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Environmental Property Assessment
(Phase II)
Niagara Falls Boulevard
(near 70th Street)

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NYS DEPT OF
ENVIRONMENTAL CONSERVATION
REGION 9

Environmental Property Assessment
(Phase II)
Niagara Falls Boulevard
(near 70th Street)

prepared for:

Tops Markets, Inc.
60 Dingens Street
Buffalo, NY 14206

prepared by:

Waste Resource Associates, Inc.
2576 Seneca Avenue
Niagara Falls, NY 14305

January 11, 1990

Introduction

Tops Markets, Inc. is contemplating the possible acquisition of property presently owned by Peter J. Schmitt Company, Inc. which is located on Niagara Falls Boulevard (near 70th Street), adjacent to a parcel of property which Tops owns. In order to determine whether the property to be purchased had any potential environmental liabilities associated with that parcel, Tops retained the services of Waste Resource Associates, Inc. to perform a Phase I, Environmental Property Assessment of the parcel. The Phase I report covered an evaluation of the property that included a surface soil sampling and analysis program that yielded test results above what could be accepted as a reasonable or suitable "clean" background level. The analytical test results in conjunction with the nature of the past history of the site (i.e. fill material such as construction/demolition debris to bring the area to an acceptable grade) led to suspicion that the results of the surface soil sampling might be indicative of far greater sub-surface contamination levels. To confirm the extent of sub-surface contamination on both the Tops and Peter J. Schmitt parcels and to determine what constraints that contamination might pose on development of the properties into a future supermarket complex, a Phase II - Environmental Property Assessment study was conducted. This report summarizes the findings of the Phase II study.

Phase II - Sampling and Testing Program

Since the previous Phase I surface sampling and testing program identified results indicative of contamination for primarily the EOX (Extractable Organic Halides) determination, the Phase II study focused its attention on determining the EOX concentrations of sub-surface soil samples taken at various depths at or near the locations of surface soil samples obtained during the Phase I study. In each of the ten (10) locations which were examined in Phase I, three additional sub-surface soil samples were obtained. The specific level at which each of the three sub-surface samples were taken and the rationale for sampling at that level is as follows;

- * upper (fill) soil sample - a sample taken within or near the bottom of the fill material zone to confirm whether or not contamination noted in the surface sample had permeated into the fill material zone.
- * middle (sand/clay interface) soil sample - a sample near the bottom of the sand and/or gravel layer (which rests beneath the fill material) where it interfaces with the clay layer that underlies most of the site, to confirm whether any of the contamination identified in either the surface and/or fill material samples has penetrated into and through the sand layer.
- * bottom (clay) soil sample - a sample taken from the upper portion of the clay layer which rests on the bedrock at the site to confirm whether any of the contamination identified in either surface, fill and/or sand samples, has penetrated in the clay layer.

The sub-surface samples were obtained using a hollow-stem soil auger drilling unit which was supplied and operated by Buffalo Drilling Company, Inc. When a desired depth was reached with the

hollow-stem auger that conformed to the appropriate location description (i.e. upper, middle, bottom), a split-spoon soil sampler was used to obtain a single, discrete soil sample at that level. Additional split-spoon samples were taken at or immediately below the initial sample point and combined with the previous sample(s) to provide a representative sample of that strata. The split-spoon sampler was decontaminated between individual level samplings (i.e. upper, middle, bottom) to avoid possible cross-contamination of samples and the soil auger was decontaminated between borings at each of the ten (10) locations. The sub-surface soil samples were obtained during the period Wednesday, December 13, 1989 through Saturday, December 16, 1989 and were subsequently delivered to the analytical testing laboratory facilities of Advanced Environmental Services, Inc. for a determination of the EOX concentration associated with each sample.

The visual classification of soil types identified during each of the soil borings is provided as Exhibit I.

Soil Sampling Test Results

There were only two sample locations where testing showed EOX concentrations above the lower limit of detection for the test procedure employed. The two locations are;

- * the upper (fill) soil sample taken along the eastern portion of the Peter J. Schmitt parcel near the northeast corner of the property, and,
- * the upper (fill) soil sample taken near the northwestern corner of the Tops property.

All remaining soil samples were determined to be less than the lower limit of detection or below the quantifiable limit for the EOX test procedure of 1.0 milligrams per kilogram or 1.0 ppm (parts per million).

The results of the analytical testing are presented graphically in Figures 1, 2, 3 and 4 which follow.

The actual analytical test data reported is provided as Exhibit II.

Although the sub-surface soil sampling and testing program confirmed that the EOX contamination is pretty much confined to the surface soils and the upper portion of fill material strata at the site, the soil borings identified a considerable amount of non-soil material (i.e. construction/demolition debris, rocks, assorted unknown materials). In a location immediately west of sampling location No. 7, a sample of material suspected to be waste lime was obtained and analyzed separately from the soil samples. The pH and TOC of the sample was tested along with a scan for total halogenated organics (a procedure similar to but not as precise as the EOX determination). The pH measurement confirmed that the unknown material was in fact waste lime which was contaminated with a

significant amount of primarily non-halogenated organics (approximately 3.8%). The analytical test data associated with the waste lime sample is presented as Exhibit III.

Conclusions

The following are the major conclusions which can be drawn on the basis of the Phase I and Phase II studies which were conducted;

- * the EOX (or chlorinated hydrocarbon) contamination is confined to the surface soils and upper portions of the fill material at the site and if removed does not present an impediment to developing the site.

- * the soil borings did identify certain sub-surface deposits (i.e. waste lime) which would need to be removed in order to develop the site.

Recommendations

If the Peter J. Schmitt parcel represents an acquisition for Tops with particular strategic economic value to its business, the following are considerations which should somehow be factored into the cost of purchasing the property.

Contaminated Fill Material

Although the EOX (chlorinated hydrocarbon) contamination at the site is confined to the surface soils and upper portion of the fill material strata and the contamination level is minimal, that material would in all likelihood need to be disposed of at either a Part 360 - permitted Solid Waste Landfill Facility at a cost of approximately \$50 per ton or at a Part 360 - permitted Construction and Demolition Debris Landfill at a somewhat lower cost. If all fill material must be moved from the site because of inadequate stability considerations which it may impose on future construction activities, the total volume of fill material which must be removed is approximately 100,000 - 125,000 cubic yards of material. If the contaminated fill material can effectively be separated and isolated from the non-contaminated fill material and if it represents only 10 - 25% of the expected total volume of fill material to be removed, the disposal charges associated with the contaminated fill would be between \$625,000 - \$2.0 million (assuming 1.25 tons per cubic yard and \$50 per ton disposal charge). The remaining uncontaminated fill would cost approximately \$1.0 million to \$1.2 million to dispose of (assuming 1.25 tons per cubic yard and \$10 per ton disposal charge).

Other Sub-surface Deposits

The waste lime identified in the Phase II - study indicates that if all contaminated/uncontaminated fill material is removed from the site as previously mentioned, there may be isolated pockets of additional unknown materials similar to the waste lime

that will be uncovered and which will require special handling. The waste lime identified would in all likelihood be approved for disposal at a Part 360 - permitted Solid Waste Landfill Facility at a cost of approximately \$50 per ton. There is the possibility however that the NYSDEC may require it to be handled at a Part 373 - permitted Hazardous Waste Landfill Facility at a cost that could range from as little as \$150 per ton to as much as \$250 per ton. There is also a slim possibility that if the organics present in the waste lime prohibit its disposal in a hazardous waste landfill facility because of existing or impending land ban restrictions, the waste lime would need to be sent to a hazardous waste incinerator to be treated. The charges at hazardous waste incinerator could be as much as \$500 to \$2,000 per ton.

Even though a substantial number of soil borings were taken (a boring for every 1.5 - 2.0 acres of property), it is not possible to accurately estimate the volume of waste lime or approximate total volume for waste lime and other miscellaneous sub-surface deposits which could be encountered once excavation and removal of the fill material proceeds. It is conceivable that during excavation, drums of industrial waste could possibly be encountered. If 55-gallons are encountered each and every drum would need to be sampled (if it still contains any material), at a cost for testing alone which could range from as little as \$250 to as much as \$1,500 per drum to identify the contents. If empty or deteriorated drums were found, the soils surrounding these areas would definitely need to be tested extensively to determine an appropriate disposition. At best, those soils may be allowed to be disposed of at a Part 360 - permitted Solid Waste Landfill Facility at approximately \$50 per ton for disposal. At worst, they would require disposal at either a part 373 - permitted Hazardous Waste Landfill Facility at \$150 - \$250 per ton or at a Hazardous Waste Incinerator at \$500 - \$2,000 per ton, if prohibited from landfill disposal due to land ban restrictions.

Summary

As a result of the Phase II - study, there is definitely concern for potential liability exposure in the purchase of the property which is being contemplated. If however, the parcel presents a unique strategic opportunity for Tops, the development of the parcel could conceivably take place, but not without significant costs associated with necessary remedial action and clean-up activities. Unfortunately, at this time with the data that is available, it is impossible to determine the exact magnitude of the worst case scenario with regard to potential liability exposure.

It is certain however, that whatever current commercial market value is placed on the Peter J. Schmitt parcel, if were to proceed with the acquisition and assume a calculated risk associated with its future development, the acquisition cost for the parcel should be only a portion of what may be currently considered its fair market value.

Exhibit I

FIELD BORING LOG

BUFFALO DRILLING COMPANY, INC.

955 Niagara Street
Buffalo, New York 14213

Waste Resource Associates, Inc.

Client _____

Project Tops Parcel NF

File No _____ Boring No B-1

Driller K. Dauser

Surface Elevation _____

Type of Drill Rig Diedrich D-50

Datum _____

Sampling Method ASTM D1586

Location refer to plan

Size and Type of Bit 4-1/4 ID auger

Date Started 12-13-89 Completed 12-13-89

Overburden Samples: Disturbed 5 Undist. _____

Top of Rock Elevation _____

Total Depth of Hole 12.0 ft.

Bottom of Hole Elevation _____

Depth Drilled into Rock 0 ft.

Ground Water Depth 6.7 ft. at comp.

Depth (ft.)	Blows per .5 ft.		Sample No.	N	% Rec (RQD)	SOIL AND ROCK DESCRIPTION	REMARKS
1	7	9	5-1	18	50	Fill, moist	5-1:0-2
	9	12					
	8	8					
5	14	15	5-2	28	75	Topsoil	5-2:2-4
	7	10					
	14	18					
	4	12	5-3	21	80	Brown, sandy silt, little clay, wet	5-3:4-6
	16	21					
10			5-4	28	75	same as 5-3	5-4:6-8
15	5	9	5-5	21	80	Red/brown silty clay	5-5:10-12
	12	12					
						Bottom of hole 12.0 ft.	

Notes

Sheet No 1 of

FIELD BORING LOG

BUFFALO DRILLING COMPANY, INC.

955 Niagara Street
Buffalo, New York 14213

Client _____

Project Tops Parcel NF

File No _____ Boring No B-2

Driller K. Dauser

Type of Drill Rig _____

Sampling Method 11

Size and Type of Bit _____

Surface Elevation _____

Datum _____

Location refer to plan

Date Started 12-15 Completed 12-15

Overburden Samples Disturbed 5 Undist.

Total Depth of Hole 10

Depth Drilled into Rock 0 ft.

Top of Rock Elevation _____

Bottom of Hole Elevation _____

Ground Water Depth 8.5 ft. at comp.

[illegible]

Notes

Sheet No 1 of

Auger refusal at 1 ft. moved hole to 15 to North

FIELD BORING LOG

BUFFALO DRILLING COMPANY, INC.
955 Niagara Street
Buffalo, New York 14213

Client Waste Resource Associates, Inc.
Project Tops Parcel NF
File No. Boring No B-3

File No. _____ Boring No. B-3

Surface Elevation _____

Datum _____

Location _____

Date Started 12-15-89 Completed 12-15-89

Top of Rock Elevation _____

Bottom of Hole Elevation _____

Ground Water Depth 1

[illegible]

Sheet No. 1 of

FIELD BORING LOG

Client Waste Resource Associates, Inc.

BUFFALO DRILLING COMPANY, INC.
955 Niagara Street
Buffalo, New York 14213

BUFFALO DRILLING COMPANY, INC.
955 Niagara Street
Buffalo, New York 14213

Project Tops Parcel NF

File No _____ Boring No B-4

Driller: K. Dauser

Surface Elevation _____

Type of Drill Rig _____

Datum _____

Sampling Method _____

Size and Type of Bit _____

Loc. on _____

Date Started 12-15-89 Completed 12-15-89

Size and Type of Bit _____

Date started _____ Completed _____

Overburden Samples: Disturbed _____ Undist. _____

Top of Rock Elevation _____

Total Depth of Hole _____
Depth Drilled into Rock _____ **auger out 4:5 dry**

Bottom of Hole Elevation _____
Ground Water Depth **dry hole**

Depth Drilled Into Rock _____

Ground Water Depth _____

[illegible]

Notes	4-4-5-8 2'-4'	Sheet No 1 of
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Notes	4-4-5-8 2'-4'	Sheet No 1 of
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FIELD BORING LOG

Client Waste Resource Associates, Inc.

BUFFALO DRILLING COMPANY, INC.
955 Niagara Street
Buffalo, New York 14213

Project Tops Parcel NF
File No. _____ Boring No B-5

Project Tops Parcel NF
File No. _____ Boring No B-5

Project Tops Parcel NF
File No. _____ Boring No B-5

Driller K. Dauser
Type of Drill Rig _____
Sampling Method _____
Size and Type of Bit _____

Surface Elevation _____

Datum _____

Location _____

Date Started 12-15-89 Completed 12-15-89

Driller K. Dauser
Type of Drill Rig _____
Sampling Method _____
Size and Type of Bit _____

Surface Elevation _____

Datum _____

Location _____

Date Started 12-15-89 Completed 12-15-89

Driller K. Dauser
Type of Drill Rig _____
Sampling Method _____
Size and Type of Bit _____

Surface Elevation _____

Datum _____

Location _____

Date Started 12-15-89 Completed 12-15-89

Driller K. Dauser
Type of Drill Rig _____
Sampling Method _____
Size and Type of Bit _____

Surface Elevation _____

Datum _____

Location _____

Date Started 12-15-89 Completed 12-15-89

Overburden Samples: Disturbed _____ Undist. _____
Total Depth of Hole 10 _____
Depth Drilled into Rock _____

Top of Rock Elevation _____

Bottom of Hole Elevation _____

Ground Water Depth _____

Overburden Samples: Disturbed _____ Undist. _____
Total Depth of Hole 10 _____
Depth Drilled into Rock _____

Top of Rock Elevation _____

Bottom of Hole Elevation _____

Ground Water Depth _____

Overburden Samples: Disturbed _____ Undist. _____
Total Depth of Hole 10 _____
Depth Drilled into Rock _____

Top of Rock Elevation _____

Bottom of Hole Elevation _____

Ground Water Depth _____

[illegible]

Notes	Sheet No 1 of
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Notes	Sheet No 1 of
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FIELD BORING LOG

BUFFALO DRILLING COMPANY, INC.

955 Niagara Street
Buffalo, New York 14213

Client Waste Resource Associates, Inc.

Project Tops Parcel NF

File No. _____ Boring No. B-7

Driller K. Dauser

Surface Elevation _____

Type of Drill Rig _____

Datum _____

Sampling Method _____

Location _____

Size and Type of Bit _____

Date Started 12-15-89 Completed 12-15-89

Overburden Samples: Disturbed _____ Undist. _____

Top of Rock Elevation _____

Total Depth of Hole _____

Bottom of Hole Elevation _____

Depth Drilled into Rock _____

Ground Water Depth _____

Depth (ft.)	Blows per .5 ft		Sample No.	N	% Rec (RCD)	SOIL AND ROCK DESCRIPTION	REMARKS
0-2	8	12	1		15	Black Fill	
	14	23					
2-4						Refused, Pull ahead	Damp
4-6	22	24				Refusal, pull ahead	White material on auger
	4	3					
2-4	6	12	2		10	Fill - Refusal	3rd hole
	22	9					
4-6	6	4	3			Refusal	100 blows hit wood 6"
	100						
4-6	4	4	4		25	1/4 Full Silt Clay	
	3	9					
6-8	5	6	5		75	Clay	Hole dry
	6	8					
10-12	14	15					
	19	25					

Notes
Moved rig 3 times

Sheet No 1 of

FIELD BORING LOG

Client Waste Resource Associates, Inc.

BUFFALO DRILLING COMPANY, INC.
955 Niagara Street
Buffalo, New York 14213

Project Tops Parcel NF
File No. _____ Boring No. B-9

File No. _____ Boring No. B-9

Surface Elevation _____

Datum _____

Location _____

Date Started 12-16-89 Completed 12-16-89

Top of Rock Elevation _____

Bottom of Hole Elevation _____

Ground Water Depth _____

[illegible]

Notes

Sheet No. 1 of

Notes

Sheet No. 1 of

FIELD BORING LOG

Client: Waste Resource Associates, Inc.

BUFFALO DRILLING COMPANY, INC.
955 Niagara Street
Buffalo New York 14213

Buffalo New York 14213

Project Tops Parcel NF

File No. _____ Boring No. B-10

Driller K. Dauser

Surface Elevation _____

Type of Drill Rig _____

Datum _____

Sampling Method _____

Location _____

Size and Type of Bit _____

Date Started 12-16-89 Completed 12-16-89

Overburden Samples: Disturbed _____ Undist. _____

Top of Rock Elevation _____

Total Depth of Hole 10

Bottom of Hole Elevation _____

Depth Drilled into Rock _____

Ground Water Depth _____

[illegible]

Notes	Sheet No 1 of
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Notes	Sheet No 1 of
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Exhibit II

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: ORGANICS

Units of Measure: Milligrams/ Kilogram or ppm
Client: WRA A.E.S. Job Code ENG

Analytical Parameter(s)	Method No.	Quant. Limits	Sample Date-	AES Lab No.- Sample ID -		15185 PJS1 1A LAB COMP 12/13/89	15186 PJS1 1B LAB COMP 12/13/89	15187 PJS1 1C LAB COMP 12/13/89
Extractable Organic Halides (EOX)	DOR4-4	1.00				BQL *	BQL	BQL

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: ORGANICS

Units of Measure: Milligrams/ Kilogram or ppm
Client: WRA A.E.S. Job Code ENG

Analytical Parameter(s)	Method No.	Quant. Limits	Sample Date	AES Lab No. - Sample ID -	15188 PJS1 2A	15189 PJS1 2B	15190 PJS1 2C
Extractable Organic Halides (EOX)	DOR4-4	1.00	12/15/89	1.41	BQL *	BQL	BQL

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: ORGANICS

Units of Measure: Milligrams/ Kilogram or ppm
Client: WRA A.E.S. Job Code ENG

Analytical Parameter(s)	Method No.	Quant. Limits	Sample Date	AES Lab No.- Sample ID -	15191 PJS1 3A	15192 PJS1 3B	15193 PJS1 3C
Extractable Organic Halides (EOX)	DOR4-4	1.00	12/15/89		BQL *	BQL	BQL

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: ORGANICS

Units of Measure: Milligrams/ Kilogram or ppm
Client: WRA A.E.S. Job Code ENG

AES Lab No.- 15194 15195 15196
Sample ID - PJS2 4A PJS2 4B PJS2 4C

Analytical Parameter(s)	Method Quant. No. Limits	Sample Date-	12/15/89	12/15/89	12/15/89
Extractable Organic Halides (EOX)	DOR4-4	1.00	BQL *	BQL	BQL

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: ORGANICS

Units of Measure: Milligrams/ Kilogram or ppm
Client: WRA A.E.S. Job Code ENG

AES Lab No.- 15197 15198 15199
Sample ID - PJS2 5A PJS2 5B PJS2 5C

Analytical Parameter(s)	Method No.	Quant. Limits	Sample Date-		
Extractable Organic Halides (EOX)	DOR4-4	1.00	12/15/89	BQL *	BQL

12/15/89

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT


Type of Analysis: ORGANICS

Units of Measure: Milligrams/ Kilogram or ppm
Client: WRA A.E.S. Job Code ENG

AES Lab No.- 15200 15201 15202
Sample ID - PJS2 6A PJS2 6B PJS2 6C

Analytical Parameter(s)	Method Quant.		Sample Date-	12/15/89	12/15/89	12/15/89
	No.	Limits				
Extractable Organic Halides (EOX)	DOR4-4	1.00	BQL *	BQL	BQL	BQL

* Below Quantifiable Limits


Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: ORGANICS

Units of Measure: Milligrams/ Kilogram or ppm
Client: WRA A.E.S. Job Code ENG

Analytical Parameter(s)	Method Quant. No. Limits	Sample Date-	AES Lab No.-		Sample ID -	Sample Date-	Sample ID -	Sample Date-
Extractable Organic Halides (EOX)	DOR4-4	1.00	BQL *	BQL	BQL	BQL	BQL	BQL

* Below Quantifiable Limits



Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: ORGANICS

Units of Measure: Milligrams/ Kilogram or ppm
Client: WRA A.E.S. Job Code ENG

Analytical Parameter(s)	Method No.	Quant. Limits	Sample Date	AES Lab No. - Sample ID -	15206 8A	15207 8B	15208 8C
Extractable Organic Halides (EOX)	DOR4-4	1.00	12/16/89		BQL *	BQL	BQL

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: ORGANICS

Units of Measure: Milligrams/ Kilogram or ppm
Client: WRA A.E.S. Job Code ENG

AES Lab No.- 15209 15210 15211
Sample ID - 9A 9B 9C

Analytical Parameter(s)	Method Quant.		Sample Date-	BQL *	BQL	BQL
	No.	Limits				
Extractable Organic Halides (EOX)	DOR4-4	1.00	12/16/89			

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: ORGANICS

Units of Measure: Milligrams/ Kilogram or ppm
Client: WRA A.E.S. Job Code ENG

AES Lab No.- 15212 15213 15214
Sample ID - 10A 10B 10C

Analytical Parameter(s)	Method Quant.		Sample Date-	12/16/89	12/16/89	12/16/89
	No.	Limits				
Extractable Organic Halides (FOX)	DOR4-4	1.00	2.58	BQL *	BQL	BQL

* Below Quantifiable Limits



Wayne J. Juda
Organics Supervisor

Exhibit III

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: INORGANICS

Client: WRA

A.E.S. JOB CODE ENG

AES Lab No. - 15330
Sample ID - 7D

PJS1 (3RD
HOLE) GRAB
12/15/89

Analytical Parameter(s) Method Quant. No. Limits

pH (Standard Units) SW846 /9045 0.1 12.5

Total Organic Carbon (mg/l) 505B 100 38,000

M. Shauna Pandolfino

M. Shauna Pandolfino
Inorganic Supervisor

ADVANCED ENVIRONMENTAL SERVICES, INC.
LABORATORY REPORT

Type of Analysis: ORGANICS

Units of Measure: Milligrams/ Kilogram or ppm (as received)
Client: WRA A.E.S. Job Code ENG

AES Lab No.- 15330
Sample ID - 7D

PJSI (3RD
HOLE) GRAB
12/15/89

Analytical Method Quant.
Parameter(s) No. Limits Sample Date-

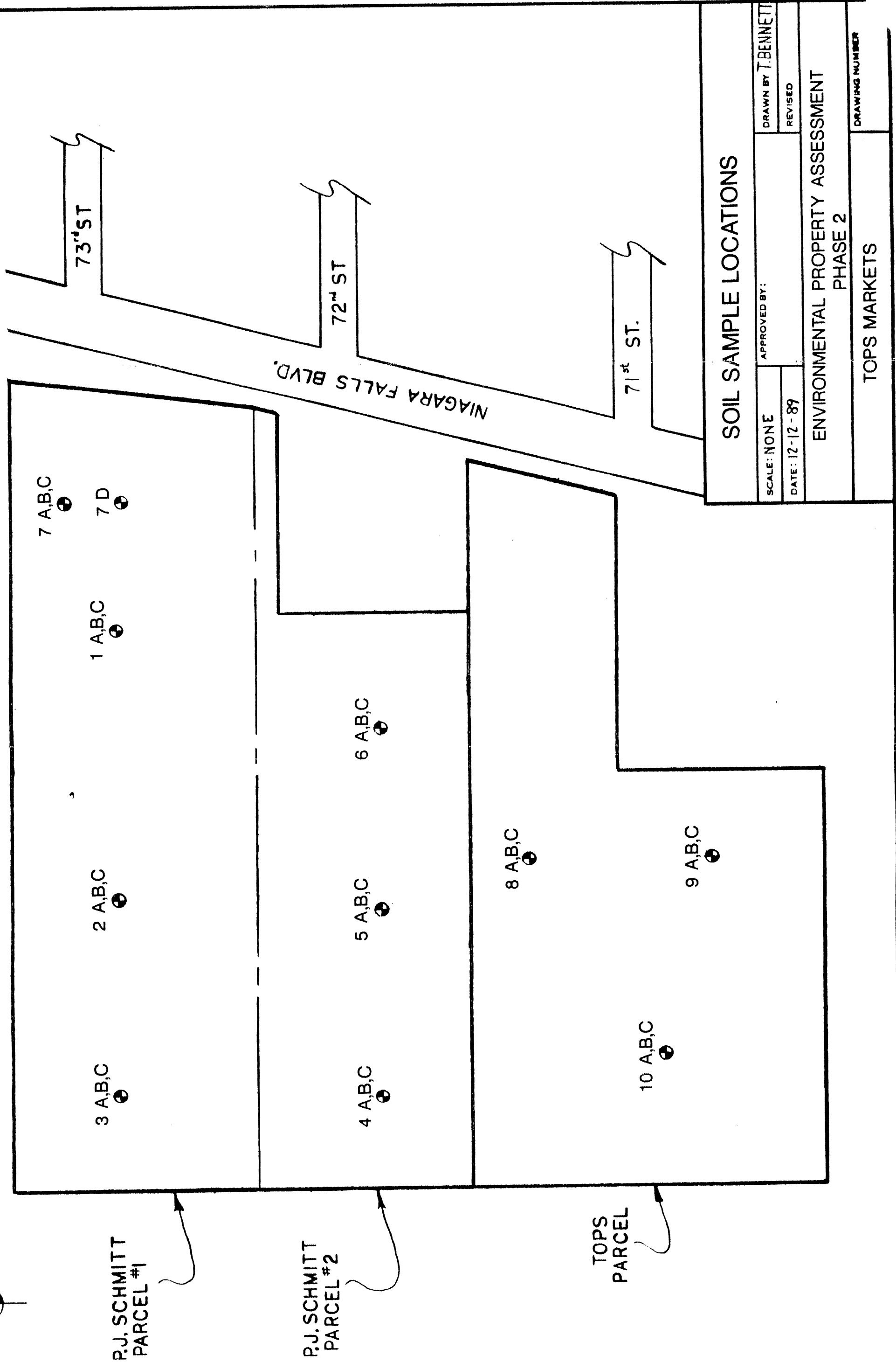
Total Chlorinated 310-17 5.0 BQL *
Hydrocarbon Scan

* Below Quantifiable Limits

Wayne J. Juda
Organics Supervisor



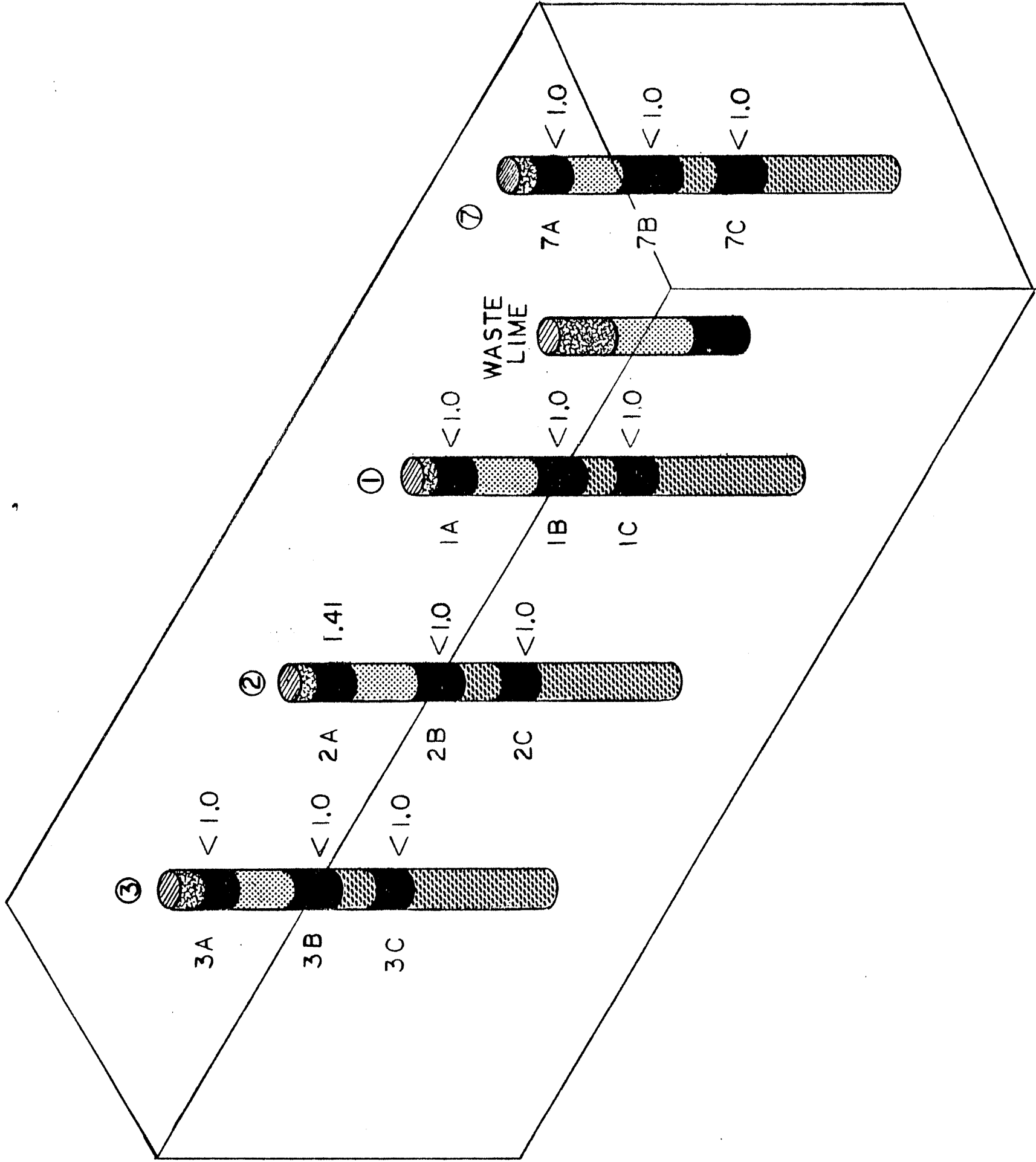
FIGURE 1



SOIL SAMPLE LOCATIONS			
SCALE: NONE	APPROVED BY:	DRAWN BY T. BENNETT	
DATE: 12-12-89		REVISED	
ENVIRONMENTAL PROPERTY ASSESSMENT PHASE 2			
TOPS MARKETS		DRAWING NUMBER	

FIGURE 2

P.J. SCHMITT PARCEL #1



SAMPLE NO.	DEPTH (FT.)
1A	0 to 4
1B	4 to 8
1C	8 to 12
2A	0 to 2
2B	2 to 6
2C	6 to 10
3A	2 to 4
3B	4 to 6
3C	6 to 12
7A	0 to 4
7B	4 to 6
7C	6 to 10
WASTE LIME	4 to 6

KEY	
FILL	
SILTY SAND	
CLAY	

FIGURE 3

P.J. SCHMITT PARCEL #2

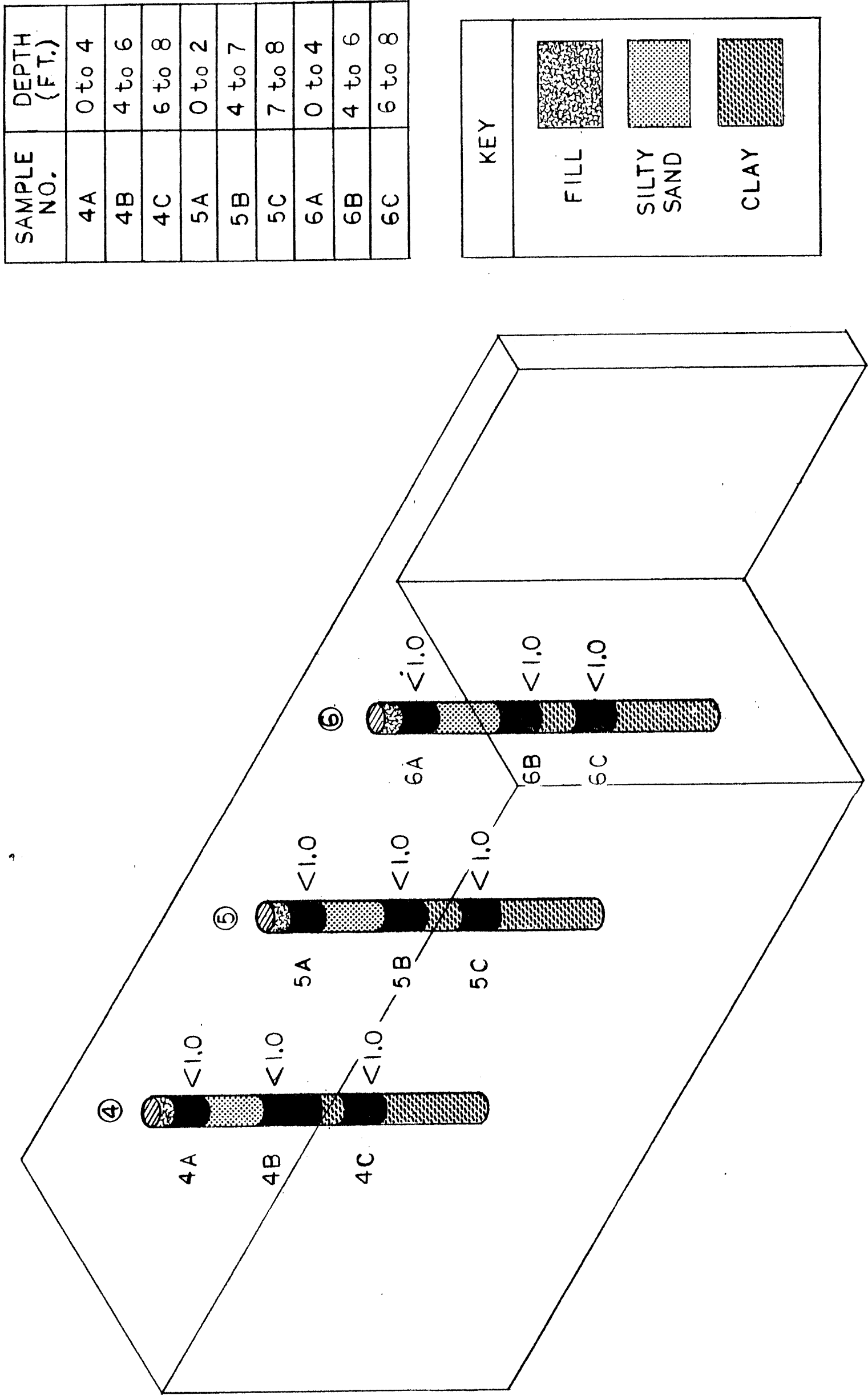
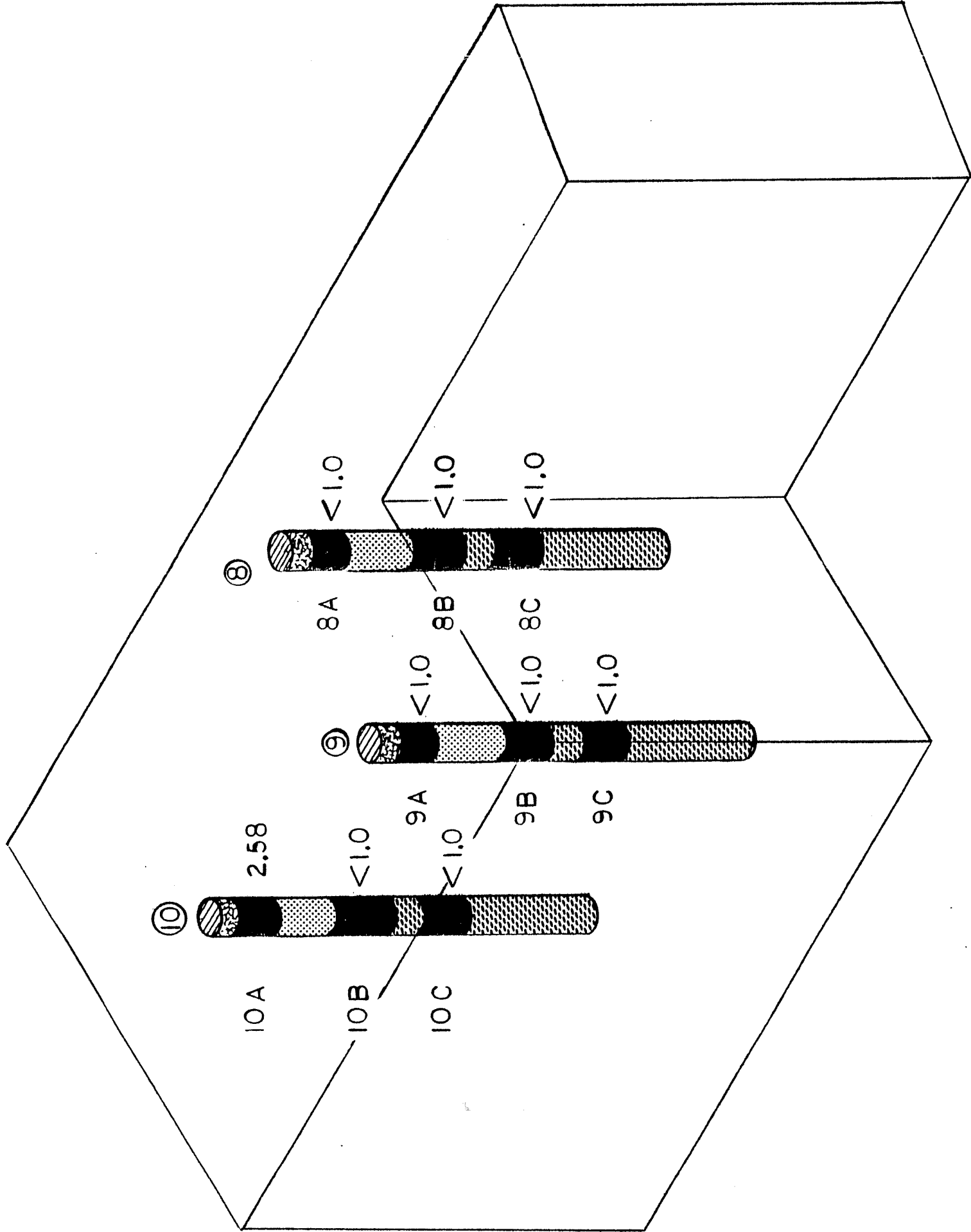


FIGURE 4

TOPS PARCEL



SAMPLE NO.	DEPTH (FT.)
8A	2 to 4
8B	4 to 8
8C	8 to 10
9A	0 to 4
9B	4 to 7
9C	7 to 10
10A	0 to 3
10B	3 to 8
10C	8 to 10

KEY	
FILL	
SILTY SAND	
CLAY	