Sonia Rd. Landfill</u>		<u>600 N + 900 E stake</u>		
Drilling Method <u>1/4" HSA</u>				Location/Address <u>W. Brentwood, N.Y.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather		Plot Plan		
Water Level <u>28'</u>				<u>M. Sunny, hot, sl. humid, calm winds</u>				
Time				Date/Time Start <u>8/1/97 11:00 am</u>				
Date				Date/Time Finish <u>8/1/97 3:00 pm</u>				
Casing Depth								
Sample Depth	Sample Number	SPT	PIG/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
			<u>0.0</u>	0-8" DK. br. blk. organic silt w/ roots, grass, weeds, little f sand, moist Cuttings (very little cuttings from 2-10') DK. br. organic silt + f sand some wood, little plastic + metal, tr. glass + f-c gravel + conc. ↓ Split Spoon (18-20') DK br. organic silt + f sand, some wood, little plastic, tr. rubber + metal, moist sl. landfill odor				
18-20'	1	9	0.0					
Rec.	4"	7						
		9						
		50						
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary				



DVRKA
AND
BARTILUCCI

DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>SB-1</u>	
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>2</u> of <u>2</u>	
Inspector <u>D. Obradovich</u>				<u>RI</u>		Boring Location <u>-</u>	
Rig Type <u>Canterra CT-250</u>				PROJECT # <u>1445</u>			
Drilling Method <u>4 1/4" HSA</u>				Location/Address <u>Sonia Rd.</u>			
Drive Hammer Weight <u>140 lbs.</u>				<u>W. Brentwood, NY.</u>			
GROUNDWATER OBSERVATIONS				Weather <u>Sunny, calm winds</u>		Plot Plan	
Water Level				Date/Time Start <u>8/1/97 11am</u>			
Time				Date/Time Finish <u>8/1/97 3pm</u>			
Date							
Casing Depth							
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC	
				20 <u>Split spoons</u>			
20-22'	2	24	0.0	(20-22') Br. wood, some silt & f.		*Collected analytical samples from 20-22'	
Rec.	8"	50		21 sand, little f gravel, fr. tiles & brick, moist			
		49		22 (22-24') No recovery			
		50		23			
22-24'	Rec.	50/6"	0.0	24			
Rec.	0			25			
				26			
				27			
				28			
				29			
				30			
				31			
				32			
				33			
				34			
				35			
				36			
				37			
				38			
				39			
				40			
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary			

**DELLCON.PM4**

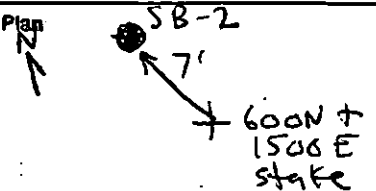


DVIRKA
AND
BARTILUCCI

DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>SB-01 A</u>	
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>2</u> of <u>2</u>	
Inspector <u>D. Obradovich</u>				PROJECT # <u>RI</u>		Boring Location	
Rig Type <u>MOBILE B-8C</u>				PROJECT # <u>1445</u>		<u>20' NORTH OF STAIRS</u>	
Drilling Method <u>HSA</u>				Location/Address <u>Sonia Rd.</u>		<u>600 N, 900 E</u>	
Drive Hammer Weight <u>140 lbs.</u>				<u>W. Brentwood, NY.</u>			
GROUNDWATER OBSERVATIONS				Weather <u>RAIN - OVERCAST</u>		Plot Plan	
Water Level				Date/Time Start <u>8-18-97</u> <u>0900</u>			
Time				Date/Time Finish <u>8-18-97</u> <u>1048</u>			
Date							
Casing Depth							
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC	COMMENTS
				20			
				21 <u>REFUSE</u>			
				22			
				23			
				24			
				25			
				26			
				27			
				28			
				29			
				30			
				31			
				32			
				33			
				34			
				35			
35-37	S-1	13	NA	Split spoon (35-37)			
		5		Gray to lite Gray fine gr			
		7		SAND, little ~~fine~~ trace fine			
		17		gr. Gravel, tr S.H.			
				WET			
				38 End of boring at 37.			
				39			
				40			
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary			



DVIRKA
AND
BARTILUCCI

DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>SB-2</u>	
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>1</u> of <u>3</u>	
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445</u>		Boring Location <u>7' N-NW of</u>	
Rig Type <u>Mobile B-80</u>				Location/Address <u>Sonia Rd. Landfill</u>		<u>600 N + 1500 E stake</u>	
Drilling Method <u>4 1/4" HSA</u>				<u>W. Brentwood, N.Y.</u>			
Drive Hammer Weight <u>140 lbs</u>							
GROUNDWATER OBSERVATIONS				Weather <u>M. Cloudy, sl breeze ~75°</u>		Plot Plan	
Water Level <u>23'</u>				Date/Time Start <u>8/4/97 9:30</u>			
Time				Date/Time Finish <u>8/5/95 11 am</u>			
Date							
Casing Depth							
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC		COMMENTS
				<u>Split Spoons</u>			
			1.0	0 (0-4") Topsoil (organic blk silt, roots, f-m sand, moist)			
			2.0	1 (4"-2') Br. f-m sand, some silt, little f-c gravel, moist			
			3.2	2 (2-4") Grey f-m sand, some silt, (little ~~metal~~ metal, plastic, glass organic silt, moist			
			12.2	3 (4-8") Grey f-m sand & organic blk silt, some metal, glass, wood, tr. f-c gravel, moist			
			10.7	4 (8-12") Blk. organic silt & wood, (little f-m sand & metal), tr. glass, plastic, creosote odor wood has sticky mat'l (blk.), moist			
				5			
				6			
				7			
				8			
				9			
				10			
				11			
				12			
12-14'	142	12	9	11 <u>Split Spoons</u>			
Rec.	0"	8	20	12 (12-14') Split spoon - 2 attempts - no recovery			
		8	18	13 open split spoon			
		9	30	14 (14-16') No recovery			
14-16'	3	10		15 (16-18') 0-3" Br. wood & organic silt, plastic etc. ~~silt~~ 3-7" Br. f-m sand, tr. silt, tr. plastic, v. moist			
Rec.	0	11		16			
		22		17 (18-20') No recovery			
		10		18 open spoon			
16-18'	4	12	8.6	19			
Rec.	7"	14		20			
		48					
		12					
18-20'	5	11	10.2				
Rec.	0"	10					
		8					
		27					
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary			



DVERKA
AND
BARTILUCCI

DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>SB-2</u>		
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>2</u> of <u>3</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445</u>		Boring Location <u>-</u>		
Rig Type <u>Mobile B-80</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>4 1/4" HSA</u>				<u>W. Brentwood, NY.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather <u>M. Cloudy</u>		Plot Plan		
Water Level				Date/Time Start <u>8/4/97</u> <u>9:30 am</u>				
Time				Date/Time Finish <u>8/5/97</u> <u>11:00 am</u>				
Date								
Casing Depth								
Sample Depth	Sample Number	SPT	PI/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
20-22'	6	5	6.3	20 Split spoons				
Rec.	10"	32		21 0-5" Br. wood mulch, fine twigs, roots, little f-m br. sand, br. silt 5"-10" Bk. organic silt and wood debris (leaves, mulch etc.) little f sand, creosote/hydrocarbon bitter odor) moderate-strong odor, 0-5" v. moist 5-10" v. moist-wet				
22-24'	7	77	6.8	22				
Rec.	8"	24		23				
		22		24 Collected 2nd 20-22' split spoon (some readings 110)				
24-26'	8	30	28.6	25				
Rec.		200/6"		26 (22-24') 0-5" grey-bk. f-m sand, some silt, little f-m gravel, fr. c gravel & cobble, paper & metal, v. moist same odor as 20-22' not as strong				
				27 5-8" Br. newspaper, wood debris & fr. organic silt bk. v. moist-wet				
				28				
				29 (24-26') Bk. organic silt & wood, fr. f sand, metal, plastic, v. moist-wet				
				30				
				31 No Cuttings 26-40' bg				
				32				
				33				
				34				
				35				
				36				
				37				
				38				
				39				
				40				
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary				

* Bottom of waste at approx. 37-40'



DYRKA
AND
BARTILUCCI

DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>SB-2</u>		
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>3</u> of <u>3</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445</u>		Boring Location <u> </u>		
Rig Type <u>Mobile B-80</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>HSA</u>				<u>W. Brentwood, NY.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather <u>M. Cloudy, breezy</u>		Plot Plan		
Water Level								
Time				Date/Time Start <u>8/4/97 9:30 am.</u>				
Date				Date/Time Finish <u>8/5/97 11 am</u>				
Casing Depth								
Sample Depth	Sample Number	SPT 1 st 2 nd	FIELD Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
40-42'		(1 5 00)	40	Split spoon				
Rec.	19"	6 9	41	(40-42') Grey-lt. br. f-c SAND,				*Submitted 40-42' bg sample for analytical (below waste)
		4 10	42	little (+) silty f-m gravel, tr. c. gravel (some c. gravel @ btm, wet)				
		15 13	43	END OF BORING AT 42' bg				
			44					
			45					
			46					
			47					
			48					
			49					
			50					
			51					
			52					
			53					
			54					
			55					
			56					
			57					
			58					
			59					
			60					
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary				



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>SB-3</u>	
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>1</u> of <u>2</u>	
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445</u>		Boring Location <u>10' north of</u>	
Rig Type <u>Canterra CT-250</u>				Location/Address <u>Sonia Rd. Landfill</u>		<u>300N+900E grid location</u>	
Drilling Method <u>4 1/4" HSA</u>				<u>W. Brentwood, N.Y.</u>		<u>(stake)</u>	
Drive Hammer Weight <u>140 lbs</u>							
GROUNDWATER OBSERVATIONS				Weather <u>Sunny, v. warm ~80°</u>		Plot Plan 	
Water Level <u>25'</u>				Date/Time Start <u>7/31/97 11 am</u>			
Time <u>1:00</u>				Date/Time Finish <u>8/1/97 10 am</u>			
Date <u>8/1/97</u>							
Casing Depth <u>-</u>							
Sample Depth	Sample Number	SPT	PIV/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC	
				Drill Cuttings down to 16' bg			
			0.0	0-5" Blk organic silt + roots, little f-c gravel + sand, moist			
				5"-2' Blk. organic silt + f-m dk. br- blk. sand, little f-c gravel, trace cobble			
				2-16' Grey f-c sand + dk. gray-blk. silt, little f-c gravel + plastic, wood, conc, + metal scraps, moist			
				Cuttings			
				Split Spoons			
				(16-18') Grey/blk. f sand + silt, little fine sand, tn. conc. + gravel, (btm of spoon wet) sl. moist			
16-18'	1	3	0.0	(18-20') 0-2" Br. a. gravel + dk. br. f-m sand, little paper, v. moist			
Rec.	2"	6		(2-10") Grey f-m sand mixed w/ dk. br.-blk. organic silt, little conc debris (f sand - m gravel size), tn. wood, metal, paper, v. moist, loose			
		9		26 wood piece stuck in cage of spoon			
18-20'	2	26	0.0	landfill well @ btm			
Rec.	10"	17		* Collected analytical sample from 18-20' bg			
		10		Soil Stratigraphy Summary			
		22		SPT = STANDARD PENETRATION TEST			



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>SB-3</u>		
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>2</u> of <u>2</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445</u>		Boring Location <u> </u>		
Rig Type <u>Canterra CT250</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>4 1/4" HSA</u>				<u>W. Brentwood, N.Y.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather <u>Sunny am.</u>		Plot Plan		
Water Level <u>25'</u>				<u>↓</u> <u>in.</u>				
Time <u>10⁰⁰</u>				Date/Time Start <u>7/31/97</u> <u>11 am</u>				
Date <u>8/1/97</u>				Date/Time Finish <u>8/1/97</u> <u>10 am</u>				
Casing Depth <u>-</u>								
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
20-22'	3	45	0.0	20' <u>Split spoon</u>				
Rec.	3"	50/6"		21 (20-22') Actually 20-21' by dk. br. wood, little blk. silt & plastic 1 mil thick several layers, v. moist - wet, fn. br. sand				
				22				
				23 <u>Cuttings</u>				
23-25'	4	26	0.0	24 blk. organic silt, some f. dk. br. sand & woody plastic metal v. moist				
Rec.	0"	55/6"		25 <u>Split spoons</u>				
				26 (23-25') No recovery				
				27 (25-27') No recovery				
				28				
				29				
30-32'	5	30	0.0	30 (30-32') blk organic silt, some dk. br. fine sand, wood, little glass & plastic & metal, wet				
Rec.	2"	5/6"		31				
				32				
				33 <u>Cuttings</u>				
				34 blk. silt & fine sand, little glass metal plastic & wood, wet				
				35				
				36				
				37				
				38 END OF BORING AT 37' by <u>Retrsal</u>				
				39				
				40				
SPT - STANDARD PENETRATION TEST				Soil Stratigraphy Summary				



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>F&N / C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>1</u> of <u>4</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>RI</u>		Boring Location _____		
Rig Type <u>MOBILE B-80</u>				Location/Address <u>Sonia Rd. Landfill</u>		_____		
Drilling Method <u>4 1/4" HSA</u>				_____		_____		
Drive Hammer Weight <u>140 lbs.</u>				_____		_____		
GROUNDWATER OBSERVATIONS				Weather		Plot Plan		
Water Level _____				<u>Rain/Cloudy AM</u>		_____		
Time _____				<u>Mostly Sunny PM</u>		_____		
Date _____				Date/Time Start <u>8-18-97 1:00 PM</u>		_____		
Casing Depth _____				Date/Time Finish <u>8-21-97 12:00 PM</u>		_____		
Sample Depth	Sample Number	SPT	FID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				0 Cuttings				
				1 NO Samples collected in the				
				2 Refuse - see log of				
				3 SB-03 for ^{more} descriptions				
				4 of waste				
				5 0.5' Refuse - metal, brick, gray/black				0.5' 0% LEL
				6 Clay/clayey silt, wood, glass				
				7 Fabric				
				8				
				9				
				10 @ 10' Fabric - wire				@ 10' 1-3% LEL
				11				
				12				
				13 @ 13' - wood, fabric, wire				@ 13' 2-3% LEL
				14				
				15				
				16				
				17				
				18				
				19				
				20				
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary _____				



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>2</u> of <u>4</u>		
Inspector <u>D. Obregonich</u>				PROJECT # <u>1445-38</u>		Boring Location <u>-</u>		
Rig Type <u>MOBILE B-2D</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>HSA</u>				<u>W. Brentwood, NY.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather		Plot Plan		
Water Level				<u>RAIN/overcast AM</u>				
Time				<u>mostly sunny PM</u>				
Date				Date/Time Start <u>8-18-97</u>				
Casing Depth				Date/Time Finish <u>1pm</u>				
Sample Depth	Sample Number	SPT	PRO/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				20				
				21				
				22				
				23 @ 23' wood, fabric rubber				@ 23' LEL 100%
				24				@ gen supernat
				25				Amal ready 14%
				26				
				27				
				28				
				29				
				30				
				31				
31-33	S-1	12	NA	Split Spoon				
		13		(31-33')				
		15		Drk Gray clayey silt, some				
		9		fine-med-coarse sand, tr.				
				wood, glass - fill - moist				
				to wet				
				33				
				34				
				35				
				36				
				37				
				38				
				39				
				40				
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary				



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>SB-3</u>		
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>3</u> of <u>4</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>RI</u>		Boring Location <u> </u>		
Rig Type <u>Mobile B-80</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>4 1/4" HSA</u>				<u>W. Brentwood, NY.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather <u> </u>		Plot Plan		
Water Level				Date/Time Start <u> </u>				
Time				Date/Time Finish <u> </u>				
Date								
Casing Depth								
Sample Depth	Sample Number	SPT	FIQ/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				40				
				41				
				42 <u>43-57 1/2' Cuttings</u>				
				43 <u>Blk. mucky silt & f.c. sand,</u>				
				44 <u>little grey sand & wood, sl.</u>				
				45 <u>landfill/solvent odor</u>				
				46				
				47				
				48				
				49				
				50				
				51				
				52				
				53				
				54				
				55				
				56				
				57 <u>Cuttings</u>				
				58 <u>58' DK. grey stained f.c. sand</u>				
				59 <u>on lead auger 8" wood stuck in</u>				
				60 <u>cutter head & metal band 4' long</u>				
				around cutter head				
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary <u> </u>				



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>4</u> of <u>4</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445-3B</u>		Boring Location <u>—</u>		
Rig Type <u>—</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>4 1/4" HSA</u>				<u>W. Brentwood, NY.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather <u>—</u>		Plot Plan <u>—</u>		
Water Level				Date/Time Start <u>—</u>				
Time				Date/Time Finish <u>—</u>				
Date								
Casing Depth								
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				60				
				61 60' Cutter head w/ grey-blk.				→ END OF WASTE AT APPROX. 61' below grade
				62 f-m sand (stained) may not				
				63 be representative of 60' bg				
				64 wood below sand (same as				
				65 58' bg)				
				66 60-65' No recovery				
65-67	1	12	0.0	Split Spoon (no cuttings)				
Rec.	20"	6		(65-67') Grey f.-m. SAND,				
		10		tr. mica, wet, no odor				
		12		67				
				68 END OF BORING AT 67' bg				
				69				
				70				
				71				
				72				
				73				
				74				
				75				
				76				
				77				
				78				
				79				
				80				
SPT - STANDARD PENETRATION TEST				Soil Stratigraphy Summary				

DRILL CON. PM 4-

DRILLING CONTRACTOR		DRILLING LOG		BORING NUMBER 518-4	
DRILLING CONTRACTOR F&N/C. Guzzardo Inspector D. Orsagovich Rig Type Mobile 13-50 Drilling Method HSA Drive Hammer Weight 140 lbs.		PROJECT NAME Sonia Rd. LF PROJECT # 1445 Location/Address Sonia Rd. W. Brentwood, NY		Sheet 2 of 3 Boring Location 5' South of 300 N + 1500 E Stake	
GROUNDWATER OBSERVATIONS Water Level Date Casing Depth		Weather Clear, Sunny to Partly Cloudy Date/Time Start 0930 AM Date/Time Finish 0200 PM		Plot Plan	
FIELD IDENTIFICATION OF MATERIAL Sample Depth Sample Number SPT PID/FID Reading		WELL SCHEMATIC COMMENTS		Soil Stratigraphy Summary SPT - STANDARD PENETRATION TEST	
21 Split Spoon (22-24) 22 61-61. fine SAND, little fine 23 clayey silt, fr + fine gravel, moist 24 Cuttings return ~ 20 25 Soggy - black mix of 26 decomposed waste and sand and 27 Gravel		@ 22' 59% water near well not eas. below grade @ 25% water @ 25' 0% water		28 29 30 31 32 33 34 35 36 37 38 39 40	



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>3</u> of <u>3</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445</u>		Boring Location <u>5' South of</u>		
Rig Type <u>Mobile B-80</u>				Location/Address <u>Sonia Rd.</u>		<u>300 N + 1500 E State</u>		
Drilling Method <u>HSA</u>				W. Brentwood, NY.				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather <u>Hazy - mostly sunny to</u>		Plot Plan		
Water Level <u>225</u>				<u>mostly cloudy</u>				
Time				Date/Time Start <u>0930</u>				
Date				Date/Time Finish <u>200</u>				
Casing Depth								
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				40				
				41 Cuttings are Black Sandy				* Waste btm @ ~ 40-41' bgs
				42 Mix of decomposed refuse				
				43 and Sand & Gravel				
				44 Split spoon (44-46')				
44-46	S-2	13		Gray-white fine SAND, tr. f				
		12	D	Gravel, little tr. silt-clayey				
		6		S.I.L. - Saturated.				
		10		46				
				47 End of Boring @ 46'				
				48				
				49				
				50				
				51				
				52				
				53				
				54				
				55				
				56				
				57				
				58				
				59				
				60				
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary				

APPENDIX H

DRILL LOGS FOR HYDROPUNCH SAMPLES

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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>2</u> of <u>3</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>RI</u>		Boring Location <u>-</u>		
Rig Type <u>Cantlevra CT-250</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>4 1/4" HSA</u>				<u>W. Brentwood, N.Y.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather		Plot Plan		
Water Level				Date/Time Start				
Time				Date/Time Finish				
Date								
Casing Depth								
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				40				
			0.0	Cuttings				
43'bg	3		0.0	40-50'				Hydropunch II screen from 42'6" - 43'bg
				Orange - lt. br. f-v.c. sand, little f-m gravel, tr. silt, wet f.c. gravel				* Collected discrete g.w. sample from 43'bg
				↓				
			0.0	50				
53'bg	4		0.0	50-60'				* Collected discrete g.w. sample from 53'bg (screen from 52'6" - 53'bg)
				Orange - br. f-v.c. sand, little f-c gravel, tr. silt, wet				
				↓				
			0.0	60				
63'bg	5		0.0	60-70'				* Collected discrete g.w. sample from 63'bg (screen from 62'6" - 63'bg)
				Tan - lt. br - orange m-v.c. sand, some f. gravel, little m-c gravel & f. sand, tr. silt, wet				
				↓				
			0.0	70				
73'bg	6		0.0	70-80'				* Collected discrete g.w. sample from 73'bg (screen from 72'6" - 73'bg)
				Lt. br. - sl. orange m-v.c. sand, little f. gravel, tr. f. sand & silt, wet				
				↓				
			0.0	80				
				Soil Stratigraphy Summary				

SPT = STANDARD PENETRATION TEST



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>H1</u>		
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>3</u> of <u>3</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>RI</u>		Boring Location <u>---</u>		
Rig Type <u>Canterra CT250</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>4 1/4" HSA</u>				<u>W. Brentwood, N.Y.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather <u>---</u>		Plot Plan		
Water Level				Date/Time Start <u>---</u>				
Time				Date/Time Finish <u>---</u>				
Date								
Casing Depth								
Sample Depth	Sample Number	SPT	PI/PT Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				80				
83'bg	7		0.0	80-90' Cuttings Br - sl. orange fine-c. sand, tr. silt & f-m gravel, wet				* Collected discrete g.w. sample from 83'bg
				90				
93'bg	8		0.0	90-100' Cuttings Br - sl. orange fine-c. sand, tr. silt & f-m gravel, wet				* Collected discrete g.w. sample from 93'bg
				100				
103'bg	9		0.0	100-110' Cuttings tan - br. - uf-m sand, tr. c. sand, silt & fine gravel, wet				* Collected discrete g.w. sample from 103'bg
104-106' Rec.	10 0"	7 8	0.0	Split Spoons (104-106') No recovery sample washed out of split spoon even w/ check valve above spoon - mat'l is finer grained here				→ Gardiners Clay @ ~109'bg
		25						
		80						
109-111' Rec.	11 19"	40 45	0.0	110 ↓ (109-111') DK. grey - dk. green dense clay, sl. moist, sl. plastic, 1mm rad-br. silt & clay above clay				
		72						
		125						
				END OF BORING AT 111'bg (soft, plastic clay on augers @ 106.5' - 107'bg) (DK. green-grey)				
				120 @ 106.5' - 107'bg (DK. green-grey)				
				Soil Stratigraphy Summary				
SPT = STANDARD PENETRATION TEST								

**DFWLLCON.PM4**



DRILL CON. PM4

*Gardiners
July @ 108,95

DENLCON.PMA

DRILLING CONTRACTOR Driller <u>F&N / C. Guzzardo</u> Inspector <u>D. Obradovich</u> Rig Type <u>Cantenna CT-250</u> Drilling Method <u>4 1/4" HSA</u> Drive Hammer Weight <u>140 lbs.</u>			DRILLING LOG PROJECT NAME <u>Sonia Rd. LF</u> <u>RI</u> PROJECT # <u>1445-3B</u> Location/Address <u>Sonia Rd.</u> <u>W. Brentwood, N.Y.</u>			BORING NUMBER <u>43</u> Sheet <u>2</u> of <u>3</u> Boring Location _____		
GROUNDWATER OBSERVATIONS Water Level _____ Time _____ Date _____ Casing Depth _____			Weather _____ Date/Time Start _____ Date/Time Finish _____			Plot Plan _____		
Sample Depth	Sample Number	SPT	P/FID Reading	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS		
				40				
			0.0	<u>Cuttings</u> 40-48' Tan v.f.-v.c. SAND, little f. gravel, tr. m-c gravel & silt, wet				
45' bg	3		0.0	48-60' Tan-grey v.f.-m SAND fr. little f.-m gravel, c. sand & silt, tr. c gravel, wet				
			0.0	50				
55' bg	4		0.0					
			0.0	60				
64' bg	5		0.0	<u>Cuttings</u> 60-70' Tan-grey v.f.-c SAND, tr. silt & f. gravel, wet		* Collected discrete g.w. sample from 64' bg		
			0.0	70				
			0.0	<u>Cuttings</u> 70-80' Tan-grey fine-coarse sand, little f.-m gravel, trace silt		* Collected discrete g.w. sample from 75'		
75' bg	6		0.0	80				
				Soil Stratigraphy Summary _____				

SPT = STANDARD PENETRATION TEST



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>FRN/C. Gullardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>3</u> of <u>3</u>		
Inspector <u>K. Robins</u>				PROJECT # <u>RZ</u>		Boring Location <u>✓</u>		
Rig Type <u> </u>				LOCATION/Address <u>Sonia Rd.</u>				
Drilling Method <u>4 1/4 HSA</u>				Location/Address <u>W. Brentwood, NY</u>				
Drive Hammer Weight <u>140 LBS</u>								
GROUNDWATER OBSERVATIONS				Weather <u>Sunny</u>		Plot Plan <u> </u>		
Water Level				Date/Time Start <u>9/16/97</u>				
Time				Date/Time Finish <u>9/17/97</u>				
Date								
Casing Depth								
Sample Depth	Sample Number	SPT	FID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
85'	7		0.0	Cuttings 80-90' Tan-Gray fine to coarse sand, little f-m gravel, trace silt, wet				collected discrete g.w sample from 85'
95'	8		0.0	Cuttings 90-98' Tan-Gray f-c sand, little - tr gravel, wet				collected discrete g.w sample from 95'
98-100'	SS-1		0.0	Split Spoons (98-100) Tan-LT Brown-Gray medium to fine grained, well sorted sand, trace silt, wet		* EOB @ 110'		split spoon (98-100')
105'	9		0.0	(106-108) 106-107 - Tan f-m Sand 107-107.5 Tan c-m Sand, some gravel, tr silt 107.5-108' Brown Gray Silt, some clay, tr iron		* Gardners Clay @ 108' by		collected discrete g.w. sample from 105'
110'	SS-3		0.0	(108-110) DK Brown Gray silt into DK Gray-Green Clay				split spoon (106-108) (108-110)
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary				

**DELLCON PM4**

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AND
BARTLUCCI

DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>H5</u>	
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>1</u> of <u>4</u>	
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445-3B</u>		Boring Location <u>6' south of</u>	
Rig Type <u>Canterra CT-250</u>				Location/Address <u>Sonia Rd.</u>		<u>Grass/woods area into Deer</u>	
Drilling Method <u>1/4" HSA</u>				<u>W. Brentwood, N.Y.</u>		<u>Park St.</u>	
Drive Hammer Weight <u>140 lbs.</u>							
GROUNDWATER OBSERVATIONS				Weather <u>M. Cloudy</u>		Plot Plan	
Water Level				Date/Time Start <u>9/8/97 9:30 am</u> <td colspan="2">SITE</td>		SITE	
Time				Date/Time Finish		—x— woods —x— woods	
Date						300' →	
Casing Depth						114' → Deer Park St. 6' H5	
Sample Depth	Sample Number	SPT	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC		COMMENTS	
			<u>Cuttings</u>				
		0.0	0-5" Asphalt				
			5"-2' Red-orange-br. SILT, little f-c gravel & sand, moist				
			2-3' Br.-red GRAVEL (f-m) little f. sand & silt, dry-sl. moist				
			3-5' Red-br.-orange f-c SAND, some gravel (f-c), little silt, moist				
		0.0	5-10' Br.-red v.f-c SAND, little f-c gravel & silt, moist, (tr. cobble)				
			10-11' Br. & tan v.f-c SAND, little f-c gravel & silt				
			11-16' Br.-orange v.f-c SAND, little f-c gravel & silt, tr. cobble, moist				
		0.0	16-20' Lt br.-orange v.f-c SAND, some cobbles, little f-c gravel, tr. silt, moist				
27'bg	1	0.0	20-25' Lt. br.-orange v.f-m SAND, little f-m gravel & silt, moist			Advanced Hydropunch II sampler from 24-28'bg pulled 1' up screen from 26'6"-27'bg	
		0.0	25-45' Lt. tan v.f-m SAND, tr. c. sand, f. gravel & silt, wet			*Collected discrete g.w. sample from 27'bg	
37'bg	2	0.0				*Collected discrete g.w. sample from 37'bg	
SPT - STANDARD PENETRATION TEST				Soil Stratigraphy Summary			



DYWIDAG
AND
BARTLUCCI

DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>H5</u>		
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>2</u> of <u>4</u>		
Inspector <u>D. Obradorovich</u>				PROJECT # <u>RI</u>		Boring Location <u>-</u>		
Rig Type <u>Canterra CT-250</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>1 1/4" HSA</u>				<u>W. Brentwood, N.Y.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather <u>-</u>		Plot Plan		
Water Level				<u>-</u>				
Time				Date/Time Start <u>-</u>				
Date				Date/Time Finish <u>-</u>				
Casing Depth				<u>-</u>				
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
			0.0	40 <u>Cuttings</u>				
				45-52' Grey-tan v.f.-c. SAND, little silt & f. gravel, wet				
47'bg	3		0.0					* Collected discrete g.w. sample from 47'bg
			0.0	50 <u>Cuttings</u>				
				52-75' Grey-tan v.f.-c. SAND, little f. gravel & silt, wet				
57'bg	4		0.0					* Collected discrete g.w. sample from 57'bg
			0.0	60				
67'bg	5		0.0					* Collected discrete g.w. sample from 67'bg
			0.0	70 <u>Cuttings</u>				
				75-92' Grey-tan v.f.-m. SAND, little f. gravel & silt, tr. m. gravel, wet				
77'bg	6		0.0					* Collected discrete g.w. sample from 77'bg
				80				

SPT = STANDARD PENETRATION TEST

Soil Stratigraphy Summary



DEVIRKA
AND
BARTILUCCI

DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>HS</u>	
Driller <u>Delta/B. Devine</u>				PROJECT NAME <u>Sonia Rd. LF-RI</u>		Sheet <u>3</u> of <u>4</u>	
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445-3B</u>		Boring Location <u> </u>	
Rig Type <u>Failing F-7</u>				Location/Address <u>Sonia Rd.</u>			
Drilling Method <u>3/4" HSA</u>				<u>W. Brentwood N.Y.</u>			
Drive Hammer Weight <u>140 lbs</u>							
GROUNDWATER OBSERVATIONS				Weather <u>Sunny</u>		Plot Plan	
Water Level				Date/Time Start <u>4/15 11:00 am w/Delta</u>			
Time				Date/Time Finish <u> </u>			
Date							
Casing Depth				60			
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC	
			0.0				
87'bg	7		0.0	<u>Cuttings</u> 92-99' Grey-tan v.f.-m SAND, tr. f. gravel, little silt, wet		* Collected discrete g.w. sample @ 87'bg	
			0.0				
97'bg	8		0.0	<u>Split Spoons</u> (99-101') Grey-tan v.f.-m SAND, little silt, tr. f. gravel wet		* Collected discrete g.w. sample @ 97'bg	
99-101'	9	8	0.0				
Rec.	8"	7	0.0				
		6					
		7		(104-107') Br.-grey-si. orange v.f. SAND, little silt + m. sand, wet		* Collected discrete g.w. sample from 106'bg	
104-107'	10	8	0.0				
Rec.	12"	13					
106'bg	10	9	0.0				
		6		(109-111') Grey-br. v.f.-m SAND, little silt, tr. f. gravel (sub rounded) wet			
109-111'	12	10					
Rec.	9"						
110-112'	13		0.0				
Rec.	24"			(110-112') Tan-grey-orange v.f.-m SAND, little silt, tr. c. sand + f.-m gravel-grey + sand w/ orange silt @ btm			
112-114'	14						
Rec.	10"						
				(112-114') Tan-grey-orange v.f.-c SAND, little f. gravel + silt, tr. m. gravel, wet		* Collected discrete g.w. sample from 117'bg	
119-121'	15		0.0				
Rec.	10"						
SPT - STANDARD PENETRATION TEST				Soil Stratigraphy Summary			



DVIRKA
AND
BARTLUCCI

DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>H5</u>		
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>4</u> of <u>4</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445</u>		Boring Location <u> </u>		
Rig Type <u> </u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>HSA</u>				<u>W. Brentwood, N.Y.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather <u> </u>		Plot Plan <u> </u>		
Water Level <u> </u>				Date/Time Start <u> </u>				
Time <u> </u>				Date/Time Finish <u>9/17/97 3⁰⁰ pm</u>				
Date <u> </u>								
Casing Depth <u> </u>								
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				<u>120 Split Spoons</u>				
				(114-119') Grey - sl. br. v.f - m SAND, little silt, tr. f. gravel (subrounded)				
124-126'	16		0.0	(119-121') Lt. br. - grey v.f - m SAND, some f - m gravel, tr. silt, c. sand + c. gravel, wet				
Rec. 5"								
126-128'	17		0.0	(124-126') Orange - lt. br. f - m GRAVEL, orange v.f. sand + silt, tr. clay + c. gravel, wet				
Rec. 6"								
128-130'	18		0.0	(126-128') 0-3" DK. grey - dk. br. - dk. greenish v.f - f sand + silt, tr. m. sand + v.f gravel, wet 3-4"				
Rec. 7"				(128-130') 0-1" Bk. SILT, little v.f. sand + mica 1-2" Lt. tan v.f sand + silt, tr. mica 2-7" Bk. SILT lenses w/ little mica Bright orange-red iron stained silt lenses @ 5 + 6"				
				END OF BORING AT 130' bg				
				* Green - grey - soft moderately plastic clay w/ red peat found on lead auger from 125-126' B"				
SPT - STANDARD PENETRATION TEST				Soil Stratigraphy Summary <u> </u>				

**DRILLCON.PM4**



DYRKA
AND
BARTLUCCI

DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>2</u> of <u>3</u>		
Inspector <u>D. Obradorovich</u>				PROJECT # <u>RI</u>		Boring Location <u> </u>		
Rig Type <u>Canterra CT-250</u>				LOCATION # <u>1445-3B</u>				
Drilling Method <u>4 1/4" HSA</u>				Location/Address <u>Sonia Rd.</u>				
Drive Hammer Weight <u>140 lbs.</u>				<u>W. Brentwood, N.Y.</u>				
GROUNDWATER OBSERVATIONS				Weather <u> </u>		Plot Plan <u> </u>		
Water Level <u> </u>				Date/Time Start <u> </u>				
Time <u> </u>				Date/Time Finish <u> </u>				
Date <u> </u>								
Casing Depth <u> </u>								
Sample Depth	Sample Number	SPT	FID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				40				
			0.0					
47'bg	3		0.0	Cuttings 42-51' Tan-grey v.f.-c. SAND, little silt & f. gravel, tr. m-c gravel, wet				* Collected discrete g.w. sample from 47'bg
			0.0	50 Cuttings 51-54' Tan-orange v.f.-c. SAND, little f. gravel, tr. silt & m. gravel, wet				
57'bg	4		0.0	54-72' Tan-grey (same mat'l as above w/ tr. m-c gravel)				* Collected discrete g.w. sample from 57'bg
			0.0	60				
67'bg	5		0.0	Cuttings 72-85' Tan-grey v.f.-m. SAND, little silt & f. gravel, tr. c. sand & m. gravel, wet				* Collected discrete g.w. sample from 67'bg
			0.0	70				
76'bg	6		0.0					* Collected discrete g.w. sample from 76'bg
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary <u> </u>				

**NETLCON.PM4**

**DRILLCON.PM4**



DYNKA
AND
BARTLUCCI

DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>47</u>		
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>2</u> of <u>3</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>RI</u>		Boring Location <u>-</u>		
Rig Type <u>Canterra CT-250</u>				LOCATION/ADDRESS <u>Sonia Rd.</u>				
Drilling Method <u>6 5/8" HSA</u>				<u>W. Brentwood, N.Y.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather <u>-</u>		Plot Plan <u>-</u>		
Water Level				Date/Time Start <u>-</u>				
Time				Date/Time Finish <u>-</u>				
Date								
Casing Depth								
Sample Depth	Sample Number	SPT	PRO/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				<u>Cuttings</u> 52-68' Tan: grey v.f.-c. SAND, little silt & f. gravel, tr. m-c gravel, wet				* Collected discrete g.w. sample from 47'bg
47'bg	3	0.0						
57'bg	4	0.0		60 <u>Cuttings</u> 68-92' Tan-grey v.f.-m SAND little silt + f. gravel, tr. c. sand, wet				* Collected discrete g.w. sample @ 57'bg
67'bg	5	0.0		70 <u>Cuttings</u> 68-92' Tan-grey v.f.-m SAND little silt + f. gravel, tr. c. sand, wet				* Collected discrete g.w. sample @ 67'bg
77'bg	6	0.0		80 Soil Stratigraphy Summary				* Collected discrete g.w. sample @ 77'bg

SPT = STANDARD PENETRATION TEST

DRILLING CONTRACTOR Dyrka and Bartucci 140 lbs.		Inspector D. D. Bartucci 3/4" HSA		Drilling Method 3/4" HSA		Drive Hammer Weight 140 lbs.	
PROJECT NAME Sonia Rd. LF		PROJECT # 1445-38		Location/Address Sonia Rd. W. Breckwood, NJ		Weather Clear	
Plot Plan 		Date/Time Start 9/18/97 900 am.		Date/Time Finish 9/19/97 10:00 am		Groundwater Observations Water Level 21.2 ft w/ augers @ 108'	
Comments		Field Identification of Material		Well Schematic		Sample Depth	
Soil Stratigraphy Summary		Soil Stratigraphy Summary		Soil Stratigraphy Summary		Soil Stratigraphy Summary	

90' Cuttings
 92-99' Tan-grey v.f.-m. SAND, little silt, tr. c. sand & gravel, wet
 99-101' Grey-tan v.f.-m. SAND, little silt, tr. c. sand & gravel, wet
 100' (108-111) Green-grey v.f.-m. SAND, little silt, tr. c. sand, wet, st. dense-hard packed
 (111-113) same as 108-111
 (113-115) 0-8" dk. green-dk. grey CLAY, little silt w/ 2 seams of red-br. silt clay (very thin joints) @ 2-5" / v. moist, 8-11" dk. green-dk. grey silt & clay w/ tr. red-br. peat (fibers), v. moist - wet
 END OF BORING AT 115' b
 * Soft wet dk. green-dk. grey CLAY on augers @ 111-113' w/ red-br. peat fibers
 * Gardiners Clay @ 113' b
 * Collected discrete gw. sample @ 107' b
 * Collected discrete gw. sample @ 97' b
 * Collected discrete gw. sample @ 87' b

Sample Number	Depth	SPT	PI/ID	Reading
87' b	7			0.0
97' b	8			0.0
99-101'	9			0.0
	12			0.0
Rec.	12"			12
				11
107' b	10			
108-111'	11			0.0
Rec.	7"			4231
				0.0
111-113'	12			0.0
Rec.	11"			3128
				0.0
113-115'	13			0.0
Rec.	51			39
				52

APPENDIX I

DRILL LOGS FOR DEEP MONITORING WELLS



OVERKA
AND
BARTILUCCI

DRILLING CONTRACTOR Driller <u>F&N/C. Guzzardo</u> Inspector <u>D. Obradovich</u> Rig Type <u>Falling F-7</u> Drilling Method <u>4 1/4" HSA</u> Drive Hammer Weight <u>140 lbs.</u>				DRILLING LOG PROJECT NAME <u>Sonia Rd. LF</u> <u>RI</u> PROJECT # <u>1445</u> Location/Address <u>Sonia Rd. Landfill</u> <u>W. Brentwood, N.Y.</u>				BORING NUMBER <u>MW-01D</u> Sheet <u>1</u> of <u>3</u> Boring Location _____							
GROUNDWATER OBSERVATIONS Water Level _____ Time _____ Date _____ Casing Depth _____				Weather <u>Partly Sunny 705</u> Date/Time Start <u>10/13/97</u> Date/Time Finish <u>10/13/97</u>				Plot Plan 							
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL				WELL SCHEMATIC			COMMENTS				
				<u>Cuttings</u>											
			0.0 ppm	0-7	grey-green coarse sand w/ gravel <u>Cuttings</u>										
			0.2 ppm	7-8	brown sand fine to coarse, angular w/ gravel fine to coarse							<u>Cuttings</u>			
			1.2 ppm	8-12	same as 7-8 but w/ petroleum product. <u>Cuttings</u>										
			0.9 ppm	12-14	Split spinn Brown sand fine to coarse subangular grading to							1' Recovery			
12-14	1			6	Sand-tan, coarse w/ gravel both subangular. wet							8-7-sec Blow Count			
Rec.			0.1 ppm	7	14-20 Sand - light brown to tan, F-C subangular to subrounded, w/ Gravel - F-C subangular to subrounded. wet							<u>Cuttings</u>			
				8											
				9											
				20											
			0.0 ppm	11	30-40 Sand - tan, F-C subangular to subrounded, w/ Gravel - F-C subangular to subrounded. wet							<u>Cuttings</u>			
				12											
				13											
				14											
				15											
				16											
				17											
				18											
				19											
				Soil Stratigraphy Summary											

SPT = STANDARD PENETRATION TEST



DYRKA
AND
BARTILUCCI

DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>MW-010</u>		
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>2</u> of <u>3</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445</u>		Boring Location _____		
Rig Type _____				Location/Address <u>Sonia Rd.</u>		_____		
Drilling Method <u>HSA</u>				<u>W. Brentwood NY.</u>		_____		
Drive Hammer Weight <u>140 lbs.</u>				_____		_____		
GROUNDWATER OBSERVATIONS				Weather _____		Plot Plan		
Water Level _____				Date/Time Start _____				
Time _____				Date/Time Finish _____				
Date _____								
Casing Depth _____								
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
			20					
			0.0ppm	40	40'-50' Same as 30'-40' bls			<u>Cuttings</u>
				21				
				22				
				23				
				24				
			0.0ppm	50	50-60 Same as 30'-40' bls			<u>Cuttings</u>
				25				
				26				
				27				
				28				
				29	60-70 Same as 30'-40' bls			<u>Cuttings</u>
			0.0ppm	30				
				31				
				32				
				33				
65-67'	2		0.0ppm	32	65-67 split spore Sand (93%) F-C, tan, sub rounded to Sub angular. Gravel (5%) fine to medium. sub rounded to sub angular			2' Recovery 11-12-8-14
Rec.				33				
				34				
				35				
				36				
			0.0ppm	36	70-80 Same as 30'-40' bls			<u>Cuttings</u>
				37				
				38				
				39				
				40				
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary _____				



DYERKA
AND
BARTILUCCI

DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>3</u> of <u>3</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445</u>		Boring Location _____		
Rig Type _____				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>HSA</u>				<u>W. Brentwood, NY.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather _____		Plot Plan		
Water Level _____				Date/Time Start _____				
Time _____				Date/Time Finish _____				
Date _____								
Casing Depth _____								
Sample Depth	Sample Number	SPT	PIO/FIO Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				40-80				
				80'-90' Same as 30-40' bbs				Cuttings
			41					
			42					
			43					
			44					
			45	90'-100' Same as 30-40' bbs				Cuttings
			46					
			47	Split spoon.				
			48	(98-100') Clay - soft brown				Split spoon
			49	turning into a hard, dense grey				2' recovery
98-100			50	100				23-15-18-22
			51	END OF BORING AT 100' by				
			52					
			53					
			54					
			55	110				
			56					
			57					
			58					
			59					
			60					
SPT - STANDARD PENETRATION TEST				Soil Stratigraphy Summary				



DVIRKA
AND
BARTILUCCI

DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>MW-02 I</u>	
Driller <u>Delta</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>1</u> of <u>1</u>	
Inspector _____				PROJECT # <u>1445-3B</u>		Boring Location _____	
Rig Type _____				Location/Address <u>655 Sonia Rd.</u>		_____	
Drilling Method <u>HSA</u>				Location/Address <u>W. Brentwood, NY.</u>		_____	
Drive Hammer Weight <u>140 lbs.</u>				_____		_____	
GROUNDWATER OBSERVATIONS				Weather _____		Plot Plan _____	
Water Level _____				_____		_____	
Time _____				Date/Time Start <u>10/2/97</u>		_____	
Date _____				Date/Time Finish _____		_____	
Casing Depth _____				_____		_____	
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS	
				0 (0-33') <u>Cuttings</u> WASTE		Grout. Fine Sand Pack 57' — sand packs 58' 10' screen (60-70')	
				20 30 (33-70') <u>Cuttings</u> Sand and gravel			
				40			
				50			
				60			
				70			
				80			
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary _____			



DRULCON.PM4

**DELLCON.PM4**

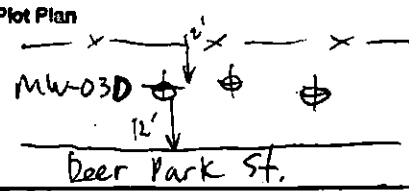


DYIRKA
AND
BARTILUCCI

DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER	
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>3</u> of <u>3</u>	
Inspector <u>D. Obradovich</u>				PROJECT # <u>RI</u>		Boring Location _____	
Rig Type <u>F-7 Failing</u>				Location/Address <u>Sonia Rd.</u>			
Drilling Method <u>3/4" HSA</u>				<u>W. Brentwood, NY.</u>			
Drive Hammer Weight <u>140 lbs.</u>							
GROUNDWATER OBSERVATIONS				Weather _____		Plot Plan	
Water Level _____				Date/Time Start _____			
Time _____				Date/Time Finish _____			
Date _____							
Casing Depth _____							
Sample Depth	Sample Number	SPT	FI/D/FID Reading	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS	
				40			
				41			
				42			
				43			
				44			
				45			
100'				46			
100-102.0	3	9	0.0	47			
REC=	1.1	11		48			
		19		49			
		13		50			
				51			
				52			
				53			
				54			
105'				55			
104-106.0	4	10	0.0	56			
REC=	1.3	15		57			
		22		58			
		11		59			
106-108.0	5	19	0.0	60			
REC=	1.6	21		61			
		22		62			
		34		63			
108-110.0	6	30	0.0	64			
REC=	1.6	25		65			
		20		66			
		18		67			
110'				68			
110-112.0	7	22	0.0	69			
REC=	1.7	18		70			
		14		71			
		23		72			
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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>De Ha / M. Pellegrino</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>1</u> of <u>6</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>RI</u>		Boring Location _____		
Rig Type <u>Failing F-7</u>				LOCATION/Address <u>Sonia Rd. Landfill</u>				
Drilling Method <u>3 1/4 HSA</u>				Location/Address <u>W. Brentwood, N.Y.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather <u>Sunny 70°</u>		Plot Plan		
Water Level				Date/Time Start <u>9/23/97</u>				
Time				Date/Time Finish <u>9/25/97</u>				
Date								
Casing Depth								
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				<u>Cuttings</u>				
				1 (0-5') Brown-Tan coarse sand and f-m gravel dry				Visual soil cuttings (0-20')
				2				
				3 (7') Gravel with light Tan c-m sand				
				4				
				5				
				6				
				7				
				8				
				9				
				10 (10') Ligh Tan gtz Sand little gravel				
				11				
				12				
				13				
				14				
				15 (15') coarse - very fine sand, little fine gravel, trace silt				
				16				
				17				
				18				
				19				
				20				
SPT - STANDARD PENETRATION TEST				Soil Stratigraphy Summary _____				

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DRILLING CONTRACTOR Driller <u>F&N/ ~~E. G. G. G.~~</u> Inspector <u>D. Obradovich</u> Rig Type <u>Failing F-7</u> Drilling Method <u>3 1/4" HSA</u> Drive Hammer Weight <u>140 lbs.</u>				DRILLING LOG PROJECT NAME <u>Sonia Rd. LF</u> <u>RI</u> PROJECT # <u>1445-3B</u> Location/Address <u>Sonia Rd.</u> <u>W. Brentwood, NY.</u>				BORING NUMBER <u>MW-03 D</u> Sheet <u>3</u> of <u>6</u> Boring Location _____			
GROUNDWATER OBSERVATIONS Water Level _____ Time _____ Date _____ Casing Depth _____				Weather <u>Sunny</u> Date/Time Start <u>9/23/97</u> Date/Time Finish <u>9/25/97</u>				Plot Plan _____			
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL				WELL SCHEMATIC		COMMENTS	
40-42'	5	6	0.0	40 Split Spoons (40-42') Grey-tan fine Sand qtz subrounded-little fine gravel, trace hornblende minerals, well sorted, wet							
Rec.		7									
		9									
		10									
45-47'	6	9	0.0	45 (45-47') Grey-tan medium to fine qtz rounded Sand, little coarse Sand, little-trace fine white gravel, trace silt, well sorted, wet.							
Rec.		10									
		11									
		12									
50-52'	7	8	0.0	50 (50-52') 0-8" Grey-tan v.f-m SAND, little silt, tr. c. sand, wet 51 8-10" Grey-tan f-m GRAVEL & v.f-c. SAND, tr. silt, wet 52 53 54							
Rec.	10"	7									
		8									
		8									
55-57'	8	10	0.0	55 (55-57') Grey-tan v.f-m SAND little silt, tr. c. sand & f. gravel, wet 56 57 58 59 60							
Rec.		11									
		9									
		10									
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary _____							



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DRILLING CONTRACTOR <u>De 12</u> Driller <u>FBN / G. [unclear]</u> Inspector <u>D. Obradovich</u> Rig Type <u>Failing F-7</u> Drilling Method <u>3/4" HSA</u> Drive Hammer Weight <u>140 lbs.</u>				DRILLING LOG PROJECT NAME <u>Sonia Rd. LF</u> <u>RI</u> PROJECT # <u>1445-38</u> Location/Address <u>Sonia Rd.</u> <u>W. Brentwood, NY.</u>				BORING NUMBER <u>MW-030</u> Sheet <u>4</u> of <u>6</u> Boring Location <u>—</u>													
GROUNDWATER OBSERVATIONS Water Level <table border="1" style="width:100%; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table> Time <table border="1" style="width:100%; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table> Date <table border="1" style="width:100%; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table> Casing Depth <table border="1" style="width:100%; height: 20px;"><tr><td> </td><td> </td><td> </td></tr></table>																Weather <u>P. Sunny cool</u> Date/Time Start <u>9/23/97</u> Date/Time Finish <u>9/23/97</u>				Plot Plan <u>—</u>	
Sample Depth	Sample Number	SPT	PROFID Reading	FIELD IDENTIFICATION OF MATERIAL				WELL SCHEMATIC	COMMENTS												
60-62'	9	11	0.0	Split spoons																	
Rec.	15"	12		61	(60-62') sand, little gravel																
		13		62	wet.																
		13		63																	
				64																	
65-67'	10	15	0.4	65	(65-67) Tan-Light Grey																
Rec.	15"	17		66	med - fine sand, some coarse																
		20		67	sand, little f-m subrounded																
		13		68	gravel, trace silt, well sorted																
				69	wet.																
				70	(70-72) Tan-Light Grey																
70-72'	11	15	0.0	71	medium - fine well rounded																
Rec.	20"	20		72	qtz sand, trace silt,																
		22		73	fine gravel, wet.																
		17		74																	
				75	(75-77) Tan-Light Brown																
75-77'	12	14	0.0	76	medium - fine qtz sand,																
Rec.	24"	16		77	well sorted, trace white																
		11		78	fine gravel, wet.																
		14		79																	
				80																	
				Soil Stratigraphy Summary																	

SPT = STANDARD PENETRATION TEST

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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>MW-03D</u>	
Driller <u>Delta/M. Pellegrino</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>6</u> of <u>6</u>	
Inspector <u>D. Obradovich</u>				PROJECT # <u>KE</u>		Boring Location <u> </u>	
Rig Type <u>Piling F-7</u>				Location/Address <u>Sonia Rd.</u>			
Drilling Method <u>3/4 HSA</u>				<u>W. Brentwood, N.Y.</u>			
Drive Hammer Weight <u>140 lbs.</u>							
GROUNDWATER OBSERVATIONS				Weather <u>Sunny/Cool</u>		Plot Plan <u> </u>	
Water Level				Date/Time Start <u>9/23/97</u>			
Time				Date/Time Finish <u>9/23/97</u>			
Date							
Casing Depth							
Sample Depth	Sample Number	SPT	(PR)/FD Reading	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC	COMMENTS	
				<u>100 Split spoons</u>			
<u>100-101</u>	<u>SS-17</u>	<u>25</u>	<u>0.0</u>	<u>101 (100-102') Tan - Light Brown</u>			
<u>rec</u>	<u>24</u>	<u>19</u>		<u>102 fine-medium Sand, little</u>			
		<u>23</u>		<u>silt, trace gravel, well</u>			
		<u>21</u>		<u>sorted, wet</u>			
				<u>103</u>			
				<u>104</u>			
				<u>105</u>			
<u>105-107</u>	<u>18</u>	<u>28</u>	<u>0.0</u>	<u>106 (105'-106.5') Brown Tan fine-</u>			
<u>rec</u>	<u>24</u>	<u>30</u>		<u>medium Sand, some silt,</u>			
		<u>18</u>		<u>107 Dense Brown - Light Green</u>			
		<u>30</u>		<u>clay at (106.5' - 107')</u>			
				<u>108</u>			
				<u>109</u>			
				<u>110</u>			
				<u>111 END OF Boring at 107'</u>			
				<u>112</u>			
				<u>113</u>			
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SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary <u> </u>			

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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>MW-04D</u>	
Driller <u>Delta/B. Devine</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>1</u> of <u>1</u>	
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445-3B</u>		Boring Location <u>30' west of</u>	
Rig Type <u>Failing F-7</u>				Location/Address <u>655 Sonia Rd.</u>		<u>east boundary fence near</u>	
Drilling Method <u>3 1/4" HSA</u>				<u>W. Brentwood, NY.</u>		<u>SE corner of site</u>	
Drive Hammer Weight <u>140 lbs.</u>							
GROUNDWATER OBSERVATIONS				Weather <u>M. Cloudy, windy, v. cool</u>		Plot Plan <u>SE corner of site</u>	
Water Level <u>21.8" bg measured</u>				Date/Time Start <u>10/1/97 8:30 am</u>			
Time <u>in augers @ 60' r/s</u>				Date/Time Finish <u>10/2/97</u>			
Date <u>10/1/97 1:00 pm</u>							
Casing Depth							
Sample Depth	Sample Number	SPT	FI/FR Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC	
				0 <u>Cuttings</u>			
			0.0	0-4" Topsoil			
				4"-2' DK. br. f-c SAND, some silt, little f-m gravel, moist			
				2-9' Orange-lt. br. v.f-c. SAND, little f-c gravel + silt, moist			
			0.0	9-21' Lt. br. - orange v.f-c. SAND, little f-m gravel + silt, tr. c. gravel, moist			
				<u>Cuttings down to 21' bg</u>			
				↓ <u>Split spoons</u>			
21-23'	1	11	0.8	(21-23') Lt. Grey m-c SAND some v.c-f sand, little f. gravel + silt, wet			
Rec.	21"	8					
		10					
		15					
25-27'	2	13	0.4	(25-27') Grey-blve f-m GRAVEL, little f-c sand + silt, wet			
Rec.	5"	11					
		15					
		19					
30-32'	3	8	1.0	30 (30-32') Lt. grey-fs. blve v.f-c SAND, some f gravel, little lt. br. silt + m-c gravel, wet			
Rec.	16"	9					
		11					
		14					
35-37'	4	20	0.2	(35-37') Grey-tan v.f-m. SAND, little c. gravel (rounded-angular), silt + c. sand, tr. fm gravel, wet			
Rec.	18"	23					
		27					
		19					
				40			
				Soil Stratigraphy Summary			
SPT = STANDARD PENETRATION TEST							



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>Delta/B. Devine</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>2</u> of <u>4</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445-3B</u>		Boring Location <u> </u>		
Rlg Type <u>Failing F-7</u>				Location/Address <u>655 Sonia Rd.</u>				
Drilling Method <u>HSA</u>				<u>W. Brentwood, NY.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather		Plot Plan		
Water Level								
Time				Date/Time Start				
Date				Date/Time Finish				
Casing Depth								
Sample Depth	Sample Number	SPT	PIV/FIO Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
40-42'	5	20	0.8	40 <u>Split spoons</u>				
Rec.	14"	21		(40-42') Grey-tan v.f.-c SAND, some f.-c gravel, little silt, tr. v.-c sand, cobble, wet				
		27						
		18						
45-47'	6	23	1.0	(45-47') Grey-tan v.f.-c SAND, some f. gravel, little silt, tr. m gravel, wet				
Rec.	12"	16						
		17						
		21						
50-52'	7	9	0.0	50 (50-52') Grey-tan f.-m SAND, little silt + f.-c gravel, wet				
Rec.	18"	11						
		12						
		10						
55-57'	8	9	0.5	(55-57') Grey-tan f.-m SAND, little silt + f.-c gravel, wet				
Rec.	10"	8						
		10						
		12						
60-62'	9	15	0.3	60 (60-62') Grey-tan f.-m SAND, little silt + c. sand + f. gravel, tr. m. gravel, wet				
Rec.	13"	17						
		14						
		12						
65-67'	10	15	0.0	(65-67') Grey-tan f.-m SAND, tr. silt + c. sand + f. gravel, wet				
Rec.	15"	20						
		18						
		17						
70-72'	11	15	0.0	70 (70-72') Grey-tan f.-m SAND, little silt, tr. c. sand + f. gravel, wet				
Rec.	20"	20						
		18						
		17						
75-77'	12	16	0.0	(75-77') Grey-tan v.f.-m SAND, little silt, tr. c. sand + f.-m gravel, wet				
Rec.	14"	12						
		15						
		19						
SPT - STANDARD PENETRATION TEST				80				
				Soil Stratigraphy Summary				



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>MW-04D</u>	
Driller <u>Delta/B. Devine</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>3</u> of <u>4</u>	
Inspector <u>D. Obrudovich</u>				PROJECT # <u>1445-3B</u>		Boring Location <u> </u>	
Rig Type <u>Failing F-7</u>				Location/Address <u>655 Sonia Rd.</u>			
Drilling Method <u>3 1/4" HSA</u>				<u>W. Brentwood, N.Y.</u>			
Drive Hammer Weight <u>140 lbs.</u>							
GROUNDWATER OBSERVATIONS				Weather <u> </u>		Plot Plan <u> </u>	
Water Level <u> </u>				<u> </u>			
Time <u> </u>				Date/Time Start <u> </u>			
Date <u> </u>				Date/Time Finish <u> </u>			
Casing Depth <u> </u>							
Sample Depth	Sample Number	SPT	PRO/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC	COMMENTS
				<u>80 Split Spoons</u>			
80-82'	13	14	0.0	(80-82') Grey-tan v.f.-m SAND, little silt, tr. c. sand, wet			
Rec.	12"	18					
		21					
		17					
85-87'	14	10	0.0	(85-87') Grey-tan v.f.-m SAND, little silt, tr. c. sand & f. gravel, wet			
Rec.	17"	11					
		15					
		18					
90-92'	15	15	0.0	90 (90-92') Grey-tan v.f.-m SAND, little silt, tr. c. sand, wet			
Rec.	20"	21					
		18					
		19					
95-97'	16	12	0.0	(95-97') Grey-tan v.f.-m SAND, wet			
Rec.	22"	10					
		14					
		10					
100-102'	17	15	0.0	100 (100-102') Grey-tan v.f.-m SAND, little silt, tr. c. sand & f. gravel, wet			
Rec.	13"	16					
		12					
		14					
105-107'	18	20	0.0	(105-107') Grey-slt green-tan v.f.-m SAND, little silt, tr. mica, wet			
Rec.	15"	32					
		40					
		36					
110-112'	19	35+40	0.0	110 (110-112') Green-grey v.f.-m SAND, little silt & f.-m gravel, tr. c. sand & clay, wet, sl. dense - hard packed, sl. odor (grease odor)?			
Rec.	13"	50+56					
112-114'	20	80+75	0.0	(112-114') 0-1" Br.-yellow green v.f.-m SAND & SILT, tr. mica, v. moist-wet			
Rec.	13"	91+86					
				1-6" DK. green-dk. grey SILT, tr. v.f. sand, mica & clay 6-8" DK. green-dk. brown SILT, little clay, tr. red peat fibers & mica 8-10' Br.-orange light peat fibers 10-13" DK. br.-dk red			
SPT - STANDARD PENETRATION TEST				Soil Stratigraphy Summary <u>SILT & Peat</u>			

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DRILLING CONTRACTOR		PROJECT NAME		BOILING NUMBER		WELL SCHEMATIC		FIELD IDENTIFICATION OF MATERIAL		COMMENTS	
Driller Delta/B. Devine	Inspector D. Obradovich	Rig Type Falling F-7	Drilling Method 3 1/2" HSA	Drive Hammer Weight 140 lbs.	PROJECT # 1445-30	Location/Address 655 Savia Rd. W. Brentwood NY.	Plot Plan (Site) 10'	MW-05D	Fire Hydrant	Beer Park St.	Northstein Ave.
Date 10/8/97		Time 8:45 am		Weather Sunny		Date/Time Start 10/8/97		Date/Time Finish 10/8/97		4:00 pm	
Boring Location 10' SW of		Section of Beer Park St. &		Northstein Ave.		MW-05D		Fire Hydrant		SI 55	
PROJECT NAME Savia Rd. LF - RI		PROJECT # 1445-30		Location/Address 655 Savia Rd. W. Brentwood NY.		Plot Plan (Site) 10'		MW-05D		Beer Park St.	
Drilling Method 3 1/2" HSA		Rig Type Falling F-7		Drive Hammer Weight 140 lbs.		PROJECT # 1445-30		Location/Address 655 Savia Rd. W. Brentwood NY.		Plot Plan (Site) 10'	
Inspector D. Obradovich		Date 10/8/97		Time 8:45 am		Weather Sunny		Date/Time Start 10/8/97		Date/Time Finish 10/8/97	
Boring Location 10' SW of		Section of Beer Park St. &		Northstein Ave.		MW-05D		Fire Hydrant		SI 55	
PROJECT NAME Savia Rd. LF - RI		PROJECT # 1445-30		Location/Address 655 Savia Rd. W. Brentwood NY.		Plot Plan (Site) 10'		MW-05D		Beer Park St.	

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DRILLING CONTRACTOR Driller <u>F. N. / E. Guercardo</u> Inspector <u>D. Obradovich</u> Rig Type <u>Failing F-7</u> Drilling Method <u>3 1/4" HSA</u> Drive Hammer Weight <u>140 lbs.</u>				DRILLING LOG PROJECT NAME <u>Sonia Rd. LF</u> <u>RI</u> PROJECT # <u>1445</u> Location/Address <u>Sonia Rd.</u> <u>W. Brentwood, NY.</u>				BORING NUMBER <u>MW-05D</u> Sheet <u>3</u> of <u>4</u> Boring Location _____			
GROUNDWATER OBSERVATIONS Water Level _____ Time _____ Date _____ Casing Depth _____				Weather _____ Date/Time Start _____ Date/Time Finish _____				Plot Plan _____			
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL				WELL SCHEMATIC		COMMENTS	
			0.5	40 41 <u>Cuttings</u> 42 85-100' Grey - sl. tan v.f - m 43 SAND, tr. c. sand, f-m gravel + 44 silt, wet 45 <u>Split spoons</u> 46 (100-102') Br. - sl. red v.f - 47 f SAND, little silt, tr. m sand 48 + f. gravel (f-m gravel + f sand 49 from 9-11'), wet 50 (102-104') Same as 100-102' 51 (104-106') Br. - dk. grey v.f - f SAND 52 some silt, little m. sand, tr. f. 53 gravel + mica, wet (dk. br. - blk. 54 SILT lens @ 11") 55 (106-108') 0-8" Br. - grey - sl. orange 56 v.f - m SAND, tr. silt + f. gravel. 8-11" 57 Br. - red SILT + v.f. sand, little f. 58 gravel, tr. little clay 59 (108-110') 0-11" Br. - orange v.f - 60 c SAND, little f-m rounded gravel + silt 11-14" dk. grey-br. silt + f. sand, tr. f. gravel (iron stained red- br. silt @ 13") 14-16" Grey silt, little v.f sand + clay, tr. red silt v. fine seams (few) 16-21" Br. - bright red grey v.f sand, silt, wet (110-112') 0-9" Grey-br. v.f - c SAND, little f-m subrounded gravel, tr. silt 9-13" Grey - sl. orange v.f - m SAND, little f. gravel, tr. silt + clay (silt, sand, tr. clay clumps)							
100-102'	3	10+16	0.8								
Rec.	13"	14+11									
102-104'	4	20+15	1.4								
Rec.	8"	13+12									
104-106'	5	30+24	1.1								
Rec.	14"	18+21									
106-108'	6	40+32	0.7								
Rec.	11"	42+27									
108-110'	7	53+48	1.0								
Rec.	21"	37+35									
110-112'	8	68+70	0.6								
Rec.	13"	72+74									
				Soil Stratigraphy Summary							

SPT = STANDARD PENETRATION TEST



DYRKA
AND
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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>F.N. C. Guzzarda</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>4</u> of <u>4</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445-3B</u>		Boring Location <u>-</u>		
Rig Type <u>Failing F-7</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>3/4" HSA</u>				<u>W. Brentwood, NY</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather		Plot Plan		
Water Level								
Time				Date/Time Start				
Date				Date/Time Finish				
Casing Depth								
Sample Depth	Sample Number	SPT	FID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
112-114	9	23+28	1.0	60 Split spoons				
Rec.	8"	31+27		61 (112-114') 0-3" Orange-tan-white v.f.-f sand, some silt, tr. subrounded m. gravel 3-5" Br.				
114-116	10	34+41	0.6	62 grey-red silt & v.f.-f sand, little clay 5-8" Br-grey-red v.f.-f				
Rec.	8"	47+51		63 sand, little silt, tr. clay, wet				
116-118	11	27+31	0.0	64 (114-116') 0-3" Br.-red v.f.-f sand, little silt 3-8" Grey v.f.-s sand,				
Rec.	21"	24+25		65 little silt, wet				
				66 (116-118') Charcoal grey (lt.)-sl. dk. green sl. dense, moderately plastic clay w/ few inclusions of red-br. wood pieces (f. gravel size)				* Gardiners Clay @ 116' 6g
				67				
				68				
				69 END OF BORING AT 116' 6g				
				70				
				71				
				72				
				73				
				74				
				75				
				76				
				77				
				78				
				79				
				80				
SPT - STANDARD PENETRATION TEST				Soil Stratigraphy Summary				



NRRLCON.PM4

QFILLCON.PM4



DYRKA
AND
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DRILLING CONTRACTOR Driller <u>Delta / B. Deune</u> Inspector <u>D. Obradovich</u> Rig Type <u>Failing F-7</u> Drilling Method <u>3/4" HSA</u> Drive Hammer Weight <u>140 lbs.</u>				DRILLING LOG PROJECT NAME <u>Sonia Rd. LF</u> <u>RI</u> PROJECT # <u>1445-3B</u> Location/Address <u>Sonia Rd.</u> <u>W. Brentwood NY.</u>				BORING NUMBER <u>MW-06D</u> Sheet <u>2</u> of <u>6</u> Boring Location <u>-</u>																			
GROUNDWATER OBSERVATIONS Water Level <table border="1" style="width:100%; height: 20px;"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> Time <table border="1" style="width:100%; height: 20px;"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> Date <table border="1" style="width:100%; height: 20px;"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> Casing Depth <table border="1" style="width:100%; height: 20px;"><tr><td> </td><td> </td><td> </td><td> </td></tr></table>																				Weather <u>M. Sunny</u> Date/Time Start <u>9/26/97 10⁰⁰ am</u> Date/Time Finish <u> </u>				Plot Plan <u>-</u>			
Sample Depth	Sample Number	SPT	P.D./F.D. Reading	FIELD IDENTIFICATION OF MATERIAL				WELL SCHEMATIC		COMMENTS																	
				20 21 <u>Split spoons</u> 22 (22-24') 0-8" Br. -tan v.f-c SAND, little silt & f-c gravel, wet 23 8-10" Br. -tan -grey f-c GRAVEL and f-c sand, little silt, wet 24 25 (25-27') Grey - dk. grey v.f-c SAND, little f-c gravel, some blk. staining, little silt, wet (v. sl. Landfill/sludge odor) 26 27 28 29 30 (30-32') Grey v.f-c SAND, little f-c gravel & silt, wet 31 32 33 34 35 (35-37') Br. -grey v.f-c. SAND, some f-m gravel, fr. silt & c. gravel, wet 36 37 38 39 40				<table border="1" style="width:100%; height: 100%;"><tr><td> </td><td> </td><td> </td></tr></table>																			
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary <u> </u>																							



DVIRKA
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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER	
Driller <u>Delta B. Devine</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>3</u> of <u>6</u>	
Inspector <u>D. Obradovich</u>				PROJECT # <u>RI</u>		Boring Location <u>---</u>	
Rig Type <u>Failing F-7</u>				Location/Address <u>Sonia Rd.</u>			
Drilling Method <u>3/4" HSA</u>				<u>W. Brentwood, NY.</u>			
Drive Hammer Weight <u>140 lbs.</u>							
GROUNDWATER OBSERVATIONS				Weather <u>M. Sunny</u>		Plot Plan	
Water Level				Date/Time Start <u>9/26/97 10⁰⁰ am.</u>			
Time				Date/Time Finish			
Date							
Casing Depth							
Sample Depth	Sample Number	SPT	PRO/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC	
				40 <u>Split Spoons</u>			
40-42'	5	5	0.0	41 (40-42') Br-grey v.f.-c SAND,			
Rec.	7"	11		little f-m gravel & silt, wet			
		12		42			
		12		43			
				44			
45-47'	6	18	0.0	45 (45-47') Br-grey v.f.-c SAND,			
Rec.	8"	17		little f-m gravel & silt, wet			
		15		46			
		16		47			
				48			
				49			
50-52'	7	15	0.0	50 (50-52') Grey-br. v.f.-c SAND,			
Rec.	9"	20		tr. silt + v.c. sand			
		16		51			
		18		52			
				53			
				54			
55-57'	8	18	0.0	55 (55-57') Grey-lt. br. m.-c. SAND,			
Rec.	13"	12		little silt + v.c. sand, wet			
		10		56			
		13		57			
				58			
				59			
				60			
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary			



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AND
BARTLUCCI

DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER	
Driller <u>Delta B. Denne</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>4</u> of <u>6</u>	
Inspector <u>D. Obradovich</u>				PROJECT # <u>RI</u>		Boring Location <u>W. Brentwood, NY</u>	
Rig Type <u>Fulling F-7</u>				Location/Address <u>Sonia Rd.</u>			
Drilling Method <u>3/4" HSA</u>							
Drive Hammer Weight <u>140 lbs.</u>							
GROUNDWATER OBSERVATIONS				Weather <u>Sunny</u>		Plot Plan	
Water Level				Date/Time Start <u>9/26/97 10:00 am</u> <td colspan="2"></td>			
Time				Date/Time Finish			
Date							
Casing Depth							
Sample Depth	Sample Number	SPT	PRO/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC	
60-62'	9	20	0.0	Split spoons			
Rec.	17"	16		61 (60-62') Grey-tan v.f.-m SAND, tr. c. sand, silt + f. gravel, wet			
		18		62			
		21		63			
				64			
65-67'	10	18	0.0	65 (65-67') Grey-tan v.f.-m SAND, tr. c. sand + silt, wet			
Rec.	12"	24		66			
		19		67			
		18		68			
				69			
70-72'	11	20	0.0	70 (70-72') Tan-grey v.f.-m SAND, little f.-m gravel, silt + c. sand, tr. c. gravel, wet			
Rec.	12"	23		71			
		22		72			
		21		73			
				74			
75-77'	12	12	0.0	75 (75-77') Tan-grey v.f.-m SAND, little silt + c. sand, tr. f. gravel, wet			
Rec.	8"	15		76			
		17		77			
		15		78			
				79			
				80			
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary			



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>Delta / B. Devine</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>5</u> of <u>6</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>RI</u>		Boring Location <u>—</u>		
Rig Type <u>Failing F-7</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>3/4" HSA</u>				<u>W. Brentwood, N.Y.</u>				
Drive Hammer Weight <u>140 lbs</u>								
GROUNDWATER OBSERVATIONS				Weather		Plot Plan		
Water Level								
Time				Date/Time Start				
Date				Date/Time Finish				
Casing Depth								
Sample Depth	Sample Number	SPT	PTD/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
80-82	13'	15	0.0	80 Split spoons				
Rec.	20	17		81 (80-82') Tan-grey v.f.-m SAND, little silt, tr. c. sand & f-m gravel, wet				
		21		82				
		22		83				
				84				
85-87	14	14	0.0	85 (85-87') Tan-grey v.f.-m SAND, little silt, tr. c. sand & f-m gravel, wet				
Rec.	24"	21		86				
		18		87				
		17		88				
				89				
90-92	15	15	0.0	90 (90-92') Tan-grey v.f.-m SAND, little f-m gravel, tr. c. sand & silt, wet (Br. silt and little clay on top from 0-3" mixed w/ f-m sand)				
Rec.	17"	16		91				
		16		92				
		12		93				
				94				
95-97	16	10	0.0	95 (95-97') Tan-grey v.f.-m SAND, little silt, tr. c. sand & f-m gravel, wet				
Rec.	12"	11		96				
		14		97				
		9		98				
				99				
				100				
SPT - STANDARD PENETRATION TEST				Soil Stratigraphy Summary				



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>Delta/B. Devine</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>6</u> of <u>6</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>KI</u>		Boring Location <u>—</u>		
Rig Type <u>Failing F-7</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>3/4" HSA</u>				<u>W. Brentwood, NY.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather		Plot Plan		
Water Level								
Time				Date/Time Start				
Date				Date/Time Finish				
Casing Depth								
Sample Depth	Sample Number	SPT	FI/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
100-102"	17	19	0.0	100 Split spoons				
Rec.	22"	21		101 (100-102') Grey-br. v.f.-m				
		23		SAND, little silt, tr. c. sand				
		16		102 + f- gravel, wet				
				103				
				104				
105-107"	18	30	0.0	105 (105-107') Layered Grey-lt.				
Rec.	11"	35		106 br. v.f.-m SAND and Grey-br.				
		40		SILT and v.f.-f sand, tr. rounded				
		52		107 + subrounded m. gravel, wet				
				108				
				109				
110-111"	19	50	0.0	110 (110-112') Green-grey-red-				
Rec.	6"	47		111 CLAY, tr. iron-stained silty-clay				
				112 + rounded m. gravel, moderate				
				plasticity, v. moist-wet				
				113				
				114				
				115				
				116				
				117				
				118				
				119				
				120				
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary				

* Gardiners
Clay @
110' bg

END OF BORING AT 110'bg

**DRILLCON.PM4**

**DRILL CON PM4**

**DRILL CON. PM4**



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>F. N. C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>2</u> of <u>7</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445-3B</u>		Boring Location <u>-</u>		
Rig Type <u>Failing F-7</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>3/4" HSA</u>				<u>W. Brentwood NY.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather		Plot Plan		
Water Level								
Time				Date/Time Start				
Date				Date/Time Finish				
Casing Depth								
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				20				
				21				
				22				
				23				
				24				
				25				
25-27'	1	14	0.0	(25-27') Orange-lt. br. f-c				
Rec.	16"	20		SAND, little f-m gravel, tr.				
		22		silt, wet				
		18		27				
				28				
				29				
				30				
				31				
				32				
				33				
				34				
				35				
				36				
				37				
				38				
				39				
				40				
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary				



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>F&N / C. Gozzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>3</u> of <u>7</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>RI</u>		Boring Location _____		
Rig Type <u>Failing F-7</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>3/4" HSA</u>				<u>W. Brentwood, NY.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather _____		Plot Plan		
Water Level _____				Date/Time Start _____				
Time _____				Date/Time Finish _____				
Date _____								
Casing Depth _____								
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				40				
			0.0	41				
				42				
				43				
				44				
				45				
			0.0	46				
				47				
				48				
				49				
				50				
			0.0	51				
				52				
				53				
				54				
				55				
				56				
				57				
				58				
				59				
				60				
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary _____				



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>EN/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>4</u> of <u>7</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>RI</u>		Boring Location <u>—</u>		
Rig Type <u>Failing F-7-</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>3 1/4" HSA</u>				<u>W. Brentwood, NY.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather <u>—</u>		Plot Plan		
Water Level				Date/Time Start <u>—</u>				
Time				Date/Time Finish <u>—</u>				
Date								
Casing Depth								
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				<u>60 Cuttings</u>				
				60-71' Tan-grey f-c SAND, little f-m gravel, tr. c. gravel + silt, wet				
				61				
				62				
				63				
				<u>Split spoon</u>				
64-66'	2	22	D.O	64 (64-66') Tan-grey-slt. orange f-c SAND, little f-m gravel, tr. c. gravel, wet				
Rec.		26		65				
		18		66				
		15		67				
				68				
				69				
				70				
				<u>Cuttings</u>				
				71 71-96' Tan-grey-slt. orange f-c SAND, tr. silt + f-gravel, wet				
				72				
				73				
				74				
				75				
				76				
				77				
				78				
				79				
				<u>80</u>				
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary				



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>ENR / C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>5</u> of <u>7</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>RI</u>		Boring Location <u>—</u>		
Rig Type <u>Failing F-7</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>3/4" HSA</u>				<u>W. Brentwood, N.Y.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather		Plot Plan		
Water Level								
Time				Date/Time Start				
Date				Date/Time Finish				
Casing Depth								
Sample Depth	Sample Number	SPT	PRO/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
			0.0	80				
				81				
				82				
				83				
				84				
				85				
				86				
				87				
				88				
				89				
				90				
			0.0	91				
				92				
				93				
				94				
				95				
				96				
				97				
				98				
				99				
			0.0	100				
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary				

Cuttings
96-100' Tan-grey-sil. orange
f-m SAND, tr. silt + c. sand,
wet



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>MW-07D</u>		
Driller <u>Delta/B. Devine</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>6</u> of <u>6</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445-3B</u>		Boring Location <u> </u>		
Rig Type <u>Failing R-7</u>				Location/Address <u>655 Sonia Rd.</u>				
Drilling Method <u>3 1/4" HSA</u>				<u>W. Brentwood, NY.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather <u> </u>		Plot Plan <u> </u>		
Water Level <u> </u>				<u> </u>				
Time <u> </u>				Date/Time Start <u> </u>				
Date <u> </u>				Date/Time Finish <u> </u>				
Casing Depth <u> </u>								
Sample Depth	Sample Number	SPT	PRO/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				<u>100 Split spoons</u>				
100-102	3	15+18	0.0	(100-102') Red-br.-grey v.f.-m SAND, fr. c. sand, silt + mica, wet				
Rec.	19"	21+19						
102-104	4	18+19	0.0	(102-104') Lt. br.-grey-sl. red v.f.-m SAND, fr. c. sand, silt + mica wet				
Rec.	12"	24+17						
104-106	5	34+21	0.0	(104-106') same as 102-104'				
Rec.	22"	22+27						
106-108	6	45+42	0.0	(106-108') <u>0-10"</u> Grey-tan v.f. SAND, little silt, fr. m sand, mica + f. subangular gravel, wet				
Rec.	16"	36+38						
108-110	7	76+55	0.0	(108-110') <u>0-3"</u> Grey-br. v.f. SAND, some silt, fr. mica, wet				
Rec.	10"	40+65						
110-112	8	80+96	0.0	(110-112') <u>3-4"</u> white-tan v.f.-m SAND, little silt, fr. clay				
Rec.	18"	76+73						
112-114	9	90+87	0.0	(112-114') <u>4-6"</u> Grey SILT, some v.f. sand, little clay				
Rec.	14"	56+64						
114-116	10	75+60	0.0	(114-116') <u>6-10"</u> Red-br. SILT, little clay, v.f. sand, fr. mica, wet				
Rec.	9"	61+58						
116-118	11	80+75	0.0	(116-118') <u>0-8"</u> Bright orange-br.-red v.f.-c SAND, little silt + f. gravel- <u>rounded</u> (iron-staining)				
Rec.	13"	65+64						
				(118-120') <u>8-12"</u> Grey-br. SILT, some f. sand, fr. clay + iron-stained SILT (red-microash), fr. mica				
				<u>120</u> blue-white SILT + f. sand, fr. clay				
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary <u> </u>				

DRILLING LOG PROJECT NAME <u>Sonia Rd. LF</u> PROJECT # <u>1445-3B</u> Location/Address <u>655 Sonia Rd.</u> <u>W. Brentwood, NY.</u>		GROUNDWATER OBSERVATIONS Driller <u>Delta/B. Devine</u> Inspector <u>D. Oradoud</u> Rig Type <u>Falling F-7</u> Drilling Method <u>3 1/2" HSA</u> Drive-Hammer Weight <u>140 lbs.</u>		Date _____ Time _____ Water Level _____ Casing Depth _____																															
BORING NUMBER <u>MW-07D</u> Sheet <u>7</u> of <u>2</u> Boring Location _____		Weather _____ Date/Time Start _____ Date/Time Finish _____		Plot Plan _____																															
COMMENTS		FIELD IDENTIFICATION OF MATERIAL Split Spoons		WELL SCHEMATIC																															
(10-118') Contaminated - B+m of Spun-in basket Br-grey silt + clay - mixed fibers if put * 0-8" from top sand contains fr rounded gravel (18-120') 0-4" grey-blue v.f sand & silt, tr. mica 4-8" layered blue-grey silt & bic. silt lenses (v. fine) Red-orange iron-stained silt @ 4" 8-12" grey-blue silt + v.f sand. Yellow-brown silt from 10-11" tr. mica (120-122') 0-1" red nonchond silt + clay 1-4" blue-grey-line clay high oxid. 4-6" br-grey-blue f sand & silt 6-8" grey-white silt + clay, 1-6" f acid 8-13" blue grey-line clay. 13-15" lt. grey silt, some f sand, tr. mica, wet (122-124') 0-2' lt. grey silt & clay some f sand, tr. mica, wet 7-12" red br nonchond silt, little clay + f sand, wet (124-126') 0-5" red-br. silt + f sand, tr. mica 5-13" grey-white silt + f sand, tr. mica, wet (126-128') grey silt & f sand, wet Red-br. silt ~ 3 mm thick @ 10+12" (128-130') 0-4" blk. silt + f sand 4-9" tan-white f sand, some silt, tr. clay. Red silt @ 5" 9-13" blk. + grey silt + f sand, tr. mica, wet END OF BORING AT 130' bg <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">SPT - STANDARD PENETRATION TEST</th> </tr> <tr> <th>Depth</th> <th>SPT</th> </tr> </thead> <tbody> <tr><td>12-123</td><td>101+98</td></tr> <tr><td>12</td><td>101+98</td></tr> <tr><td>11</td><td>65+82</td></tr> <tr><td>10</td><td>54+90</td></tr> <tr><td>9</td><td>86+75</td></tr> <tr><td>8</td><td>45+65</td></tr> <tr><td>7</td><td>55+70</td></tr> <tr><td>6</td><td>18+15</td></tr> <tr><td>5</td><td>14+15</td></tr> <tr><td>4</td><td>48+57</td></tr> <tr><td>3</td><td>60+75</td></tr> <tr><td>2</td><td>35+44</td></tr> <tr><td>1</td><td>37+36</td></tr> </tbody> </table>						SPT - STANDARD PENETRATION TEST		Depth	SPT	12-123	101+98	12	101+98	11	65+82	10	54+90	9	86+75	8	45+65	7	55+70	6	18+15	5	14+15	4	48+57	3	60+75	2	35+44	1	37+36
SPT - STANDARD PENETRATION TEST																																			
Depth	SPT																																		
12-123	101+98																																		
12	101+98																																		
11	65+82																																		
10	54+90																																		
9	86+75																																		
8	45+65																																		
7	55+70																																		
6	18+15																																		
5	14+15																																		
4	48+57																																		
3	60+75																																		
2	35+44																																		
1	37+36																																		

No significant
 Carder's Clay
 unit encountered

NRRLCON.PM4

**DRILLCON.PM4**



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DRILLING CONTRACTOR Driller <u>F&N/C. Guzzardo</u> Inspector <u>D. Obradovich</u> Rig Type <u>F-7</u> Drilling Method <u>4 1/4" HSA</u> Drive Hammer Weight <u>140 lbs</u>				DRILLING LOG PROJECT NAME <u>Sonia Rd. LF</u> <u>RI</u> PROJECT # <u>1445</u> Location/Address <u>Sonia Rd. Landfill</u> <u>W. Brentwood, N.Y.</u>				BORING NUMBER <u>MW-110</u> Sheet <u>1</u> of <u>5</u> Boring Location _____			
GROUNDWATER OBSERVATIONS Water Level _____ Time _____ Date _____ Casing Depth _____				Weather <u>Partly Cloudy 65-70'</u> Date/Time Start <u>10/14/97</u> Date/Time Finish <u>10/14/97</u>				Plot Plan 			
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL				WELL SCHEMATIC		COMMENTS	
				<u>Cuttings</u>							
			0.00pm	0	Silty Sand, brown to tan, fine						Cuttings
				1							
				2							
			0.00pm	3	Sand, f-c, tan, subrounded to subangular, w/ gravel						Cuttings
				4							
			0.00pm	5	Sand, f-c, tan, subrounded to subangular, w/ gravel						Cuttings
				6							
				7							
				8							
				9							
10-12	1		6.00pm	10	(10-12') Split spoon Gravel (75%) F-C, sub rounded to well rounded; SiH (20%) brown; Cobble (5%)						Recovery = 1' Blow count 8-9-11-8
				11	Coarse, sub roundy - sub angular, wet						
				12							
				13							
				14	<u>Split spoon</u>						
15-17	2		0.00pm	15	(15-17') Sand (50%) fine - coarse tan to light brown, sub angular to sub rounded; Gravel (25%) f-c Sub angular to sub rounded; Pebble (25%) Sub angular to well rounded. Wet						Recovery 6" Blow count 9-11-9-10
				16							
				17							
				18							
				19							
				20							
				26							
				Soil Stratigraphy Summary							
SPT = STANDARD PENETRATION TEST											

DRILLING CONTRACTOR Driller <u>F&N/C. Guzzardo</u> Inspector <u>D. Obradovich</u> Rig Type <u>Fulling F-7-</u> Drilling Method <u>HSA</u> Drive Hammer Weight <u>140 lbs.</u>				DRILLING LOG PROJECT NAME <u>Sonia Rd. LF</u> <u>RI</u> PROJECT # <u>1445</u> Location/Address <u>Sonia Rd.</u> <u>W. Brentwood, N.Y.</u>				BORING NUMBER <u>M52-11 D</u> Sheet <u>2</u> of <u>5</u> Boring Location _____ _____ _____					
GROUNDWATER OBSERVATIONS Water Level _____ Time _____ Date _____ Casing Depth _____				Weather _____ Date/Time Start _____ Date/Time Finish _____				Plot Plan _____ _____ _____					
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL				WELL SCHEMATIC			COMMENTS		
20-22	3	—	0.0 fpm	20 Split spoons (20-22') Sand (85%) f-c trace light brown; Gravel (10%) f-c, sub angular to sub rounded; Pebble (5%) sub angular to well rounded. wet							Recovery 6' Blow Counts 5, 8, 11, 17 Recovery 6' Blow Counts 14, 5, 7, 12 Recovery 2' 11, 15, 8, 14 Recovery 1.5' 15, 8, 6, 9		
25-27	4	—	0.0 fpm	(25-27') Same as 20-22									
		—											
		—											
		—											
		—											
30-32	5	—	0.0 fpm	(30-32') Same as 20-22									
		—											
		—											
		—											
		—											
35-37	6	—	0.0 fpm	(35-37') Same as 20-22									
		—											
		—											
		—											
		—											
40				Soil Stratigraphy Summary									



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>3</u> of <u>5</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445</u>		Boring Location _____		
Rig Type _____				Location/Address <u>Sonia Rd.</u>		_____		
Drilling Method <u>HSA</u>				_____		_____		
Drive Hammer Weight <u>140 lbs.</u>				<u>W. Brentwood, NY.</u>		_____		
GROUNDWATER OBSERVATIONS				Weather _____		Plot Plan _____		
Water Level _____				Date/Time Start _____		_____		
Time _____				Date/Time Finish _____		_____		
Date _____				_____		_____		
Casing Depth _____				_____		_____		
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
40-42	7		0.0ppm	40	Split spoons			
				41	(40-42') Same as 20-42'			Recovery 1'
				42				7,5,5,6
				43				
				44				
				45	(45-47') Sand (100%) f-c,			Recovery 2'
45-47	8		0.0ppm	46	light brown to tan, subangular to subrounded			10,7,6,6
				47	Trace of gravel.			
				48				
				49				
50-52	9		0.0ppm	50	(50-52') Same as 45-47			Recovery 2'
				51				18,14,10,19
				52				
				53				
				54				
55-57	10		0.0ppm	55	(55-57') Same as 45-47			Recovery 1.5'
				56				10,8,7,7
				57				
				58				
				59				
				60				
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary _____				



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER	
Driller <u>F&N/C. Guzzardo</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>4</u> of <u>5</u>	
Inspector <u>D. Obradovich</u>				PROJECT # <u>1445</u>		Boring Location _____	
Rig Type _____				Location/Address <u>Sonia Rd.</u>		_____	
Drilling Method <u>HSA</u>				_____		_____	
Drive Hammer Weight <u>140 lbs.</u>				_____		_____	
GROUNDWATER OBSERVATIONS				Weather _____		Plot Plan _____	
Water Level _____				Date/Time Start _____		_____	
Time _____				Date/Time Finish _____		_____	
Date _____				_____		_____	
Casing Depth _____				_____		_____	
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL	WELL SCHEMATIC		COMMENTS
60-62	11	-	0.0ppm	<u>Split spoons</u> (60-62') Sand (95%) f-c, lt brown to tan, subangular to sub round; Gravel (5%) f-c, sub rounded to sub angular.			Recovery 2' 17, 12, 10, 15
65-67	12	-	0.0ppm	(65-67') Same as 60-62			Recovery 1.5' 10, 9, 15, 11
70-72	13	-	0.0ppm	(70-72') Same as 60-62			Recovery 2' 14, 11, 8, 12
75-77	14	-	0.0ppm	(75-77') Same as 60-62			Recovery 2' 17, 14, 10, 15
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary _____			



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DRILLING CONTRACTOR Driller <u>F&N / C. Guzzardo</u> Inspector <u>D. Obradovich</u> Rig Type _____ Drilling Method <u>HSA</u> Drive Hammer Weight <u>140 lbs</u>				DRILLING LOG PROJECT NAME <u>Sonia Rd. LF</u> <u>RI</u> PROJECT # <u>1445</u> Location/Address <u>Sonia Rd.</u> <u>W. Brentwood, N.Y.</u>				BORING NUMBER <u>MW-11D</u> Sheet <u>5</u> of <u>5</u> Boring Location _____	
GROUNDWATER OBSERVATIONS Water Level _____ Time _____ Date _____ Casing Depth _____				Weather _____ Date/Time Start _____ Date/Time Finish _____				Plot Plan _____	
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL			WELL SCHEMATIC	COMMENTS	
80-82	15	—	0.0ppm	80 Split spoons (80-82') Same as 60-62'				Bottom of spoon was wiped out	
		—		81				9-11-8-14	
		—		82				Recovery 2'	
		—		83					
		—		84					
85-87	16	—	0.6ppm	85 (85-87') Sand (100%) Fm My tan - lt. brown, Trace of gravel wet				Recovery 2'	
		—		86				10, 9, 14, 12	
		—		87					
		—		88					
		—		89					
90-92	17	—	0.0ppm	90 (90-92') Same as 85-87				13, 14, 15, 16	
		—		91				Recovery 2'	
		—		92					
		—		93					
		—		94					
94-96	18	—	0.0ppm	95 (94-96') Silty Clay (40%) dark gray-green Clay (60%) dark grey				Silty clay gradual into dark gray clay.	
		—		96					
		—		97					
		—		98				END OF BORING AT 96'	
		—		99					
		—		100					
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary _____					

DELLCON.PM4

**DELLCON.PM4**



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DRILLING CONTRACTOR <u>Delta</u> Driller <u>F.N. / C. Lubrano</u> Inspector <u>D. Obradovich</u> Rig Type <u>Fauling F-10 truck</u> Drilling Method <u>3/4" HSA</u> Drive Hammer Weight <u>140 lbs.</u>				DRILLING LOG PROJECT NAME <u>Sonia Rd. LF</u> <u>RI</u> PROJECT # <u>1445</u> Location/Address <u>Sonia Rd. Landfill</u> <u>W. Brentwood, N.Y.</u>		BORING NUMBER <u>MW-13D</u> Sheet <u>1</u> of <u>3</u> Boring Location <u>10' NW of mw-13I and</u> <u>W of mw-13S</u>		
GROUNDWATER OBSERVATIONS Water Level Time Date Casing Depth				Weather <u>10/13/97, Sunny 60°F am</u> <u>M. Cloudy 70°F pm</u> Date/Time Start <u>10-13-97/08:50</u> Date/Time Finish <u>10-13-97/15:00</u>		Plot Plan N ↑ Brentwood St. 13D 13I 13S 13A 13B 13C 13D 13E 13F 13G 13H 13I 13J 13K 13L 13M 13N 13O 13P 13Q 13R 13S 13T 13U 13V 13W 13X 13Y 13Z		
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				<u>Cuttings</u>				
				0-28', cuttings, Moist, br m-f sand, little c sand, trace m-f o to subo gravel.				Angers at 0', PID = 0.0 ppm in b. zone
								Angers at 7', PID = 0.0 ppm in b. zone + in angers
								Angers at 17', PID = 0.0 ppm in b. zone
				pre S-1, 2" sand inside angers.				
				<u>28-30' Split spoon</u>				
28-30.0'	S-1	3-5	0.0	S-1, Wet, light brown c-t sand, trace m-f o to subo gravel, No visible layering, but more coarse in tip of spoon				Angers at 28', PID = 0.0 ppm in b. zone + in angers
REC =	0.6'	7-6						▼ <u>27.5'</u>
								Angers at 37', PID = 0.0 ppm in b. zone
				30-65' cuttings, Moist, br m-f sand, trace c sand, trace m-f o to subo gravel, trace (-) silt.				Angers at 47', PID = 0.0 ppm in b. zone
								Angers at 57', PID = 0.0 ppm in b. zone + in angers
				pre S-2, 6" sand inside angers				
				<u>(65-67') Split spoon</u>				
65-67.0'	S-2	4-7	0.0	S-2, Wet, brown m-f sand, trace c sand, trace m-f o to subo gravel, No visible layering				Angers at 65', PID = 0.0 ppm in b. zone
REC =	0.5'	9-11						Angers at 77', PID = 0.0 ppm in b. zone and in angers.
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary				

**DRILL CON.PM4**

DELLCON.PM4

DRILLING CONTRACTOR		PROJECT NAME		BORING NUMBER		DRILLING LOG	
Order Delta/B. Devine	Inspector D. O. Bradovich	Project # 1445-3B	Location/Address 655 Sonia Rd. W. Brentwood, NY.	Sheet 1 of 6	Boring Location 3' south of Brentwood Rd. in front of House # 214 368' from Joseison Ave.	PROJECT # 1445-3B	Location/Address 655 Sonia Rd. W. Brentwood, NY.
Drilling Method 3 1/4" HSA	Rig Type Falling F-7						
Drive Hammer Weight 140 lbs.							
GROUNDWATER OBSERVATIONS		Weather		Plot Plan		FIELD IDENTIFICATION OF MATERIAL	
Water Level	Time	Date/Time Start 10/15/97	Date/Time Finish	House # 214	Brentwood St. 142	W. Joseison Ave. 368'	W. Joseison Ave. 368'
Casing Depth		Overcast, cool ~50°		Plot Plan		FIELD IDENTIFICATION OF MATERIAL	
Sample Depth	Sample Number	SPT	Reading	WELL SCHEMATIC		COMMENTS	
1			0.0	0-2" Topsoil, grass, blue-stem		0-2" Topsoil, grass, blue-stem	
2				2"-1' DK. br. f-c GRAVEL, some f-c sand + organic silt, v. moist		2"-1' DK. br. f-c GRAVEL, some f-c sand + organic silt, v. moist	
3				1-3' Br. orange f-c SAND, little f-c gravel, tr. silt + cobbles, v. moist		1-3' Br. orange f-c SAND, little f-c gravel, tr. silt + cobbles, v. moist	
4				3-5' Orange-br. f-c SAND, little f-c gravel, tr. silt, v. moist		3-5' Orange-br. f-c SAND, little f-c gravel, tr. silt, v. moist	
5			0.0	5-6' Br. f-c GRAVEL, little f-c sand, tr. silt, moist		5-6' Br. f-c GRAVEL, little f-c sand, tr. silt, moist	
6				6-12' Bright orange-red f-c SAND, little f-m gravel, tr. silt, dry		6-12' Bright orange-red f-c SAND, little f-m gravel, tr. silt, dry	
7							
8							
9							
10			0.0				
11							
12							
13							
14							
15			0.0				
16							
17							
18							
19							
20							



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER <u>MW-04D</u>		
Driller <u>F. P. G. 2320</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>2</u> of <u>6</u>		
Inspector <u>D. Obradorich</u>				PROJECT # <u>1445</u>		Boring Location <u>—</u>		
Rig Type <u>Failing F-7</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>3/4" HSA</u>				<u>W. Brentwood, NY.</u>				
Drive Hammer Weight <u>140 lbs.</u>								
GROUNDWATER OBSERVATIONS				Weather <u>—</u>		Plot Plan <u>—</u>		
Water Level				<u>—</u>				
Time				Date/Time Start <u>—</u>				
Date				Date/Time Finish <u>—</u>				
Casing Depth								
Sample Depth	Sample Number	SPT	PI/FO Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
				20				
21-23	1	8	1.7	21 Split spoons (21-23') Br.-green-grey SILT +				*clay lens
Rec.	4"	5		22 clay, tr. v.f sand + sub angular				
		7		f. gravel				
		5		23				
				24				
25-27	2	5	3.2	25 (25-27') Br. f.-c SAND,				
Rec.	2"	6		some f.-c gravel, tr. silt, wet				
		7		26				
		7		27 27-30" Lt. br.-sl. grey v.f.-				
				c. SAND, some f.-m gravel,				
				28 little c gravel + silt, wet				
				29				
30-32	3	7	6.9	30 (30-32') Br. v.f.-c SAND,				
Rec.	5"	8		31 little silt, tr. f.-m gravel, wet				
		8		32				
		9		33				
				34				
35-37	4	6	2.7	35 (35-37') Tan-grey v.f.-m				
Rec.	21"	6		SAND, little silt, tr. f. gravel,				
		5		36 wet				
		9		37				
				38				
				39				
				40				
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary				



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DRILLING CONTRACTOR Driller <u>F. J. P. Penney</u> Inspector <u>D. Obradovich</u> Rig Type <u>Failing F-7</u> Drilling Method <u>3 1/4" HSA</u> Drive Hammer Weight <u>140 lbs.</u>				DRILLING LOG PROJECT NAME <u>Sonia Rd. LF</u> <u>RI</u> PROJECT # <u>1445-3B</u> Location/Address <u>Sonia Rd.</u> <u>W. Brentwood, NY.</u>				BORING NUMBER <u>MW-14D</u> Sheet <u>3</u> of <u>6</u> Boring Location <u>—</u>															
GROUNDWATER OBSERVATIONS Water Level <table border="1" style="width:100%; height: 20px;"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> Time <table border="1" style="width:100%; height: 20px;"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> Date <table border="1" style="width:100%; height: 20px;"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> Casing Depth <table border="1" style="width:100%; height: 20px;"><tr><td> </td><td> </td><td> </td><td> </td></tr></table>																				Weather <u>—</u> <u>—</u> Date/Time Start <u>—</u> Date/Time Finish <u>—</u>		Plot Plan <u>—</u>	
Sample Depth	Sample Number	SPT	PID/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC	COMMENTS																
				40 Split spoons																			
40-42'	5	8	5.2	41 (40-42') Tan-sl. grey v.f.-c			PID readings may be due to high moisture w/ odor on any samples																
Rec.	9"	10		42 SAND, little silt, tr. f-m																			
		12		43 gravel, wet																			
		11		44																			
				45																			
45-47'	6	9	7.8	46 (45-47') Grey-tan v.f.-c																			
Rec.	8"	14		47 SAND, little f. gravel + silt, tr.																			
		8		48 m gravel, wet																			
		11		49																			
				50																			
50-52'	7	7	0.7	51 (50-52') Grey v.f.-m SAND,																			
Rec.	11"	8		52 little silt, tr. c. sand & f.																			
		9		53 gravel, wet																			
		9		54																			
				55																			
55-57'	8	7	2.3	56 (55-57') Same as 50-52'																			
Rec.	7"	14		57																			
		8		58																			
		7		59																			
				60																			
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary																			



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER	
Driller <u>F. M. P. Denne</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>4</u> of <u>6</u>	
Inspector <u>D. Obradovich</u>				RI		Boring Location <u>—</u>	
Rig Type <u>Fulling F-7</u>				PROJECT # <u>1445-3B</u>			
Drilling Method <u>3 1/4" HSA</u>				Location/Address <u>Sonia Rd.</u>			
Drive Hammer Weight <u>140 lbs.</u>				<u>W. Brentwood, N.Y.</u>			
GROUNDWATER OBSERVATIONS				Weather <u>—</u>		Plot Plan	
Water Level				—		—	
Time				Data/Time Start <u>—</u>			
Date				Data/Time Finish <u>—</u>			
Casing Depth							
Sample Depth	Sample Number	SPT	PRO/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC	
				60 <u>split spoons</u>			
60-62'	9	8		61 (60-62') Grey-br. v.f.-c			
Rec.	5"	9		SAND, some f-m gravel, little			
		9		62 silt, wet			
		9		63			
				64			
65-67'	10	10		65 (65-67') Grey-lt. br. v.f.-m.			
Rec.	20"	8		66 SAND, little silt, tr. c. sand, wet			
		7		67			
		9		68			
				69			
70-72'	11	5		70 (70-72') Grey-lt. br. v.f.-c			
Rec.	32"	6		71 SAND, some f.-c gravel, tr.			
		8		silt, wet			
		11		72			
				73			
				74			
75-77'	12	8		75 (75-77') Grey-lt. br. v.f.-m			
Rec.	12"	11		76 SAND, little silt, tr. c. sand, wet			
		11		77			
		13		78			
				79			
				80			
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary			



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER		
Driller <u>F. DeVincentis</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>5</u> of <u>6</u>		
Inspector <u>D. Obradovich</u>				PROJECT # <u>RI</u>		Boring Location <u>—</u>		
Rig Type <u>Failing F-7</u>				Location/Address <u>Sonia Rd.</u>				
Drilling Method <u>3/4" HSA</u>				<u>W. Brentwood, N.Y.</u>				
Drive Hammer Weight <u>140 lbs</u>								
GROUNDWATER OBSERVATIONS				Weather <u>—</u>		Plot Plan <u>—</u>		
Water Level				Date/Time Start <u>—</u>				
Time				Date/Time Finish <u>—</u>				
Date								
Casing Depth								
Sample Depth	Sample Number	SPT	PRO/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC		COMMENTS
80-82'	13	9	1.2	Split spoons				
Rec.	12"	8		(80-82') Grey tan v.f.-f.				
		7		SAND, little - some silt 2 lenses				
		7		82 ~ 5 mm thick Br - sl. orange-grey silt @				
				83				
				84				
85-87'	14	10	2.6	85 (85-87') Grey-tan v.f.-m				
Rec.	13"	9		86 SAND, little silt, tr. c. sand,				
		12		wet (tr. subrounded f-m gravel)				
		11		87				
				88				
				89				
90-92'	15	11	0.9	90 (90-92') Grey-tan v.f.-m				
Rec.	22"	14		91 SAND, little silt, tr. c. sand,				
		10		wet				
		10		92				
				93				
				94				
95-97'	16	8	3.7	95 (95-97') same as 90-92'				
Rec.	17"	9		96				
		8		97				
		8		98				
				99				
				100				
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary				



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DRILLING CONTRACTOR				DRILLING LOG		BORING NUMBER	
Driller <u>F. J. J. Devine</u>				PROJECT NAME <u>Sonia Rd. LF</u>		Sheet <u>6</u> of <u>6</u>	
Inspector <u>D. Obradovich</u>				PROJECT # <u>RI</u>		Boring Location <u>—</u>	
Rig Type <u>Failing F-7</u>				LOCATION # <u>1445-3B</u>			
Drilling Method <u>3/4" HSA</u>				Location/Address <u>Sonia Rd.</u>			
Drive Hammer Weight <u>140 lbs.</u>				<u>W. Brentwood, N.Y.</u>			
GROUNDWATER OBSERVATIONS				Weather		Plot Plan	
Water Level				—		—	
Time				Date/Time Start		Date/Time Finish	
Date				—		—	
Casing Depth				—		—	
Sample Depth	Sample Number	SPT	PIV/FID Reading	FIELD IDENTIFICATION OF MATERIAL		WELL SCHEMATIC	
				100 Split Spoons			
100-102	17	9411	2.2	(100-102') same as 90-92' tr. mica			
Rec.		10412		101 (102-104') Grey-lt. br. v.f.-f			
102-104	18	747	2.3	102 SAND, little silt, wet			
Rec.		686		103			
104-106	19	10411	1.8	104 (104-106') 0-5" same as above			
Rec.	24"	14410	1 sand	105 5-7" Tan-orange v.f.-m SAND			
				tr. c, sand & f. rounded gravel,			
				106 little silt, wet grades into			
				7-7.1" Br. silt grading to red			
				107 silt grading to bright orange silt			
				w/ tr. v.f. sand & clay 7.1-11" Lt.			
				108 br. SILT & CLAY (tough pattern -			
				109 almost like nodules) w/ streaks			
				of red-orange silt (peat?)			
				110 11-12" Green-grey-orange SILT,			
				111 some clay, tr. mica			
				112 11-20" Lt. br. br-grey CLAY, little-			
				some silt grading into dk. grey-			
				113 green CLAY, little silt (same			
				pattern as 7-11" tough)			
				114 20-24" Dk. grey-dk. green			
				CLAY, tr.-little silt, smooth-			
				115 tough pattern, plastic (moderately)			
				116 END OF BORING AT 106' bg			
				117			
				118			
				119			
				120			
SPT = STANDARD PENETRATION TEST				Soil Stratigraphy Summary		Gardiners Clay @ 105' bg	

APPENDIX J

WELL CONSTRUCTION LOGS

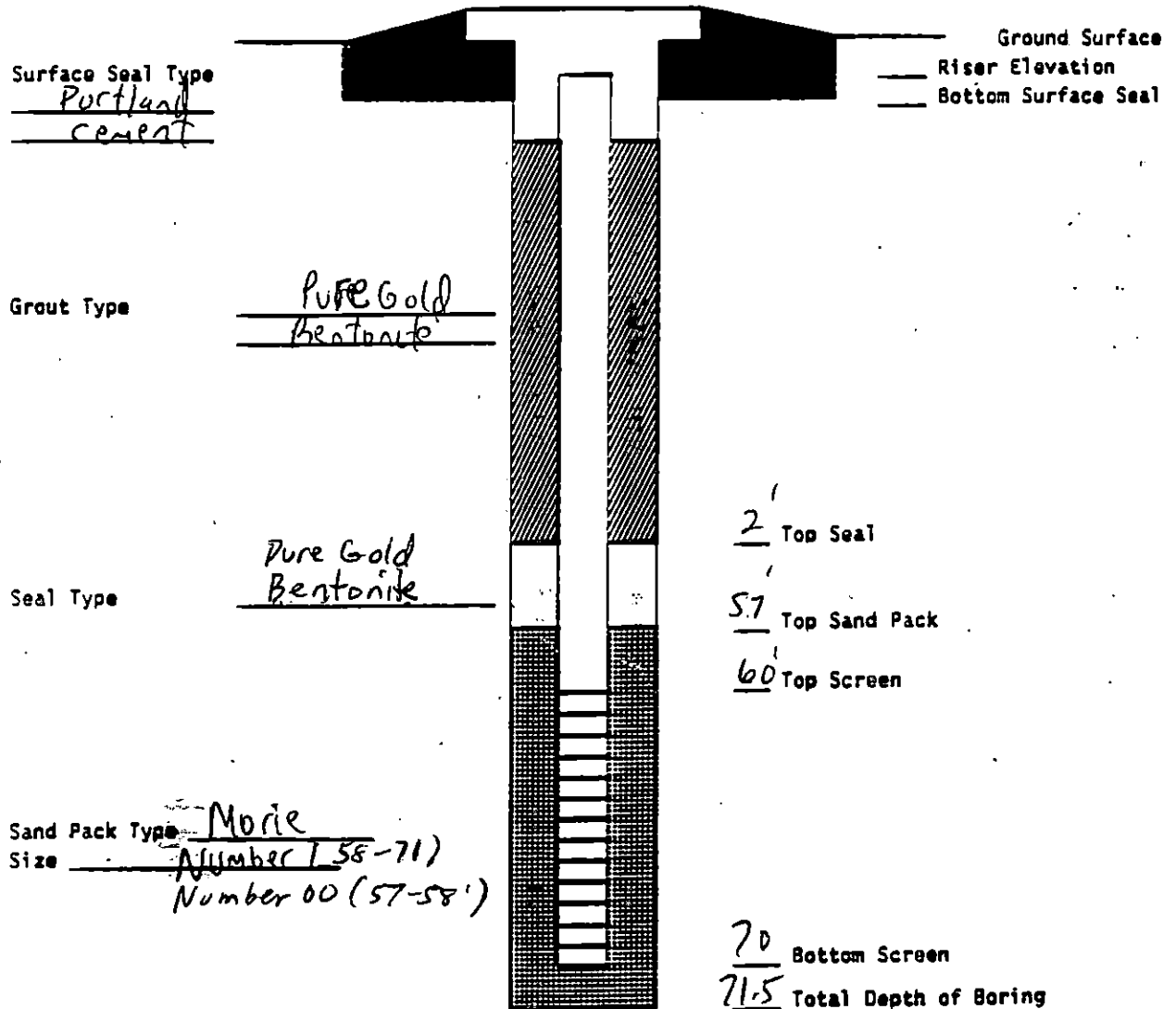


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WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-01I
TOTAL DEPTH 70 FT SURFACE ELEV. 57.57 TOP RISER ELEV. 57.25
WATER LEVELS (DEPTH, DATE, TIME) 7.82 11/04/97 DATE INSTALLED 10/6/97
RISER DIA 4" MATERIAL PVC LENGTH 60'
SCREEN DIA 4" MATERIAL CHAINLESS LENGTH 10' SLOT SIZE 010
Steel

SCHEMATIC



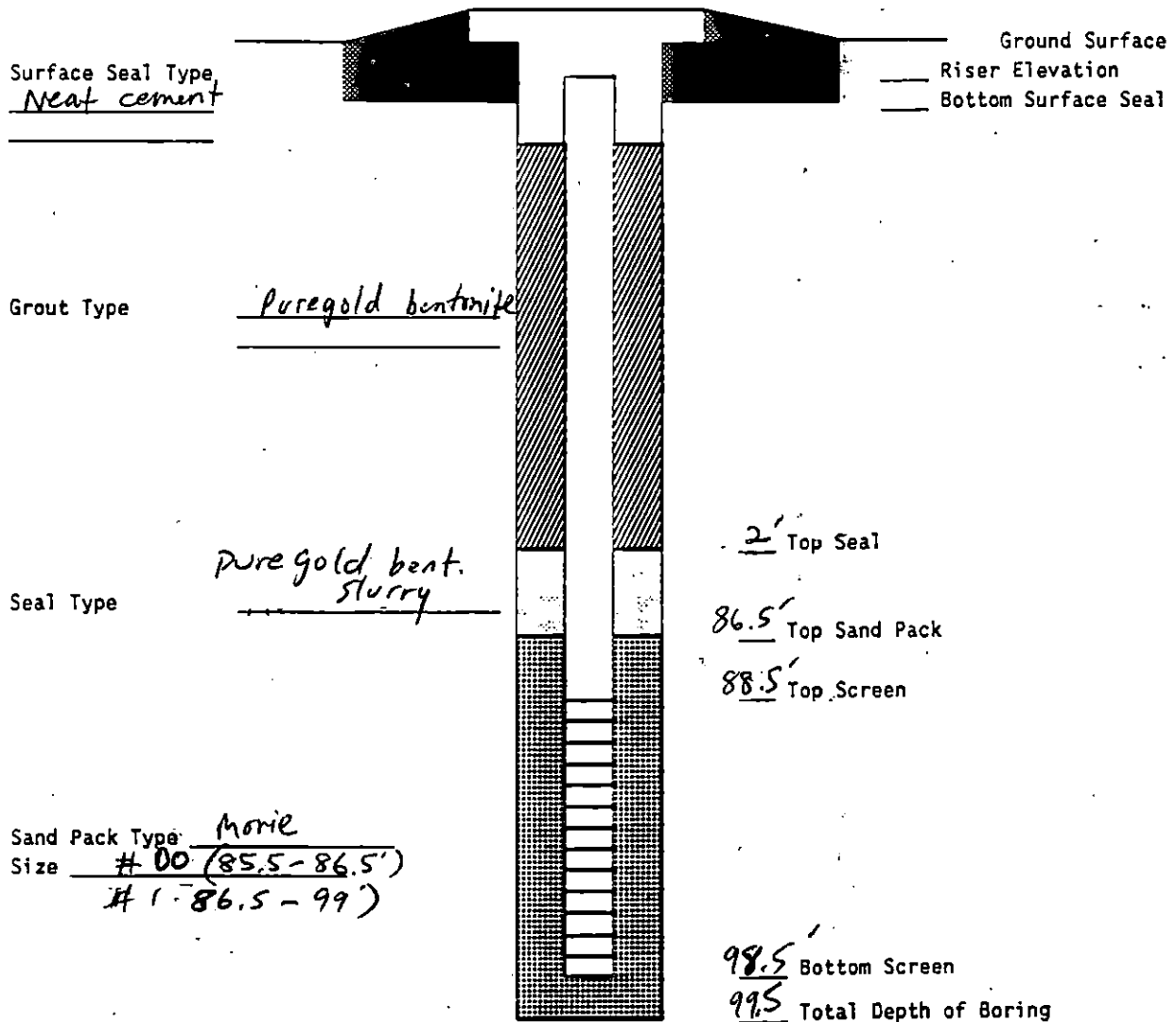


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WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-01D
TOTAL DEPTH 98.5' SURFACE ELEV. 57.06 TOP RISER ELEV. 56.71
WATER LEVELS (DEPTH, DATE, TIME) 7.64 TOC 10/24/97 DATE INSTALLED 10/14/97
RISER DIA 4" MATERIAL PVC LENGTH 88.5'
SCREEN DIA 4" MATERIAL Stainless steel LENGTH 10' SLOT SIZE 0.010"

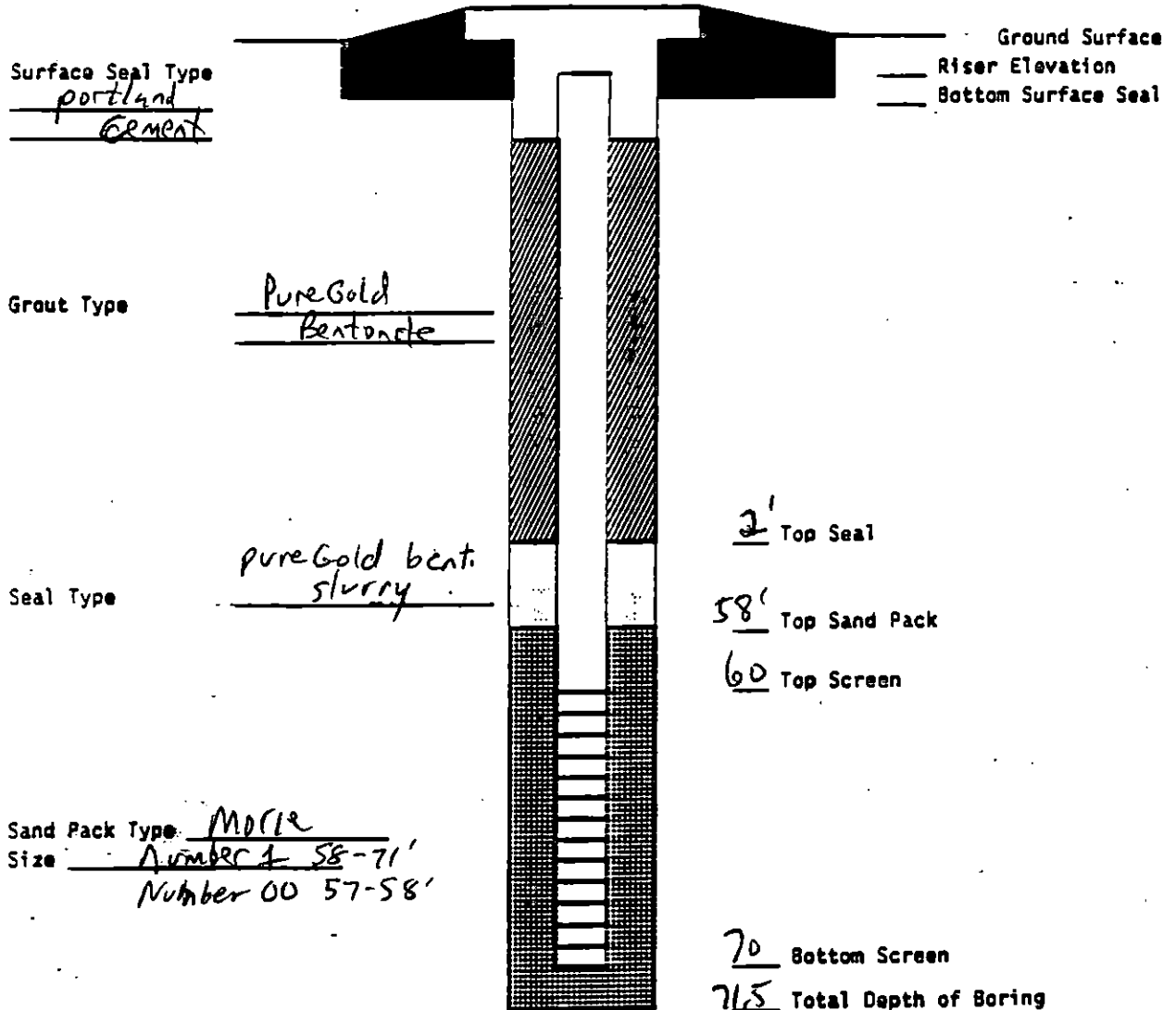
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. Mw-02I
TOTAL DEPTH 70' SURFACE ELEV. 76.83 TOP RISER ELEV. 76.35
WATER LEVELS (DEPTH, DATE, TIME) 28.05 11/4/97 DATE INSTALLED 10/1/97
RISER- DIA 4 MATERIAL PVC LENGTH 60'
SCREEN DIA 4 MATERIAL Steel LENGTH 10' SLOT SIZE 0x10
Stainless

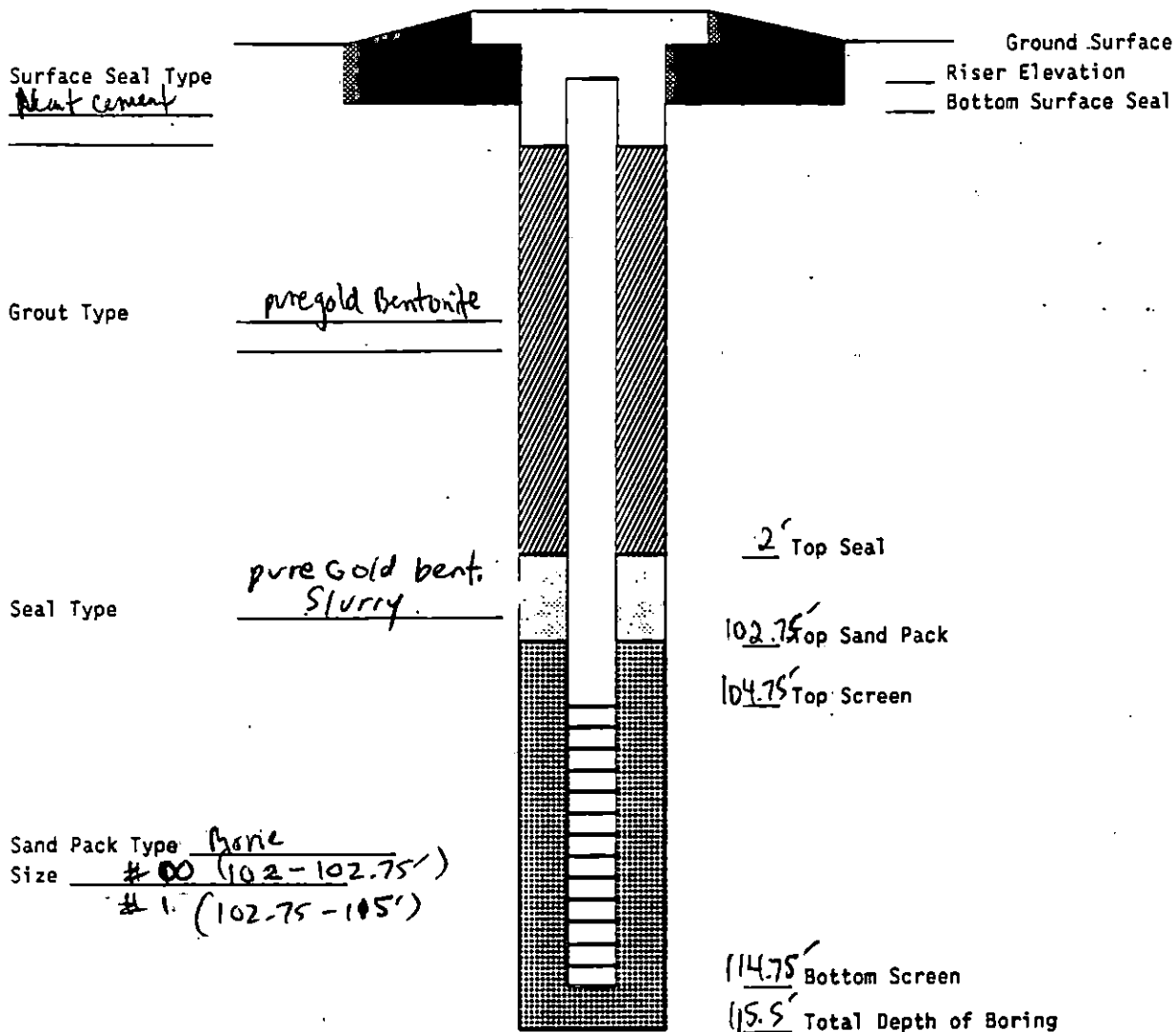
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-020
TOTAL DEPTH 114.75' SURFACE ELEV. 76.97 TOP RISER ELEV. 76.63
WATER LEVELS (DEPTH, DATE, TIME) 28.36 11/4/97 DATE INSTALLED 10/13/97
RISER DIA 4" MATERIAL PVC LENGTH 104.75'
SCREEN DIA 4" MATERIAL Stainless steel LENGTH 10' SLOT SIZE 0.010"

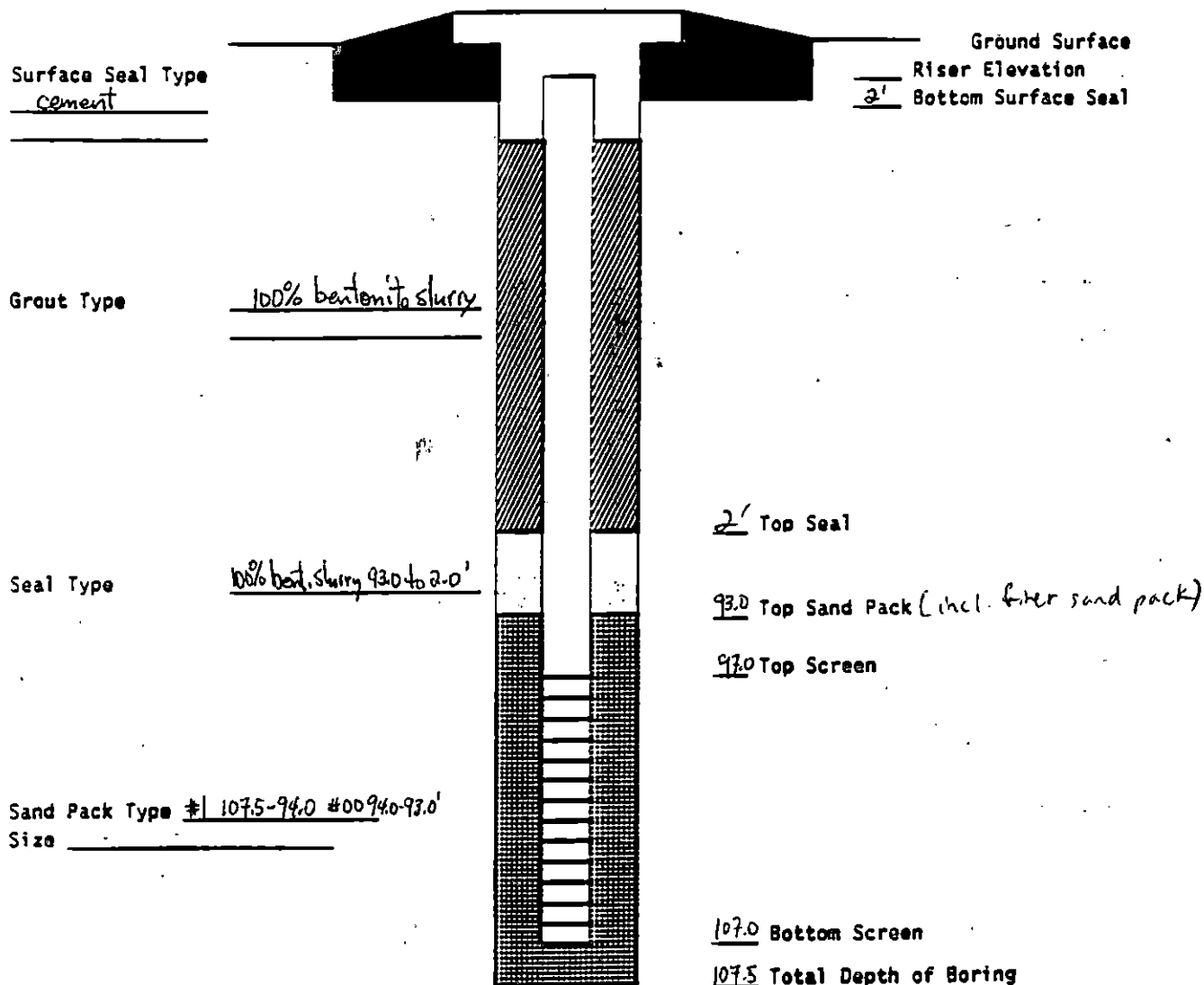
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-03D
TOTAL DEPTH 107.5 SURFACE ELEV. 70.71 TOP RISER ELEV. 70.50
WATER LEVELS (DEPTH, DATE, TIME) 24.5, 9.30.97, 08:10 DATE INSTALLED 9.30.97
RISER DIA 4" MATERIAL PVC LENGTH 97.0
SCREEN DIA 4" MATERIAL S.S. LENGTH 10.0 SLOT SIZE 0.010"

SCHEMATIC



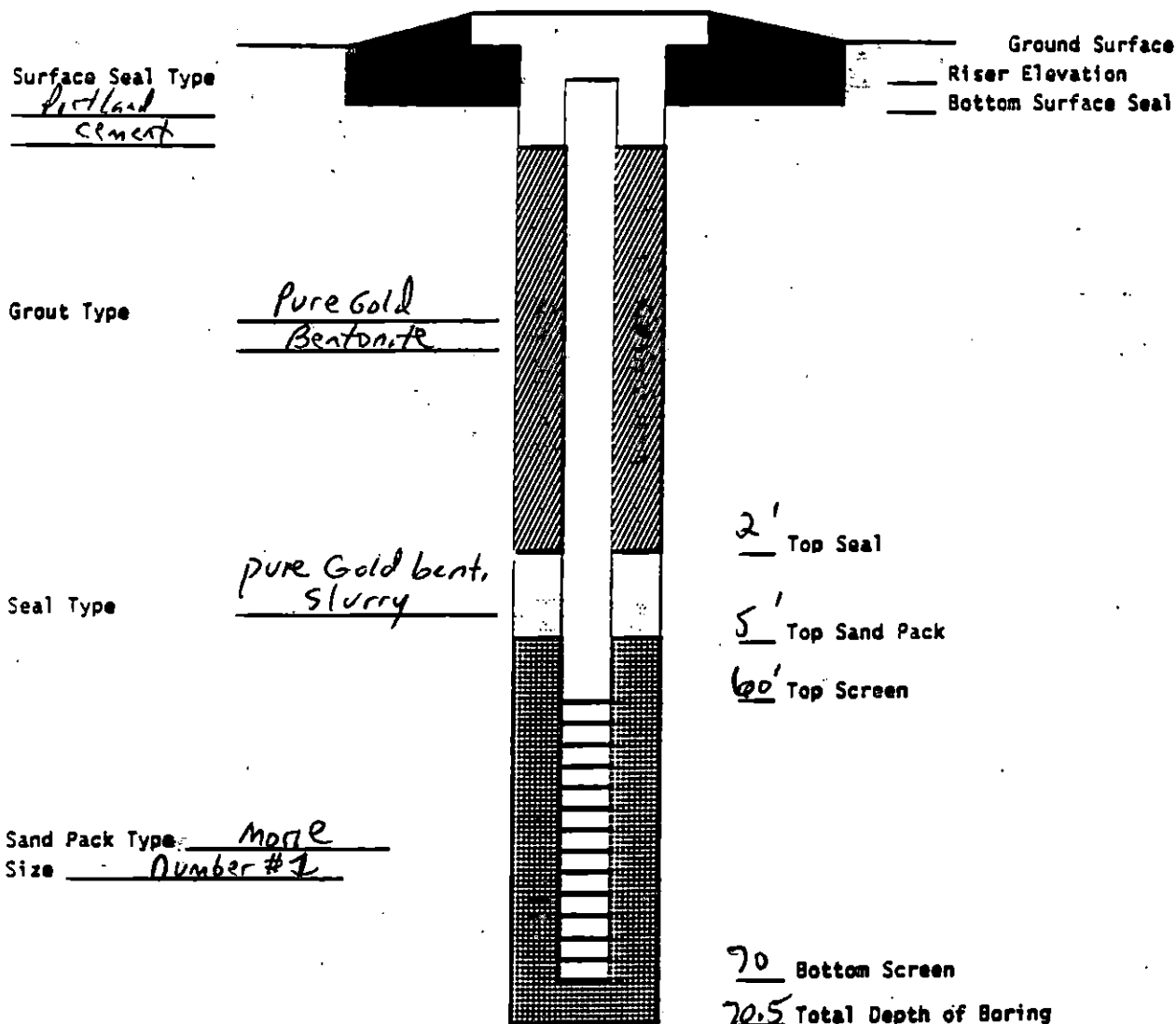


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WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-04I
TOTAL DEPTH 70' SURFACE ELEV. 68.44 TOP RISER ELEV. 68.06
WATER LEVELS (DEPTH, DATE, TIME) 22.30, 11/4/97 DATE INSTALLED 9/29/97
RISER DIA 4" MATERIAL PVC LENGTH 60'
SCREEN DIA 4" MATERIAL Stainless steel LENGTH 10' SLOT SIZE 1010

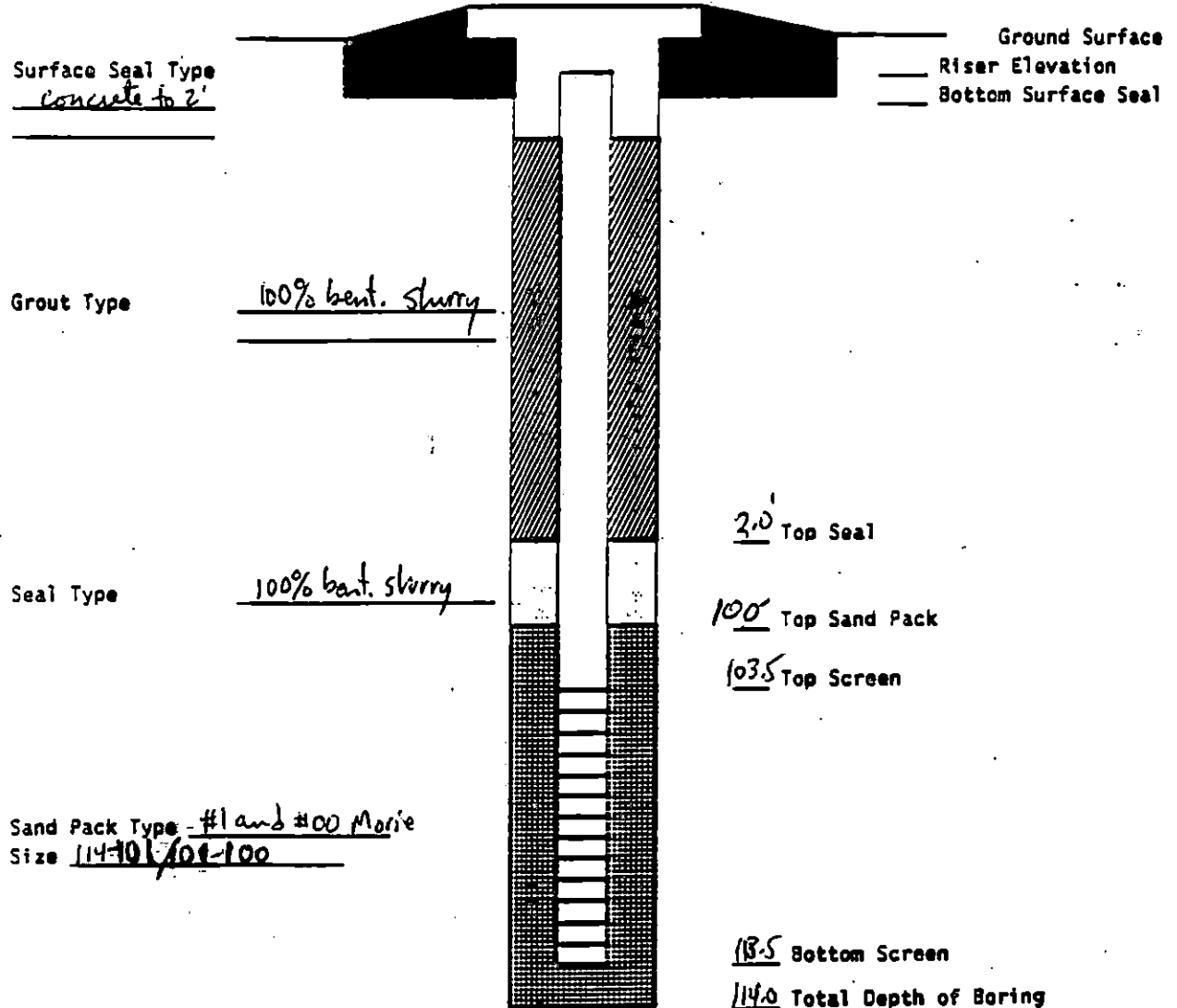
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-04D
TOTAL DEPTH 114.0 SURFACE ELEV. 68.20 TOP RISER ELEV. 67.90
WATER LEVELS (DEPTH, DATE, TIME) 22.11 11/4/97 DATE INSTALLED 10-6-97
RISER DIA 4" MATERIAL PVC LENGTH 103.5
SCREEN DIA 4" MATERIAL S.S LENGTH 10 SLOT SIZE 0.010"

SCHEMATIC



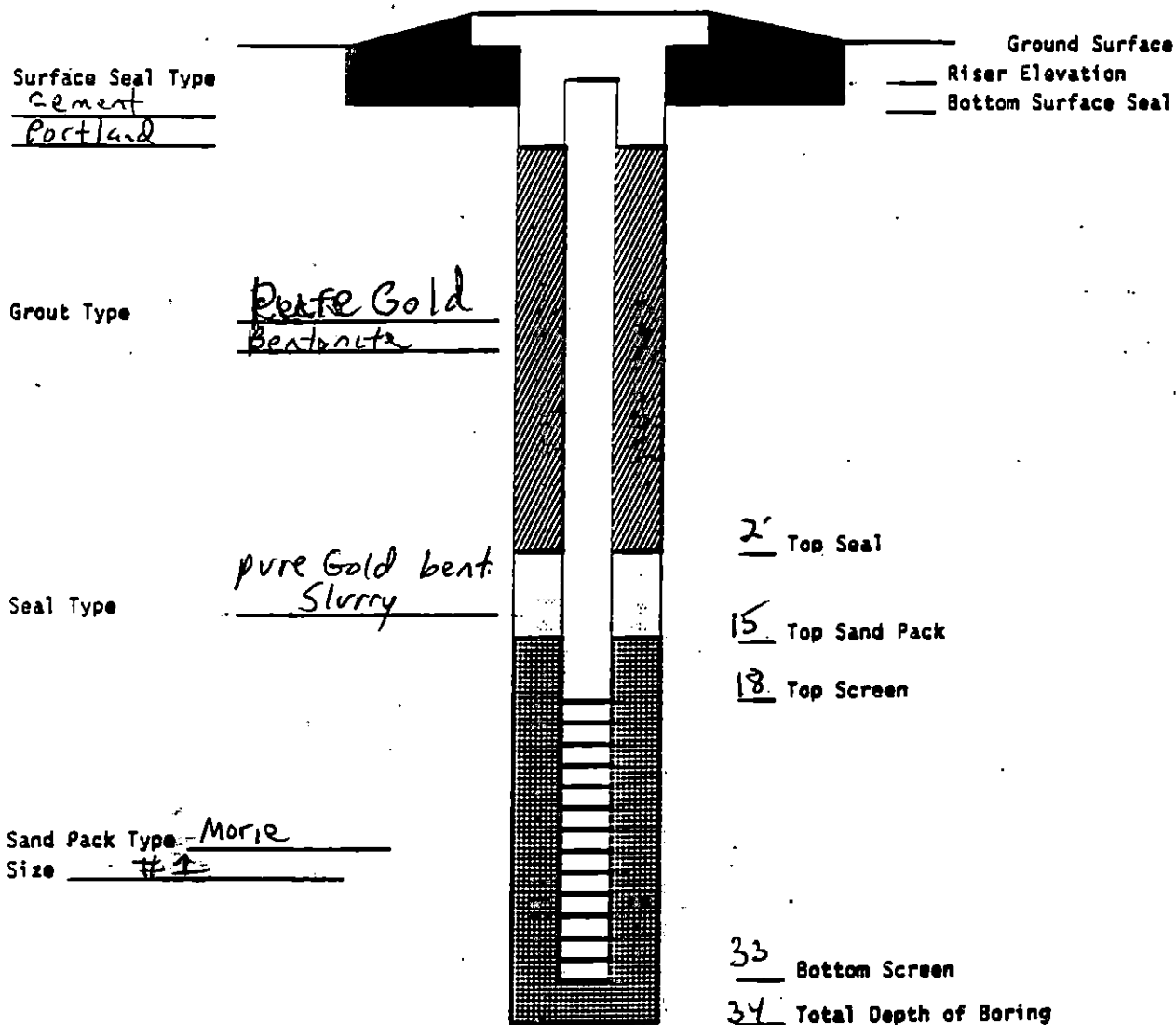


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WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-05S
TOTAL DEPTH 33' SURFACE ELEV. 70.78 TOP RISER ELEV. 70.58
WATER LEVELS (DEPTH, DATE, TIME) 24.22 11/4/97 DATE INSTALLED 10/4/97
RISER DIA 4 MATERIAL PVC LENGTH 18'
SCREEN DIA 4 MATERIAL Stainless Steel LENGTH 15' SLOT SIZE .010

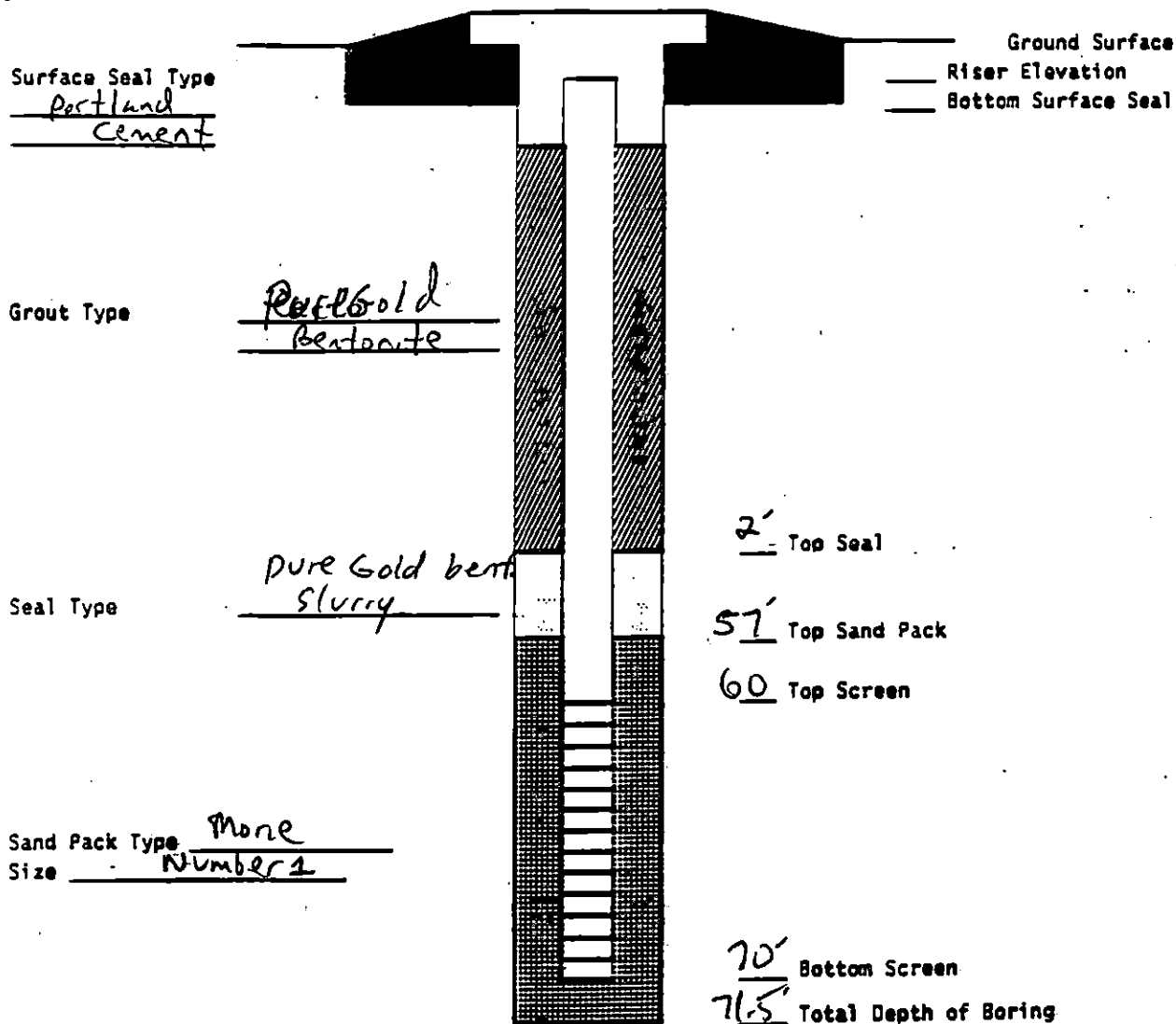
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-051
TOTAL DEPTH 70' SURFACE ELEV. 70.71 TOP RISER ELEV. 70.55'
WATER LEVELS (DEPTH, DATE, TIME) 24.16 11/4/97 DATE INSTALLED 10/2/97
RISER DIA 4 MATERIAL PVC LENGTH 60'
SCREEN DIA 4 MATERIAL Steel LENGTH 10 SLOT SIZE .010"

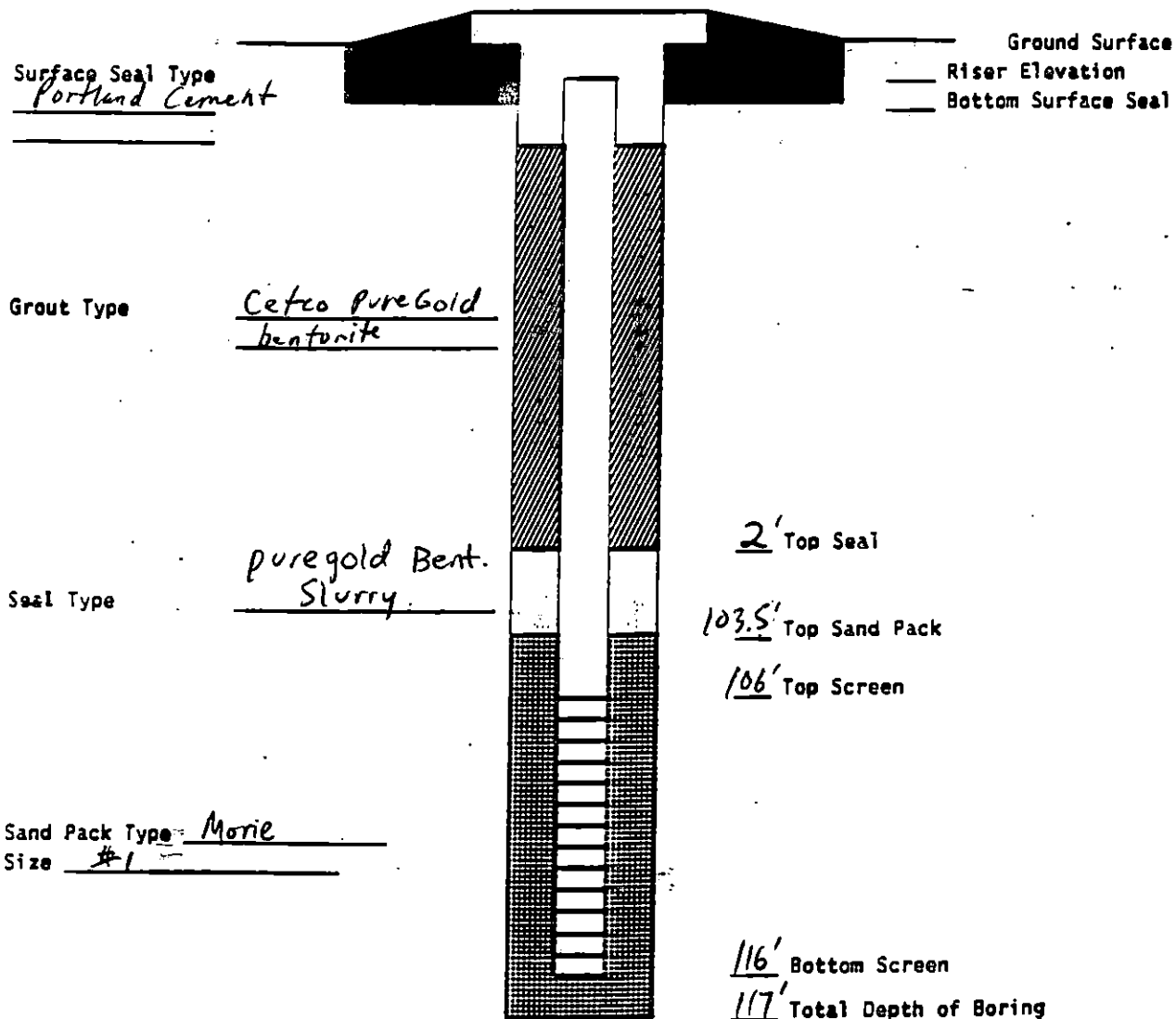
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-05D
TOTAL DEPTH 116' SURFACE ELEV. 71.14 TOP RISER ELEV. 71.04
WATER LEVELS (DEPTH, DATE, TIME) 24.68 11/4/97 DATE INSTALLED 10/10/97
RISER DIA 4" MATERIAL PVC LENGTH 106'
SCREEN DIA 4" MATERIAL Stainless steel LENGTH 10' SLOT SIZE 0.010"

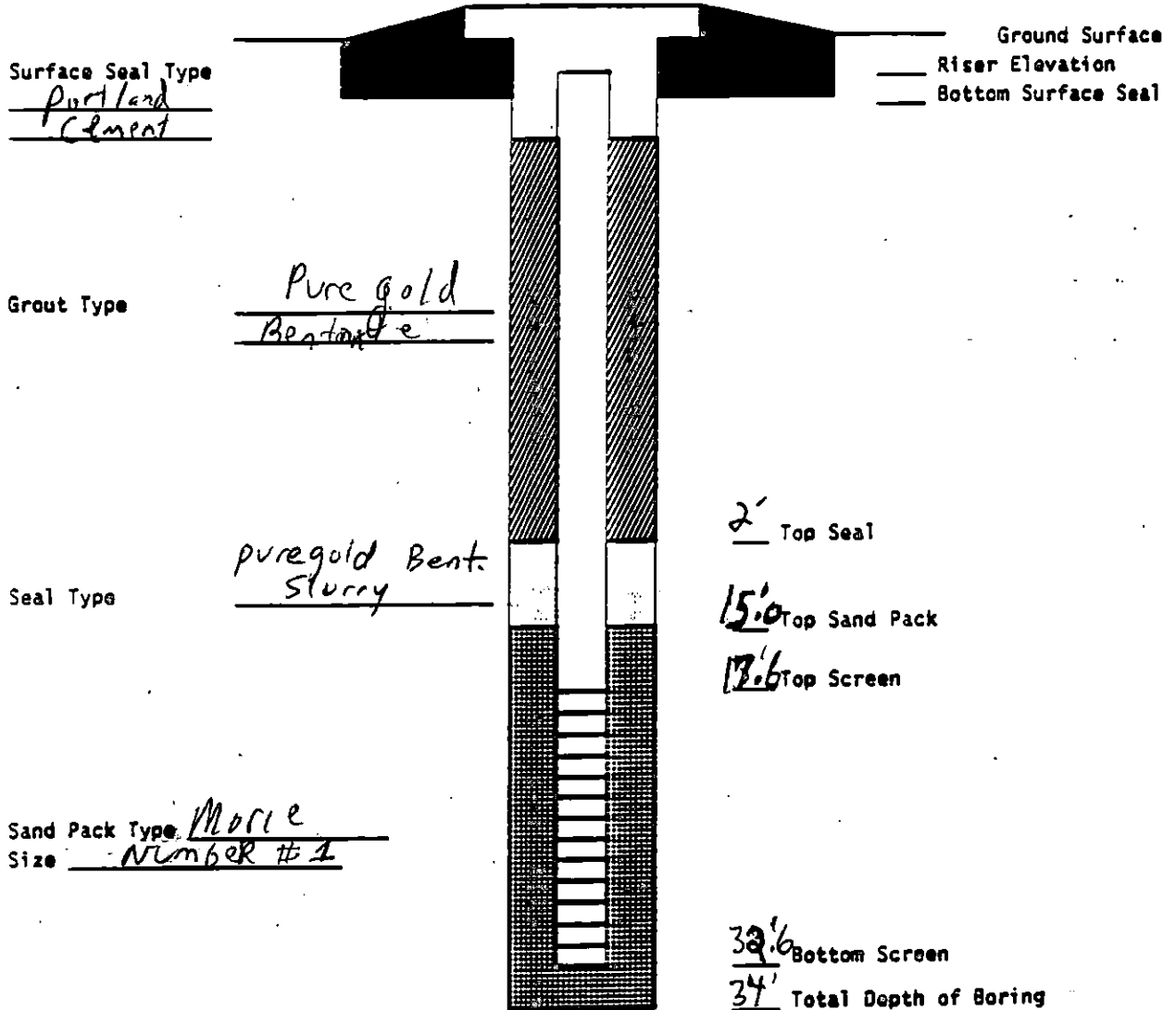
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-065
TOTAL DEPTH 33 FT SURFACE ELEV. 69.52 TOP RISER ELEV. 69.06
WATER LEVELS (DEPTH, DATE, TIME) 32.64 FT (11/4/97) DATE INSTALLED 9/24/97
RISER DIA 9" MATERIAL Pvc LENGTH 18'
SCREEN DIA 4" MATERIAL Stainless Steel LENGTH 15' SLOT SIZE .010

SCHEMATIC





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WELL CONSTRUCTION LOG

SITE Sonia Rd Landfill JOB NO. 1445 WELL NO. MW-06I

TOTAL DEPTH 71.5' SURFACE ELEV. 69.55 TOP RISER ELEV. 69.21'

WATER LEVELS (DEPTH, DATE, TIME) 22.82 11/4/97 DATE INSTALLED 9/25/9

RISER DIA 4" MATERIAL PVC LENGTH 61'
SCREEN DIA 4" MATERIAL S.S. LENGTH 10' SLOT SIZE 0.010"

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Surface Seal Type

Cement
Gravel mix

Ground Surface

Riser Elevation

Bottom Surface Seal

Grout Type

100% Bent.
Slurry

Seal Type

100% Bent. Slurry

2 Top Seal

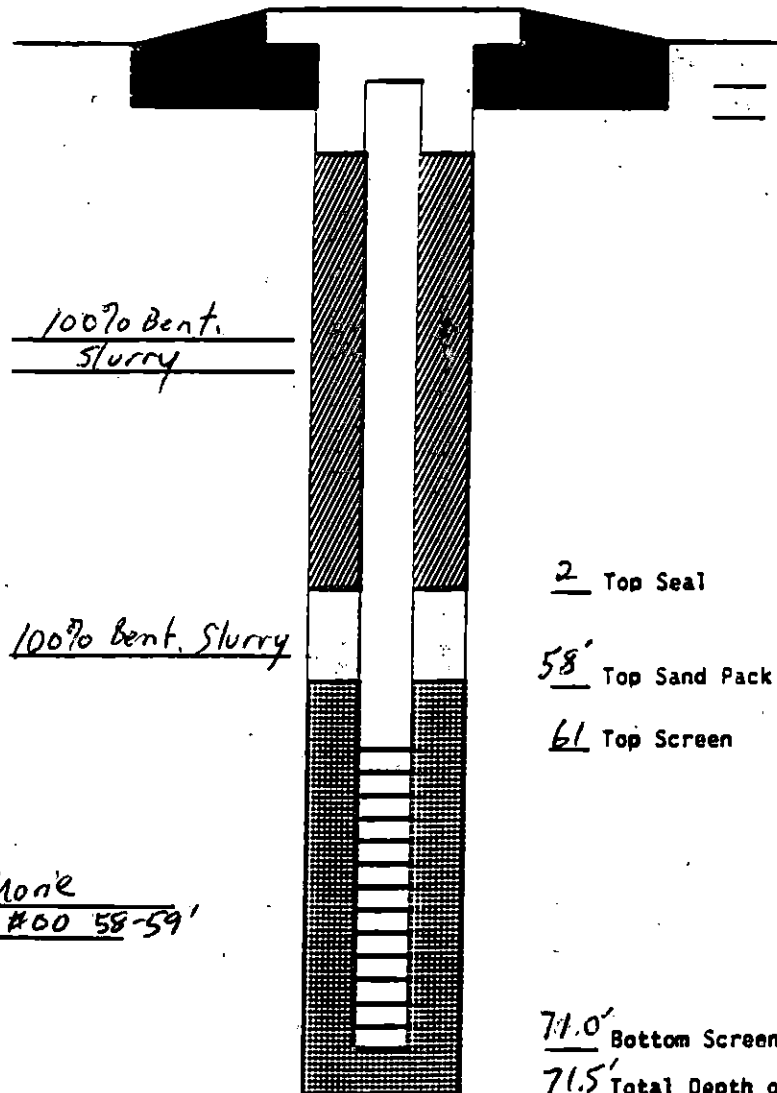
58' Top Sand Pack

61 Top Screen

Sand Pack Type Monk
Size #159-71.5, #00 58-59'

71.0' Bottom Screen

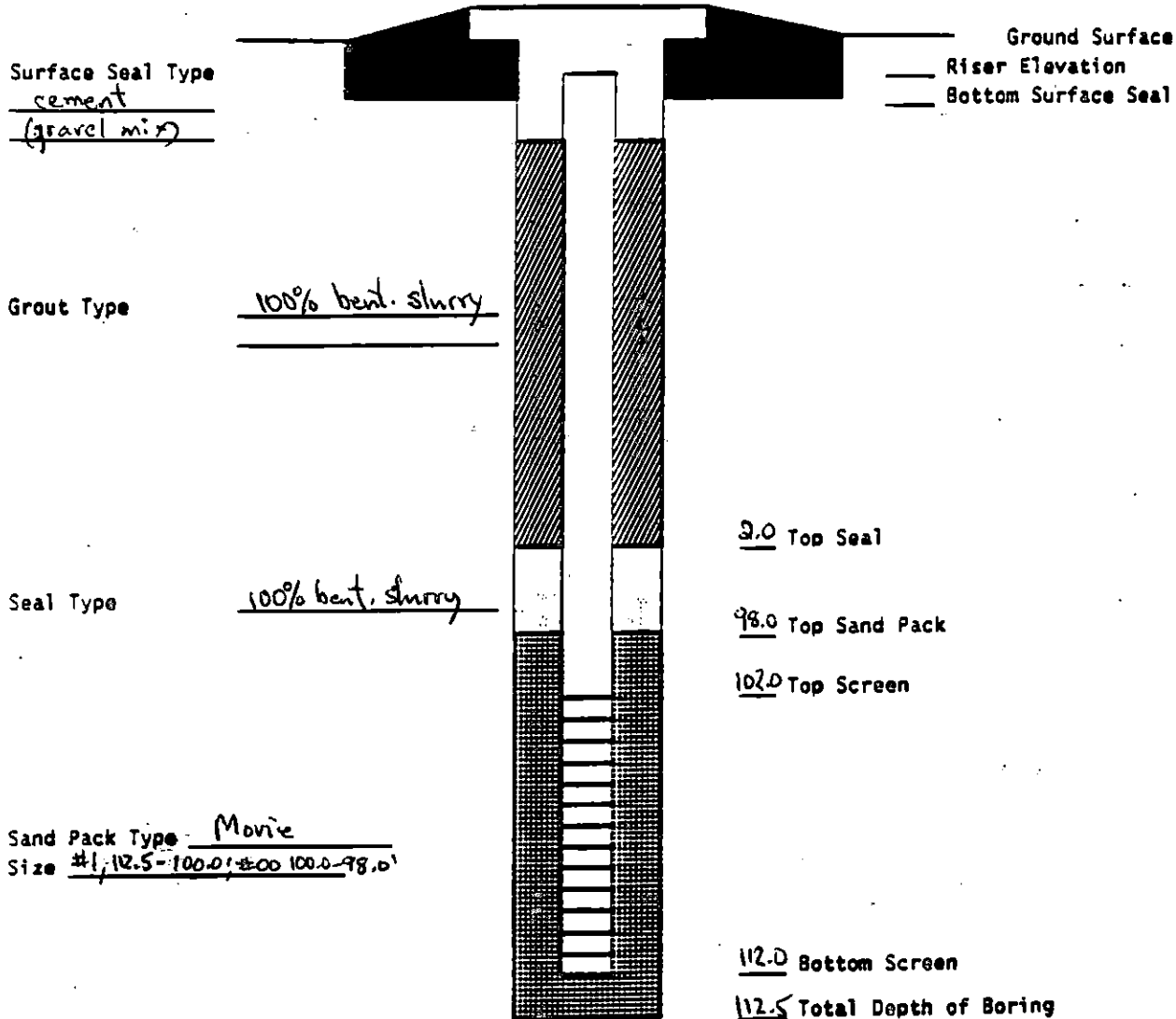
71.5' Total Depth of Boring



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-06D
TOTAL DEPTH 112.5 SURFACE ELEV. 69.90 TOP RISER ELEV. 69.65
WATER LEVELS (DEPTH, DATE, TIME) 23.24 11/4/97 DATE INSTALLED 10-1-97
RISER DIA 4" MATERIAL PVC LENGTH 102.0
SCREEN DIA 4" ~~4.5~~ MATERIAL SS LENGTH 10.0 SLOT SIZE 0.010"

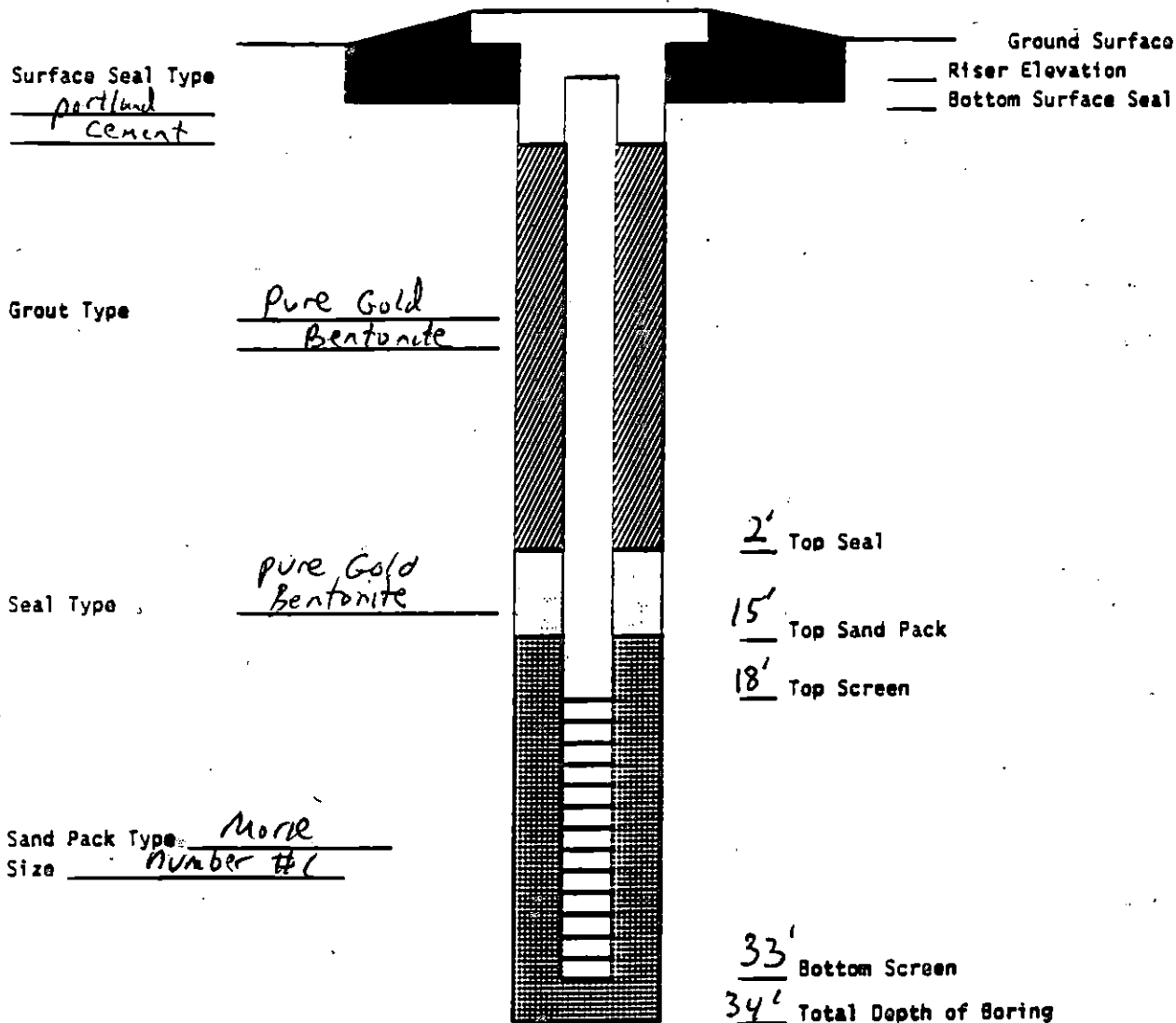
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-075
TOTAL DEPTH 33' SURFACE ELEV. 72.26 TOP RISER ELEV. 71.72
WATER LEVELS (DEPTH, DATE, TIME) 24' 9/26/97 DATE INSTALLED 9/28/97
RISER DIA 4" MATERIAL PVC LENGTH 18'
SCREEN DIA 4" MATERIAL Stainless Steel LENGTH 15' SLOT SIZE 0.60

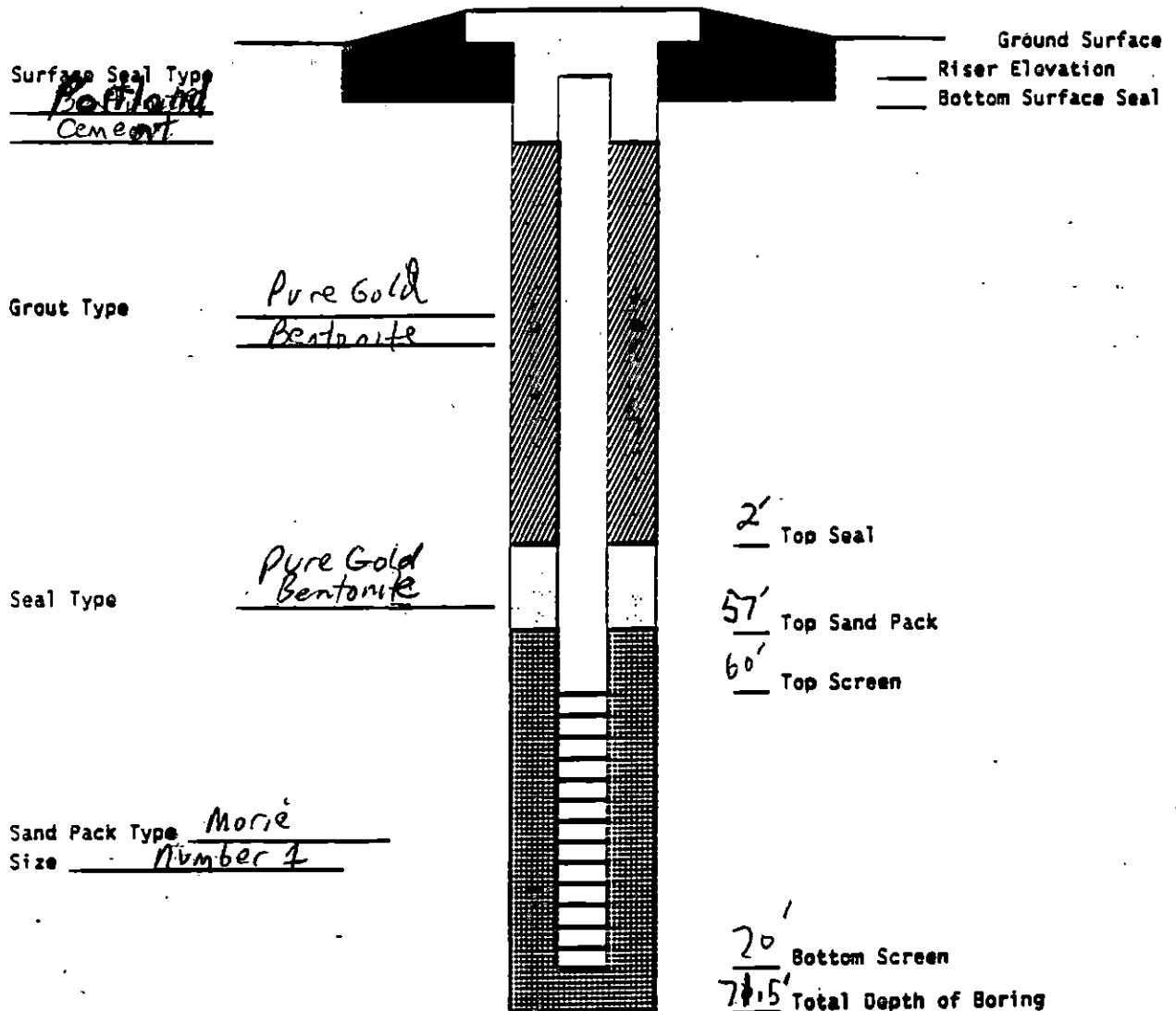
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-07I
TOTAL DEPTH 70 FT SURFACE ELEV. 69.48 TOP RISER ELEV. 69.25
WATER LEVELS (DEPTH, DATE, TIME) 21.78 11/4/97 DATE INSTALLED 9/26/97
RISER DIA 4" MATERIAL PVC LENGTH 60'
SCREEN DIA 4" MATERIAL Stainless Steel LENGTH 10' SLOT SIZE .010"

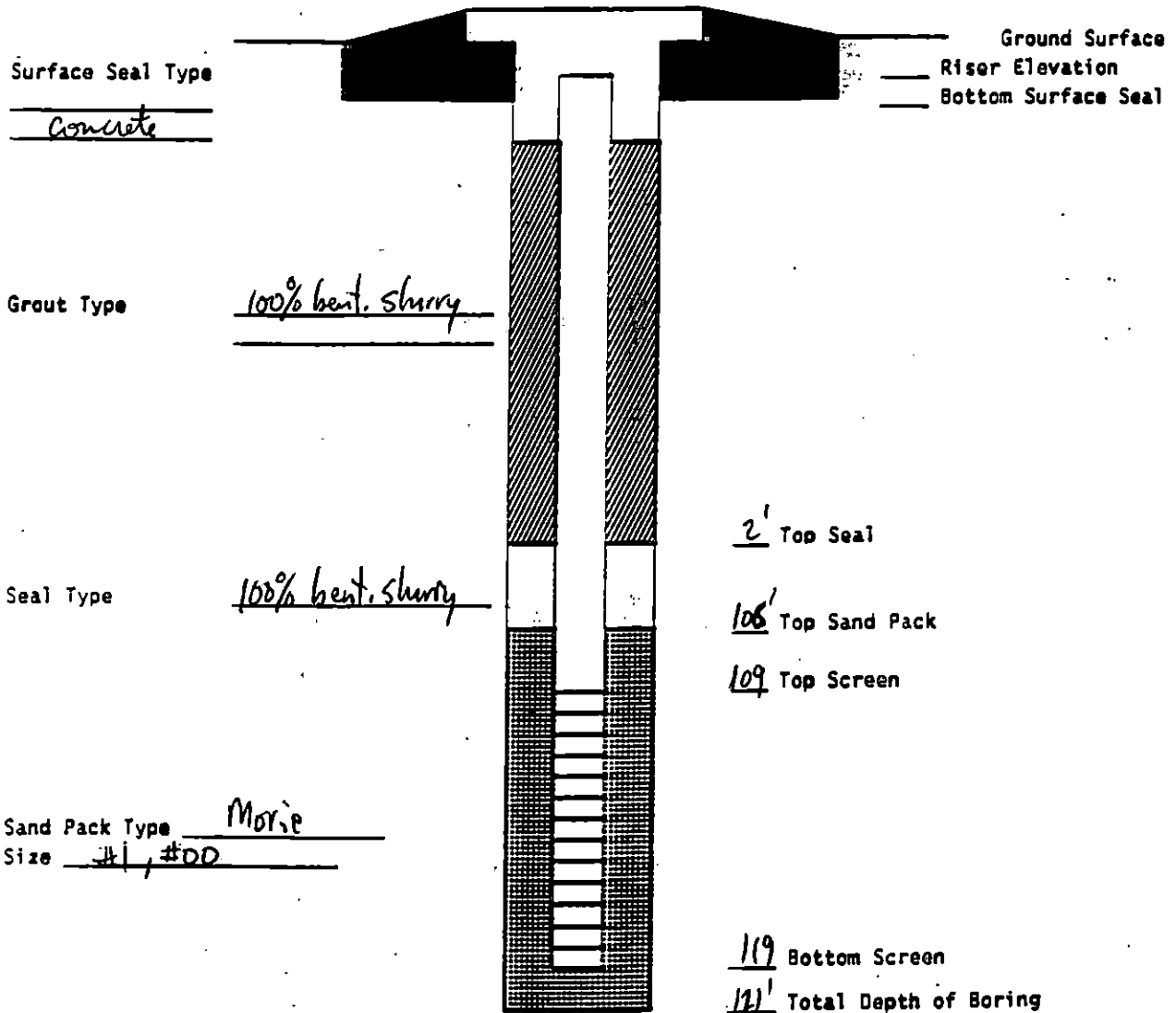
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-7D
TOTAL DEPTH 121.0' SURFACE ELEV. 72.35 TOP RISER ELEV. 72.16
WATER LEVELS (DEPTH, DATE, TIME) 24.73 11/4/97 DATE INSTALLED 10-8-97
RISER DIA 4" MATERIAL PVC LENGTH 109'
SCREEN DIA 4" MATERIAL SS LENGTH 10' SLOT SIZE 0.010"

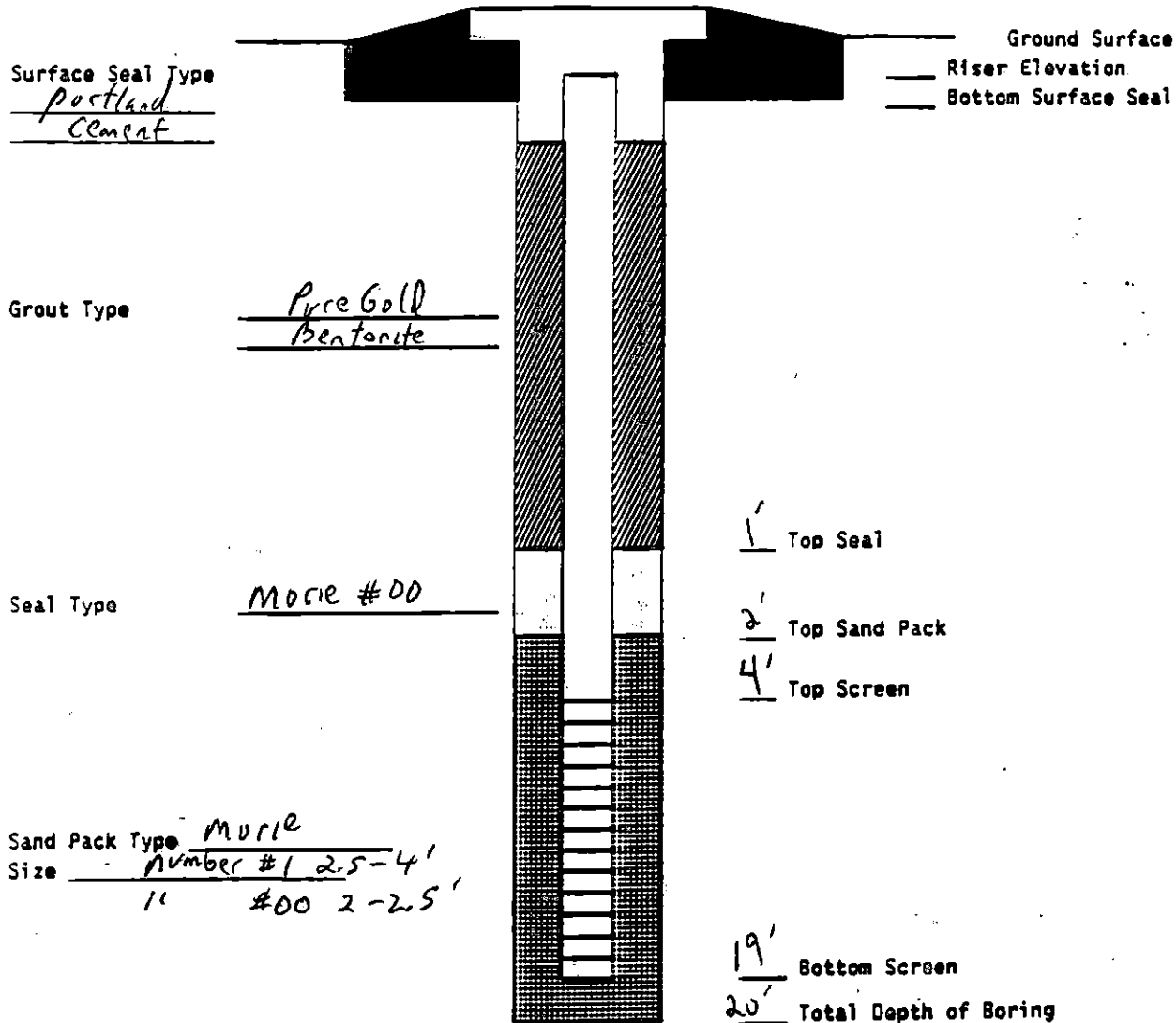
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-0105
TOTAL DEPTH 19' SURFACE ELEV. 56.82 TOP RISER ELEV. 56.65
WATER LEVELS (DEPTH, DATE, TIME) 7' 10/8/97 DATE INSTALLED 10/8/97
RISER DIA 4" MATERIAL PVC LENGTH 4'
SCREEN DIA 4" MATERIAL Stainless Steel LENGTH 15' SLOT SIZE 0.075"

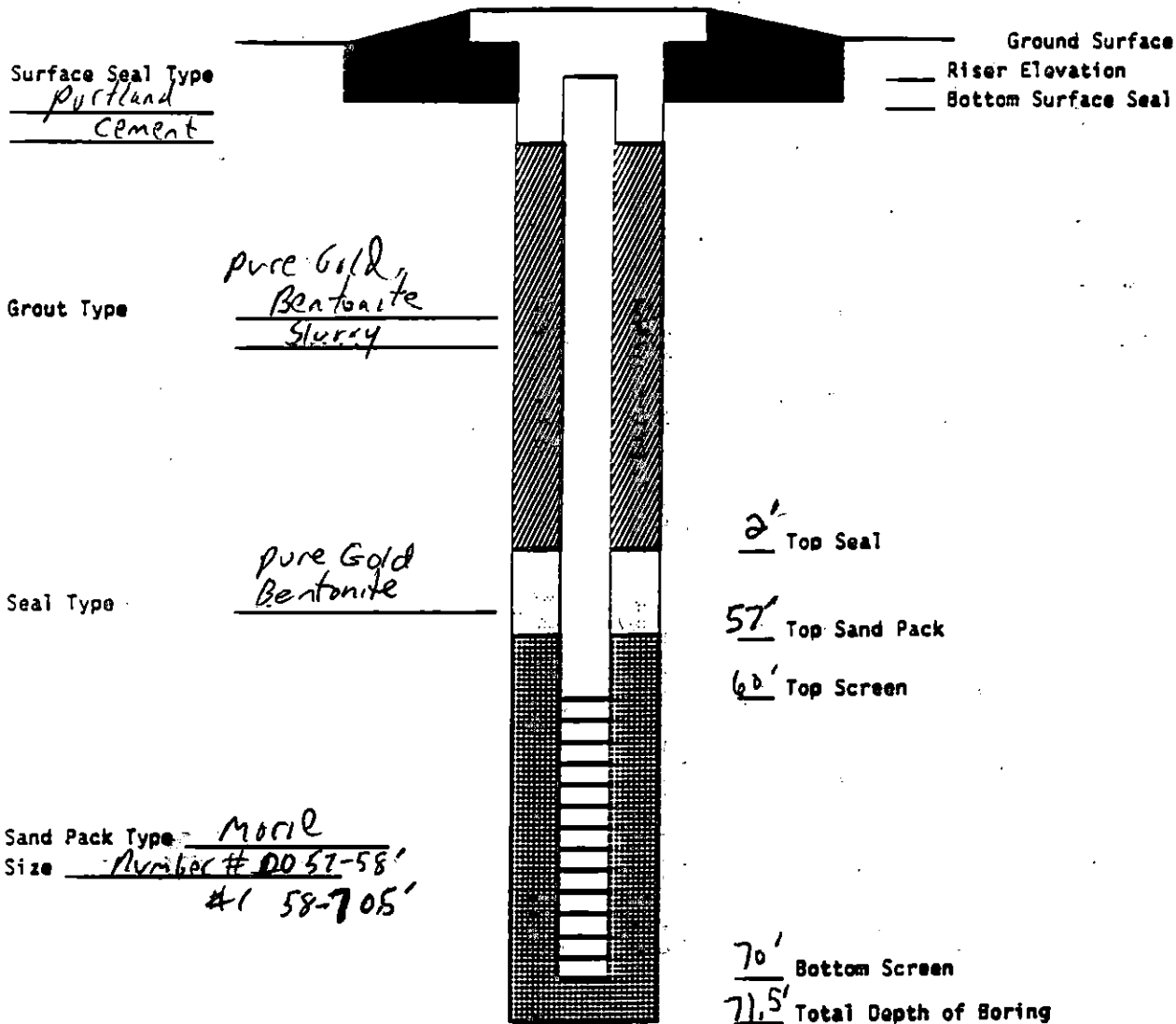
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-010I
TOTAL DEPTH 70' SURFACE ELEV. 56.74 TOP RISER ELEV. 56.16
WATER LEVELS (DEPTH, DATE, TIME) 6.75 11/4/97 DATE INSTALLED 10/7/97
RISER DIA 4" MATERIAL PVC LENGTH 10'
SCREEN DIA 4" MATERIAL Stainless Steel LENGTH 60' SLOT SIZE 10/10"

SCHEMATIC



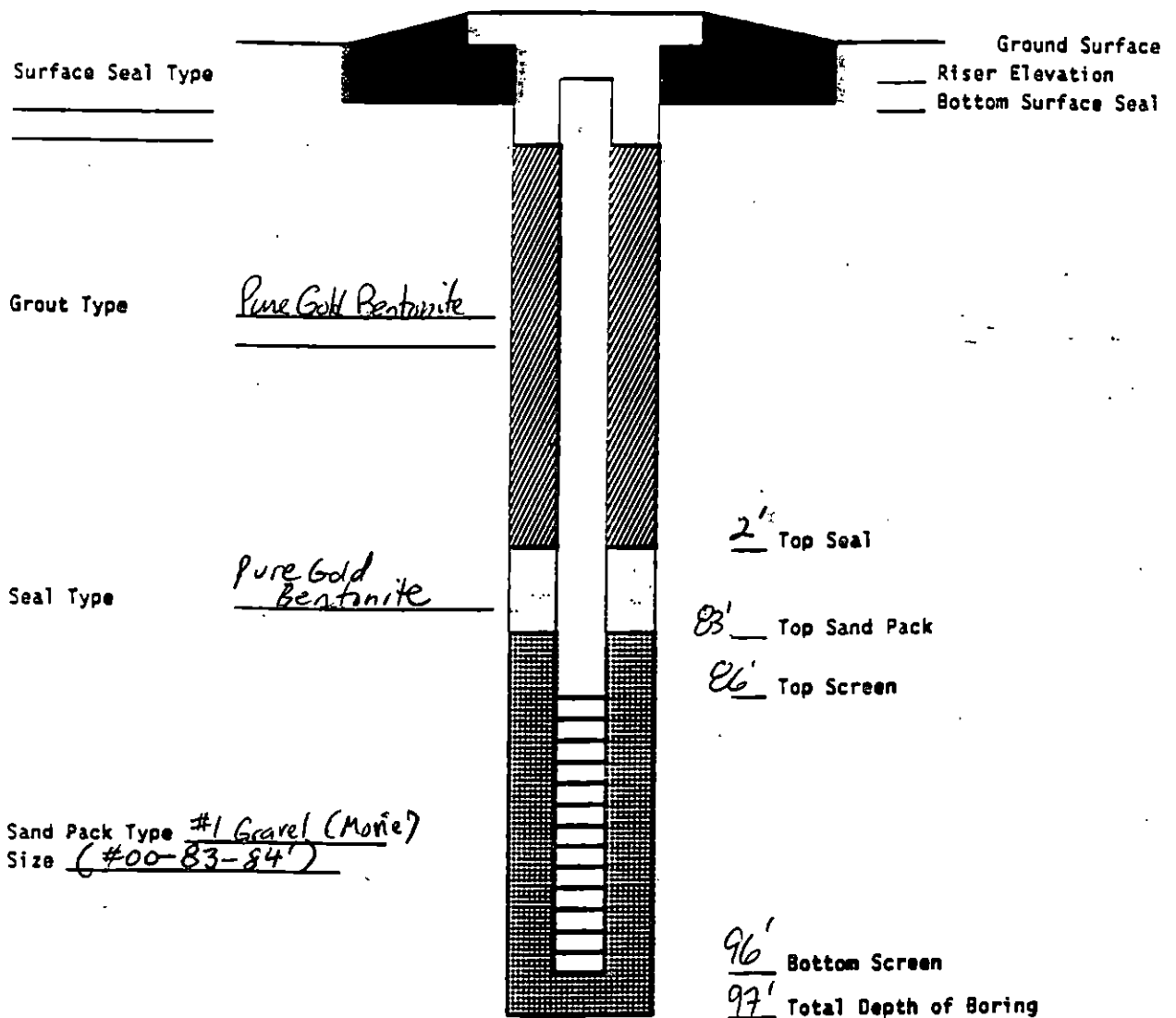


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WELL CONSTRUCTION LOG

SITE Sonia Road Landfill JOB NO. 1445 WELL NO. MW-10D
TOTAL DEPTH 96' SURFACE ELEV. 56.83 TOP RISER ELEV. 56.34
WATER LEVELS (DEPTH, DATE, TIME) 7.06 11/4/97 DATE INSTALLED 10/15/97
RISER DIA 4" MATERIAL PVC LENGTH
SCREEN DIA 4" MATERIAL Stainless Steel LENGTH 10' SLOT SIZE #10

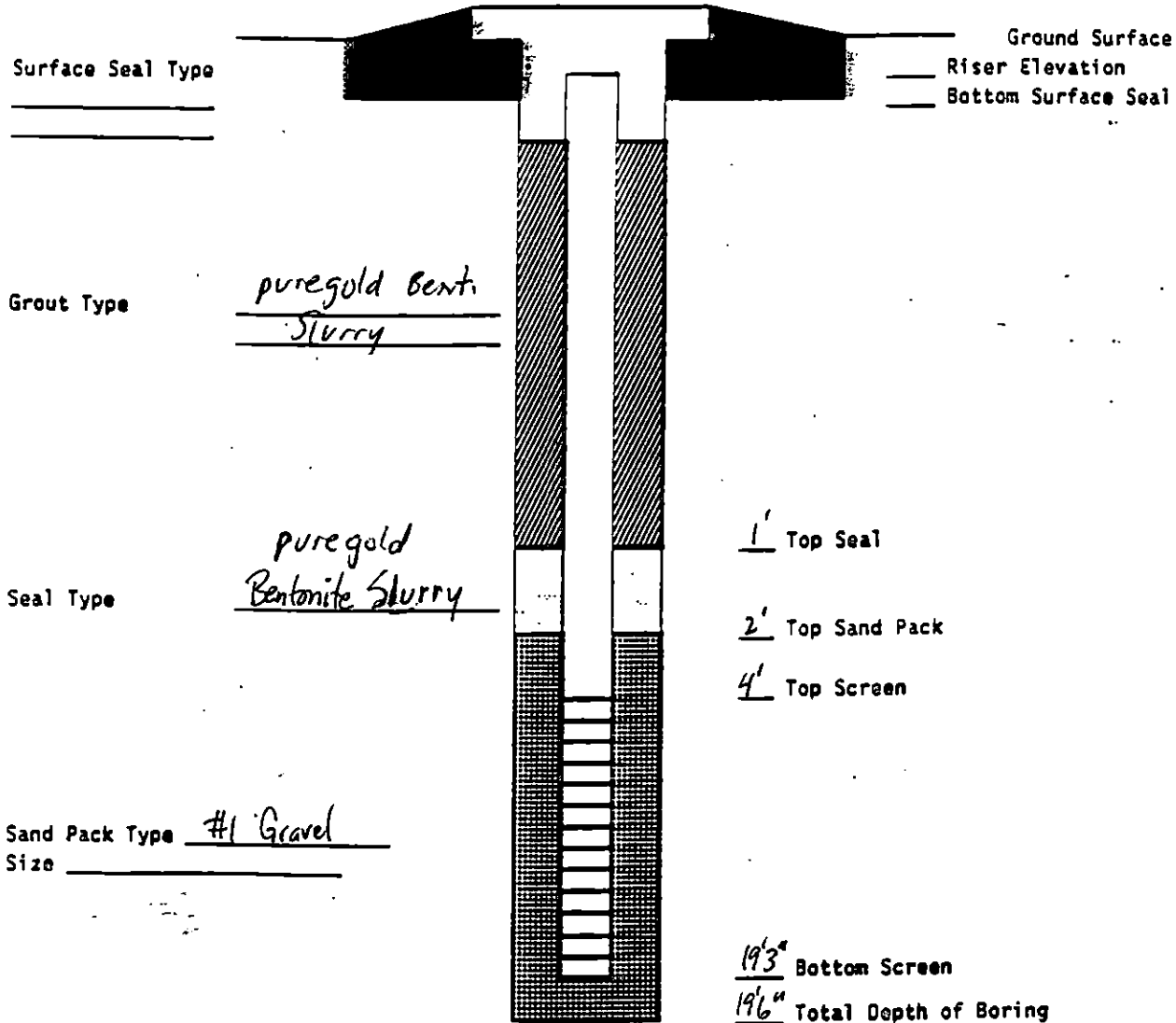
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. 115
TOTAL DEPTH 19'6" SURFACE ELEV. 59.57 TOP RISER ELEV. 59.24
WATER LEVELS (DEPTH, DATE, TIME) 7.93 11/4/97 DATE INSTALLED 10/13/97
RISER DIA 4" MATERIAL PVC LENGTH 4'
SCREEN DIA 4" MATERIAL Stainless Steel LENGTH 15' SLOT SIZE #10

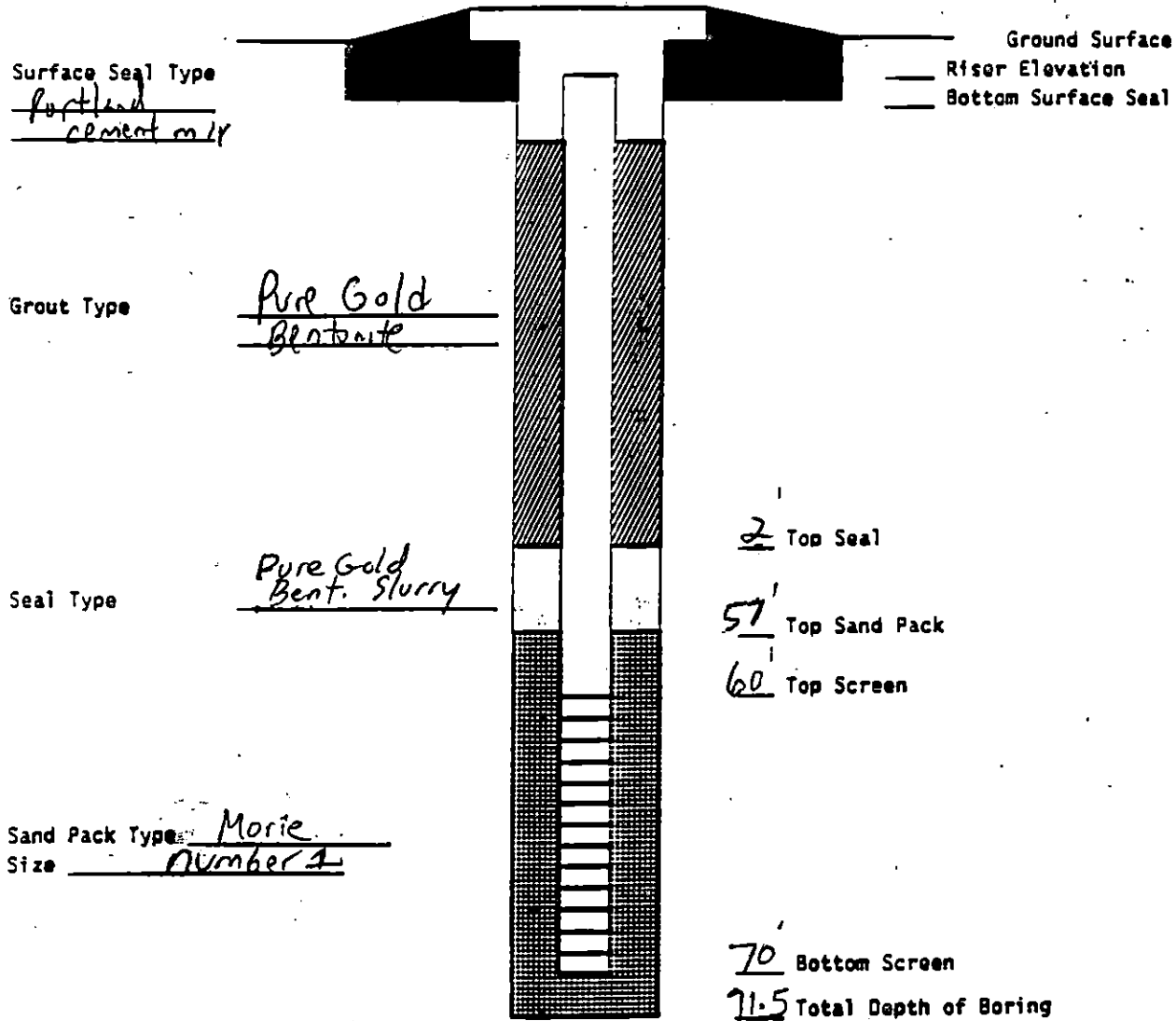
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-011I
TOTAL DEPTH. 70' SURFACE ELEV. 59.26 TOP RISER ELEV. 58.85
WATER LEVELS (DEPTH, DATE, TIME) 7.56 11/4/97 DATE INSTALLED 10/11/97
RISER DIA 4" MATERIAL PVC LENGTH 10'
SCREEN DIA 4" MATERIAL stainless steel LENGTH 60' SLOT SIZE .010

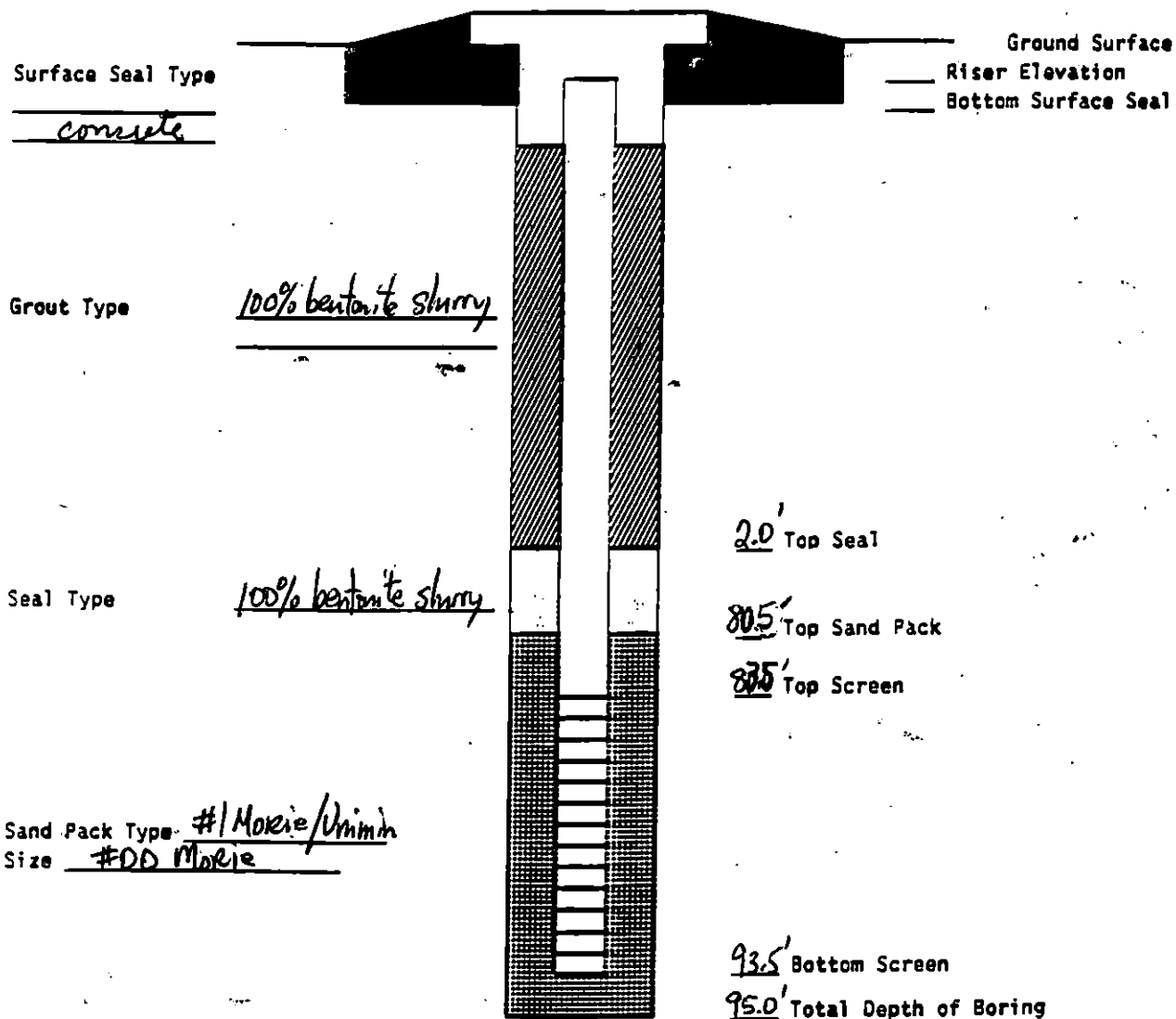
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-11D
TOTAL DEPTH 95.0 SURFACE ELEV. 59.35 TOP RISER ELEV. 59.03
WATER LEVELS (DEPTH, DATE, TIME) 7.72 11/4/97 DATE INSTALLED 10-16-97
RISER DIA 4" MATERIAL PVC LENGTH 83.5'
SCREEN DIA 4" MATERIAL SS LENGTH 10.0' SLOT SIZE 0.010"

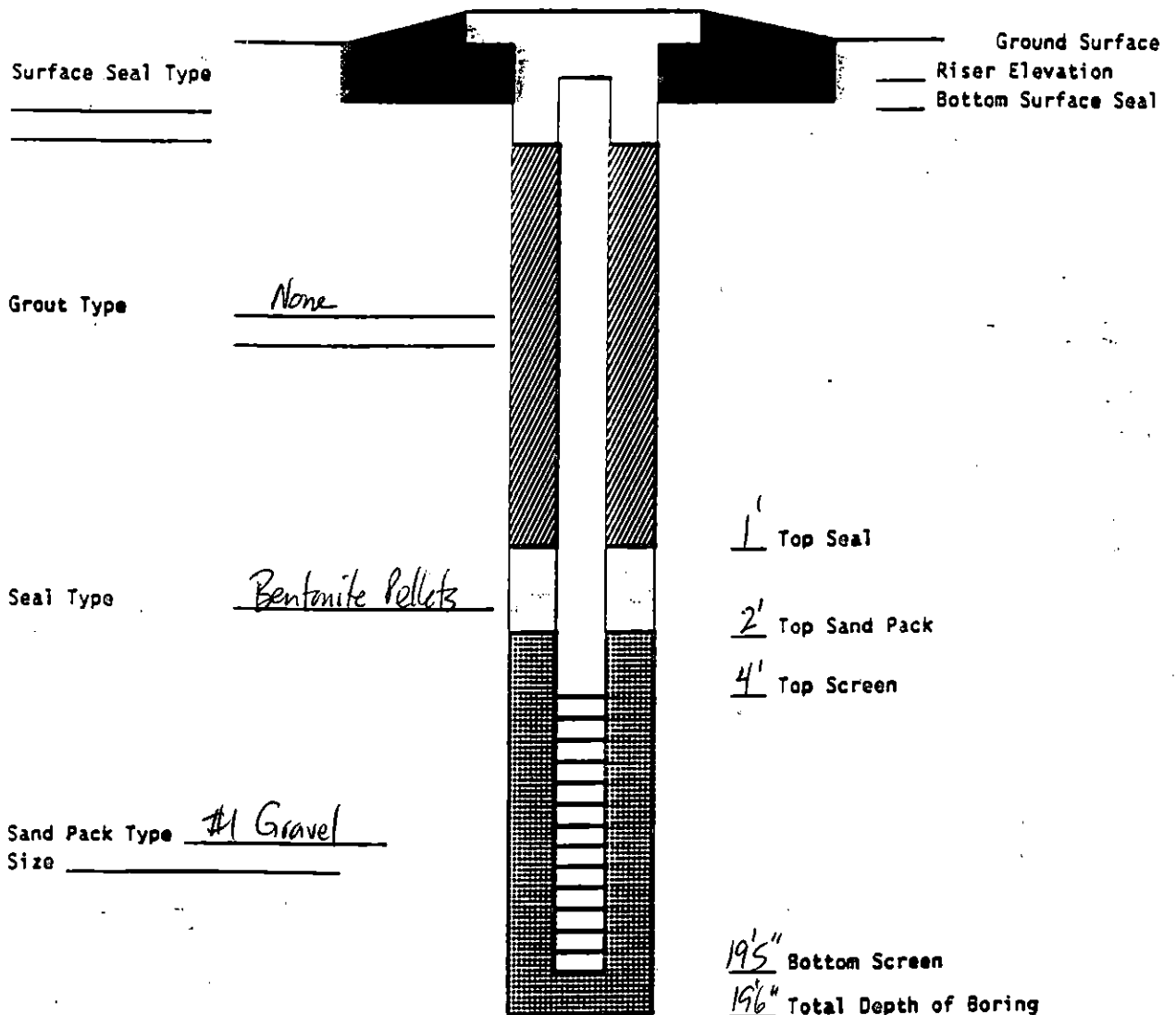
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-125
 TOTAL DEPTH 19'6" SURFACE ELEV. 59.07 TOP RISER ELEV. 58.81
 WATER LEVELS (DEPTH, DATE, TIME) 8.77 11/4/97 DATE INSTALLED 10/13/97
 RISER DIA 4 MATERIAL GPK LENGTH 4'
 SCREEN DIA 4 MATERIAL Stainless Steel LENGTH 15' SLOT SIZE #10

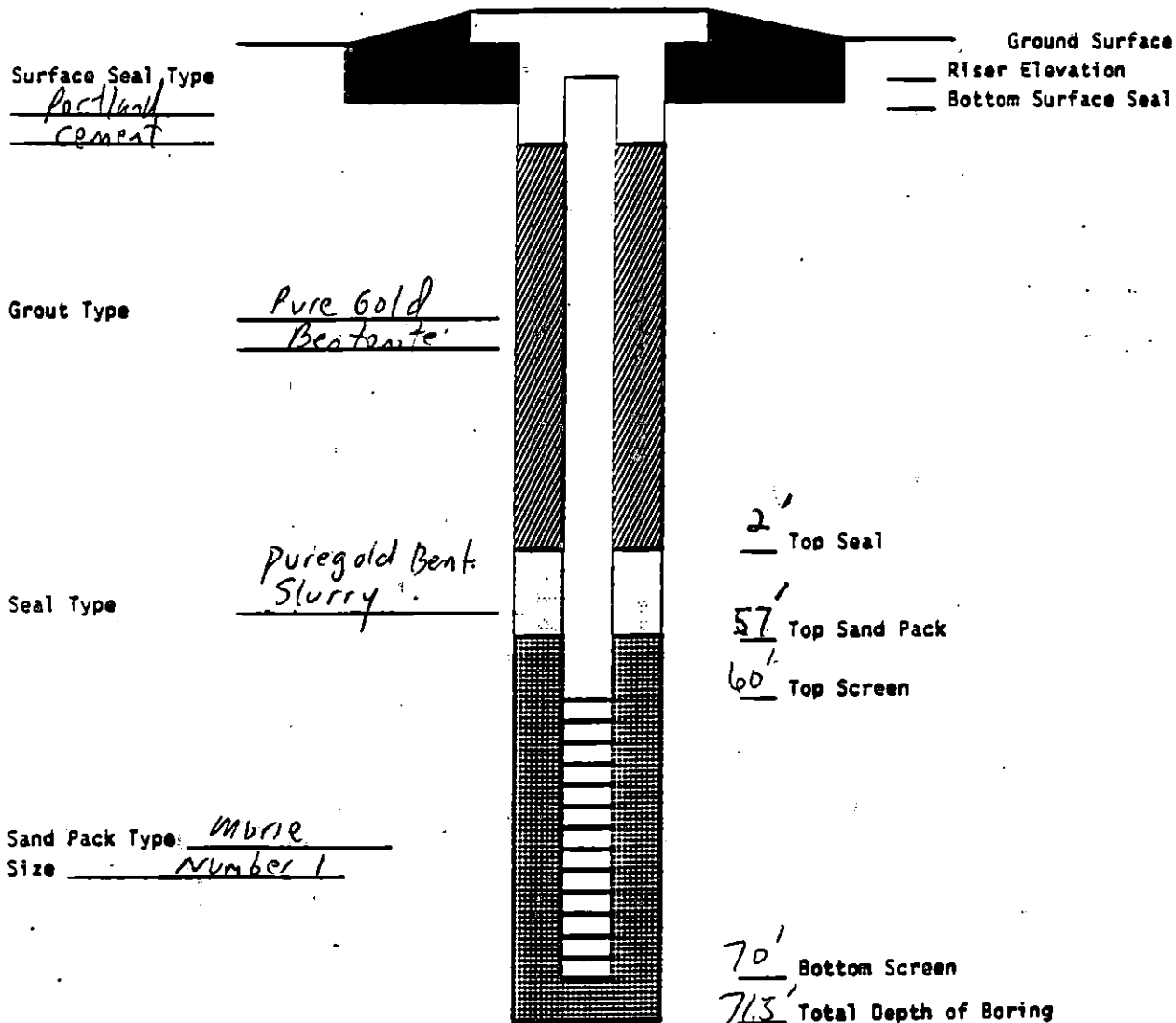
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-127
TOTAL DEPTH 70' SURFACE ELEV. 59.16 TOP RISER ELEV. 58.95
WATER LEVELS (DEPTH, DATE, TIME) 9.11 11/4/97 DATE INSTALLED 10/10/97
RISER DIA 4" MATERIAL PVC LENGTH 60'
SCREEN DIA 4" MATERIAL Stainless Steel LENGTH 10' SLOT SIZE 1010

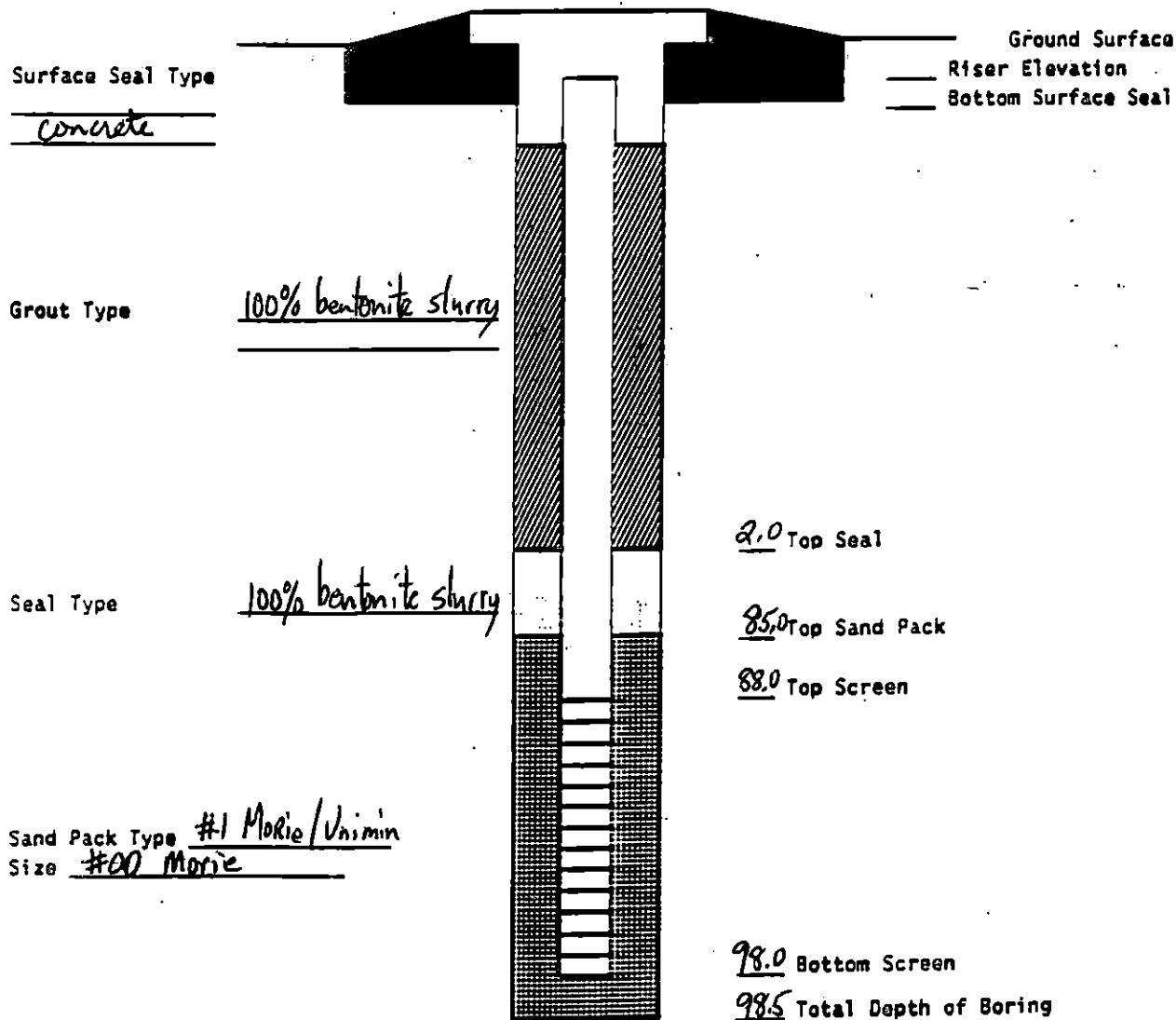
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-12D
TOTAL DEPTH 98.5 SURFACE ELEV. 59.00 TOP RISER ELEV. 58.68
WATER LEVELS (DEPTH, DATE, TIME) 8.81 11/4/97 DATE INSTALLED 10-15-97
RISER DIA 4" MATERIAL PVC LENGTH 88.0
SCREEN DIA 4" MATERIAL SS LENGTH 10.0 SLOT SIZE 0.010"

SCHEMATIC





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WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-0135

TOTAL DEPTH 37' SURFACE ELEV. 70.57 TOP RISER ELEV. 70.50

WATER LEVELS (DEPTH, DATE, TIME) 27 10/8/97 DATE INSTALLED 10/8/97

RISER DIA 4" MATERIAL PVC LENGTH 22'
SCREEN DIA 4" MATERIAL Stainless Steel LENGTH 15' SLOT SIZE 10/10'

SCHEMATIC

Surface Seal Type
Portland
Cement

Grout Type

Pure Gold
Bentonite

Seal Type

pure gold Bent.
Slurry

Sand Pack Type MACIE
Size NUMBER # 10

Ground Surface

Riser Elevation

Bottom Surface Seal

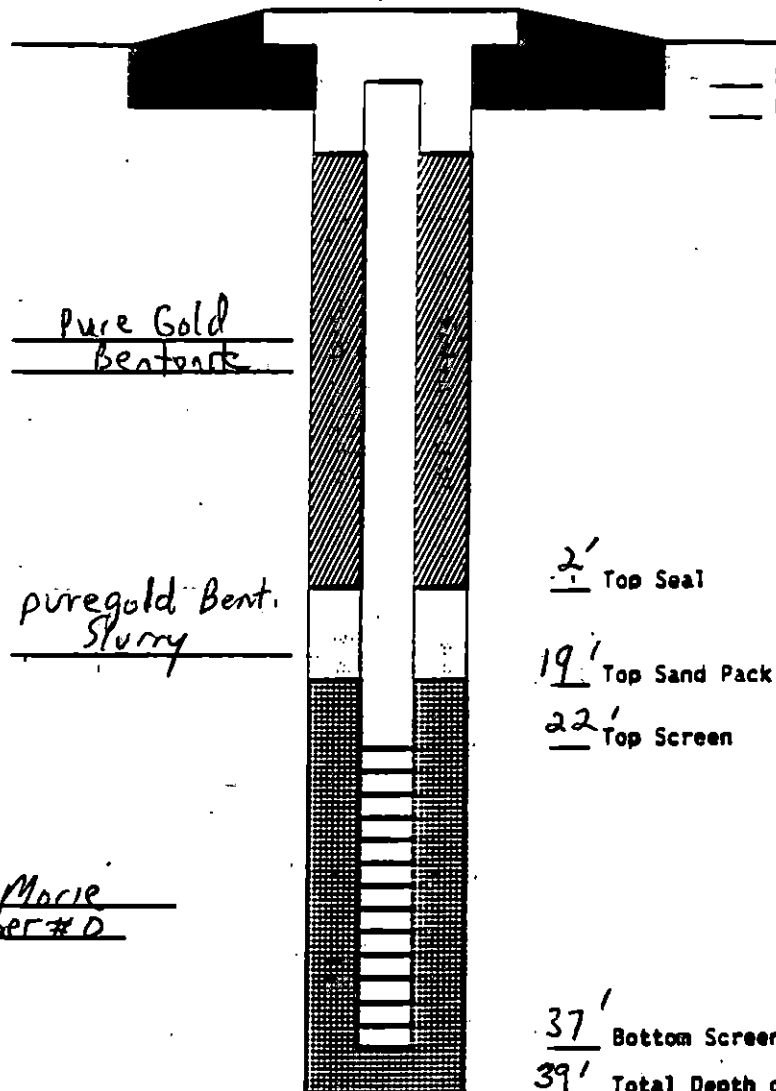
2' Top Seal

19' Top Sand Pack

22' Top Screen

37' Bottom Screen

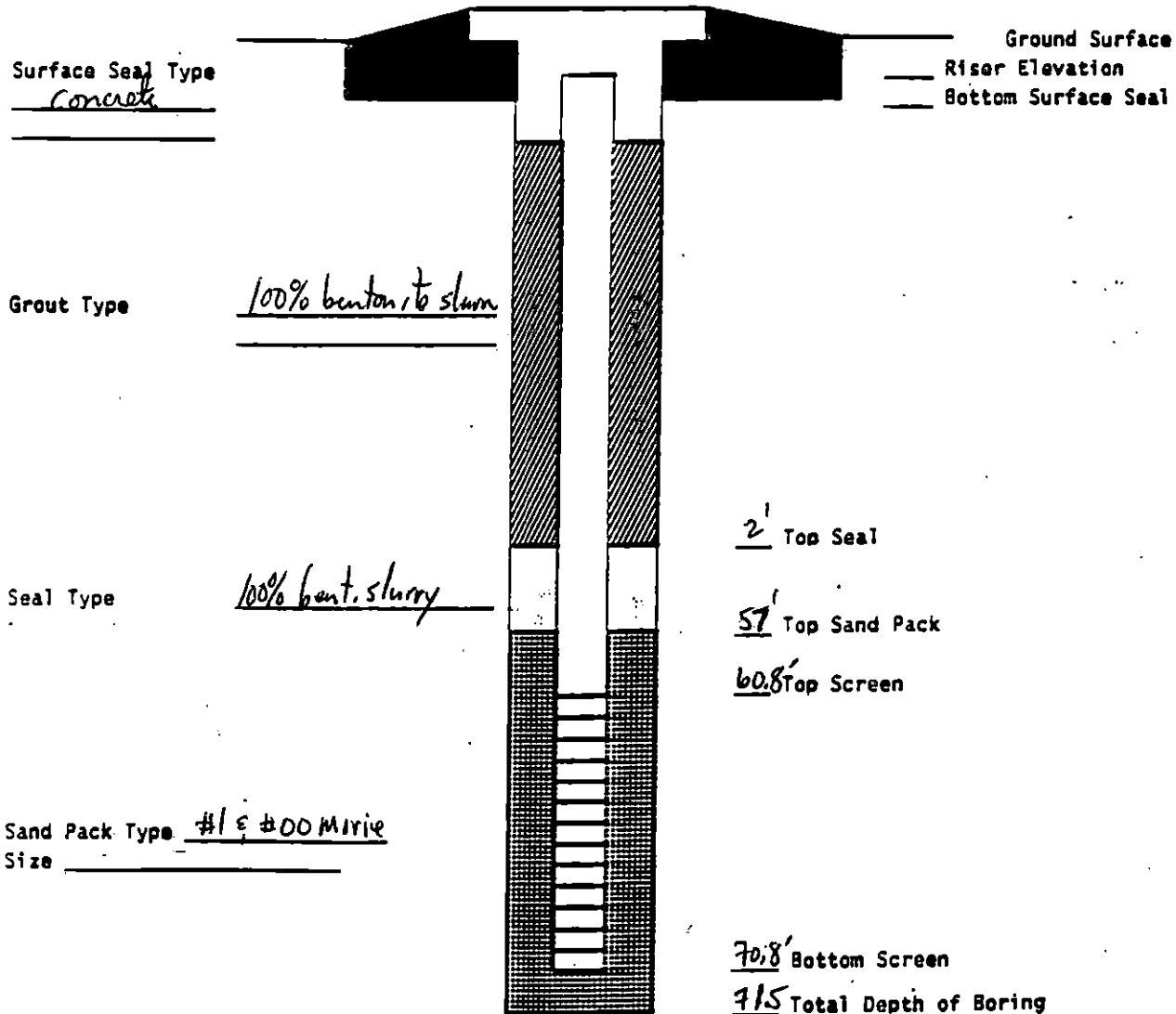
39' Total Depth of Boring



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-13E
TOTAL DEPTH 70.5' SURFACE ELEV. 70.49 TOP RISER ELEV. 70.29
WATER LEVELS (DEPTH, DATE, TIME) 27.2 TOC 27.5 by 10/8/97 DATE INSTALLED 10-7-97
RISER DIA 4" MATERIAL PVC LENGTH 60.0
SCREEN DIA 4" MATERIAL SS LENGTH 10.0 SLOT SIZE 0.010

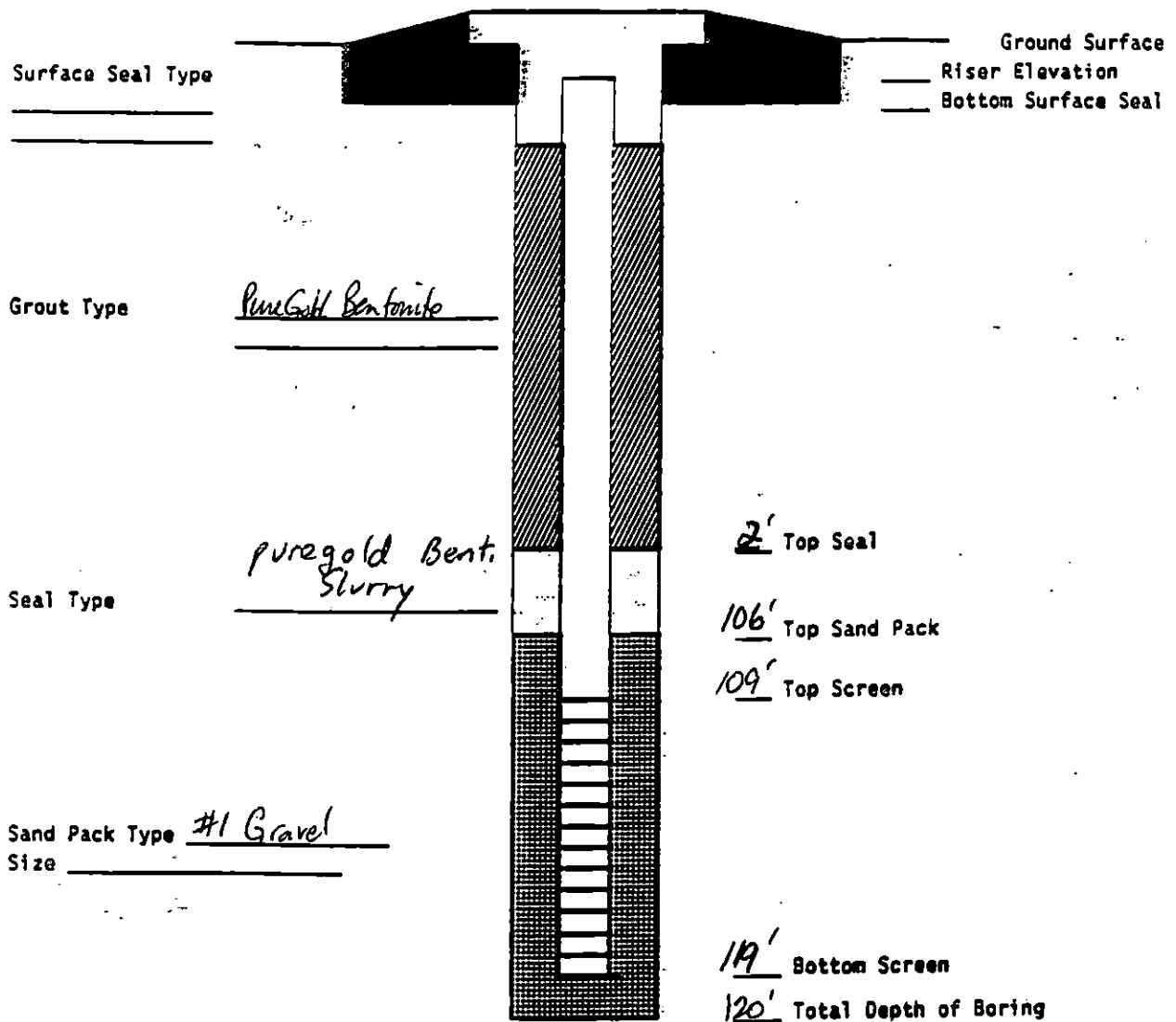
SCHEMATIC



WELL CONSTRUCTION LOG

SITE SOMA ROAD LANDFILL JOB NO. 1445 WELL NO. MW-13D
TOTAL DEPTH 119' SURFACE ELEV. 70.59 TOP RISER ELEV. 70.35
WATER LEVELS (DEPTH, DATE, TIME) 27.69 11/4/97 DATE INSTALLED 12/16/97
RISER DIA 4" MATERIAL PVC LENGTH
SCREEN DIA 4" MATERIAL Stainless Steel LENGTH 10' SLOT SIZE #10

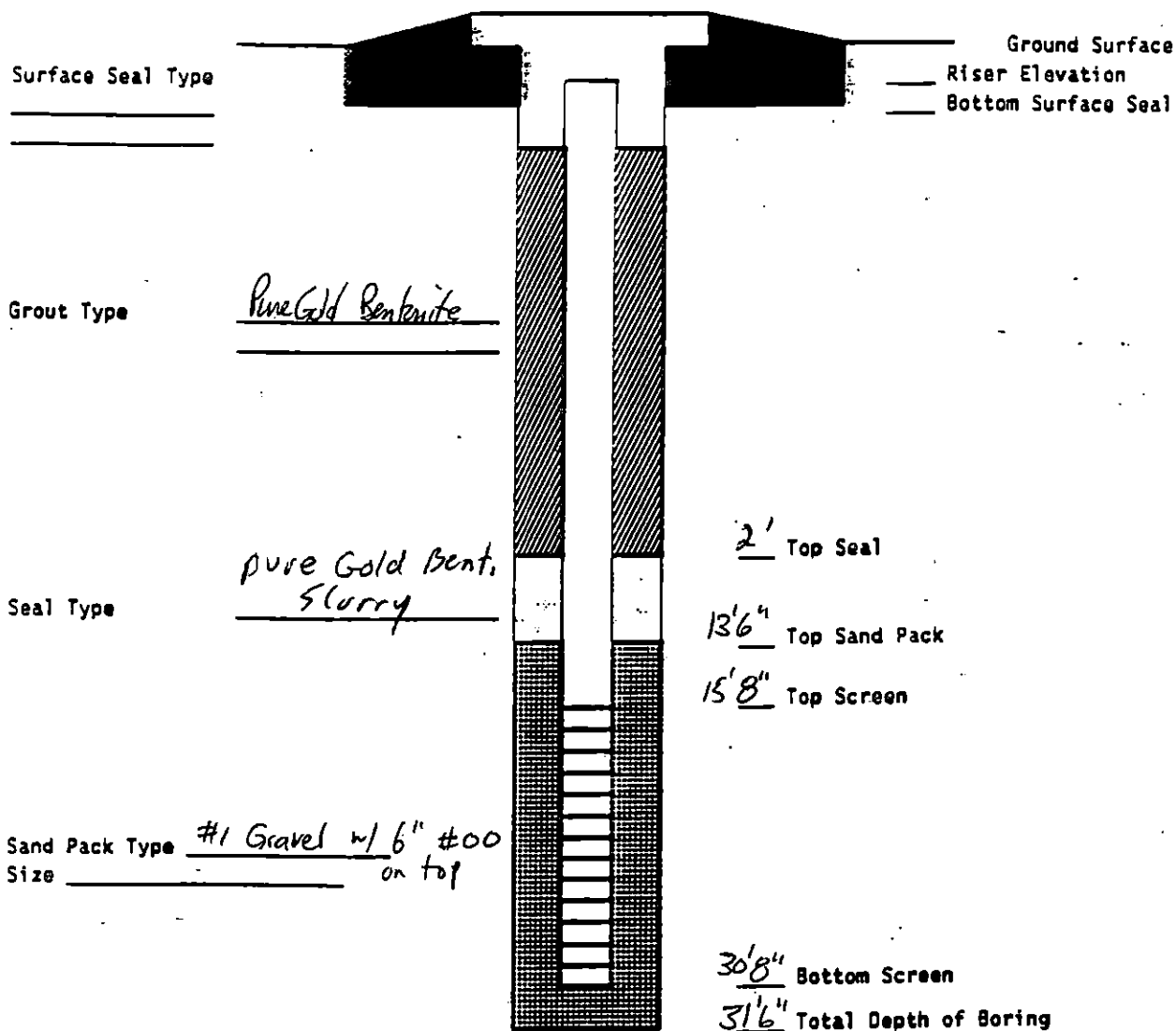
SCHEMATIC



WELL CONSTRUCTION LOG

SITE SONIA ROAD LANDFILL JOB NO. 1445 WELL NO. MW-145
TOTAL DEPTH 30'8" SURFACE ELEV. 64.71 TOP RISER ELEV. 64.55
WATER LEVELS (DEPTH, DATE, TIME) 20.85 11/4/97 DATE INSTALLED 10/14/97
RISER DIA 4" MATERIAL PVC LENGTH 15'6"
SCREEN DIA 4" MATERIAL Stainless steel LENGTH 15' SLOT SIZE #10

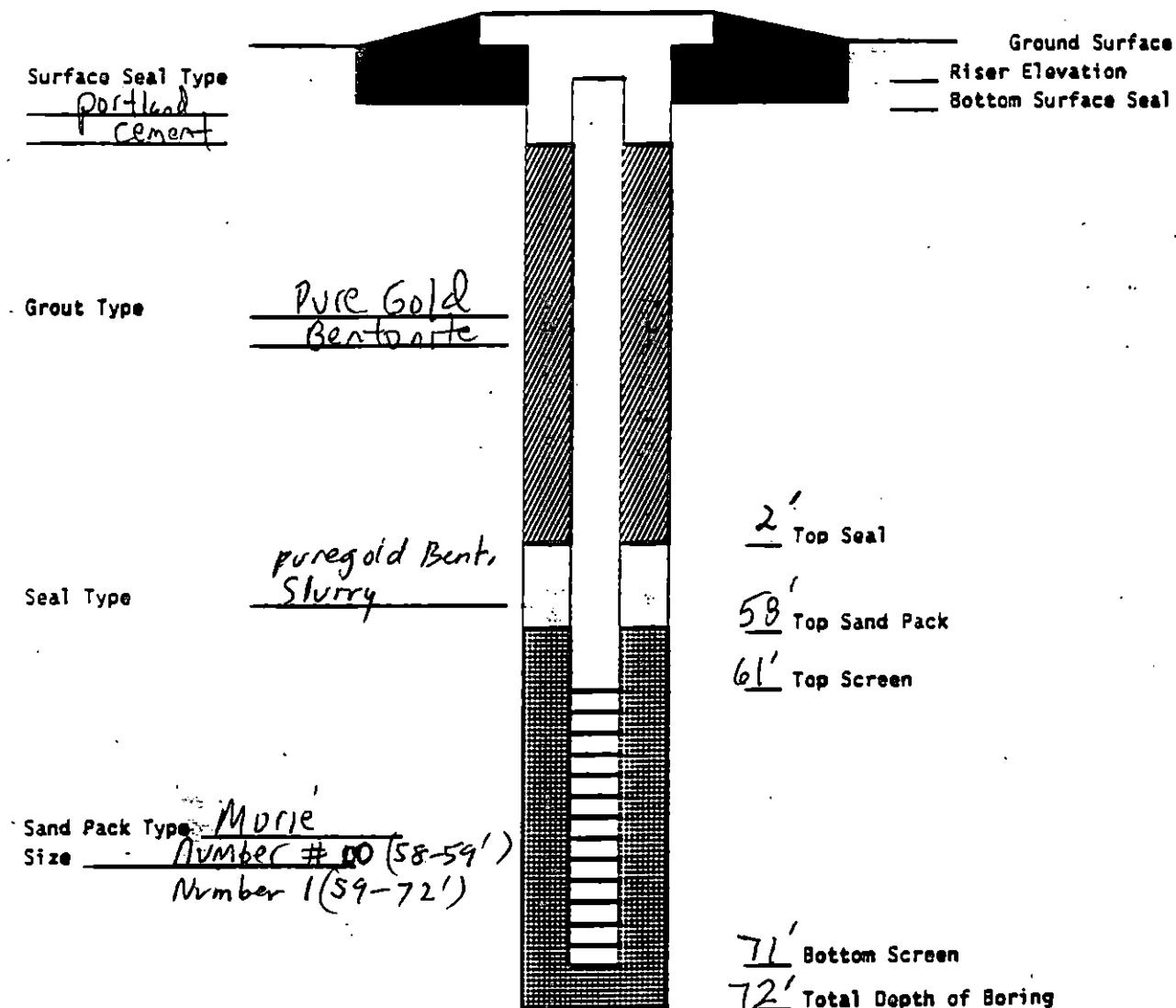
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-0147
TOTAL DEPTH 71' SURFACE ELEV. 64.81 TOP RISER ELEV. 64.58
WATER LEVELS (DEPTH, DATE, TIME) 20.59 10/14/97 DATE INSTALLED 10/9/97
RISER DIA 9" MATERIAL PVC LENGTH 61'
SCREEN DIA 4" MATERIAL STAINLESS STEEL LENGTH 10' SLOT SIZE .010"

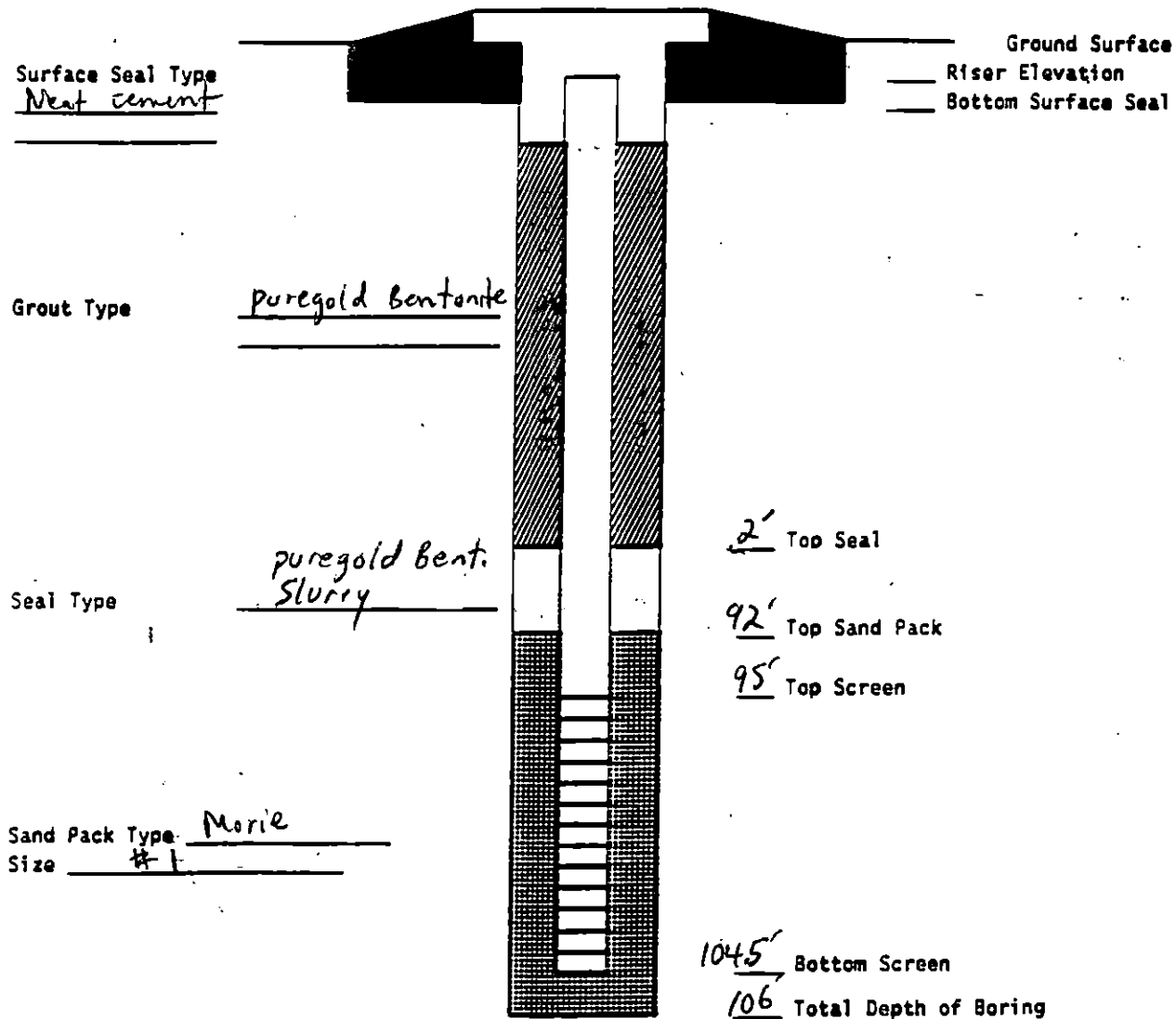
SCHEMATIC



WELL CONSTRUCTION LOG

SITE Sonia Rd. Landfill JOB NO. 1445 WELL NO. MW-14D
 TOTAL DEPTH 105' SURFACE ELEV. 64.91 TOP RISER ELEV. 64.59
 WATER LEVELS (DEPTH, DATE, TIME) 20.84 11/4/97 DATE INSTALLED 10/17/97
 RISER DIA 4" MATERIAL PVC LENGTH 95'
 SCREEN DIA 4" MATERIAL Stainless Steel LENGTH 10' SLOT SIZE 0.010"

SCHEMATIC

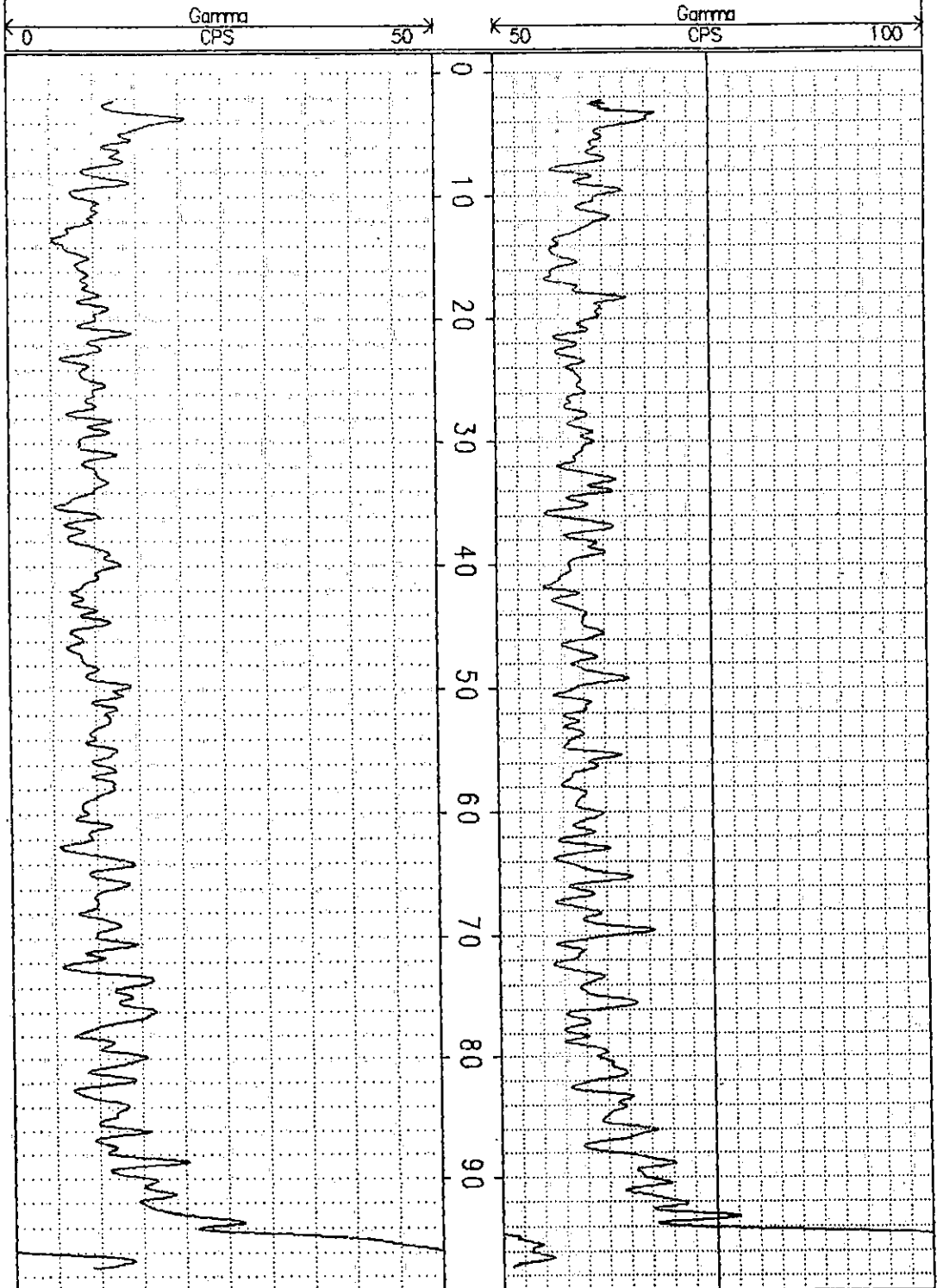


APPENDIX K

GAMMA LOGS

(C:\SONIA\MW01D.AB1)

SONIA ROAD MW01D



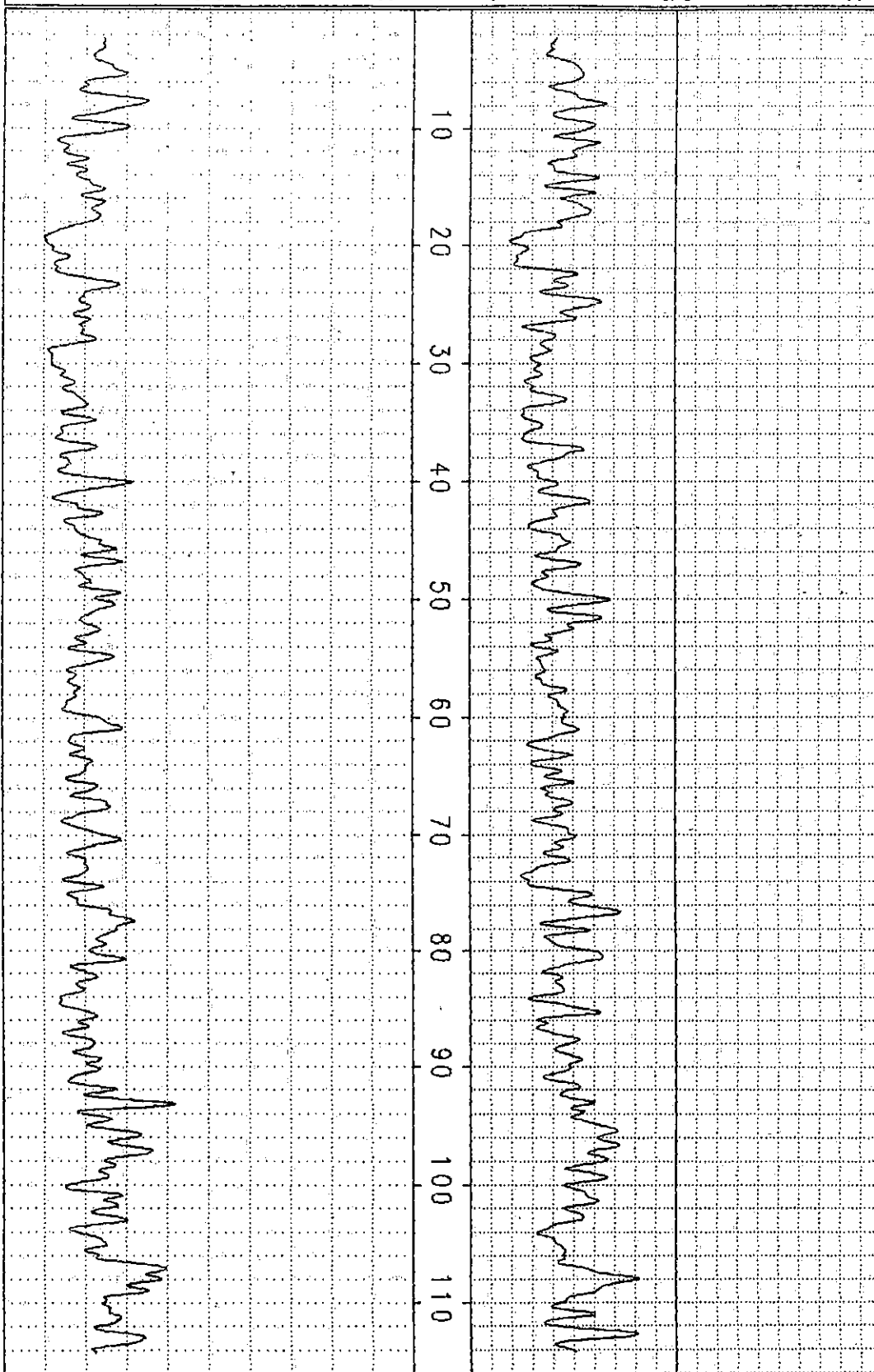
(C:\SONIA\MW01D.AB1)

SONIA ROAD MW01D

(C:\SONIA\MW02D.AB1)

SONIA ROAD MW02D

Gamma CPS 50 0 K 0 Gamma CPS 50



Gamma CPS 50 0 K 0 Gamma CPS 50

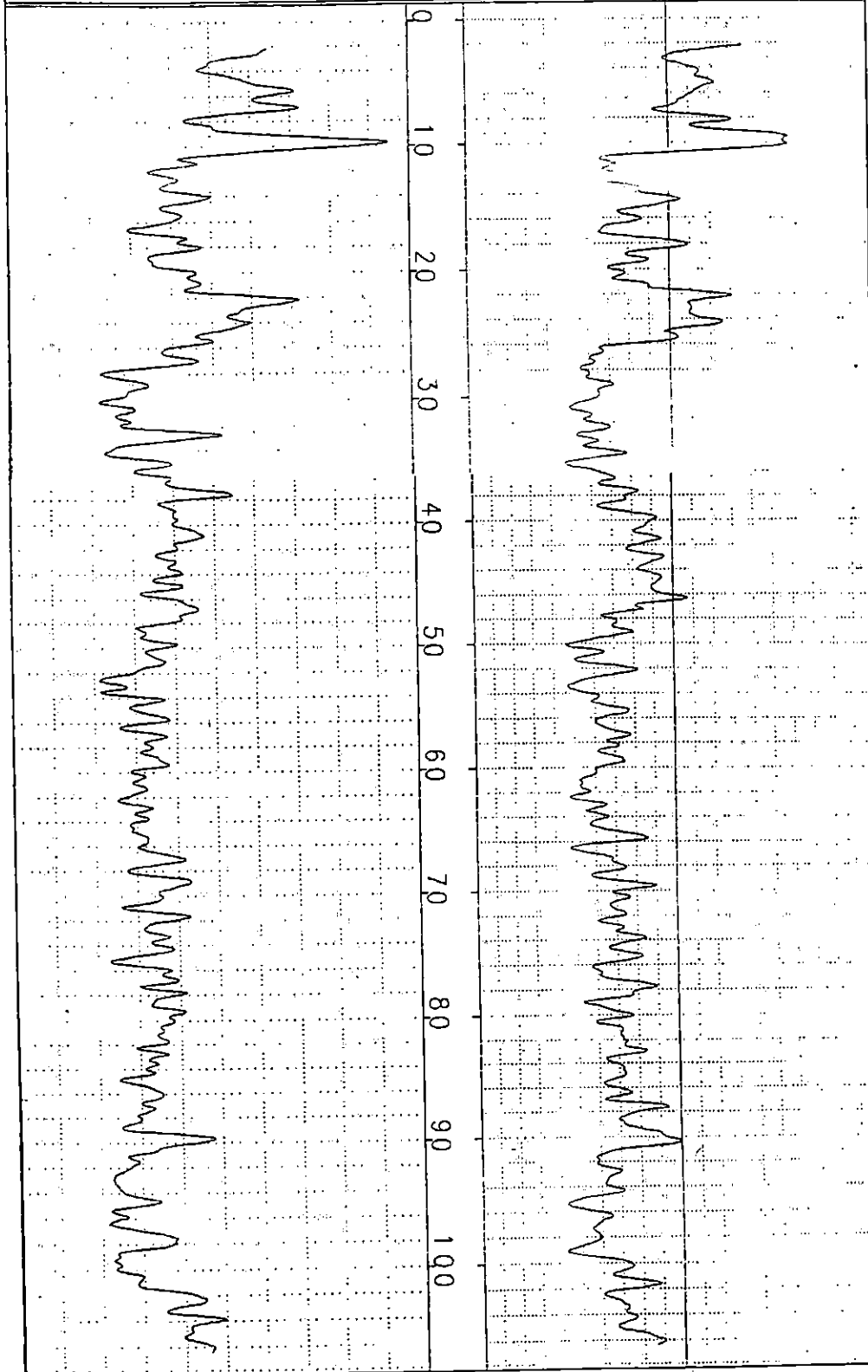
(C:\SONIA\MW02D.AB1)

SONIA ROAD MW02D

(A:\SONIA\MW03D.AB1)

SONIA ROAD MW03D

Gamma CPS 0 50 0 50



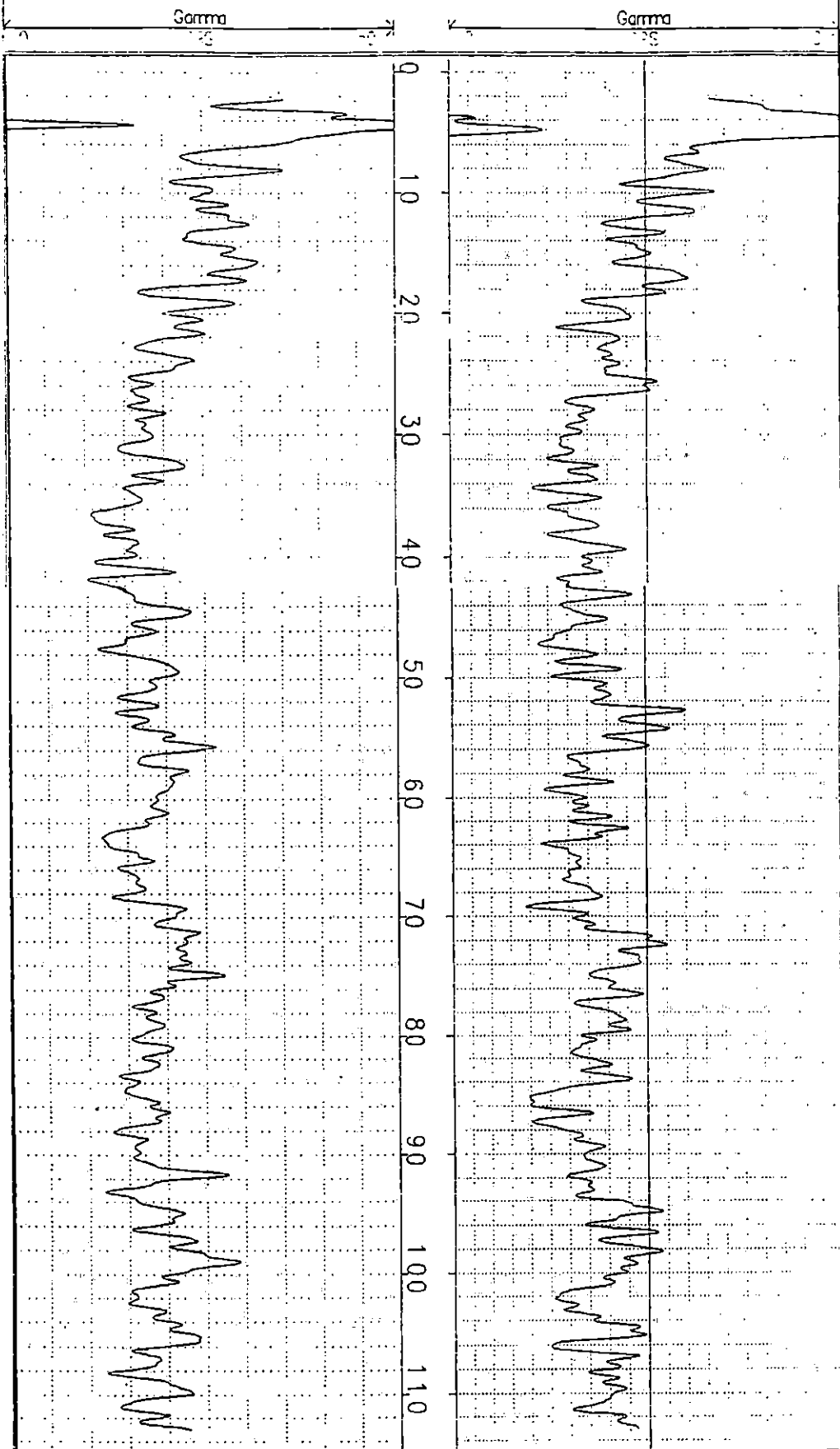
Gamma CPS 0 50 0 50

(A:\SONIA\MW03D.AB1)

SONIA ROAD MW03D

(A:\SONIA\MW04D.AB1)

SONIA ROAD MW04D



Gamma
CPS

50

(A:\SONIA\MW04D.AB1)

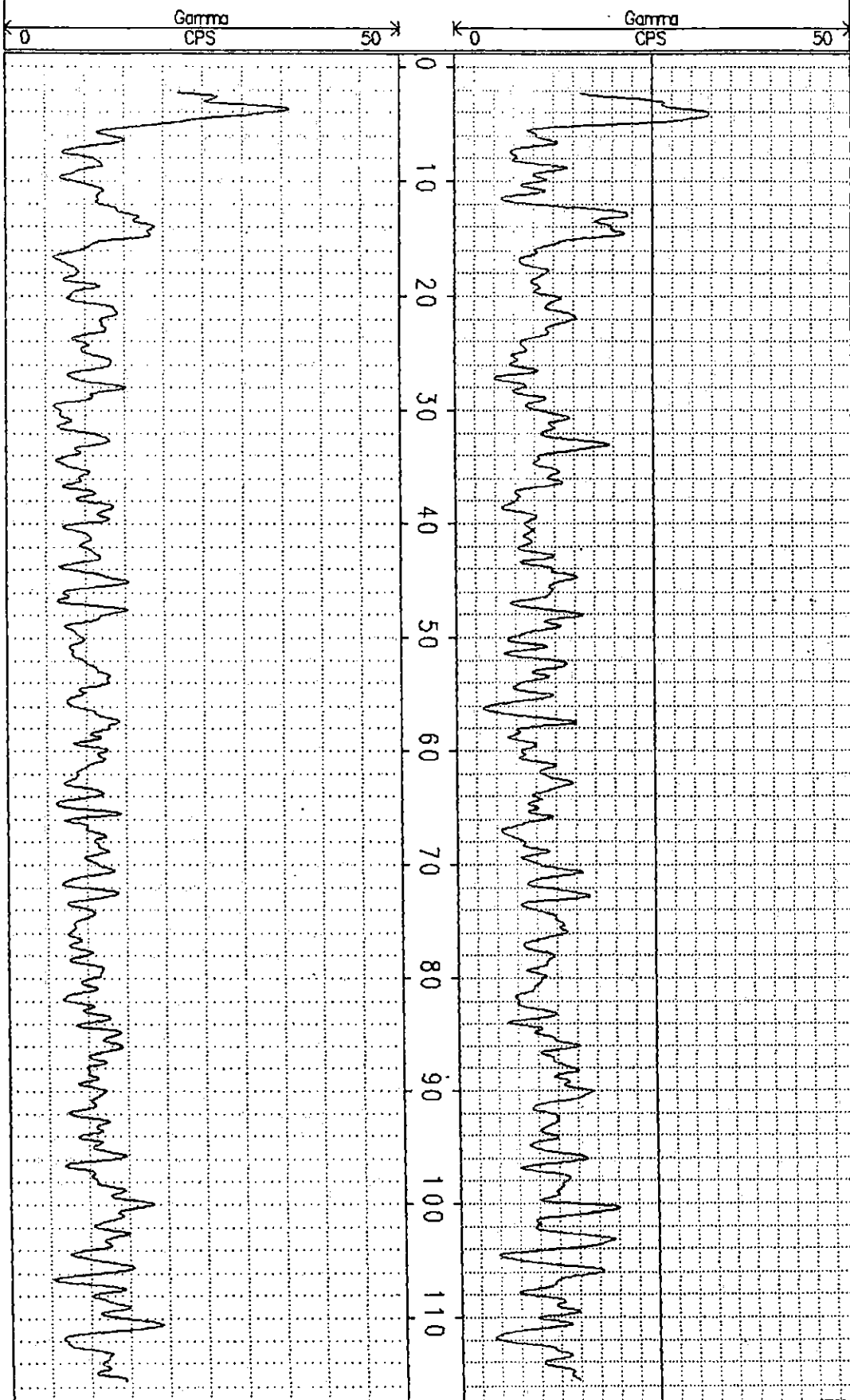
SONIA ROAD MW04D

Gamma
CPS

50

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SONIA ROAD MW05D

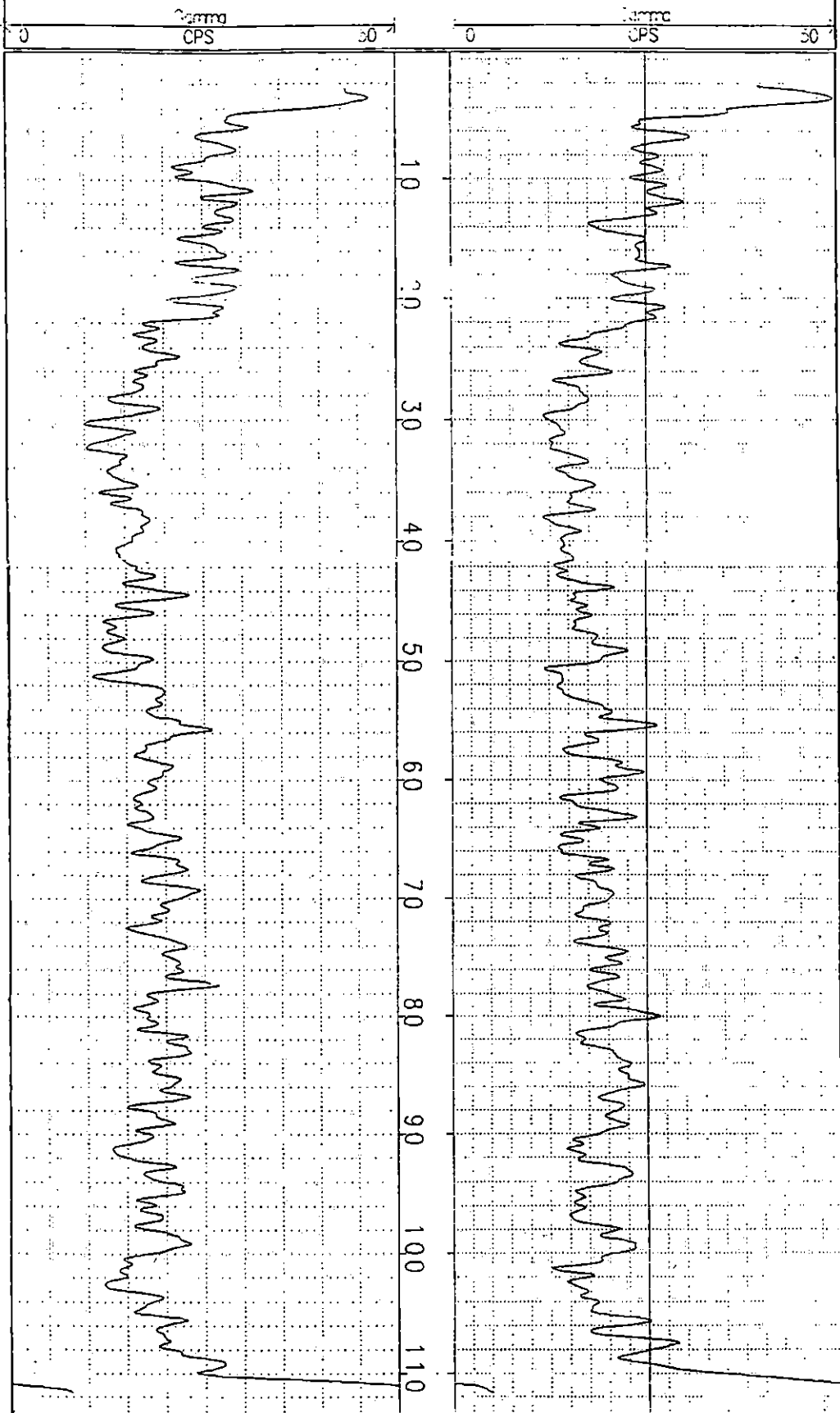


(C:\SONIA\MW05D.AB1)

SONIA ROAD MW05D

(A:\SONIA\MW06D.AB1)

SONIA ROAD MW06D

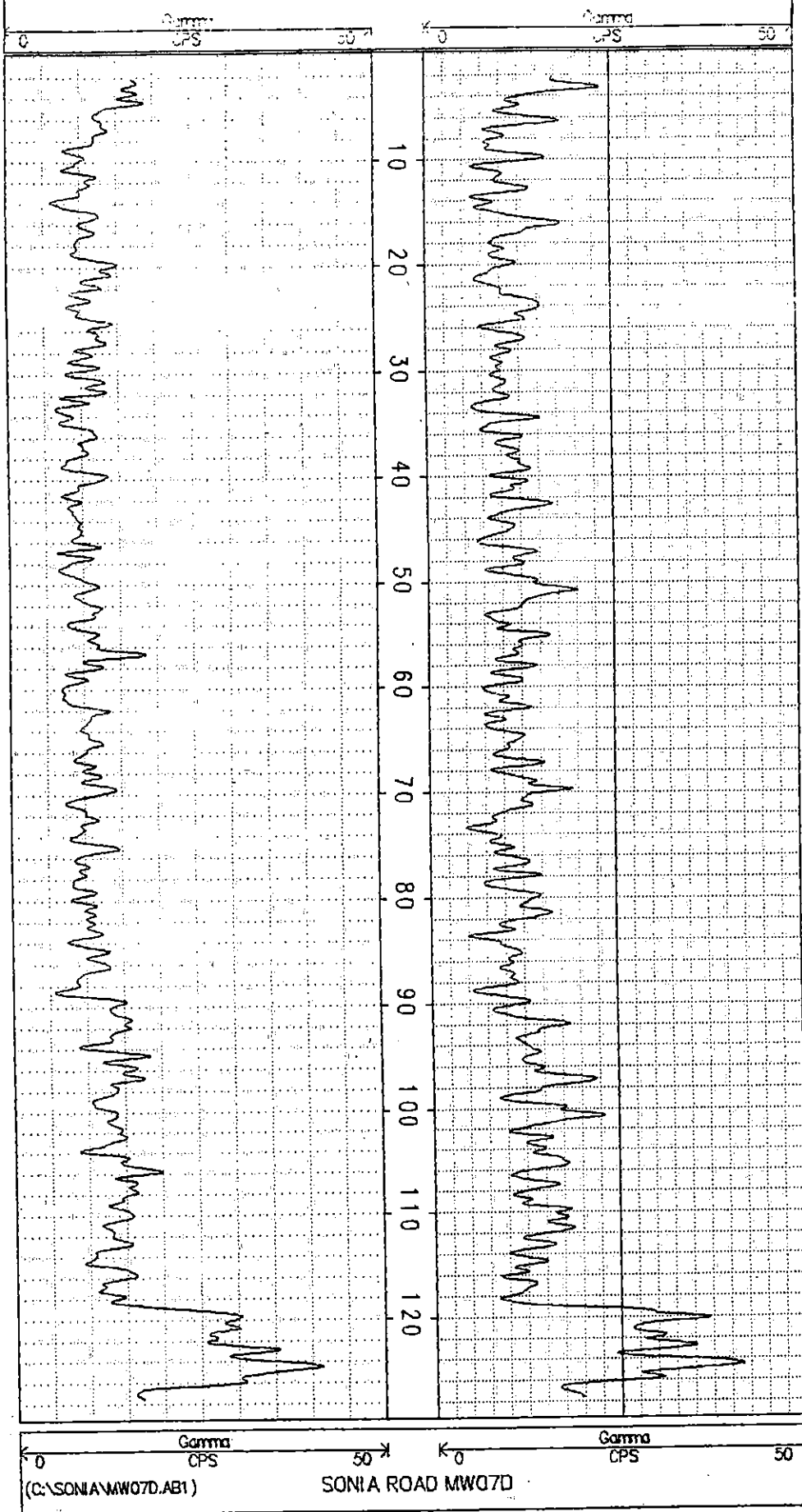


(A:\SONIA\MW06D.AB1)

SONIA ROAD MW06D

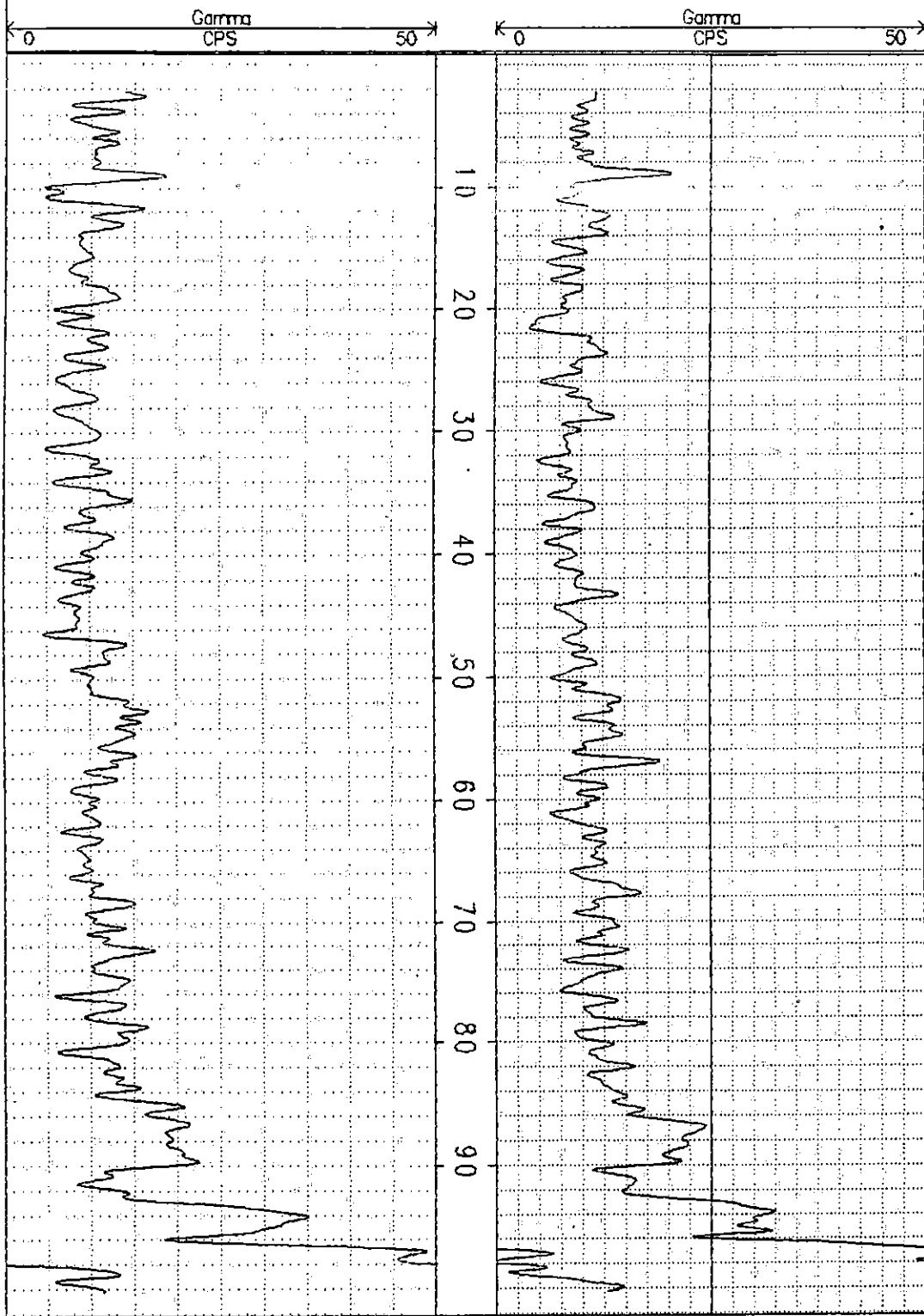
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SONIA ROAD MW07D



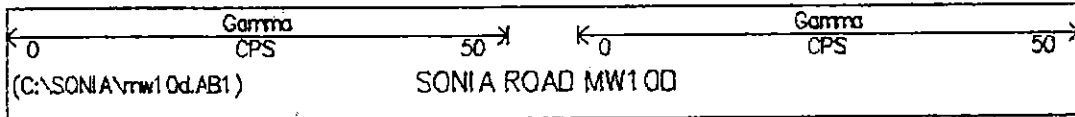
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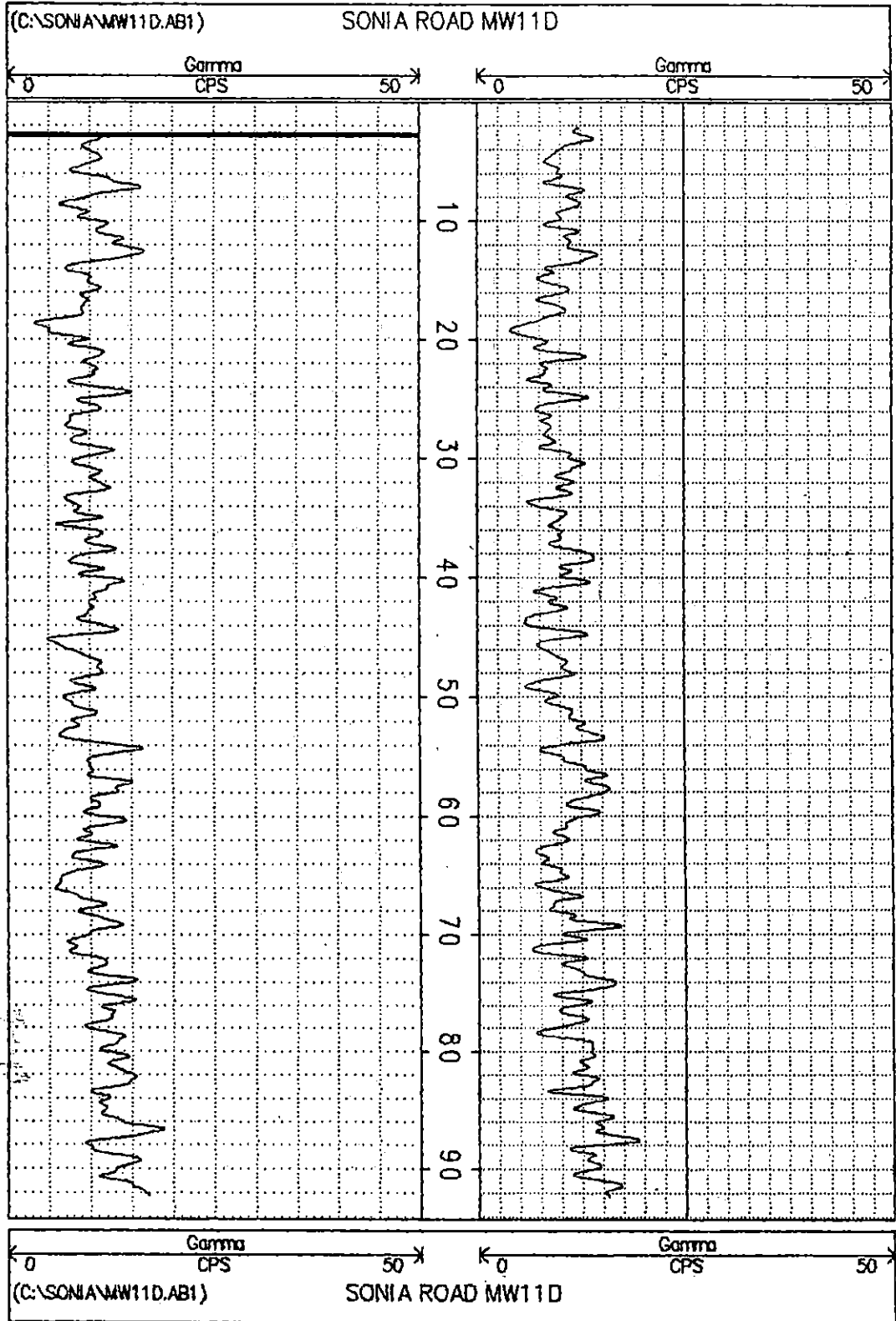
SONIA ROAD MW10D



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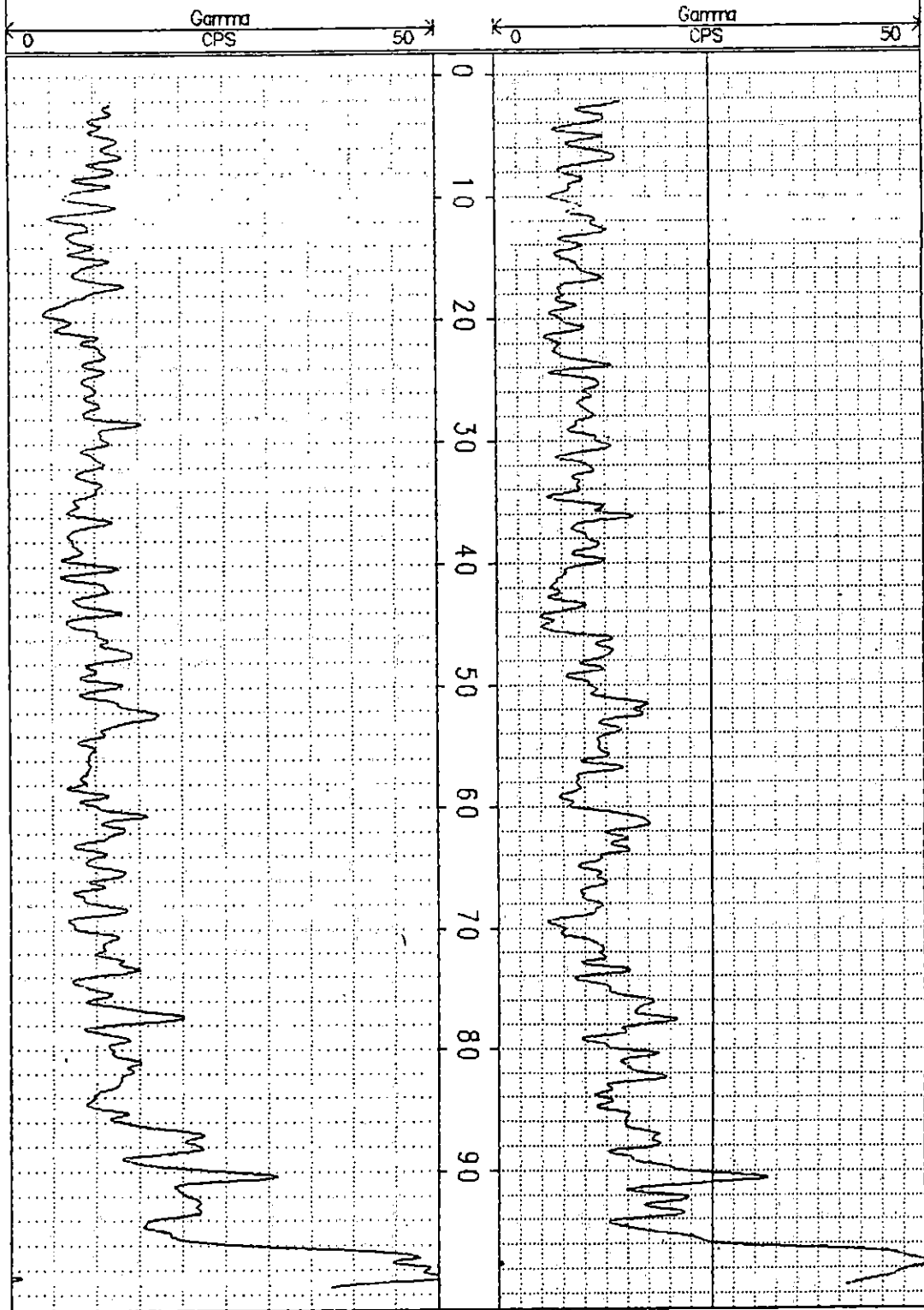
SONIA ROAD MW10D





(C:\SONIA\MW12D.AB1)

SONIA ROAD MW1 2D

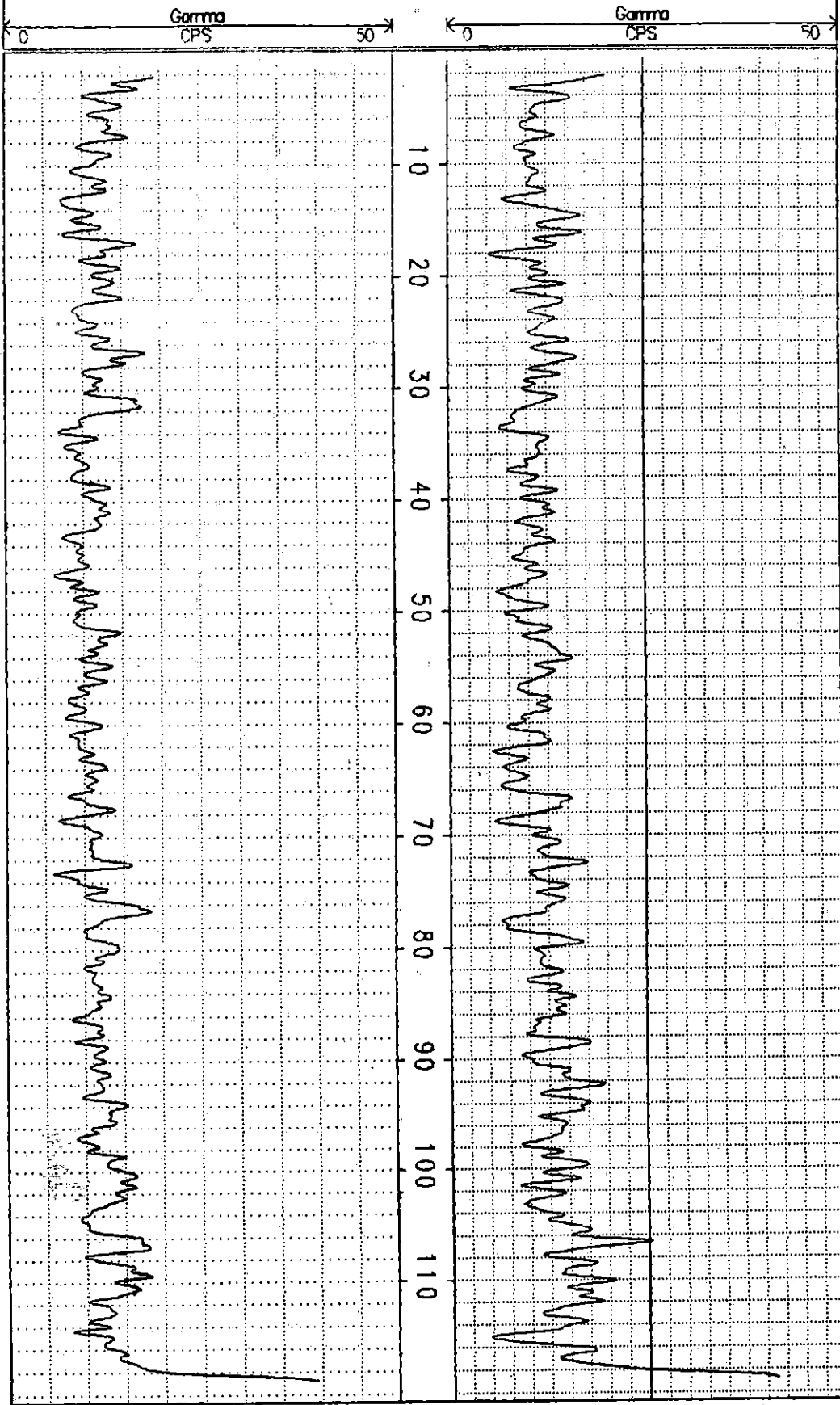


(C:\SONIA\MW12D.AB1)

SONIA ROAD MW1 2D

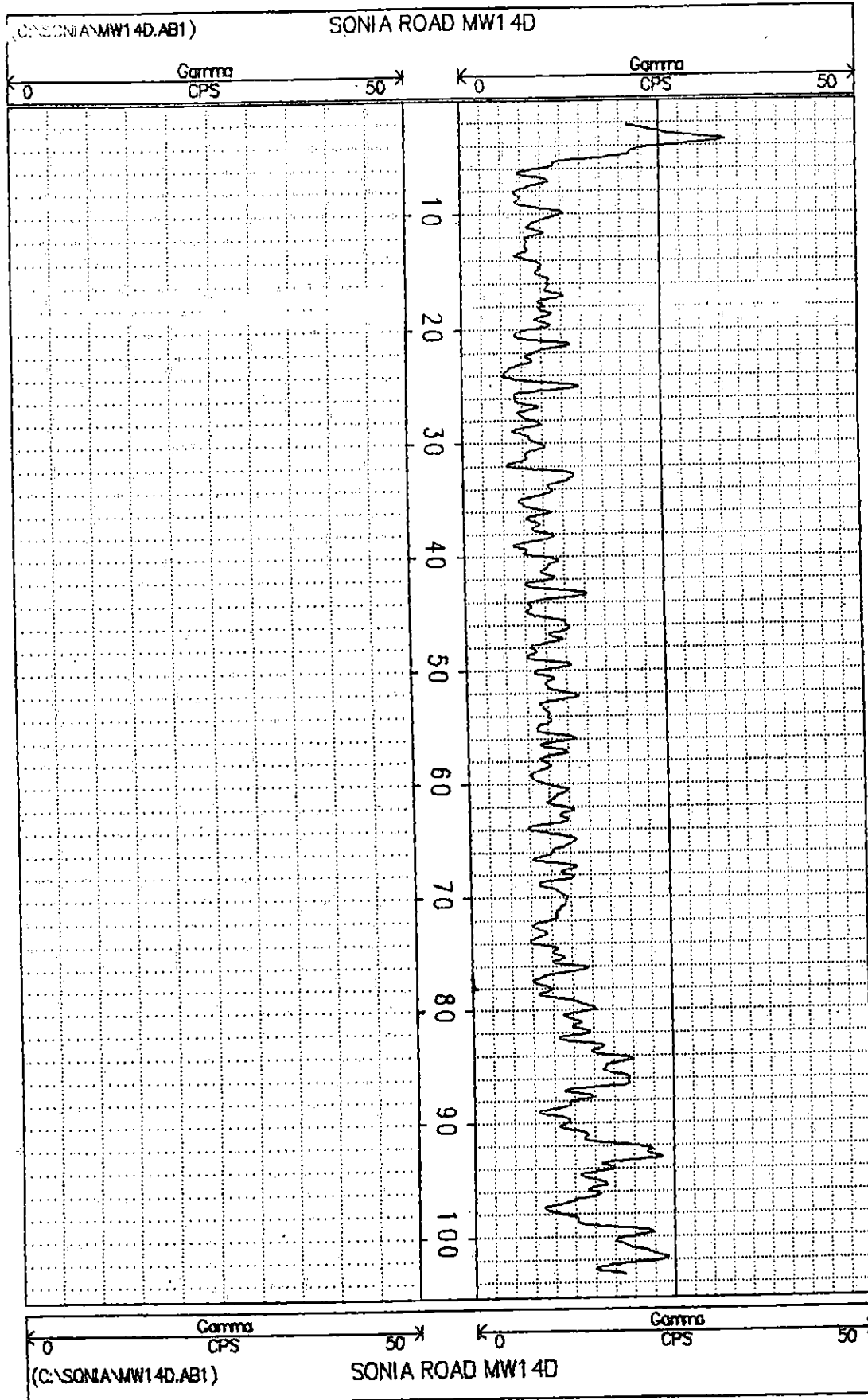
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SONIA ROAD MW1 3D



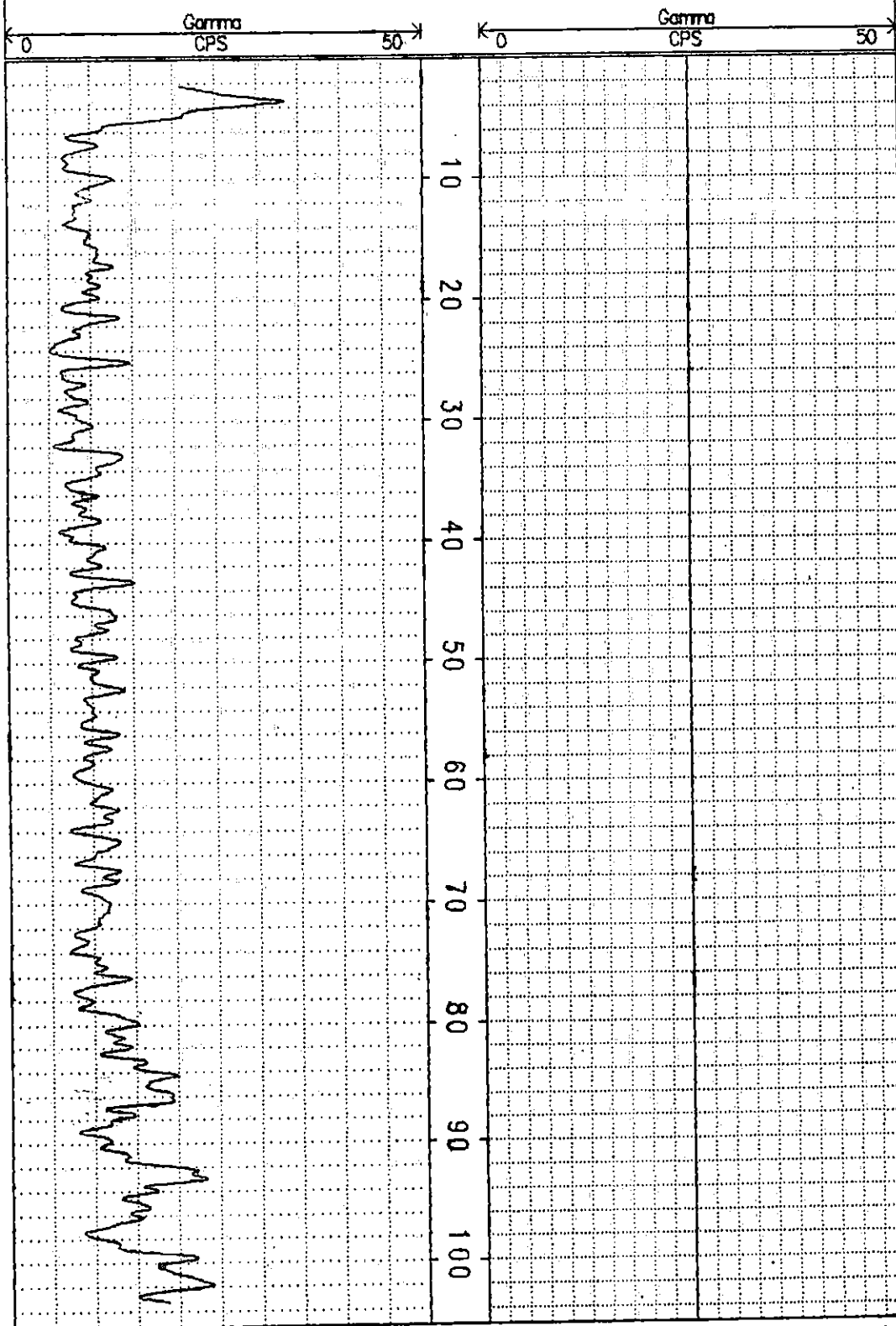
(C:\SONIA\MW1 3D.AB1)

SONIA ROAD MW1 3D



(C:\SONIA\MW14D.AB1)

SONIA ROAD MW1 4D



(C:\SONIA\MW14D.AB1)

SONIA ROAD MW1 4D

APPENDIX L

D&B SEPTEMBER 24, 1997 LETTER TO NYSDEC



**Dvirka
and
Bartilucci**

CONSULTING ENGINEERS

330 Crossways Park Drive, Woodbury, New York, 11797-2015
516-364-9890 • 718-460-3634 • Fax: 516-364-9045
e-mail: db-eng@worldnet.att.net

September 24, 1997

Mr. James Bologna
Department of Environmental Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

Re: Sonia Road Landfill
Remedial Program
D&B 1445 3B

Dear Mr. Bologna:

We have completed the Hydropunch sampling portion of the Sonia Road Landfill Remedial Program and have initiated installation of monitoring wells at the site. Based on the results of the Hydropunch sampling, we are providing herewith our determinations regarding the placement of final wells and depth setting for the intermediate wells.

In accordance with the work plan, groundwater samples were collected from each of the Hydropunch locations at 10 foot intervals from the water table until the Gardiners Clay was encountered. Each groundwater sample was analyzed by portable gas chromatograph and confirmatory samples were provided to H2M Laboratories. Preliminary results from the sampling are provided in the attached tables for your review. Table 1 presents a summary of the gas chromatograph results based on total volatile organic compounds (VOCs) analyzed. A figure providing the locations of the Hydropunch sampling points, and the recommended modifications of well locations are also provided.

The following provides the pertinent information for each well cluster location. The well clusters have been discussed in the order of their installation:

MW-3 deep well/no change: Based upon the results of H3, the elevated levels of VOCs detected in the deep sample warrant installation of the deep well in this cluster. In addition, a shallow and intermediate well exist at this location. This well is currently being installed.

MW-6 cluster/no change: Based upon the results of the H7 location, significantly elevated levels of VOCs have been detected on the eastern edge of the landfill. This cluster is appropriately

Mr. James Bologna
Department of Environmental Remediation
New York State Department of Environmental Conservation
September 24, 1997

Page Two

located to further investigate this contamination, as well as impacts from the landfill. Construction of the shallow well in this cluster location will be initiated today.

MW-7 cluster/change: This cluster will be moved appropriately 100 feet to the northeast in order to place the wells out of waste. This well will be located to determine groundwater quality upgradient of the landfill.

MW-4 intermediate and deep wells/change: Although these two well were originally designated to be installed in the vicinity of the shallow well already in place, due to the significantly elevated levels of VOCs detected in the H7 location in the deeper zones, we recommend moving the intermediate and deep wells in this cluster to be approximately 50 feet north of the H7 location to have permanent monitoring points at this location. This would move the MW-4 location approximately 200 feet to the east.

MW-2 intermediate and deep wells/no change: This location would serve as an upgradient point to the new MW-4I and MW-4D location. Therefore, this location would not need to be modified.

MW-5 cluster/change: Based upon the elevated levels detected at the H5, H6 and H7 locations, we recommend moving this location approximately 100 feet to the east to place this cluster between the MW-3 and new MW-4 location. This would still provide coverage along the southern boundary downgradient of the site, approximately every 500 feet (~550 feet) and therefore, would still meet the intended Part 360 post closure monitoring requirements.

MW-8 cluster/change: Since very low levels of VOC contamination have been detected at this location (H1) and this location is not hydrologically downgradient of the landfill, it is recommended not to install the cluster at this location, but perhaps move this location to a new downgradient location, in the vicinity of S62720, to better define downgradient water quality.

MW-10 cluster/no change: This cluster will need to be installed on the western side of Corbin Avenue due to overhead utility lines. It will be an upgradient cluster for MW-3, cluster and therefore, would remain in the same location.

MW-9 cluster/change: Monitoring well 1 has been found to be intact. Therefore, this cluster will be moved to complete monitoring well 1 location as a cluster.

MW-13 cluster/change: Based upon the results of the Hydropunch sampling we recommend moving MW-13 approximately one block east of MW-14 (~ 2200 feet to the east) in order to be directly downgradient of the H7 location and the new MW-4I and MW-4D location.

Mr. James Bologna
Department of Environmental Remediation
New York State Department of Environmental Conservation
September 24, 1997

Page Three

MW-14 cluster/no change: We recommend leaving this cluster at the original location in order to have information downgradient of MW-3 cluster.

MW-11 cluster/change: We recommend moving MW-11 approximately 200 feet to the east to be upgradient of the new MW-9 cluster.

MW-12 cluster/no change: Similarly MW-12, would remain in essentially the same location in order to provide information upgradient of H7/new MW-4 location.

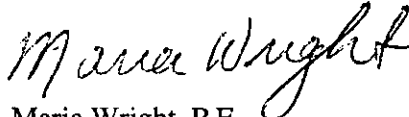
With regard to the depths of the wells, the shallow wells will be screened at the water table approximately 20 to 35 feet below ground surface. Deep wells will be screened just above the Gardiners clay which was encountered approximately 110 feet below ground surface. Therefore the deep wells will be screened from 100 to 110 feet below ground surface.

In addition to the VOC results, we have reviewed the field parameters measured during collection of the groundwater samples in the Hydropunch locations in order to select the depths of the intermediate wells. The results of the field parameters are shown on Table 2. Specifically, we reviewed the conductivity results to identify elevated levels of conductivity that may indicate impacts from the landfill. Based upon the results it appears as though the levels of conductivity decrease after the 63 to 67 foot samples. This interval is also exactly the mid depth between the shallow and deep wells. Therefore, we would recommend installing all of the intermediate wells from 60 to 70 feet below ground surface.

As you are aware, in the best interest in keeping the project on schedule, we are proceeding with the installation of the monitoring wells at an increasingly rapid pace and request any comments on the placement and depths of these wells as soon as possible.

If you have any comments or questions with regard to this matter, please do not hesitate to call me at (516) 364-9890.

Very truly yours,


Maria Wright, P.E.
Project Manager

MW/ld

cc: W. Graner, IRRA
B. Maglienti, IRRA

♦1445\MW97A-04.LTR(R02)

APPENDIX M

CHAIN OF CUSTODY FORMS



CHAIN OF CUSTODY RECORD

NO. 67942

REGULATORY CLASSIFICATION - PLEASE SPECIFY

☐ NPDES ☐ DRINKING WATER ☐ RCRA ☐ OTHER

Dvirka & Bartilucci

Page 1 of 1

14-15-3B | Sonia Rd. Land (S. of Islip)

AMPLERS: (SIGNATURE)

David Jorachovich

CONTAINERS

OF

S
O
I
L

WATER

T01/T02
tenax tube)

1 week turnaround

V-V-1	3/6/97	3:20		Soil Vapor Sample #1 (IEA # 241)

V-V-2		3:40			Soil Vapor Sample #2 (IEA #272)

V-V-3	4:00	Spill Vapor Sample #3 (IEA #140)

V-V-4		4:40		Soil Vapor Sample #4 (IEA #267)

V-V-5	5:00	Soil Vapor Sample #5 (IEA # 218)

V-V-6	5:20	Soil Vapor Sample #6 (IER #221)

V-V-FB	↓	-			Field Blank

IEA QUOTE, NO

IEA RUSH NO

PROJECT MANAGER (PLEASE PRINT)

P O NQ

Daniel Abrahamovich

3/6/97 1800

☐ BOTTLE INTACT ☐ CUSTODY SEALS
☐ PRESERVED ☐ SEALS INTACT
☐ CHILLED ☐ SEE REMARKS

1 week turnaround results

CHAIN OF CUSTODY RECORD

PAGE

OF

NO.

EA JOB #:

CLIENT: DIB (Maria Wright)

PROJECT ID: Sonia Rd LF (R)

EA PROJECT MGR: Johanna DeMatteis

RUSH ☒ YES ☐ NO

DUE DATE

1 Week turnaround

FILE #	CLIENT SAMPLE ID	DATE / TIME	ANALYST	LAB	QC	FIELD FILTERED - CIRCLE Y or N								REMARKS
						Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	Y / N	
1	SS-S-1 (0-2")	2-26-97 / 2:15	AS			+ D.O.	1	2						
2	SS-S-2 (0-2")	↓ 3:00	AS			+ D.O.	1	2						
3	SS-S-3 (0-2")	↓ 3:15	AS			+ D.O.	1	2						
4			A			1	D.O.							
5			A			1	D.O.							
6			A			1	D.O.							
7			A			1	D.O.							
8			S			3	6	D.O.						MS/MSD/S/D D.O.
9			S			1	2	D.O.						
			S			1	2	D.O.						

MATCH CODES

BOTTLES PREPPED BY

DATE / TIME

BOTTLES REC'D BY

DATE / TIME

REMARKS ON SAMPLE RECEIPT

SIGNATURE

SIGNATURE

SAMPLES COLLECTED BY

DATE / TIME

RECEIVED BY

DATE / TIME

SIGNATURE

SIGNATURE

- ☐ BOTTLES INTACT ☐ CUSTODY SEALS
☐ PRESERVED ☐ SEALS INTACT
☐ CHILLED ☐ SEE REMARKS

- AIR S - SOIL
- AQUEOUS SL - SLUDGE
- COMPLEX W - WIPE
- DRUM WASTE O - OTHER
- OIL FB - FIELD BLANK
TR - TRIP BLANK

David Obradovich 2-26-97/16⁰⁰
David Obradovich 2-26-97/16⁰⁰

CLIENT COPY



IEA
An Aquarion Company

3000 WESTON PKWY.
CARY, N.C. 27513
PH # 919-877-0080
FAX # 919-877-0427

CHAIN OF CUSTODY RECORD

NO. 67943

REGULATORY CLASSIFICATION - PLEASE SPECIFY

☐ NPDES ☐ DRINKING WATER ☐ RCRA ☐ OTHER _____

Dvirka & Bartilucci

Page 1 of 1

1445-3B Town of Islip Ed. Landfill

SAMPLERS: (SIGNATURE)

David Orendovich

OF CONTAINERS
SOIL
WATER

TCL-VOCs
Wine Spill Via
TCL SVOCs, PAHs, Cyanide
pesticides, organics

* 1 week turn
for results

SS-S-4 (0-2")	2/27/97	11:00	✓	Surficial soil sample #4	3	✓	1	2											
SS-S-5 (0-2")		11:45	✓	" " " #5	3	✓	1	2											
SS-S-6 (0-2")		12:15	✓	" " " #6	3	✓	1	2											
SS-S-7 (0-2")		12:45	✓	" " " #7	3	✓	1	2											
SS-S-4 (0-2") MS		11:00	✓	" " " #4 MS	3	✓	1	2											
SS-S-4 (2") MS		11:00	✓	" " " #4 MS	3	✓	1	2											

H. Neebe				2/17/97				David Orendovich				2/25/97				IEA QUOTE NO				IEA RUSH NO											
David Orendovich												2/27/97 16:00												WS762261							
PROJECT MANAGER (PLEASE PRINT)																								P.O. NO.							

- ☐ BOTTLE INTACT
- ☐ PRESERVED
- ☐ CHILLED
- ☐ CUSTODY SEALS
- ☐ SEALS INTACT
- ☐ SEE REMARKS

Environmental and Industrial Analytical Laboratory
575 Broad Hollow Road, Melville, N.Y. 11747-5076
(516) 894-3040
FAX: 516-894-4122

Nº 6010

EXTERNAL CHAIN OF CUSTODY

CLIENT COPY

Environmental and Industrial Analytical Laboratory
575 Broad Hollow Road, Melville, N.Y. 11747-5076
(516) 694-3040
FAX: 516-694-4122

EXTERNAL CHAIN OF CUSTODY

CLIENT COPY

Environmental and Industrial Analytical Laboratory
575 Broad Hollow Road, Melville, N.Y. 11747-5076
(516) 894-3040
FAX: 516-694-4122

IRR No 6012
EXTERNAL CHAIN OF CUSTODY

[illegible]

CLIENT COPY

7 Sheffield Avenue, North Babylon, New York 11703
16) 422-5777 • FAX (516) 422-5770

ant: FENLEY + Nicol ENVIRONMENTAL
dress: 445 Brook Ave
Deer Park
one: (516) 586-4500 FAX: (516) 586-4920
rson recelving report: FN
mpled by: KENNETH Blumberg
urce: FN WATER PARK
No.: 9715826

TYPE & NUMBER OF CONTAINERS	
Brown QZ	1602 Plastic
	40mc WAs

[illegible]

Relinquished by: (Signature) <i>Ernest R. [Signature]</i>	DATE/TIME <i>8/1/11</i>	SEAL INTACT ? YES NO NA	Received by: (Signature)	Relinquished by: (Signature)	DATE/TIME	SEAL INTACT ? YES NO NA	Received by: (Signature)
presenting:			Representing:	Representing:			Representing:
Relinquished by: (Signature)	DATE/TIME	SEAL INTACT ? YES NO NA	Received by: (Signature)	Relinquished by: (Signature)	DATE/TIME	SEAL INTACT ? YES NO NA	Received by: (Signature)
presenting:			Representing:	Representing:			Representing:

REMARKS-TESTS REQUIRED	
SPECIAL TURNAROUND SPECIAL G.C. 110	
Iron Test for Iron	
24 Hour Turn Around	

Relinquished by: (Signature) <i>James Beasley</i>	DATE/TIME 8/12	SEAL INTACT ? YES NO NA	Received by: (Signature)	Relinquished by: (Signature)	DATE/TIME	SEAL INTACT ? YES NO NA	Received by: (Signature)
Representing:			Representing:	Representing:			Representing:
Relinquished by: (Signature)	DATE/TIME	SEAL INTACT ? YES NO NA	Received by: (Signature)	Relinquished by: (Signature)	DATE/TIME	SEAL INTACT ? YES NO NA	Received by: (Signature)
Representing:			Representing:	Representing:			Representing:

H2M LABS, INC.

Environmental and Industrial Analytical Laboratory
595 Broad Hollow Road, Melville, N.Y. 11747-5076
(516) 894-3040
FAX: 516-894-4122

No 6195

EXTERNAL CHAIN OF CUSTODY

PROJ. NO. 1445-38		PROJECT NAME Sonia Road Landfill Town of Islip IRRRA			Refrigerator # 										NOTES: * 24 hr. turnaround time for results Please call Maria Wright @ 364-9890 w/ results ASAP Fax results to 364-9045																				
SAMPLERS: (Signature)/Client David Obrendovich / David A. Bertilucci					SAMPLE CONTAINER DESCRIPTION →	1 liter Plastic w/ 4. NO ₂																													
DELIVERABLES:					TOTAL NO. OF CONTAINERS ↓																				ANALYSIS REQUESTED										
																									ORGANIC					INORG.					
DATE	TIME	MATRIX	FIELD I.D.		↓	VDA	BNA	Pest/PCB										LAB I.D. No.	REMARKS																
8/12/97	730	water	F&N water Tank																	TAL Metals															

Relinquished by: (Signature) David Obrendovich		Date 8/12/97	time 1600	Received by: (Signature)		Date	time	PROJECT CONTACT:	
Relinquished by: (Signature)		Date	time	Received by: (Signature)		Date	time	PHONE NUMBER:	
Relinquished by: (Signature)		Date	time	Received for Laboratory by: (Signature)		Date	time	Discrepancies Between Sample Labels and COC Record? Y or N NOTES:	

LABORATORY USE ONLY
 Samples were:
 1) Shipped _____ or Hand Delivered _____
 Ambient @ _____
 2) Ambient or Chilled
 3) Received in Good Condition Y or N
 4) Properly Preserved Y or N
 5) Samples returned to lab. _____ hours from Collection
 COC Tape was:
 1) Present on Outer Package Y or N
 2) Unbroken on Outer Package Y or N
 3) COC Record Present and Complete Upon Sample Rec'd. Y or N

LABORATORY COPY



Receipt for Samples

Project Name: Sonia Road Landfill - RI

Field Log Book Reference Number: p. 96-101

Project Address: Sonia Rd., W. Brentwood, N.Y.

Sampled By: D. Obradorich

Project Number: 1445-36

Split With: 1

[illegible]



Receipt for Samples

Project Name: Sonia Road Landfill - RI

Field Log Book Reference Number: p. 102 - 105

Project Address: Sonia Rd., W. Brentwood, N.Y.

Sampled By: D. Obradovich

Project Number: 1445-3B

Split With: NA

[illegible]

Environmental and Industrial Analytical Laboratory
575 Broad Hollow Road, Melville, N.Y. 11747-5076
(516) 894-3040
FAX: 516-694-4122

IRS
EXTERNAL CHAIN OF CUSTODY

[illegible]

LABORATORY COPY

Environmental and Industrial Analytical Laboratory
575 Broad Hollow Road, Melville, N.Y. 11747-5076
(516) 894-3040
FAX: 516-694-4122

EXTERNAL CHAIN OF CUSTODY

LABORATORY COPY



Receipt for Samples

Project Name: Sonia Road Landfill - RI

Field Log Book Reference Number: p. 111-113

Project Address: Sonia Rd., W. Brentwood, N.Y.

Sampled By: D. Obradovich

Project Number: 1445-3B

Split With: _____

[illegible]



Receipt for Samples

Project Name: Sonia Rd. Landfill - RI

Field Log Book Reference Number: p. 116-118

Project Address: W. Brentwood N.Y. (Sonia Rd.)

Sampled By: D. Obradovich

Project Number: 1445-3B

Split With: _____

[illegible]

Split With:

Environmental and Industrial Analytical Laboratory
575 Broad Hollow Road, Melville, N.Y. 11747-5076
(516) 894-3040
FAX: 516-694-4122

EXTERNAL CHAIN OF CUSTODY

CLIENT COPY

NOTES:



Receipt for Samples

Project Name: Sonia Road Landfill - RI

Field Log Book Reference Number: p. 140-144

Project Address: Sonia Rd., W. Brentwood, N.Y.

Sampled By: D. Obradovich

Project Number: 1445-3B

Split With:

[illegible]

Environmental and Industrial Analytical Laboratory
575 Broad Hollow Road, Melville, N.Y. 11747-5076
(516) 894-3040
FAX: 516-694-4122

EXTERNAL CHAIN OF CUSTODY

CLIENT COPY

FAX: 516-694-4122

EXTERNAL CHAIN OF CUSTODY

LABORATORY.COM



Receipt for Samples

Field Log Book Reference Number: p. 28³⁰ Book #2 p. 46 Book #3

Sampled By: D. Obradovich

Split With: _____

[illegible]**RFS**



Receipt for Samples

Project Name: Sonia Road Landfill - RI

Field Log Book Reference Number: p. 1-3 Book #4

Project Address: Sonia Rd., W. Brentwood, N.Y.

Sampled By: K. Robins

Project Number: 1445-3B

Split With: _____

[illegible]

Environmental and Industrial Analytical Laboratory
575 Broad Hollow Road, Melville, N.Y. 11747-5076
(516) 694-3040
FAX: 516-694-4122

1 K 5

№ 7638

PROJ. NO.		PROJECT NAME		Refrigerator #							
SAMPLERS: (Signature)/Client				SAMPLE CONTAINER DESCRIPTION							
DELIVERABLES:				TOTAL NO. OF CONTAINERS							
DATE	TIME	MATRIX	FIELD I.D.	ANALYSIS REQUESTED							
				ORGANIC				INORG.			
				VOL	BNA	Pest/PCB			Metal	Σ	
10/17/97	8:00	Water	MW-07DS (10-27-97)	11	2	2	1	2	1	1	
10/17/97	11:45		MW-07I (10-27-97)								
10/17/97	11:45		MW-07IS (10-27-97)								
10/17/97	14:10		MW-07S (10-27-97)								
10/17/97			MW-07D (10-27-97)								
-	-	-	TB-1	2	2						
Relinquished by: (Signature)		Date	time	Received by: (Signature)		Date	time	PROJECT CONTACT:			
David Blundorich		10/17/97	8:00	David Blundorich		10/23/97	15:00	PHONE NUMBER:			
Relinquished by: (Signature)		Date	time	Received by: (Signature)		Date	time	Discrepancies Between Sample Labels and COC Record? Y or N			
David Blundorich		10/24/97	16:5					NOTES:			
Relinquished by: (Signature)		Date	time	Received for Laboratory by: (Signature)		Date	time	LABORATORY USE ONLY			
						10/24/97	16:5	Samples were: 1) Shipped _____ or Hand Delivered _____ Airbill # _____ 2) Ambient or Chilled 3) Received in Good Condition Y or N 4) Properly Preserved Y or N 5) Samples returned to lab. _____ hours from Collection			
								COC Tape was: 1) Present on Outer Package Y or N 2) Unbroken on Outer Package Y or N 3) COC Record Present and Complete Upon Sample Rec't. Y or N			

Environmental and Industrial Analytical Laboratory
575 Broad Hollow Road, Melville, N.Y. 11747-5076
(516) 694-3040
FAX: 516-694-4122

№ 7637

NOTES:

10/95 NYS DEC ASP

* Please send results to
Robbin Petrella @ DAB tel.#
364-9890

PROJ. NO. 1445-3B		PROJECT NAME Sonja Rd. LF - RI (Town of Islip)		Refrigerator #								
SAMPLERS: (Signature)/Client David Obendorf / Dr. Robert Petrelli (D&B)				SAMPLE CONTAINER DESCRIPTION →								
DELIVERABLES: C5-70D				TOTAL NO. OF CONTAINERS ↓								
						ANALYSIS REQUESTED						
						ORGANIC				INORG.		
						VOL	BNA	Pest./ PCB			Metal	Z
DATE	TIME	MATRIX	FIELD I.D.									
10/27/97	845	Water	MW-02S (10-27-97)	20		6	4	3	3	3	3	3
	1147		MW-02I (10-27-97)	11		2	2	1	2	1	1	1
	1210		MW-02D (10-27-97)									
	1410		MW-07S (10-27-97)									
↓	1525	↓	MW-07D (10-27-97)									
			TB-2	2		2						
Relinquished by: (Signature) Robert Petrelli				Date 10/17/97	Time 8:00	Received by: (Signature) David Obendorf		Date 10/23/97	Time 15:00	PROJECT CONTACT:		
Relinquished by: (Signature) David Obendorf				Date 10/27/97	Time 16:00	Received by: (Signature)		Date	Time	PHONE NUMBER:		
Relinquished by: (Signature)				Date	Time	Received for Laboratory by: (Signature)		Date	Time	Discrepancies Between Sample Labels and CDC Record? Y or N		
										NOTES:		
LABORATORY USE ONLY												
Samples were: 1) Shipped _____ or Hand Delivered _____ Airbill # _____						CDC Tape was: 1) Present on Outer Package Y or N 2) Unbroken on Outer Package Y or N 3) CDC Record Present and Complete Upon Sample Rec'd. Y or N Y or N 5) Samples returned to lab. _____ hours from Collection						

Environmental and Industrial Analytical Laboratory
575 Broad Hollow Road, Melville, N.Y. 11747-5076
(516) 894-3040
FAX: 516-894-4122

EXTERNAL CHAIN OF CUSTODY

CLIENT COPY

EXTERNAL CHAIN OF CUSTODY

PROJ. NO.		PROJECT NAME		Refrigerator #								
1445-3B		Sonia Rd. Landfill - RI (Town of Islip)										
SAMPLERS: (Signature)/Client				SAMPLE CONTAINER DESCRIPTION								
Daniel Obudorich / Daniel Obudorich (D&B)				→								
DELIVERABLES:				TOTAL NO. OF CONTAINERS								
C5-70D				↓								
DATE	TIME	MATRIX	FIELD I.D.	ANALYSIS REQUESTED								
				ORGANIC						INORG.		
				VOC	BNA	Pest/ PCB					Metals	Ch
10/29/97	9 ⁰⁰	Water	MW-04S (10-29-97)	11	2	2	1	2	1	1	1	1
	10 ³⁰		MW-04I (10-29-97)	11	2	1	1	1	1	1	1	1
	12 ⁰⁰		MW-05S (10-29-97)	11	2	1	1	1	1	1	1	1
	1 ³⁰		MW-05I (10-29-97)	11	2	1	1	1	1	1	1	1
	2 ⁵⁵		MW-05P (10-29-97)	11	2	✓	✓	✓	✓	✓	✓	✓
			TB-4	2	2							
Relinquished by: (Signature)				Date	time	Received by: (Signature)		Date	time	PROJECT CONTACT:		
Daniel Obudorich				10/30/97	0700	Daniel Obudorich		10/23/97	15 ⁰⁰	PHONE NUMBER:		
Relinquished by: (Signature)				Date	time	Received by: (Signature)		Date	time	Discrepancies Between Sample Labels and CDC Record? Y or N		
Daniel Obudorich				10/30/97	0700	Daniel Obudorich				NOTES:		
Relinquished by: (Signature)				Date	time	Received for Laboratory by: (Signature)		Date	time	LABORATORY USE ONLY		
										Samples were: 1) Shipped _____ or Hand Delivered _____ Airbill # _____ 2) Ambient or Chilled 3) Received in Good Condition Y or N 4) Properly Preserved Y or N 5) Samples returned to lab. _____ hours from Collection		
										CDC Tape was: 1) Present on Outer Package Y or N 2) Unbroken on Outer Package Y or N 3) CDC Record Present and Complete Upon Sample Rec'd. Y or N		

H2M LABS, INC.

Environmental and Industrial Analytical Laboratory
575 Broad Hollow Road, Melville, N.Y. 11747-5076
(516) 894-3040
FAX: 516-694-4122

No 6199

EXTERNAL CHAIN OF CUSTODY

PROJ. NO. 1445-38		PROJECT NAME Sonia Rd. Landfill (Town of Islip)		Refrigerator #											NOTES: 10/95 NYSDEC ASP * Please send results to Robbitt Petrella tel. # 364-9890	
SAMPLERS: (Signature)/Client David Olsendovich/Daniel Bartolucci (DAB)				SAMPLE CONTAINER DESCRIPTION →	40ml vial 1 liter glass 1.4 liter glass 1 liter plastic 250 ml glass-H₂SO₄ 1 liter glass H₂SO₄ 1 liter plastic w/HNO₃ 250 ml plastic w/HNO₃											
DELIVERABLES: C5-70D				TOTAL NO. OF CONTAINERS ↓	ANALYSIS REQUESTED											
					ORGANIC INORG.											
DATE	TIME	MATRIX	FIELD I.D.		VOA	BNA	Pest/ PCB								LAB I.D. No.	REMARKS
10/30/97	830	Water	MW-035 (10-30-97)	11	2	2	1	2	1	1		1	1			
	950		MW-03I (10-30-97)	11												
	1100		MW-03D (10-30-97)	11												
	1225		MW-10S (10-30-97)	11												
	135		MW-10I (10-30-97)	11	✓	✓	✓	✓	✓	✓		✓	✓			
	-		TB-5	2	2	-	-	-	-	-		-	-			Trip Blank #5
10/31/97	250	✓	MW-10D (10-30-97)	11	2	2	1	2	1	1		1	1			
Relinquished by: (Signature)				Date	time	Received by: (Signature)				Date	time	PROJECT CONTACT:		LABORATORY USE ONLY		
Relinquished by: (Signature)				Date	time	Received by: (Signature)				Date	time	PHONE NUMBER:		Samples were:		
Relinquished by: (Signature)				Date	time	Received for Laboratory by: (Signature)				Date	time	Discrepancies Between Sample Labels and COC Record? Y or N		COC Tape was:		
												NOTES:		1) Shipped or Hand Delivered Airbill # 2) Ambient or Chilled 3) Received in Good Condition Y or N 4) Properly Preserved Y or N 5) Samples returned to lab. hours from Collection		

CLIENT COPY

H2M LABS, INC.

Environmental and Industrial Analytical Laboratory
575 Broad Hollow Road, Melville, N.Y. 11747-5076
(516) 694-3040
FAX: 516-694-4122

No 6200

EXTERNAL CHAIN OF CUSTODY

PROJ. NO. 1445-3B		PROJECT NAME Sonja Road LF-RI (Town of Islip)		Refrigerator #		NOTES: 10/95 NYSDEC ASP * Please send results to Robbin Petrella at DAB tel # 364-9890																																		
SAMPLERS: (Signature)/Client Dean N. Staw / Antea Bartilucci (DAB)				SAMPLE CONTAINER DESCRIPTION →																																				
DELIVERABLES: C5-70D				TOTAL NO. OF CONTAINERS ↓																																				
DATE	TIME	MATRIX	FIELD I.D.			ANALYSIS REQUESTED										LAB I.D. No.	REMARKS																							
						<table border="1"> <tr> <th colspan="5">ORGANIC</th> <th colspan="5">INORG.</th> </tr> <tr> <th>VOA</th> <th>BNA</th> <th>PAH/PCB</th> <th></th> <th></th> <th>Metals</th> <th>As</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </table>										ORGANIC					INORG.					VOA	BNA	PAH/PCB			Metals	As								
ORGANIC					INORG.																																			
VOA	BNA	PAH/PCB			Metals	As																																		
11-3-97	09:00	water	MW-145 (11-3-97)	11		2	2	1	2	1	1		1	1																										
	10:00		MW-141 (11-3-97)	11		2	2	1	2	1	1		1	1																										
	11:00		MW-14D (11-3-97)	11		2	2	1	2	1	1		1	1																										
	13:30		MW-13S (11-3-97)	11		2	2	1	2	1	1		1	1																										
	14:30		MW-13I (11-3-97)	33		6	6	3	6	3	3		3	3		MS/MSD																								
↓	15:10	↓	MW-13D (11-3-97)	11		2	2	1	2	1	1		1	1																										
			TB-7	2	2											trip blank #7																								
Relinquished by: (Signature)		Date	time	Received by: (Signature)		Date	time	PROJECT CONTACT:		LABORATORY USE ONLY Samples were: 1) Shipped _____ or Hand Delivered _____ Airbill # _____ 2) Ambient or Chilled 3) Received in Good Condition Y or N 4) Properly Preserved Y or N 5) Samples returned to lab _____ hours from Collection COC Tape was: 1) Present on Outer Package Y or N 2) Unbroken on Outer Package Y or N 3) COC Record Present and Complete Upon Sample Rec'd Y or N																														
Relinquished by: (Signature)		Date	time	Received by: (Signature)		Date	time	PHONE NUMBER:																																
Relinquished by: (Signature)		Date	time	Received for Laboratory by: (Signature)		Date	time	Discrepancies Between Sample Labels and COC Record? Y or N																																
Dean N. Staw		11-4-97	07:30																																					

PINK COPY - LABORATORY

APPENDIX N

SURVEYOR'S REPORT AND MAP

YEC, INC.
Clarkstown Executive Park
612 Corporate Way
Suite 4M
Valley Cottage, NY 10989
(914) 268-3203

please feel free to

Y.E.C. INC./ SONIA LANDFILL WELL AND TEST PIT LOCATIONS NOVEMBER 18, 1997

Pt.No.	Code	North	East	Elevation	Desc.
620		195470.2280	2196518.0800	80.220	SB-1
621		195157.8050	2196505.4600	77.290	SB-3
622		195017.0230	2197111.9900	71.060	SB-4
623		194832.3080	2197274.5300	69.560	MW-4S
624		194842.7740	2197435.3400	68.200	MW-4D
625		194841.1440	2197446.6700	68.440	MW-4I
626		195227.6550	2197450.6200	69.900	MW-6D
627		195238.5750	2197452.0100	69.550	MW-6I
628		195249.1390	2197451.2400	69.520	MW-6S
629		195478.4270	2197107.8900	72.070	SB-2
630		195821.4970	2197310.0000	69.480	MW-7I
631		195820.8940	2197353.8000	72.260	MW-7S
632		195807.3580	2197355.2700	72.350	MW-7D
633		195787.2290	2196806.3600	76.970	MW-2D
634		195795.5390	2196803.6500	76.830	MW-2I
635		195805.6470	2196804.7500	76.940	MW-2S
636		195554.4040	2195650.9900	56.830	MW-10D
637		195562.2610	2195656.1000	56.740	MW-10I
638		195570.1420	2195661.9500	56.820	MW-10S
639		195793.9700	2195941.4000	57.060	MW-1D
640		195794.9460	2195950.2600	57.570	MW-1I
641		195795.1980	2195960.3300	57.740	MW-1S
642		196442.9050	2195446.5300	59.570	MW-11S
643		196437.6970	2195435.8500	59.260	MW-11I
644		196445.1110	2195417.1600	59.350	MW-11D
645		196423.5580	2196426.6100	59.000	MW-12D
646		196421.4210	2196435.0800	59.160	MW-12I
647		196422.4680	2196445.6100	59.070	MW-12S
648		194793.8430	2195717.8800	68.540	GW-H1
649		194779.1180	2195969.8200	69.640	GW-H2
650		194800.4060	2196211.2100	70.710	MW-3D
651		194798.1040	2196231.9000	70.760	MW-3S
652		194800.6350	2196221.2900	70.770	MW-3I
653		194780.9970	2196259.2800	70.570	GW-H3
654		194781.2850	2196551.6000	70.920	GW-H4
655		194787.6050	2196858.9600	69.660	GW-H5
656		194803.2480	2196808.5100	70.780	MW-5S
657		194803.6650	2196798.3800	70.710	MW-5I
658		194798.5640	2196782.3100	71.140	MW-5D
659		194790.8800	2197159.7000	68.050	GW-H6
660		194791.0430	2197448.0300	67.660	GW-H7
661		193714.9910	2197407.9000	64.710	MW-14S
662		193714.7590	2197397.3500	64.810	MW-14I
663		193715.6720	2197375.9600	64.910	MW-14D
664		193729.0090	2198377.6700	70.570	MW-13S
665		193723.6280	2198371.0100	70.490	MW-13I
666		193729.3090	2198364.0600	70.590	MW-13D
667		192751.6680	2198985.2000	67.320	S62720
668		195165.8120	2195743.9000	64.863	TT-32(L.O.W.)
669		195326.2160	2195743.1600	54.942	TT-33(L.O.W.)
670		195478.0310	2195723.4900	56.690	TT-1D(L.O.W.)
671		195524.0470	2195800.3900	57.893	TT-2(L.O.W.)
672		195666.3350	2195826.3100	57.426	TT-4A(L.O.W.)
673		195661.2730	2195836.7100	57.664	TT-4B
674		195654.7090	2195851.4000	58.395	TT-4C

Pt. No.	Code	North	East	Elevation	Desc.
675		195785.0430	2195925.8400	56.114	TT-5(L.O.W.)
676		195798.5350	2196044.9900	61.827	TT-6C
677		195803.5820	2196098.2500	61.490	TT-6A
678		195764.5140	2196236.9300	68.106	TT-7(L.O.W.)
679		195516.9220	2195863.7100	61.458	TT-3
680		195017.8240	2195761.8100	69.957	TT-31(L.O.W.)
681		194871.9260	2195765.4800	71.007	TT-30(L.O.W.)
682		194815.1580	2195915.5800	66.295	TT-29(L.O.W.)
683		194820.4380	2196225.1600	69.361	TT-27(L.O.W.)
684		194808.3180	2196149.0100	70.587	TT-28C(L.O.W.)
685		194798.6560	2196062.9400	69.735	TT-28B(L.O.W.)
686		194801.6950	2195993.8700	67.649	TT-28A(L.O.W.)
687		194809.0910	2196308.0600	72.861	TT-26A(L.O.W.)
688		194805.0980	2196382.5200	71.299	TT-26B(L.O.W.)
689		194810.5440	2196457.6800	71.616	TT-26C(L.O.W.)
690		194818.7470	2196512.0100	69.756	TT-25(L.O.W.)
691		194810.2770	2196656.3500	70.886	TT-24B(L.O.W.)
692		194811.5250	2196723.9900	71.941	TT-24C(L.O.W.)
693		194827.8120	2196804.9300	70.649	TT-23(L.O.W.)
694		194835.4530	2196979.0600	68.696	TT-22(20' TO L.O.
695		194844.1420	2196979.3200	68.604	TT-22(30' TO L.O.
696		194828.7740	2197114.6300	67.073	TT-21(L.O.W.)
697		194831.0760	2197356.6000	67.760	TT-20A(L.O.W.)
698		195022.9470	2197443.2300	70.406	TT-19(L.O.W.)
699		195181.0190	2197448.7000	70.107	TT-18(L.O.W.)
700		195261.4860	2197449.2200	69.032	TT-18A(L.O.W.)
701		195301.6910	2197457.1500	68.949	TT-17A(L.O.W.)
702		195320.5710	2197450.8500	69.602	TT-17(L.O.W.)
703		195397.5440	2197457.6200	70.701	TT-16A(L.O.W.)
704		195430.8660	2197457.7300	71.278	TT-16B(L.O.W.)
705		195472.6960	2197456.4300	71.366	TT-16(L.O.W.)
706		195620.6900	2197453.5700	71.906	TT-15(L.O.W.)
707		195770.5860	2197405.1300	71.113	TT-34B(L.O.W.)
708		195824.3090	2197442.2500	71.513	TT-34A(L.O.W.)
709		195837.0870	2197294.4600	69.523	TT-14B
710		195852.8120	2197296.1300	68.826	TT-14A(L.O.W.)
711		195853.8680	2197113.1300	67.691	TT-13A(L.O.W.)
712		195843.5430	2196804.0600	72.767	TT-11A(L.O.W.)
713		195855.5120	2196692.9200	65.920	TT-10A(L.O.W.)
714		195833.9510	2196694.4700	69.566	TT-10
715		195856.4480	2196573.4800	61.798	TT-9A(L.O.W.)
716		195866.3880	2196380.2700	59.345	TT-8A(L.O.W.)
717		195858.0680	2196282.8300	57.737	TT-7A(L.O.W.)
718		195839.0470	2196280.0900	56.598	TT-7B
719		195836.5540	2196144.2000	68.980	TT-6B
720		195864.1751	2196965.6498	59.995	TT-12A(L.O.W.)

SONIA LANDFILL: WELL ELEVATIONS
 DATE OF SURVEY: NOVEMBER 13, 1997
 VERTICAL DATUM: NGVD 1929 FROM SUFFOLK COUNTY BENCHMARK

<u>WELL I.D.</u>	<u>TOP OF CASING ELEVATION (FLUSH MOUNT)</u>	<u>TOP PVC ELEVATION</u>
1S	57.74	57.36
1I	57.57	57.25
1D	57.06	56.71
2S	76.94	76.32
2I	76.83	76.35
2D	76.97	76.63
3S	70.76	70.49
3I	70.77	70.51
3D	70.71	70.50
4S	69.56	69.18
4I	68.44	68.06
4D	68.20	67.90
5S	70.78	70.58
5I	70.71	70.55
5D	71.14	71.04
6S	69.52	69.06
6I	69.55	69.21
6D	69.90	69.65
7S	72.26	71.72
7I	69.48	69.25
7D	72.35	72.16
10S	56.82	56.65
10I	56.74	56.16
10D	56.83	56.34
11S	59.57	59.24
11I	59.26	58.85
11D	59.35	59.03
12S	59.07	58.81
12I	59.16	58.95
12D	59.00	58.68
13S	70.57	70.50
13I	70.49	70.29
13D	70.59	70.35
14S	64.71	64.55
14I	64.81	64.58
14D	64.91	64.59
S62720	67.32	67.19 (STEEL)

Time: 11-10-97 17:40:03

Page 1

JOB: 96046

Crew: FD, FP

Material: FIELD DATA

Notes:

DATE BEGUN: 11-07-97 14:56:46

DATE ENDED: 11-10-97 14:36:08

UNIT:

Distance unit: FEET

Angle unit: D.M.S.

Azimuth system: NORTH

Angle direction: RIGHT

Vertical system: ZENITH

ACTIVITY	POINT	HEIGHT	HORIZONTAL	VERTICAL	DISTANCE	CREATED TIME/DESC
OCC. STA.	22	0.00				11-10-97 09:07:04
BACKSIGHT	18		0.00000	91.43350	436.4100	SPIKE
SIDESHOT	620	0.00	295.02300	92.37450	197.3800	SB-1
NOTE:						
SB-1=SOIL BORING#1(ETC)						
SIDESHOT	621	0.00	208.52300	91.08500	256.2651	SB-3
SIDESHOT	622	0.00	114.52250	91.54000	550.2051	SB-4
SIDESHOT	623	0.00	118.22350	91.10350	792.7851	MW-4S
SIDESHOT	624	0.00	111.16400	91.16250	914.7400	MW-4D
SIDESHOT	625	0.00	110.58200	91.14350	925.0751	MW-4I
SIDESHOT	626	0.00	86.33000	91.17100	785.8751	MW-6D
SIDESHOT	627	0.00	85.44500	91.18350	785.6300	MW-6I
SIDESHOT	628	0.00	84.59250	91.11150	783.4000	MW-6S
SIDESHOT	629	0.00	61.05450	92.10450	452.1951	SB-2
SIDESHOT	630	0.00	41.00400	91.25350	791.3300	MW-7I
SIDESHOT	631	0.00	42.51150	91.06550	826.4951	MW-7S
SIDESHOT	632	0.00	43.41250	90.51500	820.0200	MW-7D
SIDESHOT	633	0.00	4.21200	91.32150	456.5600	MW-2D
SIDESHOT	634	0.00	3.44150	91.31500	463.7600	MW-2I
SIDESHOT	635	0.00	3.31300	91.24250	473.7551	MW-2S
OCC. STA.	5	0.00				11-10-97 10:50:05
BACKSIGHT	4		0.00000	89.57000	501.5700	SPIKE
SIDESHOT	636	0.00	9.47350	89.45000	265.6600	MW-10D
SIDESHOT	637	0.00	10.08450	89.45550	256.4251	MW-10I
SIDESHOT	638	0.00	10.24200	89.44000	246.6800	MW-10S
SIDESHOT	639	0.00	215.02150	89.19400	118.7351	MW-1D
SIDESHOT	640	0.00	216.07300	89.09100	127.3500	MW-1I
SIDESHOT	641	0.00	217.31550	89.07550	136.8900	MW-1S
OCC. STA.	6	0.00				11-10-97 11:12:59
BACKSIGHT	5		0.00000	90.08150	738.2151	SPIKE
SIDESHOT	642	0.00	72.24350	89.46550	588.7351	MW-11S

ACTIVITY	POINT	HEIGHT	HORIZONTAL	VERTICAL	DISTANCE	CREATED TIME/DESC
SIDESHOT	643	0.00	71.56250	89.49000	599.5700	MW-11I
SIDESHOT	644	0.00	72.41200	89.48500	618.0400	MW-11D
SIDESHOT	645	0.00	259.09350	89.45200	393.1751	MW-12D
SIDESHOT	646	0.00	259.21150	89.44150	401.8051	MW-12I
SIDESHOT	647	0.00	259.04200	89.45250	412.1951	MW-12S
OCC. STA.	10	0.00				11-10-97 12:33:35
						SPIKE
BACKSIGHT	11		0.00000	90.06100	626.3400	SPIKE
SIDESHOT	648	0.00	2.37400	90.09550	942.0800	GW-H1
SIDESHOT	649	0.00	2.06400	90.05250	689.8100	GW-H2
SIDESHOT	650	0.00	5.35000	90.00350	449.8500	MW-3D
SIDESHOT	651	0.00	5.30450	90.00100	429.0351	MW-3S
SIDESHOT	652	0.00	5.43300	90.00200	439.8200	MW-3I
SIDESHOT	653	0.00	3.24100	90.03450	400.5900	GW-H3
SIDESHOT	654	0.00	10.47500	89.55000	109.5200	GW-H4
SIDESHOT	655	0.00	173.24150	90.18400	201.1700	GW-H5
SIDESHOT	656	0.00	165.15250	89.59200	154.6700	MW-5S
SIDESHOT	657	0.00	164.02000	90.01250	145.0500	MW-5I
SIDESHOT	658	0.00	164.09300	89.49550	128.1951	MW-5D
SIDESHOT	659	0.00	177.24000	90.18550	501.1151	GW-H6
SIDESHOT	660	0.00	178.35300	90.13500	789.1500	GW-H7
OCC. STA.	2	0.00				11-10-97 13:13:46
						PK
BACKSIGHT	10		0.00000	90.00400	1125.2600	SPIKE
TRAVERSE	23	0.00	272.18000	90.18400	1026.7300	SPIKE
TRAVERSE	23	0.00	92.18050	269.41250	1026.7251	SPIKE
BACKSIGHT	10		180.00050	269.59150	1125.2651	SPIKE
OCC. STA.	23	0.00				11-10-97 13:25:11
						SPIKE
BACKSIGHT	2		0.00000	89.42350	1026.7251	PK
SIDESHOT	661	0.00	261.46100	90.04100	360.4700	MW-14S
SIDESHOT	662	0.00	261.56150	90.03200	370.9700	MW-14I
SIDESHOT	663	0.00	262.27050	90.02150	392.1000	MW-14D
OCC. STA.	1	0.00				11-10-97 13:56:05
						SPIKE
BACKSIGHT	2		0.00000	90.23450	1071.3251	PK
TRAVERSE	24	0.00	269.38000	90.04000	1187.3051	AXLE
TRAVERSE	24	0.00	89.38050	269.56000	1187.3051	AXLE
BACKSIGHT	2		180.00050	269.36150	1071.3251	PK
OCC. STA.	24	0.00				11-10-97 13:59:09
						AXLE
BACKSIGHT	1		0.00000	89.57050	1187.2951	SPIKE
TRAVERSE	25	0.00	269.44200	90.12150	2127.8400	AXLE
TRAVERSE	25	0.00	89.44200	269.47550	2127.8351	AXLE
BACKSIGHT	1		180.00050	270.02400	1187.2951	SPIKE
OCC. STA.	25	0.00				11-10-97 14:10:22
						AXLE
OCC. STA.	25	0.00				11-10-97 14:11:50
						AXLE

ACTIVITY	POINT	HEIGHT	HORIZONTAL	VERTICAL	DISTANCE	CREATED TIME/DESC
BACKSIGHT	24		.000000	89.48250	2127.8451	AXLE
SIDESHOT	664	0.00	269.04450	89.52250	632.7451	MW-13 ~~S~~
SIDESHOT	665	0.00	268.37200	89.53000	639.6351	MW-13 ~~I~~
SIDESHOT	666	0.00	269.09200	89.52350	646.3300	MW-13 ~~D~~
SIDESHOT	667	0.00	182.51200	90.06450	1003.7900	S62720(?)

Time: 11-10-97 17:40:03

Page 1

JOB: 96046

Crew: FD, FP

Material: FIELD DATA

Notes:

DATE BEGUN: 11-11-97 18:16:21

DATE ENDED: 11-18-97 11:08:22

UNIT:

Distance unit: FEET

Angle unit: D.M.S.

Azimuth system: NORTH

Angle direction: RIGHT

Vertical system: ZENITH

ACTIVITY	POINT	HEIGHT	HORIZONTAL	VERTICAL	DISTANCE	CREATED TIME/DESC
OCC. STA.	5	5.13				11-13-97 07:30:43 SPIKE
BACKSIGHT	4		0.00000	89.54350	501.5851	SPIKE
SIDESHOT	4	4.96	180.00000	270.05200	501.5900	SPIKE
OCC. STA.	5	5.13				11-13-97 07:35:26 SPIKE
BACKSIGHT	4		0.00000	0.00000	0.0000	SPIKE

NOTE:

B/S HGT=4.96

SIDESHOT 668 6.80 335.33400 88.57050 590.2800 TT-32(L.O.W.)

NOTE:

L.O.W.=LIMIT OF WASTE(IF NOT LABELED'L.O.W.---IS NOT L.O.W.)

SIDESHOT	669	8.80	338.48300	89.37050	432.3600	TT-33(L.O.W.)
SIDESHOT	670	7.30	348.42250	89.23100	292.1000	TT-1D(L.O.W.)
SIDESHOT	671	5.30	334.51200	89.24450	227.5600	TT-2(L.O.W.)
SIDESHOT	672	5.30	330.29300	88.43000	83.3200	TT-4A(L.O.W.)
SIDESHOT	673	5.30	323.32400	88.38100	88.4000	TT-4B
SIDESHOT	674	5.30	315.04400	88.19250	96.9200	TT-4C
SIDESHOT	675	6.10	216.25350	89.13550	101.0000	TT-5(L.O.W.)
SIDESHOT	676	5.30	224.06500	88.21450	219.3200	TT-6C
SIDESHOT	677	5.30	225.35100	88.45100	272.4200	TT-6A
SIDESHOT	678	12.30	234.55150	87.14350	406.3600	TT-7(L.O.W.)
SIDESHOT	679	5.30	319.06500	88.33400	234.8800	TT-3

UNIT:

Distance unit: FEET

Angle unit: D.M.S.

Azimuth system: NORTH

Angle direction: RIGHT

Vertical system: VERT DIST

UNIT:

Distance unit: FEET

Angle unit: D.M.S.

Azimuth system: NORTH

Angle direction: RIGHT

ACTIVITY	POINT	HEIGHT	HORIZONTAL	VERTICAL	DISTANCE	CREATED TIME/DESC
Vertical system: ZENITH						
OCC. STA.	13	5.48				11-13-97 08:54:50
BACKSIGHT	4		0.00000	93.14300	233.1800	SPIKE
NOTE: B/S HGT=4.96						
SIDESHOT	680	7.10	216.12400	89.12100	157.1800	TT-31(L.O.W.)
UNIT: Distance unit: FEET						
Angle unit: D.M.S.						
Azimuth system: NORTH						
Angle direction: RIGHT						
Vertical system: VERT DIST						
UNIT: Distance unit: FEET						
Angle unit: D.M.S.						
Azimuth system: NORTH						
Angle direction: RIGHT						
Vertical system: ZENITH						
OCC. STA.	12	5.48				11-13-97 10:01:47
BACKSIGHT	4		0.00000	91.18500	538.1151	SPIKE
SIDESHOT	4	4.96	180.00050	268.41000	538.1151	SPIKE
NOTE: B/S HGT=4.96						
OCC. STA.	12	5.48				11-13-97 10:07:33
BACKSIGHT	4		0.00000	0.00000	0.0000	SPIKE
SIDESHOT	681	5.30	68.38500	89.15100	176.1600	TT-30(L.O.W.)
UNIT: Distance unit: FEET						
Angle unit: D.M.S.						
Azimuth system: NORTH						
Angle direction: RIGHT						
Vertical system: VERT DIST						
UNIT: Distance unit: FEET						
Angle unit: D.M.S.						
Azimuth system: NORTH						
Angle direction: RIGHT						
Vertical system: ZENITH						
OCC. STA.	11	5.37				11-13-97 10:43:54
BACKSIGHT	12		0.00000	90.09500	426.8400	SPIKE
NOTE: B/S HGT=5.38/REVERSE ANGLES=HORIZ.-180-00-00/VERT.-269-50-05						
SIDESHOT	682	15.60	22.08000	87.03500	132.4651	TT-29(L.O.W.)
OCC. STA.	11	5.37				11-13-97 10:50:25
SPIKE						

ACTIVITY	POINT	HEIGHT	HORIZONTAL	VERTICAL	DISTANCE	CREATED TIME/DESC
BACKSIGHT	12		0.00000	0.00000	0.0000	SPIKE
SIDESHOT	683	15.60	155.52150	87.13200	203.2800	TT-27(L.O.W.)
SIDESHOT	684	4.90	149.54250	89.49500	127.7800	TT-28C(L.O.W.)
SIDESHOT	685	4.90	118.50150	90.30350	53.3000	TT-28B(L.O.W.)
SIDESHOT	686	5.00	45.05150	92.17400	61.4600	TT-28A(L.O.W.)
SIDESHOT	687	5.30	163.35350	89.22350	280.3200	TT-26A(L.O.W.)
SIDESHOT	688	5.30	166.35050	89.45300	353.0400	TT-26B(L.O.W.)
SIDESHOT	689	5.30	167.18200	89.45300	428.2400	TT-26C(L.O.W.)
SIDESHOT	690	10.80	167.11050	89.21150	483.2000	TT-25(L.O.W.)
OCC. STA.	10	5.40				11-13-97 11:21:49
						SPIKE
BACKSIGHT	11		0.00000	90.04500	626.3600	SPIKE
SIDESHOT	11	5.40	180.00050	269.55050	626.3600	SPIKE
OCC. STA.	10	5.40				11-13-97 11:24:47
						SPIKE
BACKSIGHT	11		0.00000	0.00000	0.0000	SPIKE
NOTE:						
B/S HGT=5.40						
SIDESHOT	691	5.30	87.02500	89.48550	48.3000	TT-24B(L.O.W.)
SIDESHOT	692	5.30	143.15000	89.08500	81.3400	TT-24C(L.O.W.)
SIDESHOT	693	10.10	156.23000	88.18250	159.7400	TT-23(L.O.W.)
OCC. STA.	22	5.40				11-13-97 11:52:38
						SPIKE
BACKSIGHT	18		0.00000	91.43400	436.4200	SPIKE
SIDESHOT	18	4.94	180.00050	268.16150	436.4200	SPIKE
OCC. STA.	22	5.40				11-13-97 11:56:45
						SPIKE
BACKSIGHT	18		0.00000	0.00000	0.0000	SPIKE
NOTE:						
B/S HGT=4.94						
SIDESHOT	694	12.40	136.58100	91.17500	598.2800	TT-22(20' TO L.O.W.)
SIDESHOT	695	12.40	136.31050	91.19200	590.9600	TT-22(30' TO L.O.W.)
SIDESHOT	696	9.50	127.24450	91.31000	682.6000	TT-21(L.O.W.)
SIDESHOT	697	8.80	114.51050	91.12300	857.3600	TT-20A(L.O.W.)
SIDESHOT	698	5.70	100.38150	91.16150	835.6600	TT-19(L.O.W.)
NOTE:						
'L.O.W.-21' TO FENCE'						
SIDESHOT	699	6.80	89.54150	91.16550	792.6200	TT-18(L.O.W.)
SIDESHOT	700	12.30	84.06350	90.58400	779.8400	TT-18A(L.O.W.)
SIDESHOT	701	12.10	81.07250	90.59350	784.2000	TT-17A(L.O.W.)
SIDESHOT	702	10.80	79.45450	91.03000	776.9800	TT-17(L.O.W.)
SIDESHOT	703	12.30	74.07000	90.51000	784.5600	TT-16A(L.O.W.)
SIDESHOT	704	11.70	71.41450	90.50550	787.3800	TT-16B(L.O.W.)
SIDESHOT	705	12.30	68.40200	90.47400	791.4600	TT-16(L.O.W.)
SIDESHOT	706	8.80	58.25400	90.58050	824.7200	TT-15(L.O.W.)
SIDESHOT	707	5.30	47.39300	91.14200	843.0400	TT-34B(L.O.W.)
SIDESHOT	708	5.30	45.52350	91.07550	902.4200	TT-34A(L.O.W.)
SIDESHOT	709	5.30	39.25400	91.26250	788.4400	TT-14B
SIDESHOT	710	8.80	38.36550	91.13100	799.4800	TT-14A(L.O.W.)

ACTIVITY	POINT	HEIGHT	HORIZONTAL	VERTICAL	DISTANCE	CREATED TIME/DESC
SIDESHOT	711	15.60	28.37200	90.58250	667.8800	TT-13A(L.O.W.)
UNIT:						
Distance unit: FEET						
Angle unit: D.M.S.						
Azimuth system: NORTH						
Angle direction: RIGHT						
Vertical system: VERT DIST						
UNIT:						
Distance unit: FEET						
Angle unit: D.M.S.						
Azimuth system: NORTH						
Angle direction: RIGHT						
Vertical system: ZENITH						
UNIT:						
Distance unit: FEET						
Angle unit: D.M.S.						
Azimuth system: NORTH						
Angle direction: RIGHT						
Vertical system: VERT DIST						
UNIT:						
Distance unit: FEET						
Angle unit: D.M.S.						
Azimuth system: NORTH						
Angle direction: RIGHT						
Vertical system: ZENITH						
OCC. STA.	18	5.25				11-18-97 09:34:18
						SPIKE
BACKSIGHT	19		0.00000	90.03300	421.9200	SPIKE
SIDESHOT	19	5.34	180.00050	269.56250	421.9200	SPIKE
NOTE:						
B/S HGT=5.34						
SIDESHOT	712	8.80	208.35150	90.10050	76.1451	TT-11A(L.O.W.)
OCC. STA.	18	5.25				11-18-97 09:56:27
						SPIKE
BACKSIGHT	19		0.00000	0.00000	0.0000	SPIKE
SIDESHOT	713	8.80	137.05150	93.41400	109.7200	TT-10A(L.O.W.)
SIDESHOT	714	5.30	128.39400	94.13150	94.0800	TT-10
SIDESHOT	715	12.40	113.03500	92.03450	210.9600	TT-9A(L.O.W.)
SIDESHOT	716	8.80	103.46350	91.57400	398.7400	TT-8A(L.O.W.)
SIDESHOT	717	15.60	100.16000	90.59000	492.5400	TT-7A(L.O.W.)
SIDESHOT	718	17.60	98.01500	90.53000	492.4450	TT-7B
SIDESHOT	719	12.40	96.13150	90.02150	627.1600	TT-6B
OCC. STA.	18	5.25				11-18-97 10:50:46
						SPIKE
BACKSIGHT	19		0.00000	90.03350	421.9200	SPIKE
TRAVERSE	26	5.07	261.22550	89.44450	204.6351	NL(TEMP)
TRAVERSE	26	5.07	81.23000	270.15100	204.6351	NL(TEMP)
BACKSIGHT	19		180.00050	269.56150	421.9200	SPIKE
OCC. STA.	26	5.29				11-18-97 11:02:12

ACTIVITY	POINT	HEIGHT	HORIZONTAL	VERTICAL	DISTANCE	CREATED TIME/DESC
OCC. STA.	26	5.29				NL(TEMP) 11-18-97 11:04:56
BACKSIGHT	18		0.00000	90.20550	204.6400	NL(TEMP) SPIKE
NOTE:						
B/S HGT=5.17						
SIDESHOT	720	12.40	94.22500	100.50350	56.0000	TT-12A(L.O.W.)

SUNNY
40°F
96046

SONIA ROAD LANDFILL
WELL ELEVATIONS

11/11/97
OS
FP

(WELLS FLUSH MOUNT)				
+	HI	-	ELEV	REMARKS
			70.65	PK #2
3.025	73.675			
		6.01	67.665	GW H-1
		6.20	67.475	T.P.
5.975	73.45			
		5.25	68.20	WELL MW 4D CASING
		5.55	67.90	" PVC
		5.01	68.44	MW 4I CASING
		5.39	68.06	" PVC
		3.89	69.56	MW 4S CASING
		4.27	69.18	" PVC
3.67	72.85			
		4.80	68.05	GW H-6
		4.93	68.02	T.P.
6.49	74.51			
		4.85	69.66	H-5(GW) I
		3.73	70.78	MW 5-S CASING
		3.925	70.585	" PVC
		3.80	70.71	MW 5-I CASING
		3.96	70.55	" PVC
		3.37	71.14	MW 5-D CASING
		3.475	71.035	" PVC
4.635	75.67			
		5.04	70.63	SPIKE #10

①

SONIA LANDFILL
WELL ELEVATIONS

11/11/97
OS
FP

96047				
+	HI	-	ELEV	REMARKS
5.04				
6.07	76.70			
		5.78	70.92	GW-H4
		6.13	70.57	MW GW-H3
		5.94	70.76	MW-3S CASING
		6.21	70.49	" PVC
		5.93	70.77	MW-3I CASING
		6.19	70.51	" PVC
		5.99	70.71	MW-3D CASING
		6.20	70.50	" PVC
4.345	74.84			
		5.105	69.74	SPIKE #11
4.22 ²¹⁵	73.955			
		4.31	69.645	GW-H2
		5.41	69.545	GW-H1
		5.425	68.53	PK #12
4.145	72.67			
		13.11	59.56	T.P.
3.06	62.62			
		5.89	56.73	SPIKE #4
		5.895	56.73	< 56.75

②

SONIA ROAD LANDFILL

11-11-97
DS
FP

96046

WELL ELEVATIONS

+	H.I.	-	ELEV	REMARKS
			56.73	SPIKE #4
4.19	60.83			
		4.00	56.83	MW-10D CASING
		4.49	56.34	" PVC
		4.09	56.74	MW-10I CASING
		4.67	56.16	" PVC
		4.01	56.82	MW-10S CASING
		4.18	56.65	" PVC
4.79	61.44			
		5.71	55.73	SPIKE #5 (55.73)
			55.73	SPIKE #5 (55.73)
7.69	63.42			
		6.36	57.06	MWHD CASING
		6.71	56.71	" PVC
		5.85	57.57	MW1I CASING
		6.17	57.25	MW1E PVC
		5.68	57.74	MW1S CASING
		6.06	57.36	" PVC
6.06	63.42			
		7.69	55.73	SPIKE #5
		③		

SUNNY 35°F
96046SONIA LANDFILL
WELL ELEVATIONS
(LEVELS OK)11/12/97
FD, FP

+	H.I.	-	ELEV.	REMARKS
			55.73	ON STA #5 SPIKE (ON CONC. NIB ON CNRB -0.04 TO SPIKE)
4.76	60.49			
		4.66	55.83	MW-10S CASING
5.25	61.08			
		4.35	56.73	Δ #4 SPIKE
10.41	67.14			
		0.75	66.39	T.P.
6.52	72.91			
		4.38	68.53	Δ #12 A.K.
5.68	74.71			
		4.47	69.74	Δ #11 SPIKE (ON CONC. TO 0.06 TO SPIKE)
5.73	75.47			
		4.76	70.71	MW-3B CASING
6.31	77.02			
		6.39	70.63	Δ #10 SPIKE
5.59	76.22			
		5.08	71.14	MW-5B CASING
2.26	73.40			
		5.36	68.09	T.P.
5.075	73.115			
		4.57	68.545	T.P.
5.055	73.60			
		4.04	69.56	MW-4S CASING
4.125	73.685			
		①		

SUNNY 30°F
96046

SONIA LANDFILL
WELL ELEV'S
CROVELS CNK CONT'D)

11/12/97
FB,FP

t	H.I.	-	ELEV.	REMARKS
		5.75	67.935	T.P. (COP)
6.485	74.42			
		3.77	70.65	BM STA #2 P.K.
			68.53	RM STA #12 P.K.
6.30	74.83			
		6.75	68.08	MON. 5-432
6.22	74.30			
		5.77	68.53	BM STA #12 P.K. (S/A BEG.)
			55.73	BM STA #5 SPIKE
6.24	61.97			
		6.54	55.43	T.P.
6.40	61.83			
		4.76	57.07	A#6 P.K.
6.38	63.45			
		4.38	59.07	MW-125 CASING
		4.64	58.81	" PVC
		4.29	59.16	MW-121 CASING
		4.50	58.95	" PVC
		4.45	59.00	MW-120 CASING
		4.77	58.68	" PVC
4.48	63.16			
		6.09	57.07	A#6 P.K.
6.44	63.51			

②

SUNNY 40°
96046

SONIA LANDFILL
WELL ELEV'S

11/12/97
FB,FP

t	H.I.	-	ELEV.	REMARKS
		4.16	59.35	MW-110 CASING
		4.48	59.03	" PVC
		4.25	59.26	MW-111 CASING
		4.66	58.85	" PVC
		3.94	59.57	MW-113 CASING
		4.27	59.24	" PVC
4.92	64.16			
		8.50 8.49	55.66	T.P.
5.37	61.53			
		5.80	55.73	BM STA #5 SPIKE (S/A BEG.)
			70.65	BM STA #2 P.K.
7.96	78.61			
		4.16	74.45	T.P. #1
6.12	80.57			
		4.74	75.83	T.P. #2
6.22	82.05			
		4.51	77.54	A#1 SPIKE
4.14	81.68			
		5.85	75.83	T.P. #4 (T.P. #1)
4.77	80.60			
		6.15	74.45	T.P. #5 (T.P. #2)
3.97	78.42			
		7.77	70.65	BM STA #2 P.K. (S/A BEG.)

③

+	H.I.	-	ELEV.	REMARKS
3.33	73.98		70.65	BM STA #2 P.K.
4.87	72.64	6.21	67.77	T.P. #1
4.47	71.43	5.68	66.96	T.P. #2
4.94	70.15	6.22	65.21	Δ#23 SPKTS
5.24	64.91	5.24	64.91	MW-14D CASING
5.56	64.54		64.54	PVC
5.84	64.81		64.81	MW-14I CASING
5.07	64.58		64.58	PVC
5.44	64.71		64.71	MW-14S CASING
5.60	64.55		64.55	PVC
5.27	69.82			
3.51	68.34	4.19	64.83	T.P. #3
5.65	62.96		62.96	T.P. #6
6.47	69.16			
4.42	67.65	5.93	63.23	T.P. #7
3.99	63.66		63.66	T.P. #8
9.91	73.57			
			7.27	T.P. #9

OVERCAST 40°
86046
SONIA LAUBFILL
WELL ELEV'S
FB, FP
11/12/97

+	H.I.	-	ELEV.	REMARKS
5.94	72.24			
4.68	72.13	4.69	67.55	T.P. #10
4.81	67.32		67.32	MW-362720 CASING
	67.19	4.94	67.19	" - 562720 STEEL
5.28	72.47	4.44	68.03	T.P. #12
7.03	75.06			
5.71	69.35		69.35	Δ#25 AXLE
4.47	73.82			
4.43	69.39		69.39	T.P. #14
6.30	75.69			
5.20	70.49		70.49	MW-13I CASING
5.40	70.29		70.29	PVC
5.10	70.59		70.59	MW-13D CASING
5.34	70.35		70.35	PVC
5.12	70.57		70.57	MW-13S CASING
5.19	70.50		70.50	PVC
4.79	75.29			
3.76	71.53		71.53	T.P. #15
5.69	77.22			
4.41	72.81		72.81	T.P. #16
5.83	78.64			
4.43	74.21		74.21	T.P. #17

OVERCAST 40°
96046
SONIA LAUBFILL
WELL ELEV'S
FB, FP
11/12/97

94096

WELTAM

१२११

REMARKS

४३'९३

5.1372 773M

96096

ש. 1372 תתצ"ח

४३'९३

7	M.I.

11/2/07

+	H.I.	-	ELEV	REMARKS
1.36	20.60	0.875 0.88	89.24	1" 22 SIRE
		10.88	80.22	SB-1 (GRAB)
		7.79	82.81	T.R.#11
4.09	86.90			
		9.61	77.29	SB-3 (GRAB)
		5.49	81.41	T.R.#12
1.78	83.19			
		9.21	73.98	T.R.#13
0.42	74.40			
		14.65	59.75	T.R.#14
3.83	63.58	7.85	55.73	BM STA 25 50 TKE (LOW MUD @ TIDE)
				55.75 73

11/13/97

[illegible]

SUNNY 3PF
96046

SONIA LANDFILL

11/13/97
FD, WP

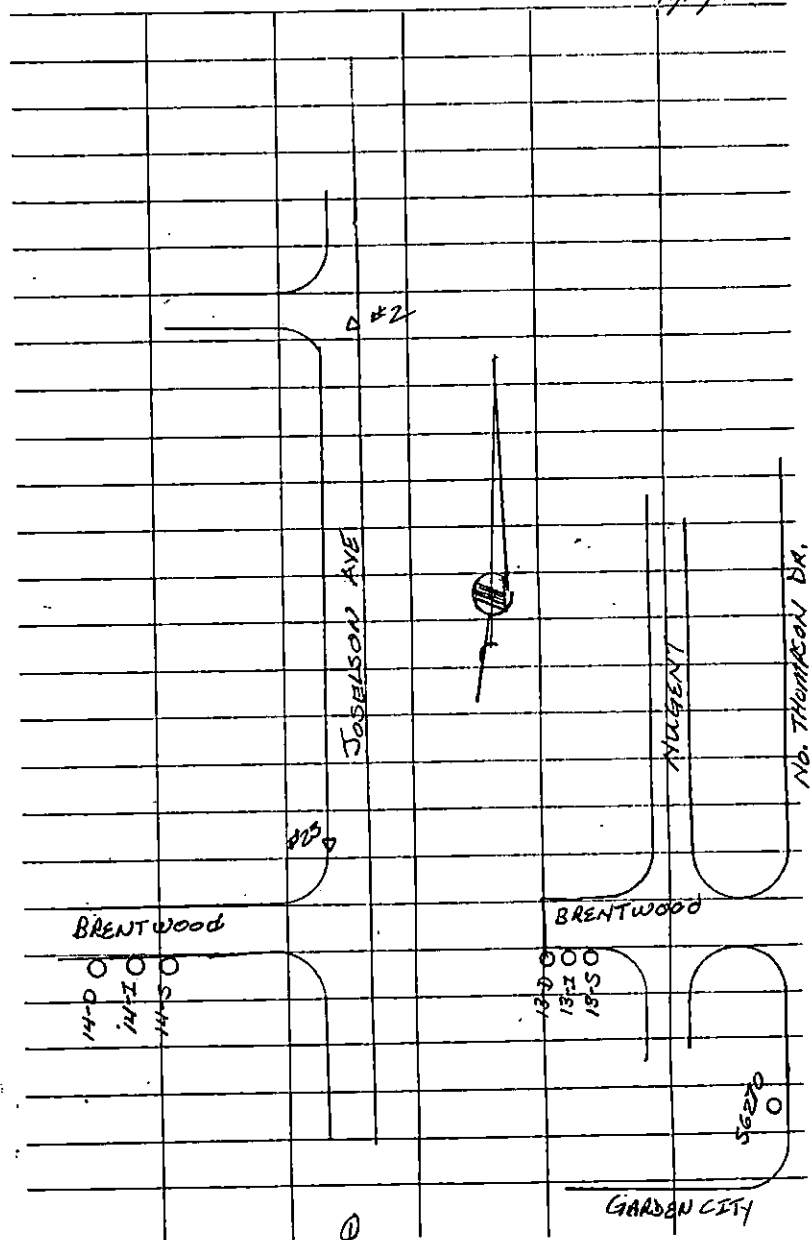
HORIZ	VERT DIST	VERT X	Rod	REMARKS
		⑤		④
		T@ 5' 4" 4/5 Δ #4 H.I. = 5.13		
00-00-00	501.570	89-54-40	4.96	Δ #4 ④
180-00-10	501.590	270-55-10		
230-55-22 H.R.				
230-55-30	270.570	89-40-00	5.28	Δ #14 ④
50-55-25	270.580	291-19-45		
		⑬		④
		T@ Δ #35 4/5 Δ #4 H.I. = 5.48		
00-00-00	233.180	93-14-20	4.96	Δ #4 ④
190-00-00	—	266-15-25		

⑩

96046

SONIA LANDFILL
WELLNATION SKETCH

FD
FP
11/10/97



APPENDIX O

GRAIN SIZE DISTRIBUTION ANALYSES

DELTA WELL & PUMP CO., INC.

SIEVE ANALYSIS

97 UNION AVE., P.O. BOX 1309

ROCKY HILL, NEW YORK, 11779

TEL. # 516 - 981 - 2255

JOB NAME: SONIA ROAD LANDFILL

FILE NAME - SONIA.SIV

WORK ORDER # 388

DATE: 1/13/95

SITE	WELL NO. 1	WELL NO. 1	WELL NO. 2	WELL NO. 2	WELL NO. 3	WELL NO. 3	WELL NO. 4	WELL NO. 4	WELL NO. 5
SIZE	DEPTH 14-16]	DEPTH 19-21]	DEPTH 34-36]	DEPTH 40-42]	DEPTH 24-26]	DEPTH 32-34]	DEPTH 29-31]	DEPTH 31-33]	DEPTH 79-81]
SIEVE	WT. CUM. %	WT. CUM. %	WT. CUM. %	WT. CUM. %	WT. CUM. %	WT. CUM. %	WT. CUM. %	WT. CUM. %	WT. CUM. %
.065	32 .14]	18 .09]	18 .14]	61 .25]	30 .15]	34 .14]	94 .29]	55 .20]	16 .08]
.046	39 .18]	26 .13]	19 .15]	78 .32]	38 .19]	45 .19]	111 .34]	67 .25]	22 .11]
.033	52 .23]	41 .21]	24 .19]	97 .40]	52 .26]	62 .26]	134 .41]	83 .30]	42 .20]
.023	75 .34]	66 .34]	37 .29]	123 .51]	78 .39]	90 .37]	163 .50]	113 .41]	79 .38]
.016	111 .50]	105 .53]	61 .48]	164 .68]	121 .61]	136 .56]	203 .62]	160 .59]	127 .61]
.012	154 .69]	150 .76]	93 .73]	210 .87]	165 .83]	191 .79]	253 .78]	214 .78]	171 .82]
.008	180 .81]	179 .91]	112 .88]	232 .96]	185 .93]	222 .92]	279 .86]	240 .88]	189 .90]
PAN	222 1.00]	197 1.00]	127 1.00]	241 1.00]	199 1.00]	241 1.00]	326 1.00]	273 1.00]	209 1.00]

SITE	WELL NO. 5
SIZE	DEPTH 82-84]
SIEVE	WT. CUM. %
.065	31 .12]
.046	39 .15]
.033	55 .21]
.023	87 .34]
.016	138 .53]
.012	208 .81]
.008	239 .93]
PAN	258 1.00]

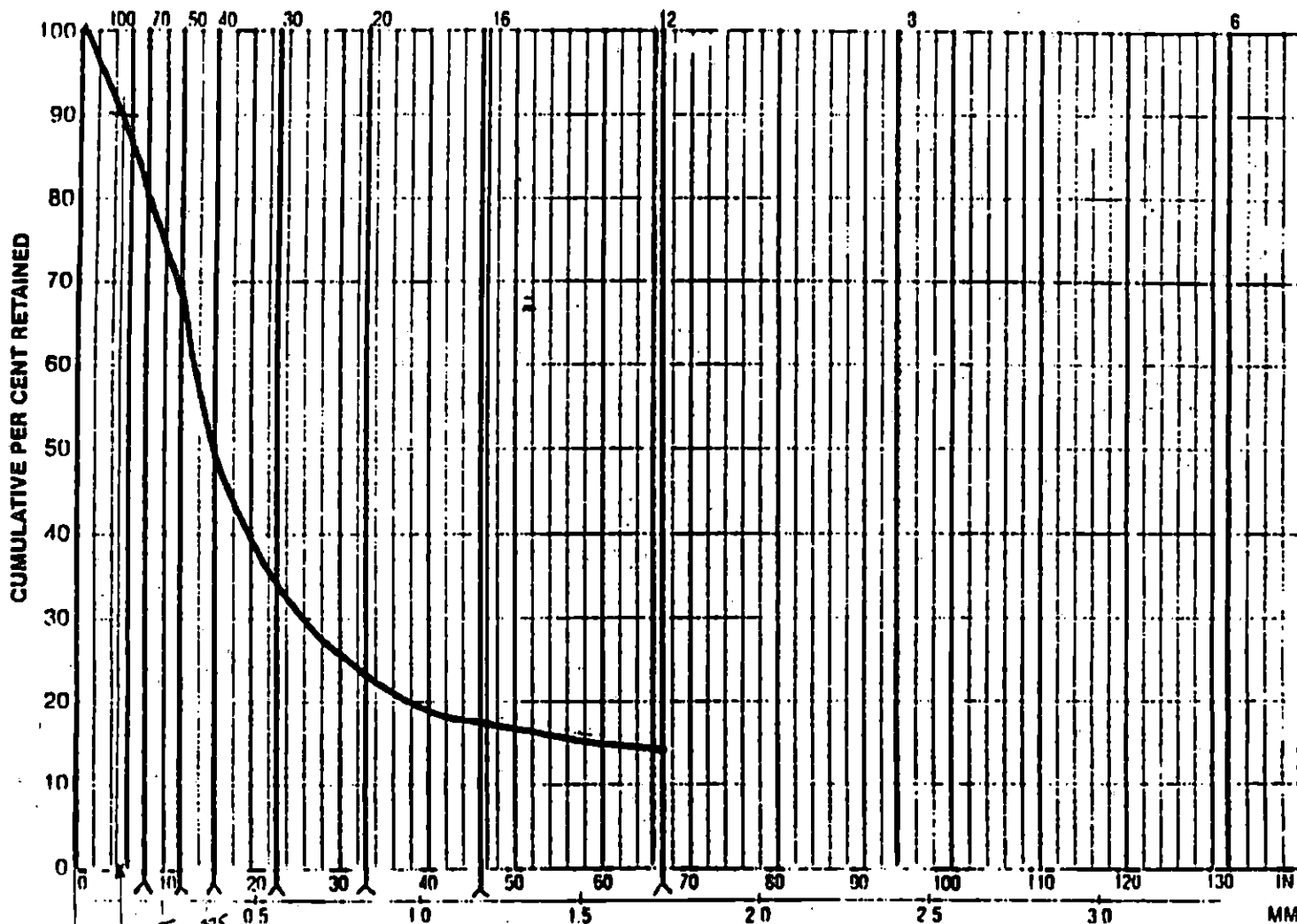
& PUMP CO., INC.
 97 Union Avenue P.O. Box 1309
 RONKONKOMA, NEW YORK 11779
 (516) 981-2255

SAND ANALYSIS

388

Job Name IRRA SONIA ROAD LANDFILL Date 1/13/95
 City ISLIP State NEW YORK Zip _____
 Driller MR. JOSEPH GUGGINO Phone _____
 Engineer _____ Phone _____
 Remarks WELL GW 1 DEPTH= 14-16 FEET

U.S. STANDARD SIEVE NUMBERS



SLIT OPENING AND GRAIN SIZE IN THOUSANDTHS OF AN INCH AND MM.

U.S. SIEVE NO.	SLIT OPENING		SAMPLE DEPTHS			
	IN	MM				
6	.132	.138				
8	.094	.106				
12	.066	.076				
16	.047	.054				
20	.033	.038				
30	.023	.027				
40	.016	.019				
50	.012	.015				
70	.0085	.011				
100	.006	.0075				

Comments _____

SCREEN RECOMMENDATIONS: DIAM.

SLOT	SETTING	LENGTH

388

U.S. STANDARD SIEVE NUMBERS

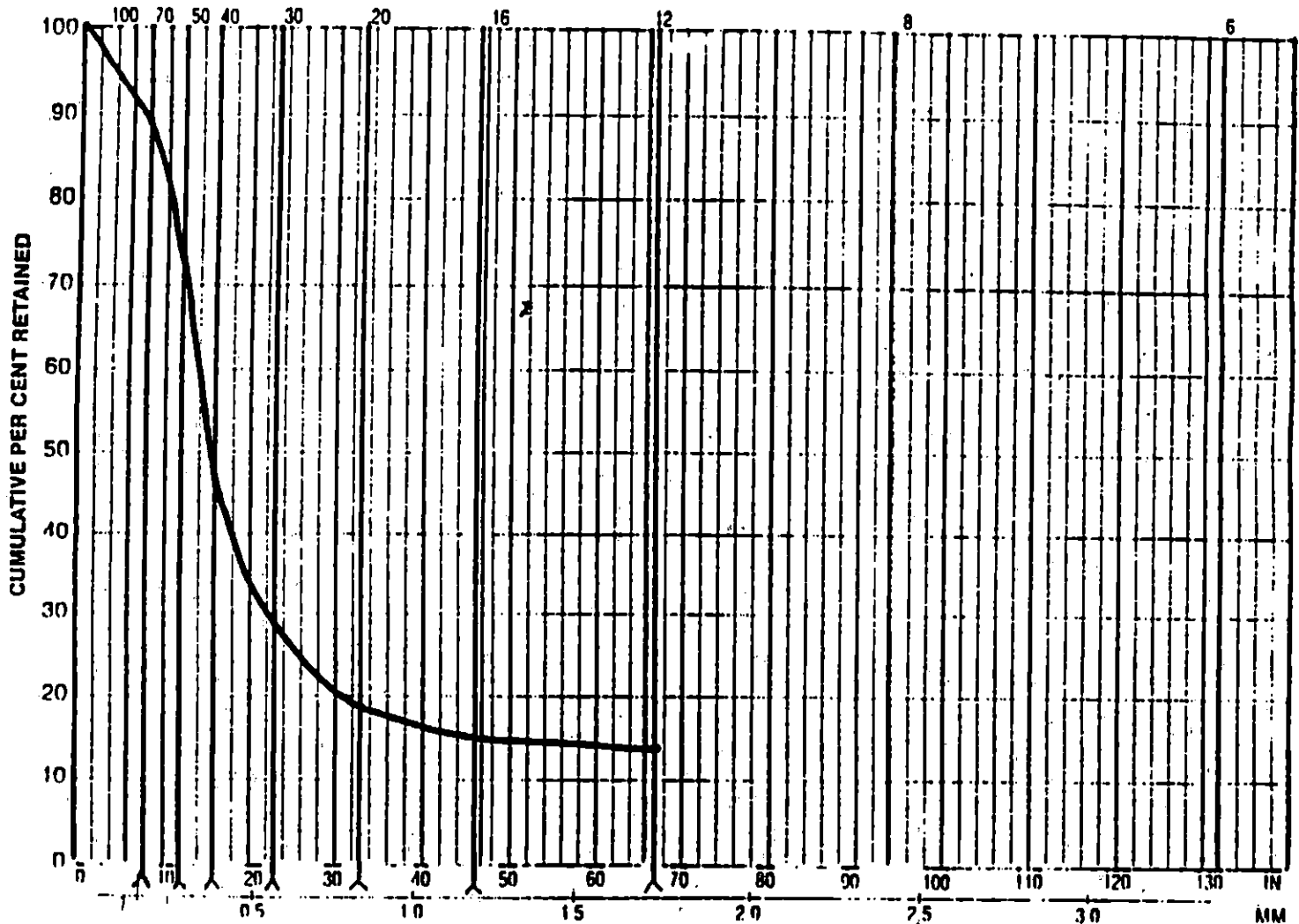


Comments

SLOT	SETTING	LENGTH

Job Name IRRA SONIA ROAD LANDFILL Date 1/13/95
 City ISLIP State NEW YORK Zip _____
 Driller MR. JOSEPH GUGGINO Phone _____
 Engineer _____ Phone _____
 Remarks WELL GW 2 DEPTH- 34-36 FEET

U.S. STANDARD SIEVE NUMBERS



SLOT OPENING AND GRAIN SIZE IN THOUSANDTHS OF AN INCH AND MM.

U.S. SIEVE NO.	SLOT OPENING		SAMPLE DEPTHS			
	IN.	MM.				
6	.132	3.36				
8	.094	2.38				
12	.066	1.68				
16	.047	1.19				
20	.033	0.84				
30	.023	0.60				
40	.016	0.42				
50	.012	0.30				
70	.010	0.21				
100	.008	0.15				

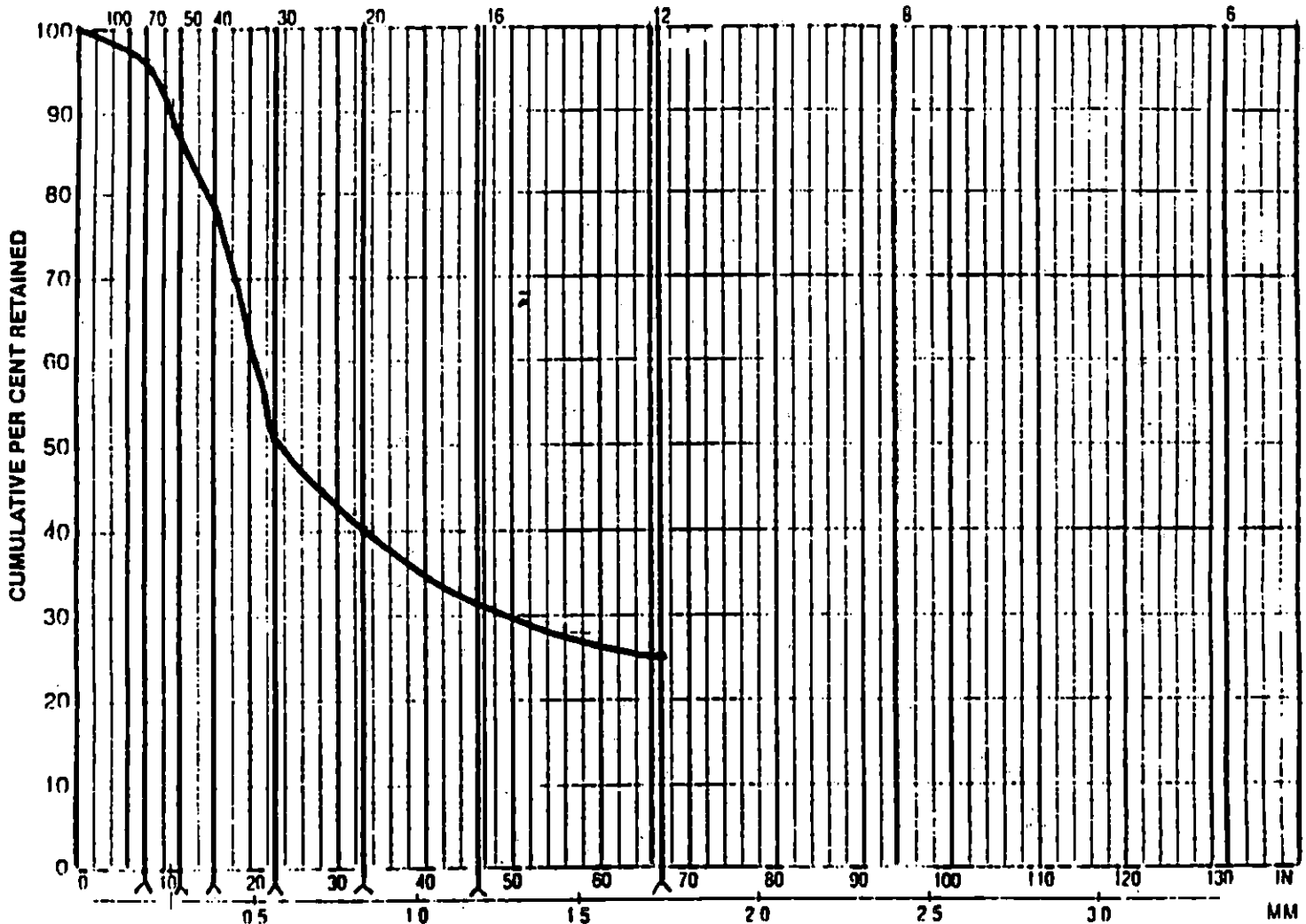
Comments _____

SCREEN RECOMMENDATIONS: DIAM.

SLOT	SETTING	LENGTH

Job Name IRRA SONIA ROAD LANDFILL Date 1/13/95
 City ISLIP State NEW YORK Zip _____
 Driller MR. JOSEPH GUGGINO Phone _____
 Engineer _____ Phone _____
 Remarks WELL GW 2 DEPTH- 40-42 FEET

U.S. STANDARD SIEVE NUMBERS



SLOT OPENING AND GRAIN SIZE IN THOUSANDTHS OF AN INCH AND MM.

U.S. SIEVE NO.	SLOT OPENING		SAMPLE DEPTHS			
	IN	MM				
6	.132	3.36				
8	.094	2.38				
12	.066	1.68				
16	.047	1.19				
20	.033	0.84				
30	.025	0.60				
40	.016	0.42				
50	.012	0.30				
70	.009	0.21				
100	.006	0.15				

Comments _____

SCREEN RECOMMENDATIONS: DIAM. _____

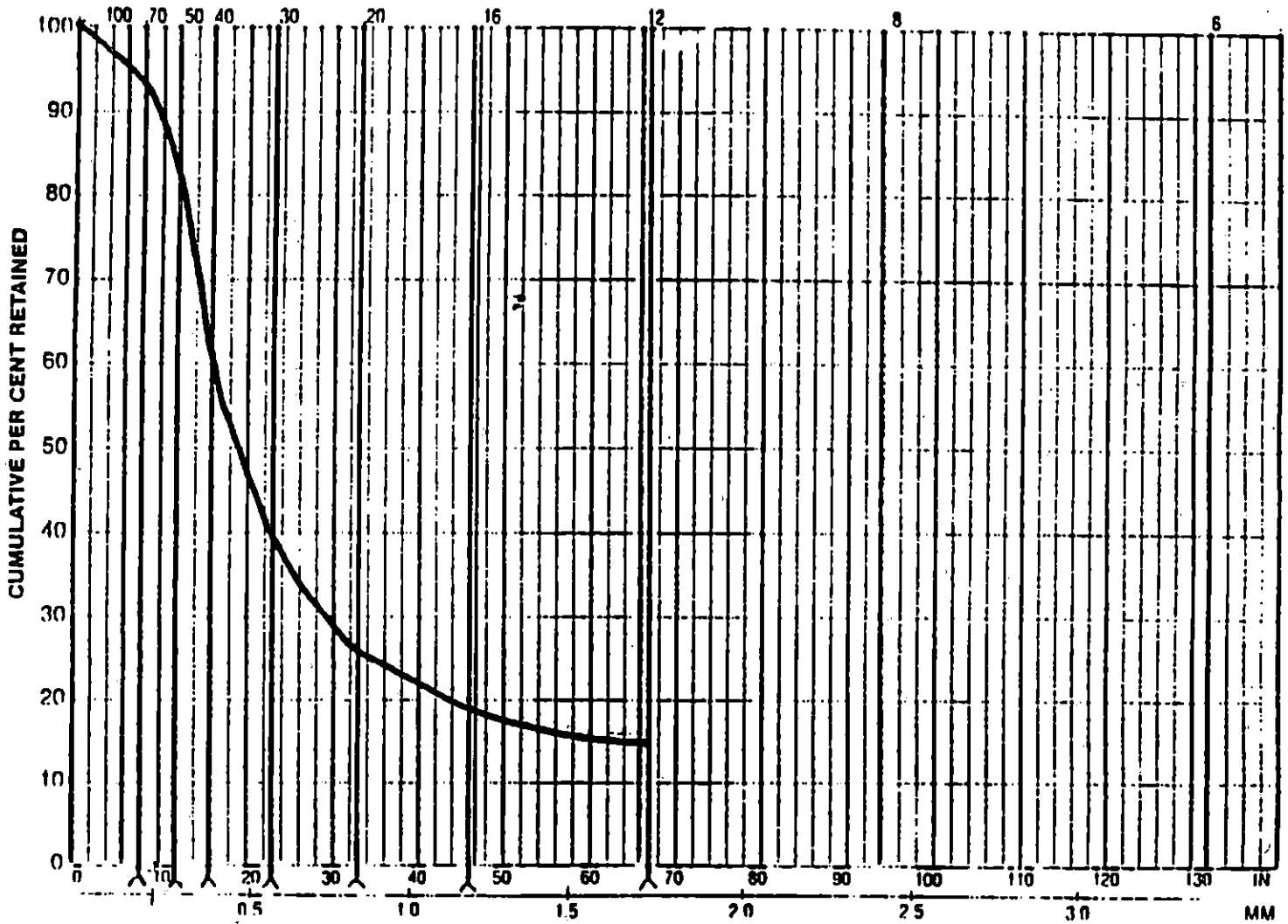
SLOT	SETTING	LENGTH

SAND ANALYSIS

388

Job Name IRRA SONIA ROAD LANDFILL Date 1/13/95
City ISLIP State NEW YORK Zip _____
Driller MR. JOSEPH GUGGINO Phone _____
Engineer _____ Phone _____
Remarks WELL GW 3 DEPTH- 24-26 FEET

U.S. STANDARD SIEVE NUMBERS



SLOT OPENING AND GRAIN SIZE IN THOUSANDTHS OF AN INCH AND MM.

U.S. SIEVE NO.	SLOT OPENING		SAMPLE DEPTHS			
	IN.	MM.				
6	.132	3.36				
8	.091	2.38				
12	.060	1.68				
16	.047	1.19				
20	.033	0.84				
30	.023	0.60				
40	.016	0.42				
50	.012	0.30				
70	.009	0.21				
100	.007	0.15				

Comments _____

SCREEN RECOMMENDATIONS: DIAM.

SLOT	SETTING	LENGTH

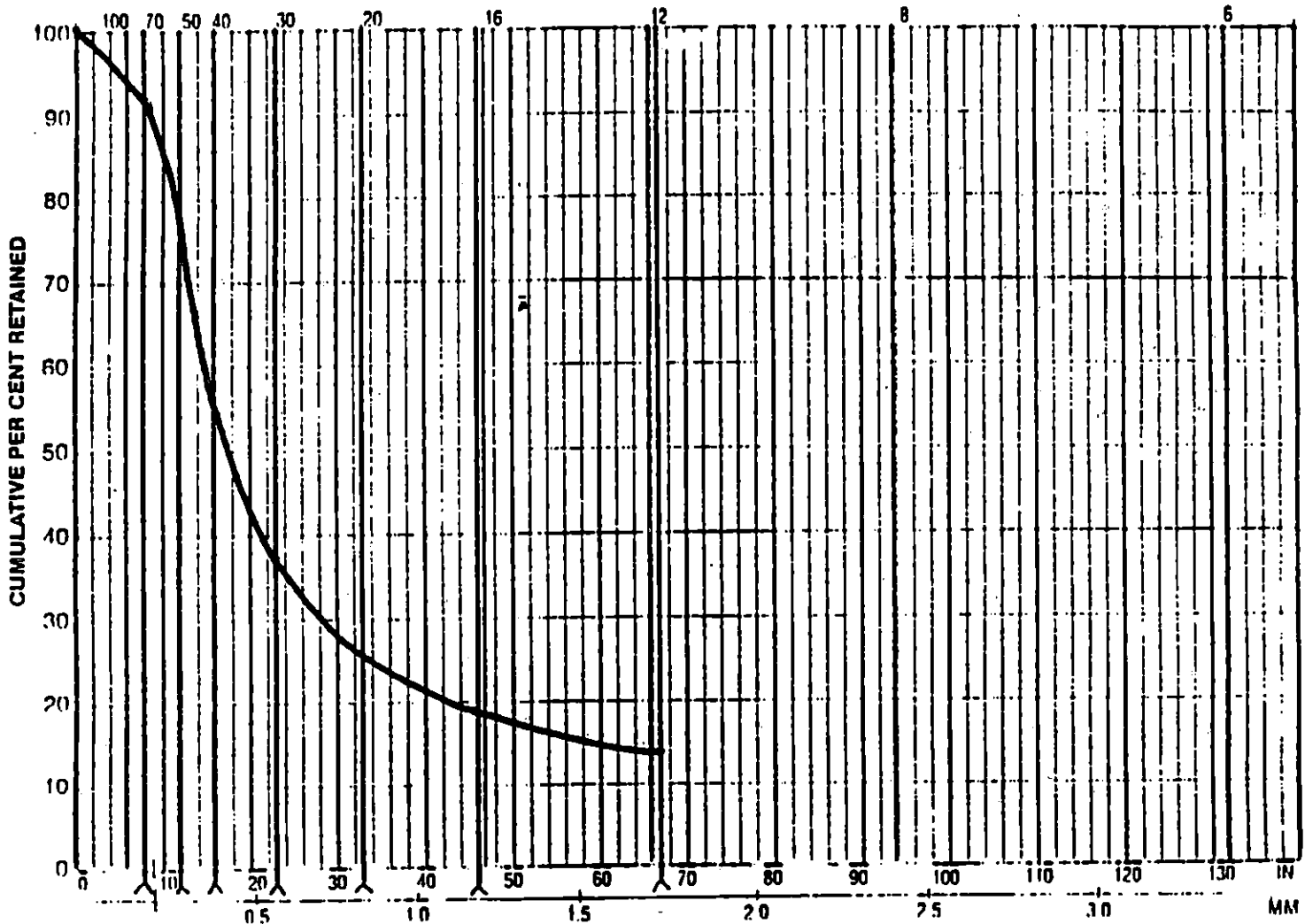
& PUMP CO., INC.

97 Union Avenue P.O. Box 1309
RONKONKOMA, NEW YORK 11779
(516) 981-2255

SAND ANALYSIS

388

Job Name IRRA SONIA ROAD LANDFILL Date 1/13/95
City ISLIP State NEW YORK Zip _____
Driller MR. JOSEPH GUGGINO Phone _____
Engineer _____ Phone _____
Remarks WELL GW 3 DEPTH- 32-34 FEET

U.S. STANDARD SIEVE NUMBERS**SLOT OPENING AND GRAIN SIZE IN THOUSANDTHS OF AN INCH AND MM.**

U.S. SIEVE NO.	SLOT OPENING		SAMPLE DEPTHS	
	IN	MM		
6	132	3.36		
8	99.1	2.38		
12	96.6	1.68		
16	94.7	1.19		
20	85.0	0.84		
30	60.0	0.60		
40	42.5	0.42		
50	30.0	0.30		
70	21.0	0.21		
100	15.0	0.15		

Comments _____

SCREEN RECOMMENDATIONS: DIAM

SLOT	SETTING	LENGTH

& PUMP CO., INC.

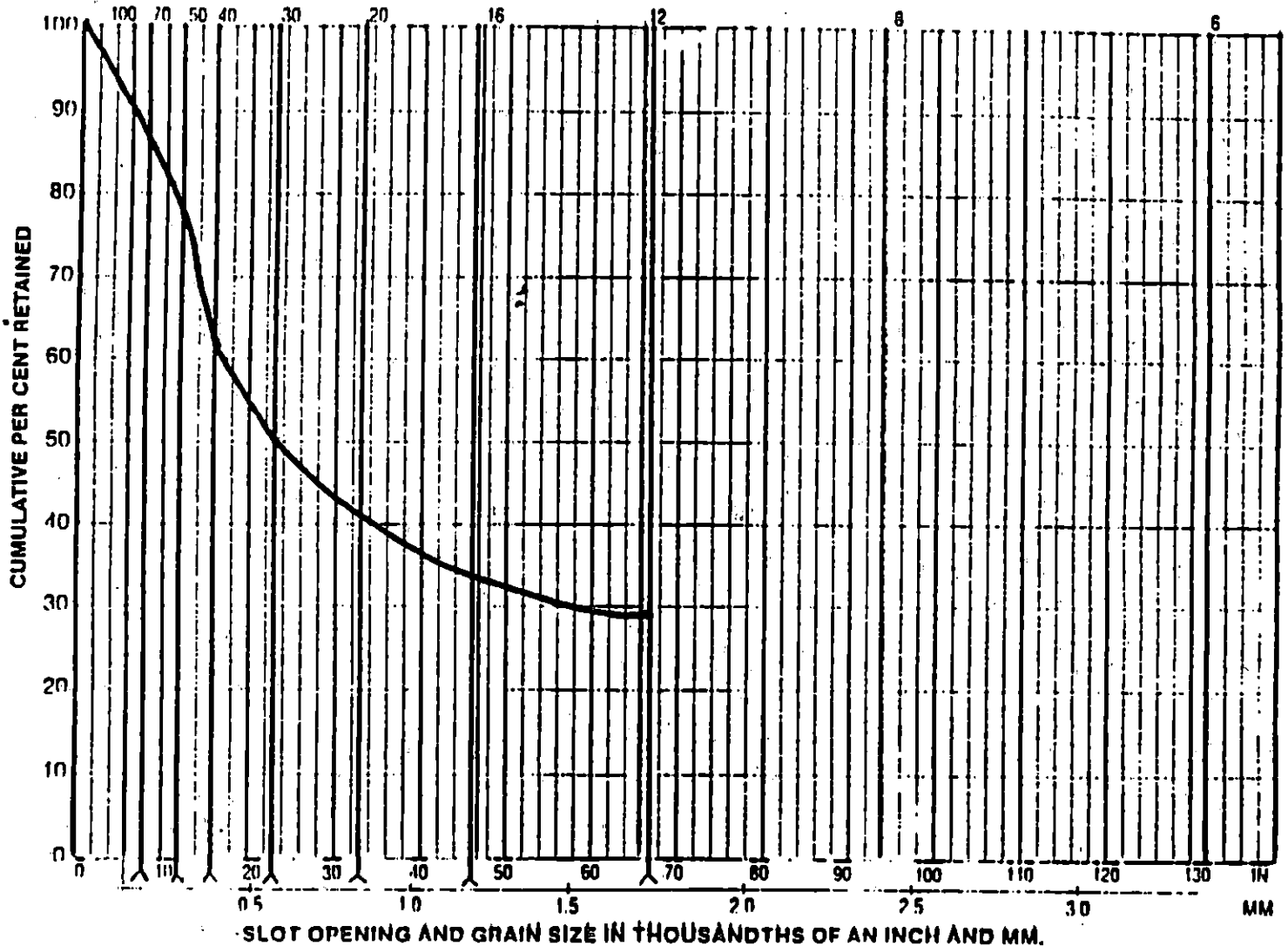
97 Union Avenue P.O. Box 1309
RONKONKOMA, NEW YORK 11779
(516) 981-2255

SAND ANALYSIS

388

Job Name IRRA SONIA ROAD LANDFILL Date 1/13/95
City ISLIP State NEW YORK Zip _____
Driller MR. JOSEPH GUGGINO Phone _____
Engineer _____ Phone _____
Remarks WELL GW 4 DEPTH- 29-31 FEET

U.S. STANDARD SIEVE NUMBERS



U.S. SIEVE NO.	SLOT OPENING		SAMPLE DEPTHS			
	IN.	MM.				
6	.132	3.36				
10	.094	2.38				
12	.066	1.68				
16	.047	1.19				
20	.033	0.84				
30	.021	0.60				
40	.016	0.42				
50	.012	0.30				
70	.009	0.21				
100	.006	0.15				

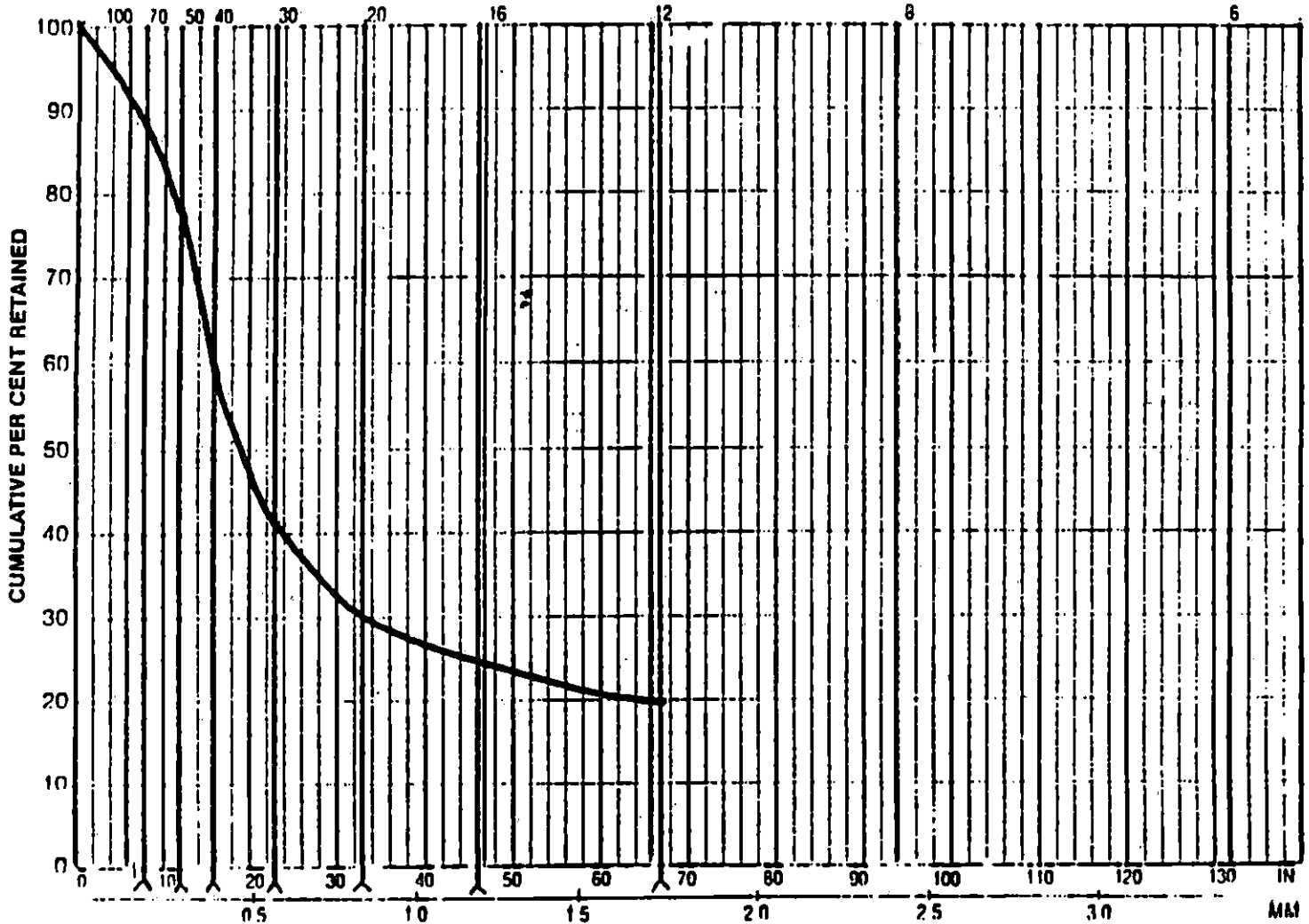
Comments _____

SCREEN RECOMMENDATIONS DIAM.

SLOT	SETTING	LENGTH

Job Name IRRA SONIA ROAD LANDFILL Date 1/13/95
City ISLIP State NEW YORK Zip _____
Driller MR. JOSEPH GUGGINO Phone _____
Engineer _____ Phone _____
Remarks WELL GW 4 DEPTH= 31-33 FEET

U.S. STANDARD SIEVE NUMBERS



SLOT OPENING AND GRAIN SIZE IN THOUSANDTHS OF AN INCH AND MM.

U.S. SIEVE NO.	SLOT OPENING		SAMPLE DEPTHS			
	IN	MM				
6	132	3.36				
8	094	2.38				
12	066	1.68				
16	047	1.19				
20	033	0.84				
30	023	0.60				
40	016	0.42				
50	012	0.30				
70	009	0.21				
100	007	0.15				

Comments _____

SCREEN RECOMMENDATIONS: DIAM.

SLOT	SETTING	LENGTH

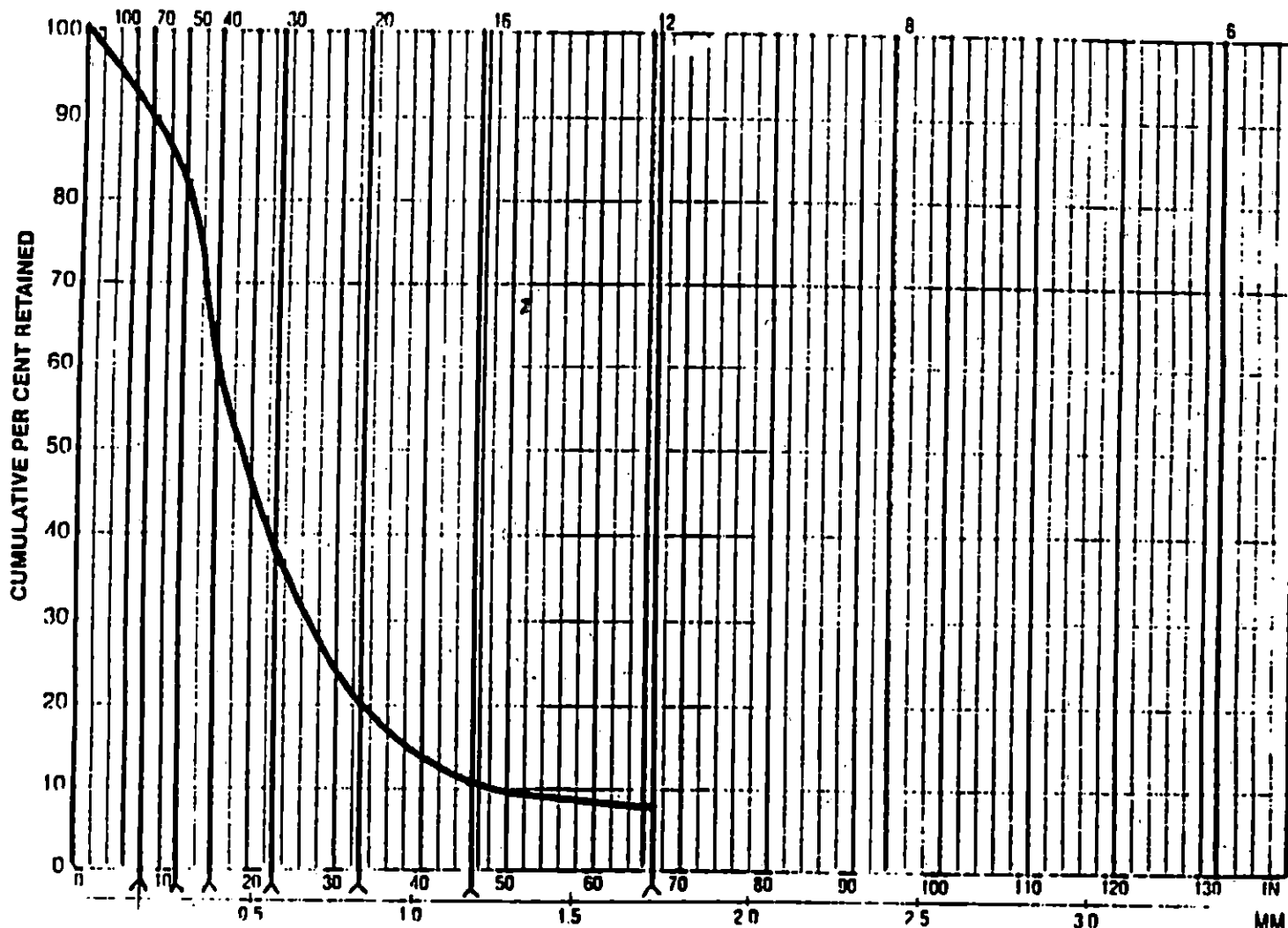
& PUMP CO., INC.
 97 Union Avenue P.O. Box 1309
 RONKONKOMA, NEW YORK 11779
 (516) 981-2255

SAND ANALYSIS

388

Job Name IRRA SONIA ROAD LANDFILL Date 1/13/95
 City ISLIP State NEW YORK Zip _____
 Driller MR. JOSEPH GUGGINO Phone _____
 Engineer _____ Phone _____
 Remarks WELL GW 5 DEPTH= 79-81 FEET

U.S. STANDARD SIEVE NUMBERS



SLOT OPENING AND GRAIN SIZE IN THOUSANDTHS OF AN INCH AND MM.

U.S. SIEVE NO.	SLOT OPENING		SAMPLE DEPTHS			
	IN.	MM.				
6	132	3.36				
8	99.4	2.50				
12	96.6	1.68				
16	94.7	1.19				
20	85.0	0.85				
30	60.0	0.60				
40	47.5	0.425				
50	30.0	0.30				
60	25.0	0.25				
75	19.6	0.19				

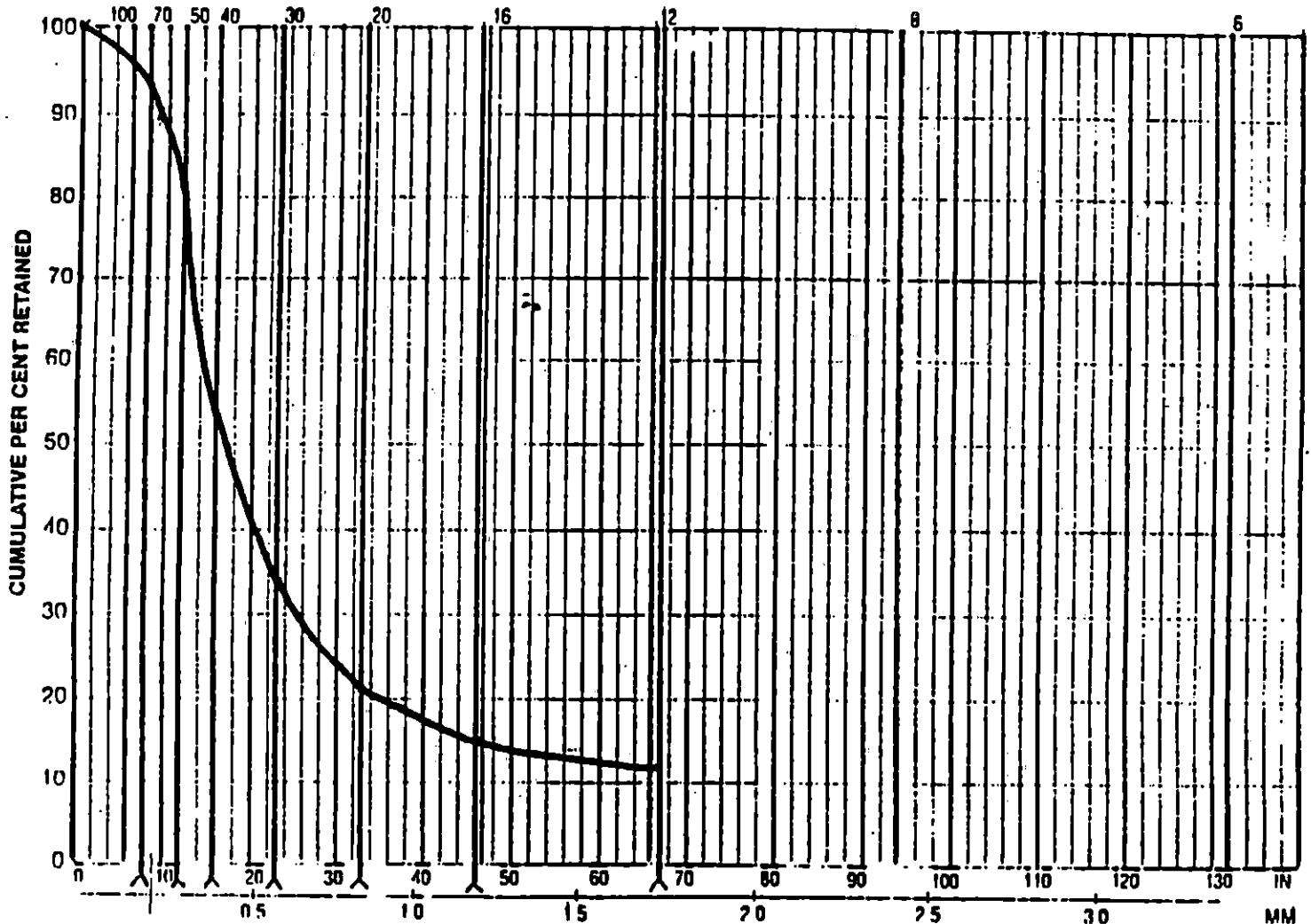
Comments _____

SCREEN RECOMMENDATIONS: DIAM. ...

SLOT	SETTING	LENGTH

Job Name IRRA SONIA ROAD LANDFILL Date 1/13/95
City ISLIP State NEW YORK Zip _____
Driller MR. JOSEPH GUGGINO Phone _____
Engineer _____ Phone _____
Remarks WELL GW 5 DEPTH = 82-84 FEET

U.S. STANDARD SIEVE NUMBERS



SLOT OPENING AND GRAIN SIZE IN THOUSANDTHS OF AN INCH AND MM.

U.S. SIEVE NO.	SLOT OPENING		SAMPLE DEPTHS			
	IN	MM				
6	.132	3.36				
8	.094	2.38				
12	.066	1.68				
16	.047	1.19				
20	.033	0.84				
30	.023	0.60				
40	.016	0.42				
50	.012	0.30				
70	.008	0.21				
100	.006	0.15				

Comments _____

SCREEN RECOMMENDATIONS: DIAM

SLOT	SETTING	LENGTH

105862
 MW1
 N 193745 25
 E 219560 22
 GROUND EL. 57.7
 STEEL CASTING EL. 57.803
 PVC EL. 57.424

105859
 MW2
 N 193805 32
 E 219604 78
 GROUND EL. 77.0
 STEEL CASTING EL. 77.171
 PVC EL. 76.418

5-105858
 MW3D
 N 191944 48
 E 219621 25
 GROUND EL. 76.4
 STEEL CASTING EL. 76.835
 PVC EL. 76.318

105897
 MW4B5
 N 193795 09
 E 219621 82
 GROUND EL. 76.4
 STEEL CASTING EL. 76.848
 PVC EL. 76.541

105857
 MW4
 N 191832 36
 E 219724 55
 GROUND EL. 49.5
 STEEL CASTING EL. 49.571
 PVC EL. 49.106

MON 1
 N 193546 253
 E 219714 591
 EL. 73.877

MON 4
 N 193711 798
 E 2196419 120
 EL. 89.776

MON 5
 N 194911 231
 E 219594 934
 EL. 85.419

TARGET "A"
 N 194769 71
 E 219574 91
 EL. 69.2

TARGET "B"
 N 194738 79
 E 2197429 07
 EL. 67.4

TARGET "C"
 N 193846 51
 E 219753 36
 EL. 74.7

CATCH BASIN "A"
 N 194263
 E 2197401
 EL. 66.9

CATCH BASIN "B"
 N 194766
 E 2197199
 EL. 67.3

CATCH BASIN "C"
 N 194318
 E 21974311
 EL. 67.3

CATCH BASIN "D"
 N 194780
 E 2195679
 EL. 44.0

CATCH BASIN "E"
 N 191751
 E 2195441
 EL. 44.3

CATCH BASIN "F"
 N 193747
 E 2195776
 EL. 55.1

CATCH BASIN "G"
 N 193727
 E 2195815
 EL. 54.7

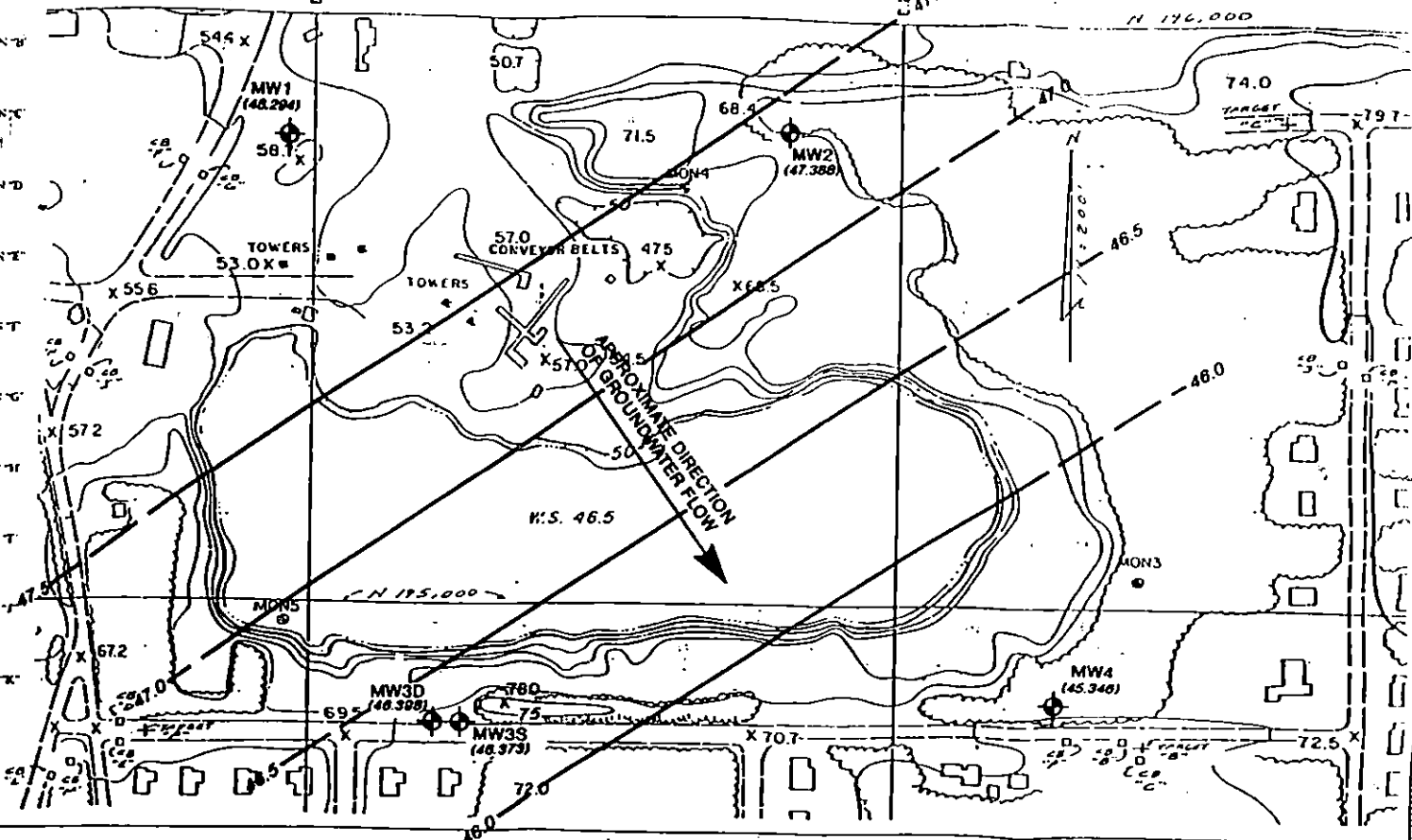
CATCH BASIN "H"
 N 195481
 E 2195585
 EL. 55.0

CATCH BASIN "I"
 N 195384
 E 2195630
 EL. 54.7

CATCH BASIN "J"
 N 195427
 E 2195747
 EL. 74.3

CATCH BASIN "K"
 N 195400
 E 2197786
 EL. 74.9

NOTE: DATA MATTER FOR MONITORING WELLS, MONUMENTS, AERIAL TARGETS & CATCH BASINS TAKEN FROM TOPOGRAPHIC MAP FOR SEWAGE WORKS STUDY, CITY OF WEST HAVEN TOWNS, SUFFOLK COUNTY, NY. AERIAL PHOTOGRAPHY DATE: APRIL 21, 1964. COMPILED DATE: AUGUST 1964. SHEET NO. 1. COORDINATES AND ELEVATIONS SHOWN REFER TO NAD 1929 NEW YORK STATE PLANE SYSTEM.



MUNICIPAL LAND SURVEY P.C.

10 SYLVIA LANE

MIDDLE ISLAND, NEW YORK, 11953

(516) 345-2658

PROJ. # 95019

SURVEYED MARCH 20, 1995

MONITORING WELL, NEW MONUMENTS, AERIAL TARGETS
AND CATCH BASINS

SONJA ROAD LANDFILL
ISLIP, NEW YORK

LEGEND

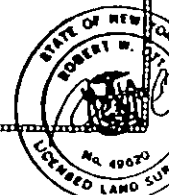
APPROXIMATE GROUNDWATER TABLE
CONTOUR LINE

(45.364)

GROUNDWATER ELEVATION IN FEET
PROVIDED BY IRRA, MAY 24, 1995

REFERENCE

1.) ISLIP RESOURCE RECOVERY AGENCY, 1995.



FIGURE

Golder Associates

SUBJECT IRRA Sonic-Ed Hydrogeo Assmnt.	Made by Checked Reviewed RSW	Job No. 953-6247	Ref.
	Date 6/1/95	Sheet 1	of 1

Job No. 953-6247	Made by Checked Reviewed	RSW	Date Sheet	6/1/95 1 of 1

Job No. 953-6247 Ref.	Made by Checked Reviewed RSW	Date 6/11/95 Sheet 1 of 1

Job No. 953-6247 Ref.	Made by Checked Reviewed RSW	Date 6/1/95 Sheet 1 of 1

Job No. 953-6247 Ref.	Made by Checked Reviewed RSW	Date 6/11/95 Sheet 1 of 1

Monitoring Well / Interval	Effective S _{ic} - D ₁₀ (mm)	Permeability * K = C(D ₉₀) ² C = 12.5 (mm/s - cm/s)	Permeability - conversion - (ft/s)	Average Permeability per well (cm/s - ft/s)
Shallow GW1 / 14-16	.125	.2 - .02	.0007	.03 - .001
Shallow GW1 / 19-21	.188	.4 - .04	.0013	
Shallow GW2 / 34-36	.16	.3 - .03	.001	
Shallow GW2 / 40-42	.25	.8 - .08	.0026	
Shallow GW-35 / 24-26	.23	.7 - .07	.0022	.06 - .002
Shallow GW-35 / 32-34	.20	.5 - .05	.0016	
Deep GW-30 / 79-81	.185	.4 - .04	.0013	.05 - .0016
Deep GW-30 / 82-84	.22	.6 - .06	.002	
Shallow GW-4 / 29-31	.125	.2 - .02	.0007	.025 - .0009
Shallow GW-4 / 31-33	.155	.3 - .03	.001	
				Average Permeability for Shallow Wells = .04 - .002
				Average Permeability for Deep Well = .05 - .0016

* * Sources, G.B. Soil Mechanics and Foundations, 1979
 * Estimates from Delta Well Pump "Sand Analysis"
 (Values or rounded to 1 significant figure)
 (Graphical interpretation of results)

APPENDIX P

NYSDEC TECHNICAL AND ADMINISTRATIVE GUIDANCE MEMORANDUM 4046

P R O P O S E D

New York State Department of Environmental Conservation



MEMORANDUM

TO: Regional Hazardous Waste Remediation Engineers, Bureau Directors & Section Chiefs
 FROM: Michael J. O'Toole, Jr., Director, Division of Hazardous Waste Remediation
 SUBJECT: DIVISION TECHNICAL AND ADMINISTRATIVE GUIDANCE MEMORANDUM:
 DETERMINATION OF SOIL CLEANUP OBJECTIVES AND CLEANUP LEVELS
 DATE:

The cleanup goal of the Department is to restore inactive hazardous waste sites to predisposal conditions, to the extent feasible and authorized by law. However, it is recognized that restoration to predisposal conditions will not always be feasible.

1. INTRODUCTION:

This TAGM provides a basis and procedure to determine soil cleanup levels at individual Federal Superfund, State Superfund, 1986 EQBA Title 3 and Responsible Party (RP) sites, when the Director of the DHWR determines that cleanup of a site to predisposal conditions is not possible or feasible.

The process starts with development of soil cleanup objectives. The objectives contained in the Appendix may be used directly provided the criteria contained in this document apply. If the criteria do not apply, e.g., high groundwater, the Technology Section should be consulted for the determination of cleanup objectives. The Technology Section uses the procedure described in this TAGM to develop soil cleanup objectives. Attainment of these generic soil cleanup objectives will, at a minimum, eliminate all significant threats to human health and/or the environment posed by the inactive hazardous waste site. Project Managers should use these cleanup objectives in selecting alternatives in the Feasibility Study (FS). Based on the proposed selected remedial technology (outcome of FS), final site specific soil cleanup levels are established in the Record of Decision (ROD) for these sites.

It should be noted that even after soil cleanup levels are established in the ROD, these levels may prove to be unattainable when remedial construction begins. In that event, alternative remedial actions or institutional controls may be necessary to protect public health and the environment.

2. BASIS FOR SOIL CLEANUP OBJECTIVES:

The following alternative bases are used to determine soil cleanup objectives:

Post-It™ brand fax transmittal memo 7671		# of pages = 9
To: Richard Roszel	From: Jim Harrington	
Co.	Co. DEC	
Dept.	Phone # 518-485-8792	
Fax # 516-364-9045	Fax #	

P R O P O S E D

- (a) Human health based levels that correspond to excess lifetime cancer risks of one in a million for Class A¹ and B² carcinogens, or one in 100,000 for Class C³ carcinogens. These levels are contained in USEPA's Health Effects Assessment Summary Tables (HEASTs) which are compiled and updated quarterly by the NYSDEC's Division of Hazardous Substances Regulation;
- (b) Human health based levels for systemic toxicants, calculated from Reference Doses (RfDs). RfDs are an estimate of the daily exposure an individual (including sensitive individuals) can experience without appreciable risk of health effects during a lifetime. An average scenario of exposure in which children ages one to six (who exhibit the greatest tendency to ingest soil) is assumed. An intake rate of 0.2 gram/day for a five-year exposure period for a 16-kg child is assumed. These levels are contained in USEPA's Health Effects Assessment Summary Tables (HEASTs) which are compiled and updated quarterly by the NYSDEC's Division of Hazardous Substances Regulation;
- (c) Environmental concentrations which are protective of groundwater/drinking water quality; based on promulgated or proposed New York State Standards;
- (d) Background values for contaminants; and
- (e) Detection limits.

A recommendation on the appropriate cleanup objective is based on the criterion that produces the most stringent cleanup level using criteria a, b, and c for organic chemicals, and criteria a, b, and d for heavy metals. If criteria a and/or b are below criterion d for a contaminant, its background value should be used as the cleanup objective. However, cleanup objectives developed using this approach must be, at a minimum, above the method detection limit (MDL) and it is preferable to have the soil cleanup objectives above the Contract Required Quantitation Limit (CRQL) as defined by NYSDEC. If the cleanup objective of a compound is "non-detectable", it should mean that it is not detected at the MDL. Efforts should be made to obtain the best MDL detection possible when selecting a laboratory and analytical protocol.

3. **DETERMINATION OF SOIL CLEANUP OBJECTIVES FOR ORGANICS IN SOIL FOR PROTECTION OF WATER QUALITY**

The water/soil partitioning theory is used to determine soil cleanup objectives which would be protective of groundwater/drinking water

- (1) Class A are proven human carcinogens
- (2) Class B are probable human carcinogens
- (3) Class C are possible human carcinogens

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quality for its best use. This theory is conservative in nature and assumes that contaminated soil and groundwater are in direct contact. This theory is based upon the ability of organic matter in soil to adsorb organic chemicals. The approach predicts the maximum amount of contamination that may remain in soil so that leachate from the contaminated soil will not violate groundwater and/or drinking water standards. USEPA has also selected this approach in its Soil Screening Levels (SSL) Guidance.

This approach is not used for heavy metals, which do not partition appreciably into soil organic matter. For some routinely found inorganics, an objective has been developed through multiple review on various sites. For others, eastern USA or New York State soil background values may be used as soil cleanup objectives. A list of objectives is attached. For contaminants where site background is the objective, background data near the site is preferable and should be used if it is available. Background samples should be free from the influences of this site and any other source of contaminants. Ideal background samples may be obtained from uncontaminated upgradient and upwind locations.

Protection of water quality from contaminated soil is a two-part problem. The first is predicting the amount of contamination that will leave the contaminated media as leachate. The second part of the problem is to determine how much of that contamination will actually contribute to a violation of groundwater standards upon reaching and dispersing into groundwater. Some of the contamination which initially leaches out of soil will be absorbed by other soil before it reaches groundwater. Some portion will be reduced through natural attenuation or other mechanisms.

PART A: PARTITION THEORY MODEL

There are many test and theoretical models which are used to predict leachate quality given a known value of soil contamination. The Water-Soil Equilibrium Partition Theory is used as a basis to determine soil standard or contamination limit for protection of water quality by most of the models currently in use for organic contaminants. It is based on the ability of organic carbon in soil to adsorb contamination. Using a water quality value which may not be exceeded in leachate and the partition coefficient method, the equilibrium concentration (C_s) will be expressed in the same units as the water standards. The following expression is used:

$$\text{Allowable Soil Concentration } C_s = f \times K_{oc} \times C_w \dots (1)$$

Where: f = fraction of organic carbon of the natural soil medium.

K_{oc} = partition coefficient between water and soil media. K_{oc} can be

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estimated by the following equation:

$$\log K_{oc} = 3.64 - 0.55 \log S$$

S = water solubility in ppm

C_w = appropriate water quality value from TOGS 1.1.1

Most K_{oc} and S values are listed in the Exhibit A-1 of the USEPA Superfund Public Health Evaluation Manual (EPA/540/1-86/060). The K_{oc} values listed in this manual should be used for the purpose. If the K_{oc} value for a contaminants is not listed, it should be estimated using the above mentioned equation.

PART B: PROCEDURE FOR DETERMINATION OF SOIL CLEANUP OBJECTIVES

When the contaminated soil is in the unsaturated zone above the water table, many mechanisms are at work that prevent all of the contamination that would leave the contaminated soil from impacting groundwater. These mechanisms occur during transport and may work simultaneously. They include the following: (1) volatility, (2) sorption and desorption, (3) leaching and diffusion, (4) transformation and degradation, and (5) change in concentration of contaminants after reaching and/or mixing with the groundwater surface. To account for these mechanisms, a correction factor of 100 is used to establish soil cleanup objectives. This value of 100 for the correction is consistent with the logic used by EPA in its Dilution Attenuation Factor (DAF) approach for EP Toxicity and TCLP. (Federal Register/Vol. 55, No. 61, March 29, 1990/Pages 11826-27). Soil cleanup objectives are calculated by multiplying the allowable soil concentration by the correction factor. If the contaminated soil is very close (<3' - 5') to the groundwater table or in the groundwater, extreme caution should be exercised when using the correction factor of 100 (one hundred) as this may not give conservative cleanup objectives. For such situations the Technology Section should be consulted for site-specific cleanup objectives.

An effort should be made to include soil cleanup objectives for the major contaminants. However, many sites have a large number of contaminants, frequently only tentatively identifiable. In those instances, soil cleanup objectives are limited to the following total maximum values. These values are consistent with the approach promulgated by the States of Washington and Michigan.

- 1) Total VOCs $\leq$ 10 ppm.
- 2) Total Semivolatile Compounds $\leq$ 500 ppm.
- 3) Total Carcinogenic Semivolatiles $\leq$ 50 ppm.
- 4) Total Pesticides $\leq$ 10 ppm.

One concern regarding the semi-volatile compounds is that some of these compounds are so insoluble that their C_s values are fairly large. Experience (Draft TOGS on Petroleum Contaminated Soil Guidance) has shown that soil containing some of these insoluble

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substances at high concentrations can exhibit a distinct odor even though the substance will not leach from the soil. Hence, any time a soil exhibits a discernible odor nuisance, it shall not be considered clean even if it has met the numerical criteria.

4. DETERMINATION OF FINAL CLEANUP LEVELS:

Recommended soil cleanup objectives should be utilized in the development of final cleanup levels through the Feasibility Study (FS) process. During the FS, various alternative remedial actions developed during the Remedial Investigation (RI) are initially screened and narrowed down to the list of potential alternative remedial actions that will be evaluated in detail. These alternative remedial actions are evaluated using the criteria discussed in TAGM 4030, Selection of Remedial Actions at Inactive Hazardous Waste Sites and the preferred remedial action is selected. After the detailed evaluation of the preferred remedial action, the final cleanup levels which can be actually achieved using the preferred remedial action must be established. Remedy selection, which will include final cleanup levels, is the subject of TAGM 4030.

Recommended soil cleanup objectives that have been calculated by the Technology Section are presented in Appendix A. These objectives are based on a soil organic carbon content of 1% (0.01) and should be adjusted for the actual organic carbon content if it is known. For determining soil organic carbon content, use attached USEPA method (Appendix B). Please contact the Technology Section, Bureau of Program Management for soil cleanup objectives not included in Appendix A.

Attachments

cc: D. Sterman
J. Ferreira
C. Sullivan
J. Eckl
R. Dana
A. Carlson
C. Goddard
P. Counterman
A. Fossa
J. Kelleher
J. Colquhoun

D. Persson
M. Birmingham
D. Johnson
M. Kadlecsek
E. Netkin (2)
D. Nelson
Regional Directors
Regional Engineers
Reg. Solid and Haz. Waste Engineers
Regional Citizen Participation Specialists
DHWR Standby Consultants

APPENDIX A
TABLE 1
Recommended soil cleanup objectives (mg/kg or ppm)
Volatile Organic Contaminants

Contaminant	Partition coefficient K _{oc}	Groundwater Standard/ Criteria C _{gw} ug/l or ppb	Allowable Soil concn. ppm, C _s	Soil Cleanup objectives to Protect GW Quality (ppm)	USEPA Health Based Carcinogens (ppm)	Systemic Toxicants	CRQL (ppb)	Rec. Soil Cleanup Object. (ppm)
Acetone	2.2	50	0.0011	0.11	N/A	8,000	10	0.2
Benzene	83	0.7	0.0006	0.06	24	N/A	5	0.06
Boric Acid	54*	50	0.027	2.7	N/A	300,000	5	2.7
2-Butanone	4.5*	50	0.003	0.3	N/A	4,000	10	0.3
Carbon Disulfide	54*	50	0.027	2.7	N/A	8,000	5	2.7
Carbon Tetrachloride	110*	5	0.006	0.6	5.4	60	5	0.6
Chlorobenzene	330	5	0.017	1.7	N/A	2,000	5	1.7
Chloroethane	37*	50	0.019	1.9	N/A	540	10	1.9
Chloroform	31	7	0.003	0.30	114	800	5	0.3
Dibromochloromethane	N/A	50	N/A	N/A	N/A	N/A	5	0.3
1,2-Dichlorobenzene	1,700	4.7	0.079	7.9	N/A	7,000	330	7.9
1,3-Dichlorobenzene	310*	5	0.0155	1.55	N/A	N/A	330	1.6
1,4-Dichlorobenzene	1,700	5	0.085	8.5	29	N/A	330	8.5
1,1-Dichloroethane	30	5	0.002	0.2	N/A	8,000	5	0.2
1,2-Dichloroethane	14	5	0.001	0.1	7.7	N/A	5	0.1
1,1-Dichloroethene	65	5	0.004	0.4	12	700	5	0.4
1,2-Dichloroethene (trans)	59	5	0.003	0.3	N/A	2,000	5	0.3
1,2-Dichloroethene (cis)	48*	5	0.0025	0.25	N/A	800	5	0.25
1,3-Dichloropropane	51	5	0.003	0.3	N/A	N/A	5	0.3
Ethylbenzene	1,100	5	0.065	5.5	N/A	8,000	5	5.5
1,1,1,2-Tetrachloro- 1,2,2-Trifluoroethane	1,230*	5	0.060	6.0	N/A	200,000	5	6.0
Methylene chloride	21	5	0.001	0.1	53	5,000	5	0.1
4-Methyl-2-Pentanone	18*	50	0.01	1.0	N/A	4,000	10	1.0
Tetrachloroethane	277	5	0.014	1.4	14	800	5	1.4
1,1,1-Trichloroethane	152	5	0.0076	0.76	N/A	7,000	5	0.8
1,1,2,2-Tetrachloroethane	118	5	0.006	0.6	N/A	N/A	5	0.6
1,2,3-Trichloropropane	69	5	0.0034	0.34	35	500	5	0.4
1,2,4-Trichlorobenzene	670*	5	0.034	3.4	N/A	2,000	330	3.4
Toluene	300	5	0.015	1.5	N/A	20,000	5	1.5
Trichloroethane	126	5	0.007	0.70	64	N/A	5	0.7
Vinyl chloride	57	2	0.0012	0.12	N/A	N/A	10	0.2
Xylenes	240	5	0.012	1.2	N/A	200,000	—	1.2

a. Allowable Soil Concentration $C_s = f \times C_{gw} \times K_{oc}$

b. Soil cleanup objective = $C_s \times$ Correction Factor (CF)

N/A is not available

* Partition coefficient is calculated by using the following equation:

$\log K_{oc} = -0.55 \log S + 3.64$, where S is solubility in water in ppm.

All other K_{oc} values are experimental values.

-- Correction Factor (CF) of 100 is used as per TAGM #4046

--- As per TAGM #4046, Total VOCs < 10 ppm.

Note: Soil cleanup objectives are developed for soil organic carbon content (f) of 1%, and should be adjusted for the actual soil organic carbon content if it is known.

APPENDIX A (cont.)
TABLE 2
Recommended Soil Cleanup Objectives (mg/kg or ppm)
Semi-Volatile Organic Contaminants

Revised 4/85

Contaminant	Partition coefficient K _{oc}	Groundwater Standards/ Criteria C _w ug/l or ppb.	a Allowable Soil conc. ppm C _s	b ** Soil Cleanup objectives to Protect GW Quality (ppm)	USEPA Health (ppm) Carcinogens	Based Systemic Toxicants	CRCL (ppb)	Rec. soil Cleanup Object. (ppm)
Acenaphthene	4,600	20	0.9	80.0	N/A	5,000	330	50.0***
Acenaphthylene	2,056*	20	0.41	41.0	N/A	N/A	330	41.0
Aniline	13.8	5	0.001	0.1	123	N/A	330	0.1
Anthracene	14,000	50	7.00	700.0	N/A	20,000	330	50.0***
Benzo(a)anthracene	1,380,000	0.002	0.03	3.0	0.224	N/A	330	0.224 or MDL**
Benzo(a)pyrene	5,500,000	0.002(MD)	0.110	11.0	0.0609	N/A	330	0.061 or MDL**
Benzo(b)fluoranthene	550,000	0.002	0.011	1.1	0.224	N/A	330	0.224 or MDL**
Benzo(g,h,i)perylene	1,600,000	5	8.0	800	N/A	N/A	330	50.0***
Benzo(k)fluoranthene	550,000	0.002	0.011	1.1	0.224	N/A	330	0.224 or MDL**
bis(2-ethylhexyl)phthalate	8,708*	50	4.35	435.0	50	2,000	330	50.0***
Butylbenzylphthalate	2,430	50	1.215	122.0	N/A	20,000	330	50.0***
Chrysene	200,000	0.002	2.004	0.4	N/A	N/A	330	0.4**
4-Chloroaniline	43****	5	0.0022	0.22	200	300	330	0.220 or MDL
4-Chloro-3-methylphenol	47	5	0.0024	0.24	N/A	N/A	330	0.240 or MDL
2-Chlorophenol	15*	50	0.008	0.8	N/A	400	330	0.8
Dibenzofuran	1,230*	5	0.062	6.2	N/A	N/A	330	6.2
Dibenzo(a,h)anthracene	33,000,000	50	1.650	165,000	0.0143	N/A	330	0.014 or MDL**
3,3'-Dichlorobenzidine	N/A	N/A	N/A	N/A	1.6	N/A	N/A	N/A
2,4-Dichlorophenol	380	1	0.004	0.4	N/A	200	330	0.4
2,4-Dinitrophenol	38	5	0.002	0.2	N/A	200	1,600	0.200 or MDL
2,6-Dinitrotoluene	198*	5	0.01	1.0	1.03	N/A	330	1.0
Diethylphthalate	142	50	0.071	7.1	N/A	60,000	330	7.1
Dimethylphthalate	40	50	0.020	2.0	N/A	80,000	330	2.0
Di-n-butyl phthalate	162*	50	0.081	8.1	N/A	8,000	330	8.1
Di-n-octyl phthalate	2,346*	50	1.2	120.0	N/A	2,000	330	50.0***
Fluoranthene	38,000	50	19	1900.0	N/A	3,000	330	50.0***
Fluorene	7,300	50	3.5	350.0	N/A	3,000	330	50.0***
Heptachlorobenzene	3,900	0.35	0.014	1.4	0.41	60	330	0.41
Indeno(1,2,3-cd)pyrene	1,600,000	0.002	0.032	3.2	N/A	N/A	330	3.2**
Isophorone	88.31*	50	0.044	4.40	1,707	7,000	330	4.40
2-methylnaphthalene	727*	50	0.364	36.4	N/A	N/A	330	36.4
2-Methylphenol	15	5	0.001	0.1	N/A	N/A	330	0.100 or MDL
4-Methylphenol	17	50	0.009	0.9	N/A	4,000	330	0.9
Naphthalene	1,300	10	0.130	13.0	N/A	300	330	13.0
Nitrobenzene	36	5	0.002	0.2	N/A	40	330	0.200 or MDL
2-Nitroaniline	86	5	0.0043	0.43	N/A	N/A	1,600	0.430 or MDL
2-Nitrophenol	65	5	0.0033	0.33	N/A	N/A	330	0.330 or MDL
4-Nitrophenol	21	5	0.001	0.1	N/A	N/A	1,600	0.100 or MDL
3-Nitroaniline	93	5	0.005	0.5	N/A	N/A	1,600	0.500 or MDL
Pentachlorophenol	1,022	1	0.01	1.0	5.8	2,000	1,600	1.0 or MDL
Phenanthrene	4,365*	50	2.20	220.0	N/A	N/A	330	50.0***
Phenol	27	1	0.0003	0.03	N/A	50,000	330	0.03 or MDL
Pyrene	13,295*	50	8.65	665.0	N/A	2,000	330	50.0***
2,4,5-Trichlorophenol	88*	1	0.001	0.1	N/A	8,000	330	0.1

a. Allowable Soil Concentration C_s = f x C_w x K_{oc}b. Soil cleanup objective = C_s x Correction Factor (CF)

N/A is not available

MDL is Method Detection Limit

- * Partition coefficient is calculated by using the following equation:
log K_{oc} = -0.55 log S + 3.64, where S is solubility in water in ppm. Other K_{oc} values are experimental values.
- ** Correction Factor (CF) of 100 is used as per TAGM #4046
- *** As per TAGM #4046, Total VOCs < 10 ppm, Total non-carcinogenic Semi-VOCs < 500 ppm, individual non-carcinogenic Semi-VOCs < 50 ppm, and Total carcinogenic Semi-VOCs < 10 ppm.
- **** K_{oc} is derived from the correlation K_{oc} = 0.63 K_{ow} (Determining Soil Response Action Levels.... EPA/540/2-89/057). K_{ow} is obtained from the USEPA computer database "MAIN".

Note: Soil cleanup objectives are developed for soil organic carbon content (f) of 1%, and should be adjusted for the actual soil organic carbon content if it is known.

APPENDIX A (cont.)
 TABLE 3
 Recommended soil cleanup objectives (mg/kg or ppm)
 Organic Pesticides / Herbicides and PCBs

Contaminant	Partition coefficient Koc	Groundwater Standards/ Criteria Cw ug/l or ppb	a Allowable Soil conc. ppm. Cs	b Soil Cleanup objectives to Protect GW Quality (ppm)	USEPA Health Based (ppm) Carcinogens	Systemic Toxicants	CRQL (ppb)	*** Rec. soil Cleanup Object. (ppm)
Aldrin	98,000	ND(<0.01)	0.005	0.5	0.041	2	8	0.041
alpha - BHC	3,800	ND(<0.05)	0.002	0.2	0.111	N/A	8	0.11
beta - BHC	3,800	ND(<0.05)	0.002	0.2	3.89	N/A	8	0.2
delta - BHC	6,600	ND(<0.05)	0.003	0.3	N/A	N/A	8	0.3
Chlordane	21,305*	0.1	0.02	2.0	0.54	50	80	0.54
2,4-D	104*	4.4	0.005	0.5	N/A	800	800	0.5
4,4'-DDD	770,000*	ND(<0.01)	0.077	7.7	2.9	N/A	18	2.9
4,4'-DDE	440,000*	ND(<0.01)	0.0440	4.4	2.1	N/A	16	2.1
4,4'-DDT	243,000*	ND(<0.01)	0.025	2.5	2.1	40	16	2.1
Dieldrin	10,700*	ND(<0.01)	0.0010	0.1	0.044	4	16	0.044
Endosulfan I	8,168*	0.1	0.009	0.9	N/A	N/A	16	0.9
Endosulfan II	8,031*	0.1	0.009	0.9	N/A	N/A	16	0.9
Endosulfan Sulfate	10,038*	0.1	0.01	1.0	N/A	N/A	16	1.0
Endrin	9,157*	ND(<0.01)	0.001	0.1	N/A	200	8	0.10
Endrin ketone	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
gamma - BHC (Lindane)	1,080	ND(<0.05)	0.0006	0.06	5.4	20	8	0.06
gamma - chlordane	140,000	0.1	0.14	14.0	0.54	5	80	0.54
Heptachlor	12,000	ND(<0.01)	0.0010	0.1	0.16	40	8	0.10
Heptachlor epoxide	220	ND(<0.01)	0.0002	0.02	0.077	0.8	8	0.02
Methoxychlor	25,637	35.0	9.0	900	N/A	400	80	---
Mitotane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Parathion	760	1.5	0.012	1.2	N/A	500	8	1.2
PCBs	17,510*	0.1	0.1	10.0	1.0	N/A	180	1.0(Surface) 10(sub-surf)
Polychlorinated dibenzo-furans(PCDF)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Silvex	2,600	0.26	0.007	0.7	N/A	600	330	0.7
2,4,5-T	53	35	0.019	1.9	N/A	200	330	1.9
2,3,7,8 tetrachloro dibenzo-p-dioxin	N/A	0.000035	N/A	N/A	0.0000045	N/A	0.001	0.001

a. Allowable Soil Concentration $C_s = f \times C_w \times K_{oc}$

b. Soil cleanup objective = $C_s \times$ Correction Factor (CF)

N/A is not available

- * Partition coefficient is calculated by using the following equation:
 $\log K_{oc} = -0.55 \log S + 3.64$, where S is solubility in water in ppm.
 All other Koc values are experimental values.

** Correction Factor (CF) of 100 is used as per TAGM #4046

*** As per TAGM #4046, Total Pesticides < 10 ppm.

Note: Soil cleanup objectives are developed for soil organic carbon content (f) of 1% (5% for PCBs), and should be adjusted for the actual soil organic carbon content if it is known.

APPENDIX A

Rev. 4/95

TABLE 4

Average Background Concentrations (mg/kg or ppm) in soil for Heavy Metals

Contaminants	Protect Water Quality ppm	***** Eastern USA Background ppm	* CRDL mg/kg or ppm	Rec. soil cleanup object. (ppm)
Aluminum	N/A	33,000	2.0	SB
Antimony	N/A	N/A	0.6	SB
Arsenic	N/A	3-12 **	0.1	7.5 or SB
Barium	N/A	15-600	2.0	300 or SB
Beryllium	N/A	0-1.75	0.05	0.16(HEAST) or SB
Cadmium	N/A	0.1-1	0.05	10
Calcium	N/A	130 - 35,000 **	50.0	SB
Chromium	N/A	1.5-40 **	0.1	50
Cobalt	N/A	2.5-60 **	0.5	30 or SB
Copper	N/A	1-50	0.25	25 or SB
Cyanide	N/A	N/A	0.1	***
Iron	N/A	2,000 - 550,000	1.0	2,000 or SB
Lead	N/A	****	0.03	****
Magnesium	N/A	100 - 5,000	50.0	SB
Manganese	N/A	50 - 5,000	0.15	SB
Mercury	N/A	0.001-0.2	0.002	0.1
Nickel	N/A	0.5-25	0.4	13 or SB
Potassium	N/A	8,500 - 43,000 **	50.0	SB
Selenium	N/A	0.1-3.9	0.05	2 or SB
Silver	N/A	N/A	0.1	SB
Sodium	N/A	6,000 - 8,000	50.0	SB
Thallium	N/A	N/A	0.1	SB
Vanadium	N/A	1-300	0.5	150 or SB
Zinc	N/A	9-50	0.2	20 or SB

SB is site background

N/A is not available

* CRDL is contract required detection limit which is approx. 10 times the CRDL for water.

** New York State background

*** Some forms of Cyanide are complex and very stable while other forms are pH dependent and hence are very unstable. Site-specific form(s) of Cyanide should be taken into consideration when establishing soil cleanup objective.

**** Background levels for lead vary widely. Average background levels in metropolitan or suburban areas near highways are much higher and typically range from 200-500 ppm. The USEPA's Interim Lead Hazard Guidance (July 14, 1994) establishes a residential screening level of 400 ppm.

***** Eastern USA background concentrations as reported in a 1984 survey of reference material by E. Carol McGovern, NYSDEC.

APPENDIX Q

HISTORICAL GAS MONITORING WELL RESULTS

SONIA ROAD METHANE

DATE	TIME	TEMP	BARO	COND	MONITORING WELL NUMBERS								
					1	2	3	4	5	6	7	8	9
9-30-92	11 ³⁰	54°	30.14	Clear	0.6	0.6	0.6	0.6	0.6	0.6			
10-1-92	12 ⁰⁰	51°	30.11	"	0.7	0.7	0.7	0.7	0.7	0.7			
10-5-92	139	53°	30.16	"	0.7	0.7	0.7	0.7	0.7	0.7			
10-6-92	1 ⁰⁰	56°	30.37	"	0.7	0.7	0.7	0.7	0.7	0.7			
10-7-92	139	62°	30.30	"	0.7	0.7	0.7	0.7	0.7	0.7			
10-8-92	9 ³⁰	68°	30.28	"	0.7	0.7	0.7	0.7	0.7	0.7			
10-9-92	1 ⁰⁰	64°	30.19	Cloudy	0.7	0.7	0.7	0.7	0.7	0.7			
10-13-92	10 ³⁰	58°	29.89	Clear	0.7	0.7	0.7	0.7	0.7	0.7			
	2 ¹⁵	63°	"	"	0.7	0.7	0.7	0.7	0.7	0.7			
10-14-92	7 ⁰⁰	46°	30.15	"	0.7	0.7	0.7	0.7	0.7	0.7			
	1 ⁴⁵	57°	"	Cloudy	0.7	0.7	0.7	0.7	0.7	0.7			
10-15-92	8 ¹⁵	54°	30.13	"	0.7	0.7	0.7	0.7	0.7	0.7			
	13 ³⁰	70°	30.10	Clear	0.7	0.7	0.7	0.7	0.7	0.7			
10-16-92	9 ⁰⁰	65°	30.05	"	0.7	0.7	0.7	0.7	0.7	0.7			
	1 ⁴⁵	70°	29.96	"	0.7	0.7	0.7	0.7	0.7	0.7			
10-17-92	7 ⁴⁰	45°	29.07	Cloudy	0.7	0.7	0.7	0.7	0.7	0.7			
	1 ⁴⁵	48°	29.94	"	0.7	0.7	0.7	0.7	0.7	0.7			
10-20-92	8 ³⁰	35°	30.35	Clear	0.7	0.7	0.7	0.7	0.7	0.7			
	13 ³⁰	50°	30.39	"	0.7	0.7	0.7	0.7	0.7	0.7			
10-21-92	8 ³⁰	52°	30.32	Rain	0.7	0.7	0.7	0.7	0.7	0.7			
	1 ⁴⁰	58°	30.29	Clear	0.7	0.7	0.7	0.7	0.7	0.7			
10-23-92	7 ⁴⁰	39°	30.47	"	0.7	0.7	0.7	0.7	0.7	0.7			
10-26-92	8 ¹⁵	36°	29.73	"	0.7	0.7	0.7	0.7	0.7	0.7			
	13 ³⁰	55°	29.70	"	0.7	0.7	0.7	0.7	0.7	0.7			
10-27-92	8 ³⁰	47°	28.96	"	0.7	0.7	0.7	0.7	0.7	0.7			
	1 ⁴⁵	55°	29.89	"	0.7	0.7	0.7	0.7	0.7	0.7			
10-28-92	8 ³⁰	35°	30.01	"	0.7	0.7	0.7	0.7	0.7	0.7			
	2 ⁰⁰	56°	30.09	"	0.7	0.7	0.7	0.7	0.7	0.7			
10-29-92	9 ⁰⁰	45°	30.00	"	0.7	0.7	0.7	0.7	0.7	0.7			
	2 ⁰⁰	58°	30.07	"	0.7	0.7	0.7	0.7	0.7	0.7			

COMMENTS:

Post-it Brand fax transmittal memo 7671

To: *Martha Miller* From: *John Barry*

Co: *ERRA* Date: *10-29-92*

Rept: *ERRA* Phone: *ERRA*

Fax: *ERRA* Fax: *ERRA*

SONIA ROAD METHANE

DATE	TIME	TEMP	BARO	COND	MONITORING WELL NUMBERS								
					1	2	3	4	5	6	7	8	9
11-2-92	8 ⁵⁵ / _a	45°	30.38	cloudy	-	-	-	16%	-	-	-	-	-
	1 ³⁵ / _p	46°	30.31	Rain	-	-	-	16%	-	-	-	-	-
11-5-92	8 ³⁰ / _a	50°	29.83	cloudy	-	-	-	16%	-	-	-	-	-
#	2 ⁰⁰ / _p	53°	"	Rain	-	-	-	17%	-	-	-	-	-
11-6-92	8 ³⁰ / _a	40°	29.91	clear	-	-	-	20%	-	-	-	-	-
11-9-92	8 ³⁰ / _a	32°	30.60	"	-	-	-	-	-	-	-	-	-
11-10-92	9 ³⁰ / _a	34°	30.65	"	-	-	-	-	-	-	-	-	-
11-12-92	9 ¹⁵ / _a	50°	30.05	Rain	6%	-	-	18%	-	-	-	-	-
	2 ⁰⁰ / _p	57°	30.02	"	8%	-	-	20%	-	-	-	-	-
11-3-92	9 ⁴⁰ / _a	55°	29.63	cloudy	-	-	-	-	-	-	-	-	-
11-16-92	9 ⁰⁰ / _a	33°	30.41	clear	-	-	-	10%	-	-	-	-	-
11-17-92	9 ⁰⁰ / _a	37°	30.30	cloudy	-	-	-	-	-	-	-	-	-
	2 ⁰⁰ / _p	47°	30.29	"	5%	-	-	6%	-	-	-	-	-
11-18-92	9 ²⁰ / _a	40°	30.28	"	-	-	-	6%	-	-	-	-	-
	2 ⁰⁰ / _p	40°	30.30	"	-	-	-	5%	-	-	-	-	-
11-19-92	10 ¹⁵ / _a	40°	30.49	Sunny	-	-	-	8%	-	-	-	-	-
11-20-92	10 ⁰⁰ / _a	37°	30.70	clear	-	-	-	5%	-	-	-	-	-
11-30-92	10 ³⁰ / _a	41°	29.97	"	4%	-	-	15%	-	-	-	-	-
12-1-92	11 ⁰⁰ / _a	40°	29.96	"	2%	-	-	18%	-	-	-	-	-
12-2-92	10 ⁰⁰ / _a	40°	29.93	"	-	-	-	4%	-	-	-	-	-
12-3-92	10 ⁰⁰ / _a	38°	29.71	"	-	-	-	2%	-	-	-	-	-
12-4-92	10 ³⁰ / _a	33°	30.19	"	-	-	-	6%	-	-	-	-	-
12-7-92	10 ¹⁵ / _a	38°	29.85	"	-	-	-	7%	-	-	-	-	-
12-8-92	9 ⁴⁵ / _a	35°	30.13	"	-	-	-	4%	-	-	-	-	-
12-9-92	10 ³⁰ / _a	24°	30.40	"	-	-	-	-	-	-	-	-	-
12-10-92	10 ¹⁰ / _a	30°	30.35	"	-	-	-	6%	-	-	-	-	-
12-11-92	10 ²⁰ / _a	44°	29.57	Heavy Rain	-	-	-	-	-	-	-	-	-

COMMENTS: 11-9-92 Discovered Wells destroyed. 11-11-92 Fenlin & Nicol installed 9 flush mount wells. The wh of Thackley & Sons on Urquhart. Location of wells are as follows: #1 inside main gate on south side of landfill #2 & #3 on E side of landfill #4 & #5 on N side of landfill #6 & #7 on West Park St. #8 inside gate on E side of landfill. From 9-30-92 to 11-6-92 there were only 4 wells to monitor (-) → no reading

SONIA ROAD METHANE

DATE	TIME	TEMP	BARO	COND	MONITORING WELL NUMBERS								
					1	2	3	4	5	6	7	8	9
8-16-93	(See Below)												
8-20-93	8 ⁴⁵ am	75°	30.11 (Steady)	cloudy	0%	0%	0%	13%	0%	0%	0%	-	-
8-23-93	9 ⁴⁵ am	76°	30.10 (Steady)	clear	0%	0%	0%	6%	0%	0%	0%	-	-
8-24-93	9 ⁴⁵ am	75°	30.13 (Fallen)	cloudy	0%	0%	0%	0%	0%	0%	0%	-	-
8-25-93	9 ⁴⁵ am	77°	30.10 (Fallen)	clear	0%	0%	0%	0%	0%	0%	0%	-	-
8-26-93	9 ³⁰ am	80°	30.16 (Steady)	clear	0%	0%	0%	14%	0%	0%	0%	-	-
8-27-93	9 ⁵⁰ am	80°	30.17 (Steady)	clear	0%	0%	0%	18%	0%	0%	0%	-	-
8-30-93	9 ²⁰ am	74°	30.12 (Risen)	P/C cloudy	0%	0%	0%	5%	0%	0%	0%	-	-
8-31-93	9 ⁴⁰ am	80°	30.10 (Risen)	clear	0%	0%	0%	0%	0%	0%	0%	-	-
9-1-93	9 ³⁰ am	76°	29.94 (Steady)	cloudy	0%	0%	0%	18%	0%	0%	0%	-	-
9-2-93	9 ¹⁵ am	71°	30.16 (Steady)	cloudy	0%	0%	0%	5%	0%	0%	0%	-	-
9-8-93	9 ⁵⁰ am	68°	30.06 (Steady)	Rain	0%	0%	0%	18%	0%	0%	0%	-	-
9-9-93	9 ⁴⁵ am	70°	29.93 (Steady)	P/Sunny	0%	0%	0%	18%	0%	0%	0%	-	-
9-10-93	10 ²⁵ am	73°	29.67 (Steady)	cloudy	0%	0%	0%	14%	0%	0%	0%	-	-
9-13-93	10 ⁴⁵ am	74°	30.34 (Risen)	clear	0%	0%	0%	0%	0%	0%	0%	-	-
9-14-93	10 ³⁰ am	74°	30.28 (Steady)	clear	0%	0%	0%	0%	0%	0%	0%	-	-
9-15-93	9 ³⁵ am	75°	30.06 (Fallen)	clear	0%	0%	0%	0%	0%	0%	0%	-	-
9-17-93	10 ⁰⁰ am	61°	30.21 (Risen)	Rain	0%	0%	0%	16%	0%	0%	0%	-	-
9-21-93	9 ⁵⁰ am	51°	30.15 (Fallen)	Rain	0%	0%	0%	14%	0%	0%	0%	-	-
9-27-93	10 ³⁰ am	70°	29.88 (Fallen)	cloudy	0%	0%	0%	12%	0%	0%	0%	-	-
9-28-93	10 ²⁰ am	57°	29.92 (Steady)	clear	0%	0%	0%	0%	0%	0%	0%	-	-
9-29-93	10 ¹⁵ am	55°	30.07 (Risen)	clear	0%	0%	0%	6%	0%	0%	0%	-	-
9-30-93	10 ¹⁰ am	57°	30.12 (Steady)	clear	0%	0%	0%	16%	0%	0%	0%	-	-

COMMENTS: 9-16-93 Keys do NOT open Lock to gate.
 - (wells #8 & #9 destroyed) * 9-27-93 #1 well L.F. Reading

SONIA ROAD METHANE

DATE	TIME	TEMP	BARO	COND	MONITORING WELL NUMBERS												A	B	C
					1	2	3	4	5	6	7	8	9	10	11	12			
11-10-93	9 ³⁰ am	40°	29.82	Steady	clear	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
"	2 ⁵⁰ pm	52°	29.84	"	"	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
11-15-93	10 ³⁰ am	65°	29.89	"	"	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
"	2 ⁰⁰ pm	69°	29.90	"	"	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
11-16-93	11 ⁰⁰ am	55°	29.94	Risen	"	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
11-19-93	10 ³⁰ am	52°		4/Rain		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
11-23-93	10 ⁴⁵ am	53°	30.38	Steady	clear	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
11-30-93	9 ⁰⁰ am	38°	30.49	"	"	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12-7-93	10 ⁰⁰ am	46°	30.13	"	"	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-	-
12-10-93	9 ⁰⁰ am	45°	30.07	cloudy		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-	-
12-13-93	9 ⁴⁵ am	34°	29.96	clear		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-	-
12-20-93	10 ³⁰ am	39°	30.11	P/Cloudy		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-	-
12-21-93	10 ⁰⁰ am	52°	29.39 (Fallen)	Rain		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-	-
12-27-93	10 ²⁰ am	20°	30.40	clear		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-	-
1-3-94	10 ⁰⁰ am	31°	30.24	cloudy		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-	-
1-10-94	10 ³⁰ am	14°	30.69 (Rain)	clear		-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-14-94	10 ⁰⁰ am	30°	29.59 (Fallen)	cloudy		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-	-
1-24-94	10 ³⁰ am	39°	30.02 (Rain)	P/Sunny		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-	-
1-31-94	10 ³⁰ am	24°	30.24 (Steady)	clear		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-	-
2-1-94	10 ⁰⁰ am	21°	30.19	cloudy		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-	-
2-7-94	11 ³⁰ am	29°	30.07	clear		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-	-	-
4-5-94	10 ⁰⁰ am	43°	30.08	clear		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
4-13-94	10 ³⁰ am	49°	30.09	clear		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
4-21-94	10 ⁴⁵ am	45°	30.12	clear		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
4-26-94	11 ⁰⁰ am			cloudy		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5-3-94	10 ⁴⁵ am	52°	30.08	P/Cloudy		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5-12-94	10 ⁵⁰ am	59°	29.74	cloudy		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5-18-94	10 ⁴⁵ am	54°	29.86	"		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5-20-94	10 ⁵⁰ am	51°	30.11	"		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5-24-94	10 ³⁰ am	73°	29.96	Clear		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

COMMENTS: 11-9-93 installed A,B,C wells on Picone Property on N/side of Sonia Sandfall. (-) - could not take reading due to frozen out on wells 6 & 7.

QUINLA ROAD METHANE

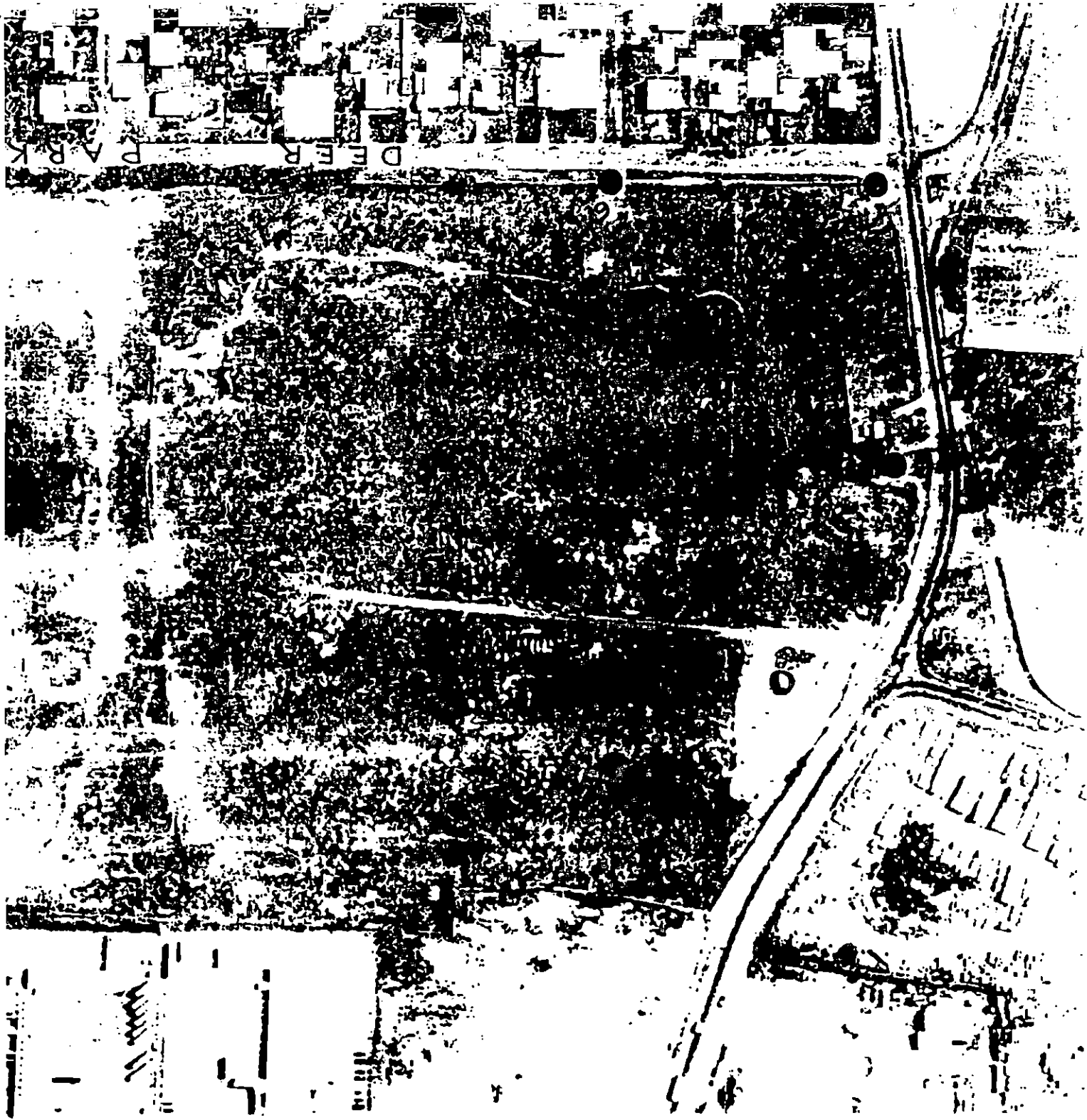
DATE	TIME	TEMP	BARO	COND	MONITORING WELL NUMBERS							A	B	C
					1	2	3	4	5	6	7			
6-9-94	10 ⁴⁵ / _{am}	68°	30.03	Clear	0%	-	-	5%	-	-	-	0%	0%	0%
6-22-94	11 ⁰⁵ / _{am}	72°	29.75	Clear	0%	-	-	2%	-	-	-	0%	0%	0%
7-6-94	10 ⁴⁵ / _{am}	81°	30.04	"	-	-	-	-	-	-	-	0%	0%	0%
7-14-94	10 ³⁰ / _{am}	86°	30.08	"	3%	0%	0%	1%	-	-	-	0%	0%	0%
11-15-94	11 ³⁰ / _{am}	61°	30.17	P/Cloudy	3%	0%	0%	4%	0%	-	0%	0%	0%	0%

9/26/96	10:00 AM	70°	30.34	Clear	0%	0%	0%	0%	1%	X	X	X	X	X

#5
3%

COMMENTS: * X - indicates well not found
Landtec GA-70 Gas Analyzer used

All readings are % methane except where indicated.



APPENDIX R

PHYSICAL, CHEMICAL AND TOXICOLOGICAL INFORMATION

40.1513 Human Health-Based Toxicity Values and Scores

(1) The Human Health-Based Toxicity Values found in 310 CMR 40.1513(2) shall be used to score OHM not included in Tab. III.A. of the Scoresheet. If a site-related OHM is not listed in 310 CMR 40.1513(2) use the Relative Toxicity Value Matrix [310 CMR 40.1513(3)] to derive a OHM-specific Toxicity Value. Correlate the value derived using 310 CMR 40.1513(3) with the OHM concentration to determine the OHM Toxicity Score using Worksheet III.A.1. in the Scoresheet. Record each OHM name, Toxicity Value, concentration and Toxicity Score in Table III.A.1 of the Scoresheet.

(2) Human Health-Based Toxicity Values

40.1513(2) Human Health-Based Toxicity Values and Scores							
OHM	CAS Number	Chronic Oral RfD mg/kg/d	Oral Cancer Slope Factor 1/(mg/kg/d)	CLASS	Inhalation Cancer Slope Factor 1/(mg/kg/d)	CLASS	HUMAN TOXICITY VALUE
Acenaphthene	83329	6.0e-02					8
Acenaphthylene	208968			D		D	25
Acephate	30560191	4.0e-03	8.7e-03	C		ND	30
Acetaldehyde	75070						25
Acetone	67641	1.0e-01		D		D	8
Acetone Cyanohydrin	75865	7.0e-02					8
Acetonitrile	75058	6.0e-03		D			25
Acetophenone	98862	1.0e-01		D		D	8
Acetyl Chloride	75365			D		D	25
Acrolein	107028	2.0e-02		C		C	25
Acrylamide	79061	2.0e-04	4.5e+00	B2	4.5e+00	B2	46
Acrylic acid	79107	8.0e-02					8
Acrylonitrile	107131		5.4e-01	B1	2.4e-01	B1	28
Alachlor	15972608	1.0e-02	8.0e-02	B2		B2	25
Aldicarb	116063	2.0e-04		D		D	40
Aldrin	309002	3.0e-05	1.7e+01	B2	1.7e+01	B2	50
Alkanes/Alkenes							25
Allyl Alcohol	107186	5.0e-03					25
Allyl Chloride	107051	5.0e-02		C		C	22
Aluminum phosphide	20859738	4.0e-04					40
Ametryn	834128	9.0e-03					18
Aminopyridine, 4-	504245	2.0e-05		D		D	40
Ammonia	7664417						25
Ammonium Acetate	631618			D		D	25
Aniline	62533		5.7e-03	B2		B2	22
Anthracene	120127	3.0e-01		D		D	4

310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

40.1513(2) Human Health-Based Toxicity Values and Scores							
OHM	CAS Number	Chronic Oral RfD mg/kg/d	Oral Cancer Slope Factor 1/(mg/kg/d)	CLASS	Inhalation Cancer Slope Factor 1/(mg/kg/d)	CLASS	HUMAN TOXICITY VALUE
Antimony	7440360	4.0e-04					40
Antimony Potassium Tartrate	28300745	9.0e-04					40
Antimony Trioxide	1309644	4.0e-04					40
Aroclor 1016	12674112	7.0e-05	7.7	B2		B2	50
Arsenic	7440382	3.0e-04	1.8e+00	A	5.0e+01	A	46
Asbestos	1332214			A		A	34
Atrazine	1912249	5.0e-03	2.2e-01	C		C	34
Barium	7440393	7.0e-02					8
Barium Cyanide	542621	1.0e-01					8
Baygon	114261	4.0e-03					25
Benzaldehyde	100527	1.0e-01					8
Benzene	71432	5.0e-03	2.9e-02	A	2.9e-02	A	30
Benzidine	92875	3.0e-03	2.3e+02	A	2.3e+02	A	46
Benzoic acid	65850	4.0		D		D	4
Benzotrachloride	98077		1.3e+01	B2		B2	44
Benzo(a)anthracene	56553			B2		B2	28
Benzo(b)fluoranthene	205992			B2		B2	28
Benzo(a)pyrene	50328		7.3e+00	B2	6.1e+00	B2	44
Benzo(k)fluoranthene	207089			B2		B2	28
Benzyl Chloride	100447		1.7e-01	B2		B2	25
Beryllium	7440417	5.0e-03	4.3e+00	B2	8.4e+00	B2	38
Biphenyl, 1,1-	92524	5.0e-02		D		D	8
Bis(2chloro-1methylethyl)ether			7.0e-02	C	7.0e-02	C	25
Bis(2-chloroethyl)ether	111444		1.1e+00	B2	1.1e+00	B2	34
Bis(2-ethylhexyl)phthalate	117817	2.0e-02	1.4e-02	B2		B2	22
Bis(chloromethyl)ether	542881		2.2e+02	A	2.2e+02	A	44
Bromodichloromethane	75274	2.0e-02	6.2e-02	B2		B2	25
Bromoform	75252	2.0e-02	7.9e-03	B2		B2	22

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40.1513(2) Human Health-Based Toxicity Values and Scores							
OHM	CAS Number	Chronic Oral RfD mg/kg/d	Oral Cancer Slope Factor 1/(mg/kg/d)	CLASS	Inhalation Cancer Slope Factor 1/(mg/kg/d)	CLASS	HUMAN TOXICITY VALUE
Bromomethane	74839	1.4e-03		D			25
Bromoxynil	1689845	2.0e-02					18
Butadiene, 1,3-	106990				1.8e+00	B2	18
Butanol, n-	71363	1.0e-01		D		D	8
Buryl Benzyl Phthalate	85687	2.0e-01		C		NA	20
Burylate	2008415	5.0e-02					8
Cacodylic Acid	75605	3.0e-03		D		D	25
Cadmium	7440439	1.0e-03		ND	6.1e+00	B1	25
Calcium Chromate	13765190						25
Calcium Cyanide	592018	4.0e-02					18
Captafol	2425061	2.0e-03	8.6e-03	C		C	30
Captan	133062	1.3e-01	3.5e-03	B2		B2	20
Carbaryl	63252	1.0e-01					8
Carbofuran	1563662	5.0e-03					25
Carbon Disulfide	75150	1.0e-01					8
Carbon Tetrachloride	56235	7.0e-04	1.3e-01	B2		B2	43
Chloral	75876	2.0e-03					25
Chlordane	57749	6.0e-05	1.3e+00	B2	1.3e+00	B2	46
Chlorine	7782505						25
Chlorine Dioxide	10049044						25
Chloroacetic Acid	79118	2.0e-03					25
Chloroacetophenone, 2-	532274						25
Chloroaniline, 4-	106478	4.0e-03					25
Chlorobenzene	108907	2.0e-02		D		D	18
Chlorobenzilate	510156	2.0e-02	2.7e-01	B2	2.7e-01	B2	28
Chlorobutane, 1-	109693	4.0e-01					4
Chloroethane	75003						25
Chloroform	67663	1.0e-02	6.1e-03	B2	8.1e-02	B2	22
Chloromethane			1.3e-02	C	6.3e-03	C	22

40.1513(2) Human Health-Based Toxicity Values and Scores							
OHM	CAS Number	Chronic Oral RfD mg/kg/d	Oral Cancer Slope Factor 1/(mg/kg/d)	CLASS	Inhalation Cancer Slope Factor 1/(mg/kg/d)	CLASS	HUMAN TOXICITY VALUE
Chloromethyl Methyl Ether	107302			A		A	34
Chloronaphthalene, beta	91587	8.0e-02					8
Chloronitrobenzene, o-	88733		2.5e-02	B2		B2	22
Chloronitrobenzene, p-	100005		1.8e-02	B2		B2	22
Chlorophenol, 2-	95578	5.0e-03					25
Chloroprene	126998	2.0e-02					18
Chloropropane, 2-							25
Chlorothalonil	1897456	1.5e-02	1.1e-02	B2		B2	22
Chloroprotham	101213	2.0e-01					4
Chlorpyrifos	2921882	3.0e-03					25
Chlorpyrifos-methyl		1.0e-02					18
Chlorthiophos	21923239	8.0e-04					40
Chromic Acid	7738945						25
Chromium III	16065831	1.0					4
Chromium VI	7440473	5.0e-03		ND	4.1e+01	A	25
Chrysene	218019			B2		B2	28
Coal Tars				ND	2.2e+00	ND	18
Coke Oven Emissions	8007452					A	34
Copper	7440508			D		D	25
Creosote	8001589			B1		B1	28
Cresol, meta-	108394	5.0e-02		C		C	22
Cresol, ortho-	95487	5.0e-02		C		C	22
Cresol, para-	106445	5.0e-03		C		C	32
Crotonaldehyde	123739		1.9e+00	C	1.9e+00	C	34
Cumene	98828	4.0e-02					18
Cyanide	57125	2.0e-02		D		D	18
Cyanogen	460195	4.0e-02					18
Cyclohexane	110827						25
Cyclohexylamine	108918	2.0e-01					4
Cyclonite (RDX)	121824	3.0e-03	1.1e-01	C		C	32
D, 2,4-	94757	1.0e-02					18
Dalapon (sodium salts)	75990	3.0e-02					18
DB, 2,4-	94826	8.0e-03					18
DBCP	96128	2.0e-02	1.4e+00	B2	2.4e-03	B2	34

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OHM	CAS Number	Chronic Oral RfD mg/kg/d	Oral Cancer Slope Factor 1/(mg/kg/d)	CLASS	Inhalation Cancer Slope Factor 1/(mg/kg/d)	CLASS	HUMAN TOXICITY VALUE
DDD	72548		2.4e-01	B2			28
DDE	72559		3.4e-01	B2			28
DDT	50293	5.0e-04	3.4e-01	B2	3.4e-01		45
Demeton	8065483	4.0e-05					40
Diallate	2303164		6.1e-02	B2			25
Diazinon	333415	9.0e-04					40
Dibenzofuran	132649		8.4e-02	D		D	25
Dibromochloromethane	124481	2.0e-02		C		C	25
Dibromoethane, 1,2-	106934	2.0e-05	8.5e+01	B2	7.6e-01		50
Dicamba	1918009	3.0e-02					18
Dichlorobenzene, 1,3-	541731					D	25
Dichlorobenzene, ortho-	95501	9.0e-02		D		D	8
Dichlorobenzene, para-	106467		2.4e-02	C		C	22
Dichlorobenzidene, 3,3'-	91941		4.5e-01	B2		B2	28
Dichlorodifluoromethane	75718	2.0e-01					4
Dichloroethane, 1,1-	75343	1.0e-01		C		C	22
Dichloroethane, 1,2-	107062	2.0e-02	9.1e-02	B2	9.1e-02	B2	25
Dichloroethylene, 1,1-	75354	9.0e-03	6.0e-01	C	1.2e+00	C	28
Dichloroethylene, cis-1,2-	156592	1.0e-02		D		D	18
Dichloroethylene, trans-1,2-	156605	2.0e-02					18
Dichloroethylene (mixed)	540590	9.0e-03					18
Dichloromethane	75092	6.0e-02	7.5e-03	B2		B2	20
Dichlorophenol, 2,4-	120832	3.0e-03					25
Dichloropropane, 1,2-	78875		6.8e-02	B2		B2	25
Dichloropropene, 1,3-	542756	3.0e-04	1.8e-01	B2	1.3e-01	B2	43
Dichloro-2-butene, 1,4-				B2	9.3e+00	B2	18
Dichlorvos	62737	8.0e-04	2.9e-01	B2			45
Dicofol	115322		4.4e-01	C			28
Dicyclopentadiene		3.0e-02					18
Dieldrin	60571	5.0e-05	1.6e+01	B2	1.6e+01	B2	50
Diethyl Phthalate	84662	8.0e-01		D		D	4
Diethyl-p-nitrophenylphosphate	311455			D		D	25
Disflubenzuron	35367385	2.0e-02					18
Dimethoate	60515	2.0e-04					40

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OHM	CAS Number	Chronic Oral RfD mg/kg/d	Oral Cancer Slope Factor 1/(mg/kg/d)	CLASS	Inhalation Cancer Slope Factor 1/(mg/kg/d)	CLASS	HUMAN TOXICITY VALUE
Dimethoxybenzidine, 3,3-	119904		1.4e-02	B2		B2	22
Dimethyl Sulfate	77781			B2		B2	28
Dimethylamine	124403						25
Dimethylaniline, 2,4-	121697	2.0e-03	7.5e-01	C		C	34
Dimethylbenzidine, 3,3-	119937		9.2e+00	B2		B2	44
Dimethylformamide, N,N-	68122	1.0e-01					8
Dimethylhydrazine, 1,1-	57147		2.6e+00	B2	3.5e+00	B2	34
Dimethylhydrazine, 1,2-	540738		3.7e+01	B1	3.7e+01	B1	44
Dimethylphenol, 2,4-	105679	2.0e-02					18
Dimethylphenol, 2,6-		6.0e-04					40
Dimethylphthalate	131113	1.0		D		D	4
Dinitrobenzene, m-	99650	1.0e-04		D		D	40
Dinitrobenzene, o-	528290	4.0e-04		D		D	40
Dinitrobenzene, p-	100254	4.0e-04					40
Dinitrophenol, 2,4-	51285	2.0e-03					25
Dinitrotoluene, 2,4-	121142	2.0e-03	6.8e-01	B2		B2	34
Dinitrotoluene, 2,6-	606202		6.8e-01	B2		B2	28
Dinitrotoluene (mixture)	121142		6.8e-01	I			28
Dinitro-o-cresol, 4,6-	534521						25
Dinoseb	88857	1.0e-03		D		D	25
Dioxane, 1,4-	123911		1.1e-02	B2		B2	22
Diphenamid	957517	3.0e-02					18
Diphenyl	92524						25
Diphenylamine, N,N-	122394	2.5e-02					18
Diphenylhydrazine, 1,2-	122667		8.0e-01	B2	8.0e-01	B2	28
Diquat	85007	2.2e-03					25
Disulfoton	298044	4.0e-05					40
Di-n-butyl Phthalate	84742	1.0e-01		D		D	8
Endosulfan	115297	5.0e-05					40

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OHM	CAS Number	Chronic Oral RfD mg/kg/d	Oral Cancer Slope Factor 1/(mg/kg/d)	CLASS	Inhalation Cancer Slope Factor 1/(mg/kg/d)	CLASS	HUMAN TOXICITY VALUE
Endothall	145733	2.0e-02					18
Endrin	72208	3.0e-04		D		D	40
Epichlorohydrin	106898	2.0e-03	9.9e-03	B2	4.2e-03	B2	30
Epoxybutane, 1,2-	106887						25
Ethanol	64175						25
Ethion	563122	5.0e-04					40
Ethoxyethanol, 2-	110805	4.0e-01					4
Ethoxyethanol Acetate, 2-		3.0e-01					4
Ethyl Acetate	141786	9.0e-01					4
Ethyl Acrylate	140885		4.8e-02	B2		B2	25
Ethyl Chloride	75003						25
Ethyl Ether	60297	2.0e-01					4
Ethyl Methacrylate		9.0e-02					8
Ethyl p-Nitrophenyl Phenylphos	2104645	1.0e-05					40
Ethylbenzene	100414	1.0e-01		D		D	8
Ethylene Cyanohydrin		3.0e-01					4
Ethylene Dibromide	106934	2.0e-05	8.5e+01	B2	7.6e-01	B2	50
Ethylene Glycol Monobutyl Ether							25
Ethylene Oxide	75218		1.0e+00	B1	3.5e-01	B1	34
Ethylene Thiourea	96457	8.0e-05	6.0e-01	B2		B2	45
Ethylenediamine	107153	2.0e-02		D		D	18
Fenamiphos	22224926	2.5e-04					40
Fluoranthene	206440	4.0e-02		D		D	18
Fluorene	86737	4.0e-02					18
Fluridone	59756604	8.0e-02					8
Folpet	133073	1.0e-01	3.5e-03	B2		B2	20
Fonofos	944229	2.0e-03					25
Formaldehyde	50000	2.0e-01	3.0e-02	B1	4.5e-02	B1	20
Furan	110009	1.0e-03					25
Furfural	98011	3.0e-03					25
Glycidaldehyde	765344	4.0e-04		B2		B2	45
Heptachlor	76448	5.0e-04	4.5e+00	B2	4.5e+00	B2	46
Heptachlor Epoxide	1024573	1.3e-05	9.1e+00	B2	9.1e+00	B2	50
Heptane, n-	142825			D		D	25

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OHM	CAS Number	Chronic Oral RfD mg/kg/d	Oral Cancer Slope Factor 1/(mg/kg/d)	CLASS	Inhalation Cancer Slope Factor 1/(mg/kg/d)	CLASS	HUMAN TOXICITY VALUE
Hexachlorobenzene	118741	8.0e-04	1.6e+00	B2	1.6e+00	B2	46
Hexachlorobutadiene	87683	2.0e-03	7.8e-02	C	7.8e-02	C	32
Hexachlorocyclohexane, alpha-	319846		6.3e+00	B2	6.3e+00	B2	44
Hexachlorocyclohexane, beta-	319857		1.8e+00	C	1.8e+00	C	34
Hexachlorocyclohexane, delta-				D		D	25
Hexachlorocyclohexane, gamma-	58899	3.0e-04	1.3e+00	B2-C		B2-C	46
Hexachlorocyclopentadiene	77474	7.0e-03		D		D	25
Hexachloroethane	67721	1.0e-03	1.4e-02	C	1.4e-02	C	30
Hexachloropentadiene	77474	7.0e-03					25
Hexachlorophene	70304	3.0e-04					40
Hexane, n-	110543	6.0e-02					8
Hexanone, 2-	591786						25
Hexazinone	51235042	3.3e-02					18
Hydrazine	302012		3.0e+00	B2	1.7e+01	B2	34
Hydrogen Chloride	7647010						25
Hydrogen Cyanide	74908	2.0e-02					18
Hydrogen Fluoride	7664393						25
Hydrogen Sulfide	7783064	3.0e-03					25
Isoamyl Acetate	123922						25
Isobutyl Acetate	110190						25
Isobutyl Alcohol	78831	3.0e-01					4
Isophorone	78591	2.0e-01	9.5e-04	C		C	18
Isopropyl Acetate	108214						25
Lead	7439921	7.5e-04		B2		B2	45
Lead Alkyls		1.0e-07					40
Lead Subacetate	1335326						25
Linuron	330552	2.0e-03		C		C	32
Malathion	121755	2.0e-02					18
Maleic Anhydride	108316	1.0e-01					8
Maleic Hydrazide	123331	5.0e-01					4
Malononitrile	109773	2.0e-05					40
Maneb	12427382	5.0e-03					25

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OHM	CAS Number	Chronic Oral RfD mg/kg/d	Oral Cancer Slope Factor 1/(mg/kg/d)	CLASS	Inhalation Cancer Slope Factor 1/(mg/kg/d)	CLASS	HUMAN TOXICITY VALUE
MCPA	94746	5.0e-04					40
MCPB	94815	1.0e-02					18
Mephosfolan		9.0e-05					40
Mercury, alkyl							25
Mercury (Inorganic)	7439976	3.0e-04		D		D	40
Merphos	150505	3.0e-05					40
Merphos Oxide	78488	3.0e-05					40
Methacrylonitrile	126987	1.0e-04					40
Methanol	67561	5.0e-01					4
Methomyl	16752775	2.5e-02					18
Methoxychlor	72435	5.0e-03		D		D	25
Methoxyethanol, 2-		4.0e-03					25
Methoxyethanol Acetate, 2-		2.0e-03					25
Methyl Acetate	79209	1.0					4
Methyl Acrylate	96333	3.0e-02		D		D	18
Methyl Bromide		1.4e-03					25
Methyl Chloride	74873		1.3e-02	C	6.3e-03	C	22
Methyl Ethyl Ketone	78933	5.0e-02		D		D	8
Methyl Isobutyl Ketone	108101	5.0e-02					8
Methyl Isocyanate	624839						25
Methyl Mercury	22967926	3.0e-04					40
Methyl Methacrylate	80626	8.0e-02					8
Methyl Parathion	298000	2.5e-04					40
Methyl Styrene		6.0e-03					25
Methyl Styrene, alpha	25013154	7.0e-02					8
Methylaniline, 2-	100618		2.4e-01	B2		B2	28
Methylene Bromide	74953	1.0e-02					18
Methylhydrazine	60344		1.1e+00	NA		NA	34
Methyl-tert-Butyl Ether		5.2e-03					25

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OHM	CAS Number	Chronic Oral RfD mg/kg/d	Oral Cancer Slope Factor 1/(mg/kg/d)	CLASS	Inhalation Cancer Slope Factor 1/(mg/kg/d)	CLASS	HUMAN TOXICITY VALUE
Mirex	2385855	2.0e-04	1.8e+00	B2		B2	46
Naphthalene	91203	4.0e-02		D		D	18
Nickel	7440020	2.0e-02		ND	8.4e-01	A	18
Nickel Carbonyl	13463393			B2		B2	28
Nitrobenzene	98953	5.0e-04		D		D	40
Nitropropane, 2-	79469		9.5e+00	B2	9.4e+00	B2	44
Nitrotoluene, m-	99081	1.0e-02					18
Nitrotoluene, o-	88722	1.0e-02					18
Nitrotoluene, p-	99990	1.0e-02					18
N-Nitrosodiethanolamine	1116547		2.8e+00	B2		B2	34
N-Nitrosodiethylamine	55185		1.5e+02	B2	1.5e+02	B2	44
N-Nitrosodimethylamine	62759		5.1e+01	B2	5.1e+01	B2	44
N-Nitrosodiphenylamine	86306		4.9e-03	B2		B2	22
N-Nitrosodi-n-butylamine	924163		5.4e+00	B2	5.4e+00	B2	34
N-Nitrosodi-n-propylamine	621647		7.0e+00	B2		B2	44
N-Nitrosomethylvinylamine	4549400			B2		B2	28
Octamethylpyrophosphoramide	152169	2.0e-03					25
Oxamyl	23135220	2.5e-02					18
Parathion	56382	6.0e-03		C		C	32
PCBs	1336363	2.0e-05	7.7e+00	B2		B2	50

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OHM	CAS Number	Chronic Oral RfD mg/kg/d	Oral Cancer Slope Factor 1/(mg/kg/d)	CLASS	Inhalation Cancer Slope Factor 1/(mg/kg/d)	CLASS	HUMAN TOXICITY VALUE
Pentachlorobenzene	608935	8.0e-04		D		D	40
Pentachloronitrobenzene	82688	3.0e-03	2.6e-01	C		C	34
Pentachlorophenol	87865	3.0e-02	1.2e-01	B2		B2	25
Permethrin	52645531	5.0e-02					8
Phenanthrene	85018			D		D	25
Phenol	108952	6.0e-01		D		D	4
Phosgene	75445						25
Phosmet	732116	2.0e-02					18
Phosphine	7803512	3.0e-04		D		D	40
Phosphoric Acid	7664382						25
Phosphorus, white	7723140	2.0e-05		D		D	40
Phthalic Anhydride	85449	2.0					4
Picloram	1918021	7.0e-02					8
Polyaromatic Hydrocarbons (TOTAL)							25
Prometon	1610180	1.5e-02					18
Prometryn	7287196	4.0e-03					25
Pronamide	23950585	7.5e-02					8
Propyl Alcohol	71238						25
Propylene Glycol Monomethyl Et		7.0e-01					4
Propylene Oxide	75569		2.4e-01	B2	1.3e-02	B2	28
Pyrene	129000	3.0e-02		D		D	18
Pyridine	110861	1.0e-03					25
Quinoline	91225		1.2e+01	C		C	44
Quinone	106514						25
Resorcinol	108463						25
Ronnel	299843	5.0e-02					8
Rotenone	83794	4.0e-03					25
Selenious Acid	7783008	5.0e-03		D		D	25
Selenium	7782492	5.0e-03		D		D	25
Selenium Sulfide	7488546			B2		B2	28
Silver	7440224	5.0e-03		D		D	25

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40.1513(2) Human Health-Based Toxicity Values and Scores							
OHM	CAS Number	Chronic Oral RfD mg/kg/d	Oral Cancer Slope Factor 1/(mg/kg/d)	CLASS	Inhalation Cancer Slope Factor 1/(mg/kg/d)	CLASS	HUMAN TOXICITY VALUE
Simazine	122349	2.0e-03		C		C	32
Sodium Cyanide	143339	4.0e-02					18
Styrene	100425	2.0e-01	3.0e-02	B2	2.0e-03	B2	20
Sulfuric Acid	7664939						25
TCDD, 2,3,7,8-	1746016		1.5e+05	B2	1.5e+05	B2	44
Tebuthiuron	34014181	7.0e-02					8
Terbufos	13071799	2.5e-05					40
Terbutryn	886500	1.0e-03					25
Tetrachloroethane, 1,1,1,2-	630206	3.0e-02	2.6e-02	C	2.6e-02	C	22
Tetrachloroethane, 1,1,2,2-	79345		2.0e-01	C	2.0e-01	C	28
Tetrachloroethylene	127184	1.0e-02	5.1e-02	B2		B2	25
Tetrachlorophenol, 2,3,4,6-	58902	3.0e-02					18
Tetraethyl Lead	78002	7.0e-07					40
Tetrahydrofuran	109999	1.8e-01					4
Thallic Oxide	1314325	7.0e-05		D		D	40
Thallium	7440280	7.0e-05					40
Thallium Acetate	563688	9.0e-05		D		D	40
Thallium Carbonate	6533739	8.0e-05		D		D	40
Thallium Chloride	7791120	8.0e-05		D		D	40
Thallium Nitrate	10102451	9.0e-05		D		D	40
Thallium Selenide	12039520	9.0e-05		D		D	40
Thallium Sulfate	7446186	8.0e-05		D		D	40
Thiofanox	39196184	3.0e-04					40
Thiram	137268	3.0e-03					25
Toluene	108883	2.0e-01		D		D	4
Toluene Diisocyanate	584849						25
Toluenediamine, 2,4-	95807		3.2e+00	B2		B2	34
Toluene-2,6-diamine	823405	2.0e-01					4
Toluidine, o-	95534		2.4e-01	B2		B2	28

310 CMR: DEPARTMENT OF ENVIRONMENTAL PROTECTION

40.1513(2) Human Health-Based Toxicity Values and Scores							
OHM	CAS Number	Chronic Oral RfD mg/kg/d	Oral Cancer Slope Factor 1/(mg/kg/d)	CLASS	Inhalation Cancer Slope Factor 1/(mg/kg/d)	CLASS	HUMAN TOXICITY VALUE
Tolidine, p-Toraphene TP, 2,4,5-	106490 8001352		1.9e-01 1.1e+00	C B2	1.1e+00	C B2	25 34
Trichlorobenzene, 1,2,4-	93721	8.0e-03		D		D	18
Trichloroethane, 1,1,1-	120821	1.0e-02		D		D	18
Trichloroethane, 1,1,2-	71556 79005	9.0e-02 4.0e-03		D C		D C	8 32
Trichloroethylene	79016	2.0e-03	1.1e-02	B2	1.7e-02	B2	30
Trichlorofluoromethane	75694	3.0e-01					4
Trichlorophenol, 2,4,5-	95954	1.0e-01					8
Trichlorophenol, 2,4,6-	88062		1.1e-02	B2	1.1e-02	B2	22
Trichloropropane, 1,2,3-	96184	6.0e-03		B2		B2	34
Triethylamine	121448						25
Trifluralin	1582098	7.5e-03	7.7e-03	C		C	30
Trimethyl Phosphate	121459		3.7e-02	B2		B2	25
Trinitrobenzene, 1,3,5-	99354	5.0e-05					40
Vanadium Pentoxide	1314621	9.0e-03					18
Vanadyl Sulfate	27774136	2.0e-02					18
Vinyl Acetate	108054	1.0					4
Vinyl Chloride	75014	1.0e-03	1.9e+00	A	3.0e-01	A	38
Xylenes	1330207	2.0		D		D	4
Zinc	7440666	3.0e-01		D		D	4
Zincb	12122677	5.0e-02					8

40.1513(3) Human Health-Based Toxicity Value Matrix**(a) Human Health-Based Toxicity Value Matrix**

HUMAN HEALTH-BASED TOXICITY VALUE MATRIX					
CANCER SLOPE VALUE (CSV) in (mg/kg/day) ¹ or CARCINOGENIC CLASS	REFERENCE DOSE (RfD) in (mg/kg/day)				
	≤ 0.0009	0.0009 < x ≤ 0.0075	0.0075 < x ≤ 0.04 (or No RfD)	0.04 < x ≤ 0.15	> 0.15
≥ 6	50	46	44	42	40
0.9 ≤ x < 6 (or Class A with no CSV)	46	38	34	32	30
0.2 ≤ x < 0.9 (or Class B1 & B2 with no CSV)	45	34	28	25	22
0.03 ≤ x < 0.2 (or Class C with no CSV)	43	32	25	22	20
< 0.03	41	30	22	20	18
Class D or (No Class and CSV)	40	25	18 (*)	8	4
Class E	40	25	17	7	0

(*) DEFAULT	When there is no RfD, no CSV and no Carcinogenic Class, assign a Value of 25.

(b) Defaults

In the absence of a U.S. EPA derived Reference Dose (RfD) from *IRIS* or *HEAST* but when a Carcinogenic Slope Value (CSV) is available, the scorer shall either (1) assign a Human Health-Based Toxicity Value using the RfD default categories indicated in the matrix, or (2) identify and document an allowable daily intake which is developed in a manner consistent with the U.S. EPA methodology, and assign a Toxicity Value accordingly.

In the absence of a U.S. EPA derived CSV or carcinogenic group classification from *IRIS*, *HEAST* or another similar database, but when a RfD is available, the scorer shall assign a Toxicity Value using the Class D default category indicated in the matrix.

In the absence of an RfD, CSV and carcinogenic group classification, the scorer shall (1) assign a default Toxicity Value of 25, or (2) identify and document toxicity information analogous to a RfD or CSV and assign a Toxicity Value accordingly.

For radionuclides, no Human Health-Based Toxicity Value has been established. Radionuclides present in quantities greater than their federal Reportable Quantity (40 CFR Part 302.4, Appendix B) where the quantity is known or in concentrations greater than background where the quantity is not known shall be assigned an *OHM Toxicity Score* equal to 50. This score shall be entered directly in Worksheet III.A.1..

40.1514(1) Users shall use the Mobility and Persistence Scores found in the following pages. If a OHM is not found in 310 CMR 40.1514(2) - Organic Compounds or 310 CMR 40.1514(3) - Metals, develop a Mobility and Persistence Score using 40.1514(4) - OHM Mobility and Persistence Factors.

40.1514(2) Mobility and Persistence Values and Scores: Organic OHMs

ORGANIC OHM	MOBILITY AND PERSISTENCE VALUES AND SCORES											TOTAL SCORE
	Solubility (mg/l)		Vapor Pressure (mm Hg)		K _{ow}		Degradation Potential ^A		Specific Gravity (at 20°) ^B			
	Value	ref. score	Value	ref. score	Value	ref. score	Value	ref. score	Value	ref. score		
Acenaphthene	3.4E+00 ²	5	1.55E-03 ^{1(b)}	0	1.0E+04 ²	5	N-P ⁸	0	1.069 ¹⁶ (95°/95°)	10	20	
Acetone	1.0E+06 ¹	10	2.70E+02 ^{1(f)}	10	5.8E-01 ^{1(f)}	10	N-P ¹⁵	0	.791 ¹⁶	0	30	
Benzene	1.8E+03 ^{1(a)}	10	9.52E+01 ^{1(a)}	10	1.3E+02 ^{1(a)}	5	N-P ⁷	0	.879 ¹⁶	0	25	
Benzo(a)pyrene	1.2E-03 ²	0	5.60E-09 ^{1(a)}	0	1.2E+06 ²	0	P ^{8,10}	10	1.35 (25°) ¹⁹	10	20	
Benzo(g,h,i)perylene	7.0E-04 ²	0	1.03E-10 ^{1(a)}	0	3.2E+06 ²	0	P ^{8,10}	10	NA	10	20	
Benzoic Acid	2.7E+03 ²	10	(0) ^a	0	7.4E+01 ²	5	N-P ⁸	0	1.316 ¹⁶ (28°/4°)	10	25	
Bromodichloromethane	4.4E+03 ²	10	1.5E+01	10	7.6E+01 ²	5	P ⁷	10	2.006 ¹⁶ (15°/4°)	10	45	
Bromofom (Tribromomethane)	3.0E+03 ^{1(b)}	10	5.00E+00 ^{1(b)}	10	2.5E+02 ^{1(b)}	5	P ⁷	10	2.903 (15°) ¹⁶	10	45	
Carbon Tetrachloride	7.6E+02 ^{1(a)}	5	9.00E+01 ^{1(a)}	10	4.4E+02 ^{1(a)}	5	P ⁷	10	1.594 ¹⁶	10	40	
Chlorobenzene	4.7E+02 ^{1(a)}	5	1.17E+01 ^{1(a)}	10	6.9E+02 ^{1(a)}	5	N-P ⁷	0	1.106 ¹⁶	10	30	
Chloroethane	5.7E+03 ²	10	(34)	5	3.5E+01 ²	5	N-P ¹²	0	.903 ¹⁶	0	20	
Chloroform (Trichloromethane)	8.2E+03 ^{1(a)}	10	1.51E+02 ^{1(a)}	10	9.3E+01 ^{1(a)}	5	P ⁷	10	1.49 (20°) ¹⁷	10	45	

ORGANIC OHM	MOBILITY AND PERSISTENCE VALUES AND SCORES										TOTAL SCORE
	Solubility (mg/l)		Vapor Pressure (mm Hg)		K _{ow}		Degradation Potential ^A		Specific Gravity (at 20°) ^B		
	Value	ref. score	Value	ref. score	Value	ref. score	Value	ref. score	Value	ref. score	
2-Chlorophenol	2.9E+04	² 10	(0.93)	0	1.5E+01	² 5	N-P	⁷ 0	1.241 (18.2°/15°)	¹⁶ 10	25
p-Dichlorobenzene(1,4)	7.9E+01	² 5	1.18E+00	^{1(b)} 10	4.0E+03	² 5	P	⁷ 10	1.458 (21°)	¹⁶ 10	40
1,1-Dichloroethane	5.5E+03	^{1(a)} 10	1.82E+02	^{1(a)} 10	6.2E+01	^{1(a)} 5	P	⁷ 10	1.176	¹⁶ 10	45
1,2-Dichloroethane	8.5E+03	^{1(a)} 10	6.40E+01	^{1(a)} 10	3.0E+01	^{1(a)} 5	P	⁷ 10	1.253	¹⁶ 10	45
1,1-Dichloroethylene	2.3E+03	^{1(a)} 10	6.00E+02	^{1(a)} 10	6.9E+01	^{1(a)} 5	P	⁷ 10	1.250 (15°)	¹⁶ 10	45
cis-1,2-Dichloroethylene	3.5E+03	^{1(a)} 10	2.09E+02	^{1(a)} 10	5.0E+00	^{1(a)} 10	P	⁷ 10	1.27 (25°)	¹⁷ 10	50
trans-1,2-Dichloroethylene	6.3E+03	^{1(a)} 10	3.24E+02	^{1(a)} 10	3.0E+00	^{1(a)} 10	P	⁷ 10	1.27 (25°)	¹⁷ 10	50
2,4-Dichlorophenoxyacetic Acid (2,4-D)	6.2E+02	² 5	4.00E-01	^{1(a)} 5	6.5E+02	² 5	N-P	⁸ 0	1.255	²⁰ 10	25
Dimethyl Phthalate	4.3E+03	² 10	(0)	0	1.3E+02	² 5	N-P	¹¹ 0	1.189 (25°/25°)	¹⁶ 10	25
2,6-Dinitrotoluene	1.3E+03	² 10	1.80E-02	^{1(b)} 5	1.0E+02	² 5	P	^{8,11} 10	1.283 (111°)	¹⁶ 10	40
1,4-Dioxane	4.3E+05	² 10	3.99E+01	^{1(a)} 10	1.0E+00	² 10	P	¹⁴ 10	1.034	¹⁶ 10	50
Ethylbenzene	1.5E+02	^{1(a)} 5	7.00E+00	^{1(a)} 10	1.4E+03	^{1(a)} 5	N-P	⁷ 0	.867	¹⁶ 0	20
bis(2-Ethylhexyl)phthalate (DEHP)	2.9E-01	² 0	(0)	0	9.5E+03	² 5	P	^{8,11} 10	.9843	¹⁶ 0	15
Fuel Oil (virgin product)											20

ORGANIC OHM	MOBILITY AND PERSISTENCE VALUES AND SCORES											TOTAL SCORE
	Solubility (mg/l)		Vapor Pressure (mm Hg)		K _{ow}		Degradation Potential ^A		Specific Gravity (at 20°) ^B			
	Value	ref. score	Value	ref. score	Value	ref. score	Value	ref. score	Value	ref. score		
Gasoline (virgin product)											25	
Heptachlor	1.8E-01	² 0	3.00E-04	^{1(b)} 0	2.5E+04	² 0	P	⁸ 10	1.57	^{1(f)} 10	20	
Hexachlorobenzene	6.0E-03	^{1(a)} 0	1.09E-05	^{1(a)} 0	1.7E+05	^{1(a)} 0	P	⁷ 10	2.044	¹⁶ 10	20	
Hexachloroethane	5.0E+01	² 5	4.00E-01	^{1(b)} 5	4.0E+04	² 0	N-P	⁸ 0	2.090	²⁰ 10	20	
2-Hexanone	1.4E+04	¹ 10	(1.6)	0	2.5E+01	³ 5	N-P	¹¹ 0	.815 (18°/4°)	¹⁶ 0	15	
Isophorone	1.2E+04	² 10	(0.3)	0	5.0E+01	¹ 5	N-P	¹¹ 0	.921 (25°)	¹⁷ 0	15	
Methylene Chloride	2.0E+04	^{1(b)} 10	4.31E+03	^{1(b)} 10	1.9E+01	^{1(b)} 5	N-P	⁷ 0	1.366	¹⁸ 10	35	
Methyl Ethyl Ketone	2.7E+05	^{1(a)} 10	7.75E+01	^{1(b)} 10	1.8E+00	^{1(a)} 10	N-P	¹⁵ 0	.805	¹⁶ 0	30	
Methyl Naphthalene	2.5E+01	² 5	(3.2)	0	1.3E+04	² 0	N-P	⁷ 0	1.025 (14°/4°)	¹⁶ 10	15	
Methyl Tert-Butyl Ether	4.8E+00	³ 5	(196)	10	NA	5	NA	0	.731	¹⁶ 0	20	
Naphthalene	3.2E+01	² 5	(20)	5	2.8E+03	¹ 5	N-P	⁷ 0	1.145	¹⁶ 10	25	
Nitrobenzene	1.9E+03	² 10	1.50E-01	^{1(a)} 5	7.1E+01	² 5	N-P	⁸ 0	1.203	¹⁶ 10	30	
Pentachlorophenol	1.4E+01	^{1(b)} 5	1.10E-04	^{1(b)} 0	1.0E+05	^{1(b)} 0	P	⁷ 10	1.978 (22°)	¹⁶ 10	25	
Phenol	9.3E+04	^{1(a)} 10	3.41E-01	^{1(a)} 5	2.9E+01	^{1(a)} 5	N-P	⁷ 0	1.071 (25°/4°)	¹⁶ 10	30	
PCBs	1.2E-02	¹ 0	7.70E-05	^{1(b)} 0	1.1E+06	² 0	P	^{8,9} 10	1.5 (25°)	¹⁸ 10	20	
1,1,2,2-Tetrachloroethane	2.9E+03	² 10	5.00E+00	^{1(a)} 10	2.5E+02	² 5	P	^{8,11} 10	1.600	¹⁶ 10	45	

ORGANIC OHM	MOBILITY AND PERSISTENCE VALUES AND SCORES										TOTAL SCORE
	Solubility (mg/l)		Vapor Pressure (mm Hg)		K _{ow}		Degradation Potential ^A		Specific Gravity (at 20°) ^B		
	Value	ref. score	Value	ref. score	Value	ref. score	Value	ref. score	Value	ref. score	
Tetrachloroethylene	1.5E+02	1(a) 5	1.8E+01	1(a) 10	4.0E+02	1(a) 5	P	7 10	1.631 (15°/4°)	16 10	40
Tetrahydrofuran	3.0E-01	4 0	(2)	0	6.6E+00	6 10	N-P	13 0	.888 (21°/4°)	16 0	10
Toluene	5.3E+02	1(a) 5	2.81E+01	1(a) 10	5.4E+02	1(a) 5	N-P	7 0	.866	16 0	20
1,2,4-Trichlorobenzene	3.0E+01	1(a) 5	2.90E-01	1(b) 5	2.0E+04	2 0	P	8 10	1.446 (26°)	16 10	30
1,1,1-Trichloroethane	1.5E+03	1(a) 10	1.23E+02	1(a) 10	3.2E+02	1(b) 5	P	7 10	1.346 (15°/4°)	16 10	45
1,1,2-Trichloroethane	4.5E+03	1(a) 10	3.00E+01	1(a) 10	3.0E+02	1(a) 5	P	7 10	1.441 (25.5°/4°)	16 10	45
Trichloroethylene (TCE)	1.1E+03	1(a) 10	5.79E+01	1(a) 10	2.4E+02	1(a) 5	P	7 10	1.466 (20°/20°)	16 10	45
2,4,6-Trichlorophenol	8.0E+02	2 5	1.20E-02	1(a) 5	7.4E+03	2 5	N-P	8 0	1.490 (75°/4°)	16 10	15
Vinyl Chloride	2.7E+0	1(a) 5	2.66E+03	1(a) 10	2.4E+01	1(a) 5	P	7 10	.908 (25°/25°)	16 0	30
Xylenes	2.0E+02	1(a) 5	1.00E+01	1(a) 10	8.9E+02	1(a) 5	N-P	7 0	.880	16 0	20

NOTES

- ^A Degradation Potential: N-P = Non-Persistent; P = Persistent. Score for "N-P" = 0; "P" = 10.
^B Specific gravity of compound at 20°C referred to water at 4°C (20°/4°) unless otherwise specified.
^C Numbers in parentheses are Henry's Law Constant in atm m³ water/m³ air.

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- ⁴ b. Mabey, W.R., J.H. Smith, R.T. Rodoll, H.L. Johnson, T. Mill, T.W. Chou, J. Gates, I.W. Patridge, H. Jaber, and D. Vanderberg. "Aquatic Fate Process Data for Organic Priority Pollutants," EPA Contract Nos. 68-01-3867 and 68-03-2981 by SRA International for Monitoring and Data Support Division, Office of Water Regulations and Standards, Washington, DC, 1982.
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- ²⁴ Weiss, G., "Hazardous Chemicals Data Book", 2nd edition, Noyes Data Corp., New York, 1986.
- ²⁵ US Public Health Service, Agency for Toxic Substances and Disease Registry, "Draft Toxicological Profile for Selected PCBs," November 1987.
- ²⁶ US Public Health Service, Agency for Toxic Substances and Disease Registry, "Draft Toxicological Profile for Benzo(a)pyrene," October 1987.
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40.1514(3) Metals

METAL	Mobility	Score
Arsenic - $H_2AsO_4^-$	Slowly mobile	15
Asbestos - > 2 μ	Immobile	5
Asbestos - < 2 μ	Slowly mobile	15
Beryllium - Be^{++}	Moderately mobile	25
Cadmium - Cd^{++}	Slowly mobile	15
Chromium - Cr^{+++} or Cr^{+6}	Slowly mobile	15
Copper - Cu^{++}	Moderately mobile	25
Cyanide - CN^-	Relatively mobile	35
Lead - Pb^{++}	Moderately mobile	25
Mercury - Hg^{++}	Slowly mobile	15
Selenium - $HSeO_4^-$ & SeO_3^{--}	Relatively mobile	35
Zinc - Zn^{++}	Moderately mobile	25

¹ Fuller, "Movement of Selected Metals, Asbestos, and Cyanide in Soils: Application to Waste Disposal Problems," EPA-600/2-77-020, April 1977.

40.1514(4) OHM Mobility and Persistence Factors for Other Organic Compounds

OHM MOBILITY AND PERSISTENCE FACTORS			
Organic Compounds			
FACTOR	RANGE and VALUE		
	LOW (Value)	MEDIUM (Value)	HIGH (Value)
Solubility (mg/L)	< 1 (0)	1 - 1,000 (5)	> 1,000 (10)
Vapor Pressure (mm Hg)	< 0.01 (0)	0.01 - 1 (5)	> 1 (10)
K _{ow}	> 10,000 (0)	10 - 10,000 (5)	< 10 (10)
Degradation Potential	Non-Persistent (NP) (0)		Persistent (P) (10)
Specific Gravity (20° C)	< 1 (0)	> 1 (10)	
Radionuclides			
Radionuclides present in quantities greater than their federal Reportable Quantity (40 CFR Part 302.4, Appendix B) where the quantity is known or in concentrations greater than background where the quantity is not known shall be assigned a <i>Mobility and Persistence Score</i> equal to 40.			

40.1515 Soil Permeability Criteria

SOIL PERMEABILITY	
VALUES	CRITERIA
LOW	Permeability: < 10E-7 cm/s Soil or Bedrock Type: clay; shale; compact till; unfractured metamorphic and igneous rocks.
MEDIUM	Permeability: 10E-7 to < 10E-3 cm/s Soil or Bedrock Type: silt, fine sand and silty sand; loess; silty clays; clay loams, silty loams, sandy loams, and loamy sands; less to moderately permeable limestones, dolomites, and sandstone; moderately permeable to coarse till; moderately fractured igneous and metamorphic rocks. Fill is considered moderately permeable unless disposal site-specific condition indicate otherwise.
HIGH	Permeability: ≥ 10E-3 cm/s Soil or Bedrock Type: gravel, sand; highly fractured igneous and metamorphic rocks; permeable basalt and lavas; karst limestone and dolomite.

VOLUNTARY REMEDIATION PROGRAM

APPENDIX F:
TABLE 7 - SUMMARY OF CHEMICAL
PROPERTIES AND DOSE-RESPONSE

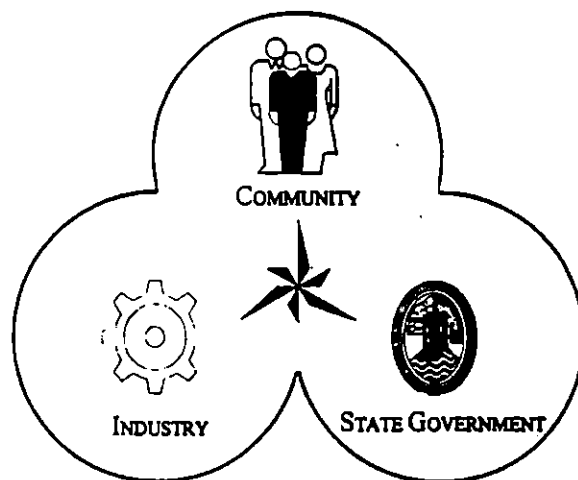


TABLE 7
SUMMARY OF CHEMICAL PROPERTIES AND DOSE-RESPONSE

Chemical Name	CHEMICAL PROPERTIES						DOSE-RESPONSE DATA			
	Molecular Weight [MW]	Org Car Part-Koc [KOC]	Oct Wat Part-Kow [KOW]	Aqueous Solubility [SOL]	Henry Law [H]	Vapor Phase Diffus Coeff. [D]	Reference Doses		Cancer Slope Factors	
	(g/g-mol)	(L/Kg)	(mg/L/mg/L)	(mg/L)	(atm/mol)	(cm ² /s)	Oral mg/kg/day	Inhalation mg/kg/day	Oral (mg/kg/day)	Inhalation (mg/kg/day)-1
naphthalene	128.20	1.28E+03	2.70E+03	31.7000	1.18E-03	5.90E-02	0.04000			
acenaphthylene	152.21	4.79E+03	1.17E+04	3.9300	1.14E-04	6.60E-02				
acenaphthene	154.21	1.78E+01	1.33E+04	3.4200	7.71E-03	6.50E-02	0.06000			
fluorene	166.00	5.01E+03	1.69E+04	1.6900	1.17E-04	6.20E-02	0.04000			
phenanthrene	178.22	1.67E+04	2.68E+04	1.0000	6.05E-03	5.90E-02				
anthracene	178.23	2.17E+04	2.78E+04	0.0450	8.60E-05	5.90E-02	0.30000			
fluoranthene	202.00	4.17E+04	1.66E+05	0.2600	6.73E-02	5.60E-02	0.04000			
pyrene	202.30	6.90E+04	1.31E+05	0.1320	7.00E-09	5.50E-02	0.03000			
benzo(a)anthracene*	228.30	1.38E+06	6.41E+05	0.0140	1.38E-09	4.30E-02			0.7300	
chrysene*	228.20	2.45E+05	5.09E+05	0.0020	1.18E-09	5.10E-02			0.0073	
benzo(b)fluoranthene*	252.32	5.50E+05	3.72E+06	0.0015	1.19E-05	5.00E-02			0.7300	
benzo(k)fluoranthene*	252.32	4.37E+06	7.08E+06	0.0008	3.94E-05	4.70E-02			0.0730	
benzo(a)pyrene	252.30	8.81E+05	1.16E+06	0.0038	1.38E-09	4.30E-02			7.3000	6.1000
indeno(1,2,3-cd)pyrene*	276.34	3.09E+07	6.84E+06	0.0005	6.86E-08	4.60E-02			0.7300	
dibenzo(a,h)anthracene*	278.35	1.84E+06	3.20E+06	0.0005	7.33E-08	4.50E-02			7.3000	
benzo(g,h,i)perylene	276.34	7.76E+06	1.40E+07	0.0003	5.34E-08	4.80E-02				
3,3'-dichlorobenzidine	253.13	2.00E+03	3.24E+03	4.0000	8.33E-07	NA			0.4500	
n-nitroso-di-n-propylamine	130.19	1.02E+01	2.04E+01	9900.0000	NA	NA			7.0000	
bis(2-chloroisopropyl)ether	171.10	6.17E+01	3.80E+02	1700.0000	1.13E-04	6.02E-02	0.04000		0.0700	0.0350
4-chloroaniline	127.47	3.23E+02	2.02E+02	3.9000	1.07E-05	7.50E-02	0.00400			
2-chloronaphthalene	162.62	8.51E+03	1.17E+04	6.7400	1.82E-02	6.60E-02	0.08000			
2,4-dinitrotoluene	182.10	6.17E+01	9.55E+01	270.0000	4.07E-06	2.03E-01	0.00200			
hexachlorobutadiene	260.80	4.68E+03	6.03E+04	2.0000	4.57E+00	5.61E-02	0.00200		0.0780	0.0780
hexachloroethane	237.00	2.19E+03	1.10E+04	50.0000	2.49E-06	6.50E-02	0.00100		0.0142	0.0142
isophorone	138.21	3.09E+01	4.84E+01	12000.0000	5.76E-06	6.23E-02	0.20000		0.0010	
benzyl alcohol	108.15	9.55E+01	1.26E+01	35000.0000	6.10E-07	7.90E-02	0.30000			
bis(2-chloroethyl)ether	143.00	1.41E+01	2.24E+01	10200.0000	1.30E-05	6.92E-02			1.1000	1.1000
nitrobenzene	123.10	9.72E+01	6.89E+01	1900.0000	1.31E-05	7.60E-02	0.00050			

TABLE 7
SUMMARY OF CHEMICAL PROPERTIES AND DOSE-RESPONSE

Chemical Name	CHEMICAL PROPERTIES						DOSE-RESPONSE DATA			
	Molecular Weight [MW]	Org Car Part-Koc [KOC]	Oct Wat Part-Kow [KOW]	Aqueous Solubility [SOL]	Henry Law [H]	Vapor Phase Diffus Coeff. [D]	Reference Doses		Cancer Slope Factors	
	(g/g-mol)	(L/Kg)	(mg/L/mg/L)	(mg/L)	(atm/mol)	(cm ² /s)	Oral mg/kg/day	Inhalation mg/kg/day	Oral (mg/kg/day)	Inhalation (mg/kg/day)-1
1,2-dichlorobenzene	147.00	3.66E+02	2.78E+03	145.0000	1.94E-03	6.90E-02	0.09000			
1,3-dichlorobenzene	147.01	4.40E+02	3.00E+03	123.0000	3.61E-03	6.98E-02				
1,4-dichlorobenzene	147.00	2.09E+02	2.87E+03	79.0000	1.60E-03	6.90E-02		0.19999	0.0240	
1,2,4-trichlorobenzene	181.50	9.39E+02	1.20E+04	30.0000	1.42E-03	6.80E-02	0.01000			
hexachlorobenzene	284.80	4.55E+03	3.91E+05	0.0060	6.80E-04	5.42E-02	0.00080		1.6000	1.6000
hexachlorocyclopentadiene	272.77	4.27E+03	7.08E+04	1.8000	1.37E-02	5.61E-02	0.00700	0.00002		
n-nitrosodiphenylamine	198.23	5.75E+02	1.35E+03	34.7000	NA	9.70E-02			0.0049	
benzoic acid	122.13	1.40E+02	7.90E+01	2700.0000	1.82E-08	7.40E-02	4.00000			
2-nitroaniline	138.14	2.66E+01	4.86E+01	1280.0000	5.00E-07	7.30E-02	0.00006	0.00006		
phenol	94.10	2.19E+01	2.95E+01	93000.0000	4.54E-07	8.20E-02	0.60000			
2-methylphenol	108.10	2.19E+01	9.05E+01	24660.0000	2.60E-06	7.40E-02	0.05000			
3-methylphenol	108.10	3.50E+01	9.33E+01	21928.0000	4.43E-07	7.40E-02				
4-methylphenol	108.10	1.57E+02	1.36E+02	19543.0000	4.43E-07	7.90E-02	0.05000			
2-chlorophenol	128.60	3.63E+02	1.47E+02	28500.0000	1.78E-05	7.90E-02	0.00500			
2,4-dichlorophenol	163.01	7.00E+02	1.35E+03	4500.0000	4.80E-06	7.10E-02	0.00300			
2,4,5-trichlorophenol	197.45	1.74E+03	8.13E+03	1202.0000	2.18E-04	6.50E-02	0.10000			
2,4,6-trichlorophenol	197.46	7.19E+02	1.77E+03	800.0000	1.77E-05	6.60E-02			0.0110	0.0100
pentachlorophenol	266.40	2.63E+03	1.70E+05	14.0000	2.80E-06	5.60E-02	0.03000		0.1200	
2,4-dinitrophenol	184.00	1.78E+01	3.65E+01	5600.0000	1.53E-07	2.73E-02	0.00200			
bis(2-ethylhexyl)phthalate	391.07	1.00E+05	4.52E+04	0.4000	3.00E-07	3.51E-02	0.02000		0.0140	
butylbenzylphthalate	312.39	1.53E+02	4.24E+04	2.9000	1.08E-02	4.30E-02	0.20000			
di-n-butylphthalate	278.30	1.38E+03	3.60E+04	13.0000	2.80E-07	4.38E-02	0.10000			
diethylphthalate	222.00	6.92E+01	1.96E+02	896.0000	1.11E-02	5.30E-02	0.80000			
di methyl phthalate	194.20	1.91E+02	4.70E+01	4320.0000	2.15E-06	5.68E-02	10.00000			
di-n-octyl phthalate	390.58	9.77E+08	1.58E+09	3.0000	1.37E-01	3.60E-02	0.02000			
benzene	78.10	7.91E+01	1.01E+02	1750.0000	5.50E-03	8.80E-02			0.0290	0.0290
toluene	92.40	1.62E+02	3.70E+02	535.0000	6.68E-03	8.70E-02	0.20000	0.11428		
ethylbenzene	106.20	1.81E+02	1.29E+03	152.0000	6.44E-03	7.50E-02	0.10000	0.28571		

TABLE 7
SUMMARY OF CHEMICAL PROPERTIES AND DOSE-RESPONSE

Chemical Name	CHEMICAL PROPERTIES						DOSE-RESPONSE DATA			
	Molecular Weight [MW] (g/g-mol)	Org Car Part-Koc [KOC] (L/Kg)	Oct Wat Part-Kow [KOW] (mg/L/mg/L)	Aqueous Solubility [SOL] (mg/L)	Henry Law [H] (atm/mol)	Vapor Phase Diffus Coeff. [D] (cm ² /s)	Reference Doses		Cancer Slope Factors	
							Oral mg/kg/day	Inhalation mg/kg/day	Oral (mg/kg/day)	Inhalation (mg/kg/day)-1
xylene	106.20	3.32E+02	1.26E+03	198.0000	7.04E-03	7.47E-02	2.00000			
vinyl chloride	62.50	2.45E+00	3.98E+00	2670.0000	8.60E-02	1.06E-01			1.9000	0.3000
chloroethane	64.52	3.24E+00	2.69E+01	5740.0000	1.11E-02	2.71E-01		2.85700		
1,1-dichloroethylene	97.00	6.46E+01	6.38E+01	2250.0000	2.61E-02	1.00E-01	0.00900		0.6000	1.2000
1,1-dichloroethane	98.96	3.02E+01	6.10E+01	5500.0000	5.62E-03	9.60E-02	0.10000	0.10000		
1,2-dichloroethylene (cis)	96.95	4.90E+01	1.00E+00	3500.0000	4.08E-03	7.36E-02	0.01000			
1,2-dichloroethane	99.00	1.64E+01	2.92E+01	8520.0000	9.78E-04	1.04E-01	0.30000		0.0910	0.0910
trichloroethylene	131.40	9.63E+01	5.28E+02	1100.0000	9.58E-03	7.90E-02	0.00600		0.0110	0.0170
1,1,1-trichloroethane	133.40	1.42E+02	2.28E+02	1500.0000	1.72E-02	7.80E-02	0.09000	0.30000		
1,1,2-trichloroethane	133.40	6.87E+01	1.51E+02	4500.0000	7.42E-04	7.80E-02	0.00400		0.0570	0.0570
tetrachloroethylene	165.83	6.69E+01	3.37E+02	150.0000	2.87E-02	7.20E-02	0.01000		0.0510	0.0018
1,1,1,2-tetrachloroethane	168.00	3.99E+02	1.07E+03	1099.0000	2.00E-03	7.10E-02	0.03000		0.0260	0.0260
1,1,2,2-tetrachloroethane	168.00	7.55E+01	2.99E+02	2900.0000	3.80E-04	7.10E-02			0.2000	0.0200
chloroform	119.40	4.42E+01	8.71E+01	8200.0000	3.39E-03	1.04E-01	0.01000		0.0061	0.0805
acetone	58.00	3.72E-01	5.75E-01	1000000.0000	2.50E-05	1.24E-01	0.10000			
4-methyl-2-pentanone	100.16	6.17E+00	1.23E+01	21300.0000	4.95E-05	7.50E-02	0.05000			
methyl ethyl ketone	72.10	1.23E+00	1.88E+00	137190.0000	4.35E-05	8.08E-02	0.05000	0.28570		
Aldrin	364.93	4.07E+02	2.82E+05	0.1800	4.96E-04	5.00E-02	0.00003		17.0000	17.1000
gamma-BHC (Lindane)	290.83	1.32E+03	4.09E+03	7.8000	4.93E-07	5.30E-02	0.00030		1.3000	
chlordane	410.00	2.29E+05	1.00E+06	0.0560	3.67E-05	4.80E-02	0.00006		1.3000	1.2900
DDD	320.05	4.37E+04	4.90E+05	0.0900	3.89E-05	5.00E-02			0.2400	
DDE	318.03	4.93E+05	5.78E+05	0.0140	3.89E-05	4.90E-02			0.3400	
DDT	354.49	3.13E+05	9.64E+05	0.0050	3.89E-05	4.70E-02	0.00050		0.3400	0.3400
dieldrin	380.93	2.07E+04	4.05E+04	0.1950	5.84E-05	NA	0.00005		16.0000	16.1000
endosulfan sulfate	422.90	2.34E+03	4.57E+03	0.1170	NA	NA	0.00005			
endrin	380.93	8.32E+03	3.69E+04	0.2600	NA	4.70E-02	0.00030			
heptachlor	373.35	2.19E+04	8.32E+04	0.1800	8.19E-04	5.10E-02	0.00050		4.5000	4.5500
heptachlor epoxide	389.20	2.09E+04	3.35E+04	0.3500	3.50E-01	NA	0.00001		9.1000	9.1000

TABLE 7
SUMMARY OF CHEMICAL PROPERTIES AND DOSE-RESPONSE

Chemical Name	CHEMICAL PROPERTIES						DOSE-RESPONSE DATA			
	Molecular Weight [MW]	Org Car Part-Koc [KOC]	Oct Wat Part-Kow [KOW]	Aqueous Solubility [SOL]	Henry Law [H]	Vapor Phase Diffus Coeff. [D]	Reference Doses		Cancer Slope Factors	
	(g/g-mol)	(L/Kg)	(mg/L/mg/L)	(mg/L)	(atm/mol)	(cm ² /s)	Oral mg/kg/day	Inhalation mg/kg/day	Oral (mg/kg/day)	Inhalation (mg/kg/day)-1
PCBs	328.00	5.30E+05	1.10E+06	0.0031	1.07E-03	4.80E-02			7.7000	
lead	207.19	NA	NA	NA	NA	5.50E-02				
cadmium	112.00	NA	NA	NA	NA	5.50E-02	0.00050			6.1000
silver	107.90	NA	NA	NA	NA	NA	0.00500			
mercury	200.59	NA	1.00	NA	1.14E-02	2.76E-02	0.00030	0.00009		
chromium vi	52.00	NA	NA	NA	NA	NA	0.00500			41.0000
chromium iii	52.00	NA	NA	NA	NA	NA	1.00000			
barium	137.00	NA	NA	NA	NA	NA	0.07000			
arsenic	74.92	NA	NA	NA	NA	5.50E-02	0.00030			50.0000
antimony	121.80	NA	NA	NA	NA	NA	0.00040			
beryllium	9.01	NA	NA	0.2000	NA	NA	0.00500		4.3000	8.4000
cyanide	27.00	1.00E+00	5.00E-01	1000000.0000	2.70E-06	NA	0.02000			
nickel	58.70	NA	NA	NA	NA	NA	0.02000			0.8400
selenium	78.96	NA	NA	NA	NA	NA	0.00500			
vanadium	51.00	NA	NA	NA	NA	NA	0.00700			
zinc	65.00	NA	NA	NA	NA	5.50E-02	0.30000			

NOTES: * - Assumes TEF approach.

NA - Data not available or not applicable.