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REMEDIAL INVESTIGATION/
FEASIBILITY STUDY REPORT
FOR THE
SOUTHERN MARYLAND WOOD TREATING SITE
HOLLYWOOD, MARYLAND

VOLUME II - APPENDICES

May 1988

Work Assignment No.: 95-3LE8
Document No.: 193-FS1-RT-GBKN

AR301761

Appendix A

AR301762

APPENDIX A
SUPERFUND PROCESS

A-1 REM II AND SUPERFUND IMPLEMENTATION

CERCLA establishes a national program for responding to releases of hazardous substances into the environment. In addition, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the process for determining appropriate remedial actions at Superfund sites. Together, CERCLA and the NCP require that a remedial action selected for a Superfund site be cost-effective and that it be adequate to protect public health.

A-2 THE RI/FS PROCESS

In accordance with the NCP, potential hazard waste sites are subjected to a preliminary assessment, if necessary, detailed site inspection. If evidence of hazardous waste activity is found, posing an actual or potential threat to public health and/or the environment, it must be determined whether removal of the wastes is necessary.

If removal actions are not required, an evaluation is made of the potential threat to public health and/or the environment relative to that posed by other potential hazardous waste sites. In this manner, a relative ranking is developed as the basis for inclusion of the site on the National Priorities List (NPL). Inclusion of a site on the NPL is a prerequisite for expenditure of monies from Superfund to conduct a more detailed site investigation and evaluation of remedial action alternatives.

A detailed site investigation and a remedial alternative consideration are conducted as a remedial investigation/feasibility study (RI/FS), in accordance with the NCP. The RI/FS is an integrated approach. The RI characterizes the nature and extent of contamination at the site, identifies potential containment migration pathways and exposure routes, and evaluates the present and/or potential threat to the public and the environment due to site contamination. Data gathered during the RI are used for the development and evaluation of possible remedial action alternatives in the FS. In the FS phase report, feasible technologies (e.g., surface-water diversion, capping, landfilling, treatment) are defined to mitigate or eliminate the health or environmental threats identified in the RI. These technologies are assembled into alternative remedial actions and subjected to an initial screening to identify those that address the goals of remedial action and can be implemented, and to

eliminate inappropriate and most costly alternatives. Those alternatives remaining following the initial screening phase are subjected to more rigorous evaluation.

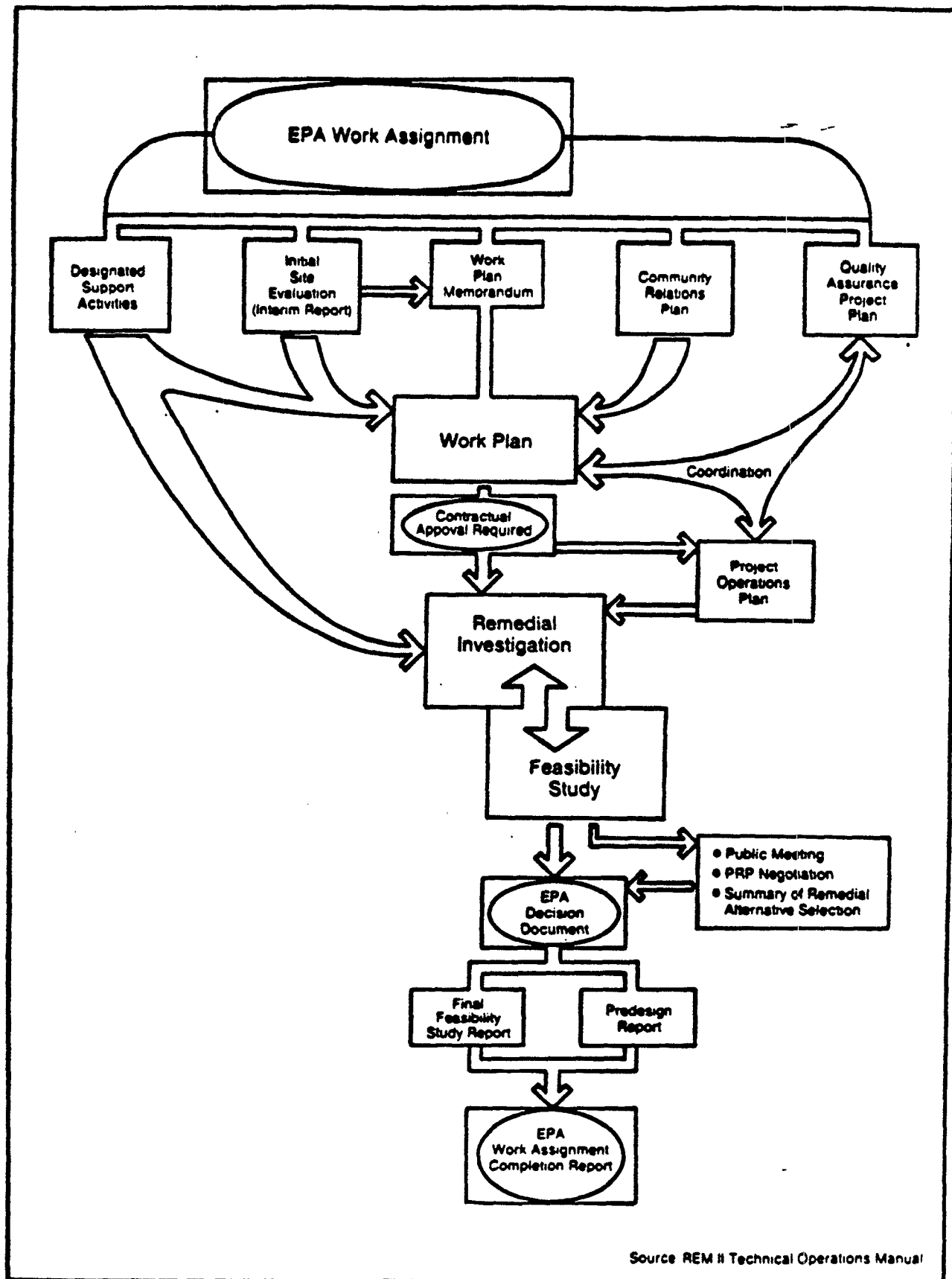
The RI/FS process results in an objective, comparative evaluation of the most appropriate remedial alternatives to meet the cleanup objectives for the site. This evaluation is prepared in the form of a draft report and subjected to public and agency review and comment. A final RI/FS report is prepared summarizing comments received during the public review period and comment responses. Based on the final RI/FS report, EPA selects the recommended remedial action alternatives.

The purpose of the REM II program is to provide technical and management services in support of EPA remedial planning enforcement and activities at selected uncontrolled hazardous substance disposal sites. This program was established under CERCLA, commonly referred to as Superfund. EPA's Hazardous Site Control Division (HSCD), through Contract No. 68-01-6939, has employed Camp Dresser & McKee, Inc. (CDM) of Boston, Massachusetts to implement remedial response activities in EPA Regions I through X.

Contract No. 68-01-6939, titled "Performance of Remedial Response Activities at Uncontrolled Hazardous Waste Site," and called "REM II," is a 4-year contract to provide:

- o Remedial investigations.
- o Engineering feasibility studies.
- o Oversight of remedial planning and implementation projects performed by states and/or responsible parties.
- o Engineering design services.
- o Monitoring.
- o Resident engineering, training, technical services, and program management.
- o Support to EPA.

Figure A-1 provides a simplified logic diagram for the major components associated with the performance of an RI/FS by the REM II team. The initial documents prepared for this assignment are components of the Southern Maryland Wood Treating site Work Plan and Project Operations Plan (POP). These documents define the objectives and scope of the RI field activities. The results of



Source: REM II Technical Operations Manual

FIGURE A-1 RI/FS LOGIC DIAGRAM

the field activities are reported in the RI, Sections 1 through 4, with the initial remedial alternatives discussed in the FS, Section 6 of this document.

Note that additional field work (i.e., Phase III activities) is required to obtain essential information to adequately finalize response objectives and develop/analyze remedial options. Therefore, this document only addresses site remediation considerations and initial technology screening.

Appendix B

Appendix B

AR301767

PRELIMINARY DRAFT

DEVELOPMENT AND VALIDATION
OF
A METHOD FOR FIELD SCREENING ANALYSIS
OF SOIL AND WATER FOR
POLYNUCLEAR AROMATIC HYDROCARBONS
FOR
SUBTASK 5
(Phase I RI - Initial Support Activities)

SOUTHERN MARYLAND WOOD TREATING SITE
Hollywood, Maryland

December 17, 1985

Work Assignment No.: 95-3LE8.1
Document Control No.: 193-RI1-RT-CALY-1

B-0

AR301768

1.0 Introduction

This report describes Subtask 5 of Task 1.0 (Initial Support Activities) of the Work Plan for the Remedial Investigation (RI) at the Southern Maryland Wood Treating (SMWT) site in Hollywood, Maryland. Details of the development and validation of a field screening method for the determination of total polynuclear aromatic hydrocarbon (PAH) concentration in both soils and waters are presented in the following sections of this report.

The purpose of this method development and validation work was to develop a rapid (10-20 minutes), semi-quantitative analytical method for screening analysis of soils samples for total polynuclear aromatic hydrocarbon (PAHs) with a target detection limit in the range 1-10 ug/g. This method was to give a total concentration of PAHs which is comparable to those obtained using conventional analytical methods (e.g., EPA-CLP Protocol and/or 8270). The technical approach described in the following sections focuses on the development of a rapid extraction of PAHs from soils and waters with analysis using UV fluorescence spectrophotometry.

2.0 Abstract

A rapid field screening technique for the determination of total Polynuclear Aromatic Hydrocarbons (PAH) in soils and waters was developed and validated for use at the Southern Maryland Wood Treating Site. Initially, a literature search was performed to provide information on alternative extraction and analysis methods, UV fluorescence spectral characteristics of the PAHs of interest, and concentrations of interest. Based on the literature search, development methods were concentrated on the use of UV fluorescence for analysis of PAHs in the soil and water samples.

Three representative PAH compounds -- naphthalene, acenaphthene, and phenanthrene, found in samples from the Southern Maryland Wood Treating Site (ERT sampling, January 1985) -- were selected as target compounds in the Method Development and Method Validation phases of this project. These three compounds were used to spike distilled water and background soil to establish the accuracy and precision of rapid screening techniques for water and soil. Soil and water samples were extracted for analysis by UV fluorescence spectrophotometry.

The fluorescence spectra of seven PAH compounds found in the majority of samples at highest concentrations in samples from the SMWT site in January 1985 were examined, as an initial step towards analysis of soils and water samples. Based on the UV fluorescence spectra of the PAH compounds, wavelength pairs were selected which would most accurately quantify the mixture of PAH compounds present at the SMWT site.

It was concluded that the method developed for field screening of water and soil samples from the SMWT site, utilizing UV fluorescence spectrophotometry, is a reliable and accurate means for estimating the total PAH concentration at the SMWT site. A description of the technical approach, summary method accuracy and precision, and a comparison of rapid screening and GC/MS data are presented in the following sections.

3.0 Screening Method Development

3.1 Selection of PAH Target Compounds

The three target compounds used for method validation were selected by examining GC/MS data from the ERT sampling event at SMWT in January 1985. These data showed that naphthalene, acenaphthene, and phenanthrene comprised approximately half the total PAH concentration in the soil at that time. An even greater proportion of the total PAH concentration in surface and well water samples was due to the presence of these three compounds.

Naphthalene and acenaphthene contain two aromatic rings, while phenanthrene contains three. These compounds are representative of PAH compounds present at the SMWT site and should closely parallel the behavior of all PAH compounds of interest (i.e., those with from two to six rings).

3.2 Generation of UV Fluorescence Spectra

After selection of the three target PAH compounds, UV fluorescence spectra over a wide concentration range were obtained using standard solutions. The fluorescence data were used to determine sensitivity and generate response curves. Based on sensitivity, the sample size and volume of extraction solvent were determined to meet the required detection limits. Sensitivity was sufficient to use a small sample (1. g of soil or 25. ml of water) for the screening techniques.

Considering site history, the proposed method was designed to achieve a detection limit of 10 ug/L for total PAH concentration in water and 1-10 ug/g in soil.

4.0 Method Development - Soil

The major steps in the development of a rapid screening method for total PAH concentration in soils are listed below:

1. Selection of target compounds.
2. Determination of spectral characteristics and UV fluorescence sensitivity range.
3. Selection of an appropriate extraction solvent.
4. Analysis of three sets of duplicate spikes as an initial method development step.
5. Examination of the data from Step 4 to establish the desired method validation range.
6. Analysis of five sets of triplicate spikes to establish method accuracy and precision.

Naphthalene, acenaphthene, and phenanthrene were selected as the target compounds as previously discussed. Excitation and Emission maxima for each target compound were determined from 250 nm - 550 nm.

Because of their similar structures, naphthalene and acenaphthene have similar spectral characteristics and concentrations were determined in spiked samples as total naphthalene/acenaphthene concentrations. The fluorescence spectral information is presented in Table 4-1.

A quantifiable fluorescence response was observed for each analyte from .01 to 1.0 ug/ml concentration in solution. The mass vs. response curve becomes non-linear at the higher concentrations and the most accurate quantification is obtained by working within a concentration range of 0.1 to 1.0 ug/ml.

Three extraction solvents were compared to select the most appropriate solvent for the rapid screening of soils. Hexane, acetonitrile, and toluene all gave quantitative recovery of a 150 ug/g PAH soil spike (50 ug/g of each compound). However, acetonitrile was chosen for the following reasons:

1. Acetonitrile gave rapid dispersion of wet soil into the extraction solvent; neither hexane nor toluene did this.
2. Acetonitrile exhibited the best sensitivity of the three solvents.
3. Toluene is opaque at 250 nm., which is the selected excitation wavelength for phenanthrene.

At this point a preliminary set of duplicate spikes were prepared and analyzed. Each compound was spiked at 0.1 ug/g, 1 ug/g, and 10 ug/g onto SMWT site background soil. Note that this yields a total PAH concentration equal to 0.3 ug/g, 3.0 ug/g, and

30 ug/g. The 0.3 ug/g PAH spike was indistinguishable background soil levels. A range of 3 ug/g to 300 ug/g total PAH in soil was selected for method validation. These results, expressed as a percentage of recovery of naphthalene/acenaphthene or phenanthrene, are shown in Table 4-2 and Table 4-3 and are corrected for background soil contribution. Recoveries above 100% occur because calibration curves were extrapolated to non-linear response regions, thus giving concentrations which were biased high. This represents a "worst case" performance, and this problem can be remedied by working over a concentration range with a more linear response. The method protocol used for this validation is described below.

RAPID SCREENING OF SOIL FOR TOTAL PAH CONCENTRATION

1. Weigh 1.0 g wet soil into a 40 ml vial.
2. Add 1.0 g anhydrous sodium sulfate.
3. Add 10 ml UV grade acetonitrile.
4. Shake vigorously for 15 seconds.
5. Let sample settle for 1 minute.
6. Filter sample through 0.2 micron teflon filter (with in-line syringe).
7. Calibrate instrument from 0.1 to 1.0 ug/ml for each target compound.
8. Analyze extracts by UV fluorescence, diluting the extract into range as necessary.

Following establishment of method performance, four SMWT site soil samples were analyzed in triplicate and the results compared to those obtained by conventional GC/MS techniques. These samples were prepared and analyzed by GC/MS using procedures described in "Statement of Work for Organics Analysis Multi-Media Multi-Concentration", U.S.EPA Contract Laboratory Program, July 1985. PAH concentrations determined by GC/MS were summed and recorrected for moisture content to give total PAH concentration on a wet weight basis.

UV fluorescence screening data for soils from the SMWT site were obtained using the procedures described above in the method development section. Quantification was performed using a slightly different method, described as follows: A mixture of PAH compounds prevalent at SMWT site was prepared and analyzed by using two pairs of compromise wavelengths to calibrate the procedure. This information is most easily depicted in tabular

Table 4-1

UV FLUORESCENCE CHARACTERISTICS OF TARGET COMPOUNDS

<u>COMPOUND</u>	<u>EXCITATION (Ex) and EMISSION (Em) MAXIMA</u>		<u>COMPROMISE WAVELENGTHS USED</u>	
	Ex	Em	Ex	Em
napthalene	275	355	280	340
acenaphthene	280	355	280	340
phenanthrene	250	365	250	365

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Table 4-2

RECOVERY OF PAHs FROM SOIL VALIDATION SAMPLES

<u>Concentration of Each Analyte ug/g</u>	<u>Total PAH Concentration ug/g</u>	<u>% Recovery Napthalene Acenaphthene</u>	<u>% Recovery Phenanthrene</u>
1	3	65.5	79.7
1	3	57.2	83.3
1	3	73.9	95.5
5	15	78.9	89.0
5	15	73.9	82.7
5	15	84.2	106.0
10	30	71.1	72.3
10	30	66.8	63.0
10	30	67.8	64.0
50	150	95.1	123.0
50	150	106	144.0
50	150	99.1	122.0
100	300	93.3	93.3
100	300	91.0	94.5
100	300	95.3	94.9

DRAFT - do not quote or cite

Table 4-3

METHOD PRECISION AND ACCURACY
FOR TOTAL PAH IN SOIL SAMPLES

<u>Total PAH Concentration (ug/g)</u>	<u>Average Recovery Naphthalene/ Acenaphthene</u>	<u>RSD (%)*</u>	<u>Average Recovery (%) Phenanthrene</u>	<u>RSD (%)*</u>
3	65.5	12.7	86.1	9.6
15	79.0	6.5	92.6	13.0
30	68.6	3.3	66.4	7.7
150	100.0	5.5	130.0	9.6
300	93.2	2.3	94.2	0.9

*Relative Standard Deviation

form (Table 4-4). Note that standard concentration is expressed as the sum of those compounds measured at each wavelength. Benzo(k)fluoranthene has not been observed at high levels at the SMWT site but has been used to provide a typical six-membered ring PAH compound in the standard mix. This mix was prepared in acetonitrile, the same solvent used for extraction.

Serial dilutions of the screening standard mix in Table 4-4 were prepared to give quantifiable response over the component concentration range of 0.005 to 1.0 ug/ml. This gave a range of 0.015 to 3.0 ug/ml for wavelength group 1 (3 components) and 0.020 to 4.0 ug/ml for wavelength group 2 (4 components).

Table 4-5 summarizes GC/MS and UV fluorescence rapid screening data for soil samples from SMWT. The results show that these data from UV fluorescence screening compare well with PAH concentrations measured by GC/MS. Discrepancies between replicates may be due to a lack of homogeneity among soil samples. This is discussed further in the Conclusions section of this report.

5.0 Method Development - Water¹

For rapid screening of water samples to determine total PAH concentration, hexane was selected as the extraction solvent. Sample preparation using micro-extraction procedures. The procedure used for sample extraction is outlined below:

1. Mix sample. Add 25 ml of sample to a 40 ml teflon capped vial.
2. Add 5 ml UV grade hexane. Shake for 1 minute.
3. Let sample settle for 5 minutes.
4. Analyze hexane extract by UV fluorescence.

This screening method was applied to three pairs of duplicates for method development. A total PAH concentration range from 9 to 1800 ug/l was chosen for method validation. Note that this equates to a 3 to 600 ug/l range for each target compound. Method precision and accuracy data are presented in Table 5-1 and 5-2.

Following determination of recoveries, the UV fluorescence screening method was used to determine total PAH concentration in the SMWT site water sample, SW1. Results were compared to those obtained by GC/MS Analysis. As in the soil sample quantification, the mixture shown in Table 4-4 was used for calibration. The screening results are shown in Table 5-3.

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Table 4-4

COMPOSITION OF TOTAL PAH SCREENING STANDARD MI

<u>Compound Concentration</u>	<u>Group No.</u>	<u>No. of Rings</u>	<u>Stock Concentration in ug/ml</u>	<u>Compromise Wavelength Pairs</u>	<u>Wavelength Pair Grd Concentra</u>
napthalene	1	2	100	280/340	
acenapthene	1	3	100	280/340	300 ug/
fluorene	1	3	100	280/340	
phenanthrene	2	3	100	250/400	
fluoranthene	2	4	100	250/400	
pyrene	2	4	100	250/400	400 ug/
benzo(k)fluor- anthene	2	6	100	250/400	

Table 4-5

COMPARISON OF UV FLUORESCENCE RAPID SCREENING
AND GC/MS DATA FOR
TOTAL PAH CONCENTRATION IN SOIL SAMPLES FROM SMWT SITE

Sample I.D.	Location	Technique	Total PAH Concentration (ug/g)			
			#1	#2	#3	Avg.
SS 1	Land Treatment	UV Fluorescence	16.4	6.5	1.4	8.1
SS 1	Land Treatment	GC/MS	7.0	---	---	7.0
SS 2	Process Area	UV Fluorescence	21.6	45.5	60.8	42.6
SS 2	Process Area	GC/MS	120.	---	---	120
SS 3	Pond	UV Fluorescence	104000	76300	85700	88500
SS 3	Pond	GC/MS	19600	---	---	19600
SS 4	Background	UV Fluorescence	4.1	4.2	3.6	4.0
SS 4	Background	GC/MS	4.1	---	---	4.1

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Table 5-1

RECOVERY OF PAHs FROM WATER VALIDATION SAMPLES

<u>Concentration of Each Analyte ug/l</u>	<u>Total PAH Concentration ug/l</u>	<u>% Recovery Napthalene/ Acenaphlene</u>	<u>% Recovery Phenanthrene</u>
3	9	82.0	92.0
3	9	80.0	93.1
30	90	97.5	111.0
30	90	95.9	110.0
600	1800	96.6	93.9
600	1800	91.4	98.8

Table 5-2

METHOD PRECISION AND ACCURACY
FOR TOTAL PAH IN WATER SAMPLES

<u>Total PAH Concentrations (ug/l)</u>	<u>Average Recovery (%) Napthalene/ Acenapthene</u>	<u>RSD (%)*</u>	<u>Average Recovery Phenanthrene</u>	<u>RSD (%)*</u>
9	81.0	1.7	92.6	0.8
90	96.7	1.2	111.0	0.6
1800	94.0	3.9	96.4	3.6

*Relative Standard Deviation

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Table 5-3

COMPARISON OF UV FLUORESCENCE RAPID SCREENING
AND GC/MS DATA FOR TOTAL PAH CONCENTRATION IN WATER SAMPLES

SAMPLE I.D.	LOCATION AVERAGE	TECHNIQUE	TOTAL PAH ug/l			AVERAGE PAH CONCENTRATION (ug/l)
			#1	#2	#3	
SW 1	Surface Water	UV	3.1	4.4	6.3	4.6
SW 1	Surface Water	GC/MS	0.7	---	---	0.7

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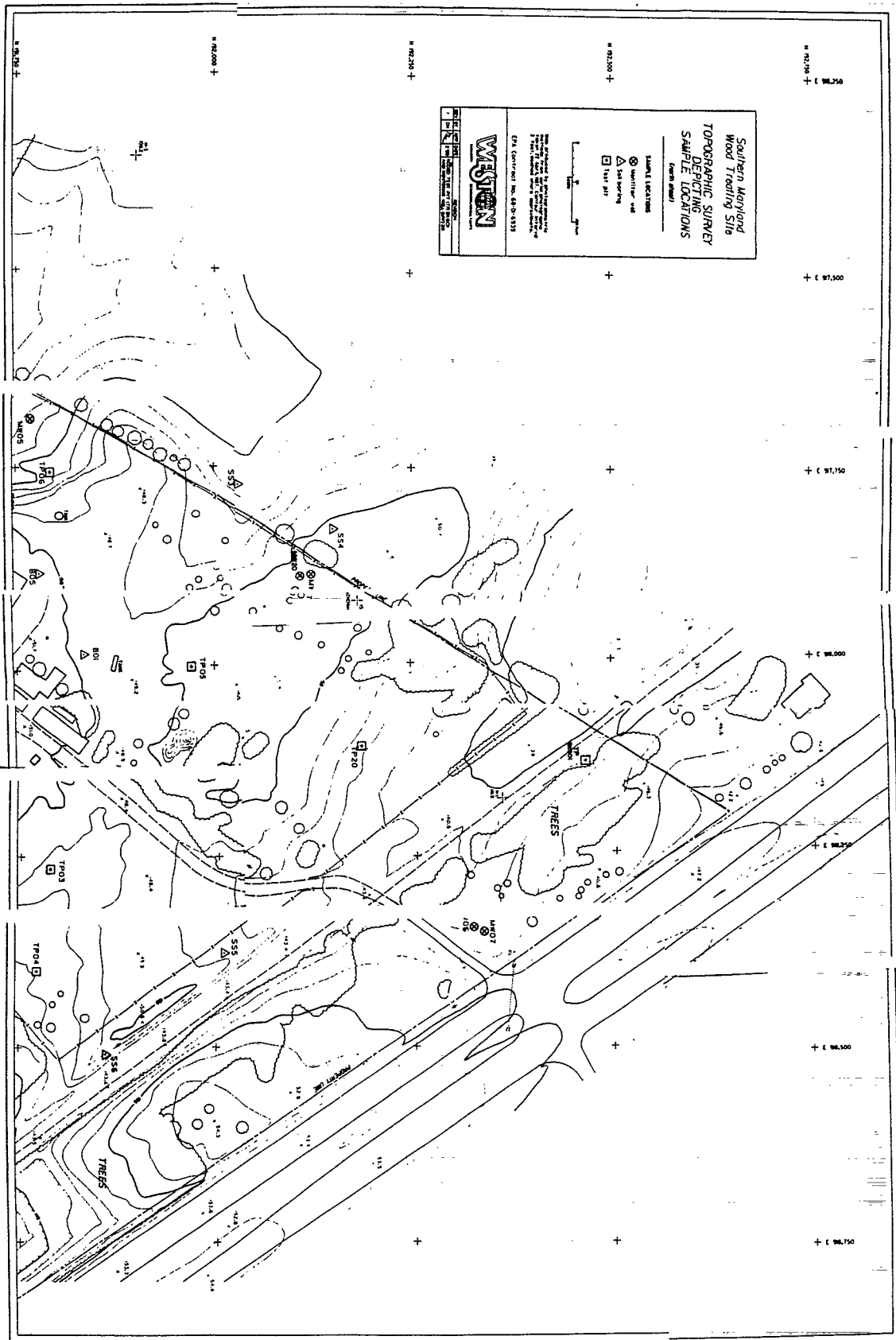
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1. Rhoades, John W. and Nulton, Carter P., "Journal of Environmental Science and Health", A15(5), pp. 467-484, 1980.

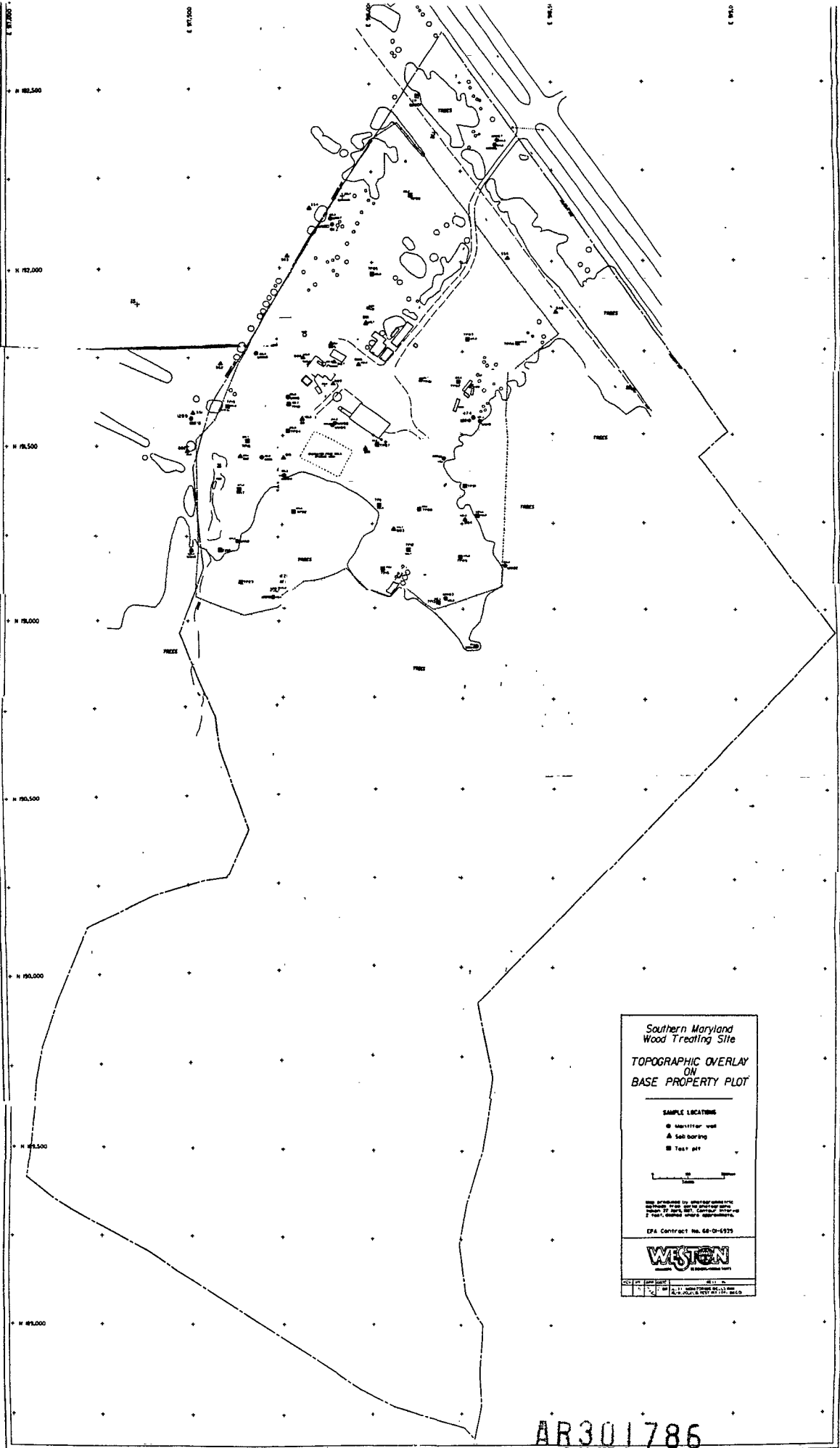
Appendix C

Appendix C

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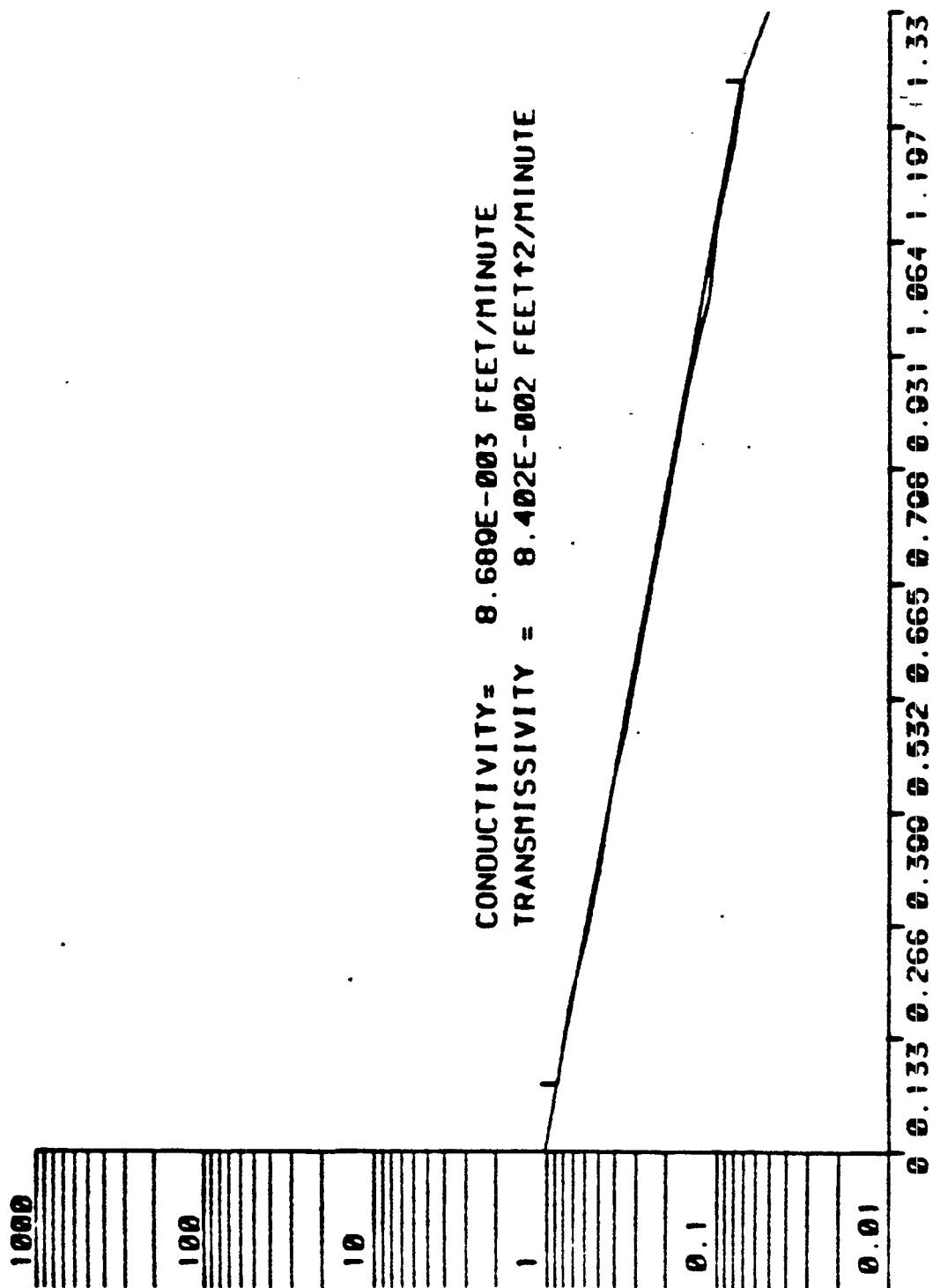


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Appendix D

Appendix D

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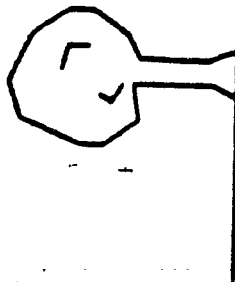
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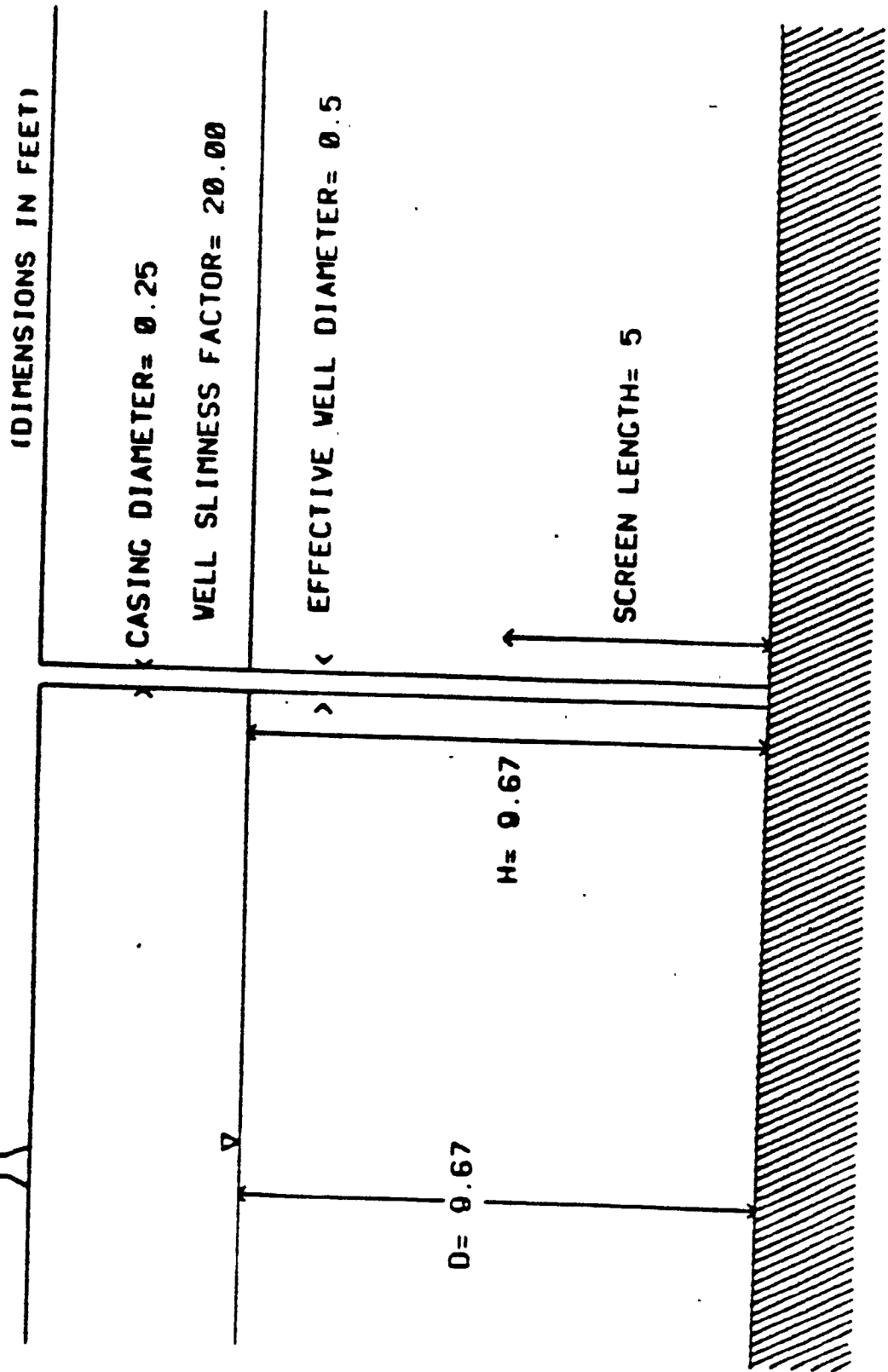
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D-1

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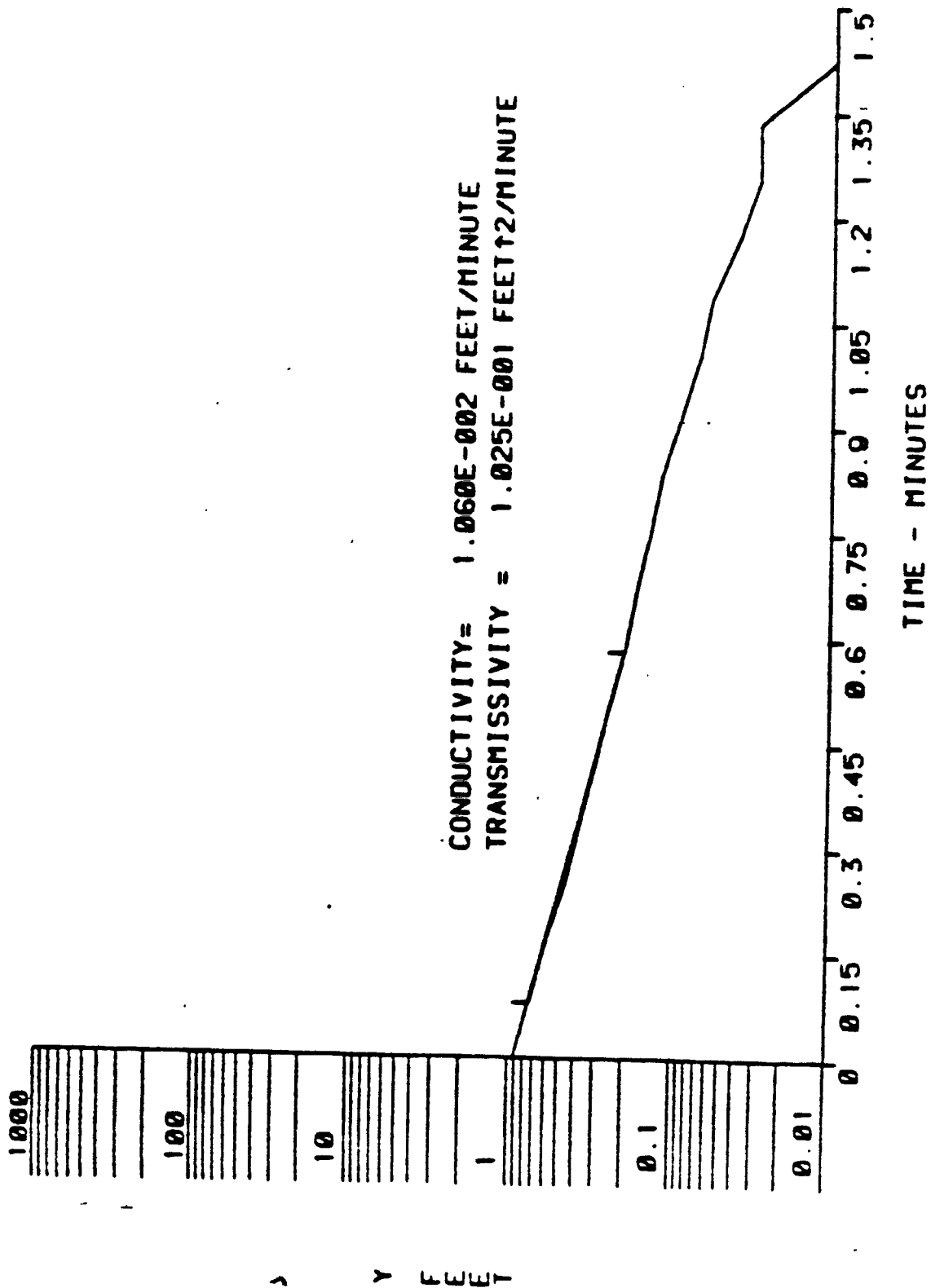


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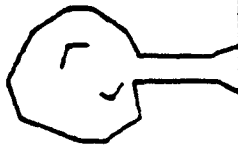


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4	0.49	0.33
5	0.42	0.42
6	0.34	0.5
7	0.29	0.58
8	0.24	0.67
9	0.2	0.75
10	0.17	0.83
11	0.14	0.92
12	0.11	1
13	0.1	1.08
14	0.08	1.17
15	0.07	1.25
16	0.05	1.33

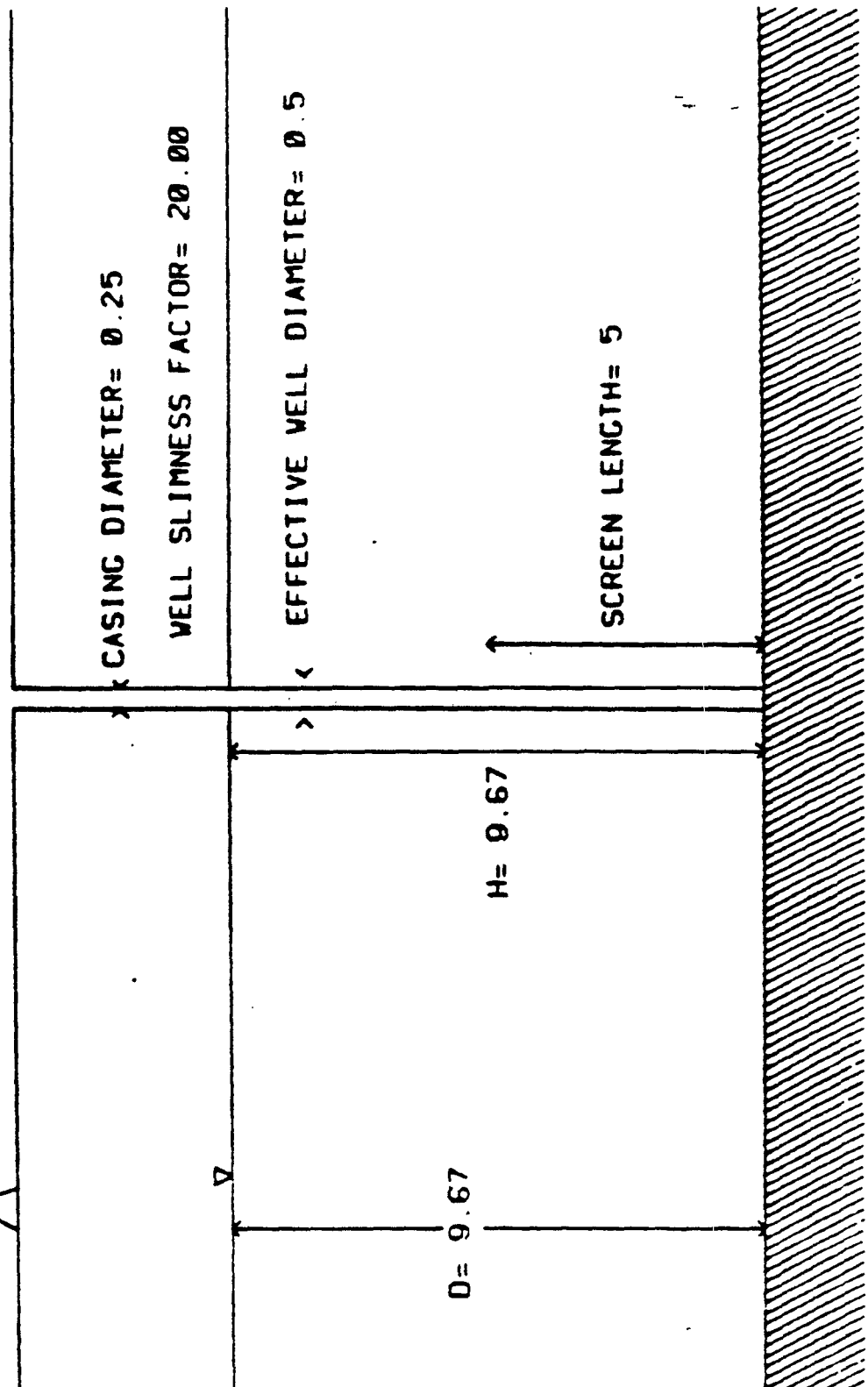


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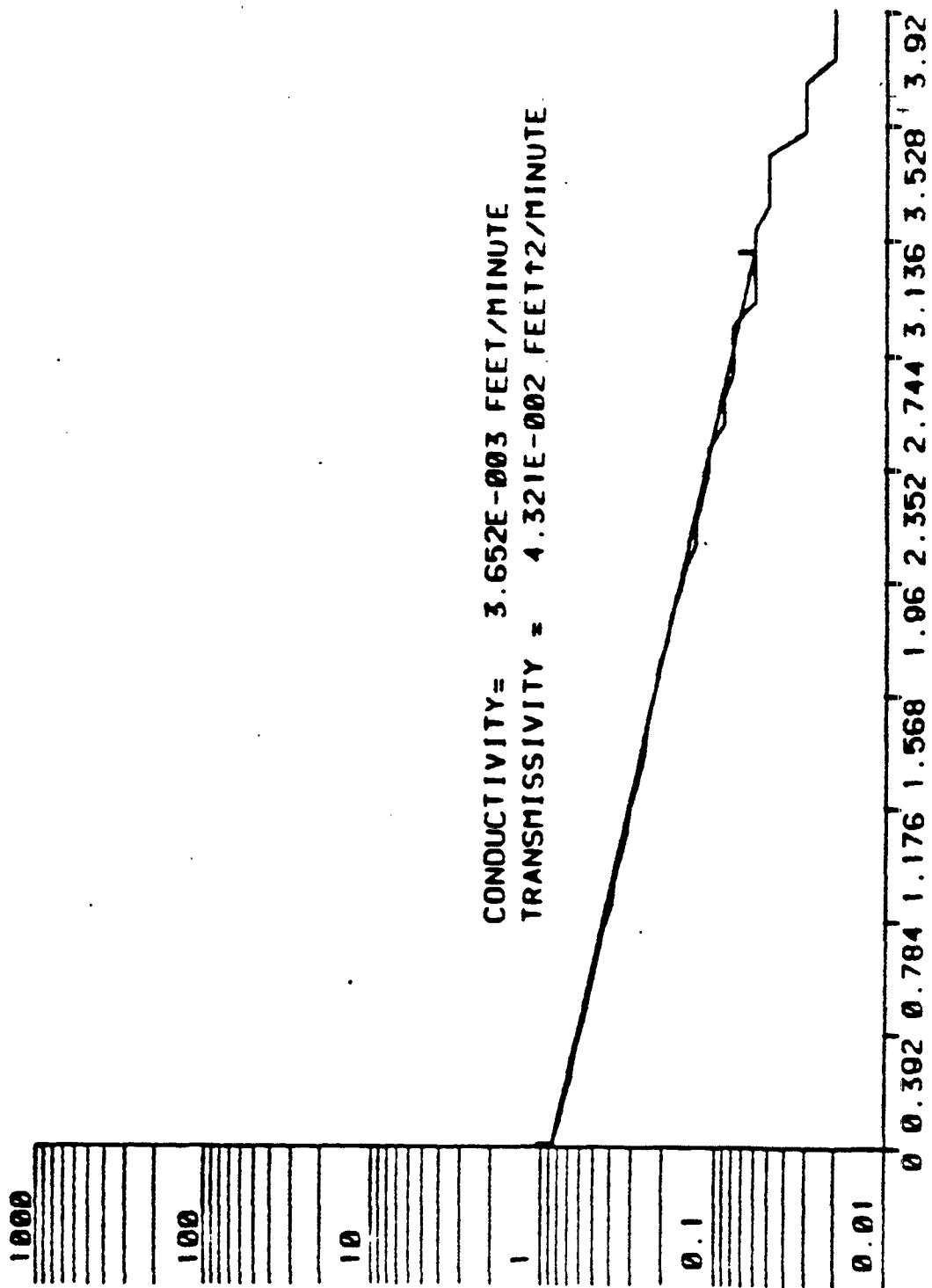
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(DIMENSIONS IN FEET)



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3	0.45	0.25
4	0.38	0.33
5	0.3	0.42
6	0.25	0.5
7	0.2	0.58
8	0.17	0.67
9	0.14	0.75
10	0.12	0.83
11	0.09	0.92
12	0.07	1
13	0.06	1.08
14	0.04	1.17
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16	0.03	1.33
17	0.01	1.42
18	0.01	1.5
19	0	1.58



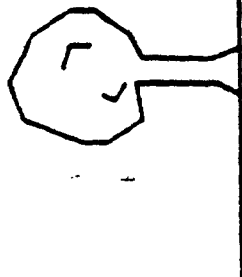
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Y FEET

D-7

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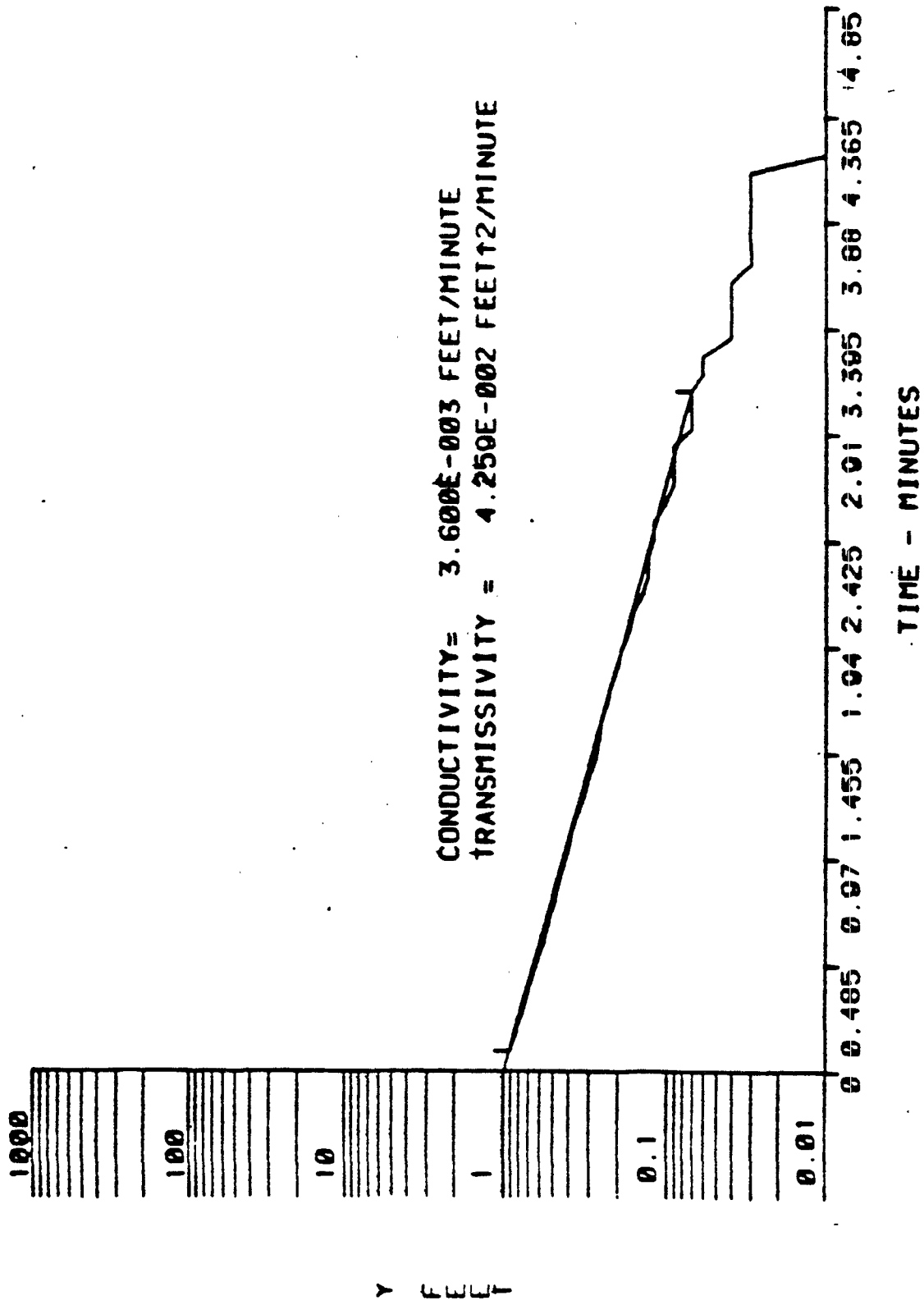
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7	0.54	0.5
8	0.5	0.59
9	0.47	0.67
10	0.44	0.75
11	0.39	0.84
12	0.38	0.92
13	0.35	1
14	0.32	1.00
15	0.31	1.17
16	0.28	1.25
17	0.26	1.34
18	0.25	1.42
19	0.24	1.5
20	0.22	1.50
21	0.21	1.67
22	0.19	1.75
23	0.18	1.84
24	0.16	1.92
25	0.15	2
26	0.13	2.00
27	0.13	2.17
28	0.12	2.25
29	0.11	2.34
30	0.11	2.42
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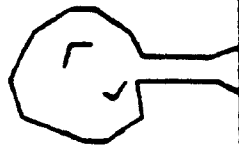
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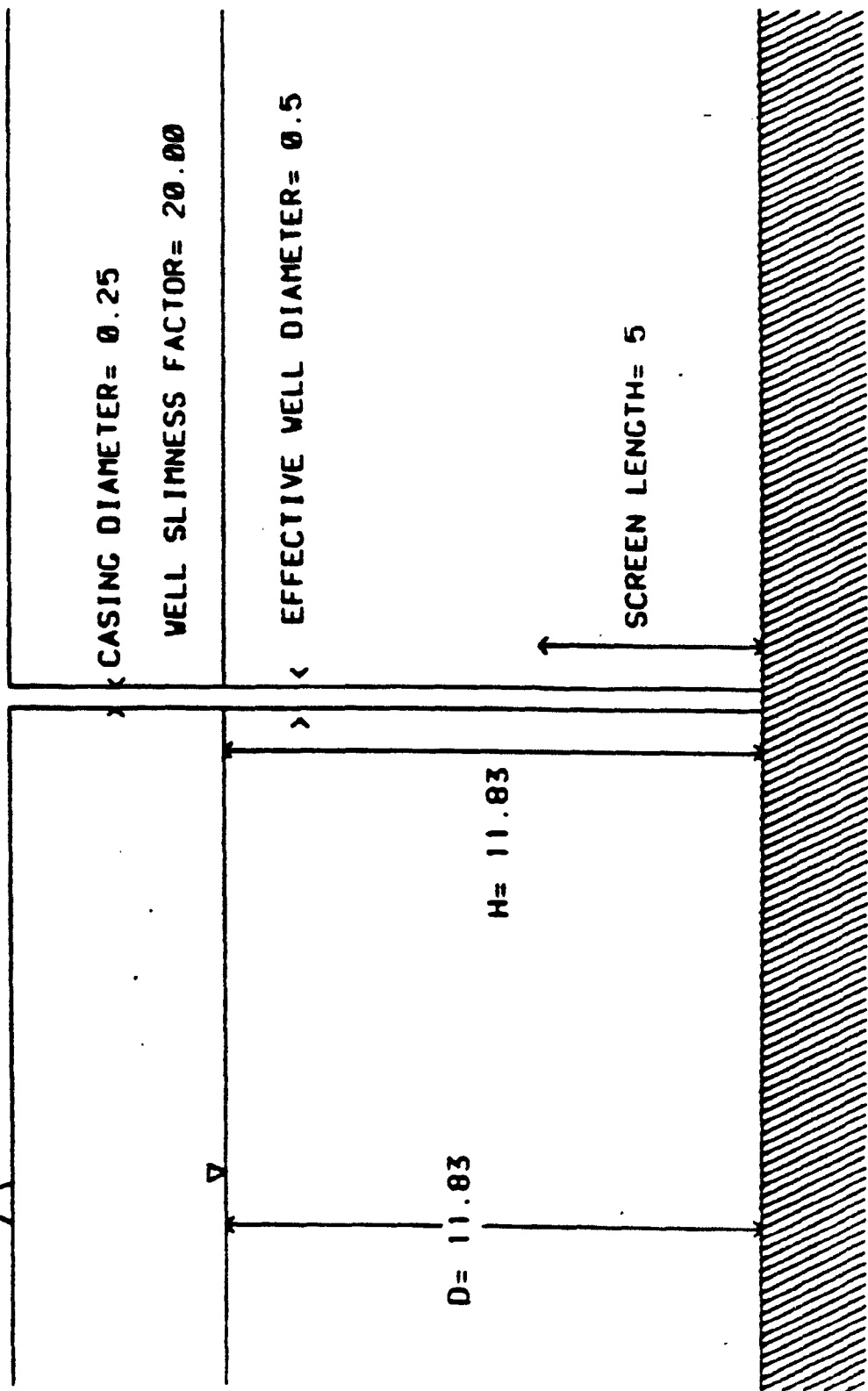


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SOUTHERN MARYLAND WOOD TREATING SITE-WELL MW03

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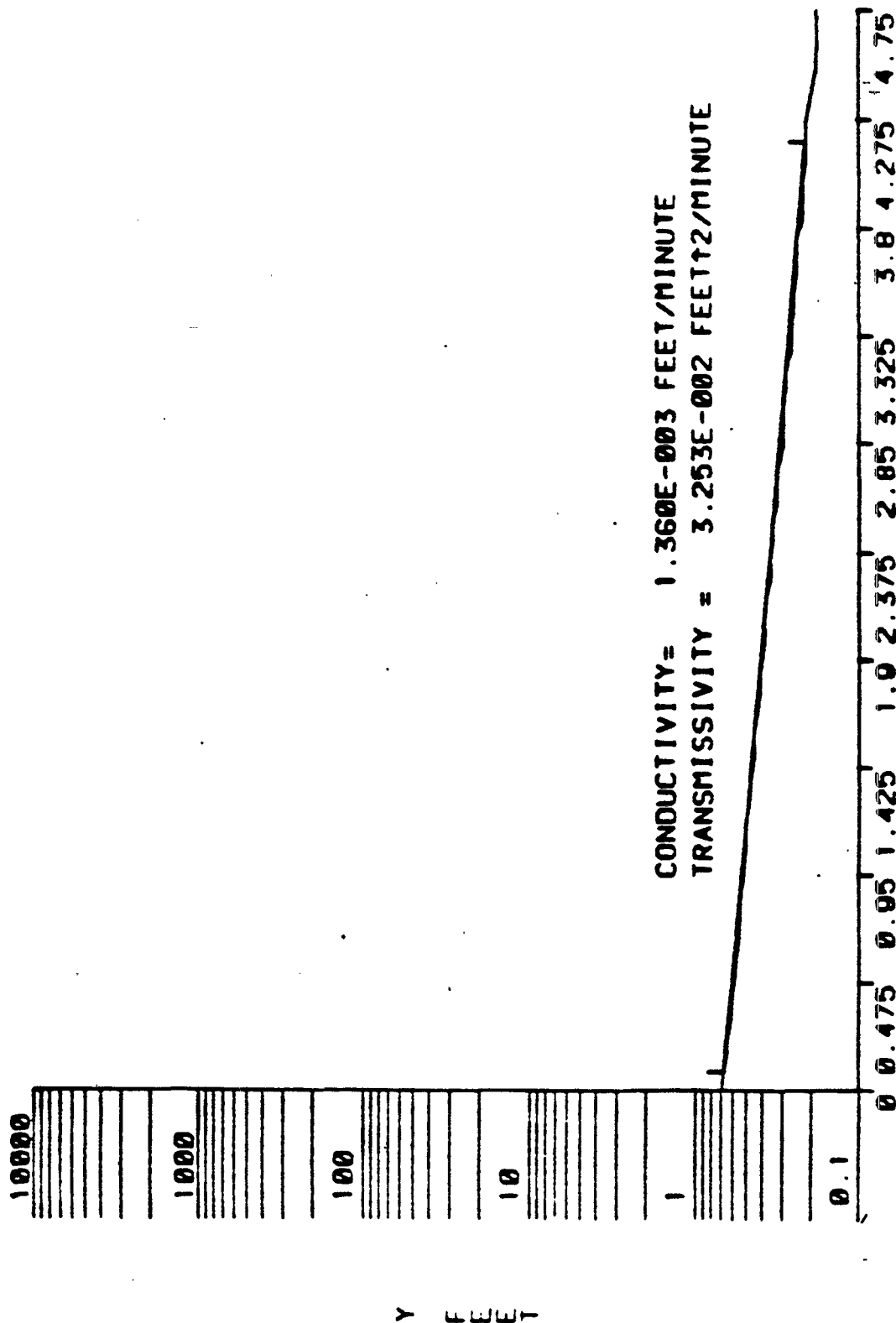
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	'Y' READINGS	TIME (MINUTES)
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2	0.84	0.17
3	0.77	0.26
4	0.71	0.35
5	0.66	0.43
6	0.61	0.51
7	0.56	0.6
8	0.53	0.68
9	0.49	0.76
10	0.46	0.85
11	0.43	0.93
12	0.4	1.01
13	0.38	1.1
14	0.35	1.18
15	0.32	1.26
16	0.3	1.35
17	0.27	1.43
18	0.26	1.51
19	0.25	1.6
20	0.23	1.68
21	0.22	1.76
22	0.2	1.85
23	0.19	1.93
24	0.17	2.01
25	0.16	2.1
26	0.14	2.18
27	0.13	2.26
28	0.13	2.35
29	0.12	2.43
30	0.12	2.51
31	0.1	2.6

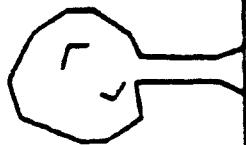
2.68
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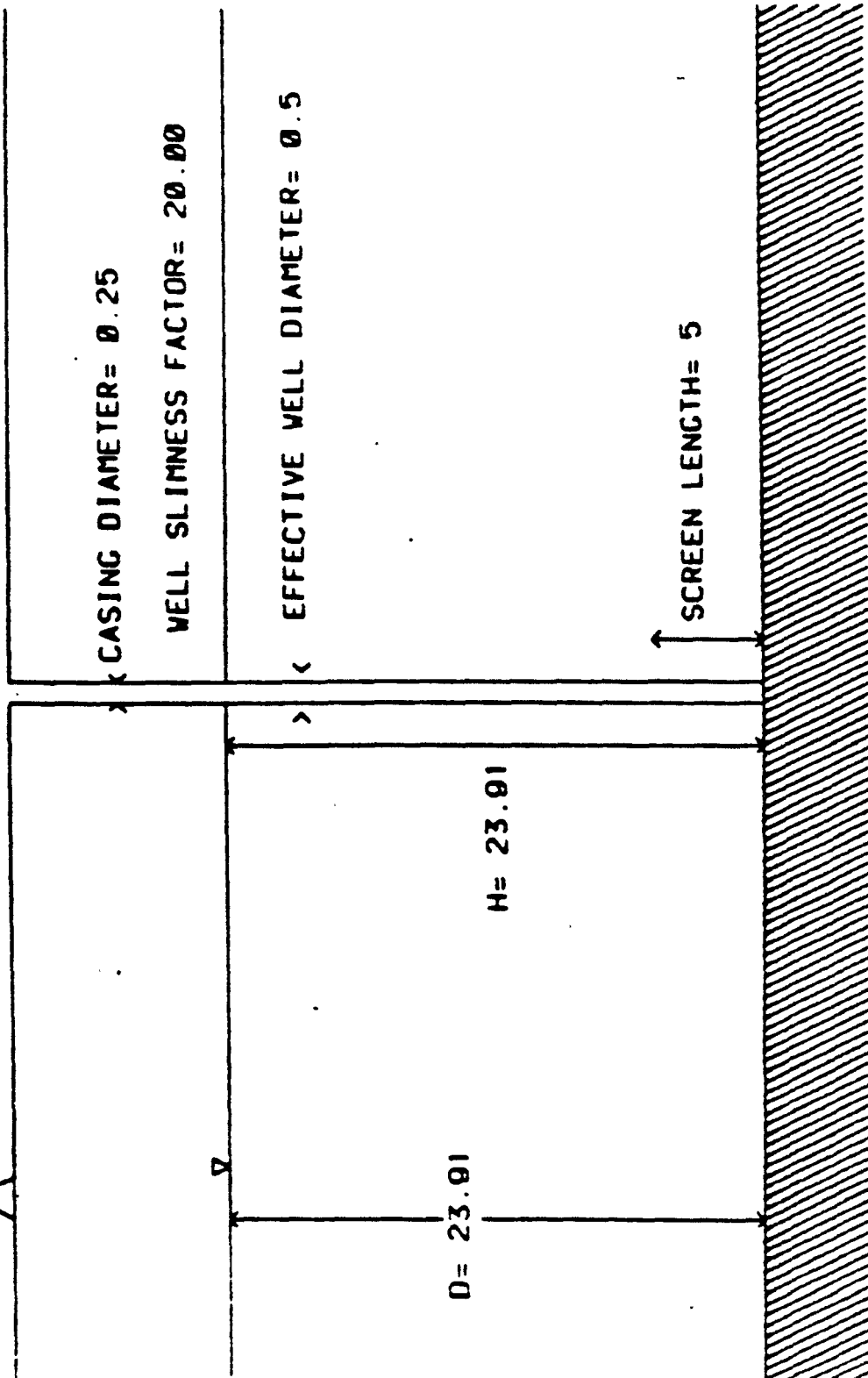


SOUTHERN MARYLAND WOOD TREATING SITE-WELL MW04



SOUTHERN MARYLAND WOOD TREATING SITE-WELL MW04

(DIMENSIONS IN FEET)



SOUTHERN MARYLAND WOOD TREATING SITE-WELL MW04

'Y' READINGS TIME (MINUTES)

1	0.67	0.08
2	0.65	0.17
3	0.64	0.25
4	0.61	0.33
5	0.6	0.42
6	0.58	0.5
7	0.57	0.58
8	0.55	0.67
9	0.54	0.75
10	0.54	0.83
11	0.52	0.92
12	0.51	1
13	0.5	1.08
14	0.5	1.17
15	0.48	1.25
16	0.47	1.33
17	0.45	1.42
18	0.44	1.5
19	0.44	1.58
20	0.42	1.67
21	0.41	1.75
22	0.41	1.83
23	0.39	1.92
24	0.38	2
25	0.38	2.08
26	0.37	2.17
27	0.35	2.25
28	0.35	2.33
29	0.34	2.42
30	0.34	2.5
31	0.32	2.58

2.67
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Appendix E

AR301807

DRILLING LOG

WELL NUMBER: MW-6 OWNER: _____
 LOCATION: _____ ADDRESS: SMWT, Hollywood
MD.
 TOTAL DEPTH: 37.0'
 SURFACE ELEVATION: _____ WATER LEVEL: _____
 DRILLING COMPANY: Harding-Hubert DRILLING METHOD: HSA DATE DRILLED: 6/17/84
 DRILLER: Sam HELPER: Brian Jeff
 LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0					Brn silty fine sand, poorly graded, loose, damp ST-sm
3.0		01	SS	2 3 6	Brn. f gr. clayey silt to silty fine sand, poorly graded, loose, damp ML-sm
		02	SS	2 2 2	
11.0					White silty clay, trace fine sand, medium to stiff, medium Plasticity, moist. CL
13.5					
14.1		03	SS	5 6 6	Brn. clayey silt, trace fine sand, non plastic, medium dense, moist. ML
					Brn f gr. silty clay, trace fine sand, stiff, medium plasticity, moist CL
17.0					
					Orange brn medium to fine sand, trace silt, poorly graded, medium dense, moist to wet SP
		04	SS	10 8 8	

ASTM D1586



DRILLING LOG

WELL NUMBER mw-6 OWNER: _____
LOCATION _____ ADDRESS Smwt, Hollywood, MD
TOTAL DEPTH 37.0'
SURFACE ELEVATION: _____ WATER LEVEL: _____
DRILLING COMPANY: Harding-Hubert DRILLING METHOD: HSA DATE DRILLED: 6/17/86
DRILLER: Sam HELPER: Brian, Jeff
LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
20.5		05	SS	4 6	Orange brn silty medium to fine sand, poorly graded, medium dense saturated. SM
23.2		06	SS	3 4	Brn coarse to fine sand, trace silt, well graded, medium dense, saturated. SW
		07	SS	3 3 5 7	
30.5		08	SS	7 3 5	Yellow brn. silty clay, trace fine sand, stiff, medium plasticity, moist, CL-CH
32.0		09	SS	2 2 2	Yellow brn & gr. silty clay, trace fine sand, stiff, high plasticity, moist, CL-CH
35		10	SS	2 2 3	Dark gr. silty clay, trace coarse to fine sand, medium to stiff, high plasticity, moist CH-OH
37.0		11	SS	2 3 3	End of boring @ 37.0'

* ASTM D1586

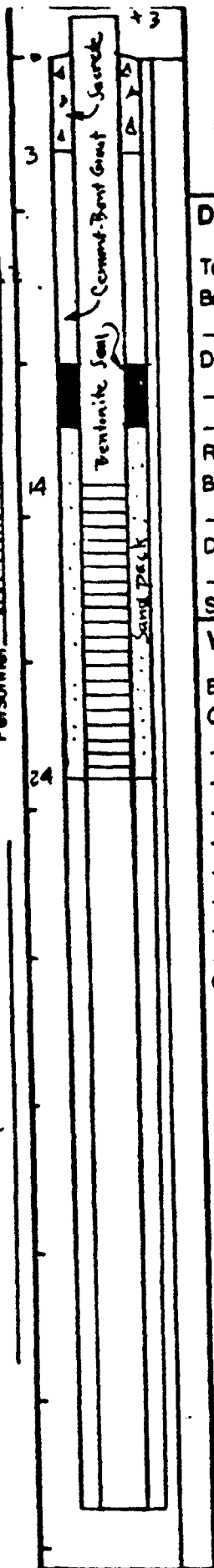
E-3

SHEET 1 OF 1

AR301810

Location Hollywood, MD.
 Personnel Karen Allen

Project Southern Maryland Wood Treatment



Well Construction Summary

Well mw-7

Location or Coords: _____

Elevation, Ground Level _____
 Top of Casing _____

Drilling Summary:

Total Depth 24.5'
 Borehole Diameter ~11"
 Driller Sam
 Rig Mobil D-6
 Bit(s) 3 1/2" ID x 6 3/8" OD #
8" ID x 11" OD
 Drilling Fluid None
 Surface Casing _____

Well Design:

Basis: Geologic Log ☒ Geophysical Log _____
 Casing String(s): C=Casing S=Screen
 14' - 24' S
 14' - 2' C
 Casing C1 4" ID PVC Riser, Sch 40,
flush joint
 C2 _____
 Screen: S1 4" ID PVC, Sch 40, #10
Continuous wound
 S2 _____
 Centralizers None
 Filter Material Well sorted coarse
sand
 Cement Portland, type I
 Other Bentonite - Super Gel x
Bentonite Pellets - 1/2" x
Steel Protector - 6" x 5'

Construction Time Log:

Task	Start		Finish	
	Date	Time	Date	Time
Drilling				
HSA	6/19	0900	6/19	1030
Well Const.	6/19	1030	6/20	0730
Geophys Logging				
Casing				
Filter Placement	6/19	1030	6/19	1330
Cementing	6/20	0600	6/20	0730
Development:	7/17	-	7/18	-
Other				

Well Development:

Developed mw-7 via submersible
pump (Gauld), removing approx 110
gal.

Comments:

Approx. 2 1/2 hrs spent on development.
Well water fairly clear. No sediments
noted in well



DRILLING LOG

WELL NUMBER MLW-8 OWNER: _____
LOCATION _____ ADDRESS SMWT, Hollywood, MD.

TOTAL DEPTH 30.5'
SURFACE ELEVATION _____ WATER LEVEL: _____
DRILLING COMPANY Harding-Hubert DRILLING METHOD: HSA DATE DRILLED 6/20/86
DRILLER Sam, Tim HELPER Brian, Jeff
LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01	SS	18 15 13	Bn clayey to sandy silt, poorly graded, medium dense, dry ML-SM
2.4					
		02	SS	9 9 11	Rust to orange bn medium to fine sand, poorly graded, medium dense, damp. SP
		03	SS	11 14 18	
		04	SS	6 8 4	Moist to wet below 14.0'
					Saturated below 17.5'
		05	SS	7 12 16	

* ASTM D1586

E-6

SHEET 1 OF 2

AR301813

DRILLING LOG

WELL NUMBER MW-8 OWNER: _____
 LOCATION _____ ADDRESS Smilt, Hollywood, MD.

 TOTAL DEPTH 30.5'
 SURFACE ELEVATION: _____ WATER LEVEL: _____
 DRILLING COMPANY: Harding-Hubert DRILLING METHOD: HSA DATE DRILLED: 6/20/86
 DRILLER Sam, Tim HELPER: Brian, Jeff
 LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
		05	SS		Rust to orange brn medium to fine sand, poorly graded, medium dense, saturated SP
22.3					
		06	SS	25 31 35	Rust to orange brn medium to fine sand, little silt, poorly graded, very dense, saturated. SP-Sm
26.0					
		07	SS	89 50	Rust to orange brn. medium to fine sand, trace silt, poorly graded, very dense, saturated, appears contaminated SP
28.5					
		08	SS	2 2 1	Yellow brn f. gr. silty clay, trace fine sand, medium, medium plasticity, moist. CL-CH
30.5					End of boring @ 30.5'

Well Construction Summary

Location or Coords: _____

Elevation: Ground Level _____

Top of Casing _____

Drilling Summary:

Total Depth Boring to 300' Well @ 28.0'
 Borehole Diameter ~11"

Driller Tim JacksonRig Mobil D-60

Bit(s) 3 1/4" ID x 6 5/8" OD &
8" ID x 11" OD

Drilling Fluid None

Surface Casing _____

Well Design:

Basis: Geologic Log ☒ Geophysical Log _____

Casing String(s): C=Casing S=Screen

18' - 28' S

18' - +2' C

Casing C1 4" ID PVC Riser, Sch 40,
Flush joint

C2 _____

Screen: S1 4" ID PVC, Sch. 40, #10
Continuous wound

S2 _____

Centralizers NoneFilter Material Well Sorted coarse sandCement Portland, Type I

Other Pentonite - Super Gel x
Granulated Bentonite (slurry)
Steel Protector - 6" x 5'

Construction Time Log:

Task	Start		Finish	
	Date	Time	Date	Time
Drilling				
HSA	6/28	0655	6/28	1020
HSA	6/28	1740	6/28	1630
Well Const.	6/28	1835	6/29	0945
Geophys Logging				
Casing				
Filter Placement	6/28	1835	6/28	1925
Cementing	6/29	0600	6/29	0945
Development	7/19	-	7/21	-
Other				

Well Development:

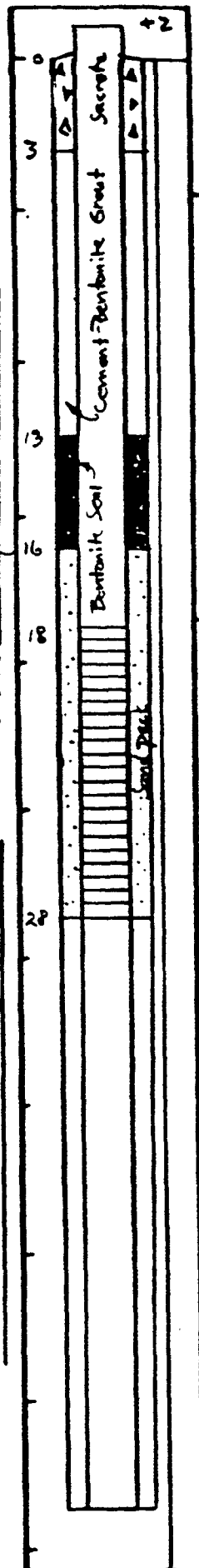
Development of MW-10 via pvc bailer.
Removed approx. 55 gal.

Comments:

Approx. 2 hrs. was spent on
development. Well water appeared
reasonably clear of sediment.
No sediment noted in well.

Location Holly wood, MD.
 Personnel Tracy La Costa

Project Southern Maryland Wood Treatment





DRILLING LOG

WELL NUMBER MW-10

LOCATION _____

OWNER: _____

ADDRESS Smwit, Hollywood, MD.

TOTAL DEPTH 30.0'

SURFACE ELEVATION: _____

WATER LEVEL: _____

DRILLING COMPANY Harding-Hubert

DRILLING METHOD: HSA

DATE

DRILLED 6/28/86

DRILLER Jim

HELPER Brian, Jeff

LOG BY: T. La Costa

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG			DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	
0	01	SS	4 6 8	Light brn. fine sand & silt, poorly graded, medium dense, dry SM-ML
3.0				
	02	SS	14 16 19	Pale gr. & orange brn medium to fine sand, trace silt, poorly graded, medium dense, dry. SP
8.0				
	03	SS	5 7 8	Pale gr. silty clay, trace to little fine sand, stiff, medium to high plasticity, moist CL-CH
	04	SS	6 9 13	Pale gr. medium to fine sand, trace silt, poorly graded, medium dense, moist ST

ASTM D1586

E-10

SHEET 1 OF 2

AR301817



DRILLING LOG

WELL NUMBER. MW-10 OWNER: _____
LOCATION. _____ ADDRESS: SMWT, Hollywood, MD.
TOTAL DEPTH 300'
SURFACE ELEVATION _____ WATER LEVEL: _____
DRILLING COMPANY Harding-Hubert DRILLING METHOD: HSA DATE 6/28/86
DRILLER Tim HELPER: Brian, Jeff
LOG BY: T. Le Costa

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG			DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	
	05	SS	6 10 9	Light gr medium to fine sand, trace silt, poorly graded, medium dense, moist to wet. SP
23.0				Orange brn medium sand, little silt, poorly graded, dense, saturated SP-SM
	06	SS	20 34 21	
26.5	07	SS	50	Orange brn medium to coarse sand, trace fine gravel, poorly graded, dense, saturated SP
27.0	08	SS	12 27 8	
28.0	09	SS	7 6 5	Orange brn. medium to coarse sand, little gravel, trace silt, poorly graded, medium dense, saturated. SP
				Drk. gr. silty clay, trace fine sand, stiff, high plasticity, moist CH-DH
				End of boring @ 30.0'

* ASTM D1586

E-11

SHEET 2 OF 2

AR301818

Top of Casing

Construction Time Log:

Task	Start		Finish	
	Date	Time	Date	Time
Drilling				
HSA	6/29	1115	6/29	1500
HSA	6/30	0700	6/30	0745
Well Const	6/30	0745	6/30	1015
Geophys Logging				
Casing				
Filter Placement	6/30	0745	6/30	1015
Cementing	7/2	1030	7/2	1100
Development	7/22	-	7/22	-
Other				

Development of MW-11 done by
PVC bailer. Removed approx 25
gal.

Aprox. 1 hr. was spent on MW-11. Well water was contaminated but was relatively clear of sediments.

Steel Protector - 6" ϕ x 5'

AR301819

DRILLING LOG

WELL NUMBER: MW-11 OWNER: _____
 LOCATION: _____ ADDRESS: SMWT, Hollywood, MD.

 SURFACE ELEVATION: _____ TOTAL DEPTH: 12.0'
 WATER LEVEL: _____
 DRILLING COMPANY: Harding-Hubert DRILLING METHOD: HSA DATE DRILLED: 6/29/86
 DRILLER: Jim HELPER: Brian, Jeff
 LOG BY: J. Vann

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01	SS	5 10 8	Red brn clayey medium to coarse sand, medium plasticity, moist. SC
		02	SS	11 12 16	
4.0		03	SS	13 18 15	
4.6		04	SS	8 8 15	Brn. silty clay, little sand, stiff, medium plasticity, moist CL
		05	SS	14 23 26 32	Blk. f. gr. brn coarse sand, some clay, low to medium plasticity, medium dense, mottled, wet to saturated SC
9.0					Orange brn silty to clayey medium to fine sand, poorly graded, medium plasticity, saturated SC-SM
2.0					End of boring @ 12.0'

* ASTM D1586

E-13

SHEET 1 OF 1

AR301820



DRILLING LOG

WELL NUMBER. MW-12 OWNER: _____
LOCATION. _____ ADDRESS: SMWT, Hollywood, MD.

TOTAL DEPTH. 12.0'
SURFACE ELEVATION _____ WATER LEVEL: _____
DRILLING COMPANY. Harding-Hubert DRILLING METHOD: HSA DATE DRILLED: 6/30/86
DRILLER Tim HELPER: Brig, Jeff
LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG			DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	
0	01	SS	100	Drk red silty medium to fine sand, poorly graded, cemented, appears contaminated, dry. SM
	02	SS	100	Brn. & blk. silty coarse to fine sand, poorly graded, very dense, appears contaminated, saturated. SM
4.0				
	03	SS	6 26 42 50	
	04	SS	100	Yellow brn clayey to silty coarse to fine sand, poorly graded, medium dense, mottled, saturated. SM
	05	SS	12 22 45 48	
11.0	06	SS	15 9 7 8	Yellow brn. silty clay, trace fine sand, stiff, medium plasticity, moist CL-CH
11.4				
12.0				End of boring @ 12.0'

ASTM D1586

E-15

SHEET 1 OF 1

AR301822

Well Construction Summary

Location or Coords: _____

Elevation. Ground Level

Top of Casing

Drilling Summary:

Total Depth Boring @ 31.5' Well @ 28.5'

Borehole Diameter ~11"

Driller Tim Jackson

Rtg Mobil D-60

Bill(s) $3\frac{1}{4}'' \text{ ID} \times 6\frac{5}{8}'' \text{ OD}$

8" SD x 11" OD

Drilling Fluid Nor e

Surface Casing

Well Design:

Basis: Geologic Log ✓ Geophysical Log

Casing String(s): C = Casing S = Screen

$$18\frac{1}{2} - 20\frac{1}{2} = S$$
$$18\frac{1}{2} - +2 \quad C$$

Casing C1 4" ID PVC Riser, Sch 40,
flush joint

C2.

Screen: 51 4" ID PVC Sch 40, #10
Continuous wound

\$2.

Centralizers None

Filter Material Well sorted coarse sand

Cement Portland, type I

Other Bentonite, Super Gel x

Steel Protector - 6" ϕ x 5'

Granulated Bentonite (slurry)

Construction Time Log:

Task	Start		Finish	
	Date	Time	Date	Time
Drilling				
HSA	7/1	1210	7/1	1700
Well Const.	7/2	0600	7/7	0800
Geophys Logging				
Casing				
Filter Placement	7/2	0600	7/2	0800
Cementing	7/7	0630	7/7	0800
Development	7/24	-	7/22	-
Other				

Well Development:

Developed via stainless steel
bailer removing gal.

Comments:

Aprox. 2 1/2 hrs Spent on development
Well water was reasonably clear of
sediment after development.



DRILLING LOG

WELL NUMBER MW-13

OWNER: _____

LOCATION _____

ADDRESS SMWT, Hollywood, MD.

TOTAL DEPTH 31.5'

SURFACE ELEVATION _____

WATER LEVEL: _____

DRILLING COMPANY Harding-Hubert

DRILLING METHOD: HSA

DATE

DRAILED 7/1/86

DRILLER Tim

HELPER Brian, Jeff

LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0					
		01	SS	2 5 9 15	Bra clayey to silty fine sand, occasional medium sand, poorly graded, medium dense, damp. SM
3.0					
		02	SS	4 2 2 2	Orange bra. silty fine sand, occasional medium to coarse sand, poorly graded, loose, moist SM
		03	SS	2 11 11 27	
13.5					
		04	SS	5 6 6 9	Light bra. silty to clayey medium to fine sand, occasional coarse sand, poorly graded, medium dense, slightly plastic, moist SC-SM
		05	SS		

* ASTM D1586

E-17

SHEET 1 OF 2

AR301824

DRILLING LOG

WELL NUMBER MW-13

LOCATION _____

OWNER: _____

ADDRESS: SMITH, Hollywood, MD.

TOTAL DEPTH 31.5'

SURFACE ELEVATION _____

WATER LEVEL: _____

DRILLING COMPANY Harding-Hubert

DRILLING METHOD: HSA

DATE DRILLED: 7/1/86

DRILLER: Tim

HELPER: Brian, Jeff

LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
		05	SS	16 42 58	Light brn silty to clayey medium to fine sand, occasional coarse sand, poorly graded, medium dense, slightly plastic, wet
23.0		06	SS	38 62	SC-SM
		07	SS	100	Drk red silty coarse to medium sand, some cementation, poorly graded, very dense, saturated. SM
26.7		08	SS	100	
		09	SS	11 9 9 9	Brn silty medium to coarse sand, poorly graded, medium dense, saturated SM
28.5		10	SS	7 5 6 6	Yellow brn. silty clay, trace fine sand, stiff, medium plasticity, moist. CL-CH
31.5					End of boring @ 31.5'

* ASTM D1586

E-18

SHEET 1 OF 1

AR301825

Well Construction Summary

Location or Coords: _____

Elevation: Ground Level _____
Top of Casing _____

Drilling Summary:

Total Depth Boring to 13.5', well @ 10.5'
Borehole Diameter ~11"

Driller Tim Jackson

Rig Mobil D-60

Bill(s) $3\frac{1}{4}" \text{ ID} \times 6\frac{5}{8}" \text{ OD}$ & $8" \text{ ID} \times 11" \text{ OD}$

Drilling Fluid None

Surface Casing

Well Design:

Basis: Geologic Log ✓ Geophysical Log

Casing String(s): C = Casing S = Screen

5.5' - 10.5' S | - - - - -

<u>5.5'</u>	-	<u>+2'</u>	<u>C</u>	<u> </u>	<u> </u>	<u> </u>
				-		

_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

_____	_____	_____	_____	_____	_____
•			•		

[illegible]

Grade 4 A" Trs PVC Tubes Sch 40

Casing C1 = 10 PVC RISER, 300-40,
Flux joint

4145A J0107

C2 _____

4" ID PVC S. & A. #10

Screen: S1 4 1/2 PVC, Sch. 40, #10
Gasoline based

Continuous wound

S2 _____

Centralizers Ylone

Filter Material Well sorted coarse sand

Cement Portland, type I

Other Bentonite - Super Gel X

Bentonite Pellets - $\frac{1}{2}$ lb

Steel Protector - 6" ϕ x 5'

Construction Time Log:

Task	Start		Finish	
	Date	Time	Date	Time
Drilling HSA	7/7	1130	7/7	1230
Well Const	7/7	-	7/9	-
Geophys Logging				
Casing				
Filter Placement	7/7	1230	7/7	1330
Cementing	7/9	0730	7/9	0745
Development	7/21	-	7/22	-
Other				

Well Development:

Developed mhw-14 using pvc bailer,
removing approx 45 gal.

Comments:

Well had some sediment @ bottom of screen, but were removed from bailing. Water reasonably clear of sediments after 2 hrs. of bailing.



DRILLING LOG

WELL NUMBER MW-14 OWNER: _____
LOCATION _____ ADDRESS SMWT, Hollywood, MD.

TOTAL DEPTH 13.5'
SURFACE ELEVATION _____ WATER LEVEL: _____
DRILLING COMPANY Harding-Hubert DRILLING METHOD: HSA DATE DRILLED: 7/7/86
DRILLER Tim HELPER: Brian, Jeff
LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0					Orange brn fine sand, occasional medium sand, some silt, poorly graded, medium dense, moist SP-SM
8.0		01	SS	7 8 11 16	
					Orange brn silty coarse to fine sand, trace fine gravel, well graded, medium dense, saturated. SM
10.5		02	SS	11 9 9 6	
11.5					Yellow brn silty to clayey coarse to fine sand, well graded, medium dense, medium plasticity, wet SC-SM
		03	SS	4 4 5 5	
13.5					Yellow brn. silty clay, trace fine sand, stiff, medium plasticity, moist CL-CH
					End of boring @ 13.5'

* ASTM D1586

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SHEET 1 OF 1

AR301827

Well Construction Summary

Location or Coords: _____

Elevation: Ground Level _____
Top of Casing _____

Drilling Summary:

Total Depth Boring to 12.0', well Q9.0'
Borehole Diameter ~11"

Driller Tim Jackson

Rig Mobil 3-60

Bul(s) $3\frac{1}{4}" \text{ ID} \times 6\frac{5}{8}" \text{ OD}$
 $8" \text{ ID} \times 11" \text{ OD}$

Drilling Fluid None

Surface Casing

Well Design:

Basis: Geologic Log ✓ Geophysical Log

Casing String(s): C = Casing S = Screen

[illegible]

Casing C1: 4" ID PVC Riser, Sch. 40,
Flush joint

C2

Screen: S1 4" ID PVC, Sch. 40, #10
Continuous wound

S2

Centralizers None

Filter Material Well sorted coarse sand

Cement Portland, type I

Other Bentonite - Super Gel x
Bentonite Pellets - 1/2" Ø
Steel Protector - 6" Ø x

Construction Time Log:

[illegible]

Well Development:

Developed mw-5 w/ pre bailer & stainless steel bailer, removing approx 25 gal.

Comments:

Spent approx. $1\frac{1}{2}$ hrs. bailing & surging well. Recovery is slow, & was very silty. Sediments inside screen when development began, but was removed using rig rods w/ jetting method. Displaced sediments from well by clear water.

Bailed for 1 hr. afterwards, recharging a little quicker, yet still slow. Water reasonably clear & no sediments noted in screen.

Location Hollywood, MD.
Personnel K. Van Alten

Project Southern Maryland Wood Treatment



DRILLING LOG

WELL NUMBER. MW-15 OWNER: _____
LOCATION _____ ADDRESS: Smart, Hollywood, MD.

TOTAL DEPTH 12.0'
SURFACE ELEVATION: _____ WATER LEVEL: _____
DRILLING COMPANY Harding-Hubert DRILLING METHOD: HSA DATE 7/8/86
DRILLER Tim HELPER: Brian, Jeff
LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01	SS	4 5 6	Brn fine sand, trace silt, poorly graded, medium dense, damp SP
		02	SS	5 3 3 5	
		03	SS	1 2 2 2	
6.0		04	SS	4 4 7 2	Light brn. silty medium to fine sand, poorly graded, loose, saturated. SM
7.0		05	SS	8 7 7 3	Orange brn. silty medium to fine sand, poorly graded, loose, saturated. SM
8.0		06	SS	5 3 2 3	Yellow brn. silty to clayey coarse to fine sand, well graded, medium dense, slightly plastic, saturated SC-SM
10.5					Yellow brn. silty clay, trace fine sand, stiff, medium plasticity, moist CL
2.0					End of boring @ 12.0'

* ASTM D1586

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SHEET ____ OF 1

AR301829



DRILLING LOG

WELL NUMBER MW-16 OWNER: _____
LOCATION _____ ADDRESS SMWT, Hollywood, MD.

TOTAL DEPTH 21.5'
SURFACE ELEVATION _____ WATER LEVEL: _____
DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE 7/10/86
DRILLER Tim HELPER Brian, Jeff
LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0					Rust brn silty medium to fine sand, poorly graded, medium dense, contaminated, moist SM
		01	SS	3 6 10 15	
8.0					Brn medium to fine sand, trace silt, poorly graded, dense, contaminated, saturated. SP
		02	SS	9 14 21 24	
11.5					Brn medium to fine sand, occasional coarse sand, trace silt, poorly graded, dense, contaminated, saturated SP
		03	SS	12 14 17 17	
15.0					Rust brn. silty medium to fine sand, poorly graded, dense, contaminated, saturated. SM
		04	SS	15 30 20 25	
		05	SS	2 2 3 5	Brn. coarse to fine sand, little silt, well graded, dense, contaminated, saturated SW-SM
19.0					
19.5		06	SS	8 17 30 12	

* ASTM D1586

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SHEET 1 OF 2

AR301831

DRILLING LOG

WELL NUMBER ML-17 OWNER: _____
 LOCATION _____ ADDRESS SWW, Hollywood, MD.
 _____ TOTAL DEPTH 40.0'
 SURFACE ELEVATION _____ WATER LEVEL: _____
 DRILLING COMPANY Harding-Hubert DRILLING METHOD: HSA DATE DRILLED: 7/14/86
 DRILLER: Tim HELPER: Brian, Jeff
 LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01	SS	6 11 11 15	Orange brn. clayey silt, little medium to fine sand, poorly graded, medium dense, damp. ML
3.0		02	SS	12 11 14 17	Orange brn. Silty medium to fine sand, little clay, poorly graded, dense, moist. SM
		03	SS	5 10 12 15	
13.0		04	SS	3 6 9 9	Orange brn. Silty medium to fine sand interbedded with silty coarse to fine sand, poorly to well graded, medium dense, moist. SM
18.0		05	SS		Orange brn & white medium to fine sand, trace silt, poorly graded, medium dense, moist. SP

* ASTM D1586

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SHEET 1 OF 2

AR301834



DRILLING LOG

WELL NUMBER. MW-17 OWNER: _____
LOCATION _____ ADDRESS SMWT, Billy Wood, MD.

TOTAL DEPTH 40.0'
SURFACE ELEVATION _____ WATER LEVEL: _____
DRILLING COMPANY Harding-Hubert DRILLING METHOD: HSA DATE DRILLED: 7/4/86
DRILLER Tim HELPER: Brian, Jeff
LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
		05	SS	4 7 10 11	Orange brn. & white medium to fine sand, trace silt, poorly graded, medium dense, moist. SP
22.0		06	SS	8 6 8 7	Orange brn. & white medium to fine sand, trace coarse sand, trace silt, poorly graded, medium dense, saturated. SP
		07	SS	6 8 11 11	
		08	SS	8 11 13 16	
		09	SS	10 8 4 5	
37.0					Dnk. gr. silty clay, trace fine sand, stiff, high plasticity, moist to saturated CH-OH
0.0		10	SS	4 4 5 4	End of boring @ 40.0'

* ASTM D1586

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SHEET 2 OF 2

AR301835

DRILLING LOG

WELL NUMBER B-1 OWNER: _____
 LOCATION _____ ADDRESS Smart, Hollywood, MD.

 TOTAL DEPTH 40.0'
 SURFACE ELEVATION _____ WATER LEVEL: ~22'
 DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE DRILLED 7/7/86
 DRILLER Tim HELPER Brian, Jeff

LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01	SS	9 12 7 9	Brn fine sand, trace silt, poorly graded, medium dense, damp SP
2.0		02	SS	11 21 34 21	Orange brn. fine sand, little silt, poorly graded, very dense, moist. SP-SM
4.5		03	SS	11 15 18 20	Orange brn silty medium to fine sand, occasional coarse sand, poorly graded, dense, moist. SM
7.0		04	SS	8 14 23 27	Rust red & white silty to clayey medium to fine sand, occasional coarse sand, poorly graded, medium plasticity, moist SC-SM
7.5		05	SS	11 19 19 19	Rust orange & brn. medium to fine sand, little silt, poorly graded, dense, moist SP-SM
11.0		06	SS	4 10 20 22	Brn to orange brn. medium to fine sand, trace silt poorly graded, dense, moist. SP
13.5		07	SS	10 15 17 20	White medium to fine sand, trace silt, poorly graded, dense, moist. SP
16.0		08	SS	7 14 16 22	
		09	SS	7 19 25 24	Brn. & white medium to fine sand, trace silt, poorly graded, dense, moist. SP
		10	SS	7 14 20 21	

* ASTM D1586

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SHEET 1 OF 2

AR301836

DRILLING LOG

WELL NUMBER B-1 OWNER _____
 LOCATION _____ ADDRESS SMWT, Hollywood, MD.

 SURFACE ELEVATION _____ TOTAL DEPTH 40.0'
 WATER LEVEL ~22'
 DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE DRILLED 7/9/86
 DRILLER Tim HELPER Brian, Jeff
 LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
		11	SS		Brn. & white medium to fine sand, trace silt, poorly graded, dense, wet to saturated. SP
		12	SS		
		13	SS		
		14	SS		
28.0		15	SS		Brn. & white medium to fine sand, occasional coarse sand, occasional fine gravel, trace silt, poorly graded, dense, saturated. SP
		16	SS		
32.0		17	SS		Brn. & white coarse to fine sand, little to trace silt, well graded, dense, saturated. SW-SM
		18	SS		
37.8		19	SS		Yellow brn silty clay, occasional coarse to fine sand, very stiff, high plasticity, moist CL-CH
38.0		20	SS		Dk. gr. silty clay, trace fine sand, high plasticity, moist CH-OH
					End of boring @ 40.0'

ASTM D1586

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SHEET 2 OF 2

AR301837

DRILLING LOG

WELL NUMBER B-2 OWNER
 LOCATION ADDRESS Smwt, Hollywood, MD.
 TOTAL DEPTH 18.0'
 SURFACE ELEVATION WATER LEVEL ~10'
 DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE DRILLED 7/23/86
 DRILLER Jim HELPER Brian, Jeff
 LOG BY KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01	SS	6 7 8 7	Dtk. brn silt & fine sand, poorly graded, medium dense, moist SM-ML
4.0		02	SS	5 4 4 3	
6.0		03	SS	3 3 4 8	Light brn. medium to fine sand, poorly graded, medium dense, moist. SP
7.3		04	SS	3 4 8 10	White, gr. & brn. silt to clayey medium to fine sand, poorly graded, medium dense, moist to wet. SC-SM
		05	SS	3 8 12 13	
		06	SS	7 8 9 10	Brn. coarse to fine sand, trace silt, well graded, medium dense, saturated. SW
		07	SS	7 7 8 9	
14.5		08	SS	2 3 2 4	Yellow brn. silty clay, some medium to fine sand, stiff, medium plasticity, moist CL-CH
		09	ST		Dtk. gr. silty clay, trace fine sand, stiff, high plasticity, moist. CH-OH
18.0					End of boring @ 18.0'

DRILLING LOG

WELL NUMBER B-3 OWNER _____
 LOCATION _____ ADDRESS SMW, Hollywood, MD.
 _____ TOTAL DEPTH 20.0'
 SURFACE ELEVATION _____ WATER LEVEL ~18'
 DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE DRILLED 7/15/86
 DRILLER Tim HELPER Brian, Jeff
 LOG BY KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01	SS	2 4 13 10	Drk brn. silty fine sand, poorly graded, medium dense, some staining, moist SM
2.0					
2.7		02	SS	13 10 7 4	Drk brn silty fine sand, poorly graded, medium dense, moist. SM
4.0					Brn. silty clay, some fine sand, stiff, medium plasticity, moist. CL
		03	SS	4 4 10 12	Orange brn. silty clay, some fine sand, stiff, medium plasticity, moist. CL
6.0					
		04	SS	4 5 9 11	Orange brn. medium to fine sand, poorly graded, medium dense, moist. SP
9.0					
		05	SS	4 8 10 12	Orange brn. silty medium to fine sand, poorly graded, medium dense, moist. SM
		06	SS	8 10 12 5	
		07	SS	5 6 7 9	
14.0					
		08	SS	5 7 7 8	Orange brn. & white silty to clayey medium to fine sand, poorly graded, medium dense, medium plasticity, moist. SC-SM
		09	SS	5 6 9 13	
18.0					
		10	SS	4 8 10 12	Orange brn. & white coarse to fine sand, trace silt, well graded, medium dense, saturated SW
20.0					End of boring @ 20.0'

* ASTM D1586

DRILLING LOG

WELL NUMBER B-4 OWNER _____
 LOCATION _____ ADDRESS SMWT, Holly wood, MD
 _____ TOTAL DEPTH 30.0'
 SURFACE ELEVATION _____ WATER LEVEL ~20'
 DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE DRILLED 7/15/86
 DRILLER Tim HELPER Brigh, Jeff
 LOG BY KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01	SS	8 7 4 5	Brn clayey silt; some medium to fine sand, poorly graded, loose, some staining, wood chips, moist. ML
2.0		02	SS	10 13 16 10	Brn. silty medium to fine sand, poorly graded, medium dense, some staining, moist. SM
5.5		03	SS	4 6 5 3	Brn silty clay, occasional fine sand, stiff, medium plasticity, moist. CL
8.0		04	SS	3 4 5 4	Brn. & white silty clay, some fine sand, stiff, medium plasticity, moist. CL
		05	SS	3 4 6 8	
		06	SS	5 8 9 9	
12.0		07	SS	13 15 16 13	Orange brn medium to fine sand, occasional coarse sand, little silt, poorly graded, medium dense, moist to wet. SP-SM
		08	SS	5 9 11 8	
16.0		09	SS	5 6 6 6	Orange brn & white silty medium to fine sand, poorly graded, medium dense, wet. SM
		10	SS	3 4 4 5	

DRILLING LOG

WELL NUMBER B-4 OWNER _____
 LOCATION _____ ADDRESS SMWT, Hollywood, MD.
 _____ TOTAL DEPTH 30.0'
 SURFACE ELEVATION _____ WATER LEVEL ~20'
 DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE DRILLED 7/15/86
 DRILLER Tim HELPER Brian, Jeff
 LOG BY KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
		11	SS	4 6 9 10	Orange brn. & white coarse to fine sand, occasional fine gravel, trace silt, well graded, medium dense, saturated. SW
		12	SS	7 9 13 31	
		13	SS	41 20 19 17	Mottling or discoloration noted below 24'
26.0		14	SS	8 9 9 11	Yellow brn. silty & clayey coarse to fine sand, slightly plastic, medium dense, wet to saturated. SC-SM
27.5		15	ST		Yellow brn. silty clay, trace fine sand, medium to stiff, medium plasticity, moist CL-CH
30.0					End of boring @ 30.0'

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SHEET 2 OF 2

AR301841



DRILLING LOG

WELL NUMBER B-5 OWNER: _____
LOCATION _____ ADDRESS SMWT, Hollywood, MD.
TOTAL DEPTH 24.0'
SURFACE ELEVATION _____ WATER LEVEL ~22'
DRILLING COMPANY Hording-Hubert DRILLING METHOD HSA DATE 7/16/86
DRILLER Tim HELPER Brian, Jeff

LOG BY: KYA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0				10	
0.6		01	SS	20	Orange brn silty to clayey medium to fine sand, some staining, poorly graded, dense, silty, moist. SC-SM
				30	
				15	Brown silty clay, trace fine sand, very stiff, medium plasticity, moist. CL
3.0		02	SS	13	
				15	
				28	
4.0				25	Orange brn. silty to clayey medium to fine sand, poorly graded, dense, slightly plastic, moist. SC-SM
		03	SS	7	
				11	
				15	Orange to rust brn. silty clay, some medium to fine sand, very stiff, medium plasticity, moist. CL
6.0				17	
		04	SS	8	
				15	Orange to rust brn. silty medium to fine sand, poorly graded, dense, moist. SM
				19	
				30	
8.5		05	SS	10	
				25	Orange brn silty coarse to fine sand interbedded with white & orange brn. silty to clayey coarse sand, poorly to well graded, dense, moist. SM
				20	
				23	
		06	SS	16	
				13	
				11	
				28	
		07	SS	9	
				13	
				11	
				11	
14.0		08	SS	7	
				14	Light orange brn. medium to fine sand, occasional coarse sand, little silt, poorly graded, medium dense, moist. SP-SM
				7	
				11	
16.0		09	SS	10	
				12	Orange brn. & white silty medium to fine sand interbedded with silty clay, poorly graded, dense, moist to wet. SM, CL
				17	
				20	
		10	SS	6	
				11	
				15	
				19	

* ASTM D-1586

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SHEET 1 OF 2

AR301842

WISCONSIN

DRILLING LOG

WELL NUMBER B-5 OWNER _____
 LOCATION _____ ADDRESS SMWT, Hollywood, MD.

 TOTAL DEPTH 24.0'
 SURFACE ELEVATION _____ WATER LEVEL ~22'
 DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE 7/16/86
 DRILLER Tim HELPER Brian, Jeff
 LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
11		SS	14	6	Light orange brn. & white medium to fine sand, occasional coarse sand, trace silt, poorly graded, dense, wet to saturated SP
			14	14	
			17	17	
12		SS	14	14	End of boring @ 24.0'
			11	11	
			5	5	

24.0

* ASTM D1586

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SHEET 2 OF 2

AR301843

DRILLING LOG

WELL NUMBER B-6 OWNER: _____
 LOCATION _____ ADDRESS SMWT, Hollywood, MD.

 TOTAL DEPTH 28.0'
 SURFACE ELEVATION _____ WATER LEVEL ~24'
 DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE 7/17/86
 DRILLER Tim HELPER Brian, Jeff
 LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0.4		01	SS	10 32 28 10	Orange brn. silty clay, some coarse to fine sand, little coarse to fine gravel, stiff, medium plasticity, moist, fill. CL
2.0		02	SS	8 7 18 24	Brn. clayey silt, some coarse to fine sand, occasional coarse to fine gravel, some staining, poorly graded, dense, moist, fill. ML
4.0		03	SS	18 30 32 34	Brn. clayey silt, trace clay, trace fine sand, slightly plastic, dense, moist. ML
6.0		04	SS	15 14 16 20	Light orange brn. silty fine sand, occasional medium sand, poorly graded, very dense, moist. SM
		05	SS	8 13 18 20	Rust to orange brn. silty to clayey medium to fine sand, poorly graded, dense, slightly plastic, moist. SC-SM
11.5		06	SS	10 13 18 21	
		07	SS	14 14 18 23	Rust orange, brn. & white silty to clayey medium to fine sand, with silty clay seams, poorly graded, dense, low to medium plasticity, moist. SC-SM, CL
		08	SS	8 12 16 14	
16.0		09	SS	6 12 8 10	Light orange brn. fine sand, occasional medium sand, little silt, poorly graded, medium dense, moist. SP-SM
18.0		10	SS	6 10 15 15	Orange brn. & white silty to clayey fine sand with coarse to fine sand seams, poorly to well graded, dense, moist. SC-SM, SW

DRILLING LOG

WELL NUMBER B-6 OWNER _____
 LOCATION _____ ADDRESS SMWT, Hollywood, MD.

 SURFACE ELEVATION _____ TOTAL DEPTH 28.0'
 WATER LEVEL ~24'
 DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE DRILLED 7/17/86
 DRILLER T.M. HELPER Brian, Jeff
 LOG BY: KYA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
22.0	11	SS	8 11 11 14		Orange brn & white silty to clayey fine sand with coarse to fine sand seams, poorly to well graded, dense, moist. SC-SM, SW
	12	SS	10 19 22 22		Orange brn. medium to fine sand, trace silt, poorly graded, dense, wet. SP
24.5	13	SS	5 7 6 5		Orange brn & white silty to clayey coarse to fine sand, well graded, medium dense, wet to saturated. SC-SM
26.0	14	SS	18 18 19 17		Orange brn. medium to fine sand, occasional coarse sand, trace silt, poorly graded, saturated. SP
28.0					End of boring @ 28.0'

* ASTM D1586



DRILLING LOG

WELL NUMBER B-7 OWNER: _____
LOCATION _____ ADDRESS Smrt, Hollywood, MD.
TOTAL DEPTH 38.6'
SURFACE ELEVATION _____ WATER LEVEL: ~22'
DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE DRILLED 7/18/86
DRILLER Jim HELPER Brian, Jeff
LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0				8	
0.4		01	SS	13	Orange brn silty to clayey medium to fine sand, poorly graded, medium dense, low plasticity, moist fill. SC-SM
1.3				14	
				13	Grayish brn clayey silt, some fine sand, staining, poorly graded, medium dense, moist. ML
		02	SS	4	
				6	
				18	Brn. silty clay to clayey silt, some fine sand, very stiff or dense, moist. CL-ML
4.0				15	
		03	SS	17	
				26	Brn silt & fine sand, little clay, poorly graded, dense to very dense, moist. ML-SM
6.0				26	
				18	
		04	SS	7	
				12	Rust to orange brn. silt & fine sand, little clay, poorly graded, dense, moist. ML-SM
				20	
				25	
		05	SS	6	
				17	
				24	
10.0				24	
		06	SS	10	
				17	Orange brn. silty to clayey fine sand, poorly graded, dense, slightly plastic, moist. SC-SM
11.7				25	
				25	
		07	SS	9	
				11	Orange brn. silty fine sand, poorly graded, medium dense, moist. SM
				15	
13.7				13	
		08	SS	7	
				8	Orange brn. silty fine sand with orange brn. & white silty clay seams, poorly graded, medium dense, non plastic to medium plasticity, moist. SM, CL
				12	
				15	
		09	SS	7	
				8	
				9	
				9	
		10	SS	6	
				12	
				8	
				9	

ASTM D1586

SHEET 1 OF 2

AR301846

DRILLING LOG

WELL NUMBER B-7 OWNER: _____
 LOCATION _____ ADDRESS Smmt, Hollywood, MD.

 SURFACE ELEVATION _____ TOTAL DEPTH 38.0'
 WATER LEVEL ~22'
 DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE 7/18/86
 DRILLER Tim HELPER Brian, Jeff
 LOG BY KYA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
20.5		11	SS	4 8 11	Orange brn silty fine sand with orange brn f white silty clay seams, poorly graded, medium dense, non plastic to medium plasticity, moist. SM, CL
22.0		12	SS	11 11 15 15	Orange brn. f white silty to clayey coarse to fine sand, well graded, medium dense, slightly plastic, moist. SC-SM
		13	SS	6 5 6 8	Orange brn. f white medium to fine sand, little silt, poorly graded, medium dense, wet to saturated, SP-SM
25.7		14	SS	12 14 16 17	Brn. f white coarse to fine sand, little silt, well graded, medium dense to dense, saturated. SW-SM
		15	SS	9 9 12 6	
		16	SS	5 10 12 22	
		17	SS	12 27 28 44	
		18	SS	20 21 30 35	
		19	SS	15 20 10 5	
37.6					Yellow brn. silty clay, trace fine sand, stiff, medium plasticity, moist. CL-CH
38.0					End of boring @ 38.0'

* ASTM D 1586



DRILLING LOG

WELL NUMBER B-8 OWNER _____
LOCATION _____ ADDRESS Smwt, Holly wood, MD.
TOTAL DEPTH 24.0'
SURFACE ELEVATION _____ WATER LEVEL ~22'
DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE DRILLED 7/22/86
DRILLER Tim HELPER Brian, Jeff
LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0				9	
0.4		01	SS	16 16 18	Bn. silty clay, little fine sand, stiff, medium plasticity, moist CL
				20 25 25 20	Bn. clayey silt, some medium to fine sand, poorly graded, dense, moist. ML-SM
3.0		02	SS		
		03	SS	11 20 13 18	Orange bn silty medium to fine sand with orange bn. silty clay seams, poorly graded, dense, non plastic to medium plasticity, moist. SM, CL
		04	SS	11 12 13 16	
		05	SS	10 11 15 18	
		06	SS	4 8 15 17	
		07	SS	9 12 13 18	
14.0		08	SS	9 8 4 5	Light orange bn medium to fine sand, occasional coarse sand, trace silt, poorly graded, loose, moist. SP
16.0		09	SS	9 12 13 21	Orange bn. & white medium to fine sand, trace silt, poorly graded, medium dense, moist. SP
19.5		10	SS	11 12 19 8	

* ASTM D1586

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AR301848

SHEET 1 OF 2

DRILLING LOG

WELL NUMBER B-8 OWNER _____
 LOCATION _____ ADDRESS SWR, Hollywood, MD
 _____ TOTAL DEPTH 24.0'
 SURFACE ELEVATION _____ WATER LEVEL ~22'
 DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE 7/22/86
 DRILLER Tim HELPER Brian, Jeff
 LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
11		SS		5 7 10	Orange brn. & white medium to fine sand, trace silt, trace clay poorly graded, medium dense, wet to saturated SP
12		SS		5 7 10 12	
24.0					End of boring @ 24.0'

* ASTM D1586

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AR301849

SHEET 2 OF 2

DRILLING LOG

WELL NUMBER B-9 OWNER: _____
 LOCATION _____ ADDRESS SMWT, Hillyard, MD.

 TOTAL DEPTH 26.0'
 SURFACE ELEVATION _____ WATER LEVEL: ~24'
 DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE DRILLED 7/17/86
 DRILLER Jim HELPER Brian, Jeff
 LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0					
0.4		01	SS	11 12 22	Dk. brn clayey silt, staining, poorly graded, medium dense, moist. ML
2.2		02	SS	10 11 13 16	Brn clayey silt, occasional medium to fine sand, poorly graded, medium dense, moist. ML
		03	SS	10 10 18 19	Rust to orange brn. silty medium to fine sand, little clay, poorly graded, moist. SM
		04	SS	18 19 26 25	
		05	SS	10 15 23 18	
9.7		06	SS	9 21 32 22	Rust to orange brn silty medium to fine sand with silty coarse to fine sand seams, poorly to well graded, dense, moist. SM
		07	SS	17 23 20 18	
		08	SS	11 15 22 30	
		09	SS	17 25 32 40	
19.7		10	SS	30 30 37 47	

DRILLING LOG

WELL NUMBER B-9 OWNER: _____
 LOCATION _____ ADDRESS SMUT, Holly Wood, MD.

 SURFACE ELEVATION _____ TOTAL DEPTH 26.0'
 WATER LEVEL: ~24'
 DRILLING COMPANY Hansing-Hubert DRILLING METHOD HSA DATE 7/17/86
 DRILLER Tim HELPER: Brian, Jeff
 LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
22.0		11	SS	27 39 40 35	Light orange brn. medium to fine sand, trace silt, poorly graded, very dense, moist. SP
23.8		12	SS	11 13 13	Light orange brn medium to fine sand, occasional coarse sand seams, trace silt, poorly graded, moist. SP
24.5		13	SS	5 5 8 8	Light orange brn f white medium to fine sand, trace silt, with silty clay seams, moist to wet. SP, CL
26.0					Light brn coarse to medium sand, some fine gravel, trace silt with silty clay seams, poorly graded, medium dense, saturated SP, CL
					End of boring @ 26.0'

DRILLING LOG

WELL NUMBER B-10 OWNER _____
 LOCATION _____ ADDRESS SMWT, Hollywood, MD.
 _____ TOTAL DEPTH 22.0'
 SURFACE ELEVATION _____ WATER LEVEL: ~2.0'
 DRILLING COMPANY Harding-Hubert DRILLING METHOD HJA DATE 7/22/86
 DRILLER Tim HELPER Brian, Jeff
 LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0					
0.2		01	SS	23 16 6	Dk brn clayey to silty medium to fine sand, staining, poorly graded, dense, moist SM
2.0				15	
		02	SS	7 7 P	Orange brn silty medium to fine sand, poorly graded, dense, moist SM
3.7				P	
		03	SS	12 14 17 18	Orange brn. silty clay with silty sand seams, stiff, medium plasticity, moist CL, SM
		04	SS	12 18 22 22	Orange brn. medium to fine sand, trace silt, poorly graded, medium dense to dense, moist SP
		05	SS	8 12 18 22	
		06	SS	5 14 12 12	
		07	SS	6 14 14 18	
		08	SS	9 9 12 2A	
15.2					
		09	SS	11 6 4 5	Orange to rust brn coarse to fine sand, little silt, trace clay, well graded, medium dense to dense, discoloration noted, moist to wet. SW-SM
16.7					
					Orange brn. silty coarse to fine sand, trace clay, well graded, loose, wet. SM
		10	SS	2 4 6 14	

* ASTM D1586

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SHEET 1 OF 2

DRILLING LOG

WELL NUMBER B-10 OWNER: _____
LOCATION _____ ADDRESS Spring, Hollywood, MD

TOTAL DEPTH 22 0'
SURFACE ELEVATION _____ WATER LEVEL ~20'
DRILLING COMPANY Harving-Hubert DRILLING METHOD HSA DATE 7/22/86
DRILLER Tim HELPER Brian, Jeff
LOG BY. KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
22.0		11	SS	7 P 6 8	Orange brn silty coarse to fine sand, trace clay, well graded, medium dense, saturated SM
					End of boring @ 22.0'

• ASIN D-42

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AR301853

SHEET 2 OF 2

DRILLING LOG

WELL NUMBER B-11 OWNER: _____
 LOCATION _____ ADDRESS SMWT, 12th Ave, MD

 TOTAL DEPTH 24.0'
 SURFACE ELEVATION _____ WATER LEVEL ~10'
 DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE DRILLED 7/19/86
 DRILLER Tim HELPER Roger, Jeff
 LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01	SS	8 3 6	Bn to orange bn. silty medium to fine sand, poorly graded, medium dense, staining, moist. SM
4.0		02	SS	10 12 18 14	
6.0		03	SS	6 7 9 11	Bn silty fine sand, with clayey sand seams, poorly graded, medium dense, moist. SM, SC
		04	SS	6 8 8	Bn. silty medium to fine sand, poorly graded, medium dense, contaminated, saturated below 9'. SM
		05	SS	6 8 9 15	
		06	SS	5 15 16 19	
		07	SS	13 15 16 13	
		08	SS	10 11 15 14	
		09	SS	20 15 18 24	
18.3		10	SS	5 9 9 8	Yellow bn to orange bn silty clay, little coarse to fine sand, stiff, medium plasticity upper ten inches upper part mottled or weathered, moist to wet CL-CH

* ASTM D1586

SHEET 1 OF 2

AR301854

WISCONSIN

DRILLING LOG

WELL NUMBER B-11 OWNER _____
 LOCATION _____ ADDRESS Smoot, Holly wood, MD.

 SURFACE ELEVATION _____ TOTAL DEPTH 24.0'
 WATER LEVEL ~10'
 DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE 7/19/86
 DRILLER Tim HELPER _____
 LOG BY: ISA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
21.5		11	SI	6 7 4 3	Yellow brn silty clay, little coarse to fine sand, stiff, medium plasticity, moist CL-CH
24.0		12	ST		Dk gr silty clay, trace fine sand, stiff, high plasticity, moist. CH-OH
					End of boring @ 24.0'

ASTM D-1586

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SHEET 2 OF 2

AR301855

DRILLING LOG

WELL NUMBER B-12 OWNER _____
 LOCATION _____ ADDRESS Smrt, Hollywood, MD.
 _____ TOTAL DEPTH 16.0'
 SURFACE ELEVATION _____ WATER LEVEL ~5'
 DRILLING COMPANY Harding-Hubert DRILLING METHOD HSA DATE _____
 DRILLER Tim HELPER Brian, Jeff
 LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01	SS	7 15 14	Bkn. silty medium to fine sand, poorly graded, medium dense, moist. SM
2.5		02	SS	3 3 4 4	Bkn. silty medium to fine sand, little clay, poorly graded, saturated below 5'
		03	SS	4 3 7 5	
7.0		04	ST		Bkn. coarse to fine sand, trace silt, well graded, medium dense, contaminated, saturated. SW
		05	SS	8 11 11 12	
		06	SS	3 2 5 7	
12.0		07	SS	2 3 4 5	Yellow brn. silty clay, occasional coarse to fine sand, stiff, medium plasticity, moist. CL-CH
		08	ST		Drk. gr. silty clay, trace fine sand, stiff, high plasticity, moist. CH-OH
16.0					End of boring @ 16.0'

* ASTM D1586

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SHEET 1 OF 1

AR301856

AR301857

DRILLING LOG

WELL NUMBER SS-1 OWNER _____
 LOCATION _____ ADDRESS Sm-T, Hollywood, MD
 _____ TOTAL DEPTH 20'
 SURFACE ELEVATION _____ WATER LEVEL No water
 DRILLING COMPANY Harding-Hubert DRILLING METHOD SPT DATE 7/21/86
 DRILLER Jim HELPER Brian
 LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01	SS	2	Brn. clayey silt, little fine sand, loose, topsoil, moist ML Brn. silty medium to fine sand, trace clay, poorly graded, loose, moist SM
0.5		02	SS	2	
		03	SS	2	
					End of boring @ 20'

* ASTM D-1586

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AR301858

SHEET 1 OF 1

DRILLING LOG

WELL NUMBER SS-2 OWNER _____
 LOCATION _____ ADDRESS SMWT Hollywood, MD
 _____ TOTAL DEPTH 20'
 SURFACE ELEVATION _____ WATER LEVEL No water
 DRILLING COMPANY Harding-Hubert DRILLING METHOD SPT DATE 7/21/86
 DRILLER Tim HELPER Brian
 LOG BY RA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01	SS	4	Brn. clayey silt, medium dense, top soil, moist ML
1.0		02	SS	5	
2.0		03	SS	5	Brn. silty medium to fine sand, poorly graded, medium dense, moist SM
					End of boring @ 2.0'

* ASTM D-1586

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SHEET 1 OF 1

AR301859

DRILLING LOG

WELL NUMBER SS-3 OWNER _____
 LOCATION _____ ADDRESS SMHT, Holly wood, MD.

 TOTAL DEPTH 20'
 SURFACE ELEVATION _____ WATER LEVEL No water
 DRILLING COMPANY Harding-Hubert DRILLING METHOD SPT DATE 7/21/84
 DRILLER Tim HELPER Brian
 LOG BY KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01	SS	2	
0.5		02	SS	4	Dark brn clay to silty medium to fine sand, poorly graded, loose, topsoil, moist - SM-SC
1.0		03	SS	10	Brn silty medium to fine sand, poorly graded, medium dense, moist SM
1.5				13	
2.0					End of boring @ 20'
2.5					
3.0					
3.5					
4.0					
4.5					
5.0					
5.5					
6.0					
6.5					
7.0					
7.5					
8.0					
8.5					
9.0					
9.5					
10.0					
10.5					
11.0					
11.5					
12.0					
12.5					
13.0					
13.5					
14.0					
14.5					
15.0					
15.5					
16.0					
16.5					
17.0					
17.5					
18.0					
18.5					
19.0					
19.5					
20.0					

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SKETCH MAP

NOTES

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AR301861

DRILLING LOG

WELL NUMBER SS-5

LOCATION _____

OWNER _____

ADDRESS SMWT, Hollywood, MD

SURFACE ELEVATION _____

TOTAL DEPTH 2.0'

WATER LEVEL No water

DRILLING COMPANY Harding-Hubert

DRILLING METHOD SPT

DATE

DRILLED 7/21/86

DRILLER Tim

HELPER Brian

LOG BY KVA

SKETCH MAP

NOTES

DEPTH (FEET)

SAMPLE LOG

SAMPLE NUMBER

SAMPLE TYPE

SAMPLE BLOWS

DESCRIPTION/SOIL CLASSIFICATION
(COLOR, TEXTURE, STRUCTURES)

Dark brn silty medium to fine sand, trace clay, poorly graded, medium dense, top soil moist. SM

Brn silty medium to fine sand, poorly graded, medium dense, moist. SM

End of boring at 2.0'

*ASTM E-588

E-55

SHEET 1 OF 1

AR301862

DRILLING LOG

WELL NUMBER SS-6 OWNER _____
 LOCATION _____ ADDRESS SWT, Holly Wood, MD.

 SURFACE ELEVATION _____ TOTAL DEPTH 2.0'
 WATER LEVEL No water
 DRILLING COMPANY Haring-Hubert DRILLING METHOD SPT DATE 7/21/86
 DRILLER Jim HELPER Brian
 LOG BY: KVA

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG			SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
	01	SS	S				
0.3	02	SS	20				Dark brn. silty medium to fine sand, trace clay, poorly graded, medium dense/topsoil, moist SM
2.0	03	SS	20				
							Brn silty medium to fine sand, poorly graded, dense, moist, SM
							End of boring @ 2.0'

ASTM D-1586

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SHEET 1 OF 1

AR301863



WELL NUMBER P-1 OWNER
LOCATION ADDRESS SMWT, Hollywood, MD.

 TOTAL DEPTH 15.0'
SURFACE ELEVATION WATER LEVEL No water
DRILLING COMPANY Bow-Co. Excav. DRILLING METHOD Backhoe DATE 6/23/66
DRILLER HELPER
LOG BY KVA, JEV

NOTES

• A 9 1 M F 5 W

AR301864

DRILLING LOG

WELL NUMBER P-2

LOCATION

OWNER

ADDRESS SmWT, Hollywood, MD

TOTAL DEPTH 15.0'

SURFACE ELEVATION

WATER LEVEL No water

DRILLING
COMPANY Baw-Co Excav

DRILLING METHOD Backhoe

DATE _____

DRILLED 6/23/86

DRILLER

HELPER

LOG BY KVA JEV

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOW*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01			Light brn silt and fine sand, poorly graded, damp ml
0.4		02			Brn clayey silt; some coarse to fine sand, poorly graded, moist ml
		03			
2.5		04			Rust brn to orange and white silty fine sand, poorly graded, moist sm
		05			
		06			
		07			
8.0					Rust orange and white silty to clayey coarse to fine sand, moist sc-sm
		08			
5.0					Bottom of test pit @ 15.0'

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5-15-1-2

AR301865

DRILLING LOG

WELL NUMBER P-3 OWNER _____
 LOCATION _____ ADDRESS Smwt, Holly wood, MD.

 SURFACE ELEVATION _____ TOTAL DEPTH 15.0'
 WATER LEVEL No water
 DRILLING COMPANY Bow-Co. Excav. DRILLING METHOD Backhoe DATE 6/23/86
 DRILLER _____ HELPER _____
 LOG BY KVA, JCV

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0					
0.3		01			Brn. silty sand, poorly graded, moist SM Brn to yellow silt and sandy clay seams, poorly graded, moist. ML, SL
		02			
		03			
		04			
		05			
		06			
5.5					
		07			white silty clay, some coarse to fine sand, medium plasticity, moist CL
7.0					
		08			white and rust orange silty to clayey medium to fine sand interbedded with sandy silty clay seams, moist SC, CL
15.0					Bottom of test pit @ 15.0'

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SHEET 1 OF 1

AR301866



DRILLING LOG

WELL NUMBER P-4 OWNER _____
LOCATION _____ ADDRESS SWMT, Hollywood, MD.

TOTAL DEPTH 15.0'
SURFACE ELEVATION _____ WATER LEVEL No water
DRILLING COMPANY Bah-Co Excav DRILLING METHOD Packcase DATE 4/24/76
DRILLER _____ HELPER _____

LOG BY: Tardone, Vann

SKETCH MAP

NOTES

DEPTH FEET	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE D. IONS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0.25		01			Orange and White Sandy clay, medium plasticity moist CL
		02			
		03			Light brown to orange coarse to fine sandy silty clay, medium plasticity, moist CL-SC
		04			
4.0		05			
					Red and white medium to coarse sandy silty clay, medium plasticity, moist CL-SC
		06			
13.0		07, 08			Red and white silty clay with red fine sand seams, medium plasticity, moist. CL, SP
5.0					
					Bottom of test pit @ 15.0'

W.D. WAINWRIGHT

E-60

SHEET 1 OF 1

AR301867



WELL NUMBER P-5 OWNER _____
LOCATION _____ ADDRESS Smith, Holly wood, MD.

TOTAL DEPTH 15.0'
SURFACE ELEVATION _____ WATER LEVEL _____
DRILLING COMPANY Bow-Co. Exter DRILLING METHOD Backhoe DATE DRILLED 6/24/66
DRILLER _____ HELPER _____

NOTES

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8-1-55

WINDY

DRILLING LOG

WELL NUMBER P-6 OWNER _____
 LOCATION _____ ADDRESS Smith, Hollywood, MD

 TOTAL DEPTH 15.0'
 SURFACE ELEVATION _____ WATER LEVEL No water
 DRILLING COMPANY Bow-Co. Excav. DRILLING METHOD Backhoe DATE 6/24/86
 DRILLER _____ HELPER _____

SKETCH MAP

NOTES

LOG BY La Costa, Tordone

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0.5		01			Light brn to tan fine sand, trace silt, poorly graded, dry SP
		02			Red to brn fine sand, trace silt, poorly graded, dry, SP
		03			
		04			
		05			
6.0		06			Orange brn medium sand, trace silt, poorly graded, damp to moist. SP
9.0		07			White medium sand with orange brn medium to fine sand seams, trace silt, poorly graded, moist. SP
0.0					Orange to rust medium sand, poorly graded, moist SP
5.0		08			Bottom of test pit @ 15.0'

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AR301869

SHEET 1 OF 1

W.D. WILSON

DRILLING LOG

WELL NUMBER P-7 OWNER _____
 LOCATION _____ ADDRESS Smwt, Hollywood, MD.

 _____ TOTAL DEPTH 15.0'
 SURFACE ELEVATION _____ WATER LEVEL No water
 DRILLING COMPANY Edw. Co. Excav DRILLING METHOD Backhoe DATE 5/28/86
 DRILLER _____ HELPER _____

LOG BY La Costa, Tordone

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOW	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0.5		01			Tan fine sand, tr. silt, poorly graded, dry. SP
1.0		02			Orange brn fine sand, trace silt, poorly graded, dry. SP
		03			Orange brn medium to fine sand, trace silt, trace clay, poorly graded, damp. SP
3.0		04			
		05			Orange brn clayey medium to fine sand, little silt, medium plasticity, damp. SC
		06			
		07			
5.0		08			Orange brn. and grayish white clayey medium to fine sand, medium plasticity, moist. SC
5.0					Bottom of test pit @ 15.0'

W.D. WILSON

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SHEET 1 OF 1

AR301870



DRILLING LOG

WELL NUMBER P-8 OWNER _____
LOCATION _____ ADDRESS Smwt, Hollyood, MD
TOTAL DEPTH 15.0'
SURFACE ELEVATION _____ WATER LEVEL No water
DRILLING COMPANY Ban Co Excav DRILLING METHOD Backhoe DATE DRILLED 6/25/86
DRILLER _____ HELPER _____

LOG BY La Costa

SKETCH MAP

NOTES

DEPTH FEET	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0					Brn fine sand, trace silt, wood chips, dry, fill SP
1.0					Dark gray fine sand, stained, poorly graded, dry SP
2.0					Tan to brn. fine sand, trace silt, trace clay, poorly graded, dry SP
3.0					Orange brn. medium to fine sand, some clay, trace silt, medium plasticity, damp SC
7.0					Light gray silty clay, some fine sand, medium to high plasticity, damp CL-CH
10.0					Tan to light orange brn fine sand, poorly graded, damp. SP
12.0					Orange brn. clayey sand, trace silt, poorly graded, moist. SC
15.0					Bottom of test pit @ 15.0'

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SHEET 1 OF 1



DRILLING LOG

WELL NUMBER T-9 OWNER _____
LOCATION _____ ADDRESS SmWT, Hollywood, MD.
TOTAL DEPTH 15.0'
SURFACE ELEVATION _____ WATER LEVEL No water
DRILLING COMPANY Ban. Co. Excess DRILLING METHOD Backhoe DATE DRILLED 6/25/66
DRILLER _____ HELPER _____

LOG BY La Costa, Tordine

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01			Brown fine sand, trace silt, poorly graded, wood chips, dry, fill SP
		02			
		03			
2.0		04			Tan to brown fine sand, trace silt, trace clay, poorly graded, dry SP
3.0		05			Orange brown medium to fine sand, trace silt, trace clay, poorly graded, damp. SP
4.0		06			
5.0		07			Light gray silty clay, trace fine sand, medium to high plasticity, damp. CL-CH
					Tan to beige medium to fine sand, trace clay, trace silt, poorly graded, damp. SP
8.0					
9.0					Light gray and red brown silty clay, medium to high plasticity, damp. CL-CH
					Orange brown medium to fine sand, some silt, trace clay, poorly graded, damp SM
		08			
15.0					Bottom of test pit @ 15.0'

* ASTM D1586

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AR301872

DRILLING LOG

WELL NUMBER P-10 OWNER _____
 LOCATION _____ ADDRESS Smart, Holly wood, MD.

 SURFACE ELEVATION _____ TOTAL DEPTH 10.0'
 WATER LEVEL 10.0'
 DRILLING COMPANY Bow-Co. Excav DRILLING METHOD Backhoe DATE DRILLED 6/25/86
 DRILLER _____ HELPER _____

LOG BY: La Costa, Van Allen

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01			Brn silty medium to fine sand, some wood chips, dry, fill sm
1.0		02			
2.0		03			Rust orange to brn. silty medium to fine sand, poorly graded, dry to damp. sm
3.0		04			Brn silty to clayey medium to fine sand, poorly graded, moist sc-sm
		05			Brn silty medium to fine sand, poorly graded, wet sm
		06			Dark brn to dark red silty medium to fine sand, cemented, staining, wet. sm
9.0					
10.0		07			Light brn. to brn. medium to fine sand, little silt, poorly graded, saturated. SP-sm
					Bottom of test pit @ 10.0'

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DRILLING LOG

WELL NUMBER P-11 OWNER _____
 LOCATION _____ ADDRESS Smwt, Hollywood, MD

 SURFACE ELEVATION _____ TOTAL DEPTH 14.5'
 WATER LEVEL No water
 DRILLING COMPANY Burn-Co. Inc. DRILLING METHOD Backhoe DATE 4/25/86
 DRILLER _____ HELPER _____
 LOG BY La Costa, Tordone

SKETCH MAP

NOTES

DEPTH (FEET)	GRAVE LOG	SAMP. #	SAMP. TYPE	SAMP. BLOW	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0					
1.0		01			Tan fine sand, trace silt, poorly graded, dry SP
2.0		02			Light brn fine sand, trace clay, poorly graded, dry SP
3.0		03			Light brn. clayey fine sand, low plasticity, poorly graded, damp SC
6.0		05			Red to brn. clayey sand, low plasticity, poorly graded, damp SC
		06			Beige to orange brn. medium to fine sand, some silt, poorly graded, moist SM
		07			
		08			
14.5					Bottom of test pit @ 14.5'

WISCONSIN

DRILLING LOG

WELL NUMBER P-12 OWNER _____
 LOCATION _____ ADDRESS Smith, Hollywood, MD.

 TOTAL DEPTH 15.0'
 SURFACE ELEVATION _____ WATER LEVEL No water
 DRILLING COMPANY Bear Co. Excav DRILLING METHOD Auger DATE 6/26/86
 DRILLER _____ HELPER _____

LOG BY Le Costa, Torrone

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01			Light brown silty fine sand, wood chips, fill, dry sm
		02			
		03			
2.0		04			Orange brown fine sand, some clay, trace silt, medium plasticity, damp. sc
		05			
6.0		06			Orange brown silty to clayey fine sand, low plasticity, damp sc-sm
8.0		07			Light gray to red orange clayey fine sand, medium plasticity, damp sc
14.0		08			Orange brown and light gray sandy clay, medium to high plasticity, moist. cl-sc
5.0					Bottom of test pit @ 15.0'

ASTM D 1586

DRILLING LOG

WELL NUMBER P-13 OWNER _____
 LOCATION _____ ADDRESS SWT, Hollywood, MD

 _____ TOTAL DEPTH 15.0'
 SURFACE ELEVATION _____ WATER LEVEL No water
 DRILLING COMPANY Brown Co. Excav DRILLING METHOD Backhoe DATE _____
 DRILLER _____ HELPER _____

LOG BY La Costa, Tordone

SKETCH MAP

NOTES

DEPTH (FEET)	GRAVE LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01			Brn to gray fine sand and silt, wood chips, debris, fill, dry SP-ML
15		02			
		03			Orange brn silty fine sand, trace silt, poorly graded, damp SM
30		04			Orange brn medium to fine sand, some silt, debris, damp SM
		05			Brn silty clay with light gray silty clay lens, high plasticity, moist CL-CH
9.5		06			Brn silty to clayey fine sand, poorly graded, low plasticity, moist SC-SM
12.0		07			Light gray and red orange fine sand, little silt, low plasticity, moist SP-SM
14.5		08			Light gray and red orange sandy silty clay, medium plasticity, mottled, moist CL-SC
15.0					Bottom of test pit @ 15.0'



DRILLING LOG

WELL NUMBER P-14

LOCATION _____

OWNER _____

ADDRESS SWT, Hollywood, MD.

SURFACE ELEVATION _____

TOTAL DEPTH 12.0'

WATER LEVEL No water

DRILLING COMPANY Bow-Co Excav

DRILLING METHOD Backhoe

DATE

DRILLED 6/26/86

DRILLER _____

HELPER _____

LOG BY La Costa, Tardone

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01			Light brn. silty fine sand, roots, wood debris, poorly graded, dry sm
2.0		02			
		03			
		04			Orange brn silty fine sand, trace clay, poorly graded, dry sm
4.0		05			
		06			Pale gray silty clay and fine sand, poorly graded, dry. CL-SC
6.0					
					Pale gray and orange red silty clay, some fine sand, mottled, moist. CL
8.0					
		07			Orange red to brn medium to fine sand, and silt, poorly graded, moist SP-ML
10.0					
		08			White medium to fine sand and orange brn fine sand, poorly graded, moist. SP
12.0					Bottom of test pit @ 12.0'

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SHEET 1 OF 1



DRILLING LOG

WELL NUMBER P-15 OWNER _____
LOCATION _____ ADDRESS Smart, Hollywood, MO

TOTAL DEPTH 13.5'
SURFACE ELEVATION _____ WATER LEVEL No water
DRILLING COMPANY Ban-Co Excav. DRILLING METHOD Backhoe DATE DRILLED 6/26/06
DRILLER _____ HELPER _____
LOG BY: La Costa, Tordone

SKETCH MAP

NOTES

DEPTH (FEET)	GRAB LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLINDS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01			Light brn fine sand, some silt, wood chips, poorly graded, dry SM
1.0		02			Dark gray fine sand, stained, trace silt, poorly graded, dry SP
2.0		03			Orange brn clayey medium to fine sand, some coarse gravel, well graded, damp SC
3.0		04			Brn silty clay, little sand, high plasticity, damp CL-CH
6.0		05			
		06			Orange brn silty medium to fine sand, trace clay, poorly graded, damp SM
10.0		07			Orange brn and white clayey medium to fine sand, low plasticity, moist SC
		08			Orange brn silty medium to fine sand, cemented, poorly graded, moist SM
13.5					Bottom of test pit @ 13.5'

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AR301878

5-11-01

DRILLING LOG

WELL NUMBER P-16 OWNER _____
 LOCATION _____ ADDRESS Snwt, Hollywood, MD
 SURFACE ELEVATION _____ TOTAL DEPTH 6.5'
 WATER LEVEL 6.5'
 DRILLING COMPANY Bow-Co Excav. DRILLING METHOD Backhoe DATE DRILLED 6/27/86
 DRILLER _____ HELPER _____
 LOG BY La Costa, Tordone

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01			
0.5		02			Brown silt, fine sand, wood chips, poorly graded, dry SM
1.0		03			Orange brown fine sand, little silt, poorly graded SP-SM
3.0		04			
		05			Gray to dark gray silty medium to fine sand, poorly graded moist to saturated SM
6.5		06			
					Bottom of test pit @ 6.5'



DRILLING LOG

WELL NUMBER P-17 OWNER _____
LOCATION _____ ADDRESS 2nd St, Hollywood, MD.

TOTAL DEPTH 5.5'
SURFACE ELEVATION _____ WATER LEVEL 5.5'
DRILLING COMPANY Bow Co. Excav. DRILLING METHOD Backhoe DATE 6/27/86
DRILLER _____ HELPER _____

LOG BY La Costa, Tordine

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWN	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01			Rust br. silty fine sand, poorly graded, dry SM
0.5		02			
1.0		03			Rust brn medium to fine sand, little silt, poorly graded, dry SP-SM
		04			Brn medium to fine sand, trace clay, trace silt, poorly graded, dry to damp SP
		05			
		06			
5.5		07			
					Bottom of test pit @ 5.5'

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SHEET 1 OF 1

DRILLING LOG

WELL NUMBER P-18

LOCATION _____

OWNER _____

ADDRESS Smwt, (billywood, MD)

SURFACE ELEVATION _____

TOTAL DEPTH 3.5'

WATER LEVEL 3.5'

DRILLING

COMPANY Ban-Co. Excav.

DRILLING

METHOD Backhoe

DATE

DRILLED 8/27/86

DRILLER _____

HELPER _____

LOG BY: La Costa, Tardone

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01			
1.0		02			Orange brn medium to fine sand, trace silt, trace clay, poorly graded, damp SP
2.0		03			Orange brn silty medium to fine sand, poorly graded, damp SM
3.0		04			Orange brn. coarse to medium sand and silt, poorly graded, moist SP-MC
3.5		05			Bottom of test pit @ 3.5'

DRILLING LOG

WELL NUMBER P-19 OWNER _____
 LOCATION _____ ADDRESS Smwt, Holly wood, MD
 _____ TOTAL DEPTH 6.0'
 SURFACE ELEVATION _____ WATER LEVEL 6.0'
 DRILLING COMPANY Bur-Co Excav. DRILLING METHOD Backhoe DATE DRILLED 6/20/76
 DRILLER _____ HELPER _____

LOG BY: Vaux, Tardone

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01			Brn. Sandy clay with red lamination, moist CL-SC
1.0		02			
2.0		03			Brn silty clay, trace silt, medium plasticity, moist CL
3.0		04			Brn silty clay, some medium to coarse sand, medium to high plasticity, moist to wet. CL
4.0		05			Light gray sandy silty clay, trace sand, medium to high plasticity, wet CL
5.0		06			Light gray sand with sandy clay lenses, possible iron staining, saturated SP, SC
6.0					Bottom of test pit @ 6.0'

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DRILLING LOG

WELL NUMBER P-20 OWNER _____
LOCATION _____ ADDRESS Smwt, Hollywood, MD.

TOTAL DEPTH 13.0'
SURFACE ELEVATION _____ WATER LEVEL Y10 water
DRILLING COMPANY Bur-Gi Excav DRILLING METHOD Backhoe DATE DRILLED 6/28/86
DRILLER _____ HELPER _____

LOG BY Vann, Tordens

SKETCH MAP

NOTES

DEPTH (FEET)	GRANIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLINDS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0	0				Light brn Sandy clay and coarse to fine gravel, well graded, dry, f.11 SC-GC
2.0	03				White sandy clay, high plasticity, some mottling or iron staining, moist. CL-SC
	04				
	05				
6.0					
6.8	06				Light gray, red and white silty clay, high plasticity, some mottling, dry CL-CH
	07				Brn. silty clay, with coarse sand, medium plasticity, damp. CL
8.0	08				Red to brn. coarse sand, poorly graded, moist SP
10.0					Brn. and white coarse sand, trace clay, poorly graded, moist. SP
12.0					Brn. and white coarse sand with light gray mottled clay lenses, moist. SP, CL
13.0					Bottom of test pit @ 13.0'

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100-1

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AR301883

DRILLING LOG

WELL NUMBER P-21 OWNER _____
 LOCATION _____ ADDRESS Smwt, Hollywood, MD
 _____ TOTAL DEPTH 15.0'
 SURFACE ELEVATION _____ WATER LEVEL No water
 DRILLING COMPANY Bur-Co Excav DRILLING METHOD Backhoe DATE DRILLED 7/1/86
 DRILLER _____ HELPER _____

LOG BY Yann Tordene

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0.5		01			Dark brn silty clay with medium to fine sand, some tree roots, medium plasticity, moist. CL-SC
1.0		02			
		03			Light brn silty clay with fine sand, some tree roots, medium plasticity, moist. CL
		04			
3.0		05			Orange brn. silty clay with fine sand, medium plasticity, moist. CL
		06			
					Orange brn to red silty clay, with white silty clay lenses, trace fine sand, medium to high plasticity, moist. CL-CH
7.0		07			White silty clay with orange medium to fine sand, some lamination, medium to high plasticity, moist. CL-CH, SP
9.0					Orange medium to fine sand, with white silty clay seams, poorly graded, moist. SP, CL-CH
13.0		08			Orange silty to clayey medium sand, poorly graded, medium plasticity, moist. SC-SM
15.0					Bottom of test pit @ 15.0'

* ATTENTION

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SHEET 1 OF 1

AR301884

DRILLING LOG

WELL NUMBER P-22 OWNER _____
 LOCATION _____ ADDRESS SWAMP, Hollywood, MO.

 TOTAL DEPTH 15.0'
 SURFACE ELEVATION _____ WATER LEVEL No water
 DRILLING COMPANY Bow-Co. Excav. DRILLING METHOD Backhoe DATE 7/1/86
 DRILLER _____ HELPER _____

LOG BY Vann, Tordone

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
01					Dark brown fine sandy, silty clay, medium plastic, moist CL-SC
02					
03					Orange silty clay and medium to fine sand, medium plasticity, moist
04					
05					
06					Orange silty sand, little clay, poorly graded, moist SM Yellow to yellow orange medium sand, little clay, slightly plastic, moist SP-SC
07					Orange silty coarse to medium sand, poorly graded, wet, SM
					Bottom of test pit @ 15.0'

DRILLING LOG

WELL NUMBER P-23 OWNER _____
 LOCATION _____ ADDRESS Smwt, Hollywood, MD.

 SURFACE ELEVATION _____ TOTAL DEPTH 9.0'
 WATER LEVEL 9.0'
 DRILLING COMPANY Bow Co. Exchv DRILLING METHOD Backhoe DATE 7/1/86
 DRILLER _____ HELPER _____

LOG BY: Vann Tordone

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01			Dark brn. silty clay, some sand, low plasticity, damp to moist. CL
0.5		02			Light brn medium to fine sand and silty clay, medium plasticity, moist. SC
1.0		03			
1.5		04			Orange silty clay, some coarse to medium sand, low plasticity, moist. CL
2.0		05			
2.5					
3.0					
3.5					
4.0					
4.5					
5.0					
5.5					
6.0		06			Orange, yellow and white silty clay, some coarse to medium sand, low plasticity, moist. CL
6.5		07			Orange brn. clayey silty sand, low plasticity, poorly graded, wet to saturated. SC-SM
7.0					
7.5					
8.0					
8.5					
9.0					Bottom of test pit @ 9.0'

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SHEET 1 OF 1

DRILLING LOG

WELL NUMBER P-24 OWNER _____
 LOCATION _____ ADDRESS SWHT, Holly Hill, MD.
 _____ TOTAL DEPTH 15.0'
 SURFACE ELEVATION _____ WATER LEVEL No water
 DRILLING COMPANY Baw-Co. Excav. DRILLING METHOD Backhoe DATE 7/1/86
 DRILLER _____ HELPER _____

LOG BY Vann, Torrone

SKETCH MAP

NOTES

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01			Dark brn, black and orange silty coarse to medium sand, poorly graded, damp. SM
1.0		02			
2.0		03			Orange sand, little silt, well graded, damp.
3.0		04			Orange brn and pink silty clay, with sand seams, medium plasticity, damp. CL, SP
		05			Olive green to orange silty clay and fine sand, trace silt, high plasticity, mottled, damp. CH-SC
1.5		06			Pale olive to brn. silty medium to fine sand, poorly graded, some staining or contamination, wet. SM
1.0		07			Blk. coarse sand, little silt, with clay seams, poorly graded, staining or contamination present, wet SP-SM, CH
1.5		08			Olive brn. silty coarse sand w/ blue to black clay seams, poorly graded, wet. SP, CH
0					Bottom of test pit @ 15.0'

* ASTM D-1586

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Sheet 1 of 1

AR301887

Well Construction Summary

Location or Coords: _____

Elevation: Ground Level _____

Top of Casing _____

Drilling Summary:

Total Depth 102 ft modified to 64 ftBorehole Diameter 12" for casing
7.5" below casingDriller Jeff Corron, Hardin-HuberRig Mobile 6-50Bit(s) 2"7.5"Drilling Fluid water plus bentonite as neededSurface Casing 8" low carbon steel

Well Design:

Basis: Geologic Log ☒ Geophysical Log ☒

Casing String(s): C=Casing S=Screen

0	-	39	C ₁	-	-
0	-	52	C ₂	-	-
52	-	62	S	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

Casing: C₁ low carbon steel surface casing, 8" IDC₂ 4" ID PVC riser pipe, sched 40 flush jointScreen: S₁ 4" ID PVC, sched 40, #10 continuous woundS₂ _____

Centralizers _____

Filter Material coarse sandCement Type I Portland

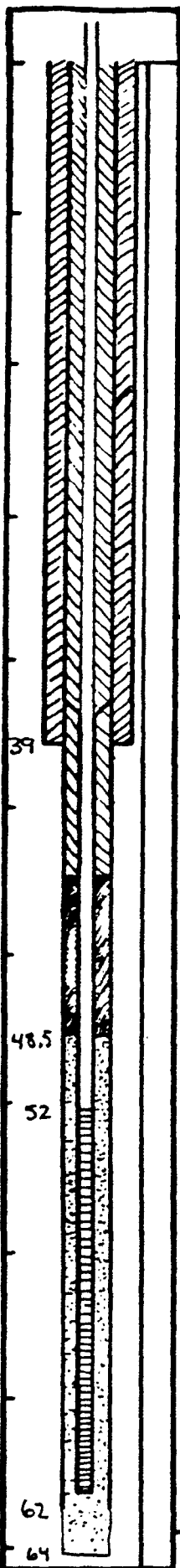
Other _____

Construction Time Log:

Task	Start		Finish	
	Date	Time	Date	Time
Drilling: 12"	12/9	1450	12/9	1645
	12/11	0952	12/14	1029
7.5"				
Geophys. Logging:	12/14	1029	12/14	1103
Casing: 8"	12/10	0904	12/10	1147
	12/16	0825	12/16	0843
4"				
Filter Placement:	12/16	0843	12/16	0917
Cementing:	12/16	0928	12/16	0946
Development:				
Other:				

Well Development:

Comments:

Location Hollywood MD
Personnel Nora HillProject Southern Maryland Wood Treatment

DRILLING LOG

WELL NUMBER: MW-19

LOCATION: next to MW-10

OWNER: _____

ADDRESS: SMWT

Hollywood MD

TOTAL DEPTH 102' modified to 64'

SURFACE ELEVATION: _____

WATER LEVEL: _____

DRILLING COMPANY: Hardin-Huber

DRILLING METHOD: Mud Rotary DATE 12-9-87 to

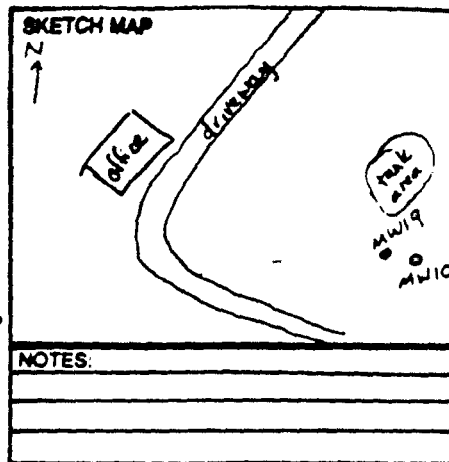
DRILLER: Jeff Corran

DRILLED: 12-16-87

HELPER: Mike Parsons

Mike Corran

LOG BY: Nora Hill



DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		CU			orange, yellow silt, fine white sand firm
5					
10					
15		CU			orange silt, fine sand
20					

* A.S.T.M. D1586

SHEET 1 OF 5

DRILLING LOG (Cont'd)

WELL NUMBER: MW19

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
20		CU			orange silt, fine to coarse sand
		CU			dark orange, white fine to coarse sand lots of water
25					
		01	SS	37 79 100 (5")	dark orange very fine to coarse sand, very compact, saturated
30					
		02	SS	3 4 4 5	blue-gray and orange mottled streaky, silty clay, firm to stiff, moist
35					
		03	SS	1 2 2 3	blue-gray clay, trace silt, few dark gray streaks, stiff, moist
37.5					
39.5					
40					
45					

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SHEET 2 OF 5

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DRILLING LOG (Cont'd)

WELL NUMBER: MW-19

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
45					
50		CU			gray clay, minor red sand, fine quartz gravel
	04	SS	2	3	blue-gray silty clay, stiff, very few streaks of fine sand, medium-grained sandy gray clay in bit, moist
				6	
55					
	05	SS	3	7	gray clayey coarse-medium, subangular quartz sand, moist
				9	
				11	
60					
	06	SS	5	9	gray silty, clayey, fine-very fine subangular sand, very stiff gray clay lenses, moist
				14	
				18	
					N.B.: well backfilled with grout to 62 ft after drilling to 102 ft + geophysical log
65					
	07	SS	3	5	blue-gray + green-gray wavy silty clay
				9	very stiff, moist
				15	
70					

ASTM D1586

DRILLING LOG (Cont'd)

WELL NUMBER: MW-19

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
70		08	SS	5 6 6 20	green-gray silty clay, streaks of very fine gray sand & silt, very stiff, moist
73.5					Harder drilling
75		09	SS	22 39 39 100 (5")	fine to very fine gray silty sand moist, very compact
80		10	SS	9 12 19 31	very fine gray silty sand, moist, compact
85		11	SS	3 6 6 10	very fine green-gray silty clayey sand, pockets of fine sand, small streaks of gray clay, moist, compact
90		12	SS	3 3 4 7	fine to very fine green silty sand, gray streaks, moist, firm
95					

* ASTM D1586

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AR301892

SHEET 4 OF 5

DRILLING LOG (Cont'd)

WELL NUMBER: MW-19

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
95		13	SS	8 10 22 100 (5%)	fine to very fine firm green sand, grading to hard, slightly cemented sand with few tan shell fragments, moist
100		14	SS		fine green sand, slightly cemented, many shell fragments, moist
					end of drilling at 102 ft

* ASTM D1586

Z-86

AR301893

SHEET 5 OF 5

Well Construction Summary

Location or Coords: _____

Elevation: Ground Level _____

Top of Casing _____

Drilling Summary:

Total Depth 65 ftBorehole Diameter 12" for casing
7.5" below casingDriller Jeff Carron, Hardin-HuberRig Mobile B-80Bit(s) 12"
7.5"Drilling Fluid water plus bentonite as
neededSurface Casing 8" low Carbon steel

Well Design:

Basis: Geologic Log X Geophysical Log X

Casing String(s): C=Casing S=Screen

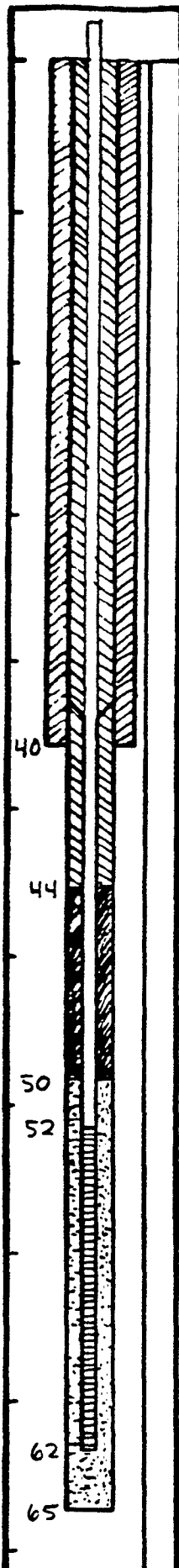
0 - 40 C₁0 - 52 C₂52 - 62 S- - - - -

Construction Time Log:

Task	Start		Finish	
	Date	Time	Date	Time
Drilling:				
12"	12/17	1039	12/17	1255
7.5"	12/18	0915	12/18	1115
Geophys. Logging:	12/18	1520	12/18	1618
Casing:				
8"	12/17	1255	12/17	1455
4"	12/18	1618	12/18	1630
Filter Placement:	12/18	1630	12/18	1647
Cementing:	12/19	0812	12/19	0904
Development:				
Other:				

Well Development:

Comments:

Location Hollywood MD
Personnel Nora HillProject Southern Maryland Wood Treatment



DRILLING LOG

WELL NUMBER: MW-20

OWNER: SMWT

LOCATION: next to MW-17

ADDRESS: Hollywood MD

TOTAL DEPTH: 65 ft

SURFACE ELEVATION: _____

WATER LEVEL: _____

DRILLING COMPANY: Hardin-Huber

DRILLING METHOD: Mud Rotary

DATE: 12-17-87

DRILLER: Teff Corran

HELPER: Mike Corran

Mike Parsons

LOG BY: Nora Hill, Bill Clavin

SKETCH MAP



face

MW-17

MW-20

blows

NOTES:

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0					No samples taken Drilled to 25 ft based on log of MW-17
25		01	SS	13 12 12	tan & orange, medium-grained, subangular, well sorted sand, white striations and lenses, semi compact to compact, moist
30		02	SS	14 19 18 27	orange coarse sand, little fine gravel, compact, moist
35		03	SS	11 8 5 5	orange soft silty clay, few sand & gravel pieces, grading to firm gray silty clay, moist, plastic
40					

* ASTM D1586

SHEET 1 OF 3

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AR301895

DRILLING LOG (Cont'd)

WELL NUMBER: MW-20

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
40					
45		04	SS	6 7 8 9	dark gray dense compact silty clay
50		05	SS	3 4 5 6	dark gray dense compact silty clay
55		06	SS	2 3 4 5 21	silty sandy gray clay, grading to clayey silty fine to very coarse sand, subangular, poorly sorted, little gravel, grading to medium to coarse sand in gray fine matrix
60		07	SS	13 13 13 18	fine gravel to very coarse sand, gray silty clay very fine to fine gray silty sand, very little gravel lost drilling mud from 55-65 ft.
65					

* ASTM D1586

WELL NUMBER: MW-20

ASTM DISC

AR301897

Top of Casing_____

Construction Time Log:

1000

165

DRILLING LOG

WELL NUMBER: MW-21

LOCATION: next to MW-13

OWNER: SMWT

ADDRESS: Hollywood MD

SURFACE ELEVATION: _____

TOTAL DEPTH: 65 ft

WATER LEVEL: _____

DRILLING COMPANY: Hardin-Huber

DRILLING METHOD: Mud Rotary DATE: 12-19-87

DRILLER: Jeff Corran

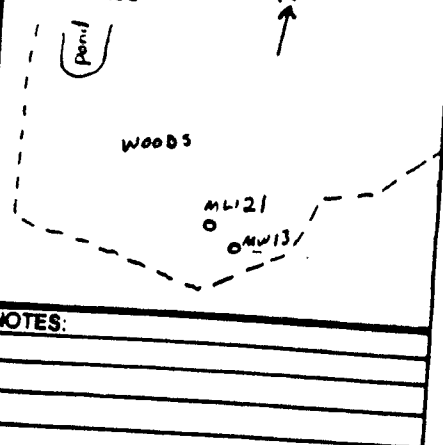
DRILLED: 12-22-87

HELPER: Mike Corran

Mike Parsons

LOG BY: Nora Hill

SKETCH MAP



NOTES:

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0					
5		CU			orange-brown silt, fine to very fine sand no samples taken, drilling to 30 ft based on log of MW-13
10					
15		CU			bright orange silt, fine to very fine sand
20					

* A.S.T.M. D1586

DRILLING LOG (Cont'd)

WELL NUMBER: MW-21

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
20		CU			orange silt, fine to coarse angular sand losing mud down hole
25					
30		CI SS	2 ₃ 4 4		firm orange and light gray mottled silty clay, crumbly, moist
35					
40					
45					

ASTM D1586

DRILLING LOG (Cont'd)

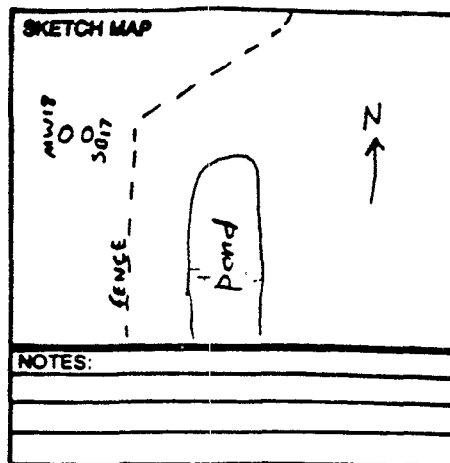
WELL NUMBER: MW-21

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
45					
50		02	SS	2 3 3 5	stiff gray silty clay, streaks of very fine to coarse, angular quartz sand
55		03	SS	8 9 13 16	fine gray silty sand, firm, wet soft gray clay
60			CU		coarse sand to fine gravel, angular
65		04		6 15 21 22	fine to very fine gray silty sand, subangular, compact, wet
70		05		4 5 6 8	hard green-gray, light gray, and blue-gray mottled silty clay, minor streaks of very fine gray sand, moist
					end of drilling at 67 ft.

ASTM D1586

DRILLING LOG

WELL NUMBER: SB-17 OWNER: SMWT
 LOCATION: W of property, next to MW-18 ADDRESS: Hollywood MD
 SURFACE ELEVATION: _____ TOTAL DEPTH: _____
 WATER LEVEL: 8.5 ft
 DRILLING COMPANY: Geomatrix DRILLING METHOD: HSA DATE DRILLED: 16 Dec 87
 DRILLER: Paul Suit HELPER: _____
 LOG BY: Nora Hill



DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01	SS	1 2 3 2	brown sandy clayey silt, orange streaks firm, moist
		02	SS	2 2 2 3	light brown to dark brown silty clayey sand, orange streaks, micaceous, loose, top moist, bottom wet
5		03	SS	1 2 3 2	beige and orange silty medium to coarse quartz sand, few pieces of quartz gravel, loose, wet
		04	SS	3 5 6 7	light gray silty medium-grained sand, bright orange stained spots, wet, loose
		05	SS	2 2 6 7	orange-brown silty clayey medium-grained sand and light gray and orange medium to coarse silty clayey sand, loose, wet
10		06	SS	1 (12") 4 5	light gray and orange stained medium to coarse silty sand, loose, wet
		07	SS	5 3 1 1	orange silty medium to coarse quartz sand, few quartz gravel pieces, orange silty clay in bit
15		01	ST	100 pi 300 pi	top of Shelby tube: medium to coarse orange silty sand bottom of Shelby tube: orange and gray silty clay
		08	SS	1 2 2 3	orange silty fine-medium sand, loose, wet, grading to firm orange silty clay, gray streaks and spots, occasional sand spots
		09	SS	2 3 4 5	orange + light gray mottled firm silty clay and dark blue-gray stiff silty clay, moist
20					

DRILLING LOG (Cont'd)

WELL NUMBER: SB-17

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
20		02	ST	150 psi 300 psi	gray silty clay, stiff
10		SS		WOM 1 2 3	dark gray-blue silty clay, stiff, moist
25		03	ST	200 psi 300 psi	gray clay
					end of boring at 26 ft
30					

* ASTM D1586

E-96

SHEET 2 OF 2

AR301903



DRILLING LOG

WELL NUMBER: SB-18 OWNER: SMWT
LOCATION: NE corner of pond ADDRESS: Hollywood MD
TOTAL DEPTH 25 ft
SURFACE ELEVATION: _____ WATER LEVEL: 6 ft
DRILLING COMPANY: Geomatrix DRILLING METHOD: HSA DATE DRILLED: 17 Dec 87
DRILLER: Paul Suit HELPER: Vernon, Don
LOG BY: Nora Hill

SKETCH MAP

N ↑

5619

5619

5620

pond

NOTES:

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01	SS	3 6	brown fine-medium sandy silt, orange and black streaks, grass and humic material, very stiff, moist
		02	SS	7 6 12 12	brown sandy silt, frequent black streaky discoloration, very stiff, moist, some wood pieces
5		03	SS	8 5 4 15	brown sandy silt, orange & black streaks, organic material, and light gray silty fine sand, yellow streaks, firm grading to loose, wet
		04	SS	3 6 8 9	gray grading to orange silty very coarse to medium sand, loose, wet
		05	SS	4 8 8 8	orange silty medium to very coarse sand, few gray silty patches, 2" section of discoloration: black fleck and a purple hue
10		06	SS	4 6 8 9	N.B.: split spoon taken after Shelby tube failed to recover any sample. Medium to very coarse orange silty sand, loose, wet, overlying very stiff orange silty clay, minor sand, slightly plastic to friable
		07	SS	WOH (18") 1	NB: split spoon again taken after failed Shelby tube. soft to firm orange and gray mottled silty clay grading to soft gray silty clay
15		08	SS	WOH (12") 1 3	NB: split spoon again taken after failed Shelby tube, soft gray-blue silty clay, darker gray streaks
		01	ST	300 psi 400 psi	firm blue-gray clay, slightly crumbly
		02	ST	100 psi 300 psi	firm gray clay
20					

* A.S.T.M. D1586

SHEET 1 OF 2

E-98

AR301905

DRILLING LOG (Cont'd)

WELL NUMBER: SB-18

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
20		09	SS	1 2 3 4	firm dark blue-green-gray silty clay, few sand streaks, very dark gray streaks
25		03	ST	100 psi 300 psi	(overshot to 23 ft augering) gray clay
30					end of boring at 25 ft

ASTM DISK

AR 301906

SHEET 2 OF 2



DRILLING LOG

WELL NUMBER: SB-19
 LOCATION: E edge of pond

OWNER: SMWT
 ADDRESS: Hollywood MD

TOTAL DEPTH 26 ft

SURFACE ELEVATION: _____

WATER LEVEL: _____

DRILLING COMPANY: Geomatrix
 DRILLER: Paul Sutt

DRILLING METHOD: HSA
 HELPER: Vernon, Dan

DATE 17 DEC 87

DRILLED: 18 DEC 87

LOG BY: _____

SKETCH MAP

NOTES:

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01	SS	1 3 4	firm brown sandy silt, orange streaks, gray clay streaks, humic, moist
		02	SS	4 9 8 6	orange + brown mottled silty sand, grading to brown + gray mottled silty sand, moist
5		03	SS	6 8 6 6	medium to fine orange-brown silty sand and light gray + dark gray mottled silty sand with streaky black discoloration, moist
		04	SS	5 5 7 8	loose orange-brown medium to coarse silty sand, black streaks, wet
		05	SS	4 6 8 10	very loose orange-brown medium to coarse silty sand, wet
10		06	SS	3 10 3 3	medium to very coarse orange-brown + dark brown mottled silty sand, increasing silt content with depth, wet, soft orange + brown mottled silty clay in bit.
		01	ST	100 psi	top of Shelby tube: soft gray + dark blue-gray clay bottom of Shelby tube: firm dark blue-gray clay
15		07	SS	1 1 2 2	soft orange-brown silty clay grading to firm blue-gray silty clay
		02	ST	300 psi	stiff blue-gray silty clay
20		08	SS	1 2 3 3	firm dark blue-gray silty clay mottled with blue-greenish-gray silty clay, plastic, moist

* A.S.T.M. D1586

SHEET 1 OF 2

E-100

AR301907

DRILLING LOG

WELL NUMBER: SB-20

OWNER: SMWT

LOCATION: E edge of pond

ADDRESS: Hollywood MD

TOTAL DEPTH: 26 ft

SURFACE ELEVATION: _____

WATER LEVEL: _____

DRILLING COMPANY: Geomatrix

DRILLING METHOD: HSA

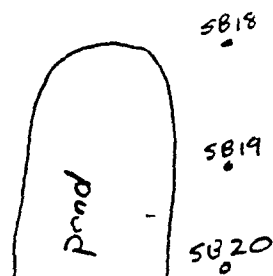
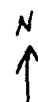
DATE DRILLED: 18 DEC 87

DRILLER: Paul Suit

HELPER: Vernon, Don

LOG BY: _____

SKETCH MAP



NOTES:

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS*	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
0		01	SS	2 3 6 6	firm orange-brown sandy silt, moist
		02	SS	2 2	spoon advanced to 3ft and hit auger loose orange-brown medium-grained silty sand
5		03	SS	6 25 100 (1")	loose dark greenish-brown medium-grained silty sand, wet
		04	SS	10 5 6 12	loose dark green-brown to orange-brown fine to coarse silty sand, wet
10		05	SS	7 7 6 7	green-orange-brown silty medium sand to fine gravel, loose, wet
		01	ST	100psi 500psi	shelby tube only advanced to 11.5" top: medium to coarse orange silty sand bottom: firm orange silty clay, gray streaks
		06	SS	1 2 3	firm blue-gray + dark gray mottled silty clay, moist, plastic, sticky
15		07	SS	1 2 3 5	firm blue-gray silty clay, moist, plastic, sticky
		02	ST	50psi 100psi	top of shelby tube: soft orange clay, wet bottom of shelby tube: firm blue-gray clay
20		08	SS	1 2 3 5	stiff blue-green-gray silty clay, plastic, moist, sticky

* ASTM D1586

DRILLING LOG (Cont'd)

WELL NUMBER: SB-20

DEPTH (FEET)	GRAPHIC LOG	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS	DESCRIPTION / SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)
20		09	SS	2 3 4 5	stiff blue-gray silty clay, little very fine sand, moist, sticky
		10	SS	4 3 5 4	stiff blue-gray silty clay, little very fine sand moist, sticky
25		03	ST	100 psi 300 psi	no description
					end of boring at 26 ft
30					



LOG BY: _____

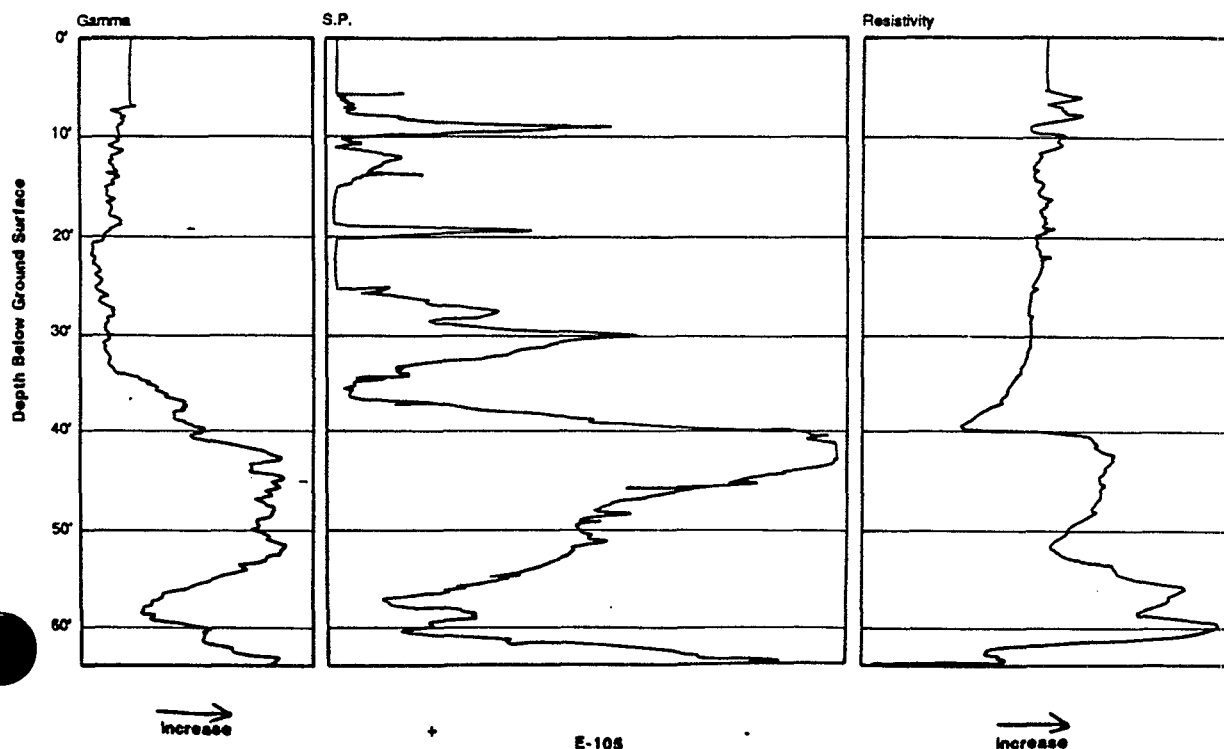
NOTES:

ASTM D1505

AR301911

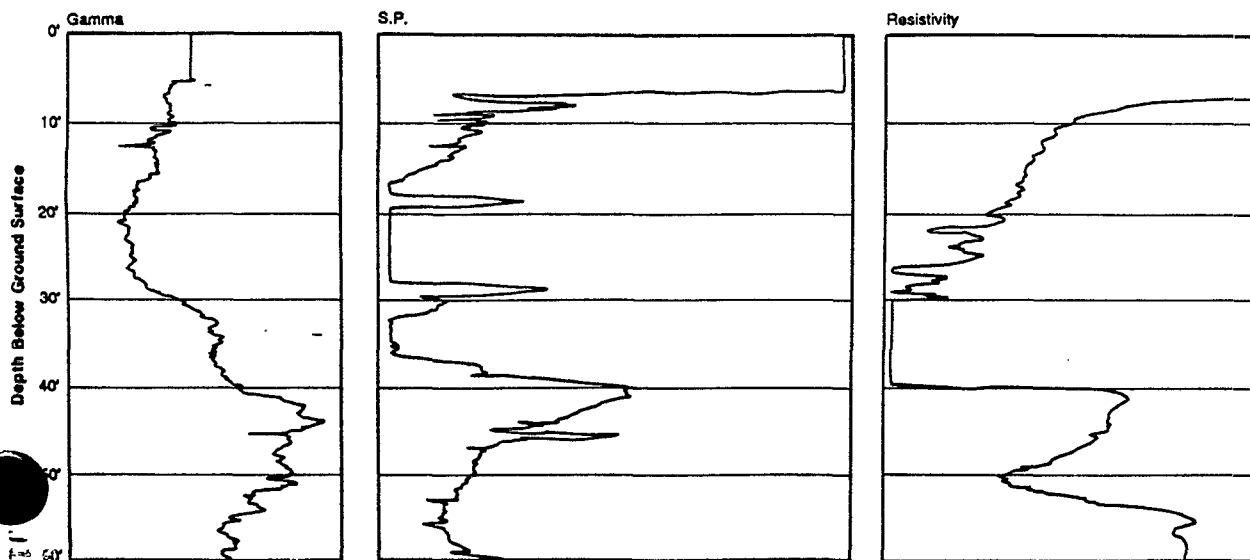
Date: 12/22/87 Well Name and Location: MW-20 Southern MD Wood Treatment		Well Location:	
Operator's Name: C. Sommerfield Earth Data Inc.			
Reference Points: Ground Surface			
Cased Interval: 0-40' Steel			

Type of Log	Gamma	S.P.	Rest.	Remarks:
Logged Interval	0-64'	→	→	
Logging Speed	20 FPM	→	→	
Horizontal Scale		400 mv	50 ~	
Vertical Scale	1"=10'	→	→	
Posit./Sens. Setting				
Time Constant	4			
Counting Rate	50			



AR301912

<u>Date:</u> 12/27/87		<u>Well Location:</u>																																							
<u>Well Name and Location:</u> MW-20 Southern MD Wood Treatment																																									
<u>Operator's Name:</u> Chris Hartman Earth Data Inc.																																									
<u>Reference Points:</u> Ground Surface																																									
<u>Cased Interval:</u> 0-48' Steel																																									
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%; padding: 2px;">Type of Log</td> <td style="width: 15%; padding: 2px;">Gamma</td> <td style="width: 15%; padding: 2px;">S.P.</td> <td style="width: 15%; padding: 2px;">Rest.</td> <td rowspan="4" style="width: 35%; padding: 2px; vertical-align: top;">Remarks:</td> </tr> <tr> <td style="padding: 2px;">Logged Interval</td> <td style="padding: 2px;">0-62'</td> <td style="padding: 2px;">→</td> <td style="padding: 2px;">→</td> </tr> <tr> <td style="padding: 2px;">Logging Speed</td> <td style="padding: 2px;">20 FPM</td> <td style="padding: 2px;">→</td> <td style="padding: 2px;">→</td> </tr> <tr> <td colspan="3" style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">Horizontal Scale</td> <td style="padding: 2px;"></td> <td style="padding: 2px;">400 mv</td> <td style="padding: 2px;">50 ~</td> <td rowspan="4"></td> </tr> <tr> <td style="padding: 2px;">Vertical Scale</td> <td style="padding: 2px;">1"=10'</td> <td style="padding: 2px;">→</td> <td style="padding: 2px;">→</td> </tr> <tr> <td style="padding: 2px;">Posit./Sens. Setting</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">Time Constant</td> <td style="padding: 2px;">4</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">Counting Rate</td> <td style="padding: 2px;">50</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> <td></td> </tr> </table>				Type of Log	Gamma	S.P.	Rest.	Remarks:	Logged Interval	0-62'	→	→	Logging Speed	20 FPM	→	→				Horizontal Scale		400 mv	50 ~		Vertical Scale	1"=10'	→	→	Posit./Sens. Setting				Time Constant	4			Counting Rate	50			
Type of Log	Gamma	S.P.	Rest.	Remarks:																																					
Logged Interval	0-62'	→	→																																						
Logging Speed	20 FPM	→	→																																						
Horizontal Scale		400 mv	50 ~																																						
Vertical Scale	1"=10'	→	→																																						
Posit./Sens. Setting																																									
Time Constant	4																																								
Counting Rate	50																																								



→
Increase

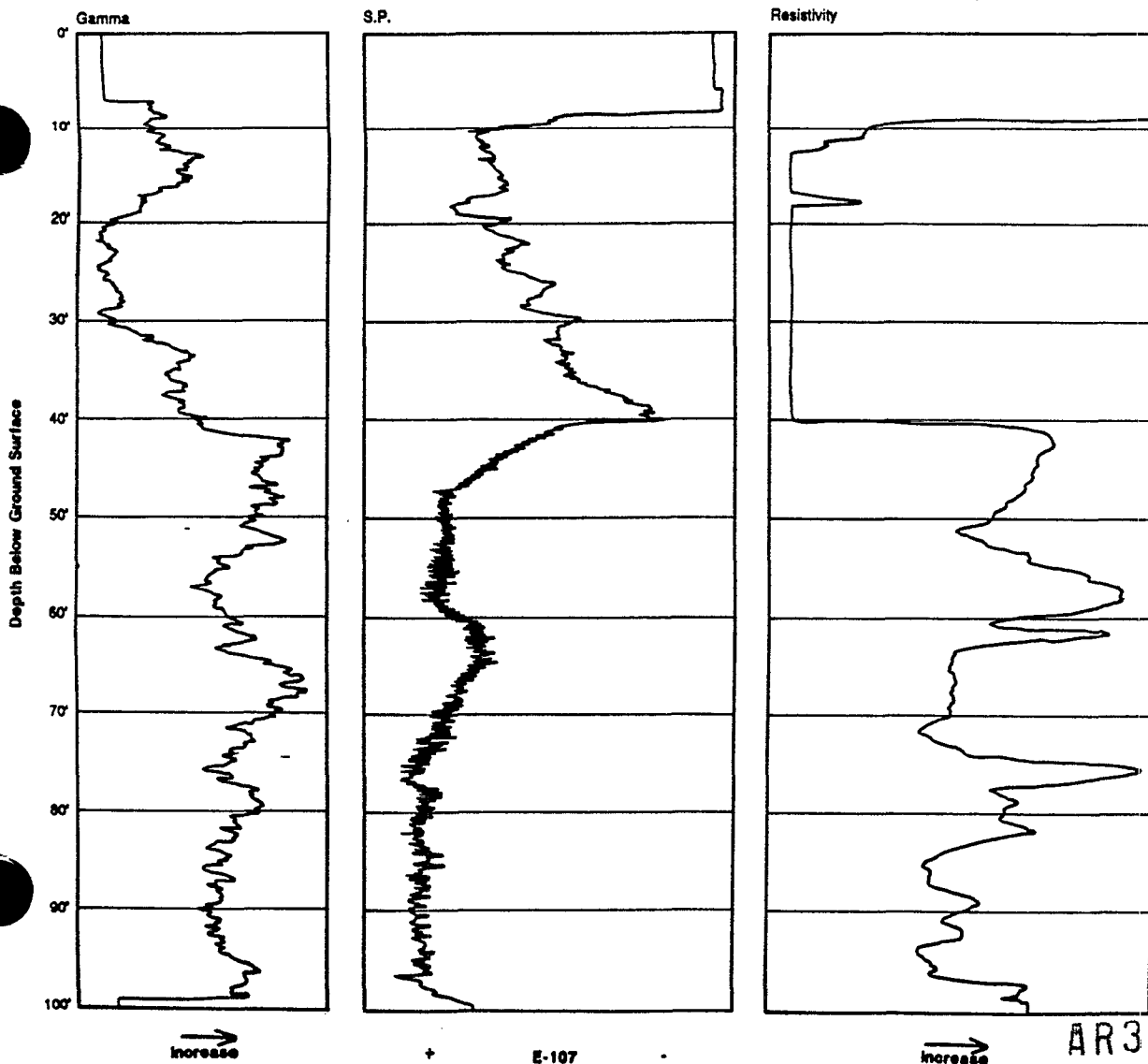
+ E-106

→
Increase

AR301913

Date: 12/14/87 Well Name and Location: MW-19 Southern MD Wood Treatment Operators Name: Chris Hartman Earth Data Inc. Reference Points: Ground Surface Cased Interval: 0-40' Steel	Well Location:
---	-----------------------

Type of Log Logged Interval Logging Speed	<table border="1"> <tr> <th>Gamma</th> <th>S.P.</th> <th>Res.</th> </tr> <tr> <td>0-100'</td> <td>→</td> <td>→</td> </tr> <tr> <td>20 FPM</td> <td>→</td> <td>→</td> </tr> </table>	Gamma	S.P.	Res.	0-100'	→	→	20 FPM	→	→	Remarks:					
Gamma	S.P.	Res.														
0-100'	→	→														
20 FPM	→	→														
Horizontal Scale Vertical Scale Posit./Sens. Setting Time Constant Counting Rate	<table border="1"> <tr> <td></td> <td>400 mv</td> <td>50 ~</td> </tr> <tr> <td>1"=10'</td> <td>→</td> <td>→</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td></td> <td></td> </tr> <tr> <td>50</td> <td></td> <td></td> </tr> </table>		400 mv	50 ~	1"=10'	→	→					4			50	
	400 mv	50 ~														
1"=10'	→	→														
4																
50																



AR301914

Appendix F

AR301915

GLOSSARY OF DATA QUALIFIERS

CODES RELATING TO IDENTIFICATION

(confidence concerning presence or absence of compounds):

U = NOT DETECTED. THE ASSOCIATED NUMBER INDICATES APPROXIMATE SAMPLE CONCENTRATION NECESSARY TO BE DETECTED.

(NO CODE) = CONFIRMED IDENTIFICATION

B = NOT DETECTED. SUBSTANTIALLY ABOVE THE LEVEL REPORTED IN LABORATORY OR FIELD BLANKS.

R = UNRELIABLE RESULT. ANALYTE MAY OR MAY NOT BE PRESENT IN THE SAMPLE. SUPPORTING DATA NECESSARY TO CONFIRM RESULT.

CODES RELATED TO QUANTITATION

(can be used for both positive results and sample quantitation limits):

J = ANALYTE PRESENT. REPORTED VALUE MAY NOT BE ACCURATE OR PRECISE.

K = ANALYTE PRESENT. REPORTED VALUE MAY BE BIASED HIGH. ACTUAL VALUE IS EXPECTED TO BE LOWER.

L = ANALYTE PRESENT. REPORTED VALUE MAY BE BIASED LOW. ACTUAL VALUE IS EXPECTED TO BE HIGHER.

UJ = NOT DETECTED. QUANTITATION LIMIT MAY BE INACCURATE OR IMPRECISE.

UL = NOT DETECTED. QUANTITATION LIMIT IS PROBABLY HIGHER.

Suspected Carcinogenic PNAs

Benzo (a) anthracene
Chrysene
Benzo (b) fluoranthene
Benzo (k) fluoranthene
Benzo (a) pyrene
Indeno (1,2,3 - cd) pyrene
Dibenzo (ah) anthracene

Typical Non Carcinogenic PNAs

Napthalene
2-Methylnapthalene
Acenapthene
Fluorene
Phenanthrene
Fluoranthene
Pyrene
Acenapthylene

Attached for your reference is the hazardous substances list (HSL) volatile organic compounds and the HSL semivolatile compounds separated into base/neutral and acid extractable fractions.

VOLATILE ORGANIC COMPOUNDS	ACID EXTRACTABLES	BASE/NEUTRALS
CHLOROMETHANE	PHENOL	NAPHTHALENE
BROMOMETHANE	2-METHYLPHENOL	2-METHYLNAPHTHALENE
VINYL CHLORIDE	4-METHYLPHENOL	ACENAPHTHENE
CHLOROETHANE	2,4-DIMETHYLPHENOL	DIBENZOFURAN
METHYLENE CHLORIDE	2,4,5-TRICHLOROPHENOL	FLUORENE
ACETONE	2,4,6-TRICHLOROPHENOL	PHENANTHRENE
CARBON DISULFIDE	2,4-DICHLOROPHENOL	ANTHRACENE
1,1-DICHLOROETHENE	2,4-DINITROPHENOL	FLUORANTHENE
1,1-DICHLOROETHANE	2-CHLOROPHENOL	PYRENE
TRANS-1,2-DICHLOROETHENE	2-NITROPHENOL	DI-n-BUTYLPHTHALATE
CHLOROFORM	4,6-DINITRO-2-METHYLPHENOL	BENZO(a)ANTHRACENE
1,2-DICHLOROETHANE	4-CHLORO-3-METHYLPHENOL	INDENO(1,2,3-cd)PYRENE
2-BUTANONE	4-NITROPHENOL	DIBENZO(a,h)ANTHRACENE
1,1,1-TRICHLOROETHANE	BENZOIC ACID	BENZO(g,h,i)PERYLENE
CARBON TETRACHLORIDE	PENTACHLOROPHENOL	CHRYSENE
VINYL ACETATE		BENZO(b)FLUORANTHENE
BROMODICHLOROMETHANE		BENZO(k)FLUORANTHENE
1,2-DICHLOROPROPANE		BENZO(a)PYRENE
TRANS-1,3-DICHLOROPROPANE		1,2,4-TRICHLOROBENZENE
TRICHLOROETHENE		1,2-DICHLOROBENZENE
DIBROMOCHLOROMETHANE		1,3-DICHLOROBENZENE
1,1,2-TRICHLOROETHANE		1,4-DICHLOROBENZENE
BENZENE		2,4-DINITROTOLUENE
CIS-1,3-DICHLOROPROPENE		2,6-DINITROTOLUENE
2-CHLOROETHYL VINYLETHER		2-CHLORONAPHTHALENE
BROMOFORM		2-NITROANILINE
4-METHYL-2-PENTANONE		3,3-DICHLOROBENZIDINE
2-HEXANONE		3-NITROANILINE
TETRACHLOROETHENE		4-BROMOPHENYL PHENYLETHER
1,1,2,2-TETRACHLOROETHANE		4-CHLOROANILINE
TOLUENE		4-CHLOROPHENYL PHENYLETHER
CHLOROBENZENE		4-NITROANILINE
ETHYLBENZENE		ACENAPHTHYLENE
STYRENE		BENZYL ALCOHOL
TOTAL XYLENES		BIS-2-CHLOROETHOXY METHANE
		BIS-2-CHLOROETHYL ETHER
		BIS-2-CHLOROISOPROPYL ETHER
		BIS-2-ETHYLHEXYL PHTHALATE
		BUTYLBENZYLPHTHALATE
		DI-N-OCTYL PHTHALATE
		DIETHYLPHTHALATE
		DIMETHYL PHTHALATE
		HEXACHLOROBENZENE
		HEXACHLOROBUTADIENE
		HEXACHLOROCYCLOPENTADIENE
		HEXACHLOROETHANE
		ISOPHORONE
		N-NITROSO-DI-n-PROPYLAMINE
		N-NITROSO-DIPHENYLAMINE

The Phase II volatile organic analyses results reported in this package are qualified for engineering purposes only. The laboratory BFB tune for OVA analyses did not follow the specific CLP protocol. The GC/MS system must be hardware tuned to meet specified abundance criteria for a maximum of a 50 ng injection of BFB (SOW 785, page E-16, Section 1.3). It is not permissible to co-inject the BFB for this tune requirement with the daily calibration standard because BFB is in this standard as a surrogate at a concentration of 50 ng/mL, which is 250 ng, on a column.

The specific impact (if any) on data quality resulting from this tuning procedure could not be determined, even after consultation with the instrument manufacturer and EPA personnel. As such, the data were qualified as usable for engineering purposes only.

SOUTHERN MARYLAND WOOD TREATING - PHASE II GROUNDWATER SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BNA) DESCRIPTION	DW-TNK-001 1 1 DRILLER WATER	R01-001 1 1	R02-001 1 1	R03-001/R 1 1	R04-001 1 1	R05-001 1 1	R06-001 1 1	R07-001 1 1
Chloromethane	10 U							
Bromomethane	10 U							
Vinyl Chloride	10 U							
Chloroethane	10 UJ							
Methylene Chloride	5 UJ							
Acetone	10 U							
Carbon Disulfide	5 UJ							
1,1-Dichloroethene	5 U							
1,1-Dichloroethane	5 U							
Trans-1,2-Dichloroethene	5 U							
Chloroform	5 U							
1,2-Dichloroethane	5 U							
2-Butanone	10 UJ							
1,1,1-Trichloroethane	5 U							
Carbon Tetrachloride	5 U							
Vinyl Acetate	10 UJ							
Bromodichloromethane	5 U							
1,2-Dichloropropane	5 U							
Trans-1,3-Dichloropropane	5 UJ							
Trichloroethene	5 U							
Dibromochloromethane	5 U							
1,1,2-Trichloroethane	5 U							
Benzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	5 UJ							
2-Chloroethylvinylether	10 U							
Bromoform	5 U							
4-Methyl-2-Pentanone	10 U							
2-Hexanone	10 U							
Tetrachloroethene	5 U							
1,1,2,2-Tetrachloroethane	5 U							
Toluene	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ
Chlorobenzene	5 U							
Ethylbenzene	5 U							
Styrene	5 UJ							
Total Xylenes	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 U	UJ
Phenol	4 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Chloroethyl)Ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzyl Alcohol	10 UJ	10 UJ	10 U	10 UJ	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-chloropropyl)Ether	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-Di-n-Propylamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

SOUTHERN MARYLAND WOOD TREATING - PHASE II GROUNDWATER SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BNA) DESCRIPTION	DW-TNK-001 1 1 DRILLER WATER	R01-001 1 1	R02-001 1 1	R03-001/R 1 1	R04-001 1 1	R05-001 1 1	R06-001 1 1	R07-001 1 1
2,4-Dimethylphenol	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U
Benzoic Acid	50 R	50 UJ	50 U	50 UJ	50 U	50 U	50 U	50 U
bis(2-Chloroethoxy)Methane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	10 UJ	10 UJ	10 U	10 UJ	10 U	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-Methylphenol	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	50 U	50 U	50 U	50 UJ	50 U	50 U	50 U	50 U
2,4,5-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Chloronaphthalene	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Nitroaniline	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dimethyl Phthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3-Nitroaniline	50 UJ	50 UJ	50 U	50 UJ	50 U	50 U	50 U	50 U
Acenaphthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	50 UJ	50 U	50 U	50 UJ	50 U	50 U	50 U	50 U
4-Nitrophenol	50 UJ	50 U	50 U	50 UJ	50 U	50 U	50 U	50 U
Dibenzofuran	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline	50 UJ	50 UJ	50 U	50 UJ	50 U	50 U	50 U	50 U
4,6-Dinitro-2-Methylphenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
N-Nitrosodiphenylamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Phenanthrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-Butylphthalate	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U
Butylbenzylphthalate	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U	10 U
3,3-Dichlorobenzidine	20 UJ	20 UJ	20 U	20 UJ	20 U	20 U	20 U	20 U
Benzo(a)Anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)Phthalate	11 UJ	2 UJ	10 U	10 UJ	10 U	2 UJ	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-Octyl Phthalate	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U	10 U
Benzo(b)Fluoranthene	10 UJ	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U
Benzo(k)Fluoranthene	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)Pyrene	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)Pyrene	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)Anthracene	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)Perylene	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U

SOUTHERN MARYLAND WOOD TREATING - PHASE II GROUNDWATER SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BNA) DESCRIPTION	OW-TNK-001	R01-001	R02-001	R03-001/R	R04-001	R05-001	R06-001	R07-001
DRILLER WATER	1	1	1	1	1	1	1	1
Aluminum	100 U							
Chromium	5 (							
Copper	15 U							
Iron	365							
Lead	5 U							
Mercury	0.2 J(							
Zinc	79							
TOC	3600							
OIL AND GREASE	500 U							
COO								
BOD	100 U							
TSS								
TKN	1000 U							
NO2/NO3								
PHOS	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U
ACIDITY	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
ALKALINITY								

SOUTHERN MARYLAND WOOD TREATING - PHASE II GROUNDWATER SAMPLES

SAMPLE NUMBER	R08-001	R09-001/R	R10-001	R11-001	MM01-001	MM02-001/R	MM03-001	MM04-001/R
DIL/CONC FACTOR (VOA)	1	1	1	1	1	1	1	1
DIL/CONC FACTOR (BNA)	1	1	1	1	1	1	1	5
DESCRIPTION								
Chloromethane								
Bromomethane								
Vinyl Chloride								
Chloroethane								
Methylene Chloride								
Acetone								
Carbon Disulfide								
1,1-Dichloroethene								
1,1-Dichloroethane								
Trans-1,2-Dichloroethene								
Chloroform								
1,2-Dichloroethane								
2-Butanone								
1,1,1-Trichloroethane								
Carbon Tetrachloride								
Vinyl Acetate								
Bromodichloromethane								
1,2-Dichloropropane								
Trans-1,3-Dichloropropane								
Trichloroethene								
Dibromochloromethane								
1,1,2-Trichloroethane								
Benzene	5 U	5 U	5 U	5 U	5 U	5 U	5 U	330
cis-1,3-Dichloropropene								
2-Chloroethylvinylether								
Bromoform								
4-Methyl-2-Pentanone								
2-Hexanone								
Tetrachloroethene								
1,1,2,2-Tetrachloroethane								
Toluene	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	3 UJ	2 UJ	180
Chlorobenzene								
Ethylbenzene								
Styrene								
Total Xylenes	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	92 J
Phenol	10 U	10 U	10 U	10 U	4 J	10 U	2 J	2600
bis(2-Chloroethyl) Ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
2-Chlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Benzyl Alcohol	10 U	10 UJ	10 U	10 U	10 U	10 UJ	10 UJ	50 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
2-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	2900
bis(2-chloropropyl) Ether	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	50 U
4-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	50 U
N-Nitroso-Di-n-Propylamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Hexachloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Isophorene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U

SOUTHERN MARYLAND WOOD TREATING - PHASE II GROUNDWATER SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BNA) DESCRIPTION	R08-001	R09-001/R	R10-001	R11-001	MW01-001	MW02-001/R	MW03-001	MW04-001/R
2,4-Dimethylphenol	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	2500
Benzoic Acid	50 U	50 UJ	50 U	50 U	50 U	50 UJ	50 UJ	250 U
bis(2-Chloroethoxy)Methane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Naphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	4500
4-Chloroaniline	10 U	10 UJ	10 U	10 U	10 U	10 UJ	10 U	50 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
4-Chloro-3-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U	10 U	10 UJ	10 UJ	380
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
2,4,5-Trichlorophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	250 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
2-Nitroaniline	50 U	50 U	50 U	50 U	50 U	50 U	50 UJ	250 U
Dimethyl Phthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Acenaphthylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	20 J
3-Nitroaniline	50 U	50 UJ	50 U	50 U	50 U	50 UJ	50 U	250 U
Acenaphthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	250 U
2,4-Dinitrophenol	50 U	50 UJ	50 U	50 U	50 U	50 U	50 UJ	250 U
4-Nitrophenol	50 U	50 UJ	50 U	50 U	50 U	50 U	50 UJ	250 U
Dibenzofuran	10 U	10 U	10 U	10 U	10 U	10 U	10 U	130
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Diethyl Phthalate	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	50 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Fluorene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	89
4-Nitroaniline	50 U	50 UJ	50 U	50 U	50 U	50 UJ	50 UJ	250 U
4,6-Dinitro-2-Methylphenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	250 U
N-Nitrosodiphenylamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Pentachlorophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Phenanthrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1300
Anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	99
Di-n-Butylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Fluoranthene	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	50 U
Pyrene	10 U	10 UJ	10 U	10 U	10 U	10 U	2 J	13 J
Butylbenzylphthalate	10 U	10 UJ	10 U	10 U	10 U	10 UJ	10 U	50 U
3,3-Dichlorobenzidine	20 U	20 UJ	20 U	20 U	20 U	20 UJ	20 U	100 U
Benzo(a)Anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
bis(2-Ethylhexyl)Phthalate	2 UJ	10 UJ	3 UJ	10 U	5 UJ	7 UJ	42	21 UJ
Chrysene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Di-n-Octyl Phthalate	10 U	10 UJ	10 U	10 U	10 U	10 UJ	10 U	50 U
Benzo(b)Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Benzo(k)Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Benzo(a)Pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Indeno(1,2,3-cd)Pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Dibenzo(a,h)Anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U
Benzo(g,h,i)Perylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	50 U

SOUTHERN MARYLAND WOOD TREATING - PHASE II GROUNDWATER SAMPLES

SAMPLE NUMBER	R08-001	R09-001/R	R10-001	R11-001	MM01-001	MM02-001/R	MM03-001	MM04-001/R
DIL/CONC FACTOR (VOA)	1	1	1	1	1	1	1	1
DIL/CONC FACTOR (BNA)	1	1	1	1	1	1	1	5
DESCRIPTION								
Aluminum								
Chromium								
Copper								
Iron								
Lead								
Mercury								
Zinc								
TOC								
OIL AND GREASE								
COO								
BOD								
TSS								
TKN								
NO2/NO3								
PHOS								
ACIDITY								
ALKALINITY	10000 U 2000 U	10000 U 2000 U	10000 U 2000 U	10000 U 2000 U	10000 U 2000 U	10000 U 2000 U	10000 U 2000 U	10000 U 2000 U

SOUTHERN MARYLAND WOOD TREATING - PHASE II GROUNDWATER SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BNA) DESCRIPTION	MW05-001	MW06-001/R	MW07-001	MW08-001/R	MW09-001	MW10-001	MW11-001	MW12-001/R
Chloromethane	1	1	1	1	1	1	1	1
Bromomethane	1	1	1	1	1	1	1	1
Vinyl Chloride	1	1	1	1	1	1	1	1
Chloroethane	1	1	1	1	1	1	1	1
Methylene Chloride	1	1	1	1	1	1	1	1
Acetone	1	1	1	1	1	1	1	1
Carbon Disulfide	1	1	1	1	1	1	1	1
1,1-Dichloroethene	1	1	1	1	1	1	1	1
1,1-Dichloroethane	1	1	1	1	1	1	1	1
Trans-1,2-Dichloroethene	1	1	1	1	1	1	1	1
Chloroform	1	1	1	1	1	1	1	1
1,2-Dichloroethane	1	1	1	1	1	1	1	1
2-Butanone	1	1	1	1	1	1	1	1
1,1,1-Trichloroethane	1	1	1	1	1	1	1	1
Carbon Tetrachloride	1	1	1	1	1	1	1	1
Vinyl Acetate	1	1	1	1	1	1	1	1
Bromodichloromethane	1	1	1	1	1	1	1	1
1,2-Dichloropropane	1	1	1	1	1	1	1	1
Trans-1,3-Dichloropropane	1	1	1	1	1	1	1	1
Trichloroethene	1	1	1	1	1	1	1	1
Dibromochloromethane	1	1	1	1	1	1	1	1
1,1,2-Trichloroethane	1	1	1	1	1	1	1	1
Benzene	5 U	5 U	5 U	5 U	72	5 U	150	180
cis-1,3-Dichloropropene								
2-Chloroethylvinylether								
Bromoform								
4-Methyl-2-Pentanone								
2-Hexanone								
Tetrachloroethene								
1,1,2,2-Tetrachloroethane								
Toluene	2 UJ	2 UJ	2 UJ	2 UJ	36	2 UJ	180	120
Chlorobenzene								
Ethylbenzene								
Styrene								
Total Xylenes	5 UJ	5 UJ	5 UJ	5 UJ	15 J	5 UJ	130 J	5 UJ
Phenol	130	10 U	10 U	10 U	220	10 U	11000	170
bis(2-Chloroethyl)Ether	10 U	10 U	10 U	10 U	10 U	10 U	400 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	400 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	400 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	400 U	10 U
Benzyl Alcohol	10 U	10 U	10 U	10 U	10 UJ	10 U	400 U	10 U
1,2-bichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	400 U	10 U
2-Methylphenol	240	10 U	10 U	10 U	360 J	10 U	400 U	430
bis(2-chloropropyl)Ether	10 U	10 U	10 U	10 U	220	10 U	400 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	400 U	10 U
N-Nitroso-Di-n-Propylamine	10 U	10 U	10 U	10 U	10 U	10 U	400 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U	11	10 U	400 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U	10 U	400 U	10 U
Isophorene	10 U	10 U	10 U	10 U	10 U	10 U	400 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U	400 U	10 U

SOUTHERN MARYLAND WOOD TREATING - PHASE II GROUNDWATER SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BNA) DESCRIPTION	MW05-001 1	MW06-001/R 1	MW07-001 1	MW08-001/R 100	MW09-001 1	MW10-001 1	MW11-001 40	MW12-001/R 1
2,4-Dimethylphenol	1300	10 U	10 U	5600 U	86	10 U	8300	220
Benzoic Acid	50 U	50 U	50 U	5000 U	50 UJ	50 U	2300	50 U
bis(2-Chloroethoxy)Methane	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
Naphthalene	1300	10 U	10 U	40000	10 U	10 U	6700	10 U
4-Chloroaniline	10 U	10 U	10 U	1000 U	10 UJ	10 U	400 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
4-Chloro-3-Methylphenol	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
2-Methylnaphthalene	160	10 U	10 U	5600	10 UJ	10 U	520 J	260
Hexachlorocyclopentadiene	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
2,4,5-Trichlorophenol	50 U	50 U	50 U	5000 U	50 U	50 U	2000 U	10 U
2-Chloronaphthalene	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
2-Nitroaniline	50 U	50 U	50 U	5000 U	50 U	50 U	2000 U	50 U
Diethyl Phthalate	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
Acenaphthylene	6 J	10 U	10 U	550 J	4 J	10 U	400 U	10 U
3-Nitroaniline	50 U	50 U	50 U	5000 U	50 UJ	50 U	2000 U	50 U
Acenaphthene	100	10 U	10 U	12000	10 U	10 U	750	10 U
2,4-Dinitrophenol	50 U	50 U	50 U	5000 U	50 UJ	50 U	2000 U	50 U
4-Nitrophenol	50 U	50 U	50 U	5000 U	50 U	50 U	2000 U	50 U
Dibenzofuran	43	10 U	10 U	7900	8	10 U	420 J	22
2,4-Dinitrotoluene	10 U	10 U	10 U	1000 U	10 UJ	10 U	400 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
Diethylphthalate	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
Fluorene	14	10 U	10 U	8600	11	10 U	310 J	7 J
4-Nitroaniline	50 U	50 U	50 U	5000 U	50 UJ	50 U	2000 U	50 U
4,6-Dinitro-2-Methylphenol	50 U	50 U	50 U	5000 U	50 U	50 U	2000 U	50 U
N-Nitrosodiphenylamine	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
Pentachlorophenol	920	50 U	50 U	5000	50 U	50 U	1300 J	500
Phenanthrene	54	10 U	10 U	27000 U	35	10 U	610 J	9 J
Anthracene	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
Di-n-Butylphthalate	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
Fluoranthene	10	10 U	10 U	13000	27	10 U	250 J	10 U
Pyrene	3 J	10 U	10 U	5700	15	10 U	92 J	10 U
Butylbenzylphthalate	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
3,3-Dichlorobenzidine	20 U	20 U	20 U	2000 U	20 U	20 U	800 U	20 U
Benzo(a)Anthracene	10 U	10 U	10 U	4400	10 U	10 U	400 U	10 U
bis(2-Ethylhexyl)Phthalate	10 U	10 U	5 UJ	1000 U	10 U	10 U	400 U	10 U
Chrysene	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
Di-n-Octyl Phthalate	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
Benzo(b)Fluoranthene	10 U	10 U	10 U	1000 U	10 UJ	10 U	400 U	10 U
Benzo(k)Fluoranthene	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U
Benzo(a)Pyrene	10 U	10 U	10 U	1700	10 U	10 U	400 U	10 U
Indeno(1,2,3-cd)Pyrene	10 U	10 U	10 U	740 J	10 U	10 U	400 U	10 U
Dibenz(a,h)Anthracene	10 U	10 U	10 U	1000 U	10 UJ	10 U	400 U	10 U
Benzo(g,h,i)Perylene	10 U	10 U	10 U	1000 U	10 U	10 U	400 U	10 U

SOUTHERN MARYLAND WOOD TREATING - PHASE II GROUNDWATER SAMPLES

SAMPLE NUMBER	MW05-001	MW06-001/R	MW07-001	MW08-001/R	MW09-001	MW10-001	MW11-001	MW12-001/R
DIL/CONC FACTOR (VOA)	1	1	1	1	1	1	1	1
DIL/CONC FACTOR (BNA)	1	1	1	100	1	1	40	1
DESCRIPTION								
Aluminum								
Chromium								
Copper								
Iron								
Lead								
Mercury								
Zinc								
TOC								
OTL AND GREASE								
COD								
BOD								
TSS								
TKN								
NO2/NO3								
PHOS								
ACIDITY	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U	10000 U
ALKALINITY	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U

SOUTHERN MARYLAND WOOD TREATING - PHASE II GROUNDWATER SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BHA) DESCRIPTION	MW13-001/R	MW14-001/R	MW15-001	MW16-001/R	MW17-001	MW18-001	MW19-001	MW20-001/R
	1	1	1	1	1	1	1	1
	1	1	1	13	1	1	1	40
				Dup MW20-001		Trip Blank	Field Blank	Dup MW16-001
Chloromethane								
Bromomethane								
Vinyl Chloride								
Chloroethane								
Methylene Chloride								
Acetone								
Carbon Disulfide								
1,1-Dichloroethene								
1,1-Dichloroethane								
Trans-1,2-Dichloroethene								
Chloroform								
1,2-Dichloroethane								
2-Butanone								
1,1,1-Trichloroethane								
Carbon Tetrachloride								
Vinyl Acetate								
Bromodichloromethane								
1,2-Dichloropropane								
Trans-1,3-Dichloropropane								
Trichloroethene								
Dibromochloromethane								
1,1,2-Trichloroethane								
Benzene	5 U	5 U	5 U	390 J	5 U	5 U	5 U	97 J
cis-1,3-Dichloropropene								
2-Chloroethylvinylether								
Bromoform								
4-Methyl-2-Pentanone								
2-Hexanone								
Tetrachloroethene								
1,1,2,2-Tetrachloroethane								
Toluene	2 UJ	2 UJ	2 UJ	580 J	2 UJ	2 UJ	2 UJ	140 J
Chlorobenzene								
Ethylbenzene								
Styrene								
Total Xylenes	5 UJ	5 UJ	5 UJ	450 J	5 UJ	5 UJ	5 UJ	99 J
Phenol	10 U	10 U	10 U	1300	10 U	10 U	2 J	1000
bis(2-Chloroethyl)Ether	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
2-Chlorophenol	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
1,3-Dichlorobenzene	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
1,4-Dichlorobenzene	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Benzyl Alcohol	10 UJ	10 U	10 U	130 U	10 U	10 U	10 U	400 U
1,2-Dichlorobenzene	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
2-Methylphenol	10 U	10 U	10 U	930	10 U	10 U	10 U	680
bis(2-Chloropropyl)Ether	10 UJ	10 U	10 U	130 U	10 U	10 U	10 U	400 U
4-Methylphenol	10 UJ	10 U	10 U	130 U	10 U	10 U	10 U	1100 J
M-Nitroso-Di-n-Propylamine	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Hexachloroethane	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Nitrobenzene	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Isophorene	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
2-Nitrophenol	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U

SOUTHERN MARYLAND WOOD TREATING - PHASE II GROUNDWATER SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BNA) DESCRIPTION	MW13-001/R 1 1	MW14-001/R 1 1	MW15-001 1 1	MW16-001/R 13 Dup MW20-001	MW17-001 1 1	MW18-001 1 Trip Blank	MW19-001 1 Field Blank	MW20-001/R 40 Dup MW16-001
2,4-Dimethylphenol	10 U	10 U	10 U	2700 J	10 U	10 U	10 U	750 J
Benzoic Acid	50 UJ	50 U	50 U	650 U	50 U	50 U	50 U	2000 U
bis(2-Chloroethoxy)Methane	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
2,4-Dichlorophenol	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Naphthalene	10 U	10 U	10 U	32000 J	10 U	10 U	10 U	15000 J
4-Chloroaniline	10 UJ	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Hexachlorobutadiene	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
4-Chloro-3-Methylphenol	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
2-Methylnaphthalene	10 UJ	10 U	10 U	9300 J	10 U	10 U	10 U	4200 J
Hexachlorocyclopentadiene	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
2,4,5-Trichlorophenol	50 U	50 U	50 U	650 U	50 U	50 U	50 U	2000 U
2-Chloronaphthalene	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
2-Nitroaniline	50 U	50 U	50 U	650 U	50 U	50 U	50 U	2000 U
Dimethyl Phthalate	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Acenaphthylene	10 U	10 U	10 U	440 U	10 U	10 U	10 U	400 U
3-Nitroaniline	50 UJ	50 U	50 U	650 U	50 U	50 U	50 U	2000 U
Acenaphthene	10 U	10 U	1 J	6400 U	10 U	10 U	1 J	6500 U
2,4-Dinitrophenol	50 U	50 U	50 U	650 U	50 U	50 U	50 U	2000 U
4-Nitrophenol	50 U	50 U	50 U	650 U	50 U	50 U	50 U	2000 U
Dibenzofuran	10 U	10 U	10 U	4300 U	10 U	10 U	10 U	4900 U
2,4-Dinitrotoluene	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
2,6-Dinitrotoluene	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Diethyl phthalate	10 UJ	10 U	10 U	130 U	10 U	10 U	10 U	400 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Fluorene	10 U	10 U	10 U	6100 U	10 U	10 U	10 U	4900 U
4-Nitroaniline	50 UJ	50 U	50 U	650 U	50 U	50 U	50 U	2000 U
4,6-Dinitro-2-Methylphenol	50 U	50 U	50 U	650 U	50 U	50 U	50 U	2000 U
N-Nitrosodiphenylamine	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Hexachlorobenzene	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Pentachlorophenol	50 U	50 U	50 U	1500 U	50 U	50 U	50 U	1100 U
Phenanthrene	10 U	10 U	10 U	13000 U	10 U	10 U	24	12000 U
Anthracene	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Di-n-Butylphthalate	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Fluoranthene	10 U	10 U	15	14000 J	1 J	10 U	16	6900 J
Pyrene	10 U	10 U	5	4100 U	10 U	10 U	5	4200 U
Butylbenzylphthalate	10 UJ	10 U	10 U	130 U	10 U	10 U	10 U	400 U
3,3-Dichlorobenzidine	20 UJ	20 U	20 U	260 U	20 U	20 U	20 U	800 U
Benzo(a)Anthracene	10 U	10 U	10 U	2900 U	10 U	10 U	10 U	2800 U
bis(2-Ethylhexyl)Phthalate	3 UJ	9 UJ	10 U	130 U	8 UJ	10 U	10 U	400 U
Chrysene	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Di-n-Octyl Phthalate	10 UJ	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Benzo(b)Fluoranthene	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Benzo(k)Fluoranthene	10 U	10 U	10 U	1100 U	10 U	10 U	10 U	970 U
Benzo(a)Pyrene	10 U	10 U	10 U	460 U	10 U	10 U	10 U	530 U
Indeno(1,2,3-cd)Pyrene	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Dibenzo(a,h)Anthracene	10 U	10 U	10 U	130 U	10 U	10 U	10 U	400 U
Benzo(g,h,i)Perylene	10 U	10 U	10 U	190 J	10 U	10 U	10 U	400 U

SOUTHERN MARYLAND WOOD TREATING - PHASE II GROUNDWATER SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BMA) DESCRIPTION	MW13-001/R	MW14-001/R	MW15-001	MW16-001/R	MW17-001	MW18-001	MW19-001	MW20-001/R
Aluminum	1	1	1	13	1	1	1	1
Chromium								
Copper								
Iron								
Lead								
Mercury								
Zinc								
TOC								
OIL AND GREASE								
COD								
BOD								
TSS								
TKN								
NO2/NO3								
PHOS								
ACIDITY								
ALKALINITY	10000 U 2000 U	10000 U 2000 U	10000 U 2000 U	10000 U 2000 U	10000 U 2000 U	10000 U 2000 U	10000 U 2000 U	10000 U 2000 U
				Dup MW20-001		Trip Blank	Field Blank	Dup MW16-001
								40

SOUTHERN MARYLAND WOOD TREATING - PHASE II GROUNDWATER SAMPLES

SAMPLE NUMBER	DIL/CONC FACTOR (VOA)	DIL/CONC FACTOR (BNA)	DESCRIPTION	MW21-001	MW22-001
				Trip Blank	Field Blank
Chloromethane					
Bromomethane					
Vinyl Chloride					
Chloroethane					
Methylene Chloride					
Acetone					
Carbon Disulfide					
1,1-Dichloroethene					
1,1-Dichloroethane					
Trans-1,2-Dichloroethene					
Chloroform					
1,2-Dichloroethane					
2-Butanone					
1,1,1-Trichloroethane					
Carbon Tetrachloride					
Vinyl Acetate					
Bromodichloromethane					
1,2-Dichloropropane					
Trans-1,3-Dichloropropane					
Trichloroethene					
Dibromochloromethane					
1,1,2-Trichloroethane					
Benzene				5 U	5 U
cis-1,3-Dichloropropene					
2-Chloroethylvinylether					
Bromoform					
4-Methyl-2-Pentanone					
2-Hexanone					
Tetrachloroethene					
1,1,2,2-Tetrachloroethane					
Toluene				2 UJ	5 U
Chlorobenzene					
Ethylbenzene					
Styrene					
Total Xylenes				5 UJ	5 UJ
Phenol				10 U	10 U
bis(2-Chloroethyl)Ether				10 U	10 U
2-Chlorophenol				10 U	10 U
1,3-Dichlorobenzene				10 U	10 U
1,4-Dichlorobenzene				10 U	10 U
Benzyl Alcohol				10 UJ	10 U
1,2-Dichlorobenzene				10 U	10 U
2-Methylphenol				10 UJ	10 U
bis(2-chloropropyl)Ether				10 U	10 U
4-Methylphenol				10 U	10 U
N-Nitroso-Di-n-Propylamine				10 U	10 U
Hexachloroethane				10 U	10 U
Nitrobenzene				10 U	10 U
Isophorene				10 U	10 U
2-Nitrophenol				10 U	10 U

SOUTHERN MARYLAND WOOD TREATING - PHASE II GROUNDWATER SAMPLES

SAMPLE NUMBER	HW21-001	HW22-001
DIL/CONC FACTOR (VOA)	1	1
DIL/CONC FACTOR (BNA)	1	1
DESCRIPTION	Trip Blank	Field Blank
2,4-Dimethylphenol	10 U	10 U
Benzoic Acid	50 UJ	50 U
Bis(2-Chloroethoxy)Methane	10 U	10 U
2,4-Dichloropheno	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U
Naphthalene	10 U	10 U
4-Chloroaniline	10 U	10 U
Hexachlorobutadiene	10 U	10 U
4-Chloro-3-Methylphenol	10 U	10 U
2-Methylnaphthalene	10 UJ	10 U
Hexachlorocyclopentadiene	10 U	10 U
2,4,6-Trichloropheno	10 U	10 U
2,4,5-Trichloropheno	50 U	50 U
2-Chloronaphthalene	10 U	10 U
2-Nitroaniline	50 UJ	50 U
Dimethyl Phthalate	10 U	10 U
Acenaphthylene	10 U	10 U
3-Nitroaniline	50 U	50 U
Acenaphthene	10 U	10 U
2,4-Dinitrophenol	50 UJ	50 U
4-Nitrophenol	50 UJ	50 U
Dibenzofuran	10 U	10 U
2,4-Dinitrotoluene	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U
Diethylphthalate	10 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U
Fluorene	10 U	10 U
4-Nitroaniline	50 UJ	50 U
4,6-Dinitro-2-Methylphenol	50 U	50 U
N-Nitrosodiphenylamine	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U
Hexachlorobenzene	10 U	10 U
Pentachloropheno	50 U	50 U
Phenanthrene	10 U	10 U
Anthracene	10 U	3 U
Di-n-Butylphthalate	10 U	10 U
Fluoranthene	10 U	6 U
Pyrene	10 U	2 U
Butylbenzylphthalate	10 U	10 U
3,3-Dichlorobenzidine	20 U	20 U
Benzo(a)Anthracene	10 U	10 U
bis(2-Ethylhexyl)Phthalate	10 UJ	5 UJ
Chrysene	10 U	10 U
Di-n-Octyl Phthalate	10 U	10 U
Benzo(b)Fluoranthene	10 U	10 U
Benzo(k)Fluoranthene	10 U	10 U
Benzo(a)Pyrene	10 U	10 U
Indeno(1,2,3-cd)Pyrene	10 U	10 U
Dibenzo(a,h)Anthracene	10 U	10 U
Benzo(g,h,i)Perylene	10 U	10 U

SOUTHERN MARYLAND WOOD TREATING - PHASE II GROUNDWATER SAMPLES

SAMPLE NUMBER	MW21-001	MW22-001
DIL/CONC FACTOR (VOA)	1	1
DIL/CONC FACTOR (BWA)	1	1
DESCRIPTION	Trip Blank	Field Blank
Aluminum		
Chromium		
Copper		
Iron		
Lead		
Mercury		
Zinc		
TOC		
OIL AND GREASE		
COD		
BOD		
TSS		
TKN		
NO2/NO3		
PHOS		
ACIDITY	10000 U	10000 U
ALKALINITY	2000 U	2000 U

SOUTHERN MARYLAND WOOD TREATING - PHASE III GROUNDWATER SAMPLES

<<SAMPLE NUMBER>>	SGW-MW01-002	SGW-MW01-003	SGW-MW02-002	SGW-MW02-002LD	SGW-MW03-002	SGW-MW04-002	SGW-MW05-002	SGW-MW06-002
	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
VOLATILE ORGANICS								
Chloromethane	10 U	10 U	10 U	10 U	10 U	1,000 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	1,000 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U	10 U	1,000 U	10 U	10 U
Chloroethane	5 J	3 JB	1 JB	1 JB	14 B	1,930 B	7 B	1 JB
Methylene Chloride	1 JB	10 U	12 B	10 U	10 U	1,800 B	10 U	26 B
Acetone	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
Carbon Disulfide	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
1,1-Dichloroethene	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
Trans-1,1-Dichloroethene	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
Chloroform	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 U	1,000 U	10 U	10 U
2-Butanone	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U	10 U	1,000 U	10 U	10 U
Vinyl Acetate	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
Trans-1,3-Dichloropropane	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
Trichloroethene	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
1,1,2-Trichloromethane	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
Benzene	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
Cis-1,3-Dichloroethane	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
2-Chloroethylvinylether	10 U	10 U	10 U	10 U	10 U	210 J	5 U	5 U
Bromoform	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	1,000 U	10 U	10 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10 U	10 U	1,000 U	10 U	10 U
Tetrachloroethene	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
Toluene	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
Styrene	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
Total Xylenes	5 U	5 U	5 U	5 U	5 U	500 U	5 U	5 U
SEMI-VOLATILES								
Phenol	2 J	10 U	10 U	10 U	10 U	2,400	10 U	2 J
Bis(2-Chloroethyl) Ether	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Benzyl Alcohol	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U

NOTE: Dioxin IEF's were calculated using maximum possible concentrations as observed by GC Analysis.

SOUTHERN MARYLAND WOOD TREATING - PHASE III GROUNDWATER SAMPLES

<<SAMPLE NUMBER>>	SGM-MW01-002	SGM-MW01-003	SGM-MW02-002	SGM-MW02-002LD	SGM-MW03-002	SGM-MW04-002	SGM-MW05-002	SGM-MW06-002
	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U	10 U	2,200 U	10 U	10 U
bis(2-chloropropyl) Ether	10 U	10 U	10 U	10 U	10 U	2,200 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U	10 U	6,200 U	10 U	10 U
M-Nitroso-Di-n-Propylamine	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Hexachlorethane	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Isophorene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Benzoic Acid	50 U	50 U	50 U	50 U	50 U	1,600 U	10 U	10 U
bis(2-Chloroethoxy)Methane	10 U	10 U	10 U	10 U	10 U	9,300 U	50 U	33 J
2,4-Dichlorophenol	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U	10 U	460 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
4-Chloro-3-Methylphenol	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
2,4,5-Trichlorophenol	50 U	50 U	50 U	50 U	50 U	200 U	10 U	10 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U	10 U	1,000 U	50 U	50 U
2-Nitroaniline	50 U	50 U	50 U	50 U	50 U	1,000 U	50 U	50 U
Dimethyl Phthalate	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
3-Nitroaniline	50 U	50 U	50 U	50 U	50 U	1,000 U	50 U	50 U
Acenaphthene	10 U	10 U	10 U	10 U	10 U	340 U	10 U	10 U
2,4-Dinitrophenol	50 U	50 U	50 U	50 U	50 U	1,000 U	50 U	50 U
4-Nitrophenol	50 U	50 U	50 U	50 U	50 U	1,000 U	50 U	50 U
Dibenzofuran	10 U	10 U	10 U	10 U	10 U	130 J	10 U	10 U
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U	10 U	77 J	10 U	10 U
4-Nitroaniline	50 U	50 U	50 U	50 U	50 U	1,000 U	50 U	50 U
4,6-Dinitro-2-Methylphenol	50 U	50 U	50 U	50 U	50 U	1,000 U	50 U	50 U
M-Nitrosodiphenylamine	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Pentachlorophenol	50 U	50 U	50 U	50 U	50 U	3,300 U	50 U	50 U
Phenanthrene	10 U	10 U	10 U	10 U	10 U	95 J	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Di-n-Butylphthalate	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U

NOTE: Dioxin TEF's were calculated using maximum possible concentrations as observed by GC Analysis.

SOUTHERN MARYLAND WOOD TREATING - PHASE III GROUNDWATER SAMPLES

<<SAMPLE NUMBER>>	SGM-MW01-002	SGM-MW01-003	SGM-MW02-002	SGM-MW02-002LD	SGM-MW03-002	SGM-MW04-002	SGM-MW05-002	SGM-MW06-002
	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
Butylbenzylphthalate	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
3,3-Dichlorobenzidine	20 U	20 U	20 U	20 U	20 U	400 U	20 U	20 U
Benzo(a)Anthracene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
bis(2-Ethylhexyl)Phthalate	3 J	6 J	3 J	3 J	5 J	200 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Di-n-Octyl Phthalate	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Benzo(b)Fluoranthene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Benzo(k)Fluoranthene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Benzo(a)Pyrene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Indeno(1,2,3-cd)Pyrene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Dibenzo(a,h)Anthracene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
Benzo(g,h,i)Perylene	10 U	10 U	10 U	10 U	10 U	200 U	10 U	10 U
INORGANICS								
Aluminum	6,340 J	7,200 J	2,120 J	869 J	508 J	5,580 J	3,700 J	3,500 J
Chromium	28.8	29.4	9.0	3.9	3.0	16.6	8.9	8.8
Copper	36.6	39.9	12.7	7.2	217.0	74.1	9.2	7.0
Iron	29,300 JL	28,100 JL	8,560 JL	3,120 JL	1,330 JL	126,000 JL	4,210 JL	3,620 JL
Lead	15.8 J	11.6 J	13.0 J	10.7 J	26.3 J	17.7 J	11.1 J	24.0 J
Mercury	0.8	0.8	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Zinc	171.0	222.0	40.8	31.8	205.0	187.0	70.9	24.8 B
DIOXIN/FURAN (NG/L)								
TEF							0.055	
TCDD							ND	
2378-TCDD							0.055	
PCDD							ND	
2378x-PCDD							ND	
HxCDD							0.055	
2378xHxCDD							ND	
HpCDD							0.018	
2378HpCDD							0.844	
OCDD							0.348	
TCDF							0.033	
2378-TCDF							0.739	
PCDF							0.032	
2378xPCDF							ND	
HxCDF							ND	
2378xHxCDF							0.049	
HpCDF							0.011	
2378HpCDF							ND	
OCDF							ND	

NOTE: Dioxin TEF's were calculated using maximum possible concentrations as observed by GC Analysis.

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SOUTHERN MARYLAND WOOD TREATING - PHASE III GROUNDWATER SAMPLES

<<SAMPLE NUMBER>> SGW-MW07-002 SGW-MW08-002 SGW-MW08-002 SGW-MW09-002 SGW-MW09-003 SGW-MW10-002 SGW-MW11-002 SGW-MW12-002

	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
VOLATILE ORGANICS								
Chloromethane	10 U	200 U	10 U	10 U	10 U	10 U	1,000 U	1,000 U
Bromomethane	10 U	200 U	10 U	10 U	10 U	10 U	1,000 U	1,000 U
Vinyl Chloride	10 U	200 U	10 U	10 U	10 U	10 U	1,000 U	1,000 U
Chloroethane	10 U	200 U	10 U	10 U	10 U	10 U	1,000 U	1,000 U
Methylene Chloride	1 JB	180 B	7 B	5 B	4 JB	2,200 B	940 B	1,800 B
Acetone	10 U	320 B	6 JB	5 U	5 U	5 U	5 U	500 U
Carbon Disulfide	5 U	100 U	5 U	5 U	5 U	5 U	5 U	500 U
1,1-Dichloroethane	5 U	100 U	5 U	5 U	5 U	5 U	5 U	500 U
1,1-Dichloroethane	5 U	100 U	5 U	5 U	5 U	5 U	5 U	500 U
Trans-1,1-Dichloroethene	5 U	100 U	5 U	5 U	5 U	5 U	5 U	500 U
Chloroform	5 U	100 U	5 U	5 U	5 U	5 U	5 U	500 U
1,2-Dichloroethane	10 U	200 U	10 U	10 U	10 U	10 U	1,000 U	1,000 U
2-Butanone	5 U	100 U	5 U	5 U	5 U	5 U	5 U	500 U
1,1,1-Trichloroethane	5 U	100 U	5 U	5 U	5 U	5 U	5 U	500 U
Carbon Tetrachloride	10 U	200 U	10 U	10 U	10 U	10 U	1,000 U	1,000 U
Vinyl Acetate	5 U	100 U	5 U	5 U	5 U	5 U	5 U	500 U
Bromodichloromethane	5 U	100 U	5 U	5 U	5 U	5 U	5 U	500 U
1,2-Dichloropropane	5 U	100 U	5 U	5 U	5 U	5 U	5 U	500 U
Trans-1,3-Dichloropropane	5 U	100 U	5 U	5 U	5 U	5 U	5 U	500 U
Trichloroethene	5 U	100 U	5 U	5 U	5 U	5 U	5 U	500 U
Dibromochloromethane	5 U	100 U	5 U	5 U	5 U	5 U	5 U	500 U
1,1,2-Trichloromethane	5 U	610	11	9	5 U	5 U	5 U	160 J
Benzene	5 U	0 U	5 U	5 U	5 U	5 U	5 U	500 U
cis-1,3-Dichloroethane	5 U	0 U	5 U	5 U	5 U	5 U	5 U	500 U
2-Chloroethyl vinyl ether	10 U	0 U	10 U	10 U	10 U	10 U	1,000 U	1,000 U
Bromoform	5 U	0 U	5 U	5 U	5 U	5 U	5 U	500 U
2-Hexanone	10 U	0 U	10 U	10 U	10 U	10 U	1,000 U	1,000 U
4-Methyl-2-Pentanone	10 U	0 U	10 U	10 U	10 U	10 U	1,000 U	1,000 U
Tetrachloroethene	5 U	0 U	5 U	5 U	5 U	5 U	5 U	500 U
1,1,2,2-Tetrachloroethane	5 U	0 U	5 U	5 U	5 U	5 U	5 U	500 U
Toluene	5 U	410	15	12	5 U	5 U	5 U	500 U
Chlorobenzene	5 U	0 U	5 U	5 U	5 U	5 U	5 U	500 U
Ethylbenzene	5 U	54 J	3 J	3 J	3 J	3 J	110 J	500 U
Styrene	5 U	120	6	5	5	5	120 J	500 U
Total Xylenes	5 U	260	12	10	10	10	170 J	500 U
SEMI-VOLATILES								
Phenol	10 U	2,000	4 J	4 J	4 J	4,100	100 U	100 U
bis(2-Chloroethyl) Ether	10 U	200 U	10 U	10 U	10 U	200 U	100 U	100 U
2-Chlorophenol	10 U	200 U	10 U	10 U	10 U	200 U	100 U	100 U
1,3-Dichlorobenzene	10 U	200 U	10 U	10 U	10 U	200 U	100 U	100 U
1,4-Dichlorobenzene	10 U	200 U	10 U	10 U	10 U	200 U	100 U	100 U
Benzyl Alcohol	10 U	200 U	10 U	10 U	10 U	200 U	100 U	100 U

NOTE: Dioxin TEF's were calculated using maximum possible concentrations as observed by GC Analysis.

SOUTHERN MARYLAND WOOD TREATING - PHASE III GROUNDWATER SAMPLES

<<SAMPLE NUMBER>>	SGM-MW07-002	SGM-MW08-002	SGM-MW08-002	SGM-MW09-002	SGM-MW09-003	SGM-MW10-002	SGM-MW11-002	SGM-MW12-002
	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
1,2-Dichlorobenzene	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
2-Methylphenol	10 U	2,200	11	13	10 U	10 U	2,000	200
bis(2-chloropropyl) Ether	10 U	200 U	10 U	10 U	10 U	10 U	2,200 U	100 U
4-Methylphenol	10 U	4,800	8 J	11	10 U	10 U	5,600	1,100
N-Nitroso-Di-n-Propylamine	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
Hexachlorethane	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
Nitrobenzene	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
Isophorene	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
2-Nitrophenol	10 U	200 U	10 U	12	10 U	10 U	2,000	100 U
2,4-Dimethylphenol	50 U	1,900	50 U	50 U	50 U	50 U	1,500	500 U
Benzoic Acid	10 U	1,000 U	10 U	10 U	10 U	10 U	200 U	100 U
bis(2-Chloroethoxy)Methane	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
2,4-Dichlorophenol	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
1,2,4-Trichlorobenzene	10 U	200 U	10 U	570	10 U	10 U	5,800	1,700
Naphthalene	10 U	8,600	540	10 U	10 U	10 U	200 U	100 U
4-Chloroaniline	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
Hexachlorobutadiene	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
4-Chloro-3-Methylphenol	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
2-Methylnaphthalene	10 U	1,800	140	140	10 U	10 U	1,500	220
Hexachlorocyclopentadiene	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
2,4,6-Trichlorophenol	50 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
2,4,5-Trichlorophenol	50 U	1,000 U	50 U	50 U	50 U	50 U	1,000 U	500 U
2-Chloronaphthalene	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
2-Nitroaniline	50 U	1,000 U	50 U	50 U	50 U	50 U	1,000 U	500 U
Dimethyl Phthalate	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
Acenaphthylene	10 U	160 J	15	14	10 U	10 U	77 J	100 U
3-Nitroaniline	50 U	1,000 U	50 U	50 U	50 U	50 U	1,000 U	500 U
Acenaphthene	10 U	2,000	170	170	10 U	10 U	1,400	180
2,4-Dinitrophenol	50 U	1,000 U	50 U	50 U	50 U	50 U	1,000 U	500 U
4-Nitrophenol	50 U	1,000 U	50 U	50 U	50 U	50 U	1,000 U	500 U
Dibenzofuran	10 U	1,300	96	98	10 U	10 U	970	63 J
2,4-Dinitrotoluene	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
2,6-Dinitrotoluene	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
Diethylphthalate	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
4-Chlorophenyl-phenylether	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
Fluorene	10 U	1,300	82	83	10 U	10 U	890	100 U
4-Nitroaniline	50 U	1,000 U	50 U	50 U	50 U	50 U	1,000 U	500 U
4,6-Dinitro-2-Methylphenol	50 U	1,000 U	50 U	50 U	50 U	50 U	1,000 U	500 U
N-Nitrosodiphenylamine	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
4-Bromophenyl-phenylether	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
Hexachlorobenzene	10 U	200 U	10 U	10 U	10 U	10 U	200 U	100 U
Pentachlorophenol	50 U	1,000 U	3 J	4 J	50 U	50 U	670	500 U
Phenanthrene	10 U	2,900	94	92	10 U	10 U	1,700	47 J
Anthracene	10 U	340	7 J	7 J	10 U	10 U	200	100 U
Di-n-Butylphthalate	10 U	200 U	3 J	10 U	10 U	10 U	200 U	100 U
Fluoranthene	10 U	1,600	22	22	10 U	10 U	1,000	100 U
Pyrene	10 U	1,000	13	13	10 U	10 U	670	100 U

NOTE: Dioxin TEF's were calculated using maximum possible concentrations as observed by GC Analysis.

SOUTHERN MARYLAND WOOD TREATING - PHASE III GROUNDWATER SAMPLES

<<SAMPLE NUMBER>>	SGM-MW07-002	SGM-MW08-002	SGM-MW09-002	SGM-MW09-003	SGM-MW10-002	SGM-MW11-002	SGM-MW12-002
	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
Butylbenzylphthalate	10 U	200 U	10 U	10 U	10 U	200 U	100 U
3,3-Dichlorobenzidine	20 U	400 U	20 U	20 U	20 U	400 U	200 U
Benzo(a)Anthracene	10 U	250	10 U	10 U	10 U	160	100 U
bis(2-Ethylhexyl)Phthalate	2 J	200 U	7 J	7 J	10 U	200 U	100 U
Chrysene	10 U	260	10 U	10 U	10 U	150	100 U
Di-n-Octyl Phthalate	10 U	200 U	10 U	10 U	10 U	200 U	100 U
Benzo(b)Fluoranthene	10 U	90 J	10 U	10 U	10 U	65 J	100 U
Benzo(k)Fluoranthene	10 U	87 J	10 U	10 U	10 U	79 J	100 U
Benzo(a)Pyrene	10 U	76 J	10 U	10 U	10 U	61 J	100 U
Indeno(1,2,3-cd)Pyrene	10 U	200 U	10 U	10 U	10 U	200 U	100 U
Dibenzo(a,h)Anthracene	10 U	200 U	10 U	10 U	10 U	200 U	100 U
Benzo(g,h,i)Perylene	10 U	200 U	10 U	10 U	10 U	200 U	100 U

INORGANICS

Aluminum	7,990 J	292 J	76,800 J	85,800 J	15,600 J	286 J	12,400 J
Chromium	21.7	3.7	138.0	156.0	45.4	5.6	70.0
Copper	22.2	3.4	132.0	132.0	17.3	0.8	10.6
Iron	14,000 JL	19,600 JL	633,000 JL	1.2 U	76,700 JL	134,000	173,000
Lead	43.0 J	2.6	51.7 J	60.8 L	11.3 J	1.3 R	13.6 JL
Mercury	0.2 U	0.2 U	1.4	2.3	0.2 U	0.2 U	0.2 U
Zinc	38.3	36.5	89.5	232.0 J	29.3 B	3.2	104.0

DIOXIN/FURAN (NG/L)

TEF	0.089	0.184	0.025	0.031	0.203	0.030
TCDD	ND	ND	ND	ND	ND	ND
2378-TCDD	0.037	0.138	0.024	0.027	0.049	0.030
PCDD	0.209	ND	ND	0.045	ND	ND
2378x-PCDD	0.030	ND	ND	ND	ND	ND
HxCDD	ND	0.973	ND	0.034	6.472	ND
2378xHxCDD	0.311	1.006	ND	ND	1.898	ND
HpCDD	56.371	125.709	0.054	0.257	123.609	0.391
2378xHpCDD	21.538	0.110	ND	0.073	63.398	0.152
OCDD	54.483	123.666	0.497	0.412	176.200	3.592
TCDF	0.110	0.545	0.016	0.039	0.048	0.014
2378-TCDF	ND	ND	0.008	0.017	ND	ND
PCDF	ND	ND	ND	0.033	ND	ND
2378xPCDF	2.523	1.852	ND	0.016	ND	ND
HxCDF	0.056	0.055	ND	0.042	6.862	0.013
2378xHxCDF	ND	11.767	ND	0.013	0.206	ND
HpCDF	0.183	2.219	ND	ND	39.593	0.051
2378xHpCDF	21.668	18.402	0.033	ND	8.061	ND
OCDF					63.092	0.147

NOTE: Dioxin TEF's were calculated using maximum possible concentrations as observed by GC Analysis.

SOUTHERN MARYLAND WOOD TREATING - PHASE III GROUNDWATER SAMPLES

<<SAMPLE NUMBER>>	SGM-MW13-002	SGM-MW14-002	SGM-MW15-002	SGM-MW16-002	SGM-MW17-002	SGM-MW18-002	SGM-MW19-002	DGM-MW20-002
	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
VOLATILE ORGANICS								
Chloromethane	10 U	10 U	10 U	100 U	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	100 U	10 U	10 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U	100 U	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	100 U	10 U	10 U	10 U	10 U
Methylene Chloride	4 JB	4 JB	4 JB	83 B	4 JB	4 JB	10 B	6 B
Acetone	10 U	10 U	10 U	130 B	10 U	10 U	10 U	11 B
Carbon Disulfide	5 U	5 U	5 U	50 U	5 U	5 U	5 U	3 J
1,1-Dichloroethane	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
Trans-1,1-Dichloroethane	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
Chloroform	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
2-Butanone	10 U	10 U	10 U	100 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
Vinyl Acetate	10 U	10 U	10 U	100 U	10 U	10 U	10 U	10 U
Bromodichloromethane	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
Trans-1,3-Dichloropropane	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
Trichloroethene	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
1,1,2-Trichloromethane	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
Benzene	5 U	5 U	5 U	140	5 U	5 U	5 U	5 U
cis-1,3-Dichloroethane	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
2-Chloroethylvinylether	10 U	10 U	10 U	100 U	10 U	10 U	10 U	10 U
Bromoform	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
2-Hexanone	10 U	10 U	10 U	100 U	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	100 U	10 U	10 U	10 U	10 U
Tetrachloroethene	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
Toluene	5 U	5 U	5 U	610	5 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	130	5 U	5 U	5 U	5 U
Styrene	5 U	5 U	5 U	240	5 U	5 U	5 U	5 U
Total Xylenes	5 U	5 U	5 U	610	5 U	5 U	5 U	5 U
SEMI-VOLATILES								
Phenol	2 J	10 U	10 U	350	10 U	10 U	10 U	10 U
bis(2-Chloroethyl)Ether	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Benzyl Alcohol	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U

NOTE: Dioxin TEF's were calculated using maximum possible concentrations as observed by GC Analysis.

SOUTHERN MARYLAND WOOD TREATING - PHASE III GROUNDWATER SAMPLES

<<SAMPLE NUMBER>>	SGW-MW13-002	SGW-MW14-002	SGW-MW15-002	SGW-MW16-002	SGW-MW17-002	SGW-MW18-002	SGW-MW19-002	DGW-MW20-002
	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
1,2-Dichlorobenzene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	350 U	10 U	10 U	10 U	10 U
bis(2-chloropropyl)Ether	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	190 U	10 U	10 U	10 U	10 U
N-Nitroso-Di-n-Propylamine	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Hexachlorethane	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Isophorene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Benzoic Acid	50 U	50 U	10 U	200 J	10 U	10 U	10 U	10 U
bis(2-Chloroethoxy)Methane	10 U	10 U	10 U	1,000 U	50 U	50 U	50 U	50 U
2,4-Dichlorophenol	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	5,700 U	10 U	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
4-Chloro-3-Methylphenol	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	1,000 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	50 U	50 U	50 U	1,000 U	50 U	50 U	50 U	50 U
2-Chloronaphthalene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
2-Nitroaniline	50 U	50 U	50 U	1,000 U	50 U	50 U	50 U	50 U
Dimethyl Phthalate	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U	59 J	10 U	10 U	10 U	10 U
3-Nitroaniline	50 U	50 U	50 U	1,000 U	50 U	50 U	50 U	50 U
Acenaphthene	10 U	10 U	10 U	980 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	50 U	50 U	50 U	1,000 U	50 U	50 U	50 U	50 U
4-Nitrophenol	50 U	50 U	50 U	1,000 U	50 U	50 U	50 U	50 U
Dibenzofuran	10 U	10 U	10 U	670 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	690 U	10 U	10 U	10 U	10 U
4-Nitroaniline	50 U	50 U	50 U	1,000 U	50 U	50 U	50 U	50 U
4,6-Dinitro-2-Methylphenol	50 U	50 U	50 U	1,000 U	50 U	50 U	50 U	50 U
N-Nitrosodiphenylamine	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Pentachlorophenol	50 U	50 U	50 U	59 U	50 U	50 U	50 U	50 U
Phenanthrene	10 U	10 U	10 U	1,400 U	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	260 U	10 U	10 U	10 U	10 U
Di-n-Butylphthalate	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	720 U	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	460 U	10 U	10 U	10 U	10 U

NOTE: Dioxin TEF's were calculated using maximum possible concentrations as observed by GC Analysis.

SOUTHERN MARYLAND WOOD TREATING - PHASE III GROUNDWATER SAMPLES

<<SAMPLE NUMBER>>	SGW-MW13-002	SGW-MW14-002	SGW-MW15-002	SGW-MW16-002	SGW-MW17-002	SGW-MW18-002	SGW-MW19-002	SGW-MW20-002
	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
Butylbenzylphthalate	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
3,3-Dichlorobenzidine	20 U	20 U	20 U	400 U	20 U	20 U	20 U	20 U
Benzo(a)Anthracene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)Phthalate	10 U	10 U	10 U	200 U	3 J	2 J	10 U	10 U
Chrysene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Di-n-Octyl Phthalate	11	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Benzo(b)Fluoranthene	10 U	10 U	10 U	48 J	10 U	10 U	10 U	10 U
Benzo(k)Fluoranthene	10 U	10 U	10 U	42 J	10 U	10 U	10 U	10 U
Benzo(a)Pyrene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)Pyrene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)Anthracene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)Perylene	10 U	10 U	10 U	200 U	10 U	10 U	10 U	10 U
INORGANICS								
Aluminum	1,910 J	54,400 J	158,000 J	9,780 J	54,000 J	5,370 J	3,400 J	20,700 J
Chromium	9.7 J	222.0	288.0	36.8	113.0	13.4	13.0 U	75.4
Copper	1.2 J	4.0 U	91.6	29.5 B	42.6	3.3 J	9.4 J	58.7
Iron	19,700 J	606,000 J	345,000 J/L	76,400	154,000 J	18,300 J	10,100 J	86,500 J
Lead	4.5 J	48.2 J	107.0 J	48.2 L	52.3 J	5.8 J	14.1 J	55.5 J
Mercury	0.2 U	2.9	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Zinc	12.9 J	167.0	246.0	130.0 J	107.0	50.6	50.5	464.0
DIOXIN/FURAN (NG/L)								
TEF				0.546				
TCDD				ND				
2378-TCDD				0.395				
PCDD				ND				
2378x-PCDD				ND				
HxCDD				5.742				
2378xHxCDD				1.557				
HpCDD				165.191				
2378HpCDD				63.788				
OCDD				256.883				
TCDF				0.417				
2378-TCDF				0.123				
PCDF				ND				
2378xPCDF				ND				
HxCDF				4.894				
2378xHxCDF				0.123				
HpCDF				31.684				
2378HpCDF				6.448				
OCDF				52.926				

NOTE: Dioxin TEF's were calculated using maximum possible concentrations as observed by GC Analysis.

SOUTHERN MARYLAND WOOD TREATING - PHASE 111 GROUNDWATER SAMPLES

<<SAMPLE NUMBER>> DGM-MW21-002 SGM-MWTB-001 SGM-MWFB-001 SGM-MWFB-002

UG/L UG/L UG/L UG/L

VOLATILE ORGANICS

Chloromethane	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U
Methylene Chloride	13 B	6 B	3 B	2 B
Acetone	10 U	11 B	10 U	10 U
Carbon Disulfide	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U
Trans-1,1-Dichloroethane	5 U	5 U	5 U	5 U
Chloroform	5 U	7	6	5
1,2-Dichloroethane	5 U	5 U	5 U	5 U
2-Butanone	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5 U	5 U	5 U	5 U
Vinyl Acetate	10 U	10 U	10 U	10 U
Bromodichloromethane	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U
Trans-1,3-Dichloropropane	5 U	5 U	5 U	5 U
Trichloroethene	5 U	5 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U
1,1,2-Trichloromethane	5 U	5 U	5 U	5 U
Benzene	5 U	5 U	5 U	5 U
Cis-1,3-Dichloroethane	5 U	5 U	5 U	5 U
2-Chloroethylvinylether	10 U	10 U	10 U	10 U
Bromoform	5 U	5 U	5 U	5 U
2-Hexanone	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10 U
Tetrachloroethene	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U
Toluene	1 J	2 J	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U
Styrene	5 U	5 U	5 U	5 U
Total Xylenes	5 U	5 U	5 U	5 U

SEMI-VOLATILES

Phenol	2 J	2 J	10 U	10 U
bis(2-Chloroethyl)Ether	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U
Benzyl Alcohol	10 U	10 U	10 U	10 U

NOTE: Dioxin TEF's were calculated using maximum possible concentrations as observed by GC Analysis.

SOUTHERN MARYLAND WOOD TREATING - PHASE III GROUNDWATER SAMPLES

<<SAMPLE NUMBER>>	UG/L	SGM-MWTB-002	UG/L	SGM-MWTB-001	UG/L	SGM-MWFB-001	UG/L	SGM-MWFB-002
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
bis(2-chloropropyl)Ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-Di-n-Propylamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Isophorene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzoic Acid	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
bis(2-Chloroethoxy)Methane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloro-3-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylinaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Dimethyl Phthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
3-Nitroaniline	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Acenaphthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4-Nitrophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Dibenzofuran	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
4,6-Dinitro-2-Methylphenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
N-Nitrosodiphenylamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Phenanthrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-Butylphthalate	10 U	10 U	3 J	3 J	3 J	3 J	3 J	10 U
Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U

NOTE: Dioxin TEF's were calculated using maximum possible concentrations as observed by GC Analysis.

SOUTHERN MARYLAND WOOD TREATING - PHASE III GROUNDWATER SAMPLES

<<SAMPLE NUMBER>>	UG/L	UG/L	UG/L	UG/L	UG/L
Butylbenzylphthalate	10 U	10 U	10 U	10 U	10 U
3,3-Dichlorobenzidine	20 U	20 U	20 U	20 U	20 U
Benzo(a)Anthracene	10 U	10 U	10 U	10 U	10 U
bis(2-Ethylhexyl)Phthalate	2 J	10 U	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U	10 U
Di-n-Octyl Phthalate	10 U	10 U	10 U	10 U	10 U
Benzo(b)Fluoranthene	10 U	10 U	10 U	10 U	10 U
Benzo(k)Fluoranthene	10 U	10 U	10 U	10 U	10 U
Benzo(a)Pyrene	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	10 U	10 U
Dibenzo(a,h)Anthracene	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)Perylene	10 U	10 U	10 U	10 U	10 U

INORGANICS

Aluminum	15,700 J	6 U	6 U
Chromium	39.7	1.1 U	1.1 U
Copper	50.3	0.8 U	0.8 U
Iron	75,500 J	158	57.5 J
Lead	61.6 J	1.3 J	1.3 U
Mercury	0.2 U	0.2 U	0.2 U
Zinc	256.0	7.2 J	2.6 J

DIOXIN/FURAN (NG/L)

TEF	0.395	0.056
TCDD	ND	0.350
2378-TCDD	0.395	0.048
PCDD	ND	ND
2378x-PCDD	ND	0.120
HxCDD	ND	ND
2378xHxCDD	0.021	ND
HpCDD	ND	ND
2378xHpCDD	0.107	ND
OCDD	0.010	ND
TCDF	ND	0.100
2378-TCDF	ND	0.048
PCDF	ND	0.020
HxCDF	0.030	0.060
2378xHxCDF	ND	ND
HpCDF	0.060	ND
2378xHpCDF	ND	ND
OCDF	ND	ND

SOUTHERN MARYLAND WOOD TREATING - PHASE II SOIL SAMPLES

SAMPLE NUMBER	B1-001	B1-012	B2-004	B3-002/R	B3-003/R	B4-002	B5-001	B5-002
DIL/CONC FACTOR (VOA)	1	1	1	1	1	510	1	1
DIL/CONC FACTOR (BNA)	1	1	1	1	1	1	1	1
DESCRIPTION								
Chloromethane	10 U	10 U	10 UJ	10 U	10 U	5100 U	10 U	10 UJ
Bromomethane	10 U	10 U	10 U	10 U	10 U	5100 U	10 U	10 U
Vinyl Chloride	10 UJ	10 UJ	10 UJ	10 U	10 U	5100 U	10 U	10 UJ
Chloroethane	10 UJ	10 UJ	10 UJ	10 U	10 U	5100 U	10 U	10 UJ
Methylene Chloride	5 UJ	5 UJ	5 UJ	5 U	5 U	2500 U	5 U	5 UJ
Acetone	23 UJ	40 UJ	12 UJ	60 UJ	53 UJ	5100 U	10 U	33 UJ
Carbon Disulfide	5 UJ	5 UJ	5 U	5 U	5 U	2500 U	5 U	5 U
1,1-Dichloroethene	5 U	5 U	5 U	5 U	5 U	2500 U	5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 UJ	5 U	5 U	2500 U	5 U	5 U
Trans-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	2500 U	5 U	5 U
Chloroform	5 U	5 U	5 U	5 U	5 U	2500 U	5 U	5 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 U	2500 U	5 U	5 U
2-Butanone	10 UJ	10 UJ	10 U	10 U	10 U	5100 U	10 U	10 U
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 U	2500 U	5 U	5 U
Carbon Tetrachloride	5 U	5 U	5 U	5 U	5 U	2500 U	5 U	5 UJ
Vinyl Acetate	10 UJ	10 UJ	10 U	10 U	10 U	5100 U	10 U	10 UJ
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	2500 U	5 U	5 U
4,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	2500 U	5 U	5 U
Trans-1,3-Dichloropropane	5 UJ	5 UJ	5 U	5 U	5 U	2500 U	5 U	5 UJ
Trichloroethene	5 U	5 U	5 U	5 U	5 U	2500 U	5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	2500 U	5 U	5 U
C.D. 1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U	2500 U	5 U	5 U
Benzene	5 UJ	5 UJ	5 UJ	5 U	5 U	2500 U	5 U	5 UJ
cis-1,3-Dichloropropene	5 UJ	5 UJ	5 UJ	5 U	5 U	2500 U	5 U	5 UJ
2-Chloroethylvinylether	10 U	10 U	10 U	10 U	10 U	5100 U	10 U	10 U
Bromoform	5 UJ	5 UJ	5 U	5 U	5 U	2500 U	5 U	5 U
4-Methyl-2-Pentanone	10 UJ	10 UJ	10 UJ	10 U	10 U	5100 U	10 U	10 UJ
2-Hexanone	4 UJ	10 UJ	10 UJ	10 U	10 U	5100 U	10 U	10 UJ
Tetrachloroethene	5 U	5 U	5 U	5 U	5 U	2500 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5 UJ	3 UJ	2 UJ	5 U	5 U	2500 U	5 U	5 U
Toluene	5 U	5 U	5 U	5 U	5 U	2500 U	5 U	5 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	2500 U	5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 U	2500 U	5 U	5 U
Styrene	5 UJ	5 UJ	5 U	5 U	5 U	1700 U	5 U	5 U
Total Xylenes	5 UJ	5 UJ	5 UJ	5 U	5 U	3000	5 U	5 UJ
Phenol	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
Bis(2-Chloroethyl) Ether	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
2-Chlorophenol	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
1,3-Dichlorobenzene	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
1,4-Dichlorobenzene	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
Benzyl Alcohol	340 U	340 U	340 UJ	340 U	340 U	340 U	340 UJ	340 UJ
1,2-Dichlorobenzene	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
2-Methylphenol	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
Bis(2-chloropropyl) Ether	340 U	340 U	340 U	340 U	340 U	340 U	340 UJ	340 UJ
4-Methylphenol	340 U	340 U	340 U	340 U	340 U	100 U	340 U	340 U
N-Nitroso-Di-n-Propylamine	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
Hexachloroethane	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
Nitrobenzene	340 U	340 U	340 UJ	340 U	340 U	340 U	340 U	340 U
Isophorene	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
2-Nitrophenol	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U

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SOUTHERN MARYLAND WOOD TREATING - PHASE II SOIL SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOR) DIL/CONC FACTOR (BNA) DESCRIPTION	81-001	81-012	82-004	83-002/R	83-003/R	84-002	85-001	85-002
2,4-Dimethylphenol	340 U	340 U	340 U	340 U	340 U	120 J	340 U	340 U
Benzoic Acid	1700 U	1700 U	1700 UJ	1700 U	1700 U	1700 U	1700 UJ	1700 UJ
bis(2-Chloroethoxy)Methane	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
2,4-Dichlorophenol	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
1,2,4-Trichlorobenzene	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
Naphthalene	340 U	340 U	340 U	340 U	340 U	1300	340 U	340 U
4-Chloroaniline	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
Hexachlorobutadiene	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
4-Chloro-3-Methylphenol	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
2-Methylnaphthalene	340 U	340 U	340 U	340 U	340 U	200 J	340 U	340 U
Hexachlorocyclopentadiene	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
2,4,6-Trichlorophenol	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
2,4,5-Trichlorophenol	1700 U	1700 U	1700 U	1700 U	1700 U	1700 U	1700 U	1700 U
2-Chloronaphthalene	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
2-Nitroaniline	1700 U	1700 U	1700 U	1700 U	1700 U	1700 U	1700 U	1700 U
Dimethyl Phthalate	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
Acenaphthylene	340 U	340 U	340 U	340 U	340 U	340 U	340 UJ	340 UJ
3-Nitroaniline	1700 U	1700 U	1700 UJ	1700 U	1700 U	1700 U	1700 U	1700 U
Acenaphthene	340 U	340 U	340 U	340 U	340 U	370	340 U	340 U
2,4-Dinitrophenol	1700 U	1700 U	1700 UJ	1700 U	1700 U	1700 U	1700 U	1700 U
4-Nitrophenol	1700 U	1700 U	1700 UJ	1700 U	1700 U	1700 U	1700 U	1700 U
Dibenzofuran	340 U	340 U	340 U	340 U	340 U	190	340 U	340 U
2,4-Dinitrotoluene	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
2,6-Dinitrotoluene	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
Diethylphthalate	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
4-Chlorophenyl-phenylether	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
Fluorene	340 U	340 U	340 U	340 U	340 U	260 J	340 U	340 U
4-Nitroaniline	1700 U	1700 U	1700 UJ	1700 U	1700 U	1700 U	1700 UJ	1700 UJ
4,6-Dinitro-2-Methylphenol	1700 U	1700 U	1700 U	1700 U	1700 U	1700 U	1700 U	1700 U
N-Nitrosodiphenylamine	340 U	340 U	340 UJ	340 U	340 U	340 U	340 U	340 U
4-Bromophenyl-phenylether	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
Hexachlorobenzene	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
Pentachlorophenol	1700 U	1700 U	1700 U	1700 U	1700 U	750	1700 U	1700 U
Phenanthrene	340 U	81 J	340 U	340 U	340 U	1300	340 U	340 U
Anthracene	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
Di-n-Butylphthalate	340 U	340 U	340 U	340 U	80 UJ	340 U	340 U	340 U
Fluoranthene	340 U	340 U	340 U	340 U	340 U	720	340 U	340 U
Pyrene	79 J	340 U	340 U	340 U	340 U	460	45 J	26 J
Butylbenzylphthalate	340 U	340 U	340 U	340 U	340 U	340 U	340 UJ	340 UJ
3,3-Dichlorobenzidine	670 U	670 U	670 U	670 U	670 U	670 U	670 UJ	670 UJ
Benzo(a)Anthracene	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
bis(2-Ethylhexyl)Phthalate	340 U	110 UJ	340 U	290 UJ	240 UJ	140 UJ	890 UJ	710 UJ
Chrysene	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
Di-n-Octyl Phthalate	340 U	340 U	340 U	340 U	340 U	340 U	340 UJ	340 UJ
Benzo(b)Fluoranthene	340 U	340 U	340 U	340 U	340 U	340 U	340 UJ	340 UJ
Benzo(k)Fluoranthene	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
Benzo(a)Pyrene	340 U	340 U	340 U	340 U	340 U	340 U	130 J	340 J
Indeno(1,2,3-cd)Pyrene	340 U	340 U	340 U	340 U	340 U	340 U	82 J	340 UJ
Dibenzo(a,h)Anthracene	340 U	340 U	340 U	340 U	340 U	340 U	340 U	340 U
Benzo(g,h,i)Perylene	340 U	340 U	340 U	340 U	340 U	340 U	340 UJ	340 UJ

SOUTHERN MARYLAND WOOD TREATING - PHASE II SOIL SAMPLES

SAMPLE NUMBER	B1-001	B1-012	B2-004	B3-002/R	B3-003/R	B4-002	B5-001	B5-002
DIL/CONC FACTOR (VOA)	1	1	1	1	1	510	1	1
DIL/CONC FACTOR (BNA)	1	1	1	1	1	1	1	1
DESCRIPTION								
Aluminum	13300	4200	9104	12500	12400	12000	15900	16700
Chromium	14	7 J	10 J	14 J	14 J	13 J	17 J	18 J
Copper	5.5	3	3 J()	4.6 J	4.4 J()	7.5 J	6.2 J	5.7 J
Iron	11000	3270	6302	12900	13800	17400	13200	14300
Lead	16 J	2.8	2.7	7.5	7.8	10	9.5	8.2
Mercury	0.1 U	0.09 J	0.1 UJ	0.1 UJ	0.1 UJ	0.53 J	0.25 J	0.1 J
Zinc	24	2 UJ	5.8 J	80 J	129 J	24 J	81 J	58 J
TOC	6440000	667000	657000	2380000	1980000	4850000		
OIL AND GREASE	41400	30300 UJL	30300 L	30300 L	30300 L	5960000		

SOUTHERN MARYLAND WOOD TREATING - PHASE II SOIL SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BNA) DESCRIPTION	86-002	87-002	88-011	88-012	89-001	810-008	811-003/R	811-004/R
Chloromethane	10 UJ	10 UJ	10 UJ	9 UJ	10 UJ	44 U	2600 U	1300 U
Bromomethane	10 U	10 U	10 U	9 U	10 U	44 U	2600 U	1300 U
Vinyl Chloride	10 UJ	10 UJ	10 UJ	9 UJ	10 UJ	44 U	2600 U	1300 U
Chloroethane	10 UJ	10 UJ	10 UJ	9 UJ	10 UJ	44 U	2600 UJ	1300 UJ
Methylene Chloride	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	22 U	1300 UJ	640 UJ
Acetone	31 UJ	10 UJ	14 UJ	26 UJ	16 UJ	61 UJ	2600 UJ	1300 UJ
Carbon Disulfide	5 U	5 U	5 U	5 U	5 U	22 U	1300 U	640 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U	5 U	22 U	1300 U	640 U
1,1-Dichloroethene	5 U	5 U	5 UJ	5 U	5 U	22 U	1300 U	640 U
Trans-1,2-Dichloroethene	5 U	5 U	5 UJ	5 U	5 U	22 U	1300 U	640 U
Chloroform	5 U	5 U	5 U	5 U	5 U	22 U	1300 U	640 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 U	22 U	1300 U	640 U
2-Butanone	10 U	10 U	10 U	9 U	10 U	44 U	5100 UJ	5100 UJ
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 U	22 U	1300 U	640 U
Carbon Tetrachloride	5 UJ	5 UJ	5 U	5 UJ	5 UJ	22 U	1300 U	640 U
Vinyl Acetate	10 UJ	10 UJ	10 U	9 UJ	10 UJ	44 U	2600 U	1300 U
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	22 U	1300 U	640 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	22 U	1300 U	640 U
Trans-1,3-Dichloropropane	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	22 U	1300 UJ	640 UJ
Trichloroethene	5 U	5 U	5 U	5 U	5 U	22 U	1300 U	640 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	22 U	1300 U	640 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U	22 U	1300 U	640 U
Benzene	5 U	5 U	5 U	5 U	5 U	22 U	1300 U	640 U
cis-1,3-Dichloropropene	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	22 U	1300 UJ	640 UJ
2-Chloroethylvinylether	10 U	10 U	10 U	9 U	10 U	44 U	2600 U	1300 U
Bromoform	5 U	5 U	5 U	5 U	5 U	22 U	1300 U	640 U
4-Methyl-2-Pentanone	10 UJ	10 UJ	10 UJ	9 UJ	10 UJ	44 U	2600 UJ	1300 UJ
2-Hexanone	5 U	5 U	5 U	5 U	5 U	22 U	1300 U	640 U
Tetrachloroethene	10 UJ	10 UJ	10 UJ	9 UJ	10 UJ	44 U	2600 UJ	1300 UJ
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U	22 U	1300 U	640 U
Toluene	3 UJ	3 UJ	5 U	4 UJ	3 UJ	8 UJ	1300 U	640 U
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	22 U	1300 U	640 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 U	22 U	1200 U	640 U
Styrene	5 U	5 U	5 U	5 U	5 U	22 U	1300 U	640 U
Total Xylenes	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	22 U	1300 UJ	640 UJ
Phenol	37 J	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
bis(2-Chloroethyl)Ether	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
2-Chlorophenol	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
1,3-Dichlorobenzene	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
1,4-Dichlorobenzene	340 UJ	340 UJ	340 UJ	350 UJ	340 UJ	330 U	20000 U	10000 U
Benzyl Alcohol	340 UJ	340 UJ	340 UJ	350 UJ	340 UJ	330 U	20000 U	10000 U
1,2-Dichlorobenzene	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
2-Methylphenol	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
bis(2-chloropropyl)Ether	340 UJ	340 UJ	340 U	350 U	340 UJ	330 U	20000 U	10000 U
4-Methylphenol	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
N-Nitroso-Di-n-Propylamine	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
Hexachloroethane	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
Nitrobenzene	340 U	340 U	340 UJ	350 UJ	340 U	330 U	20000 U	10000 U
Isophorene	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
2-Nitrophenol	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U

WILLAMU WOOD TREATING - PHASE II SOIL SAMPLES

SAMPLE NUMBER	86-002	87-002	88-011	88-012	89-001	810-008	811-003/R	811-004/R
DIL/CONC FACTOR (VOA)	1	1	1	1	1	1	260	130
DIL/CONC FACTOR (BNA)	1	1	1	1	1	1	1	60
DESCRIPTION								
2,4-Dimethylphenol	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
Benzoic Acid	1700 UJ	1700 UJ	1700 UJ	1800 UJ	1700 UJ	1700 U	100000 U	51000 U
bis(2-Chloroethoxy)Methane	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
2,4-Dichlorophenol	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
1,2,4-Trichlorobenzene	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
Naphthalene	340 U	340 U	340 U	350 U	340 U	330 U	770000 U	1100000 U
4-Chloroaniline	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
Hexachlorobutadiene	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
4-Chloro-3-Methylphenol	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
2-Methylnaphthalene	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
Hexachlorocyclopentadiene	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
2,4,6-Trichlorophenol	340 U	340 U	340 U	350 U	340 U	330 U	100000 U	51000 U
2,4,5-Trichlorophenol	1700 U	1700 U	1700 U	1800 U	1700 U	1700 U	20000 U	10000 U
2-Chloronaphthalene	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
2-Nitroaniline	1700 U	1700 U	1700 U	1800 U	1700 U	1700 U	100000 U	51000 U
Dimethyl Phthalate	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
Acenaphthylene	340 UJ	340 UJ	340 U	350 U	340 UJ	330 U	20000 U	10000 U
3-Nitroaniline	1700 U	1700 U	1700 UJ	1800 UJ	1700 U	1700 U	100000 U	51000 U
Acenaphthene	340 U	340 U	340 U	350 U	340 U	330 U	370000 U	540000 U
2,4-Dinitrophenol	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
2,6-Dinitrotoluene	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
Diethylphthalate	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
4-Chlorophenyl-phenylether	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
Fluorene	340 U	340 U	340 U	350 U	340 U	330 U	260000 U	440000 U
4-Nitroaniline	1700 U	1700 UJ	1700 UJ	1800 UJ	1700 UJ	1700 U	100000 U	51000 U
4,6-Dinitro-2-Methylphenol	1700 U	1700 U	1700 U	1800 U	1700 U	1700 U	100000 U	51000 U
N-Nitrosodiphenylamine	340 U	340 U	340 UJ	350 UJ	340 U	330 U	20000 U	10000 U
4-Bromophenyl-phenylether	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
Hexachlorobenzene	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
Pentachlorophenol	1700 U	1700 U	1700 U	1800 U	1700 U	1700 U	60000 U	51000 U
Phenanthrene	340 U	340 U	340 U	350 U	340 U	330 U	800000 X	93000 X
Anthracene	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
Di-n-Butylphthalate	340 U	340 U	340 U	350 U	340 U	330 U	420000 U	820000 U
Fluoranthene	340 U	340 U	340 U	350 U	340 U	330 U	240000 U	240000 U
Pyrene	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
Butylbenzylphthalate	340 UJ	340 UJ	340 U	350 U	340 UJ	330 U	20000 U	10000 U
3,3-Dichlorobenzidine	680 UJ	680 UJ	680 UJ	710 U	680 UJ	660 U	41000 U	20000 U
Benzo(a)Anthracene	340 U	340 U	340 U	350 U	340 U	330 U	180000 Z	240000 Z
bis(2-Ethylhexyl)Phthalate	100 UJ	340 U	340 U	350 UJ	340 U	330 U	6300 UJ	10000 U
Chrysene	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
Di-n-Octyl Phthalate	340 UJ	340 UJ	340 U	350 U	340 UJ	330 U	20000 U	10000 U
Benzo(b)Fluoranthene	340 U	340 U	340 U	350 U	340 U	330 U	83000 Y	110000 Y
Benzo(k)Fluoranthene	340 U	340 U	340 U	350 U	340 U	330 U	23000 U	10000 U
Benzo(a)Pyrene	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
Indeno(1,2,3-cd)Pyrene	340 UJ	340 UJ	340 U	350 U	340 UJ	330 U	20000 U	10000 U
Dibenzo(a,h)Anthracene	340 U	340 U	340 U	350 U	340 U	330 U	20000 U	10000 U
Benzo(g,h,i)Perylene	340 UJ	340 UJ	340 U	350 U	340 UJ	330 U	20000 U	10000 U

AR301951

SOUTHERN MARYLAND WOOD TREATING - PHASE II SOIL SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BNA) DESCRIPTION	86-002	87-002	88-011	88-012	89-001	810-008	811-003/R	811-004/R
	1 1	1 1	1 1	1 1	1 1	1 1	260 1	130 60
Aluminum	13700	15900	3960	3550	21200	4880	10020	5580
Chromium	19	18	4.1	4.1	21	16	12 J	6.2 J
Copper	7.1	6.5	3 U	3 U	8.2	3.8 ()	4.6 J	
Iron	18600	14700	1250	1970	19200	9750	28600	6380
Lead	8.9	9.6	1.3 J	1.2 J	10	0.89 J	2.3	1.3
Mercury	0.1 U	0.15	0.1 U	0.1 U	0.11	0.1 U	0.1 UJ	0.1 UJ
Zinc	25	25	3.5	3.3 ()	30	4	8.9 J	4.9 J
TOC	2600000	1270000	191000	29900	543000	626000		
OIL AND GREASE	30600 L	30600 L	41500	30900 L	30600 L	30300 L		

SOUTHERN MARYLAND WOOD TREATING - PHASE II SOIL SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BNA) DESCRIPTION	B12-005/R 1040 63 lab dup	B12-005/R 1020 60 lab dup	B13-001 1	B13-001/002 1	B13-004 1 1	FB-001 1 1 Field Blank	MW07-001 5 1 1 gram	MW07-001 1 5.35 gram
Chloromethane	10000 U	10000 U	9 UJ		10 UJ	10 U	42 U	10 U
Bromomethane	10000 U	10000 U	9 UJ		10 UJ	10 U	42 U	10 U
Vinyl Chloride	10000 U	10000 U	9 UJ		10 UJ	10 U	42 U	10 U
Chloroethane	10000 U	10000 U	9 UJ		10 UJ	10 U	42 U	10 U
Methylene Chloride	5200 U	5100 U	25 UJ		5 UJ	140	25 U	5 U
Acetone	10000 U	10000 U	43 UJ		54 UJ	250	42 U	64 UJ
Carbon Disulfide	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
1,1-Dichloroethene	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
1,1-Dichloroethane	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
trans-1,2-Dichloroethene	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
chloroform	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
2-Dichloroethane	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
2-Butanone	10000 U	10000 U	9 U		10 U	10 U	43 UJ	10 U
1,1,1-Trichloroethane	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
Carbon Tetrachloride	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
Vinyl Acetate	10000 U	10000 U	9 U		10 U	10 U	42 U	10 U
Bromodichloromethane	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
1,2-Dichloropropane	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
trans-1,3-Dichloropropane	5200 U	5100 U	4 UJ		5 UJ	5 U	21 U	5 U
Trichloroethene	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
tribromochloromethane	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
1,1,2-Trichloroethane	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
Benzene	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
cis-1,3-Dichloropropene	5200 U	5100 U	4 UJ		5 UJ	5 U	21 U	5 U
2-Chloroethylvinylether	10000 U	10000 U	9 U		10 U	10 U	42 U	10 U
Bromoform	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
4-Methyl-2-Pentanone	10000 U	10000 U	9 U		10 U	10 U	42 U	10 U
2-Hexanone	10000 U	10000 U	9 U		10 U	10 U	42 U	10 U
Tetrachloroethene	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
1,1,2,2-Tetrachloroethane	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
Toluene	8300	8000	2 UJ		5 U	3 UJ	12 UJ	2 UJ
Chlorobenzene	5200 U	5100 U	4 U		5 U	5 U	21 U	5 U
Ethylbenzene	8300	12000	4 U		5 U	5 U	21 U	5 U
Styrene	5900	8800	4 U		5 U	5 U	21 U	5 U
Total Xylenes	30000	42000	4 UJ		5 UJ	5 U	21 U	5 U
Phenol	330 U	3800 J		330 U	340 U	330 U	370 U	
bis(2-Chloroethyl)Ether	330 U	330 U		330 U	340 U	330 UJ	370 U	
2-Chlorophenol	330 U	330 U		330 U	340 U	330 U	370 U	
1,3-Dichlorobenzene	330 U	330 U		330 U	340 U	330 U	370 U	
1,4-Dichlorobenzene	330 U	330 U		330 U	340 U	330 U	370 U	
Benzyl Alcohol	330 U	330 U		330 UJ	340 UJ	330 U	370 U	
1,2-Dichlorobenzene	330 U	330 U		330 U	340 U	330 U	370 U	
2-Methylphenol	330 U	330 U		330 U	340 U	330 U	370 U	
bis(2-chloropropyl)Ether	330 U	330 U		330 UJ	340 UJ	330 UJ	370 UJ	
4-Methylphenol	330 U	330 U		330 U	340 U	330 U	370 U	
N-Nitroso-Di-n-Propylamine	330 U	330 U		330 U	340 U	330 UJ	370 U	
Hexachloroethane	330 U	330 U		330 U	340 U	330 U	370 U	
Nitrobenzene	330 U	330 U		330 U	340 U	330 UJ	370 UJ	
Isophorene	330 U	330 U		330 U	340 U	330 U	590 U	
2-Nitrophenol	330 U	330 U		330 U	340 U	330 U	370 U	

SOUTHERN MARYLAND WOOD TREATING - PHASE II SOIL SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BNA) DESCRIPTION	B12-005/R 1040 63 lab dup	B12-005/R 1020 60 lab dup	B13-001 1	B13-001/002 1	B13-004 1	FB-001 Field Blank	MM07-001 1 gram	MM07-001 5.35 gram
2,4-Dimethylphenol	330 U	330 U		330 U	59 J	330 U	370 U	
Benzoic Acid	1600 U	1600 U		1600 UJ	1700 UJ	1600 U	1900 U	
bis(2-Chloroethoxy)Methane	330 U	330 U		330 U	340 U	330 U	370 U	
2,4-Dichloropheno	330 U	330 U		330 U	340 U	330 U	370 U	
1,2,4-Trichlorobenzene	330 U	330 U		330 U	340 U	330 UJ	370 U	
Naphthalene	2300000	880000		330 U	62 J	330 UJ	370 UJ	
4-Chloroaniline	330 U	320000		330 U	340 U	330 U	370 U	
Hexachlorobutadiene	330 U	330 U		330 U	340 U	330 U	370 U	
4-Chloro-3-Methylphenol	330 U	330 U		330 U	340 U	330 U	370 U	
2-Methylnaphthalene	580000	190000		330 U	340 U	330 U	370 U	
Hexachlorocyclopentadene	330 U	330 U		330 U	340 U	330 UJ	370 UJ	
2,4,6-Trichlorophenol	330 U	330 U		330 U	340 U	330 U	370 U	
2,4,5-Trichlorophenol	1600 U	1600 U		1600 U	1700 U	1600 UJ	1900 U	
2-Chloronaphthalene	330 U	330 U		330 U	340 U	330 U	370 U	
2-Nitroaniline	1600 U	1600 U		1600 U	1700 U	1600 UJ	1900 UJ	
Dimethyl Phthalate	330 U	330 U		330 U	340 U	330 U	370 U	
Acenaphthylene	31000	18000 J		330 UJ	1700 UJ	1600 UJ	1900 UJ	
3-Nitroaniline	1600 U	1600 U		1600 U	1700 U	1600 UJ	1900 U	
Acenaphthene	440000	300000		330 U	340 U	330 U	370 U	
2,4-Dinitrophenol	1600 U	1600 U		1600 U	1700 U	1600 UJ	1900 UJ	
4-Nitrophenol	1600 U	1600 U		1600 U	1700 U	1600 UJ	1900 U	
Dibenzofuran	330000	220000		330 U	340 U	330 UJ	370 UJ	
2,4-Dinitrotoluene	330 U	330 U		330 U	340 U	330 U	370 U	
2,6-Dinitrotoluene	330 U	330 U		330 U	340 U	330 U	370 U	
Diethyl Phthalate	330 U	2900 J		330 U	340 U	330 U	370 U	
4-Chlorophenyl-phenylether	330 U	330 U		330 U	340 U	330 U	370 U	
Fluorene	380000	270000		330 U	340 U	330 U	370 U	
4-Nitroaniline	1600 U	1600 U		1600 UJ	1700 UJ	1600 UJ	1900 UJ	
4,6-Dinitro-2-Methylphenol	1600 U	1600 U		1600 U	1700 U	1600 UJ	1900 UJ	
M-Nitrosodiphenylamine	330 U	5200 J		330 U	340 U	330 U	370 U	
4-Bromophenyl-phenylether	330 U	330 U		330 U	340 U	330 UJ	370 U	
Hexachlorobenzene	330 U	330 U		330 U	340 U	330 U	370 U	
Pentachlorophenol	76000	36000		1600 U	1700 U	1600 U	1900 U	
Phenanthrene	900000 X	840000 X		330 U	340 U	330 U	370 U	
Anthracene	330 U	330 U		330 U	340 U	330 U	370 U	
Di-n-Butylphthalate	330 U	330 U		330 U	340 U	330 U	370 UJ	
Fluoranthene	640000	390000		330 U	340 U	330 U	370 U	
Pyrene	220000	150000		330 UJ	340 UJ	330 U	370 U	
Butylbenzylphthalate	330 U	330 U		330 UJ	340 UJ	330 U	370 UJ	
3,3-Dichlorobenzidine	660 U	660 U		660 UJ	680 UJ	660 U	740 UJ	
Benzo(a)Anthracene	190000 Z	140000 Z		330 U	340 U	330 U	370 U	
bis(2-Ethylhexyl)Phthalate	330 U	330 U		330 U	340 U	330 U	370 UJ	
Chrysene	330 U	330 U		330 U	340 U	330 U	370 UJ	
Di-n-Octyl Phthalate	330 U	330 U		330 UJ	340 UJ	330 U	370 U	
Benzo(b)Fluoranthene	77000 Y	49000 Y		330 U	340 U	330 UJ	370 U	
Benzo(k)Fluoranthene	61000	28000		330 U	340 U	330 UJ	370 UJ	
Benzo(a)Pyrene	13000	330 U		330 U	340 U	330 U	370 U	
Indeno(1,2,3-cd)Pyrene	330 U	330 U		330 UJ	340 UJ	330 UJ	370 UJ	
Dibenzo(a,h)Anthracene	330 U	330 U		330 U	340 U	330 UJ	370 UJ	
Benzo(g,h,i)Perylene	330 U	330 U		330 UJ	340 UJ	330 U	370 UJ	

SOUTHERN MARYLAND WOOD TREATING - PHASE II SOIL SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BNA) DESCRIPTION	B12-005/R 1040 63 lab dup	B12-005/R 1020 60 lab dup	B13-001 1	B13-001/002 1	B13-004 1 1	FB-001 1 1 1 Field Blank	MM07-001 5 1 1 gram	MM07-001 1 5.35 gram
Aluminum	4090	4580		8380	2610	20 U	8460	
Chromium	9.1	9.4		10 J	6.7	1 U	8.9 J	
Copper	4.1	5.2		3.4 J()	2.9 ()	3 U	4.2 J()	
Iron	10600	11900		11000	5550	10 U	9210	
Lead	1.8 J			6.3	1 UJ	1 U	7.7	
Mercury	0.1 U	0.1 U		0.1 UJ	0.1 U	0.1 U	0.53 J	
Zinc	4.7	5.6		9.7 J	2.3 ()	2 U	10 J	
TOC				2000000	450000		1250000 J	
OIL AND GREASE				30300 L	30600 L		33400 L	

SOUTHERN MARYLAND WOOD TREATING - PHASE II SOIL SAMPLES

SAMPLE NUMBER	MM07-002	MM07-002	MM07-003	MM09-001/R	MM09-001	MM16-001/R	SS1-001	SS2-001
DIL/CONC FACTOR (VOA)	5	1.1	1	3.7	1	1000	1	1
DIL/CONC FACTOR (BNA)	1 gram	5.12 gram	1 gram	1 gram	5.03 gram			
DESCRIPTION								
Chloromethane	38 U	10 U		37 U	10 U	10000 U	10 UJ	10 UJ
Bromomethane	38 U	10 U		37 U	10 U	10000 U	10 UJ	10 UJ
Vinyl Chloride	38 U	10 U		37 U	10 U	10000 UJ	10 U	10 U
Chloroethane	38 U	10 U		37 U	10 U	10000 UJ	10 UJ	10 UJ
Methylene Chloride	19 U	30 UJ		18 U	25 UJ	5000 UJ	5 UJ	5 UJ
Acetone	38 U	23 UJ		37 U	92 UJ	10000 UJ	10 UJ	16 UJ
Carbon Disulfide	19 U	5 U		18 U	5 U	5000 UJ	5 U	5 U
1,1-Dichloroethene	19 U	5 U		18 U	5 U	5000 U	5 U	5 U
1,1-Dichloroethane	19 U	5 U		18 U	5 U	5000 U	5 U	5 U
Trans-1,2-Dichloroethene	19 U	5 U		18 U	5 U	5000 U	5 U	5 U
Chloroform	19 U	5 U		18 U	5 U	5000 U	5 UJ	5 UJ
1,2-Dichloroethane	19 U	5 U		18 U	5 U	5000 U	5 U	5 U
2-Butanone	38 U	10 U		37 U	10 U	10000 UJ	10 U	10 U
1,1,1-Trichloroethane	19 U	5 U		18 U	5 U	5000 U	5 U	5 U
Carbon Tetrachloride	19 U	5 U		18 U	5 U	5000 UJ	5 UJ	5 UJ
Vinyl Acetate	38 U	10 U		37 U	10 U	10000 U	10 U	10 U
Bromodichloromethane	19 U	5 U		18 U	5 U	5000 U	5 U	5 U
1,2-Dichloropropane	19 U	5 U		18 U	5 U	5000 UJ	5 UJ	5 UJ
Trans-1,3-Dichloropropane	19 U	5 U		18 U	5 U	5000 U	5 U	5 U
Trichloroethene	19 U	5 U		18 U	5 U	5000 UJ	5 UJ	5 UJ
Dibromochloromethane	19 U	5 U		18 U	5 U	5000 U	5 U	5 U
1,1,2-Trichloroethane	19 U	5 U		18 U	5 U	5000 U	5 U	5 U
Benzene	19 U	5 U		18 U	5 U	5000 U	5 U	5 U
Cis-1,3-Dichloropropene	19 U	5 U		18 U	5 U	5000 U	5 UJ	5 UJ
2-Chloroethylvinylether	38 U	10 U		37 U	10 U	10000 U	10 U	10 U
Bromoform	19 U	5 U		18 U	5 U	5000 U	5 U	5 U
4-Methyl-2-Pentanone	38 U	10 U		37 U	10 U	10000 UJ	10 UJ	10 UJ
2-Hexanone	38 U	10 U		37 U	10 U	10000 UJ	10 UJ	10 UJ
Tetrachloroethene	19 U	5 U		18 U	5 U	5000 U	5 U	5 U
1,1,2,2-Tetrachloroethane	19 U	5 U		18 U	5 U	5000 U	5 U	5 U
Toluene	12 UJ	2 UJ		7 UJ	3 UJ	2400 U	2 UJ	2 UJ
Chlorobenzene	19 U	5 U		18 U	5 U	5000 U	5 U	5 U
Ethylbenzene	19 U	5 U		18 U	5 U	5000 U	5 U	5 U
Styrene	19 U	5 U		18 U	5 U	2000 U	5 U	5 U
Total Xylenes	19 U	5 U		18 U	5 U	6000 U	5 UJ	5 UJ
Phenol			380 U					
bis(2-Chloroethyl)Ether			380 U			20000 U	340 U	340 U
2-Chlorophenol			380 U			20000 U	340 U	340 U
1,3-Dichlorobenzene			380 U			20000 U	340 U	340 U
1,4-Dichlorobenzene			380 U			20000 U	340 U	340 U
Benzyl Alcohol			380 U			20000 UJ	340 UJ	340 UJ
1,2-Dichlorobenzene			380 U			20000 U	340 U	340 U
2-Methylphenol			380 U			20000 U	340 U	340 U
bis(2-chloropropyl)Ether			380 U			20000 U	340 U	340 U
4-Methylphenol			380 U			20000 U	340 U	340 U
N-Nitroso-Di-n-Propylamine			380 U			20000 UJ	340 U	340 U
Hexachloroethane			380 U			20000 U	340 U	340 U
Nitrobenzene			380 U			20000 U	340 U	340 U
Isophorene			380 U			20000 U	340 U	340 U
2-Nitrophenol			380 U			20000 U	340 U	340 U

SOUTHERN MARYLAND WOOD TREATING - PHASE II SOIL SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BNA) DESCRIPTION	MM07-002 5 1 gram	MM07-002 1.1 5.12 gram	MM07-003 1	MM09-001/R 3.7 1 gram	MM09-001 1 5.03 gram	MM16-001/R 1000	SS1-001 1	SS2-001 1
2,4-Dimethylphenol	380 U			340 U		20000 U	340 U	340 U
Benzoic Acid	1900 U			1700 U		100000 UJ	1700 U	1700 UJ
bis(2-Chloroethoxy)Methane	380 U			340 U		20000 U	340 U	340 U
2,4-Dichloropheno	380 U			340 U		20000 U	340 U	340 U
1,2,4-Trichlorobenzene	380 U			340 U		20000 U	340 U	340 U
Naphthalene	380 U			1700 U		930000	340 U	340 U
4-Chloroaniline	380 U			340 U		20000 UJ	340 U	340 U
Hexachlorobutadiene	380 U			340 U		20000 U	340 U	340 U
1-Chloro-3-Methylphenol	380 U			340 U		20000 U	340 U	340 U
1-Methylnaphthalene	380 U			99 J		200000 J	340 U	340 U
hexachlorocyclopentadiene	380 U			340 U		20000 U	340 U	340 U
1,4,6-Trichloropheno	380 U			340 U		20000 U	340 U	340 U
1,4,5-Trichloropheno	1900 U			1700 U		100000 U	1700 U	1700 U
1-Chloronaphthalene	380 U			340 U		20000 U	340 U	340 U
2-Nitroaniline	1900 U			1700 U		100000 U	1700 U	1700 U
1-methyl Phthalate	380 U			340 U		20000 U	340 U	340 U
1-naphthylene	380 U			340 U		25000	340 U	340 U
3-Nitroaniline	1900 U			1700 U		100000 UJ	1700 U	1700 U
1-naphthene	380 U			520		340000	340 U	340 U
2,4-Dinitrophenol	1900 U			1700 U		100000 UJ	1700 U	1700 UJ
4-Nitrophenol	1900 U			1700 U		100000 UJ	1700 U	1700 UJ
Dibenzofuran	380 U			620		270000	340 U	340 U
2,4-Dinitrotoluene	380 U			340 U		20000 U	340 U	340 U
2,6-Dinitrotoluene	380 U			340 U		20000 U	340 U	340 U
Diethylphthalate	380 U			340 U		20000 U	340 U	340 U
4-Chlorophenyl-phenylether	380 U			340 U		20000 U	340 U	340 U
Fluorene	380 U			1000		290000	340 U	340 U
4-Nitroaniline	1900 U			1700 U		100000 UJ	1700 U	1700 UJ
4,6-Dinitro-2-Methylphenol	1900 U			1700 U		100000 U	1700 U	1700 U
N-Nitrosodiphenylamine	380 U			340 U		20000 U	340 U	340 U
4-Bromophenyl-phenylether	380 U			340 U		20000 U	340 U	340 U
Hexachlorobenzene	380 U			340 U		20000 U	340 U	340 U
Pentachlorophenol	1900 U			1700 U		90000 J	1700 U	1700 U
Phenanthrene	380 U			4600		930000 X	340 U	340 U
Anthracene	380 U			340 U		440000	340 U	340 U
Di-n-Butylphthalate	380 U			90 UJ		170000	340 U	340 U
Fluoranthene	380 U			1300		20000 UJ	340 U	340 U
Pyrene	380 U			530		20000 R	340 U	340 U
Butylbenzylphthalate	380 U			530 U		20000 U	340 U	340 U
3,3-Dichlorobenzidine	380 U			690 U		40000 U	680 U	680 UJ
Benzo(a)Anthracene	380 U			380 J		160000 Z	340 U	340 U
bis(2-Ethylhexyl)Phthalate	380 U			2000 UJ		20000 UJ	180 UJ	180 UJ
Chrysene	380 U			340 U		20000 UJ	340 U	340 U
Di-n-Octyl Phthalate	380 U			340 U		20000 UJ	340 U	340 UJ
Benzo(b)Fluoranthene	380 U			340 U		74000 Y	340 U	340 U
Benzo(k)Fluoranthene	380 U			140 J		30000	340 U	340 U
Benzo(a)Pyrene	380 U			38 J		20000 UJ	340 U	340 UJ
Indeno(1,2,3-cd)Pyrene	380 U			340 U		20000 UJ	340 U	340 UJ
Dibenzo(a,h)Anthracene	380 U			340 U		20000 UJ	340 U	340 UJ
Benzo(g,h,i)Perylene	380 U			340 U		20000 UJ	340 U	340 UJ

SOUTHERN MARYLAND WOOD TREATING - PHASE II SOIL SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BNA) DESCRIPTION	MM07-002 5 1 gram	MM07-002 1.1 5.12 gram	MM07-003 1	MM09-001/R 3.7 1 gram	MM09-001 1 5.03 gram	MM16-001/R 1000	SS1-001 1 1	SS2-001 1 1
Aluminum	1360			511		8320	15800	20 U
Chromium	3.2 J			1.2 ()		21 J	15	1 U
Copper				3 U		8.3 J	11	3 U
Iron	1520			9760 R		19500	12000	10 U
Lead	1.5					5.5	13	1 U
Mercury	0.1 UJ			0.1 UJ		0.1 UJ	0.1 U	0.1 U
Zinc	2 UJ			2 U		3.4 J	65	2 U
TOC						42000000		
OIL AND GREASE						1620000 J		

SOUTHERN MARYLAND WOOD TREATING - PHASE II SOIL SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BNA) DESCRIPTION	SS2-002	SS3-001	SS4-001	SS5-001	SS5-002	SS5-002	SS6-001	TB-001
	1	1	1	1	2 results	2 results	4.5	1
	1	1	1	1	2 results	2 results	1	Trip Blank
Chloromethane	10 UJ	10 UJ	10 U	10 U	10 U	10 U	45 U	10 UJ
Bromomethane	10 UJ	10 UJ	10 U	10 U	10 U	10 U	45 U	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U	10 U	10 U	45 U	10 U
Chloroethane	10 UJ	10 UJ	10 U	10 U	10 UJ	10 UJ	45 U	10 UJ
Methylene Chloride	5 UJ	5 UJ	5 U	5 U	5 UJ	5 UJ	22.5 U	2000
Acetone	17 UJ	16 UJ	10 U	10 U	21 UJ	21 UJ	54 UJ	10 UJ
Carbon Disulfide	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
1,1-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
1,1-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
Trans-1,2-Dichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
Chloroform	5 UJ	5 UJ	5 U	5 U	5 U	5 U	22.5 U	5 U
1,2-Dichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	10 U	45 U	10 U
1,1,1-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
Carbon Tetrachloride	5 UJ	5 UJ	5 U	5 U	5 U	5 U	22.5 U	5 U
Vinyl Acetate	10 U	10 U	10 U	10 U	10 U	10 U	45 U	10 UJ
Bromodichloromethane	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
1,2-Dichloropropane	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
Trans-1,3-Dichloropropane	5 UJ	5 UJ	5 U	5 U	5 UJ	5 UJ	22.5 U	5 UJ
Trichloroethene	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
Dibromochloromethane	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
1,1,2-Trichloroethane	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
Benzene	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
cis-1,3-Dichloropropene	5 UJ	5 UJ	5 U	5 U	5 UJ	5 UJ	22.5 U	5 UJ
2-Chloroethylvinylether	10 U	10 U	10 U	10 U	10 U	10 U	45 U	10 U
Bromoform	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
4-Methyl-2-Pentanone	10 UJ	10 UJ	10 U	10 U	10 UJ	10 UJ	45 U	10 U
2-Hexanone	10 UJ	10 UJ	10 U	10 U	10 UJ	10 UJ	45 U	10 UJ
Tetrachloroethene	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
1,1,2,2-Tetrachloroethane	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
Toluene	2 UJ	3 UJ	2 UJ	5 U	5 U	2 UJ	10 UJ	3 UJ
Chlorobenzene	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
Ethylbenzene	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
Styrene	5 U	5 U	5 U	5 U	5 U	5 U	22.5 U	5 U
Total Xylenes	5 UJ	5 UJ	5 U	5 U	5 UJ	5 UJ	22.5 U	5 UJ
Phenol	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Bis(2-Chloroethyl)Ether	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
2-Chlorophenol	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
1,3-Dichlorobenzene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
1,4-Dichlorobenzene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Benzyl Alcohol	340 UJ	340 UJ	340 UJ	340 UJ	340 U	340 U	990 U	330 U
1,2-Dichlorobenzene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
2-Methylphenol	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Bis(2-chloropropyl)Ether	340 UJ	340 UJ	340 UJ	340 UJ	340 U	340 U	990 U	330 U
4-Methylphenol	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
N-Nitroso-Di-n-Propylamine	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Hexachloroethane	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Nitrobenzene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Isophorene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
2-Nitrophenol	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U

SOUTHERN MARYLAND WOOD TREATING - PHASE II SOIL SAMPLES

SAMPLE NUMBER DIL/CONC FACTOR (VOA) DIL/CONC FACTOR (BNA) DESCRIPTION	SS2-002 1 1	SS3-001 1 1	SS4-001 1 1	SS5-001 1 1	SS5-002 2 results	SS5-002 1 1	SS6-001 4.5 1	TB-001 1 1
2,4-Dimethylphenol	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Benzoic Acid	1700 UJ	1700 UJ	1700 UJ	1700 UJ	1700 UJ	1700 UJ	5000 U	1600 U
bis(2-Chloroethoxy)Methane	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
2,4-Dichloropheno	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
1,2,4-Trichlorobenzene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Naphthalene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
4-Chloroaniline	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Hexachlorobutadiene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
4-Chloro-3-Methylphenol	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
2-Methylnaphthalene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Hexachlorocyclopentadiene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
2,4,6-Trichlorophenol	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
2,4,5-Trichlorophenol	1700 U	1700 U	1700 U	1700 U	1700 U	1700 U	5000 U	1600 U
2-Chloronaphthalene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
2-Nitroaniline	1700 U	1700 U	1700 U	1700 U	1700 U	1700 U	5000 U	1600 U
Dimethyl Phthalate	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Acenaphthylene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
3-Nitroaniline	1700 U	1700 U	1700 U	1700 U	1700 U	1700 U	5000 U	1600 U
Acenaphthene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
2,4-Dinitrophenol	1700 UJ	1700 UJ	1700 UJ	1700 UJ	1700 UJ	1700 UJ	5000 U	1600 U
4-Nitrophenol	1700 UJ	1700 UJ	1700 UJ	1700 UJ	1700 UJ	1700 UJ	5000 U	1600 U
Dibenzofuran	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
2,4-Dinitrotoluene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
2,6-Dinitrotoluene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Diethylphthalate	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
4-Chlorophenyl-phenylether	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Fluorene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
4-Nitroaniline	1700 UJ	1700 UJ	1700 UJ	1700 UJ	1700 UJ	1700 UJ	5000 U	1600 U
4,6-Dinitro-2-Methylphenol	1700 U	1700 U	1700 U	1700 U	1700 U	1700 U	5000 U	1600 U
N-Nitrosodiphenylamine	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
4-Bromophenyl-phenylether	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Hexachlorobenzene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Pentachlorophenol	1700 U	1700 U	1700 U	1700 U	1700 U	1700 U	5000 U	1600 U
Phenanthrene	340 U	340 U	340 U	340 U	340 U	340 U	1200 U	330 U
Anthracene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Di-n-Butylphthalate	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Fluoranthene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Pyrene	340 U	340 U	340 U	340 U	340 U	340 U	3000 U	330 U
Butylbenzylphthalate	340 U	340 U	340 U	340 U	340 U	340 U	3600 U	330 U
3,3-Dichlorobenzidine	680 UJ	680 UJ	680 UJ	670 UJ	670 UJ	670 UJ	990 U	330 U
Benzo(a)Anthracene	340 U	180 U	340 U	340 U	340 U	340 U	2000 U	660 U
bis(2-Ethylhexyl)Phthalate	160 UJ	340 U	340 U	340 U	340 U	340 U	6700 U	330 U
Chrysene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Di-n-Octyl Phthalate	340 UJ	340 UJ	340 UJ	340 UJ	340 UJ	340 UJ	990 U	330 U
Benzo(b)Fluoranthene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Benzo(k)Fluoranthene	340 U	340 U	340 U	340 U	340 U	340 U	990 U	330 U
Benzo(a)Pyrene	340 U	340 U	340 U	340 U	340 U	340 U	7600 U	330 U
Indeno(1,2,3-cd)Pyrene	340 UJ	340 UJ	340 UJ	340 UJ	340 UJ	340 UJ	5600 U	330 U
Dibenzo(a,h)Anthracene	340 UJ	340 UJ	340 UJ	340 UJ	340 UJ	340 UJ	1700 U	330 U
Benzo(g,h,i)Perylene	340 UJ	340 UJ	340 UJ	340 UJ	340 UJ	340 UJ	990 U	330 U

SOUTHERN MARYLAND WOOD TREATING - PHASE II SOIL SAMPLES

SAMPLE NUMBER	SS2-002	SS3-001	SS4-001	SS5-001	SS5-002	SS5-002	SS6-001	TB-001
DIL/CONC FACTOR (VOA)	1	1	1	1	1	1	4.5	1
DIL/CONC FACTOR (BNA)	1	1	1	1	1	1	1	1
DESCRIPTION					2 results	2 results		Trip Blank
Aluminum	8690	9460	6860	6650	12800	8190		20 U
Chromium	6.9 J	9.8 J	6.3 J	8.2 J	12 J	9.3 J		1 U
Copper	3 J()	4.4 J()	3 R	R	4 J()	4 J()		3 U
Iron	6670	10020	4820	7280	12400	8580		10 U
Lead	7.9	6.5	7.1	8.9	6.5	13		1 U
Mercury	0.1 UJ	0.1 UJ	0.88 J	0.1 UJ	0.29 J	0.1 UJ		0.1 U
Zinc	17 J	12 J	15 J	14 J	12 J	17 J		2 U

TOC
OIL AND GREASE