BUREAU WATER MANAGEMENT
SITE NAME Culbro Tobacco Hall Farm
ADDRESS _____
TOWN Simsbury
FILE TYPE _____

APPENDIX M

GROUNDWATER SAMPLING RESULTS
SEPTEMBER 7, 1990

CULBRO TOBACCO
HALL FARM DISPOSAL SITE
SIMSBURY, CONNECTICUT

ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220

OCT 18 1990

MA 086 NH 198958-A CT PH-0574

CERTIFICATE OF ANALYSIS

Client: Fuss & O'Neill

Address: 146 Hartford Road
Manchester, CT 06040

Attn: David Hurley

Client Designation: Project #84-255

Laboratory Job Number: 904795

Invoice Number: 90257

Date Received: 09/10/90

Date Reported: 10/17/90

Delivery Method: Alpha Courier

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
904795.1	313900907-01	Simsbury MW-301
904795.2	313900907-02	Simsbury MW-301 DUP
904795.3	313900907-03	Simsbury MW-302
904795.4	313900907-04	Simsbury Trip Blank
904795.5	313900907-05	Simsbury MW-303
904795.6	313900907-06	Simsbury Equipment Blank
904795.7	313900907-07	Simsbury MW-304

Authorized by: _____
Scott McLean - Laboratory Director

kmg

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574

Laboratory Sample Number: 904795.1
Sample Matrix: Liquid
Condition of Samples: Satisfactory
Number & Type of Containers: One glass bottle
Analysis Requested: Organophosphorus Pesticides

Date Received: 09/10/9
Date Reported: 10/17/9
Field Prep: None

PARAMETER	RESULT	UNITS	MDL**	REF*	METHOD	DA EXT/PREP
Organophosphorus Pesticides:						
Dichlorvos	ND	ug/L	0.1	1	614	09/17/90
Mevinphos	ND	ug/L	0.1	1	614	09/17/90
Ethoprop	ND	ug/L	0.1	1	614	09/17/90
Naled	ND	ug/L	0.1	1	614	09/17/90
Phorate	ND	ug/L	0.1	1	614	09/17/90
Disulfoton	ND	ug/L	0.1	1	614	09/17/90
Diazinon	ND	ug/L	0.1	1	614	09/17/90
Parathion methyl	ND	ug/L	0.1	1	614	09/17/90
Ronnel	ND	ug/L	0.1	1	614	09/17/90
Fenthion	ND	ug/L	0.1	1	614	09/17/90
Chlorpyrifos	ND	ug/L	0.1	1	614	09/17/90
Trichloronate	ND	ug/L	0.1	1	614	09/17/90
Merphos	ND	ug/L	0.1	1	614	09/17/90
Stirophos	ND	ug/L	0.1	1	614	09/17/90
Fensulfothion	ND	ug/L	0.1	1	614	09/17/90
Azinphos methyl	ND	ug/L	0.1	1	614	09/17/90
Coumaphos	ND	ug/L	0.1	1	614	09/17/90
Bolstar	ND	ug/L	0.1	1	614	09/17/90

None found in lab

COMMENTS: * Complete list of References found in Addendum I
Organophosphorus Pesticides analysis performed by Referer
Lab #1 - see Addendum II.

ALPHA ANALYTICAL LABS
ADDENDUM I
REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Metho
EPA SW-846. 1986.

2. Standard Methods for Examination of Water and Waste Water. APHA-A
16th Edition. 1985.

3. Standard Methods for Examination of Water and Waste Water. APHA-A
17th Edition. 1989.

4. Methods for Chemical Analysis of Water and Wastes. EPA 600/4-82-0
1983.

5. Oil Spill Identification System. CG-D-52-77 U. S. Coast Guard.

6. Methods for Organic Chemical Analysis of Municipal and Industrial
Water. EPA 600/4-82-057. 1982.

7. U. S. Department of Health, Education, and Welfare, National Insti
Occupational Safety and Health. D. G. Taylor, [Manual of Analyti
Methods, 2nd Ed., DHEW (NIOSH) Pub. No. 77-237A, 1977.]

8. Handbook of Analytical Quality Control in Water and Wastewater
Laboratories. EPA 600/4-79-019. March 1979.

9. The United States Pharmacopeia. The National Formulary. USP 20t
Edition. Formulary 15th Edition. 1980.

10. Choosing Cost-Effective QA/QC (Quality Assurance/Quality Control)
for Chemical Analysis. PB85-241461. U. S. Department of Commerc
National Technical Information Service. August 1985.

11. Manual of Analytical Quality Control for Pesticides in Human and
Environmental Media. PB 261 019. EPA 600/1-76-017. February 19

12. Annual Book of ASTM Standards. Sections 0, 3, 4, 5, 6, 8, 9, 11,
American Society for Testing and Materials 1986.

13. Federal Register, part II. 40 CFR, part 261, et al, PP. 11798-118
March 29, 1990.

14. Methods for the Determination of Organic Compounds in Finished Dri
Water and Raw Source Water. Available from USEPA, Cincinnati, 26
Martin Luther King Drive, Cincinnati, Ohio, 45268.

15. Interim Methods for the Determination of Asbestiform Minerals in Bulk Insulation Samples, Research Triangle Institute, June 1980. Asbestos Containing Materials in School Buildings: A Guidance Document, March 1979, USEPA Document C00090, parts 1 & 2.

16. Interim Methods for the Determination of Asbestos in Bulk Insulation Samples (EPA-600/M4-82-020).

17. "Prescribed Procedures for Measurement of Radioactivity in Drinking Water," Publication EPA-600/4-80-032, U. S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Cincinnati, August 1980.

18. "Clean Harbors Radiological Environmental Analytical Procedures," Clean Harbors Analytical Services, Braintree, MA, October 1985.

19. H. M. Prichard and T. F. Gesell, "Rapid Measurement of RN-222 Concentrations in Water with a Commercial Liquid Scintillation Counter", Health Physics, Volume 33, 1977, pp. 577-581.

20. "Handbook for Analytical Quality Control in Water and Wastewater Laboratories", March 1979, EPA 600/4-79-019.

21. Analysis of PCB's in Transformer Fluid and Waste Oil. EPA 600/4-81-045. 1981.

22. Klute, A. 1986, "Methods of Soil Analysis, Part 1", Methods 15-2.2 and 15-5.1. American Society of Agronomy, Madison, WI.

23. Exhibit No. 1. Petroleum Oils by Gas Chromatography. Alley Young & Baumartner, Inc., Consulting Engineers, PO Box 2036, Brentwood, TN 37024.

ALPHA ANALYTICAL LABS
ADDENDUM II
REFERENCE LABORATORIES

1. CHEMWEST ANALYTICAL LABORATORIES/DIVISION OF COMPUCHEM
600 West NorthMarket Blvd.
Sacramento, CA 95834
MA Certification Number: NC028

2 CLEAN HARBORS ANALYTICAL SERVICES
325 Wood Road
Braintree, MA 02184
(617) 849-1800
MA Certification Number: MA 032

3. E. W. SAYBOLT & CO., INC.
22 Elkins Street
S. Boston, MA 02127
(617) 268-7668

4. FUSS ENVIRONMENTAL LABS.
77 Batson Drive
Manchester, CT 06040
(203) 646-5628
CT Certification Number: PH0441

5. CERTIFIED ENGINEERING AND TESTING
25 Mathewson Drive
Weymouth, MA 02189
(617) 337-7887

Analytical Parameter Request

Project #: 84-255
Project Name: Culbro/Hall Farm
Laboratory: Alpha Analytical Labs
Report to: Fuss & O'Neill

Date Sampled: 9/7/90
Date Submitted: 9/10/90
Submittor: Fuss & O'Neill

FUSS&O'NEILL Environmental Field Services

Attention: Dave Hurley
Invoice to: Culbro Tobacco Inc.
Mailing Address: 1600 Prospect Hill Road
City, State, Zip: Windsor, CT 06095
Attention: Richard Milliken / General Manager
Phone #: 203-243-2561
Special Instructions: Invoice to Culbro c/o Fuss & O'Neill for review.

COC #	Sample ID	COC #	Sample ID	COC #	Sample ID
9161	313900907-01	9162	313900907-07		
9161	-02				
9161	-03				
9162	-04				
9162	-05				
	-06				

Comments:

2 of 2

Organochlorine Pesticides and PCB's	Method 8080
Organophosphorus Pesticides	Method 8140
Chlorinated Herbicides	Method 8150
~~5 of~~ EDB	Method 504.2
Alachlor	Method 8080/
Atrazine	Method 8080
Volatile Organic Compounds (GC/MS)	Method 8240
Semi-volatile Organics (GC/MS)	Method 8270
Arsenic, Dissolved	Method 7060
Cadmium, Dissolved	Method 6010
Chromium, Dissolved	Method 6010
Copper, Dissolved	Method 6010
Lead, Dissolved	Method 6010
Mercury, Dissolved	Method 7470
Selenium, Dissolved	Method 7740
Silver, Dissolved	Method 6010

to/12

07sep90

ALPHA ANALYTICAL LABORATORIES
Eight Walkup Drive
Westborough, Massachusetts 01581-1019
(508) 898-9220

SEP 2 5 1990

MA 086 NH 198958-A CT PH-0574

CERTIFICATE OF ANALYSIS

Client: Fuss & O'Neill

Address: 146 Hartford Road
Manchester, CT 06040

Attn: David Hurley

Client Designation: Project #84-255

Laboratory Job Number: 904795

Invoice Number: 16199

Date Received: 09/10/90

Date Reported: 09/21/90

Delivery Method: Alpha courier

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
904795.1	313900907-01	Simsbury
904795.2	313900907-02	Simsbury MW-301
904795.2D	313900907-02 (Duplicate)	Simsbury MW-301 Du
904795.3	313900907-03	Simsbury MW-301
904795.3S	313900907-03 (Spike Recovery)	Simsbury MW-302
904795.4	313900907-04	Simsbury MW-302
904795.5	313900907-05	Simsbury Trip Blank
904795.6	313900907-06	Simsbury MW-303
904795.7	313900907-07	Simsbury Equipment
		Simsbury MW-304

Authorized by: Scott McLean - Laboratory Director

kmg

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574

Laboratory Sample Number: 904795.1 **Date Received:** 09/10/90

Sample Matrix: Liquid **Date Reported:** 09/21/90

Condition of Samples: Satisfactory **Field Prep:** Soluble Metals were field filtered and preserved

Number & Type of Containers: Four glass bottles, one plastic bottle and four VOA vials

Analysis Requested: Analysis as listed below

PARAMETER	RESULT	UNITS	MDL**	REF*	METHOD	DATES EXT/PREP	DATES ANALYSIS
Soluble Metals							
Arsenic	ND	mg/L	0.005	1	7060	----	09/13/90
Cadmium	ND	mg/L	0.01	1	6010	----	09/13/90
Chromium	ND	mg/L	0.02	1	6010	----	09/13/90
Copper	ND	mg/L	0.02	1	6010	----	09/13/90
Lead	ND	mg/L	0.05	1	6010	----	09/13/90
Mercury	ND	mg/L	0.0005	1	7470	----	09/13/90
Selenium	ND	mg/L	0.005	1	7740	----	09/13/90
Silver	ND	mg/L	0.01	1	6010	----	09/13/90
PCB's ***	ND	ug/L	2.5	1	8080	09/13/90	09/21/90
Volatile Organics ***							
1,2-Dichloropropane	6.8 (5)	ug/L	**	1	8260	----	09/21/90

Volatile Organics	% Surrogate Recovery
1,2-Dichloroethane-d4	97%
Toluene-d8	114%
4-Bromofluorobenzene	85%

COMMENTS: * Complete list of References found in Addendum I
** A list of volatile organics analyzed for and their detection limits accompanies this report.
*** All compounds were below the detection limits except those listed above.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574

Laboratory Sample Number: 904795.1

Sample Matrix: Liquid

Condition of Samples: Satisfactory

Number & Type of Containers: Four glass bottles, one plastic bottle and four VOA vials

Analysis Requested: Analysis as listed below

Date Received: 09/10/90

Date Reported: 09/21/90

Field Prep: Soluble Metals were field filtered and preserved

CONTINUED

PARAMETER	RESULT	UNITS	MDL**	REF*	METHOD	DATES EXT/PREP	DATES ANALYSIS
Acid/Base/Neutral Extractables ***	ND	ug/L	**	1	8270	09/13/90	09/20/90
Pesticides:							
Ethylene dibromide	ND	ug/L	0.1	14	504	----	09/20/90
Dibromochloropropane	ND	ug/L	0.1	14	504	----	09/20/90
Herbicides ***	ND	ug/L	1.0	1	8150	09/13/90	09/19/90
Pesticides ***	ND	ug/L	0.25	1	8080	09/13/90	09/21/90

Acid/Base/Neutral Extractables	% Surrogate Recovery
2-Fluorophenol	25%
Phenol-d5	22%
Nitrobenzene-d5	61%
2-Fluorobiphenyl	71%
2,4,6-Tribromophenol	83%
4-Terphenyl-d14	55%

COMMENTS: * Complete list of References found in Addendum I
** Lists of acid/base/neutral extractables, herbicides and pesticides analyzed for and their detection limits accompany this report.
*** All compounds were below the detection limits except those listed above.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

NA 086 NH 198958-A CT PH-0574

Laboratory Sample Number: 904795.2 **Date Received:** 09/10/90

Sample Matrix: Liquid **Date Reported:** 09/21/90

Condition of Samples: Satisfactory **Field Prep:** Soluble Metals were field filtered and preserved

Number & Type of Containers: Four glass bottles, one plastic bottle and four VOA vials

Analysis Requested: Analysis as listed below

PARAMETER	RESULT	UNITS	MDL**	REF*	METHOD	DATES EXT/PREP	DATES ANALYSIS
Soluble Metals							
Arsenic	ND	mg/L	0.005	1	7060	----	09/13/90
Cadmium	ND	mg/L	0.01	1	6010	----	09/13/90
Chromium	ND	mg/L	0.02	1	6010	----	09/13/90
Copper	ND	mg/L	0.02	1	6010	----	09/13/90
Lead	ND	mg/L	0.05	1	6010	----	09/13/90
Mercury	ND	mg/L	0.0005	1	7470	----	09/13/90
Selenium	ND	mg/L	0.005	1	7740	----	09/13/90
Silver	ND	mg/L	0.01	1	6010	----	09/13/90
PCB's ***	ND	ug/L	2.5	1	8080	09/13/90	09/21/90
Volatile Organics ***	ND	ug/L	**	1	8260	----	09/20/90

Volatile Organics % Surrogate Recovery

1,2-Dichloroethane-d4	109%
Toluene-d8	95%
4-Bromofluorobenzene	104%

COMMENTS: * Complete list of References found in Addendum I
** A list of volatile organics analyzed for and their detection limits accompanies this report.
*** All compounds were below the detection limits except those listed above.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574

Laboratory Sample Number: 904795.2

Sample Matrix: Liquid

Condition of Samples: Satisfactory

Number & Type of Containers: Four glass bottles, one plastic bottle and four VOA vials

Analysis Requested: Analysis as listed below

Date Received: 09/10/90

Date Reported: 09/21/90

Field Prep: Soluble Metals were field filtered and preserved

CONTINUED

PARAMETER	RESULT	UNITS	MDL**	REF*	METHOD	DATES EXT/PREP	DATES ANALYSIS
Acid/Base/Neutral Extractables ***	ND	ug/L	**	1	8270	09/13/90	09/20/90
Pesticides:							
Ethylene dibromide	ND	ug/L	0.1	14	504	----	09/20/90
Dibromochloropropane	ND	ug/L	0.1	14	504	----	09/20/90
Herbicides ***	ND	ug/L	1.0	1	8150	09/13/90	09/19/90
Pesticides ***	ND	ug/L	0.25	1	8080	09/13/90	09/21/90

Acid/Base/Neutral Extractables	% Surrogate Recovery
2-Fluorophenol	44%
Phenol-d5	38%
Nitrobenzene-d5	74%
2-Fluorobiphenyl	76%
2,4,6-Tribromophenol	93%
4-Terphenyl-d14	77%

COMMENTS:
* Complete list of References found in Addendum I
** Lists of acid/base/neutral extractables, herbicides and pesticides analyzed for and their detection limits accompany this report.
*** All compounds were below the detection limits except those listed above.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574

Laboratory Sample Number: 904795.2D **Date Received:** 09/10/90

Sample Matrix: Liquid **Date Reported:** 09/21/90

Condition of Samples: Satisfactory **Field Prep:** Soluble Metals were field filtered and preserved

Number & Type of Containers: Two glass bottles and one plastic bottle

Analysis Requested: Analysis as listed below

PARAMETER	SAMPLE RESULT	DUPLICATE RESULT	%RPD
Soluble Metals			
Arsenic	ND	ND	NC
Cadmium	ND	ND	NC
Chromium	ND	ND	NC
Copper	ND	ND	NC
Lead	ND	ND	NC
Mercury	ND	ND	NC
Selenium	ND	ND	NC
Silver	ND	ND	NC
PCB's	ND	ND	NC
Acid/Base/Neutral Extractables	ND	ND	NC

Acid/Base/Neutral Extractables	% Surrogate Recovery
2-Fluorophenol	50%
Phenol-d5	47%
Nitrobenzene-d5	74%
2-Fluorobiphenyl	74%
2,4,6-Tribromophenol	94%
4-Terphenyl-d14	77%

NC - Non calculable RPD

COMMENTS: * Complete list of References found in Addendum I

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574

Laboratory Sample Number: 904795.3

Sample Matrix: Liquid

Condition of Samples: Satisfactory

Date Received: 09/10/90

Date Reported: 09/21/90

Field Prep: Soluble Metals were field filtered and preserved

Number & Type of Containers: Four glass bottles, one plastic bottle and four VOA vials

Analysis Requested: Analysis as listed below

PARAMETER	RESULT	UNITS	MDL**	REF*	METHOD	DATES EXT/PREP	DATES ANALYSIS
Soluble Metals							
Arsenic	ND	mg/L	0.005	1	7060	----	09/13/90
Cadmium	ND	mg/L	0.01	1	6010	----	09/13/90
Chromium	ND	mg/L	0.02	1	6010	----	09/13/90
Copper	ND	mg/L	0.02	1	6010	----	09/13/90
Lead	ND	mg/L	0.05	1	6010	----	09/13/90
Mercury	ND	mg/L	0.0005	1	7470	----	09/13/90
Selenium	ND	mg/L	0.005	1	7740	----	09/13/90
Silver	ND	mg/L	0.01	1	6010	----	09/13/90
PCB's ***	ND	ug/L	2.5	1	8080	09/13/90	09/21/90
Volatile Organics ***							
1,2-Dichloropropane	13	ug/L	**	1	8260	----	09/20/90

Volatile Organics % Surrogate Recovery

1,2-Dichloroethane-d4	96%
Toluene-d8	109%
4-Bromofluorobenzene	107%

COMMENTS: * Complete list of References found in Addendum I
** A list of volatile organics analyzed for and their detection limits accompanies this report.
*** All compounds were below the detection limits except those listed above.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574

Laboratory Sample Number: 904795.3 **Date Received:** 09/10/90

Sample Matrix: Liquid **Date Reported:** 09/21/90

Condition of Samples: Satisfactory **Field Prep:** Soluble Metals were field filtered and preserved

Number & Type of Containers: Four glass bottles, one plastic bottle and four VOA vials

Analysis Requested: Analysis as listed below

CONTINUED

PARAMETER	RESULT	UNITS	MDL**	REF*	METHOD	DATES EXT/PREP	DATES ANALYSIS
Acid/Base/Neutral Extractables ***	ND	ug/L	**	1	8270	09/13/90	09/20/90
Pesticides:							
Ethylene dibromide	ND	ug/L	0.1	14	504	----	09/20/90
Dibromochloropropane	ND	ug/L	0.1	14	504	----	09/20/90
Herbicides ***	ND	ug/L	1.0	1	8150	09/13/90	09/19/90
Pesticides ***	ND	ug/L	0.25	1	8080	09/13/90	09/21/90

Acid/Base/Neutral Extractables	% Surrogate Recovery
2-Fluorophenol	56%
Phenol-d5	56%
Nitrobenzene-d5	86%
2-Fluorobiphenyl	81%
2,4,6-Tribromophenol	110%
4-Terphenyl-d14	73%

COMMENTS: * Complete list of References found in Addendum I
** Lists of acid/base/neutral extractables, herbicides and pesticides analyzed for and their detection limits accompany this report.
*** All compounds were below the detection limits except those listed above.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574

Laboratory Sample Number: 904795.3S

Sample Matrix: Liquid

Condition of Samples: Satisfactory

Number & Type of Containers: Four glass bottles, one plastic bottle and four VOA vials

Analysis Requested: Analysis as listed below

Date Received: 09/10/90

Date Reported: 09/21/90

Field Prep: Soluble Metals were field filtered and preserved

PARAMETER	%RECOVERY
Soluble Metals	
Arsenic	95%
Cadmium	91%
Chromium	100%
Copper	104%
Lead	100%
Mercury	80%
Selenium	98%
Silver	90%
Acid/Base/Neutral Extractables	
P-chloro-m-cresol	76%
2-Chlorophenol	60%
4-Nitrophenol	64%
Pentachlorophenol	49%
Phenol	36%
Acenaphthene	78%
1,2,4-Trichlorobenzene	76%
1,4-Dichlorobenzene	53%
2,4-Dinitrotoluene	195%
N-nitrosodi-n-propylamine	64%
Pyrene	101%

Acid/Base/Neutral Extractables	% Surrogate Recovery
2-Fluorophenol	35%
Phenol-d5	36%
Nitrobenzene-d5	76%
2-Fluorobiphenyl	74%
2,4,6-Tribromophenol	94%
4-Terphenyl-d14	82%

COMMENTS: * Complete list of References found in Addendum I

olatile

,2-Dichloroethane-d4	109%
oluene-d8	107%
-Bromofluorobenzene	

Addendum I
for and their detection

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574

Laboratory Sample Number: 904795.4 **Date Received:** 09/10/90

Sample Matrix: Liquid **Date Reported:** 09/21/90

Condition of Samples: Satisfactory **Field Prep:** Soluble Metals were field filtered and preserved

Number & Type of Containers: Four glass bottles, one plastic bottle and four VOA vials

Analysis Requested: Analysis as listed below

PARAMETER	RESULT	UNITS	MDL**	REF*	METHOD	DATES EXT/PREP	DATES ANALYSIS
Soluble Metals							
Arsenic	ND	mg/L	0.005	1	7060	----	09/13/90
Cadmium	ND	mg/L	0.01	1	6010	----	09/13/90
Chromium	ND	mg/L	0.02	1	6010	----	09/13/90
Copper	ND	mg/L	0.02	1	6010	----	09/13/90
Lead	ND	mg/L	0.05	1	6010	----	09/13/90
Mercury	ND	mg/L	0.0005	1	7470	----	09/13/90
Selenium	ND	mg/L	0.005	1	7740	----	09/13/90
Silver	ND	mg/L	0.01	1	6010	----	09/13/90
PCB's ***	ND	ug/L	2.5	1	8080	09/13/90	09/21/90
Volatile Organics ***	ND	ug/L	**	1	8260	----	09/20/90

Volatile Organics	% Surrogate Recovery
1,2-Dichloroethane-d4	94%
Toluene-d8	106%
4-Bromofluorobenzene	112%

COMMENTS: * Complete list of References found in Addendum I
** A list of volatile organics analyzed for and their detection limits accompanies this report.
*** All compounds were below the detection limits except those listed above.

CONNE
VIRONMENTAL

CULBRO CORPORATION IS
DER DATED JANUARY 4, 1989
F. CALL ELSIE PATTON, WATE
WATER MANAGEMENT

6

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574

Laboratory Sample Number: 904795.4 **Date Received:** 09/10/90

Sample Matrix: Liquid **Date Reported:** 09/21/90

Condition of Samples: Satisfactory **Field Prep:** Soluble Metals were field filtered and preserved

Number & Type of Containers: Four glass bottles, one plastic bottle and four VOA vials

Analysis Requested: Analysis as listed below

CONTINUED

PARAMETER	RESULT	UNITS	MDL**	REF*	METHOD	DATES EXT/PREP	DATES ANALYSIS
Acid/Base/Neutral Extractables ***	ND	ug/L	**	1	8270	09/13/90	09/20/90
Pesticides:							
Ethylene dibromide	ND	ug/L	0.1	14	504	----	09/20/90
Dibromochloropropane	ND	ug/L	0.1	14	504	----	09/20/90
Herbicides ***	ND	ug/L	1.0	1	8150	09/13/90	09/19/90
Pesticides ***	ND	ug/L	0.25	1	8080	09/13/90	09/21/90

Acid/Base/Neutral Extractables	% Surrogate Recovery
2-Fluorophenol	59%
Phenol-d5	47%
Nitrobenzene-d5	91%
2-Fluorobiphenyl	89%
2,4,6-Tribromophenol	97%
4-Terphenyl-d14	99%

COMMENTS: * Complete list of References found in Addendum I
** Lists of acid/base/neutral extractables, herbicides and pesticides analyzed for and their detection limits accompany this report.
*** All compounds were below the detection limits except those listed above.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574

Laboratory Sample Number: 904795.5 **Date Received:** 09/10/90

Sample Matrix: Liquid **Date Reported:** 09/21/90

Condition of Samples: Satisfactory **Field Prep:** Soluble Metals were field filtered and preserved

Number & Type of Containers: Four glass bottles, one plastic bottle and four VOA vials

Analysis Requested: Analysis as listed below

PARAMETER	RESULT	UNITS	MDL**	REF*	METHOD	DATES EXT/PREP	DATES ANALYSIS
Soluble Metals							
Arsenic	ND	mg/L	0.005	1	7060	----	09/13/90
Cadmium	ND	mg/L	0.01	1	6010	----	09/13/90
Chromium	ND	mg/L	0.02	1	6010	----	09/13/90
Copper	ND	mg/L	0.02	1	6010	----	09/13/90
Lead	ND	mg/L	0.05	1	6010	----	09/13/90
Mercury	ND	mg/L	0.0005	1	7470	----	09/13/90
Selenium	ND	mg/L	0.005	1	7740	----	09/13/90
Silver	ND	mg/L	0.01	1	6010	----	09/13/90
PCB's ***	ND	ug/L	2.5	1	8080	09/13/90	09/21/90
Volatile Organics ***	ND	ug/L	**	1	8260	----	09/21/90

Volatile Organics	% Surrogate Recovery
1,2-Dichloroethane-d4	97%
Toluene-d8	111%
4-Bromofluorobenzene	111%

COMMENTS: * Complete list of References found in Addendum I
** A list of volatile organics analyzed for and their detection limits accompanies this report.
*** All compounds were below the detection limits except those listed above.

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ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574

Laboratory Sample Number: 904795.5

Sample Matrix: Liquid

Condition of Samples: Satisfactory

Number & Type of Containers: Four glass bottles, one plastic bottle and four VOA vials

Analysis Requested: Analysis as listed below

Date Received: 09/10/90

Date Reported: 09/21/90

Field Prep: Soluble Metals were field filtered and preserved

CONTINUED

PARAMETER	RESULT	UNITS	MDL**	REF*	METHOD	DATES EXT/PREP	DATES ANALYSIS
Acid/Base/Neutral Extractables ***	ND	ug/L	**	1	8270	09/13/90	09/20/90
Pesticides:							
Ethylene dibromide	ND	ug/L	0.1	14	504	----	09/20/90
Dibromochloropropane	ND	ug/L	0.1	14	504	----	09/20/90
Herbicides ***	ND	ug/L	1.0	1	8150	09/13/90	09/19/90
Pesticides ***	ND	ug/L	0.25	1	8080	09/13/90	09/21/90

Acid/Base/Neutral Extractables	% Surrogate Recovery
2-Fluorophenol	31%
Phenol-d5	27%
Nitrobenzene-d5	73%
2-Fluorobiphenyl	82%
2,4,6-Tribromophenol	81%
4-Terphenyl-d14	58%

COMMENTS: * Complete list of References found in Addendum I
** Lists of acid/base/neutral extractables, herbicides and pesticides analyzed for and their detection limits accompany this report.
*** All compounds were below the detection limits except those listed above.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574

Laboratory Sample Number: 904795.6 **Date Received:** 09/10/90

Sample Matrix: Liquid **Date Reported:** 09/21/90

Condition of Samples: Satisfactory **Field Prep:** Soluble Metals were field filtered and preserved

Number & Type of Containers: Four glass bottles, one plastic bottle and three VOA vials

Analysis Requested: Analysis as listed below

CONTINUED

PARAMETER	RESULT	UNITS	MDL**	REF*	METHOD	DATES EXT/PREP	DATES ANALYSIS
Acid/Base/Neutral Extractables ***	ND	ug/L	**	1	8270	09/13/90	09/20/90
Pesticides:							
Ethylene dibromide	ND	ug/L	0.1	14	504	----	09/20/90
Dibromochloropropane	ND	ug/L	0.1	14	504	----	09/20/90
Herbicides ***	ND	ug/L	1.0	1	8150	09/13/90	09/19/90
Pesticides ***	ND	ug/L	0.25	1	8080	09/13/90	09/21/90

Acid/Base/Neutral Extractables	% Surrogate Recovery
2-Fluorophenol	54%
Phenol-d5	37%
Nitrobenzene-d5	88%
2-Fluorobiphenyl	88%
2,4,6-Tribromophenol	94%
4-Terphenyl-d14	114%

COMMENTS: * Complete list of References found in Addendum I
** Lists of acid/base/neutral extractables, herbicides and pesticides analyzed for and their detection limits accompany this report.
*** All compounds were below the detection limits except those listed above.

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ALPHA ANALYTICAL LABORATORIES
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MA 086 NH 198958-A CT PH-0574

Laboratory Sample Number: 904795.6

Sample Matrix: Liquid

Condition of Samples: Satisfactory

Number & Type of Containers: Four glass bottles, one plastic bottle and three VOA vials

Analysis Requested: Analysis as listed below

Date Received: 09/10/90

Date Reported: 09/21/90

Field Prep: Soluble Metals were field filtered and preserved

PARAMETER	RESULT	UNITS	MDL**	REF*	METHOD	DATES EXT/PREP	DATES ANALYSIS
Soluble Metals							
Arsenic	ND	mg/L	0.005	1	7060	----	09/13/90
Cadmium	ND	mg/L	0.01	1	6010	----	09/13/90
Chromium	ND	mg/L	0.02	1	6010	----	09/13/90
Copper	ND	mg/L	0.02	1	6010	----	09/13/90
Lead	ND	mg/L	0.05	1	6010	----	09/13/90
Mercury	ND	mg/L	0.0005	1	7470	----	09/13/90
Selenium	ND	mg/L	0.005	1	7740	----	09/13/90
Silver	ND	mg/L	0.01	1	6010	----	09/13/90
PCB's ***	ND	ug/L	2.5	1	8080	09/13/90	09/21/90
Volatile Organics ***	ND	ug/L	**	1	8260	----	09/21/90

Volatile Organics	% Surrogate Recovery
1,2-Dichloroethane-d4	95%
Toluene-d8	109%
4-Bromofluorobenzene	107%

COMMENTS: * Complete list of References found in Addendum I
** A list of volatile organics analyzed for and their detection limits accompanies this report.
*** All compounds were below the detection limits except those listed above.

ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574

Laboratory Sample Number: 904795.7 **Date Received:** 09/10/90

Sample Matrix: Liquid **Date Reported:** 09/21/90

Condition of Samples: Satisfactory **Field Prep:** Soluble Metals were field filtered and preserved

Number & Type of Containers: Four glass bottles, one plastic bottle and four VOA vials

Analysis Requested: Analysis as listed below

PARAMETER	RESULT	UNITS	MDL**	REF*	METHOD	DATES EXT/PREP	DATES ANALYSIS
Soluble Metals							
Arsenic	ND	mg/L	0.005	1	7060	----	09/13/90
Cadmium	ND	mg/L	0.01	1	6010	----	09/13/90
Chromium	ND	mg/L	0.02	1	6010	----	09/13/90
Copper	ND	mg/L	0.02	1	6010	----	09/13/90
Lead	ND	mg/L	0.05	1	6010	----	09/13/90
Mercury	ND	mg/L	0.0005	1	7470	----	09/13/90
Selenium	ND	mg/L	0.005	1	7740	----	09/13/90
Silver	ND	mg/L	0.01	1	6010	----	09/13/90
PCB's ***	ND	ug/L	2.5	1	8080	09/13/90	09/21/90
Volatile Organics ***	ND	ug/L	**	1	8260	----	09/21/90

Volatile Organics	% Surrogate Recovery
1,2-Dichloroethane-d4	103%
Toluene-d8	99%
4-Bromofluorobenzene	110%

COMMENTS: * Complete list of References found in Addendum I
** A list of volatile organics analyzed for and their detection limits accompanies this report.
*** All compounds were below the detection limits except those listed above.

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ALPHA ANALYTICAL LABORATORIES
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574

Laboratory Sample Number: 904795.7
Sample Matrix: Liquid
Condition of Samples: Satisfactory
Number & Type of Containers: Four glass bottles, one plastic bottle and four VOA vials
Analysis Requested: Analysis as listed below

Date Received: 09/10/90
Date Reported: 09/21/90
Field Prep: Soluble Metals were field filtered and preserved

CONTINUED

PARAMETER	RESULT	UNITS	MDL**	REF*	METHOD	DATES EXT/PREP	DATES ANALYSIS
Acid/Base/Neutral Extractables ***	ND	ug/L	**	1	8270	09/13/90	09/20/90
Pesticides:							
Ethylene dibromide	ND	ug/L	0.1	14	504	----	09/20/90
Dibromochloropropane	ND	ug/L	0.1	14	504	----	09/20/90
Herbicides ***	ND	ug/L	1.0	1	8150	09/13/90	09/19/90
Pesticides ***	ND	ug/L	0.25	1	8080	09/13/90	09/21/90

Acid/Base/Neutral Extractables	% Surrogate Recovery
2-Fluorophenol	31%
Phenol-d5	29%
Nitrobenzene-d5	73%
2-Fluorobiphenyl	77%
2,4,6-Tribromophenol	89%
4-Terphenyl-d14	55%

COMMENTS:
* Complete list of References found in Addendum I
** Lists of acid/base/neutral extractables, herbicides and pesticides analyzed for and their detection limits accompany this report.
*** All compounds were below the detection limits except those listed above.

ALPHA ANALYTICAL LABS
ACID EXTRACTABLES ANALYSIS by GC/MS
METHOD 8270

Alpha Job Number: 904795
Alpha Sample Number(s): 904795.1 - .7
Method Detection Limit: See below

Date Reported: 09/21/90

COMPOUNDS	
2,4,6-Trichlorophenol	2.7 ug/L
p-Chloro-m-cresol	3.0 ug/L
2-Chlorophenol	3.3 ug/L
2,4-Dichlorophenol	2.7 ug/L
2,4-Dimethylphenol	2.7 ug/L
2-Nitrophenol	3.6 ug/L
4-Nitrophenol	2.4 ug/L
2,4-Dinitrophenol	42.0 ug/L
4,6-Dinitro-o-cresol	24.0 ug/L
Pentachlorophenol	3.6 ug/L
Phenol	1.5 ug/L
Total cresol	10.0 ug/L
2,4,5-Trichlorophenol	10.0 ug/L
2,6-Dichlorophenol	10.0 ug/L
Benzoic acid	10.0 ug/L
Benzyl alcohol	10.0 ug/L

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ALPHA ANALYTICAL LABS
BASE/NEUTRAL EXTRACTABLES ANALYSIS by GC/MS
METHOD 8270

Alpha Job Number: 904795
Alpha Sample Number(s): 904795.1 - .7
Method Detection Limit: See below

Date Reported: 09/21/90

COMPOUNDS	
Acenaphthene	1.9 ug/L
Benzidine	44.0 ug/L
1,2,4-Trichlorobenzene	1.9 ug/L
Hexachlorobenzene	1.9 ug/L
Bis(2-chloroethyl)ether	5.7 ug/L
2-Chloronaphthalene	1.9 ug/L
1,2-Dichlorobenzene	1.9 ug/L
1,3-Dichlorobenzene	1.9 ug/L
1,4-Dichlorobenzene	4.4 ug/L
3,3-Dichlorobenzidine	16.5 ug/L
2,4-Dinitrotoluene	5.7 ug/L
2,6-Dinitrotoluene	1.9 ug/L
1,2-Diphenylhydrazine	11.1 ug/L
Fluoranthene	2.2 ug/L
4-Chlorophenyl phenyl ether	4.2 ug/L
4-Bromophenyl phenyl ether	1.9 ug/L
Bis(2-chloroisopropyl)ether	5.7 ug/L
Bis(2-chloroethoxy)methane	5.3 ug/L
Hexachlorobutadiene	0.9 ug/L
Hexachlorocyclopentadiene	5.1 ug/L
Hexachloroethane	1.3 ug/L
Isophorone	2.2 ug/L
Naphthalene	1.6 ug/L
Nitrobenzene	1.9 ug/L
N-nitrosodimethylamine	3.1 ug/L
N-nitrosodiphenylamine/diphenylamine	1.9 ug/L
N-nitrosodi-n-propylamine	2.6 ug/L
Bis(2-ethylhexyl)phthalate	2.5 ug/L
Butyl benzyl phthalate	2.5 ug/L
Di-n-butylphthalate	2.5 ug/L
Di-n-octylphthalate	2.5 ug/L
Diethyl phthalate	22.0 ug/L
Dimethyl phthalate	1.6 ug/L
Benzo(a)anthracene	7.8 ug/L
Benzo(a)pyrene	2.5 ug/L
Benzo(k)fluoranthene	2.5 ug/L
Benzo(b)fluoranthene	2.5 ug/L
Chrysene	2.5 ug/L
Acenaphthylene	3.5 ug/L
Anthracene	1.9 ug/L
Benzo(ghi)perylene	4.1 ug/L
Fluorene	1.9 ug/L
Phenanthrene	5.4 ug/L
Dibenzo(a,h)anthracene	2.5 ug/L

ALPHA ANALYTICAL LABS
BASE/NEUTRAL EXTRACTABLES ANALYSIS by GC/MS
METHOD 8270
CONTINUED

Alpha Job Number: 904795
Alpha Sample Number(s): 904795.1 - .7
Method Detection Limit: See below

Date Reported: 09/21/90

COMPOUNDS	
Indeno(1,2,3-cd)pyrene	3.2 ug/L
Pyrene	1.9 ug/L
Aniline	10 ug/L
4-Chloroaniline	10 ug/L
1-Methyl naphthalene	10 ug/L
2-Nitro aniline	10 ug/L
3-Nitro aniline	10 ug/L
4-Nitro aniline	10 ug/L
Dibenzofuran	10 ug/L
A,A-Dimethylphenethylamine	10 ug/L
Hexachloropropene	10 ug/L
Nitrosodi-n-butylamine	10 ug/L
2-Methyl naphthalene	10 ug/L
Tetrachlorobenzene	10 ug/L
1-Chloronaphthalene	10 ug/L
Pentachlorobenzene	10 ug/L
A-Naphthalamine	10 ug/L
B-Naphthalamine	10 ug/L
Acetophenetitide	10 ug/L
Dimethoate	10 ug/L
4-Aminobiphenyl	10 ug/L
Pentachloronitrobenzene	10 ug/L
Isodrin	10 ug/L
P-Dimethylaminoazobenzene	10 ug/L
Chlorobenzilate	10 ug/L
Kepone	10 ug/L
Bis(2-ethylhexyl)adipate	10 ug/L
3-Methyl cholanthrene	10 ug/L
Ethyl methanesulfonate	10 ug/L
Acetophenone	10 ug/L
Nitrosodipiperidine	10 ug/L
3,3'-Dichlorobenzidine	10 ug/L
7,12-Dimethylbenzo(a)anthracene	10 ug/L

ALPHA ANALYTICAL LABS
POLYCHLORINATED BIPHENYLS (PCB's) ANALYSIS by GC
METHOD 608/8080

Alpha Job Number: 904795
Alpha Sample Number(s): 904795.1 - .7
Method Detection Limit: 2.5 ug/L

Date Reported: 09/21/90

COMPOUNDS
PCB 1016
Arochlor 1221
Arochlor 1232
Arochlor 1242
Arochlor 1248
Arochlor 1254
Arochlor 1260
Arochlor 1262
Arochlor 1268

ALPHA ANALYTICAL LABS
PESTICIDE ANALYSIS by GC
METHOD 608/8080

Alpha Job Number: 904795
Alpha Sample Number(s): 904795.1 - .7
Method Detection Limit: 0.25 ug/L

Date Reported: 09/21/90

COMPOUND
Alpha BHC
Lindane (gamma BHC)
Beta BHC
Delta BHC
Heptachlor
Alachlor
Atrazine
Aldrin
Heptachlor epoxide
Endrin
Endrin aldehyde
Endrin ketone
Dieldrin
p,p'-DDE
p,p'-DDD
p,p'-DDT
Endosulfan I
Endosulfan II
Endosulfan Sulfate
Methoxychlor
Chlordane
Toxaphene

ALPHA ANALYTICAL LABS
CHLORINATED HERBICIDES ANALYSIS by GC
METHOD 8150

Alpha Job Number: 904795
Alpha Sample Number(s): 904795.1 - .7
Method Detection Limit: 1.0 ug/L

Date Reported: 09/21/90

COMPOUNDS
2,4-D
2,4-DB
2,4,5-T
2,4,5-TP
Dalapon
Diacamba
Dichloroprop
Dinoseb
MCPA
MCPP

ALPHA ANALYTICAL LABORATORIES

ACCEPTABLE MATRIX SPIKE RECOVERY LIMITS

FOR INORGANICS

PARAMETER GROUP	WATER	SOIL
Metals	75-125 %	60-140 %
Wet Chemistry	70-130 %	N/A

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ALPHA ANALYTICAL LABS
VOLATILE ORGANICS ANALYSIS by GC/MS
METHOD 8260

Alpha Job Number: 904795
Alpha Sample Number(s): 904795.1 - .7
Method Detection Limit: See below

Date Reported: 09/21/90

COMPOUNDS	
Methylene chloride	2.8 ug/L
1,1-Dichloroethane	4.7 ug/L
Chloroform	1.6 ug/L
Carbon tetrachloride	2.8 ug/L
1,2-Dichloropropane	6.0 ug/L
Dibromochloromethane	3.1 ug/L
1,1,2-Trichloroethane	5.0 ug/L
2-Chloroethylvinyl ether	10.0 ug/L
Tetrachloroethene	4.1 ug/L
Chlorobenzene	6.0 ug/L
Trichlorofluoromethane	5.0 ug/L
1,2-Dichloroethane	2.8 ug/L
1,1,1-Trichloroethane	3.8 ug/L
Bromodichloromethane	2.2 ug/L
Trans-1,3-Dichloropropene	5.0 ug/L
Cis-1,3-Dichloropropene	5.0 ug/L
Bromoform	4.7 ug/L
1,1,2,2-Tetrachloroethane	6.9 ug/L
Benzene	6.0 ug/L
Toluene	6.0 ug/L
Ethyl benzene	7.2 ug/L
Xylenes	10.0 ug/L
Chloromethane	8.0 ug/L
Bromomethane	7.0 ug/L
Vinyl chloride	6.5 ug/L
Chloroethane	7.5 ug/L
1,1-Dichloroethene	2.8 ug/L
Trans-1,2-dichloroethene	1.6 ug/L
Cis-1,2-dichloroethene	1.6 ug/L
Trichloroethene	1.9 ug/L
Dibromomethane	4.7 ug/L
1,4-Dichloro-2-butane	100.0 ug/L
Ethanol	100.0 ug/L
Iodomethane	7.0 ug/L
1,2,3-Trichloropropane	6.0 ug/L
Dichlorodifluoromethane	100.0 ug/L
Acetone	100.0 ug/L
Carbon disulfide	20.0 ug/L
2-Butanone	30.0 ug/L
Vinyl acetate	30.0 ug/L
4-Methyl-2-pentanone	20.0 ug/L
2-Hexanone	20.0 ug/L
Styrene	10.0 ug/L

Environmental Services, to investigate the site. The test pit encountered a caked pale green powder at a depth of one foot. No further excavation was performed on site pending analysis of the powder. The dust contained copper and lead based pesticides. Table 2 lists parameters detected.

2.0 SITE LOCATION AND SETTING

2.1 Site Description

The site is located on the 300 acre farm known as the Hall Farm of Culbro Tobacco Farm No. 2. The Hall Farm is located west of Hopmeadow Street (State Route 10) in northern Simsbury, Connecticut. The site, shown on Figure 1, is 2100 feet west of Route 10 and 1800 feet north of Country Road. The Hall Farm has been utilized for the cultivation of shade tobacco for the past forty to fifty years. Residential development has increased in the area in the past twenty years. Public water services are available to all residential areas surrounding the site.

Disposal was described as having taken place in the early 1960s, according to an employee of Culbro Tobacco who was present at the time of disposal. The site is situated in the northwest corner of a field on the south side of a logging road. The site location was identified by Culbro Tobacco personnel. The field immediately upgradient of the disposal site was fallow at the time of the remediation. Directly downgradient of the site is a wooded area and more fallow fields are beyond the wooded area. The disposal site is located approximately 5000 feet west of the Farmington River.

SI-84, a high yield irrigation well, is located 2000 ft. E-NE of the site on the Hall Farm property.

Once the rolloffs of contaminated soil were filled, the external polyethylene wrap was removed and placed in the rolloff as contaminated material. The rolloff was then removed from the exclusion zone, covered and brought to a staging area to await disposal.

4.3 Air Monitoring

An air monitoring program was conducted during remedial activities to monitor the appropriateness and effectiveness of the personal protective equipment of site workers. Personal sampling pumps were placed on workers both inside and outside their protective clothing. Area samples were collected inside the excavation and in the surrounding work area. The samples were collected on filters over the course of time personnel were actually working in the exclusion zone so that the results represented a time-weighted average concentration. The analytical results of the air sampling at the Hall Farm Disposal Site are found in Appendix C.

The only airborne compounds detected were Chlordane and Toxaphene. The highest concentration detected, 0.00038 mg/M^3, chlordane was far below the OSHA Permissible Exposure Limit (PEL) of 0.5 mg/M^3. Toxaphene was detected at 0.00021 mg/M^3 also well below the PEL of 0.5 mg/M^3.

5.0 SOIL AND WASTE REMEDIATION

Remediation activities commenced at the Hall Farm Disposal Site on October 25, 1989 (See Table 1). A subsurface investigation of the site was initially conducted to identify the exact limit of the disposal site. The removal of pesticide wastes and contaminated soils was performed according to the procedures

outlined in Section 3.0 of this report and the Site Health and Safety Plan. The pesticide wastes and soils visibly contaminated with pesticide material or mixed with pesticide waste were placed in lined 55 gallon drums. Soils adjacent to the pesticide wastes were placed into lined rolloffs.

A total of one hundred thirty-two (132) drums of pesticide wastes and heavily contaminated soil were removed during the initial remediation activities at the Hall Farm Disposal Site.

The initial excavation and remediation was completed on December 1, 1989. At this time, all pesticide wastes and visibly contaminated soil had been placed in 55 gallon drum shipping containers and all soils within one (1) foot of the pesticide wastes (approximately 60 cubic yards) had been placed into rolloffs Soil samples were then collected from the excavation and submitted to Alpha Analytical for analysis for pesticides, copper, arsenic and lead. Analytical results showed DDT, DDE and DDD detected in each sample except for the southwall composite. DDE and DDD are both degradation products of pesticide compound DDT and are found as impurities in DDT.

Arsenic, copper and lead levels in all samples were low. See Table 4 for sample results and Figure 5 for sample locations. See Appendix E for the analytical results.

On January 3, 1990 additional soil was excavated from the walls and the floor of the excavation to remove the contaminated soil that was indicated by the December 1, 1989 soil samples. An additional sixty (60) cubic yards of soil was excavated from the floor and walls on January 3, 1990.

The walls and floor of the excavation were sampled on January 10, 1990 for pesticides, herbicides, arsenic, copper and lead. Four discrete samples were collected from each surface and were submitted to Alpha Analytical Laboratories. See Figure 6 for sample locations. The results indicated no pesticide contamination in the west, south and east walls (See Appendix F). A low level of DDT at 1.0 mg/kg and lesser amounts of DDE, and DDD were also detected in the shelf at the north end of the excavation and in the floor samples. No other pesticides were detected in the excavation. The results of the sampling event are presented on Table 5. The sample results showed total DDT compounds slightly above the closure standards on the "shelf" located on the north wall of the excavation.

Further excavation in the area where DDT was still detected was conducted on January 22, 1990.

On January 31, 1990 an additional forty-two soil samples were collected from the Hall Farm Disposal Site. Samples 1 through 21 were collected for 0 - 1 foot depth and 1B through 21B were collected from 1-2 feet in depth. Samples 1 through 21 were analyzed for organochlorine pesticides. (EPA Method 8080), arsenic, copper, and lead. Samples 1B through 21B sample were submitted and held for possible analysis. See Figure 6 for sample locations.

The sample results are summarized on Table 6. DDT compounds were detected in samples 1, 2, 4, 8, 9, 11, 13, and 14. Arsenic, copper and lead levels were all below closure criteria. See Figure 7 for sample location illustration. Refer to Appendix G for analytical report. All further excavation and sampling was postponed until favorable weather conditions.

On March 19, 1990, approximately 10 cubic yards of soil in the northwest corner, the vicinity of sample 14, of the Hall Farm Disposal Site was excavated and placed into a rolloff container. No soil samples were collected at this time.

On April 12, 1990, archival soil samples were collected from the Hall Farm Disposal Site. See Section 8.0 for further discussion. The archival sampling event detected DDT compounds at 1.401 mg/kg in the 0-1 foot horizon composite sample. Individual discrete samples from the west wall and north wall were then analyzed for DDT to determine the location of the DDT exceeding the closure standards.

The results of the discrete samples from the west wall were none detected except for one sample (IWD900412-31) which had DDT compounds at 0.779 mg/kg. DDT compounds were detected in the north wall discrete samples. See Table 7 for summary of analytical results and Figure 8 for sample locations.

On June 18, 1990, an additional 18 cubic yards of soil was excavated and soil samples were collected. See Table 8 for results. DDT was detected in only one sample at 0.405 mg/kg, which is below the 0.950 mg/kg (total DDT compounds) closure standard for this site.

The excavation event on June 18, 1990 completed the Hall Farm Disposal Site remediation.

6.0 CLOSURE STANDARDS

The future use of the acreage adjacent to the Hall Farm Disposal Site is intended to remain used for agricultural purposes. The Hall Farm Disposal Site lies outside and downgradient of the tilled field boundary.

When setting standards for the surface disposal of sludge on non-agricultural land, the EPA evaluated the surface water and groundwater pathways. Because they were developed by considering the exposure pathways which may occur at the site, the surface disposal standards are appropriate and realistic closure standards for the Hall Farm Disposal Site. These limits (FR Vol. 54 No. 23 Part 503) are listed in Table 10.

7.0 DISPOSAL

TRI-S was contracted by Culbro Corporation to contract with treatment and disposal facilities to treat waste by the available technology that yields the greatest environmental benefit for the waste generated by the remediation of the Hall Farm Disposal Site. Tri-S arranged with Ensco Environmental Systems Company's Waste Treatment Division, El Dorado, Arkansas, to treat the drummed pesticide wastes by incineration. Contractual agreements were also maintained by TRI-S with Adams Center Sanitary Landfill, Fort Wayne, Indiana, a secure permitted landfill.

A total of ten (10) rolloffs containing contaminated soil were shipped to Fort Wayne, Indiana, starting on January 8, 1990. Drummed pesticide waste were shipped to El Dorado, Arkansas on January 17, 1990. A total of 132 drums were shipped. See Appendix J and K for shipping manifests.

8.0 ARCHIVAL SAMPLING

8.1 Soil Sampling

On April 12, 1990 archival sampling of the Hall Farm Disposal Site was conducted. The four (4) walls and floor were sampled

from a depth (horizon) of 0 to 12 inches and 12 to 24 inches. Five (5) samples were collected from each horizon of each surface. A total of twenty-five (25) samples were collected from each horizon. Refer to Figure 8 for illustration of sampling locations. Samples were composited such that one composite sample was created for each horizon. Each individual sample was collected using a hand-held soil auger and was placed into an eight (8) ounce glass jar with teflon lined cap. The soil auger was decontaminated between each sample location and sampling interval using the following procedure:

1. Wash with a non-phosphate soap solution
2. Deionized water rinse
3. 20% Methanol rinse, in deionized water
4. Deionized water rinse
5. 10% Nitric Acid rinse
6. Final deionized water rinse

After all the samples were collected, equal sample splits were taken from each of the sample jars and placed in a stainless steel mixing bowl for compositing purposes.

Composite samples were mixed in a stainless steel mixing bowl and placed into the laboratory provided sample jars. Each of the composite sample jars was sealed and labeled. All individual and composite samples collected were placed into coolers/refrigerators until relinquished to the laboratory.

The samples were submitted to Alpha Analytical Laboratories of Westborough, Massachusetts. The samples were analyzed for the same parameters as proposed in the F&O correspondence to the Water Compliance Unit, Connecticut DEP, dated August 16, 1988 and June 23, 1989 (Reference 7, Appendix B).

8.2 Archival Results

The analytical results of the archival samples reported the upper 0 to 12 inch composite (Sample No. 1HC900412-41) with 1.401 mg/kg DDE and DDD (total). This is slightly above the closure standard of 0.950 mg/kg. Arsenic levels were 2.5 mg/kg and 4.7 mg/kg, well below the closure criteria. All other pesticide/herbicide and dioxin compounds were not detected. See Appendix H.

Further analysis of the discrete samples revealed that samples of the north wall of the excavation still contained DDT, DDE and DDD compounds in excess of the closure standard. This material was excavated on June 18, 1990 and samples were collected to assure that any soils along the north wall containing DDT compounds in excess of the closure standard had been removed. Refer to Section 5.0 for further discussion. The archive sample analysis and later analyses demonstrate that the soil was excavated to the closure criteria.

9.0 GROUNDWATER SAMPLING

9.1 Groundwater Monitoring Well Installation

Four (4) groundwater monitoring wells were installed at the Hall Farm Disposal Site in August 1990 to evaluate the impact, if any, that the site had on the local groundwaters. The four monitoring wells were installed in the overburden sediments. MW-301 was installed approximately ten (10) feet east of the limit of the site excavation. MW-302 was installed immediately downgradient of the excavation. MW-303 was installed 110 feet southeast of the excavation. MW-304 was installed along the south side of the farm road 210 feet east of the site as illustrated on Figure 4.

The monitoring well design and installation is shown in Figure 9. In each of the monitoring well borings the auger was advanced until refusal was reached in the dense glacial till and/or bedrock. Each monitoring well was constructed with a twenty foot, 0.01 inch slot Schedule 40, PVC screen and installed, where possible, 10 feet below the groundwater elevation. The purpose for setting the monitoring well screen 10 feet below the groundwater elevation is that some studies suggest that pesticide compounds tend to be concentrated in the groundwater in the upper portion of the aquifer.

A No. 2 silica sand pack was placed with the screen to one to two feet above the screen. A one to two foot bentonite pellet seal was placed above the sand pack filling the annular space (See Figure 9, for monitoring well construction details). The PVC riser and screen were installed with casing centralizers to maintain a plumb well casing. The remainder of the annular space to the surface was filled with a high density bentonite grout. A protective steel casing was installed over the PVC riser.

9.2 Monitoring Well Development

Following the installation of each monitoring well, the wells were developed, in order to insure a complete, unobstructed hydraulic connection between the screened interval and the aquifer. During drilling procedures, fine materials tend to become caked on the walls of the drill hole. In order to remove these materials, each well was developed by means of a hand operated valve (foot valve). The simultaneous surging and pumping action provided by the foot valve tend to force finer material from the formation through the well screen where it can be removed while suspended in the water. Development was

continued until the monitoring well was pumped dry, allowed to recharge, pumped dry two more times. All evacuated water was discharged onto the ground away from the wells. Completed well logs are provided in Appendix D.

9.3 Groundwater Sample Results

Groundwater sampling was conducted on September 7, 1990. Prior to collecting the groundwater samples, each well was measured for groundwater elevations and bottom of casing so that well volumes could be calculated. Three well volumes were purged with a dedicated stainless steel bailer and groundwater samples were collected. These samples included duplicate samples from MW-301, a trip blank and field equipment blank. All field parameters were recorded on a field data sheet (See Appendix L).

As discussed earlier in Section 2.2.3, the groundwater system within the site was defined by measuring the water levels in the four (4) monitoring wells on September 7, 1990. The indicated groundwater flow is northwest to southeast across the site based on this data. Based on the groundwater elevations recorded on August 30, 1990, the average hydraulic gradient between MW-1 and MW-4 is approximately 0.095 ft./ft.

At the end of the sampling day, the samples were transferred to a secure storage refrigerator until transfer to Alpha Analytical Laboratories. Table 11 lists the Analytical Parameters for the groundwater samples analyzed (Reference 7, Appendix B).

The groundwater laboratory results are presented on Table 12. The results show the 1,2-Dichloropropane was detected in MW-301 at 6.8 ug/l and MW-302 at 13 ug/l. No other compounds or metals from the extensive list of analytes tested were detected. The

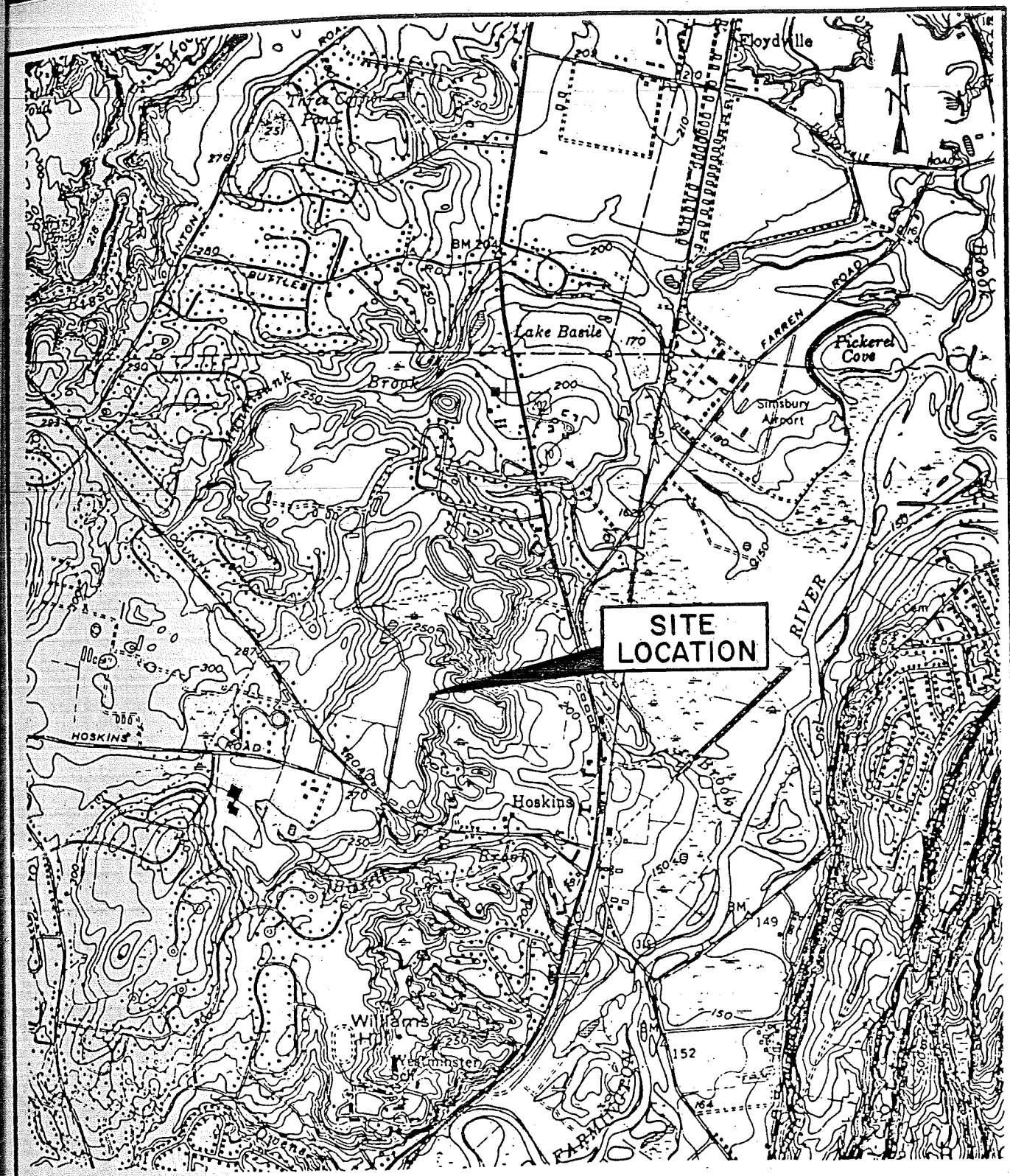
Duplicate sample collected from MW-301 did not have 1,2-Dichloropropane detected. The detection limit for this compound was 6.0 ug/l.

1,2-Dichloropropane is a component of Vorlex and used as an agricultural soil fumigant. The fumigant Vorlex (1,2-Dichloropropane) was applied to the tobacco field upgradient of the Hall Farm disposal site up to three years ago.

As a result of the groundwater sampling event, there is little indication of the groundwater being impacted by the Hall Farm Disposal Site. None of the principal constituents of the disposed material were present in the groundwater. This would indicate that there is no impact on the groundwater by the Hall Farm Disposal Site.

10.0 CONCLUSIONS

The Hall Farm Disposal Site remediation is considered complete. All visible pesticide material and contaminated soils not meeting the closure standards have been removed. These closure standards were selected to best reflect the Hall Farm Disposal Site characteristics and future use of the site. None of the constituents of the disposed material were present in the groundwater. Therefore, there is no indication of the groundwater being impacted by the site.



CONNECTICUT

QUADRANGLE LOCATION

TARIFFVILLE, CONN.—MASS.

41072-H7-TF-024

1956
PHOTOREVISED 1984
DMA 6467 IV NE-SERIES V816

FIGURE NO. 1.0

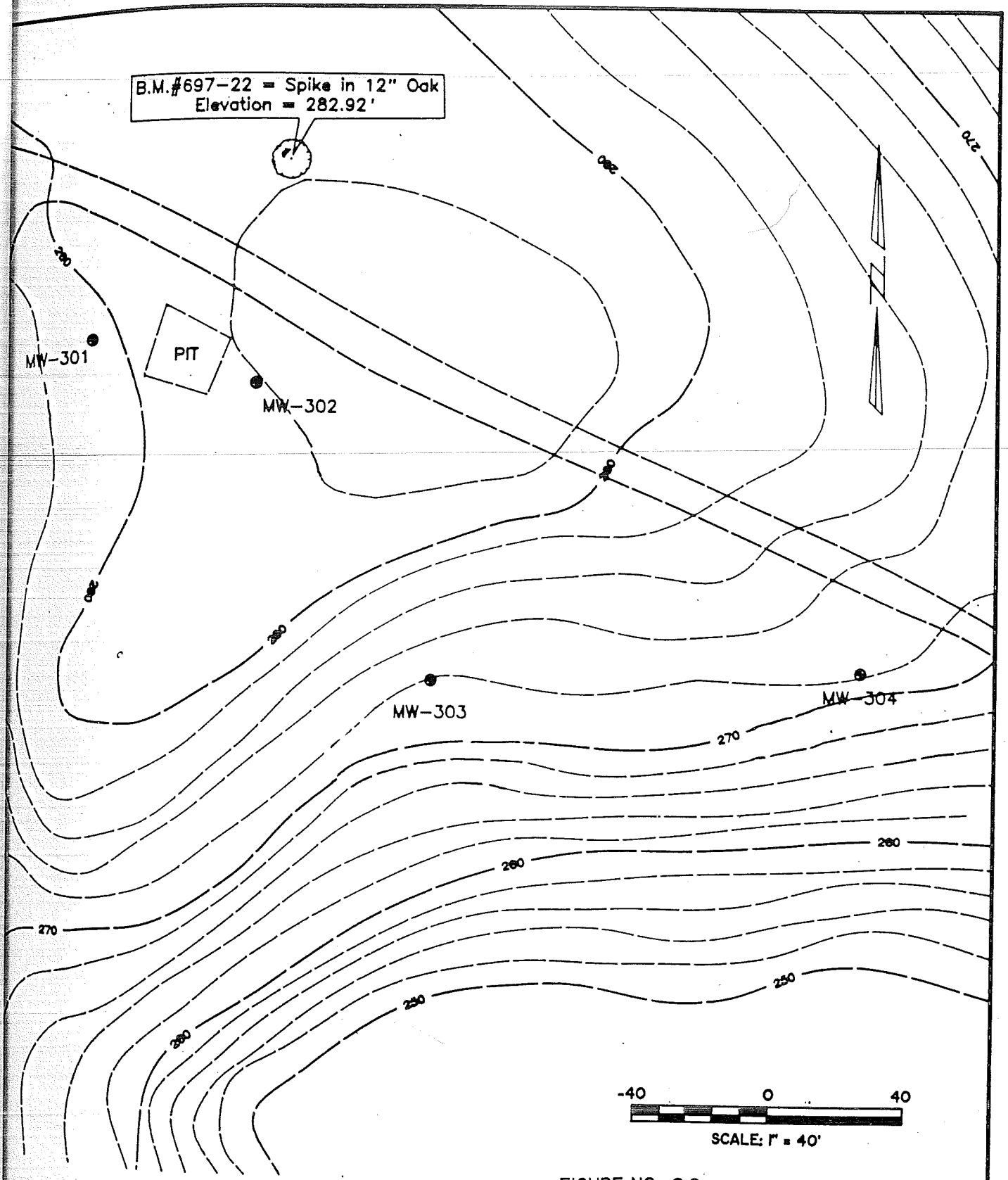
FUSS&O'NEILL
MANCHESTER, CONNECTICUT

SITE LOCATION MAP

CULBRO TOBACCO COMPANY
HALL FARM DISPOSAL SITE

HOSKINS ROAD SIMSBURY, CT.

PROJ. NO. 84-255 DATE: SEPT. 1990 SCALE: 1"=2000'



TES:

TOPOGRAPHY FROM TOWN OF SIMSBURY TOPOGRAPHIC MAPPING SHEETS H-4 AND H-5 DATED: JUNE 1979.

TOPOGRAPHIC FEATURES, SHOWN HEREON, WERE PREPARED IN ACCORDANCE WITH CLASS T-D.

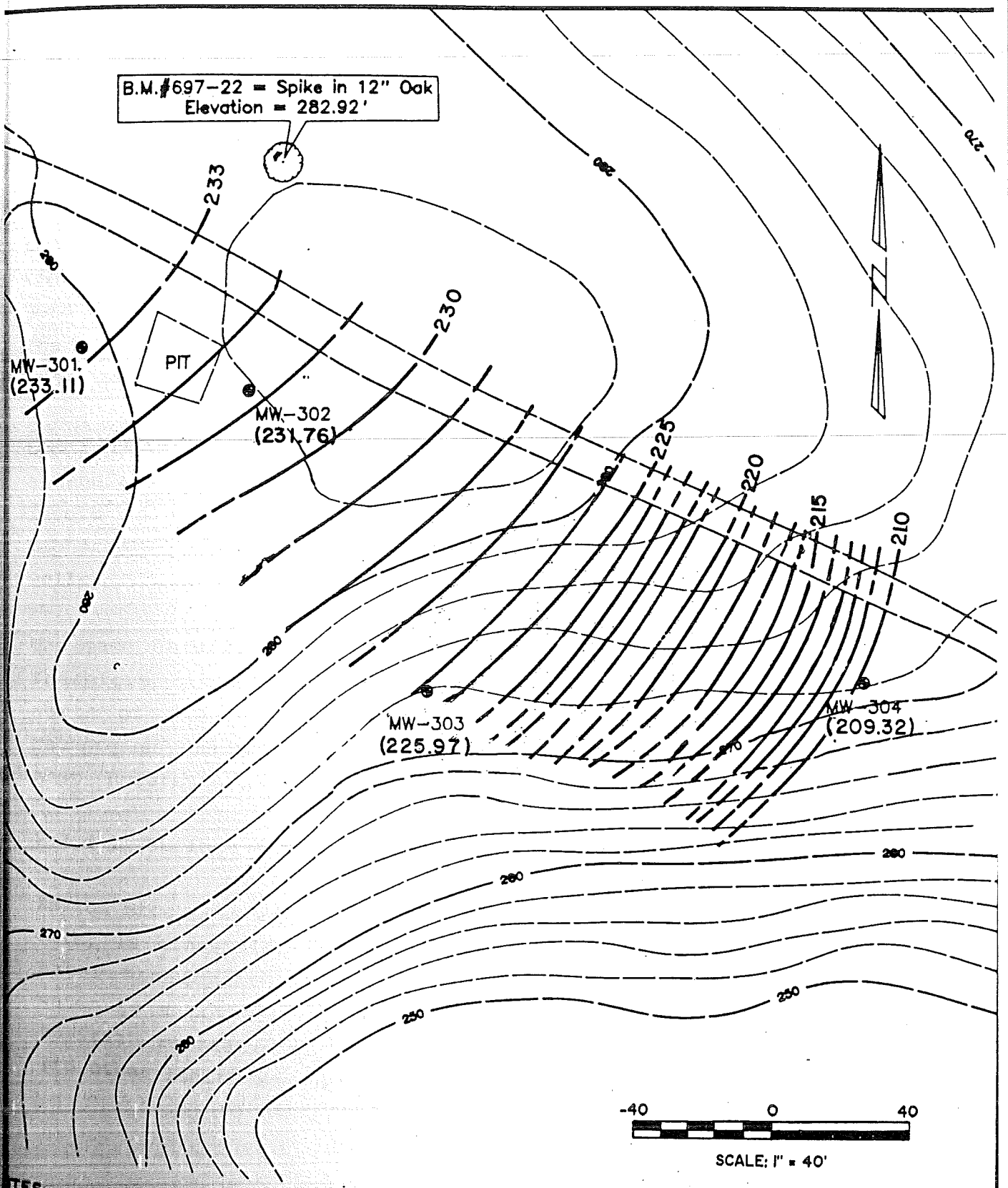
FIGURE NO. 2.0

FUSS&O'NEILL
MANCHESTER, CONNECTICUT

SITE PLAN

CULBRO TOBACCO COMPANY
HALL FARM DISPOSAL SITE

HOSKINS ROAD SIMSBURY, CT.



TES;

TOPOGRAPHY FROM TOWN OF SIMSBURY TOPOGRAPHIC MAPPING SHEETS H-4 AND H-5 DATED; JUNE 1979.

TOPOGRAPHIC FEATURES, SHOWN HEREON, WERE PREPARED IN ACCORDANCE WITH CLASS T-D.

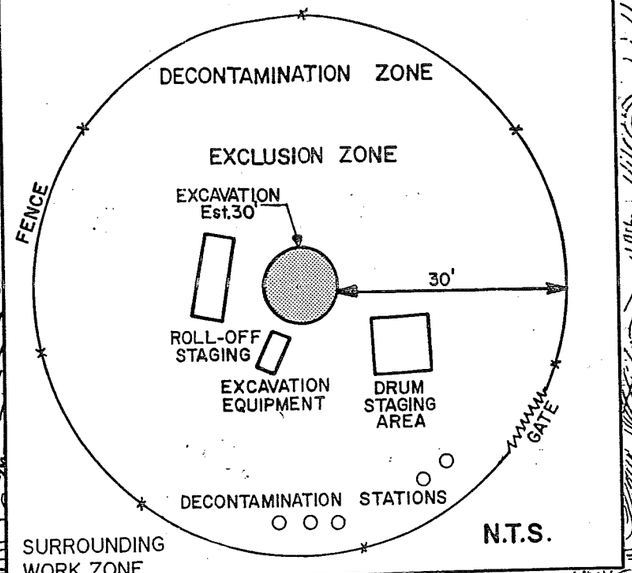
Dated April 1991

FIGURE NO. 3.0

FUSS&O'NEILL
MANCHESTER, CONNECTICUT

GROUNDWATER CONTOURS
AUGUST 30, 1990
CULBRO TOBACCO COMPANY
HALL FARM DISPOSAL SITE
HOSKINS ROAD SIMSBURY, CT

APPROXIMATE LIMIT OF STAGING AREAS



N.T.S.

SECONDARY EVACUATION ROUTE

TRAFFIC ROUTE EXIT

EXIT

HALL FARM OFFICE

NOTES:

1. TOPOGRAPHY FROM TOWN OF SIMSBURY TOPOGRAPHIC MAPPING SHEETS H-4 AND H-5 DATED: JUNE 1979.
2. TOPOGRAPHIC FEATURES, SHOWN HEREON, WERE PREPARED IN ACCORDANCE WITH CLASS T-D.

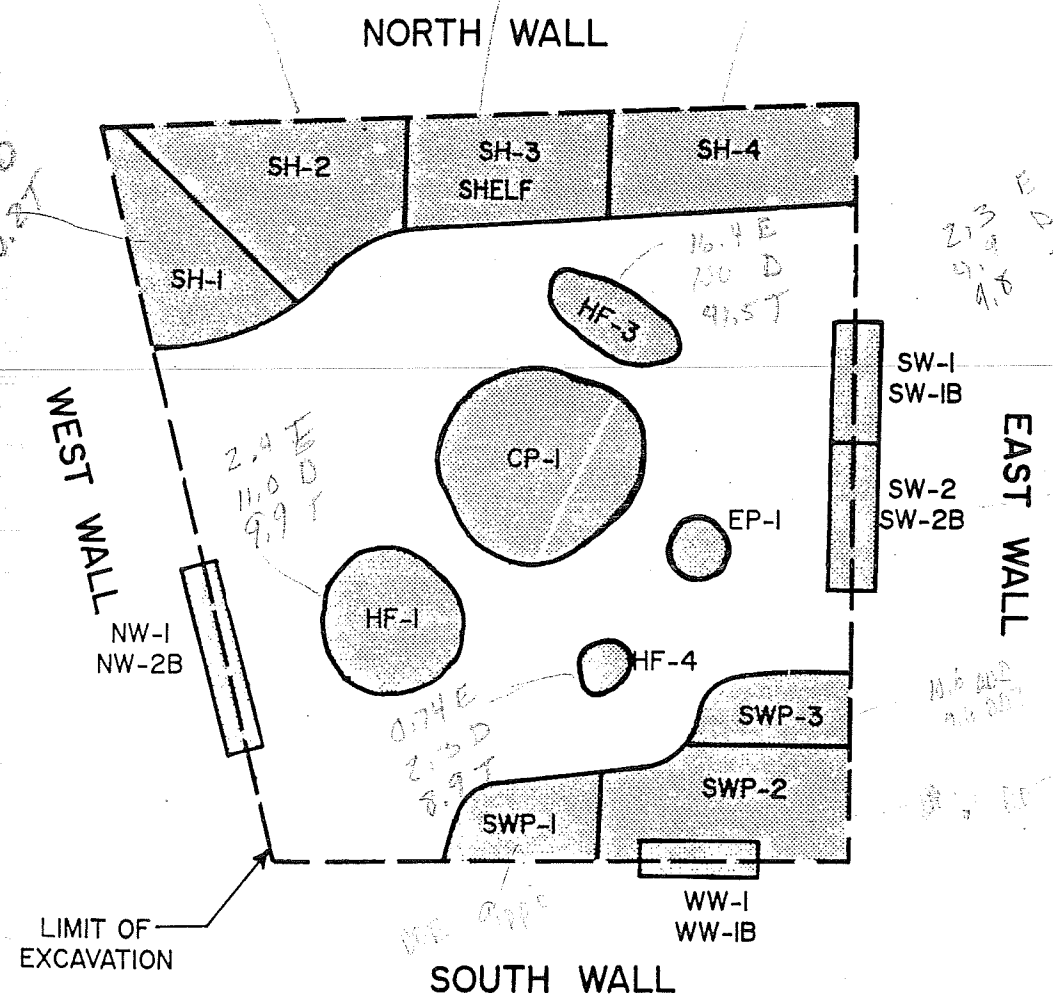
REV. 12-18-86
8-23-89

FIGURE NO. 4.0

FUSS & O'NEILL
MANCHESTER, CONNECTICUT

TRAFFIC ROUTES
CULBRO TOBACCO COMPANY
HALL FARM DISPOSAL SITE
SIMSBURY, CONNECTICUT

PROJ. NO. 84-255D DATE: AUG. 1989 SCALE: 1" = 200'



LEGEND

SAMPLE NO.	SAMPLE LOCATION	SAMPLE DEPTH
SWP-1	SOUTHWEST PILE COMPOSITE	1' - 3"
SWP-2	SOUTHWEST PILE COMPOSITE	1' - 3"
SWP-3	SOUTHWEST PILE COMPOSITE	1' - 3"
EP-1	EAST PILE COMPOSITE	1' - 3"
CP-1	CENTER PILE COMPOSITE	1' - 3"
SH-1	SHELF COMPOSITE	1' - 3"
SH-2	SHELF COMPOSITE	1' - 3"
SH-3	SHELF COMPOSITE	1' - 3"
SH-4	SHELF COMPOSITE	1' - 3"
HF-1	EXCAVATION FLOOR SAMPLE	(8' BELOW GRADE)
HF-3	EXCAVATION FLOOR SAMPLE	(8' BELOW GRADE)
HF-4	EXCAVATION FLOOR SAMPLE	(8' BELOW GRADE)
SW-1	SOUTH WALL COMPOSITE	1' - 3"
SW-1B	" " " " "	1.5' - 2'
SW-2	" " " " "	1' - 3"
SW-2B	" " " " "	1.5' - 2'
WW-1	NORTH WALL COMPOSITE	1' - 3"
WW-1B	" " " " "	1.5' - 2'
SW-1	WEST WALL COMPOSITE	1' - 3"
SW-1B	" " " " "	1.5' - 2'

FIGURE NO. 5.0

FUSS&O'NEILL
MANCHESTER, CONNECTICUT

SAMPLE LOCATIONS
DECEMBER 1, 1989

CULBRO TOBACCO COMPANY
HALL FARM DISPOSAL SITE

HOSKINS ROAD SIMSBURY, CT.

PROJ. NO. 84-255 DATE: APR. 1991 SCALE: 1" = 5'

065827

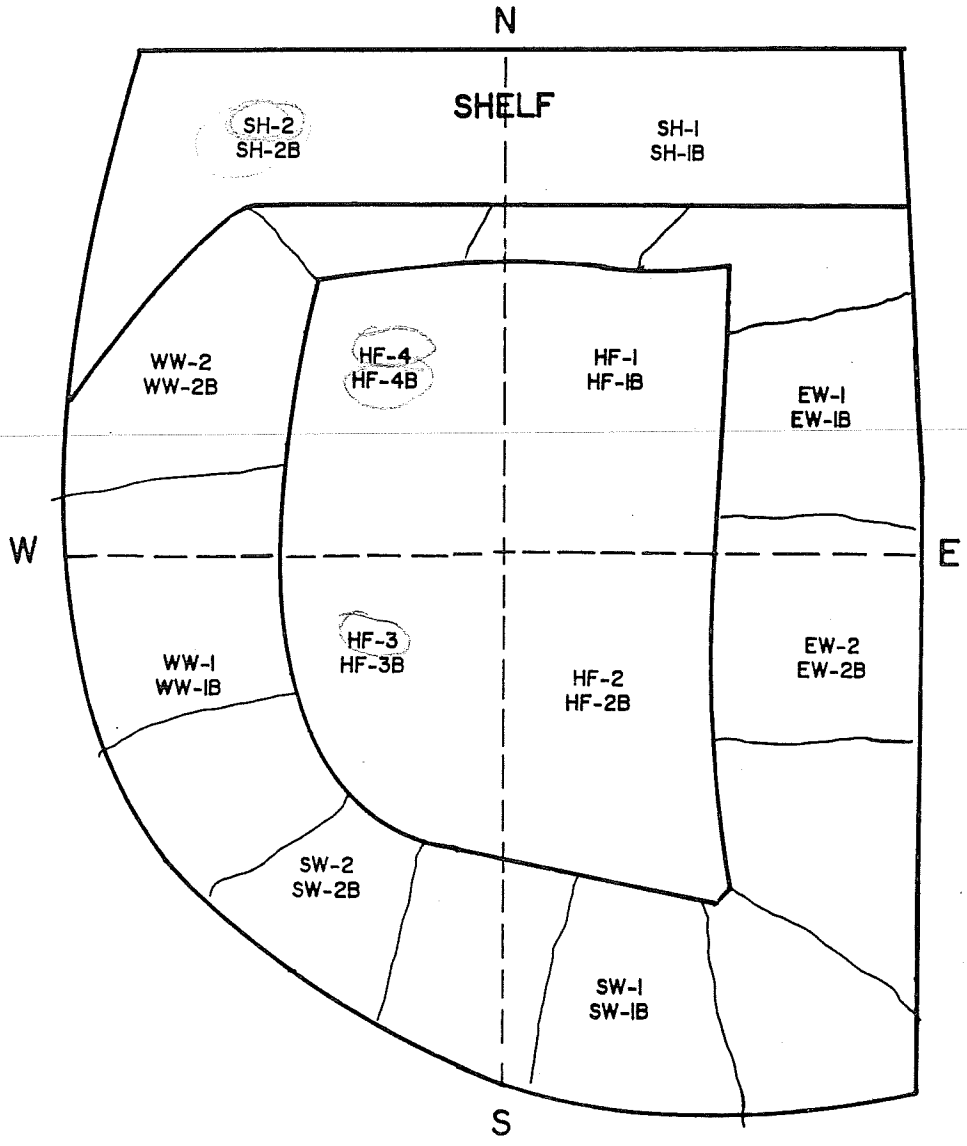


FIGURE NO. 6.0

FUSS&O'NEILL
MANCHESTER, CONNECTICUT

SAMPLE LOCATIONS
JANUARY 10, 1990

CULBRO TOBACCO COMPANY
HALL FARM DISPOSAL SITE

HOSKINS ROAD SIMSBURY, CT.

PROJ. NO. 84-255 DATE: APR. 1991 SCALE: 1"=5'

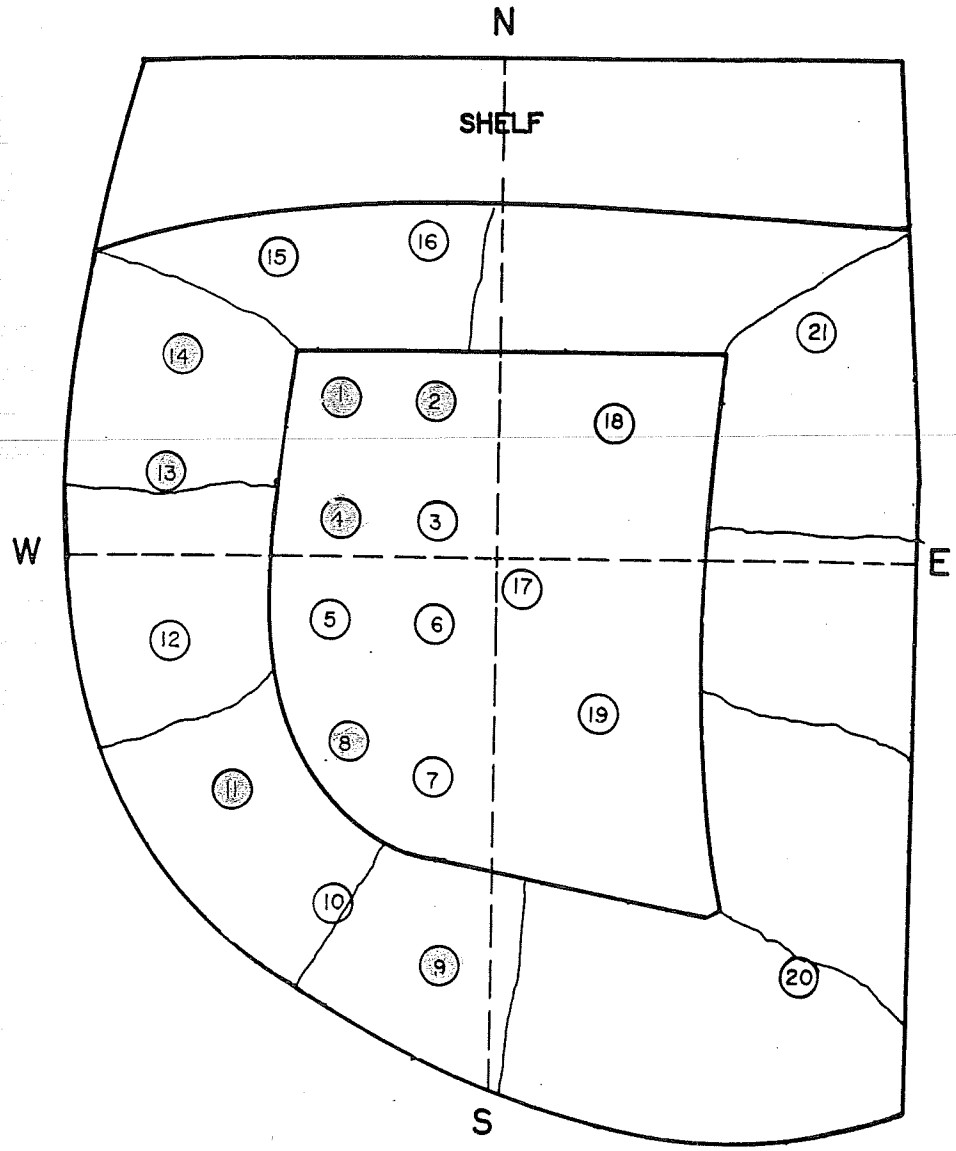


FIGURE NO. 7.0

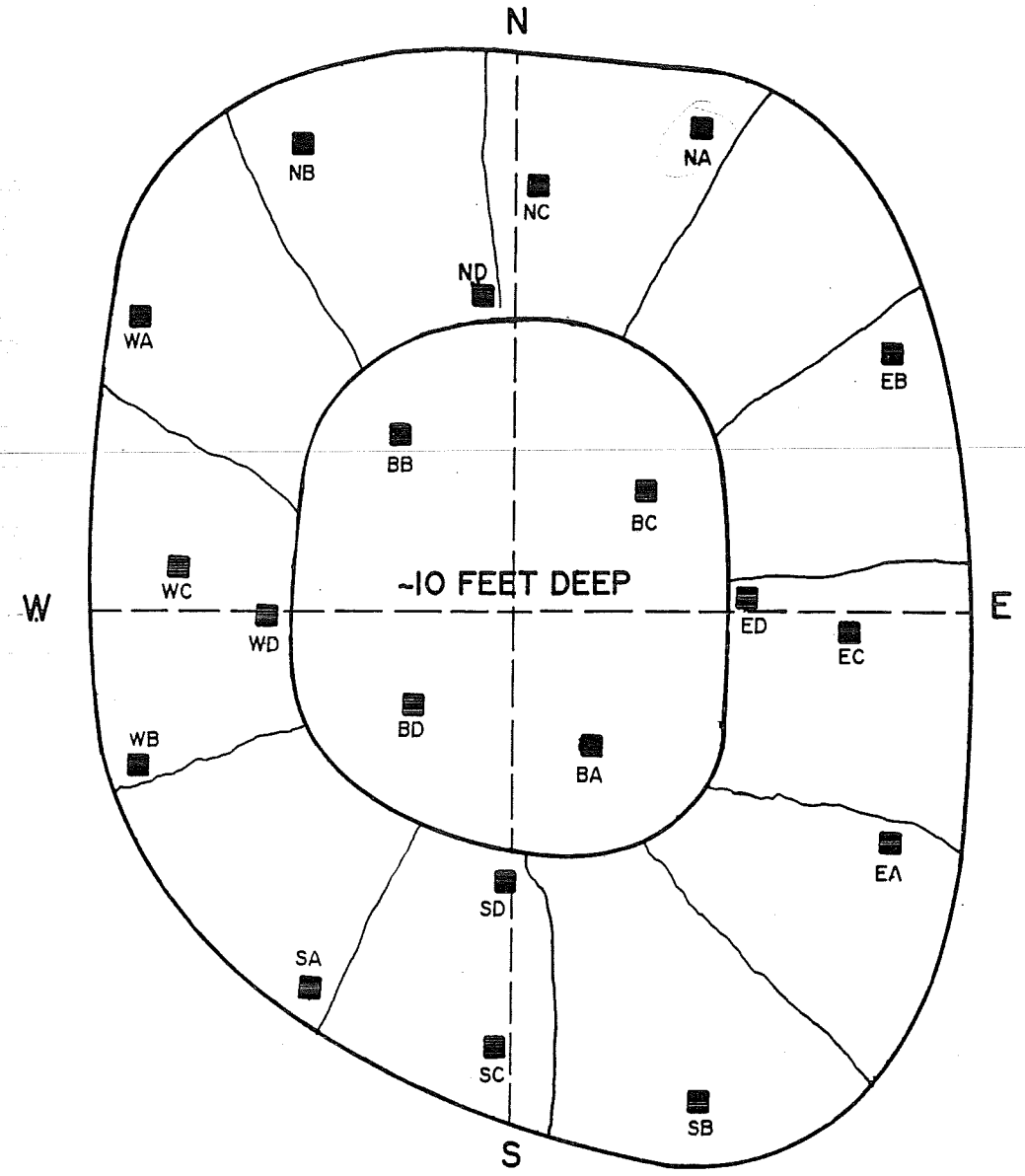
FUSS&O'NEILL
MANCHESTER, CONNECTICUT

SAMPLE LOCATIONS
JANUARY 31, 1990

CULBRO TOBACCO COMPANY
HALL FARM DISPOSAL SITE

HOSKINS ROAD SIMSBURY, CT.

PROJ. NO. 84-255 DATE: APR. 1991 SCALE: 1" = 5'



ARCHIVAL COMPOSITE SAMPLES

1HC900412-41 0-1'
2HC900412-42 1'-2'

FIGURE NO. 8.0

FUSS&O'NEILL
MANCHESTER, CONNECTICUT

ARCHIVAL SAMPLE LOCATIONS
APRIL 12, 1990

CULBRO TOBACCO COMPANY
HALL FARM DISPOSAL SITE

HOSKINS ROAD SIMSBURY, CT.

PROJ. NO. 84-255 DATE: APR. 1991 SCALE: 1" = 5'

065827

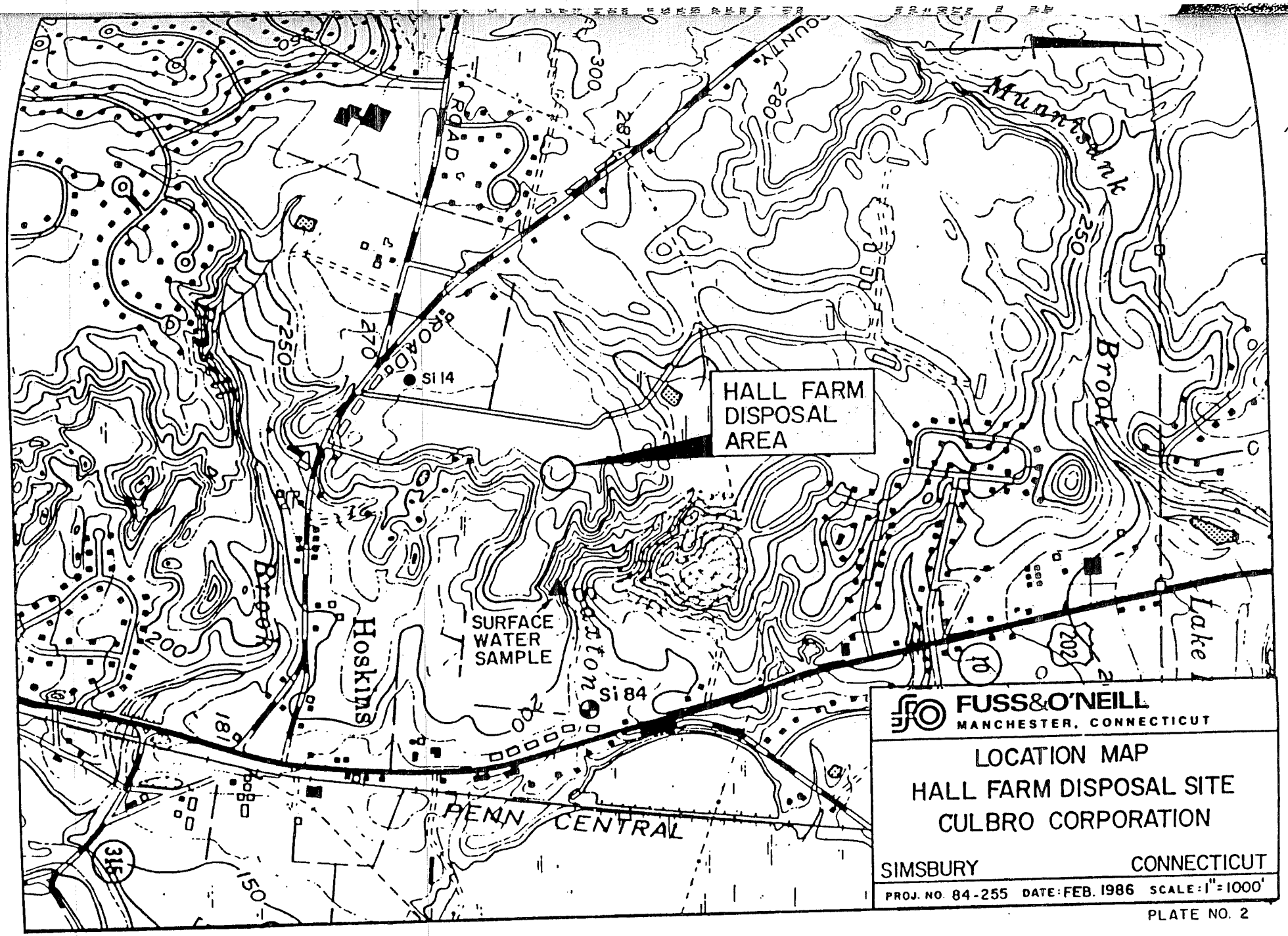

HALL FARM
DISPOSAL
AREA
SURFACE
WATER
SAMPLE
SI 14
SI 84
Hoskins Brook
Mountain Brook
Lake
PENN CENTRAL
ROAD
COUNTY
FUSS&O'NEILL
MANCHESTER, CONNECTICUT
LOCATION MAP
HALL FARM DISPOSAL SITE
CULBRO CORPORATION
SIMSBURY
CONNECTICUT
PROJ. NO. 84-255 DATE: FEB. 1986 SCALE: 1"=1000'
PLATE NO. 2

TABLE 1

CULBRO TOBACCO
HALL FARM DISPOSAL SITE
SIMSBURY, CONNECTICUT

TABLE OF SIGNIFICANT EVENTS

EVENT	REMARKS	DATE
Subsurface Investigation	Test Pit Excavation	02/06/86
Proposed Remediation Action Report	Remedial Report to DEP	10/86
Site Health and Safety Meeting	Culbro, Tri-S, Fuss & O'Neill, Inc.	10/24/89
Site Preparation Begins	Tri-S	10/25/89
Disposal Site Excavation Begins	Tri-S	10/31/89
Disposal Site Primary Excavation Ends	Tri-S	11/27/89
Additional Soil Excavation	Tri-S	12/01/89
Disposal Site Sampling	Fuss & O'Neill, Inc. Alpha Analytical	12/01/89
Additional Soil Excavation	Tri-S	01/03/90
Additional Soil Excavation	Tri-S	01/08/90
Disposal Site Sampling	Fuss & O'Neill, Inc.	01/10/90
Drums Shipped	Tri-S	01/15/90
Additional Soil Excavation	Tri-S	01/22/90
Disposal Site Sampling	Fuss & O'Neill, Inc. Alpha Analytical	01/31/90
Archival Sampling	Fuss & O'Neill, Inc. Alpha Analytical	04/12/90
Additional Site Excavation and Sampling	Tri-S, Alpha Analytical Fuss & O'Neill, Inc.	06/18/90
Excavation Backfilled	Culbro	07/23/90
Monitoring Wells Installed	Charles Pratt & Sons, Inc.	08/08-10/90
Groundwater Sampling	Fuss & O'Neill, Inc. Alpha Analytical	09/07/90

TABLE 2

CULBRO TOBACCO
HALL FARM DISPOSAL SITE
SIMSBURY, CONNECTICUT

SOLIDS ANALYSIS

PARAMETERS	LEVEL DETECTED	DETECTION LIMIT
NATURAL RESINS	--	--
DIELDRIN mg/kg	0.31	0.1
TOXAPHENE mg/kg	ND	0.1
ARSENIC mg/kg	ND	1
COPPER mg/kg	26,058	1
LEAD mg/kg	156	1

TABLE 4

CULBRO TOBACCO
HALL FARM DISPOSAL SITE
SIMSBURY, CONNECTICUT

SAMPLE RESULTS
DECEMBER 1, 1989

SAMPLE NO.	SAMPLE LOCATION	PARAMETER DETECTED mg/kg
SWP-1	Southwest Pile Composite	DDE 0.091 Arsenic 2.4 Copper 2.8
SWP-2	Southwest Pile Composite	DDE 0.110 DDD 0.710 DDT 1.100 Arsenic 4.8 Copper 4.2 Lead 2.7
SWP-3	Southwest Pile Composite	DDE 2.900 DDD 10.600 DDT 9.600 Arsenic 5.4 Copper 4.2 Lead 3.6
CP-1	Center Pile Composite	DDE 2.300 DDD 4.900 DDT 4.800 Arsenic 9.6 Copper 18.7 Lead 10.3
SH-1	Shelf Composite	DDE 4.400 DDD 14.100 DDT 10.200 Arsenic 7.6 Copper 20.2 Lead 4.5
SH-2	Shelf Composite	DDE 0.097 DDD 0.170 DDT 0.190 Arsenic 4.4 Copper 46.4 Lead 5.6

TABLE 4
(continued)

SAMPLE NO.	SAMPLE LOCATION	PARAMETER DETECTED mg/kg
SH-3	Shelf Composite	DDE 0.370 DDD 1.300 DDT 1.800 Arsenic 4.6 Copper 31.9 Lead 3.0
SH-4	Shelf Composite	DDE 1.900 DDD 8.000 DDT 7.300 Arsenic 12.2 Copper 27.1 Lead 19.4
HF-1	Excavation Floor Sample	DDT 2.400 DDD 11.000 DDT 9.900 Arsenic 2.9 Copper 7.8 Lead 4.1
HF-3	Excavation Floor Sample	DDE 16.400 DDD 100.000 DDT 41.500 Arsenic 12.8 Copper 35.0 Lead 14.6
HF-4	Excavation Floor Sample	DDE 0.740 DDD 2.300 DDT 8.900 Arsenic 7.9 Copper 43.4 Lead 7.5
NP-1	North Pile Composite	DDT 0.210 Arsenic 7.7 Copper 41.9 Lead 7.7
SW-2	South Wall Composite	Arsenic 2.0 Copper 2.2 Lead 3.6

TABLE 4
(continued)

SAMPLE NO.	SAMPLE LOCATION	PARAMETER DETECTED mg/kg
SW-2B	South Wall Composite	Arsenic 2.3 Copper 2.1 Lead 1.5
NW-1	North Wall Composite	Arsenic 2.5 Copper 2.3 Lead 1.0
NW-1B	North Wall Composite	DDT 0.059 Arsenic 1.6 Copper 2.1
WW-1	West Wall Composite	Arsenic 2.1 Copper 2.3 Lead 1.0
WW-1B	West Wall Composite	DDD 0.058 DDT 0.083 Arsenic 1.0 Copper 2.0 Lead 1.8

TABLE 5

CULBRO TOBACCO
HALL FARM DISPOSAL SITE
SIMSBURY, CONNECTICUT

EXCAVATION SAMPLE RESULTS
JANUARY 10, 1990

SAMPLE NO.	SAMPLE LOCATION	PARAMETER DETECTED mg/kg	
EW-1	East Wall	None Detected (N.D.)	
EW-1B	East Wall	N.D.	
EW-2	East Wall	N.D.	
EW-2B	East Wall	N.D.	
SW-1	South Wall	N.D.	
SW-1B	South Wall	N.D.	
SW-2	South Wall	N.D.	
SW-2B	South Wall	N.D.	
WW-1	West Wall	N.D.	
WW-1B	West Wall	N.D.	
WW-2	West Wall	N.D.	
WW-2B	West Wall	N.D.	
SH-1	Shelf	N.D.	
SH-1B	Shelf	N.D.	
SH-2	Shelf	DDE	0.380
		DDD	0.850
		DDT	1.000
SH-2B	Shelf	N.D.	
HF-1	Floor	N.D.	
HF-1B	Floor	N.D.	
HF-2	Floor	N.D.	
HF-2B	Floor	N.D.	
HF-3	Floor	DDE	0.083
		DDD	0.560
		DDT	1.000
HF-3B	Floor	N.D.	
HF-4	Floor	DDE	0.330
		DDD	0.450
		DDT	0.506
HF-4B	Floor	DDE	0.080
		DDD	0.260
		DDT	0.400

TABLE 6

CULBRO TOBACCO
HALL FARM DISPOSAL SITE
SIMSBURY, CONNECTICUT

SAMPLE RESULTS
JANUARY 31, 1990

SAMPLE NO.	SAMPLE DEPTH	PESTICIDE DETECTED	mg/kg
1	0 - 1'	DDD	0.170
		DDT	0.320
2	0 - 1'	DDD	0.078
3	0 - 1'	None Detected (N.D.)	
4	0 - 1'	DDD	0.210
		DDT	0.820
5	0 - 1'	N.D.	
6	0 - 1'	N.D.	
7	0 - 1'	N.D.	
8	0 - 1'	DDD	0.360
		DDT	0.590
9	0 - 1'	DDT	0.092
10	0 - 1'	N.D.	
11	0 - 1'	DDT	0.080
12	0 - 1'	N.D.	
13	0 - 1'	DDE	0.065
		DDD	0.480
		DDT	1.000
14	0 - 1'	DDE	6.800
		DDD	49.500
		DDT	18.900
15	0 - 1'	N.D.	
16	0 - 1'	N.D.	

TABLE 6
(continued)

SAMPLE NO.	SAMPLE DEPTH	PESTICIDE DETECTED mg/kg
17	0 - 1'	N.D.
18	0 - 1'	N.D.
19	0 - 1'	N.D.
20	0 - 1'	N.D.
21	0 - 1'	N.D.

See Appendix G for Analytical Report

TABLE 7

CULBRO TOBACCO
HALL FARM DISPOSAL SITE
SIMSBURY, CONNECTICUT

ARCHIVAL DISCRETE SAMPLES
APRIL 12, 1990

SAMPLE NO.	DEPTH	PARAMETER DETECTED	mg/kg
INA900412-01	0 - 1'	DDD	0.092
		DDT	0.390
INB900412-03	0 - 1'	DDD	0.160
		DDT	1.100
INC900412-05	0 - 1'	DDE	0.190
		DDD	0.530
		DDT	6.100
IND900412-07	0 - 1'	DDE	1.000
		DDD	5.400
		DDT	10.100
IBA900412-33	0 - 1'	DDE	0.430
		DDD	2.200
		DDT	8.400

See Appendix H for analytical report

TABLE 8

CULBRO TOBACCO
HALL FARM DISPOSAL SITE
SIMSBURY, CONNECTICUT

NORTH WALL SAMPLE RESULTS
JUNE 18, 1990

SAMPLE NUMBER	PESTICIDES DETECTED
375900618-NA1	None Detected (N.D.
375900618-NB2	DDT 0.405 mg/kg
375900618-NC3	N.D.
375900618-ND4	N.D.
375900618-BN5	N.D.

See Appendix I for analytical report.

TABLE 11

CULBRO TOBACCO
HALL FARM DISPOSAL SITE
SIMSBURY, CONNECTICUT

GROUNDWATER ANALYTICAL PARAMETERS
SEPTEMBER 1990

PARAMETER	EPA METHOD
Organochlorine Pesticides and PCB's	Method 8080
Organophosphorus Pesticides	Method 8140
Chlorinated Herbicides	Method 8150
EDB	Method 504.2
Alachlor	Method 8080
Atrazine	Method 8080
Volatile Organic Compounds (GC/MS)	Method 8240
Semi-volatile Organics (GC/MS)	Method 8270
Arsenic, Dissolved	Method 7060
Cadmium, Dissolved	Method 6010
Chromium, Dissolved	Method 6010
Copper, Dissolved	Method 6010
Lead, Dissolved	Method 6010
Mercury, Dissolved	Method 7470
Selenium, Dissolved	Method 7740
Silver, Dissolved	Method 6010

TABLE 12

CULBRO TOBACCO
HALL FARM DISPOSAL SITE
SIMSBURY, CONNECTICUT

WATER QUALITY SAMPLING RESULTS
SEPTEMBER 7, 1990

SAMPLE NUMBER	MONITORING WELL	PARAMETER DETECTED (ug/l)
313900907-01	MW-301	1,2-Dichloropropane 6.8
313900907-02	MW-301 Field Duplicate	Non Detected (ND)
313900907-03	MW-302	1,2-Dichloropropane 13.0
313900907-04	Trip Blank	ND
313909907-05	MW-303	ND
313900907-06	Equipment Blank	ND
313900907-07	MW-304	ND

See Appendix M for Analytical Report.

WELL NO. MW-301

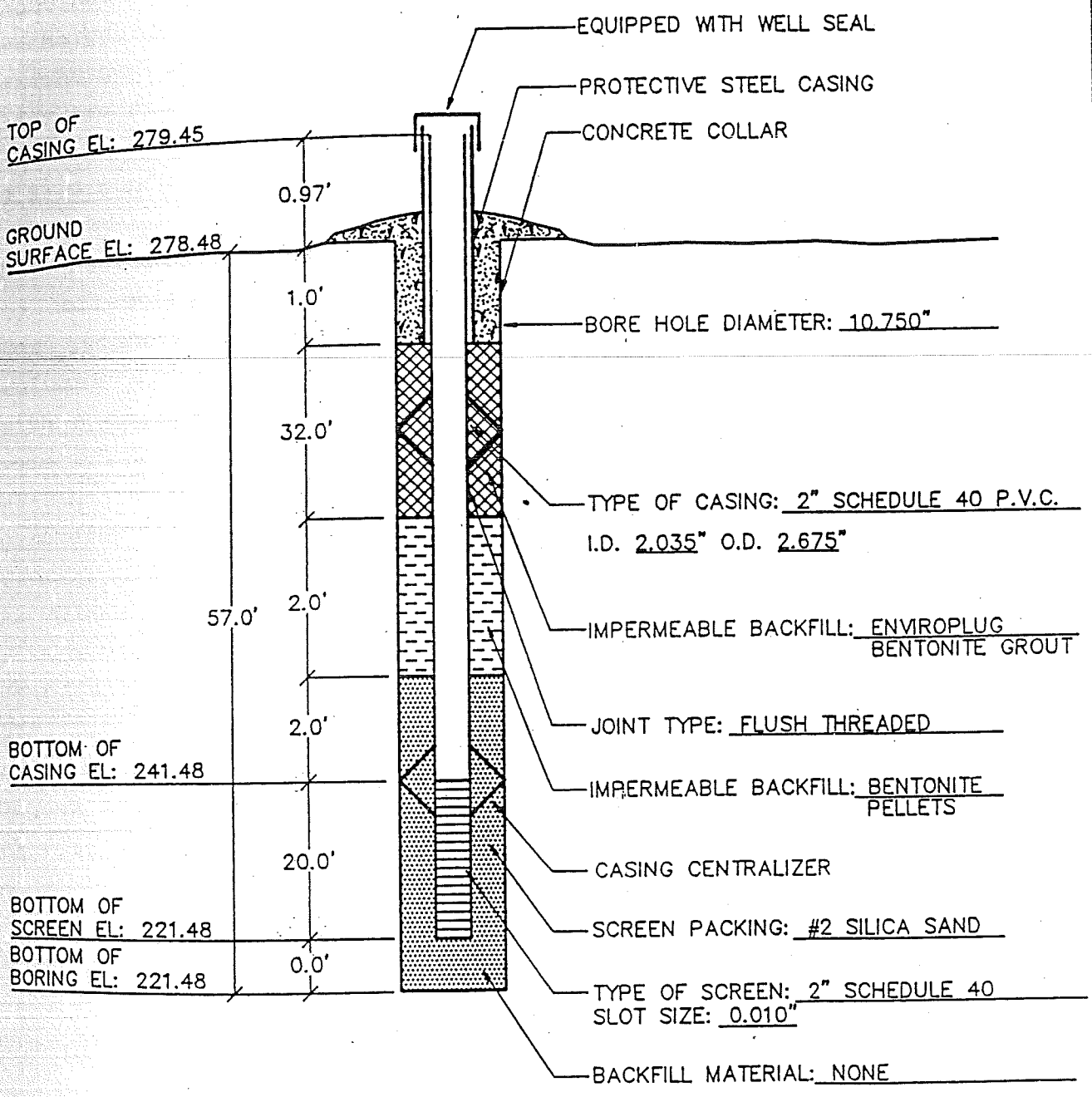


FIGURE NO. 9.0

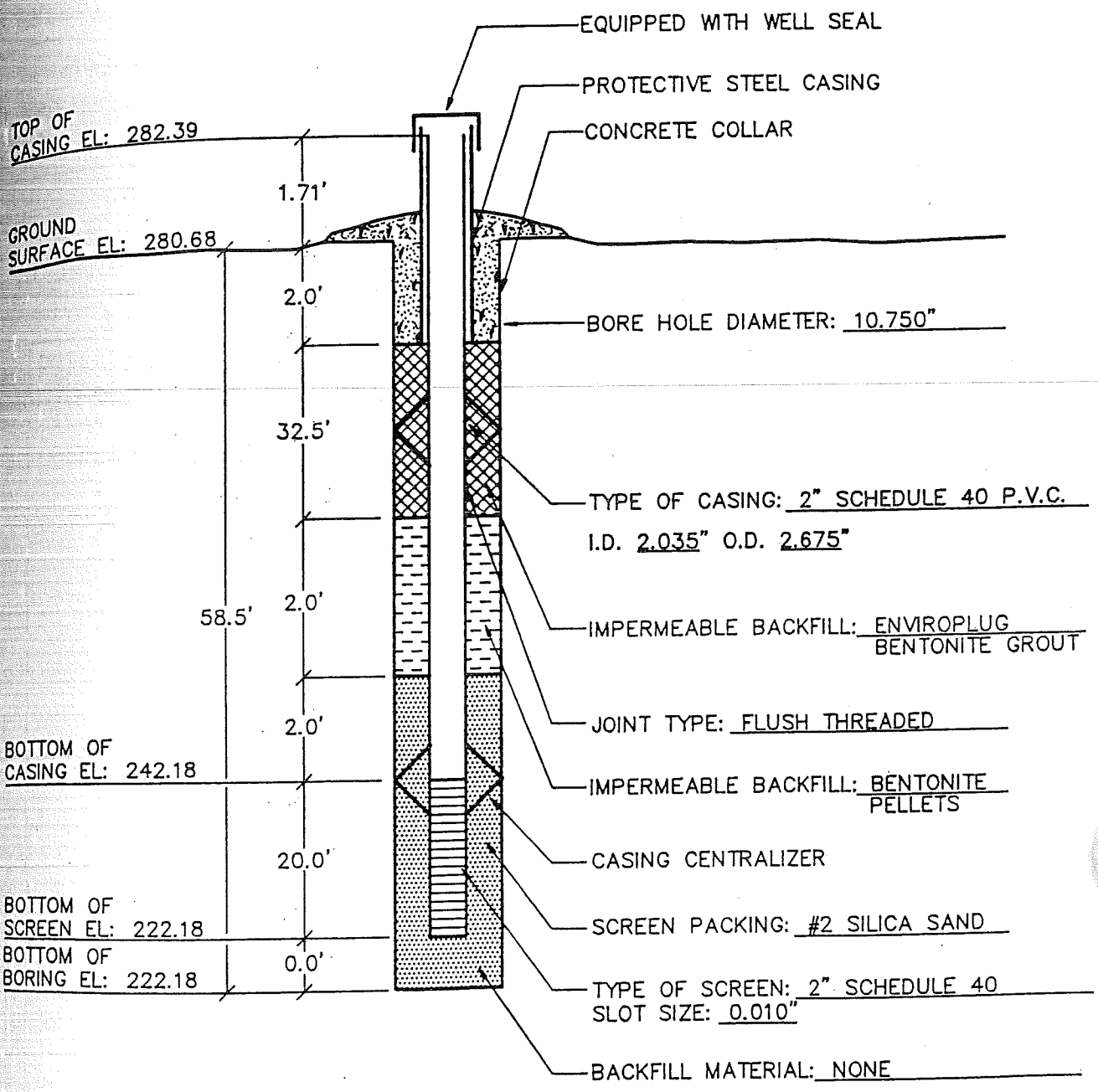
FUSS & O'NEILL
consulting engineers
MANCHESTER, CONNECTICUT

WELL CONSTRUCTION DETAILS
MW-301

HALL FARM DISPOSAL SITE
HOSKINS ROAD SIMSBURY, CT.

PROJ. NO. 84-255 DATE: AUG. 1990 SCALE: N.T.S

WELL NO. MW-302

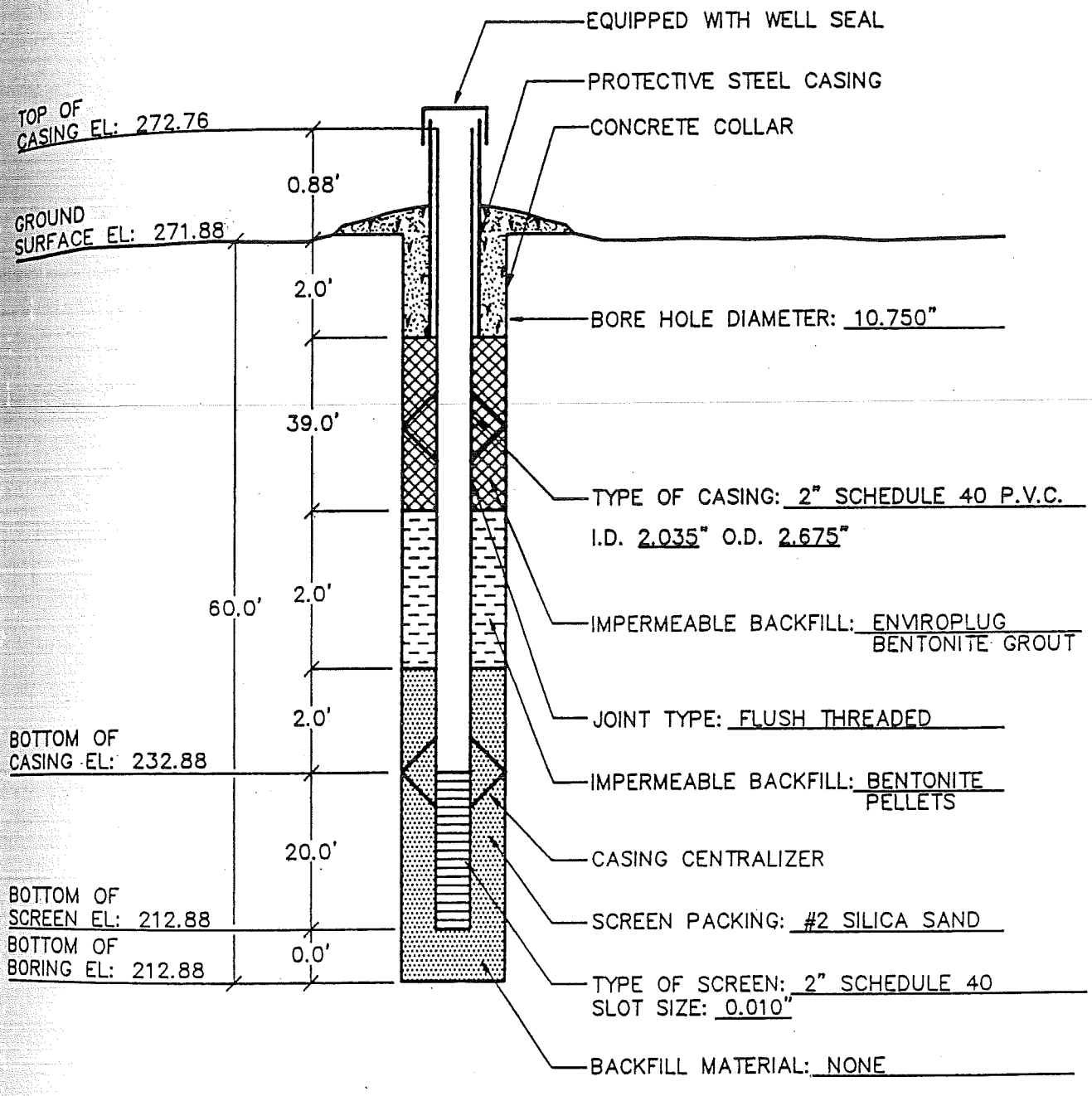


FUSS & O'NEILL
consulting engineers
MANCHESTER, CONNECTICUT

WELL CONSTRUCTION DETAILS
MW-302
HALL FARM DISPOSAL
HOSKINS ROAD SIMSBURY, CT.
PROJ. NO. 84-255 DATE: AUG. 1990 SCALE: N.T.S

NG NO. MW-302
T 2 OF 2
IO. 84-255
h of Disposal Site
TE FINISHED 08/14/
ASUREMENTS
AT | HR AFTER COMPLE
4.0
SCS | FIELD TESTING | WELL CONST. DETAILS
BORING NO. MW-302

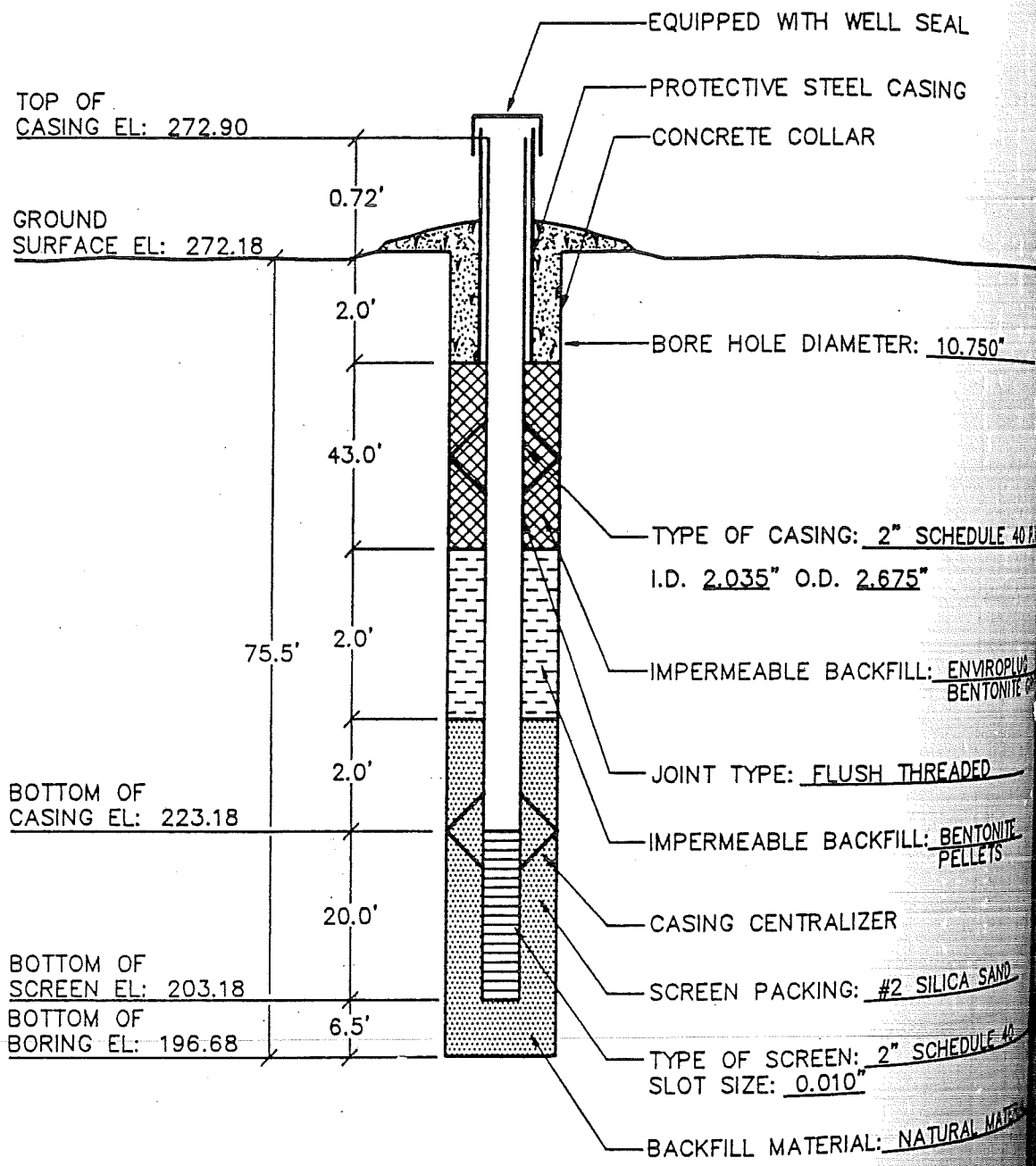
WELL NO. MW-303

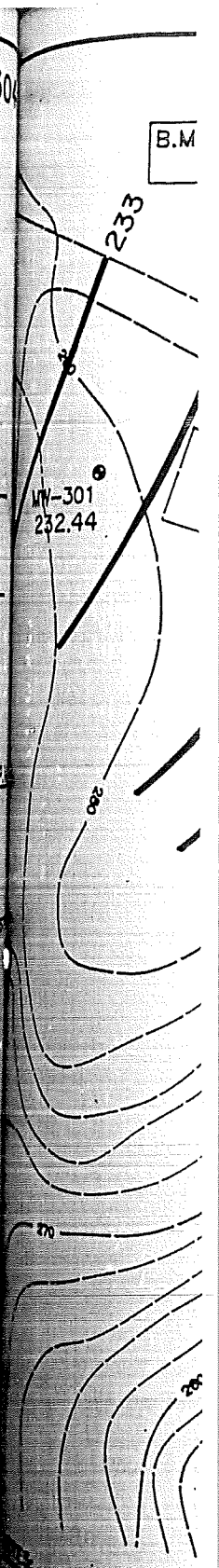


FUSS & O'NEILL
consulting engineers
MANCHESTER, CONNECTICUT

WELL CONSTRUCTION DETAILS
MW-303
HALL FARM DISPOSAL
HOSKINS ROAD SIMSBURY, CT.
PROJ. NO. 84-255 DATE: AUG. 1990 SCALE: N.T.S

WELL NO. MW-30





FUSS & O'NEILL
consulting engineers
MANCHESTER, CONNECTICUT

WELL CONSTRUCTION DETAIL
MW-304

HALL FARM DISPOSAL

HOSKINS ROAD

PROJ. NO. 84-255 DATE: AUG. 1990

TOPOGRAPHY FROM TOWN O
TOPOGRAPHIC MAPPING SHE
DATED: JUNE 1979.

TOPOGRAPHIC FEATURES, SH
REVISED IN ACCORDANCE

FUSS & O'NEILL, INC.
CONSULTING ENGINEERS
MANCHESTER, CT 06040

PROJECT/LOCATION
Culbro Hall Farm
Simsbury, CT.

BORING NO. MW-301
SHEET 1 OF 2
JOB. NO. 84-255

DRILLING CO. C. Pratt & Son, Co.
DRILLER Steve Warner
FUSS & O'NEILL REPRESENTATIVE Joel Musante

BORING LOCATION 10" North of Disposal Site
GROUND ELEVATION 278.5
DATE STARTED 08/15/90 DATE FINISHED 08/15/90

DRILLING METHOD Hollow Stem Auger
SAMPLING METHOD 2" Split Spoon Sampler
HAMMER WT. 140 lbs. HAMMER FALL (IN) 30

WATER LEVEL MEASUREMENTS

DATE	MS. PT.	WATER AT	HR AFTER COMPLETION
08/15/90	PVC	46.10	5.0

Depth (ft.)

SAMPLE NO.	DEPTH (ft)	PEN / REC.	BLOWS/ 6"	SOIL DENSITY	SAMPLE DESCRIPTION	STRATA CHANGE/ GEN. DESCRIP.	USCS	FIELD TESTING	WELL CONST. DETAILS	DEPTH (FT.)
S-1	0-2	2/2	6-6 6-7	loose	0-1' SILT with f-msd, trace grvl, 1-2' M-CSD trace wrndd grvl, slightly moist, mod brn	SM				
S-2	3-5	2/1.25	4-7	loose	5YR 4/4. 3-5' C-VCSD, ltl msd, trace grvl, slightly	SW				
			9-13		moist, mod brn 5YR 4/4.					5.0
S-3	8-10	2/1.5	6-9 10-16	loose	8-9' MSD, few csd 9-10' F-MSD, weathered schist and qtz cobbles and grvl at 10',	SW				10.0
					slightly moist, pale brn, 5YR 5/2.					
S-4	13-15	2/1	2-6	loose	13-14.5' F-MSD, trace slt, slightly moist,	SW				
			10-10		mod brn 5YR 4/4. 14.5-15' C-VCSD, slightly moist, greyish red 10R 4/2.	SW				15.0
S-5	18-20	2/1.5	2-6 15-11	loose	18-20' M-CSD, red sandstone cobble at 19.5', slightly moist, greyish red 10R 4/2.	SW				20.0
S-6	23-25	2/1.5	2-10	loose	23-25' FSD, some msd, slightly moist,	SP-SW				
			12-16		greyish-red, 10R 4/2.					25.0
					28-28.5' SILT, some m-csd, moist, drk yellow-brn 10YR 4/6. 28.5-30' MSD, some	SM SW				
S-7	28-30	1.5/1	3-10 50/5"	loose	fsd, with ang. sandstone, moist, drk red-brn 10R 3/4.					30.0

PROPORTIONS USED
TRACE 0 TO 5%
LITTLE 5 TO 10%
SOME 15 TO 25%
MOSTLY 30 TO 45%
50 TO 100%

BORING METHOD	DEPTH
Hollow Stem Auger	0-57'

REMARKS:
water at 45'
End Boring at Refusal 57'

NOTE: Geologic Log Based on Procedures Described in ASTM Standard D 2488.

BORING NO. MW-301

FUSS & O'NEILL, INC.
CONSULTING ENGINEERS
MANCHESTER, CT 06040

PROJECT/LOCATION
Culbro Hall Farm
Simsbury, CT.

BORING NO. MW-301
SHEET 2 OF 2
JOB. NO. 84-255

DRILLING CO. C. Pratt & Son, Co.
DRILLER Steve Warner
FUSS & O'NEILL REPRESENTATIVE Joel Musante

BORING LOCATION 10' North of Disposal site
GROUND ELEVATION 278.5
DATE STARTED 08/15/90 DATE FINISHED 08/15/90

DRILLING METHOD Hollow Stem Auger
SAMPLING METHOD 2" Split Spoon Sampler
HAMMER WT. 140 lbs. HAMMER FALL (IN) 30

WATER LEVEL MEASUREMENTS

DATE	MS. PT.	WATER AT	HR AFTER COMPLETION
08/15/90	PVC	46.10	5.0

TOP OF CASING EL
GROUND SURFACE E

DEPTH (FT.)	CASING blows/ft	SAMPLE NO.	SAMPLE DEPTH (ft)	PEN / REC.	BLOWS/ 6"	SOIL DENSITY	SAMPLE DESCRIPTION	STRATA CHANGE/ GEN. DESCRIP.	USCS	FIELD TESTING	WELL CONST. DETAILS
		S-8	33-35	2/2	3-12	loose	33-33.5' MSD, few vcsd and fgrvl, slightly	SW			
35.0					18-25		moist, drk red-brn 10R 3/4. 33.5-35' FSD ltl msd, slightly moist, gry-red 10R 4/2. lense	SP-SW			
							of FSD, trace slt, pale brn 5YR 5/2. rust colored laminations 1/2cm thick at 34.5'				
40.0		S-9	38-40	2/2	3-22 27-27	loose	38-40' FSD, some msd, slightly moist, pale brn 5YR 5/2, brn laminations present.	SP-SW			
		S-10	43-45	2/1.5	5-19	loose	F-MSD, trace of red sandstone, moist	SW			
45.0					20-32		wet at 44.5', gry-red 10R 4/2.				
50.0		S-11	48-50	2/1.5	3-10 13-50	loose	48-48.5' M-CSD, few grvl and slt, 48.5-50' SILT, some clay, wet, mod brn 5YR 3/4.	SW ML-CL			
		S-12	53-55	2/0.25	5-12	loose	Fragments of Red Sandstone	TILL			
55.0					20-23						
60.0		S-13	56-57	1/0.5	1-11 50/2"	loose	Red sandstone and quartzite mixed in a red brn clay.	TILL			

BOTTOM OF CASING EL:
BOTTOM OF SCREEN EL:
BOTTOM OF BORING EL:

PROPORTIONS USED	BORING METHOD	DEPTH
TRACE 0 TO 5%	Hollow Stem Auger	0-57'
FEW 5 TO 10%		
LITTLE 15 TO 25%		
SOME 30 TO 45%		
MOSTLY 50 TO 100%		

REMARKS:

Water at 44.5'.
Refusal at 57'.
Drilling speed changed at 47'.
Drilling became bumpy at 50.5'.

NOTE: Geologic Log Based on Procedures Described in ASTM Standard D 2488.

BORING NO MW-301

FUSS & O'NEILL, INC. CONSULTING ENGINEERS MANCHESTER, CT 06040	PROJECT/LOCATION Culbro Hall Farm Simsbury, CT.	BORING NO. MW-302 SHEET 1 OF 2 JOB. NO. 84-255

DRILLING CO. C. Pratt & Son, Co.
DRILLER Steve Warner
FUSS & O'NEILL REPRESENTATIVE Joel Musante

BORING LOCATION 10' South of Disposal Site
GROUND ELEVATION 280.7
DATE STARTED 08/14/90 DATE FINISHED 08/14/90

DRILLING METHOD Hollow Stem Auger
SAMPLING METHOD Split Spoon Sampler
HAMMER WT. 140 lbs. HAMMER FALL (IN) 30

WATER LEVEL MEASUREMENTS

DATE	MS. PT.	WATER AT	HR AFTER COMPLETION
08/14/90	PVC	50.40	4.0

SAMPLE NO.	DEPTH (ft)	PEN / REC.	BLOWS/ 6"	SOIL DENSITY	SAMPLE DESCRIPTION	STRATA CHANGE/ GEN. DESCRIP.	USCS	FIELD TESTING	WELL CONST. DETAILS	DEPTH (FT.)
S-1	0-2	2/1.5	2-1 2-3	loose	M-CSD with Slt, becoming M-CSD, few Slt, trace fgrvl, slightly moist, mod. yellow-brn	SM				
					roots and paper present.					
S-2	4-6	2/2	3-4 10-14	loose	4-4.5' M-CSD, trace wrndd grvl, 4.5-6' M-VCSD, trace wrndd grvl, slightly moist,	SW				5.0
					mod. brn 5YR 4/4.					
S-3	9-11	2/2	3-5	loose	VCSD, ltl msd and wrndd grvl, slightly moist,	SW				10.0
			7-8		Drk reddish brn 10R 3/4.					
S-4	14-16	2/1.5	7-6 5-8	loose	VCSD, ltl msd, trace wrndd grvl, lense of M-CSD 14.5-15', greyish red, 10R 4/2.	SW				15.0
S-1	19-21	2/2	3-5	loose	M-CSD becoming CSD at 20', slightly	SW				20.0
			6-7		moist, greyish red 10R 4/2.					
S-6	24-26	2/0	15-21 14-12	loose	No Sample Recovered; Drilling conditions did not change.					25.0
										30.0

PROPORTIONS USED		BORING METHOD	DEPTH
TRACE	0 TO 5%	Hollow Stem Auger	0-58.5'
FEW	5 TO 10%		
LITTLE	15 TO 25%		
SOME	30 TO 45%		
MOSTLY	50 TO 100%		

REMARKS:

Water at 49'.
End Boring at Refusal 58.5'

NOTE: Geologic Log Based on Procedures Described in ASTM Standard D 2488.

BORING NO. MW-302

FUSS & O'NEILL, INC.
CONSULTING ENGINEERS
MANCHESTER, CT 06040

PROJECT/LOCATION	BORING NO. MW-302
Culbro Hall Farm	SHEET 2 OF 2
Simsbury, CT.	JOB. NO. 84-255

DRILLING CO. C. Pratt & Son, Co.
DRILLER Steve Warner
FUSS & O'NEILL REPRESENTATIVE Joel Musante

BORING LOCATION 10' South of Disposal Site
GROUND ELEVATION 280.7
DATE STARTED 08/14/90 DATE FINISHED 08/14/90

DRILLING METHOD Hollow Stem Auger
SAMPLING METHOD Split Spoon Sampler
HAMMER WT. 140 lbs. HAMMER FALL (IN) 30

WATER LEVEL MEASUREMENTS

DATE	MS. PT.	WATER AT	HR AFTER COMPLETION
08/14/90	PVC	50.40	4.0

TOP OF CASING EL:
GROUND SURFACE E
BOTTOM OF CASING EL:
BOTTOM OF SCREEN EL:
BOTTOM OF BORING EL:

DEPTH (FT.)	CASING blows/ft	SAMPLE NO.	SAMPLE DEPTH (ft)	SAMPLE PEN / REC.	SAMPLE BLOWS/ 6"	SAMPLE SOIL DENSITY	SAMPLE DESCRIPTION	STRATA CHANGE/ GEN. DESCRIP.	USCS	FIELD TESTING	WELL CONST. DETAILS
		S-7	29-31	2/2	1-3 4-6	loose	Well Sorted MSD, slightly moist, pale brown 5YR 5/2.	SP			
35.0		S-9	34-36	2/2	2-4 11-9	loose	34-35.7' well sorted FSD, slightly moist, pale brn 5YR 5/2. 35.7-36	SP			
40.0		S-9	39-41	2/2	2-4	loose	39-39.5' M-CSD, moist, pale brn, 5YR 5/2.	SW			
					9-16		39.5-40' CLAY with grvl and cobbles, soft, moist, drk red-brn 10R 3/4. 40-41' F-MSD	GC SW			
							moist, gry-red, 5R 4/2.				
45.0		S-10	44-46	2/1	2-9 29-50	loose	FSD, moist, pale brn 5YR 5/2, rust colored laminations 2mm thick noted.	SP-SW			
50.0		S-11	49-51	2/2	4-12	loose	49-50' M-CSD, trace clay and grvl. 50-51'	SW			
					11-24		F-MSD, wet, gry-red 5R 4/2.	SW			
							Drilling became rough at 53'.				
55.0		S-12	54-56	0.5/0.5	30	loose	CLAY with f-csd and grvl, wet, drk reddish brn 10R 3/4.	GC			
		S-13	57-57.6	0.6/0.6	16-50/1"	loose	Same as above.	GC			
60.0											

PROPORTIONS USED	BORING METHOD	DEPTH
TRACE 0 TO 5%	Hollow Stem Auger	0-58.5'
FEW 5 TO 10%		
LITTLE 15 TO 25%		
SOME 30 TO 45%		
MOSTLY 50 TO 100%		

REMARKS:

Water at 49'
End Boring at Refusal 58.5'

NOTE: Geologic Log Based on Procedures Described in ASTM Standard D 2488.

BORING NO. MW-302

...SS & O'NEILL, INC.
...ONSULTING ENGINEERS
...ANCHESTER, CT 06040

PROJECT/LOCATION	BORING NO. MW-303
Culbro Hall Farm	SHEET 1 OF 2
Simsbury, CT.	JOB. NO. 84-255

DRILLING CO. C. Pratt & Son, Co.
DRILLER Steve Warner
...SS & O'NEILL REPRESENTATIVE Jooke Robbins

BORING LOCATION 100' SE of excavation
GROUND ELEVATION 271.9
DATE STARTED 08/20/90 DATE FINISHED 08/21/90

DRILLING METHOD Hollow Stem Auger
SAMPLING METHOD Split Spoon Sampler
HAMMER WT. 147 lbs. HAMMER FALL (IN) 30

WATER LEVEL MEASUREMENTS

DATE	MS. PT.	WATER AT	HR AFTER COMPLETION
08/20/90	ground	50.00	0.0

SAMPLE NO.	DEPTH (ft)	PEN / REC.	BLOWS/ 6"	SOIL DENSITY	SAMPLE DESCRIPTION	STRATA CHANGE/ GEN. DESCRIP.	USCS	FIELD TESTING	WELL CONST. DETAILS	DEPTH (FT.)
S-1	0-2	24"/13"	1/2/1/1	Loose	0-1" Sand, F, and silt; little C-M sand; dusky brown (5 YR 2/2); dry.	Topsoil	SM			
					1-13" SAND, M-F; trace C sand; some silt; light brown (5 YR 5/6); dry.	tree roots	SP			
S-2	3.5-5.5	24"/17"	4/5/6/6	Loose	3.5-4.0' Sand, F, and silt; trace co. sand; mod. brown (5 YR 4/4).		SM			5.0
					4.0-5.0' SAND, F; some M sand; mod. yellowish brown (10 YR 5/4); dry.		SW			
S-3	8.5-10.5	24"/14"	3/7/7/9	Loose	8.5-8.7' Plug 8.7-9.7' SAND, VC-C; little M sand;		SP			10.0
					pale yellowish brown (10 YR 6/2); dry.	coarsens				
S-4	13.5-15.5	24"/15"	2/4/4/7	Loose	SAND, VC-C; little M sand; pale yellowish brown (10 YR 6/2); possibly moist.	with	SP			
					(1.5" plug on top).	depth				15.0
S-5	18.5-20.5	24"/13"	2/4/4/5	Loose	SAND, VC-C, subrounded-subang.; little M sand; mod. brown (5 YR 4/4); poss. moist.	|	SP			20.0
S-6	23.5-25.5	24"/17"	2/3/3/4	Loose	Same as above (with plug in upper 5").	|	SP			25.0
S-7	28.5-30.5	24"/16"	3/5/10/14	Loose	28.5-28.7 Plug 28.7-29.1' Same as above (+ tr. F gravel).	|	SP			
					29.1-29.9' SAND, C-M; little VC; mod. brown (5 YR 4/4-3/4); poss. moist.	|	SP			30.0

...ROPORTIONS USED	
...RACE	0 TO 5%
...W	5 TO 10%
...TTLE	15 TO 25%
...ME	30 TO 45%
...STLY	50 TO 100%

BORING METHOD	DEPTH
H.S.A.	0-59 ft.

REMARKS:

E.O.B. = 60 ft.
#10 slotted schedule 40 PVC screen set 59-39 ft.
Centralizer placed at 48' and 28'.
Sand pack 59-38 ft. Bentonite pellets 38-36.2 ft.
Enviroplug grout 36-2 ft. Cement collar 2-0 ft.

NOTE: Geologic Log Based on Procedures Described in ASTM Standard D 2488.

BORING NO. MW-303

FUSS & O'NEILL, INC.
CONSULTING ENGINEERS
MANCHESTER, CT 06040

PROJECT/LOCATION
Culbro Hall Farm
Simsbury, CT.

BORING NO. MW-303
SHEET 2 OF 2
JOB. NO. 84-255

DRILLING CO. C. Pratt & Son, Co.
DRILLER Steve Warner
FUSS & O'NEILL REPRESENTATIVE Jooke Robbins

BORING LOCATION 100' SE of excavation
GROUND ELEVATION 271.9
DATE STARTED 08/20/90 DATE FINISHED 08/21/90

DRILLING METHOD Hollow Stem Auger
SAMPLING METHOD Split Spoon Sampler
HAMMER WT. 147 lbs. HAMMER FALL (IN) 30

WATER LEVEL MEASUREMENTS

DATE	MS. PT.	WATER AT	HR AFTER COMPLETION
08/20/90	ground	50.00	0.0

DEPTH (FT.)	CASING blows/ft	SAMPLE NO.	SAMPLE DEPTH (ft)	SAMPLE PEN / REC.	SAMPLE BLOWS/ 6"	SAMPLE SOIL DENSITY	SAMPLE DESCRIPTION	STRATA CHANGE/ GEN. DESCRIP.	USCS	FIELD TESTING	WELL CONST. DETAILS
		S-8	33.5 35.5	24"/16"	6/18/30/ 30	Loose	33.5-33.6' Plug 33.6-34.5' SAND, VC-M; liitle F; moderate		SP		
35.0							brown (5 YR 4/4); moist. 34.5-34.6' SILTSTONE subround. pebble,				
							finely foliated, dk. reddish brown (10 YR 3/4).				
40.0							34.6-34.9' SAND, F; little M; little silt; light brown (5 YR 5/6); moist. 1 pebble.		SM		
		S-9	38.5- 40.5	24"/17"	7/9/10/ 14	Loose	SAND, F-M; pale yellowish brown (10 YR 6/2) to grayish orange pink (5 YR 7/2);		SW		
							dry. (2" plug on top)				
45.0		S-10	43.5- 45.5	24"/14"	6/12/9/6	Loose	43.5-43.6' Plug 43.6-43.8' SAND, F, lgt brn (5 YR 6/4); dry.		SW		
							43.8-43.9' SAND, M-C, mod brn (5 YR 4/4), moist.		SP		
50.0							43.9-44.7' SAND, M-C, gray.orange pink (5 YR 7/2), dry.		SP		
		S-11	48.5- 50.5	24"/19"	4/6/15/ 16	M.Loose	SAND, F; some M; trace C; mod. brown (5 YR 4/4); wet.		SW		
		S-12	53-	17.5"/16"	11/40/50		SAND, F-M; F-M angular gravel; some silt;	Till	SP		
55.0			55		(5.5")		Mod. red. brown (10 R 4/6); wet.				
		S-13	58-		25/36/41 /40		Gravel, M, angular, moderate red. brown (10 R 4/6).		GW		
60.0			60								

PROPORTIONS USED	BORING METHOD	DEPTH
TRACE 0 TO 5%	H.S.A.	0-59 ft.
FEW 5 TO 10%		
LITTLE 15 TO 25%		
SOME 30 TO 45%		
MOSTLY 50 TO 100%		

REMARKS:

E.O.B. = 60 ft.
#10 slotted schedule 40 PVC screen set 59-39 ft.
Centralizers placed at 48' and 28'.
Sand pack 59-38 ft. Bentonite pellets 38-36.2 ft.
Enviroplug grout 36-2 ft. Cement collar 2-0 ft.

NOTE: Geologic Log Based on Procedures Described in ASTM Standard D 2488.

TOP OF CASING
GROUND SURFACE
BOTTOM C CASING EL
BOTTOM O SCREEN EL
BOTTOM O BORING EL
BORING MW-303

...SS & O'NEILL, INC. ...NSULTING ENGINEERS ...NCHESTER, CT 06040	PROJECT/LOCATION Culbro Hall Farm Simsbury, CT.	BORING NO. MW-304 SHEET 1 OF 3 JOB. NO. 84-255

DRILLING CO. C. Pratt & Son, Co.
DRILLER Steve Warner
...SS & O'NEILL REPRESENTATIVE Joel Musante

BORING LOCATION 150' East of Disposal Site
GROUND ELEVATION 272.2
DATE STARTED 08/17/90 DATE FINISHED 08/17/90

DRILLING METHOD Hollow Stem Auger
SAMPLING METHOD Split Spoon Sampler
HAMMER WT. 140 lbs. HAMMER FALL (IN) 30

WATER LEVEL MEASUREMENTS

DATE	MS. PT.	WATER AT	HR AFTER COMPLETION
08/17/90	grade	61.50	1.0

SAMPLE NO.	DEPTH (ft)	PEN / REC.	BLOWS/ 6"	SOIL DENSITY	SAMPLE DESCRIPTION	STRATA CHANGE/ GEN. DESCRIP.	USCS	FIELD TESTING	WELL CONST. DETAILS	DEPTH (FT.)
S-1	0-2	2/1.5	1-1 1-1	loose	0-0.5' Roots, organic material. 0.5-2' C-VCSD, some slt, few fgrvl, trace cgrvl,		SW			
S-2	3.5-5.5	2/0.5	9-9	loose	slightly moist, mod. brn 5YR 3/4. Same as above.		SW			5.0
			11-14							
S-3	8.5- 10.5	2/1.5	50-17 10-11	loose	CSD, few msd, trace fgrvl, loose, vmoist, mod. brn 5YR 4/4.		SW-SP			10.0
S-4	13.5-	2/1.5	26-15	loose	M-CSD, vmoist- wet, mod. yellow brn		SW-SP			
	15.5		8-7		10YR 5/4.					15.0
S-5	18.5- 20.5	2/1.5	15-26 8-9	loose	C-VCSD, ltl msd, trace fsd and fgrvl, lenses of f-msd w/rust colored laminations 2mm		SW			20.0
					thick, slightly moist, mod brn 5YR 4/4.					
S-6	23.5-	2/1	17-25	loose	23.5-24.5' F-MSD 24.5-25.5' F-MSD, ltl		SW-SP			
	25.5		10-13		csd, slightly moist, mod. brn 5YR 4/4.					25.0
S-7	28.5- 30.5	1.5/1.5	11-13 35-50/1"	loose	F-CSD, white powdery substance present, slightly moist, pale red 10R 6/2.		SW			30.0

PROPORTIONS USED		BORING METHOD	DEPTH
...ACE	0 TO 5%	Hollow Stem Auger	0-73.5'
...W	5 TO 10%		
...TLE	15 TO 25%		
...AE	30 TO 45%		
...STLY	50 TO 100%		

REMARKS:

End of Boring at refusal 73.5 feet.
water at 61.5 feet.

NOTE: Geologic Log Based on Procedures Described in ASTM Standard D 2488.

BORING NO. MW-304

FUSS & O'NEILL, INC. CONSULTING ENGINEERS MANCHESTER, CT 06040	PROJECT/LOCATION Culbro Hall Farm Simsbury, CT.	BORING NO. MW-304 SHEET 2 OF 3 JOB. NO. 84-255

DRILLING CO. C. Pratt & Son, Co.
DRILLER Steve Warner
FUSS & O'NEILL REPRESENTATIVE Joel Musante

BORING LOCATION 150' from the Disposal Site
GROUND ELEVATION 272.2
DATE STARTED 08/17/90 DATE FINISHED 08/17/90

DRILLING METHOD Hollow Stem Auger
SAMPLING METHOD Split Spoon Sampler
HAMMER WT. 140 lbs. HAMMER FALL (IN) 30

WATER LEVEL MEASUREMENTS

DATE	MS. PT.	WATER AT	HR AFTER COMPLETION
08/17/90	grade	61.50	1.0

DEPTH (FT.)	CASING blows/ft	SAMPLE NO.	SAMPLE DEPTH (ft)	SAMPLE PEN/REC.	SAMPLE BLOWS/6"	SAMPLE SOIL DENSITY	SAMPLE DESCRIPTION	STRATA CHANGE/ GEN. DESCRIP.	USCS	FIELD TESTING	WELL CONST. DETAILS
		S-8	33.5-	2/1	6-8	loose	VCSD and VFGRVL, ltl csd, moist,		SW-GW		
35.0			35.5		11-11		mod.yellow brn 10 YR 5/4.				
		S-9	38.5-	2/1	3-7	loose	VCSD, ltl csd and f-mgrvl, moist, pale red		SW		
40.0			40.5		12-17		10 R 6/2				
		S-10	43.5-	2/2	3-9	loose	VCSDS, few m-csd and f-mgrvl, trace fsd,		SW		
45.0			45.5		11-11		greyish red 10 R 4/2.				
		S-11	48.5-	2/1.5	7-12	loose	Same as above.		SW		
50.0			50.5		16-26						
		S-12	53.5-	.75/.75	20-50/3"	loose	FSD, moist, greyish red 10 R 4/2.		SP		
55.0			55.5								
		S-13	58.5-	2/1.5	37-20	loose	CSD, ltl vcsd, few msd and f-mgrvl, vmoist-		SW		
60.0			60.5		18-25		wet, greyish red 10 R 4/2.				

PROPORTIONS USED		BORING METHOD	DEPTH
TRACE	0 TO 5%	Hollow Stem Auger	0-73.5'
FEW	5 TO 10%		
LITTLE	15 TO 25%		
SOME	30 TO 45%		
MOSTLY	50 TO 100%		

REMARKS:

End of Boring at Refusal 73.5 feet.
Water at 61.5 feet.

NOTE: Geologic Log Based on Procedures Described in ASTM Standard D 2488.

BORING NO. MW-304

BORING NO. MW-304
SHEET 2 OF 3
JOB. NO. 84-255

' from the Disposal Site
72.2
_ DATE FINISHED 08/17

MEASUREMENTS
TER AT | HR AFTER COMP
1.50 | 1.0

LOSS & O'NEILL, INC.
CONSULTING ENGINEERS
MANCHESTER, CT 06040

PROJECT/LOCATION	BORING NO. MW-304
Culbro Hall Farm	SHEET 3 OF 3
Simsbury, CT.	JOB. NO. 84-255

LLING CO. C. Pratt & Son, Co.
LLER Steve Warner
SS & O'NEILL REPRESENTATIVE Joel Musante

BORING LOCATION 150' from the Disposal Site
GROUND ELEVATION 272.2
DATE STARTED 08/17/90 DATE FINISHED 08/17/90

LING METHOD Hollow Stem Auger
PLING METHOD Split Spoon Sampler
MER WT. 140 lbs. HAMMER FALL (IN) 30

WATER LEVEL MEASUREMENTS

DATE	MS. PT.	WATER AT	HR AFTER COMPLETION
08/17/90	grade	61.50	1.0

USCS	FIELD TESTING	WELL CONST. DETAILS	SAMPLE NO.	SAMPLE DEPTH (ft)	SAMPLE PEN / REC.	SAMPLE BLOWS/6"	SAMPLE SOIL DENSITY	SAMPLE DESCRIPTION	STRATA CHANGE/ GEN. DESCRIP.	USCS	FIELD TESTING	WELL CONST. DETAILS	DEPTH (FT.)
SW-GW			S-14	63.5-65.5	2/1.5	4-9 18-24	loose	VFSD, wet, drk red brn 10 R 3/4.		SP			65.0
SW			S-15	68.5-70.5	1.3/1.3	10-9 50/3"	loose	GRVL, ang.- wrndd, some f-vcsd, trace cobble, wet, drk red brn, 10 R 3/4.		Till			70.0
SW			S-16	73.5-75.5	2/1	17-16 8-8	loose	CLAY wth angular sand and gravel, soft, wet, drk red brn 10 R 3/4.		Till			75.0
SW													
SP													
V													

PROPORTIONS USED	BORING METHOD	DEPTH
ACE 0 TO 5%	Hollow Stem Auger	0-73.5'
Y 5 TO 10%		
TLE 15 TO 25%		
E 30 TO 45%		
STLY 50 TO 100%		

REMARKS:

End of Boring at Refusal 73.5 feet.
Water at 61.5 feet.

NOTE: Geologic Log Based on Procedures Described in ASTM Standard D 2488.

BORING NO. MW-304

BORING NO. MW-304

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

PLEASE PRINT OR TYPE

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C T P 0 0 0 0 1 0 1 9 4 | Manifest Document No. 58912 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law, but items D, F, H and I are required by State law.

3. Generator's Name and Mailing Address
Culbro Tobacco
1600 Prospect Hill Rd., Windsor, CT 06095

A. State Manifest Document Number: INA 0358912

4. Generator's Phone (203 243-2561

B. State Generator's ID: Hoskins Road Simsbury, CT

5. Transporter 1 Company Name: Tri-S, Incorporated

6. US EPA ID Number: C T D 0 1 6 4 2 4 2 1 0

C. State Transporter's ID

D. Transporter's Phone: 203 875-2110

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
Chemical Waste Management
4636 Adams Center Rd.
Fort Wayne, IN 46806

10. US EPA ID Number: I N D 0 7 8 9 1 1 1 4 6

G. State Facility's ID: same

H. Facility's Phone: 219-447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a. (RQ) Waste Hazardous Waste Solid , N.O.S. (D004) ORM_E NA9189	0.0.1	DT	25	YD	D004 U061 P123 U233 U036
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
soil contaminated with arsenic, chlordane, toxaphene, DDT, & silvex

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
a. 368-B /H70659

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Date Month	Day	Year
Michael Brozek	Michael Brozek	0.1	0.8	90

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
GERARD ROBILLARD	Gerard Robillard	0.1	0.8	90

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
		.	.	.

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted Item 19.

Printed/Typed Name	Signature	Month	Day	Year
		.	.	.

8700-22
editions are obsolete.
11865 (R/4-88)

COPY 2. GENERATOR MAIL TO GENERATOR STATE

INA 0358912

P.O. Box 7035
Indianapolis, IN 46207-7035

PLEASE PRINT OR TYPE

CTP0000101945 8917 1

INA 0358917

Calbro Corporation
1600 Prospect Hill Rd., Windsor, CT 06095
203 243-2561

Hookins Rd., Sharon, CT

CTD015422210

203-375-2110

Tri-S, Incorporated

Chemical Waste Management
4636 Adams Center Rd.
Fort Wayne, IN 46806

IND078911146

219-447-5565

(RQ) Hazardous Waste Solid, N.O.S. (D004)
ORM-E NA9189

D004 D006
P123 D023
D036

001 DT 35 Y

soil contaminated with arsenic, chlordane, toxaphene, DDT & silvex

N.A. 3749

a. 368-B/H70

In case of a spill call the Indiana Office of Environmental Response at 317/241-4336 (day or night) and the National Response Center at 800/424-8802

EPA Form 8700-22
Previous editions are obsolete.
State Form 11055 (R/4-88)

COPY 4. TSD MAIL TO GENE

OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039. Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C T P 0 0 0 0 1 0 1 9 4 | Manifest Document No. [illegible]
2. Page 1 of 1 | Information in the shaded areas is not required by Federal law, but items D, F, H and I are required by State law.

3. Generator's Name and Mailing Address
Calbro Corporation
1600 Prospect Hill Rd., Windsor CT 06095
Generator's Phone (203 243-2561

A. State Manifest Document Number
INA 0358919

B. State Generator's ID
Hoskins Rd., Simsbury, CT

C. State Transporter's ID CT-5-1004

4. Transporter 1 Company Name
Ct-S, Incorporated

6. Use EPA ID Number
C T D 0 1 6 4 2 4 2 1 0

D. Transporter's Phone 203-875-2110

5. Transporter 2 Company Name

8. Use EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

7. Designated Facility Name and Site Address
Chemical Waste management
4636 Adams Center Rd,
FortWayne, IN 46806

10. Use EPA ID Number
I N D 0 7 8 9 1 1 1 4 6

G. State Facility's ID
same

H. Facility's Phone
219-447-5585

9. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
(RQ) Hazardous Waste Solid, N.O.S. (D004) RM-E NA9189	001	CM	00020	Y	D004 U061 P123 U233 D036

J. Additional Descriptions for Materials Listed Above
Soil contaminated with arsenic, chlordane, toxaphene, DDT & silvex

K. Handling Codes for Wastes Listed Above
Net 26,620 #

15. Special Handling Instructions and Additional Information
1, 368-B/H70659

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[signature]			

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
JASON M Klock	[signature]	04	24	90

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted Item 19.

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[signature]	04	24	90

EPA Form 8700-22
Previous editions are obsolete.
SF 8700-22, Rev. 9-88 (R/4-88)

COPY 6. TRANSPORTER 2 COPY

INA 0358919

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OF SOLID AND HAZARDOUS WASTE MANAGEMENT

PLEASE PRINT OR TYPE

UNIFORM HAZARDOUS WASTE MANIFEST

CTP000010196 / 77272

INA 0358920

Culbro Corporation
1600 Prospect Hill Rd., Windsor, CT 06095
203 243-2561

Hopkins Rd., Simsbury, CT

Tri-S, Incorporated

CTD 016424210

203 875-2110

Chemical Waste Management
4636 Adams Center Rd.
Fort Wayne, IN 46806

IND 078911146

219-447-5685

(RQ) Hazardous Waste Solid, N.O.S. (D004)
ORM-E NA9189

001 | CM | 20 | Y

D004 U061
P123 U023
D036

soil contaminated with arsenic, chlordane, toxaphene, DDT & silver

a. 368-B/H70659

COPY 4. TSD MAIL TO GENERATOR

In case of a spill call the Indiana Office of Environmental Response at ... or National Response Center at ...

P.O. Box 7035
Indianapolis, I

PLEASE PRI

UNIFORM H WASTE M

3. Generator's Na
Culbro Co
1600 Pros
4. Generator's Pho
5. Transporter 1 C
Tri-S, In
7. Transporter 2 C
9. Designated Fac
Chemical
4636 Adam
Fort Wayn
11. US DOT Descrip
(RQ) Wast
ORM-E NA
J. Additional Descriptio
soil conta
chlordan,
15. Special Handling In
a. 368-B/
16. GENERATOR'S CE
proper shipping na
according to appli
If I am a large qu
determined to be
which minimizes
effort to minimize
Printed/Typed Nar
17. Transporter 1 Ackn
Printed/Typed Nan
18. Transporter 2 Ackn
Printed/Typed Nan
19. Discrepancy Indicat
20. Facility Owner or O
Printed/Typed Nam
0700-22
ions are obsolete.
11885 (R/4-88)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039 Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C·T·P·0·0·0·0·1·0·1·9·4	Manifest Document No.	2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but items C, F, H and I are required by State law.
3. Generator's Name and Mailing Address Culbro Corporation 1600 Prospect Hill Rd. Windsor, CT 06095		A. State Manifest Document Number INA 0358921
4. Generator's Phone (203)243-2561		B. State Generator's ID Hoskins Rd, Simsbury, CT
5. Transporter 1 Company Name Tti-S, Incorporated	6. Use EPA ID Number C·T·D·0·1·6·4·2·4·2·1·0	C. State Transporter's ID V-751E-CT
		D. Transporter's Phone 203-875-2110
7. Transporter 2 Company Name	8. Use EPA ID Number	E. State Transporter's ID
		F. Transporter's Phone
9. Designated Facility Name and Site Address Chemical Waste Management 4636 Adams Center Rd., Fort Wayne, IN 46806	10. Use EPA ID Number I·N·D·0·7·8·9·1·1·1·4·6	G. State Facility's ID same H. Facility's Phone 219-447-5585

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
a. (RQ) Waste Hazardous Waste Solid, NOS (D004) ORM-E NA9189	001	DT	25.	YD	D004 D061 P123 U233 U036
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
soil contaminated with arsenic
chlordan, toxaphene, DDT & silvex

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
a. 368-B/H70659

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name	Signature	Month	Day	Year
Michael Brozek	Michael Brozek	01	05	90

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Ray Morris	Ray Morris	01	05	90

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted Item 19.

Printed/Typed Name	Signature	Month	Day	Year

Form 8700-22
Previous editions are obsolete.
EPA Form 11865 (R/4-88)

COPY 2. GENERATOR MAIL TO GENERATOR STATE

INA 0358921

OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7005
Indianapolis, IN 46207-7005

PLEASE PRINT OR TYPE. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039 Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C I P 0 0 0 0 2 6 5 7
Manifest Document No.
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
Culbro Corp.
1600 Prospect Stre, Windsor, CT 060
A. State Manifest Document Number INA 0358923
4. Generator's Phone (203) 243-2561
B. State Generator's ID Indiana Steel Fabr
5. Transporter 1 Company Name Wt-S, Incorporated
6. US EPA ID Number C T D 0 6 4 2 4 2 1 0
C. State Transporter's ID
7. Transporter 2 Company Name
8. US EPA ID Number
D. State Transporter's ID
9. Designated Facility Name and Site Address
Chemical Waste Management
4636 Mesa Center Rd.
Fort Wayne, IND IN 46806
10. US EPA ID Number I N D 0 7 6 9 3 1 1 4 6
E. State Facility's ID 88366
F. Facility's Phone 219-447-7585

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.	Waste No.
a. (RQ) Hazardous Waste Solid NOS (D004) CRM-E MA0389	00	DT	00020	TW	D004 D023 D036
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
soil contaminated with Arsenic, Toluphene, Chlordane, Silver, and DDT

K. Handling Codes for Wastes Listed Above
Net 4116 lbs

15. Special Handling Instructions and Additional Information
a. 368-B/E70559

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.
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Printed/Typed Name	Signature	Month	Day	Year
James P Lavelle	James P Lavelle	11	6	89

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
William Chapell	William Chapell	11	6	89

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by the manifest except as noted in Item 19

Printed/Typed Name	Signature	Month	Day	Year
Timothy Buttrum	Timothy Buttrum	11	7	89

EPA Form 8700-22
Previous editions are obsolete.
State Form 11965 (R/4-89)

COPY 4. TSD MAIL TO GENERATOR

In case of a spill call the Indiana Office of Environmental Response at 317/241-4336 (day or night) and the National Response Center at 800/424-8802 or 202/426-2675

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF SOLID AND HAZARDOUS WASTE MANAGEMENT
P.O. Box 7035
Indianapolis, IN 46207-7035

PLEASE PRINT OR TYPE (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039. Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C·T·P·0·0·0·0·1·0·1·9·4 Manifest Document No. 6·C·3·7·D
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but items D, F, H and I are required by State law.

3. Generator's Name and Mailing Address
Culbro Corporation
1600 Prospect Hill Rd., Windsor, CT 06095
Generator's Phone (203) 243-2561

A. State Manifest Document Number INA 0460300
B. State Generator's ID Hoskins Rd., Simsbury, CT

4. Transporter 1 Company Name: Tri-S, Incorporated
6. Use EPA ID Number: C·T·D·0·1·6·4·2·42 1 0
C. State Transporter's ID 0744761
D. Transporter's Phone 203 875-2110

5. Transporter 2 Company Name
8. Use EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

7. Designated Facility Name and Site Address
Chemical Waste Management
4636 Adams Center RD.
Fort Wayne, IN 46806
10. Use EPA ID Number: I·N·D·0·7·8·9·1·1·1·4·6
G. State Facility's ID same
H. Facility's Phone 219-447-5585

9. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol.	I. Waste No.
(RQ) Hazardous Waste Solid NOS (D004) ORM-E NA9189	001	CT	00116	Y	D004 U061 P123 U233 U036

Additional Descriptions for Materials Listed Above
Soil contaminated with DDT and possibly with Arsenic, Toxaphene, Chlordane, and Silvex

K. Handling Codes for Wastes Listed Above
N-1 4/5/10 H-

15. Special Handling Instructions and Additional Information
a. 368-B/H70659

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Printed/Typed Name	Signature	Date Month Day Year
	X	06 20 90

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month Day Year
Wiley Grant		06 20 90

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted item 19.

Printed/Typed Name	Signature	Date Month Day Year

EPA Form 8700-22
Previous editions are obsolete.
SF 11865 (R/4-89)

COPY 7 TRANSPORTER

INA 0460300

STATE OF ARKANSAS
Department of Pollution Control and Ecology
P. O. Box 9583 Little Rock, Arkansas 72219
Telephone 501-562-7444

(Form designed for use on elite (12-pitch) typewriter)

Form Approved OMB No. 2050-0039 Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: CTP000001191

Manifest Document No.: 94793

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

A. State Manifest Document Number: AR-394798

3. Generator's Name and Mailing Address:
...ro Corp.
... Prospect Hill Rd., Windsor, CT 06095

Generator's Phone: 203 243-2561

B. State Generator's ID: Hoskins Rd., Simsbury, CT

4. Transporter 1 Company Name: ...S, Incorporated

6. US EPA ID Number: CTD016424210

C. State Transporter's ID: PC 1220 H 465

D. Transporter's Phone: 203-875-2110

7. Transporter 2 Company Name:

8. US EPA ID Number:

E. State Transporter's ID: PC ____ H ____

F. Transporter's Phone:

9. Designated Facility Name and Site Address:
...co
... Smith Avenue
...rado, AR

10. US EPA ID Number: ARD069748192

G. State Facility's ID: same

H. Facility's Phone: (501)863-7173

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste Arsenical Pesticide Solid (D004) Poison B, UN2759	076	DM	39200	P	~~D004~~ P004, P123, U036, U061, ~~U233~~
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above:
Unused Spoiled pesticides containing arsenic, chlordane, silvex, toxaphene, and DDT

K. Handling Codes for Wastes Listed Above

EMERGENCY RESPONSE INFORMATION
PAUL HAGEMANN
203-243-2561

No alternate TSDF, return to generator 11A - 42,129

15. Special Handling Instructions and Additional Information
...363-A/WMDS-59672

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and State regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
P. D. Hagemann	[signature]	01	13	92

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
... Castelvetro / Billy Grant	[signature]	01	13	92

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space
Line 11A Block I Changed D004 to P004 & U233 deleted
Documentation on file

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Vicki Machen	[signature]	1	16	92

EPA Form 8700-22 (Rev. 9-88) Previous edition is obsolete.

... THE HAZARDOUS WASTE SHIPMENT. ONCE DELIVERED, THE TREATMENT ... FACILITY ... COPIES MUST ... ORIGINAL COPY TO ... GENERATOR.

Department of Pollution Control and Ecology
P. O. Box 9583 Little Rock, Arkansas 72219
Telephone 501-562-7444

Form Approved. OMB No. 2050-0039. Expires 9-30-88

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UNIFORM HAZARDOUS WASTE MANIFEST

1 Generator's US EPA ID No. — Manifest Document No. — 2 Page 1 of 1 — Information in the shaded areas required by Federal law

3 Generator's Name and Mailing Address
Cubro Corp.
1600 Prospect Hill Rd., Windsor, CT 06095
4 Generator's Phone: 203 (243-2561)

5 State Manifest Document Number: AR-394799
6 State Generator's ID
7 State Transporter's ID
8 Transporter's Name
9 US EPA ID Number
10 Transporter's Phone
11 State Transporter's ID
12 Transporter 2 Company Name
13 US EPA ID Number
14 State Facility's ID
15 Designated Facility Name and Site Address
Ensco
47th Smith Avenue
El Dorado, AR
16 Facility's Phone (501) 862-7777
17 US EPA ID Number

18a	18b No. Containers	18c Type	18d Total Quantity	18e Unit Wt/Vol	18f Waste No.
a. (RQ) Waste Arsenical, Pesticide solids (D004) Poison B, UN2759	056	D.M.	21,560	P	D004, D036, U233
b.					
c.					
d.					

18g Additional Descriptions for Materials Listed Above
Unused Spoiled Pesticides Containing arsenic
Chlordane, toxpphene, silvex, and DDT
If no alternate TSDF, return to generator

18h Handling Codes for Wastes Listed Above

19 Special Handling Instructions and Additional Information
a. 368-A/WEDS-59672

EMERGENCY RESPONSE INFORMATION

20 GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name | Signature | Month | Day | Year

21 Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Steve Gilliland | Signature: Steve Gilliland | Month | Day | Year

22 Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month | Day | Year

23 Discrepancy Indication Space

24 Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 23
Printed/Typed Name | Signature | Month | Day | Year

EPA Form 8700-22 (Rev. 9-88) Previous edition is obsolete.

GENERATOR INITIAL COPY