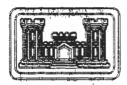
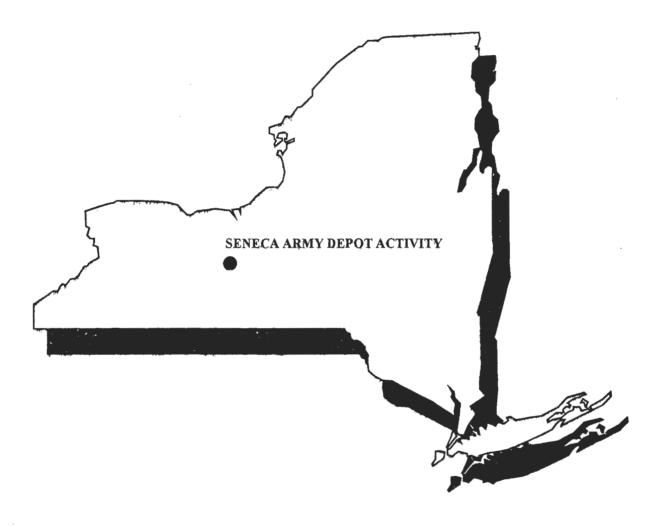
# U.S. ARMY ENGINEER DIVISION HUNTSVILLE, ALABAMA

00648







# **FINAL**

REMEDIAL INVESTIGATION REPORT AT THE FIRE TRAINING AND DEMONSTRATION PAD (SEAD-25) AND THE FIRE TRAINING PIT AND AREA (SEAD-26) APPENDICES

MAY 1998/MAR 1999

SEAD-25

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998092.6 751014.3

ASSOCIATED UNIT/AREA: SEAD-25 PROJECT NO: 728059

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

DATE STARTED: 12/03/93

GROUND SURFACE ELEVATION (ft): 743.5

DATUM: NGVD 83

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DATE COMPLETED: 12/03/93

INSPECTOR: B.Harvey, M.Burns

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

					_
SAMPLING	METHOD:	3	inch	Split	<b>Spoons</b>

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB25 -1.1	8 10 10 16	2.00	1.0	0	NA	1.0	GM	Dark brown to black fine gravel-sized SHALE fragments, little fine Sand, wet, petroleum odor.	0.00	FL	0 0
SB25 -1.2	6 12 14 20	2.00	1.2	0	NA	- 2	ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.		TL	
SB25 -1.3	27 45 60 60	2.00	1.9	0	NA	- 4					
SB25 -1.4	45 95 100/.1	1.10	1.1	0	NA	- 6 6.5 - 7		Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, dry, no odor.  SPLIT SPOON REFUSAL AT 7.1 FEET.	6.50	ws	
								Dark gray to black SHALE, dry, no odor.		33	



UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB25-1

**ENGINEERING-SCIENCE, INC.** 

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998050.0 751015.9

ASSOCIATED UNIT/AREA: SEAD-25 PROJECT NO: **728059** 

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

DATE STARTED: 12/03/93

GROUND SURFACE ELEVATION (ft): 743.7

DATUM: NGVD 83

DATE COMPLETED: 12/03/93

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

INSPECTOR: E. Schacht

DRILLING METHOD: Hollow Stem Auger

CHECKED BY: P.Feschbach-Meriney

SAMPLING METHOD: 3 inch Split Spoons

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB25 -2.1	10 15 11 10	2.00	1.4	0	NA	- 1	GM	Dark brown to black fine gravel-sized SHALE fragments, little fine Sand, moist, no odor.	0.00	FL	0
SB25 -2.2	10 11 20 22	2.00	1.6	19	NA	- 2 2.0	ML	Olive gray SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.	2.00	TL	0
B25 -2.3	17 34 100/.1	1.10	1.0	125	NA	- <b>4</b> - 5 5.0		Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, petroleum odor.  Dark gray highly fissile SHALE, some interstitial brown Silt, Clay,	5.00	ws	
								and very fine Sand, moist, petroleum odor.  SPLIT SPOON REFUSAL AT 5.1 FEET.  Dark gray to black SHALE.	5.40	CS	
NOT											



**ENGINEERING-SCIENCE, INC.** 

UNITED STATES ARMY **CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB25-2

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

REFERENCE COORDINATE SYSTEM:

BORING LOCATION (N/E): 998064.8 750981.2 **NY STATE PLANAR** 

ASSOCIATED UNIT/AREA: SEAD-25 PROJECT NO: 728059

GROUND SURFACE ELEVATION (ft):

743.8

DATE COMPLETED: 12/03/93

DATE STARTED: 12/03/93

DATUM: NGVD 83

INSPECTOR: B. Harvey, M. Burns

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DRILLING METHOD: Hollow Stem Auger

CHECKED BY: P.Feschbach-Meriney

SAMPLING METHOD: 3 inch Split Spoons

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Масго	Macro Lithology
SB25 -3.1	12 14 16 10	2.00	1.6	22	NA	- 1	GM	Dark brown to black fine gravel-sized SHALE fragments, little fine Sand, moist, petroleum odor.	0.00	FL	0 0
SB25 -3.2	12 14 18 20	2.00	2.0	2.0	NA	1.3 - 2 - 3	ML	Olive gray SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, petroleum odor.	1.30	TL	
SB25 -3.3	6 100/.3	0.80	0.6	1.3	NA	4.5		Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, moist, petroleum odor.  SPLIT SPOON REFUSAL AT 4.8 FEET.  AUGER REFUSAL AT 5.0 FEET.  Dark gray to black SHALE.	4.50	ws cs	
NOT											

PARSONS

**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB25-3

**ENGINEERING-SCIENCE, INC.** 

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998086.8 750956.9

ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: 728059

DATE STARTED: 12/03/93

GROUND SURFACE ELEVATION (ft): 743.6

DATUM: NGVD 83

DATE COMPLETED: 12/03/93

INSPECTOR: B. Harvey, M. Burns

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

		_		O 11.	
SAMPLING MET	HOD:	3	ıncn	Split	Spoons

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Don'th (ft )	Deptn (Tt.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB25 -4.1	12 13 8 7	2.00	1.1	15	NA	- 1		GM	Dark brown to black fine gravel-sized SHALE fragments, little fine Sand, moist, petroleum odor.	0.00	FL	0 0
SB25 -4.2	6 60 25 25	2.00	1.9	40	NA	- 3	1.3	ML	Olive gray SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, petroleum odor.	1.30	TL	
SB25 -4.3	45 100/.1	0.60	0.5	1.0	NA	- 4	4.5			4.50	ws	
						5			Dark gray to black highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, dry, no odor.  SPLIT SPOON REFUSAL AT 4.6 FEET.  Dark gray to black SHALE.	5.00		

PARSONS

UNITED STATES ARMY **CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB25-4

**ENGINEERING-SCIENCE, INC.** 

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998046.9 750959.2

ASSOCIATED UNIT/AREA: SEAD-25

PROJECT NO: 728059

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

**DATE STARTED: 12/03/93** 

GROUND SURFACE ELEVATION (ft): 743.6

DATUM: NGVD 83

DATE COMPLETED: 12/03/93

INSPECTOR: E. Schacht

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

SAMPLING METHOD: 3 inch Split Spoons

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Domth (ft.)	Deptn (rt.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB25 -5.1	7 18	2.00	2.0	155	NA	-	0.5	GM	Dark brown to black fine gravel-sized SHALE fragments, little fine Sand, wet, no odor.	0.00 0.50		0 0
SB25 -5.2	13 10 11 12 17 24	2.00	1.6	649	NA	- 2		ML	Olive gray SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, wet, petroleum odor.		TL	できる かんしゅう いっちょうしゅう
SB25 -5.3	17 52 100/.4	1.40	1.2	213	NA	- <b>4</b> - 5	5.0		Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, moist, petroleum odor.	5.00		
									SPLIT SPOON REFUSAL AT 5.4 FEET.  AUGER REFUSAL AT 5.5 FEET.  Dark gray to black SHALE.		CS	



ENGINEERING-SCIENCE, INC.

**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB25-5

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998032.1 751123.1

ASSOCIATED UNIT/AREA: SEAD-25 PROJECT NO: 728059

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR GROUND SURFACE ELEVATION (ft): 740.3

DATUM: NGVD 88

DATE STARTED: 12/03/93 DATE COMPLETED: 12/03/93

INSPECTOR: E. Schacht

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger SAMPLING METHOD: 3 inch Split Spoons

					iit Spot					
Sample Number Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	Depth	Macro	Macro Lithology
							DESCRIPTION			ļ
6B25 5 -6.1 15 17 15	2.00	2.0	0.7	NA	-1 1	ML	Brown SILT, some Clay, little fine gravel-sized Shale, moist, no odor.	0.00	FL	0 0
6B25 19 -6.2 19	2.00	1.9	0.7	NA	- 2	SC	Brown fine SAND, little Silt, little sand-sized Shale fragments, moist, no odor.		:	0 0
32 85					- 3	.0		4.00		0 0
100/.3	0.30	0.3		NA	- 4		Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet, no odor.  SPLIT SPOON REFUSAL AT 4.3 FEET.	5.00	ws	o.
							AUGER REFUSAL AT 5.0 FEET.  Dark gray to black SHALE.		CS	
					]					

NOTES: Monitoring Well MW25-1 was installed in this soil boring.



**ENGINEERING-SCIENCE, INC.** 

**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB25-6

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 8.5

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998276.8 751006.2

ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: 728059

GROUND SURFACE ELEVATION (ft): 742.2

DATUM: NGVD 88

DATE COMPLETED: 09/26/95

**DATE STARTED: 09/25/95** 

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

INSPECTOR: F. O'Loughlin CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

SAMPLING METHOD: 3 inch Split Spoons

	IVII LIIV					iit opoon					
Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB25- 7-00 SB25- 7-01	3 8 12 17	2.00	1.3	0	NA	- 1	ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, dry, no odor.	0.00	TL	
	22 23 23 37	2.00	1.4	0	NA	- 2		Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.			
											Βŧ
SB25- 7-03	33 32 37	2.00	1.5	0	NA	- 4					
	34					- 5					
SB25- 7-04	38 43 39	2.00	1.9	0	NA	- 6		Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, wet, no odor.			X
	43					- 7					
	25 100/.3	0.80	0.8	0	NA	- 8					
						- 9					
						10.0			10.00		

NOTES: Monitoring Well MW25-6 was installed in this soil boring.



**UNITED STATES ARMY** CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB25-7

ENGINEERING-SCIENCE, INC.

PROJECT: SEAD-25 & SEAD-26 RI/FS PROJECT NO: 728059

GROUND SURFACE ELEVATION: 742.2
INSPECTOR: F. O'Loughlin
1 CHECKED BY: P.Feschbach-Meriney PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

This log is part of a report prepared by Parson. This growth has report for complete interpretation.  In a supplied to the properties of the propertie	ROJECT LOCATION	ON: Seneca Army Depot	Activity, Romulus, NY 14541 CHECKED BY: P.	<u>Feschba</u>	<u>ch-M</u>	<u>e</u> rine
Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet, no odor.  SPLIT SPOON REFUSAL AT 8.8 FEET AND 11.3 FEET.  AUGER REFUSAL AT 12.2 FEET.  CS	Sample Number Blow Counts (# Blows per 6") Sample Advance	Sample Sample Recovery VOC Screen-PID (ppm) Rad Screen (cps)	S S S S S S S S S S S S S S S S S S S	Depth	Macro	Macro Lithology
93 100/.3 -11 SPLIT SPOON REFUSAL AT 8.8 FEET AND 11.3 FEET12 AUGER REFUSAL AT 12.2 FEET. CS	55 1.30	30 1.3 0 NA			ws	$\neg$
AUGER REFUSAL AT 12.2 FEET.			and very fine Sand, wet, no odor.			
AUGEN REFUSAL AT 12.2 FEET.		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AUGED DEFUGAL AT AN A TEST	12.20	CS	$\dashv$
NOTES. Maniering Mall MANOE 6 was installed in this sail baring						

NOTES: Monitoring Well MW25-6 was installed in this soil boring.



**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB25-7

**ENGINEERING-SCIENCE, INC.** 

Sheet 2 of 2

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998076.8 750856.9

ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

DATE STARTED: 09/26/95

PROJECT NO: **728059** 

GROUND SURFACE ELEVATION (ft): 741.4

DATE COMPLETED: 09/26/95

DATUM: NGVD 88 INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

SAMPLING METHOD: 3 inch Split Spoons

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB25- 8-00 SB25- 8-01 SB25- 8-02	2 6 8 11 20 30 100/.3	1.30	1.4	0	NA NA	- 1	ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.  Olive gray SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, dry, no odor.	0.00	TL	
	100/23					3.0		SPLIT SPOON REFUSAL AT 3.3 FEET.  Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, dry, no odor.	3.00 4.00	ws	
								AUGER REFUSAL AT 4.0 FEET.  Dark gray to black SHALE.		CS	

NOTES: Monitoring Well MW25-8 was installed in this soil boring.



**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot

LOG OF BORING SB25-8

ENGINEERING-SCIENCE, INC. Romulus, New York

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 3.5

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998005.3 750898.1

ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: 728059

GROUND SURFACE ELEVATION (ft): 741.3

DATUM: NGVD 88

DATE COMPLETED: 09/26/95

DATE STARTED: 09/26/95

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

SAMPLING METHOD: 3 inch Split Spoons

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB25- 9-00 SB25- 9-01	2 6 10 12	2.00	1.7	0	NA	- 1	ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.	0.00	TL	
SB25- 9-02	12 30 30 100/.4	1.90	1.8	О	NA	- 3					
			1			3.5		SPLIT SPOON REFUSAL AT 3.4 FEET.  Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet, no odor.	3.50	WS	
								AUGER REFUSAL AT 4.8 FEET.  Dark gray to black SHALE.	4.80	CS	
								this soil boring.			

NOTES: Monitoring Well MW25-9 was installed in this soil boring.



ENGINEERING-SCIENCE, INC.

UNITED STATES ARMY **CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB25-9

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 4.5

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 997965.0 751000.0

ASSOCIATED UNIT/AREA: SEAD-25 PROJECT NO: 728059

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

DATE STARTED: 09/27/95

GROUND SURFACE ELEVATION (ft): 741.8

DATUM: NGVD 88

DATE COMPLETED: 09/27/95

INSPECTOR: F. O'Loughlin

DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

SAMPLING METHOD: 3 inch Split Spoons

ple nce		JID				This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be			
Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	Depth	Macro	Macro Lithology
2 00	1.5	-	NΔ		BAI.		0.00		
2.00				- 1	IVIL	Shale, trace very fine Sand, dry, no odor.	0.00	16	
2.00	1.3	0	NA	- 2 - 3		Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.			
0.80	0.5	0	NA	4.5		Dark gray highly fissile SHALE, some interstitial brown Silt, Clay,	4.50	WS	
				- 5		and very fine Sand, wet. SPLIT SPOON REFUSAL AT 4.8 FEET.			
			_		-	AUGER REFUSAL AT 5.6 FEET.	5.60		$\vdash$
						Dark gray to black SHALE.			
	2.00	2.00 1.5	2.00   1.5   0 2.00   T1.3   0 	2.00   1.5   0   NA	2.00	2.00   1.5   0   NA   ML   2.00   T.3   0   NA   2    -3   -3   -3   -4   4.5   -4	DESCRIPTION  2.00   1.5   0   NA   ML   Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, dry, no odor.  2.00   1.3   0   NA   2   Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.  3   O   NA   4   4.5   Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet. SPLIT SPOON REFUSAL AT 4.8 FEET.  AUGER REFUSAL AT 5.6 FEET.	DESCRIPTION  2.00   1.5   0   NA   ML   Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, dry, no odor.  2.00   1.3   0   NA   2   Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.  0.80   0.5   0   NA   4   4.5   Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet.  SPLIT SPOON REFUSAL AT 4.8 FEET.  AUGER REFUSAL AT 5.6 FEET.	DESCRIPTION  2.00   1.5   0   NA

NOTES: Monitorin Well MW25-10 was installed in this soil boring.



**ENGINEERING-SCIENCE, INC.** 

UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB25-10

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 5.1

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998028.5 750927.4

ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: 728059 DATE STARTED: 10/17/95

GROUND SURFACE ELEVATION (ft): 742.5

DATUM: NGVD 88

DATE COMPLETED: 10/17/95

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

SAMPLING METHOD: 3 inch Split Spoons

5A	MPLING	MEIR	100:	3 Inc	n əp	lit Spoon	15				
Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB25-	2	2.00	1.5	0	NA		ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized	0.00	TL	
11-00 SB25- 11-01 SB25- 11-02		2.00	1.3	o	NA	- 1 - 2 - 3		Shale, trace very fine Sand, moist, no odor.			
SB25- 11-03	11 27 100/.3	1.30	0.6	26	NA	- 5 5.0		Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, petroleum odor.	5.00		
								Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet, petroleum odor.	5.50	WS	
								SPLIT SPOON REFUSAL AT 5.3 FEET.		cs	
								Dark gray to black SHALE.			
NOTE	ES:					J					L



**ENGINEERING-SCIENCE, INC.** 

**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB25-11

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 5.6

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998187.6 750963.0

ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: **728059** DATE STARTED: 10/16/95

GROUND SURFACE ELEVATION (ft): 742.2

DATUM: NGVD 88

DATE COMPLETED: 10/16/95

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
B25-	3	2.00	1.8	0	NA		ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized	0.00	TL	Ų.
2-00 BB25- 2-02	5 6 7 23 25 35 60	2.00	1.6	0	NA	- 1 - 2 - 3		Shale, trace very fine Sand, moist, no odor.			
8825- 2-03	25 23 35 41	2.00		0	NA	- <b>4</b> - 5					
	- 1			1					1		
	75 100/.4	0.90	0.8	0	NA	- 6 - 7		Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, wet, no odor.  SPLIT SPOON REFUSAL AT 6.9 FEET.			
	100/.4	0.90	0.8	0	NA			Shale, trace very fine Sand, wet, no odor.	7.50	ws	6

NOTES: Monitoring Well MW25-17 was installed in this soil boring.

**PARSONS** 

**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB25-12

ENGINEERING-SCIENCE, INC.

PROJECT: SEAD-25 & SEAD-26 RI/FS
PROJECT NO: 728059

25 & SEAD-26 RI/FS GROUND SURFACE ELEVATION: 742.2

INSPECTOR: F. O'Loughlin

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541 CHECKED BY: P.Feschbach-Meriney This log is part of a report prepared by Parsons
Engineering-Science, Inc. for the named project and should be
read together with the report for complete interpretation. This
summary applies only at the location of this boring and at the
time of drilling. Subsurface conditions may differ at other VOC Screen-PID (ppm) Blow Counts (# Blows per 6") Macro Lithology **USCS CLASS** Sample Recovery Depth (ft.) Sample Advance Macro Depth locations. DESCRIPTION CS Dark gray to black SHALE.

NOTES: Monitoring Well MW25-17 was installed in this soil boring.



UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB25-12

Sheet 2 of 2

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 8.0

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998135.0 750762.5

ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: 728059 DATE STARTED: 10/07/95

GROUND SURFACE ELEVATION (ft): 740.1

DATUM: NGVD 88

DATE COMPLETED: 10/07/95

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

SAMPLING METHOD: 3 inch Split Spoons

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB25- 13-00	4 6 10 20	2.00	1.0	0	NA	- 1	ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.	0.00	TL	
B25- 3-02	8 12 16 17	2.00	1.0	0	NA	- 2					
	20 17 23 18	2.00	1.8	0	NA	- <b>4</b> - 5					
B25- 3-04	36 52 53 67	2.00	1.5	0	NA	- 6					
- 1						- 8 8.0		Dode your highly finally CIVALE, name interesticial brown Cita Clay	8.00	ws	
	37 60 100/.4	1.40	1.3	0	NA	- 9		Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet, no odor.		•••	

UNITED STATES ARMY **CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB25-13

**ENGINEERING-SCIENCE, INC.** 

PROJECT: SEAD-25 & SEAD-26 RI/FS

728059

GROUND SURFACE ELEVATION:

F. O'Loughlin

PROJECT NO: INSPECTOR: Seneca Army Depot Activity, Romulus, NY 14541 P.Feschbach-Meriney PROJECT LOCATION: CHECKED BY:

Sample	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
								AUGER REFUSAL AT 10.2 FEET.  Dark gray to black SHALE.	10.20	CS	

NOTES: Monitoring Well MW25-19 was installed in this soil boring.



**UNITED STATES ARMY** CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB25-13

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 4.0

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 997974.2 750764.4

ASSOCIATED UNIT/AREA: SEAD-25

PROJECT NO: 728059

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR GROUND SURFACE ELEVATION (ft): 739.6

DATE COMPLETED: 10/10/95

**DATE STARTED: 10/10/95** 

DATUM: NGVD 88

INSPECTOR: F. O'Loughlin

CHECKED BY: P.Feschbach-Meriney

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DRILLING METHOD: Hollow Stem Auger SAMPLING METHOD: 3 inch Split Spoons

O WILL	100.	5 1710	ор	opoon					
Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
2.00	1.5	0	NA		ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized	0.00	TL	
2.00		0	NA	- 1		Shale, trace very fine Sand, moist, no odor.			
				- 3 - 4 4.0			4.00		
	0.9	0	NA	- 5		and very fine Sand, dry, no odor.		ws	
				_ &		SPLIT SPOON REPUSAL AT 5.5 FEET.			
				- 6		AUGER REFUSAL AT 6.2 FEET.  Dark gray to black SHALE.	6.20	cs	
	Sample Advance	Sample Advance Sample	Sample Advance Sample Sample Sample Sample Sample Sample Society Screen-PID O O Screen-PID O O Screen-PID O O O (ppm)	Sample Advance Sample Solventy Sample Sample Sample Solventy Sample	Sample Advance Sample Screen-PID VOC Screen-PID (Ppm) Sample Screen Scre	Sample Screen-PID (ppm) Sample Screen-PID (ppm) Sample Screen Sample Screen Sample Screen Sample Screen Sample Sam	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  2.00 1.5 0 NA	This log is part of a report prepared by Parsons Engineering Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION  DESCRIPTION  1.5 0 NA	This log is part of a report prepared by Parsons Engineering-Science, inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION  DESCRIPTION  1.5 O NA

NOTES: Monitoring Well MW25-15 was installed in this soil boring.

PARSONS

**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB25-14

**ENGINEERING-SCIENCE, INC.** 

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 2.7

BORING LOCATION (N/E): 997934.2 750920.1

ASSOCIATED UNIT/AREA: SEAD-25

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: **728059** 

GROUND SURFACE ELEVATION (ft): 740.1

DATE STARTED: 10/17/95

DATUM: NGVD 88

DATE COMPLETED: 10/17/95

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

					_
SAMPLING	METHOD:	3	inch	Split	Spoons

This log is part of a report prepared by Parsons  This log is part of a report prepared by Log is the location in the born and should be read to read the part of complete interpretation. This can be part of the part of
Shale, trace very fine Sand, moist, no odor.  Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet, no odor.  SPLIT SPOON REFUSAL AT 2.9 FEET.
Shale, trace very fine Sand, moist, no odor.  Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet, no odor.  SPLIT SPOON REFUSAL AT 2.9 FEET.  3.50
Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet, no odor.  SPLIT SPOON REFUSAL AT 2.9 FEET.  3.50
and very fine Sand, wet, no odor.  SPLIT SPOON REFUSAL AT 2.9 FEET.  3.50
Dark gray to black SHALE.



**ENGINEERING-SCIENCE, INC.** 

**UNITED STATES ARMY** CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB25-15

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 2.5

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 997964.3 751106.4

ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: **728059** DATE STARTED: 10/23/95

GROUND SURFACE ELEVATION (ft): 740.2

DATUM: NGVD 88

DATE COMPLETED: 10/23/95

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

SAMPLING	G METHOD:	3 Inc	n Spilt	Spoons	

Sample Number Blow Counts	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB25- 8 16-00 6 SB25- 6 16-01 7			0	NA NA	- 1	ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.	0.00	TL	
					- 3		Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, dry, no odor.  SPLIT SPOON REFUSAL AT 2.9 FEET.	2.70	WS	
							AUGER REFUSAL AT 4.0 FEET.  Dark gray to black SHALE.		CS	
NOTES:										



**ENGINEERING-SCIENCE, INC.** 

UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB25-16

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998032.1 751123.1

ASSOCIATED UNIT/AREA: SEAD-25 PROJECT NO: 728059

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

DATE STARTED: 12/03/93

GROUND SURFACE ELEVATION (ft): 740.3

DATUM: NGVD 88

DATE COMPLETED: 12/03/93

INSPECTOR: E. Schacht

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

SAMPLING METHOD: 3 inch Split Spoons

		J		<del></del>	op	iit Spooi					
Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
<u></u>	<u> </u>		1				-		-		
SB25 -6.1		2.00	2.0	0.7	NA	- 1 1.1		Brown SILT, some Clay, little fine gravel-sized Shale, moist, no odor.	0.00	FL	0 0
SB25	19	2.00	1.9	0.7	NA	- 2	SC	Brown fine SAND, little Silt, little sand-sized Shale fragments, moist, no odor.			0 0
-6.2	19 32 85	2.00				- 3					0 0
	100/.3	0.30				- 4 4.C	)		4.00	14/0	0
	100/.3	0.30	⊥0.3		NA			Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet, no odor.  SPLIT SPOON REFUSAL AT 4.3 FEET.	5.00	WS	
								AUGER REFUSAL AT 5.0 FEET.  Dark gray to black SHALE.		CS	

NOTES: The soil boring information was obtained from SB25-6.



UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING MW25-1

**ENGINEERING-SCIENCE, INC.** 

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998023.1 750973.4

ASSOCIATED UNIT/AREA: SEAD-25 PROJECT NO: 728059

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

DATE STARTED: 11/07/93

GROUND SURFACE ELEVATION (ft): 743.8

DATUM: NGVD 88

DATE COMPLETED: 11/07/93

INSPECTOR: E. Schacht

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

SAMPLING METHOD: 3 inch Snlit Spoons

DRILLING METHOD: Hollow Stem Auger

18 2.00	Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
10 2.00 1.6 63 NA  20 1.30 1.3 280 NA  5 5.0  Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, moist.  SPLIT SPOON REFUSAL AT 5.3 FEET.  Dark gray to black SHALE.		12 11	2.00	1.8	0	NA	- 1	ML	Olive gray SILT and CLAY, little fine to medium gravel-sized	0.00	TL	
Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, moist.  SPLIT SPOON REFUSAL AT 5.3 FEET.  Dark gray to black SHALE.		8 9	2.00	1.6	63	NA						
and very fine Sand, moist.  SPLIT SPOON REFUSAL AT 5.3 FEET.  Dark gray to black SHALE.		18	1.30		280	NA	- 4 - 5 5.0		Dark grow highly fiscile SHALE same interstitial brown Silt Clay	5.00		
		100/.1							and very fine Sand, moist.  SPLIT SPOON REFUSAL AT 5.3 FEET.  Dark gray to black SHALE.	5.50		

NOTES:



**ENGINEERING-SCIENCE, INC.** 

UNITED STATES ARMY **CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING MW25-2

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998078.3 750926.3

ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: 728059 DATE STARTED: 11/07/93

GROUND SURFACE ELEVATION (ft): 743.3

DATUM: NGVD 88

DATE COMPLETED: 11/07/93

INSPECTOR: E. Schacht

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

SAMPLING METHOD: 3 inch Split Spoons

DRILLING METHOD: Hollow Stem Auger

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
	10 11 12 12 12 21 16 20 100/.4	2.00	1.5	0	NA NA	- 1 - 2	ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.	0.00	TL	
	100/.4					3.5		Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand.	3.50	ws	
						5		SPLIT SPOON REFUSAL AT 3.9 FEET.  Dark gray to black SHALE.	5.00	cs	
								AUGER REFUSAL AT 6.5 FEET.			

NOTES:



UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING MW25-3

**ENGINEERING-SCIENCE, INC.** 

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998022.1 750983.2

ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: **728059** DATE STARTED: 10/31/95 GROUND SURFACE ELEVATION (ft): 743.8

DATUM: NGVD 88

DATE COMPLETED: 10/31/95

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Rock Coring

SAMPLING METHOD: 3.79 inch diameter HQ bit

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
	18 12 11 7	2.00	1.8	0	NA	- 1	ML	Olive gray SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.	0.00	TL	
	10 8 9 20	2.00	1.6	63	NA	- 3					
	20 18 100/.3	1.30	1.3	280	NA	- <b>4</b> - 5 5.0		Dark gray highly fissile SHALE, some interstitial brown Silt, Clay,	5.00	ws	
	100/.1							and very fine Sand, moist.  SPLIT SPOON REFUSAL AT 5.3 FEET.  Dark gray to black SHALE.  AUGERED TO 8.5 FEET.	5.50	CS	

NOTES: The soil boring information was obtained from MW25-2.

**PARSONS** 

UNITED STATES ARMY **CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING MW25-4D

**ENGINEERING-SCIENCE, INC.** 

PAGE: 1 OF 1

					CORI	E BO	RING 1	REPORT					
PA	RSONS ENG	INEERIN	G-SCII	ENCE,	INC.		CLIENT:	USACOE	BORING #:	MW25-4D			
	PROJECT:			RI FIELI	) INVESTIGA	TION			DATE CORING STA	ARTED:	10/31/95		
	SWMU # (ARE	A):			SEAD-25				DATE CORING CO	MPLETED:	10/31/95		
	SOP NO.:								CONTRACTOR:	Empire Soils	Investigation		
		М	ONITOR	ING			COMMENTS:		DRILLER:	J. Warner			
n	TRUMENT	n	NTERVAL		BACKGROUND	ТІМЕ	No water loss observ	ved during coring.	INSPECTOR:	F. O'Loughlin			
оум		8.8' - 23.8'			0.0 ppm	0800			GEOLOGIST:	F. O'Loughlin			
Miniram		8.8' - 23.8'			0.0 cpm	0800			CHECKED BY:	PFM			
CORE	EQUIPMENT		BARREL	LENGTH	(ft):				DATE CHECKED:	02/05/96			
TYPE	SERIES	_	RANGE		O.D.	I.D.			TOTAL FOOTAGE	CORED: 1.5	<u>'</u>		
DTWL	HQ	8.8' - 23.8'			3.79*	2"			OVERBURDEN TI	IICKNESS: 5.5	·		
	Dini a		<del></del>		SCHEMATIC	ANCEES	B	EDROCK/ CORE DESCRIP	GALLONS OF WAT		gals.		
DEPTH	RUN # RANGE	RECOVERY	MON.	RQD	STRATA/	DIPATRIKE	(color, ma	ajor modifiers, rock type, mino	r components, bedd	ling or foliatio			
PEET	FEET	FEET	DATA	%	FRACTURES	(BD,FL,JNT,FC)	strike of	joints/fractures relative to folia	tion, weathering or	fractures, etc	.)(.		
8.8	_					L	8.8' - 13.8' Dark Gra	ay SHALE, fractured (predomi	ominantly along bedding planes),				
	#1 _	_4.7'	BGD	38%		_0-80	trace fossils, slight w	veathering, iron staining, clay l	octween fratures.				
	(8.8'-13.8')					fractures							
	(6.6 15.6)	_									- 1		
	_	-				-							
-	_	_				-							
13.8													
	#2	_5'	BGD	66%		_0-85	13.8' - 18.8' Dark G	Gray SHALE, fractured (predor	minantly along bede	ling planes).			
	(13.8'-18.8')					fractures							
	(13.8-16.6)					Liaciaco							
	-	_				-							
-	_	_				-							
18.8													
	#3	5'	BGD	66%		0-50	18.8' - 22.7' Dark C	Gray SHALE, fractured (predor	minantly along bed	ling planes),			
	(18.8'-23.8')					fractures	some fossils.						
	(10.0 22.0)							D CECTONE Shala					
	_	_				<b>-</b>		IMESTONE, some Shale.					
23.8					-	<del>                                     </del>	23.1' - 23.8' Dark gr	ray SHALE, fractured (predom	inantly along bedd	ing planes),we	athered.		
	_	_				-	Coring terminated a	ıt 23.8'					
İ	_	L				_							
	_												
l	-	-				<b> </b>							
-		<u> </u>				-							
INV	ESTIGATION I	DERIVED	WASTE	::	From au	gering and a	ir drilling	From coring					
		DATE			10/9/95			10/31/95					
	SOIL AMOUR	NT (fraction	n of drum	)	1 drum-full			1.5 drums coring water, 3/4 de	rum bentonite/H2O				
1	Di	RUM#,											
1	LO	CATION											

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998080.2 750937.0

ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: 728059

GROUND SURFACE ELEVATION (ft): 743.4

DATE COMPLETED: 10/30/95

DATE STARTED: 10/30/95

DATUM: NGVD 88

INSPECTOR: F. O'Loughlin

DRILLING METHOD: Rock Coring

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

SAMPLING METHOD: 3.79 inch diameter HQ bit

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Масго	Macro Lithology
	10 11 12 12 12 21 16 20 100/.4	2.00	1.5	0	NA NA	- 1 - 2	ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.	0.00	TL	
						3.5	_	Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand.  SPLIT SPOON REFUSAL AT 3.9 FEET.	3.50	ws	
						5		Dark gray to black SHALE.	5.00	CS	
								AUGER REFUSAL AT 6.5 FEET.			

NOTES: The soil boring information was obtained from MW25-3.



**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING MW25-5D

**ENGINEERING-SCIENCE, INC.** 

PAGE: 1 OF 1

					COR	E BC	DRING	REPOR	$\mathbf{T}$	. •
PA	RSONS EN	GINEER	ING-SC	IENCE	, INC.		CLIENT:	USACOE	BORING #:	MW25-5D
	PROJECT SWMU # (AR: SOP NO.:	EA):		RI FIELI	D INVESTIGA SEAD-25	TION			DATE CORING STAI  DATE CORING COM  CONTRACTOR: 1	
	JOF NO.		IONITO	DINC		-	COMMENTS:			I. Warner
- DA	TRUMENT		NTERVAL	CHO.	BACKGROUND	TIME	No water loss observ	ved during coring	_	F. O'Loughlin
OVM	TROMENT	7 - 22'	VIERVAL		0.0 ppm	0820	THE WALL TOSS OBSETT	voc curing coring.	_	F. O'Loughlin
Miniram		7 - 22'			0.0 cpm	0820			-	PFM
	EQUIPMEN		BARREI	LENGTH (					DATE CHECKED:	
TYPE	SERIES	<u> </u>	RANGE		O.D.	I.D.			TOTAL FOOTAGE (	-
DTWL	HQ	7 - 22'			3.79"	2*			OVERBURDEN THI	<del> </del>
									GALLONS OF WATE	
	RUN #	CORE			SCHEMATIC	ANGLES			DESCRIPTIONS AND REM	ARKS
DEPTH	RANGE	RECOVERY	MON. DATA	RQD %	STRATA/ FRACTURES	(BD,FL,INT,FC)	(color, m strike of	iajor modifiers, rock ( f joints/fractures relati	type, minor components, beddi ive to foliation, weathering on	ng or foliation, fractures. etc.)
7						0-80				
′	_	-				_0-80			edominantly along bedding pla	nes), clay filled fractures,
	#1	5'	BGD	0%		-	some fossils, iron sta	sining, clay and trace	mineralization.	
	(7'-12')	L								
12	_	Γ								
.12									<u></u>	
		_				-				
	#2 _	_ 5'	BGD	12%		_0-60	12' - 17' Dark Gray	SHALE, fractured (p	oredominantly along bedding p	lancs),
	(12'-17')					fractures	some fossils, slightly	v weathered.		
	_							,		
	_	_				_				i
17_	_	-				-				
	#3	4.7'	BGD	52%		0-80	17' - 21.3' Dark Gra	av SHALE, fractured	(predominantly along bedding	planes).
	(1 <b>7</b> '-22')					£.,				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	(17-22)	_				fractures	some lossils, clay an	nd silt filled fractures,	Bignity weathered.	
22							21.3' - 22' Gray to I	Dark gray LIMESTO	NE, fractured, some fossils, sli	ghtly weathered.
		L				L	Coring terminated a	ıt 22'		
	_									
	_					_				
	_	_				F				
	_									
	_									
INVE	ESTIGATION	DERIVE	D WAST	E:	From au	gering and air	r drilling	From coring		
		DATE			10/22/95			10/3	0/95	
	SOIL AMOU	NT (fractio	n of drun	1)	1 drum-full			2 full drums coring	water, 3/4 drum bentonite/H2C	)
	D	RUM#,								
	LC	CATION								

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 8.5

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998276.8 751006.2

PROJECT NO: 728059

ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM:

**NY STATE PLANAR** 

**DATE STARTED: 09/25/95** 

GROUND SURFACE ELEVATION (ft): 742.2

DATUM: NGVD 88

DATE COMPLETED: 09/26/95

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

SAMPLING	METHOD:	3	inch	Split	Spoons

					<u> </u>	nt opoon					
Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB25-	3	2.00	1.3	0	NA		ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized	0.00	TL	£.
7-00 \$B25- 7-01	22 23 23 37	2.00	1.4	0	NA	- 1		Shale, trace very fine Sand, dry, no odor.  Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.			
			$\perp$								3.6
SB25- 7-03	33 32 37 34	2.00	1.5	0	NA	- <b>4</b> - <b>5</b>					
SB25- 7-04	38 43 39 43	2.00	1.9	0	NA	- <b>6</b> - 7		Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, wet, no odor.			
	25 100/.3	0.80	0.8	0	NA	- 8	7				
						40.0			10.00		X
NOT						10.0	Ļ	from SR25-7	10.00		-A.A

NOTES: The soil boring information was obtained from SB25-7.

**PARSONS** 

**ENGINEERING-SCIENCE, INC.** 

UNITED STATES ARMY **CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING MW25-6

PROJECT: SEAD-25 & SEAD-26 RI/FS PROJECT NO:

728059

GROUND SURFACE ELEVATION: 742.2

INSPECTOR: F. O'Loughlin

Seneca Army Depot Activity, Romulus, NY 14541 PROJECT LOCATION: CHECKED BY: P.Feschbach-Meriney This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be Blow Counts # Blows per 6") VOC Screen-PID (ppm) read together with the report for complete interpretation. This Macro Lithology **USCS CLASS** summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other Sample Recovery Depth (ft.) Sample Advance Macro Depth locations. DESCRIPTION 55 1.30 1.3 NA Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, ws 93 and very fine Sand, wet, no odor. 100/.3 11 SPLIT SPOON REFUSAL AT 8.8 FEET AND 11.3 FEET. 12 12.20 CS AUGER REFUSAL AT 12.2 FEET. Dark gray to black SHALE.

NOTES: The soil boring information was obtained from SB25-7.



UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING MW25-6

Sheet 2 of 2

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998277.7 751015.9

ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: 728059 DATE STARTED: 10/24/95

GROUND SURFACE ELEVATION (ft): 742.2

DATUM: NGVD 88

DATE COMPLETED: 10/24/95

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Rock Coring

SAMPLING METHOD: 3.79 inch diameter HQ bit

	MALTIN	3 1VIL 1	100.	3170	111011	ulainetei	110	DIC			
Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB25-	3	2.00	1.3	0	NA		ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized	0.00	TL	
7-00 SB25- 7-01	8 12 17					- 1	IVIL	Shale, trace very fine Sand, dry, no odor.	0.00	, ,,	
	22 23 23 37	2.00	1.4	0	NA	- 2		Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.			
			_								
SB25- 7-03	33 32 37	2.00	1.5	0	NA	- 4					
	34					- 5					
SB25- 7-04	38 43 39 43	2.00	1.9	0	NA	- 6		Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, wet, no odor.			
						- 7					
	25 100/.3	0.80	0.8	0	NA	- 8					
						- 9					
						10 10.0			10.00		

NOTES: The soil boring information was obtained from SB25-7.



UNITED STATES ARMY **CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING MW25-7D

ENGINEERING-SCIENCE, INC.

PROJECT: SEAD-25 & SEAD-26 RI/FS

GROUND SURFACE ELEVATION:

ELEVATION: 742.2
INSPECTOR: F. O'Loughlin

PROJECT NO: 728059 Seneca Army Depot Activity, Romulus, NY 14541 P.Feschbach-Meriney PROJECT LOCATION: CHECKED BY: This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This VOC Screen-PID (ppm) Macro Lithology Blow Counts Blows per 6" **USCS CLASS** summary applies only at the location of this boring and at the Sample Recovery Depth (ft.) time of drilling. Subsurface conditions may differ at other Macro Depth locations. \* DESCRIPTION WS 1.30 0 NA Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, 55 1.3 93 and very fine Sand, wet, no odor. 100/.3 11 SPLIT SPOON REFUSAL AT 8.8 FEET AND 11.3 FEET. 12 12.20 CS AUGER REFUSAL AT 12.2 FEET. Dark gray to black SHALE.

NOTES: The soil boring information was obtained from SB25-7.



UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING MW25-7D

					COR	E BC	DRING	REPORT	·
P/	ARSONS EN	GINEER	ING-SC	IENCE	, INC.		CLIENT:	USACOE	BORING #: MW25-7D
	PROJECT	<del></del>	<del></del>	RI FIELI	D INVESTIGA	TION			DATE CORING STARTED: 10/24/95
	SWMU#(AR	EA):			SEAD-25				DATE CORING COMPLETED: 10/24/95
	SOP NO.	:							CONTRACTOR: Empire Soils Investigation
		M	ONITO	RING_		-	COMMENTS:		DRILLER: S. Breeds
II.	TRUMENT	1	NTERVAL		BACKGROUND	тіме	No water loss observ	ed during coring.	INSPECTOR: F. O'Loughlin
оум		15.5' - 30.5	5'		0.0 ppm	0955			GEOLOGIST: F.O.
Miniran	1	15.5' - 30.5	5'		0.0 cpm	0955	1		CHECKED BY: PFM
CORI	EQUIPMEN	T	BARREI	LENGTH	(ft): 5.0'	1	-		DATE CHECKED: 2/5/96
ТҮРЕ	SERIES		RANGE		O.D.	I.D.	-		TOTAL FOOTAGE CORED: 15'
DTWL	HQ	15.5' - 30.5	5'		3.79"	2"	-		OVERBURDEN THICKNESS: 9'
-	RUN #	CORE	<del></del>	<u> </u>	SCHEMATIC	ANGLES		BEDROCK/ CORE DES	GALLONS OF WATER USED 80 gals. CCRIPTIONS AND REMARKS
DEPTH	RANGE	RECOVERY	MON.	RQD	STRATA	DIP/STRIKE	(color, m	ajor modifiers, rock type	, minor components, bedding or foliation,
PEET	FEET	FEET	DATA	<u>  %</u>	FRACTURES	(BD.FLJNT.FC)	strike of	joints/fractures relative t	o foliation, weathering on fractures, etc.)
15.5	-	-				-	15.5 - 20.2' Dark Gr	ray SHALE, fractured (pr	edominantly along bedding planes),
	#1 _	4.7'	BGD	88%		_0-30	trace fossils.		
	(15.5'-20.5')_	L				fractures			
1									
ı	_	T							
-	-	<u> </u>				<b>-</b>			
20.5			-	_					***
1	#2 _	4.8'	BGD	80%		0-45	20.5' - 25.3' Dark C	Gray SHALE, fractured (p	redominantly along bedding planes),
	(20.5'-25.5')_					fractures	trace fossils.		
	_	_							
-	-					<b> </b>			
22.5									
	#3 _	5'	BGD	92%		_ 5-90	25.5' - 30.5' Dark (	Gray SHALE, fractured (p	eredominantly along bedding planes),
	(25.5'-30.5')_	_				fractures	trace fossils.		
30.5									
							Coring terminated a	1 30.5'.	· · · · · ·
-	1 -	Ť							
	-	-				-			
i i	-	-				F			
ı	_	<u></u>				L			
	_	L							
1									
<u> </u>	1	<u> </u>							
INV	<b>ESTIGATION</b>	DERIVE	D WAST	<b>E</b> :	From au	gering and a	ir rotary before corin	From coring	
		DATE			10/08/95			10/24/95	
	SOIL AMOU	NT (fractio	on of drur	n)	1 drum-full			1.5 drums coring water,	1.0 drum of bentonite/H2O
	I	ORUM#,							
	L	OCATION	r	_					

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 4.0

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 997865.7 750956.7

ASSOCIATED UNIT/AREA: SEAD-25 PROJECT NO: 728059

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

GROUND SURFACE ELEVATION (ft): 738.7

DATE COMPLETED: 10/11/95

DATE STARTED: 10/11/95

DATUM: NGVD 88

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
	8 8 9 8	2.00	1.3	5 0	NA	- 1	ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.	0.00	TL	
	10 21 35 37	2.00	1.5	0	NA	- 2 - 3					
	27 35 100/.3	1.30	0.9	0	NA	- 4 - 5 - 5.0		Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, wet, no odor.	5.00		
								Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet, no odor. SPLIT SPOON REFUSAL AT 5.3 FEET.	5.70	ws	
								AUGER REFUSAL AT 5.7 FEET.  Dark gray to black SHALE.		cs	



UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING MW25-11

ENGINEERING-SCIENCE, INC.

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 997866.1 750967.3

ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: 728059 DATE STARTED: 11/01/95 GROUND SURFACE ELEVATION (ft): 738.9

DATUM: NGVD 88

DATE COMPLETED: 11/01/95

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

INSPECTOR: F. O'Loughlin

DRILLING METHOD: Rock Coring

CHECKED BY: P.Feschbach-Meriney

SAMPLING METHOD: 3.79 inch diameter HQ bit

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
	8 8 9 8 10 21 35 37	2.00	1.35	0	NA	- 1	ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.	0.00	TL	
	27 35 100/.3	1.30	0.9	0	NA	- 4 - 5 5.0		Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, wet, no odor.  Dark gray highly fissile SHALE, some interstitial brown Silt, Clay,	5.00	ws	
								and very fine Sand, wet, no odor. SPLIT SPOON REFUSAL AT 5.3 FEET.  AUGER REFUSAL AT 5.7 FEET.  Dark gray to black SHALE.	5.70	CS	

NOTES: The soil boring information was obtained from MW25-11.



UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING MW25-12D

**ENGINEERING-SCIENCE, INC.** 

PAGE: 1 OF 1

				(	CORE	BOR	ING	RI	EPORT			
PARSONS ENGINEERING-SCIENCE, INC.							CLIENT:		USACOE	BORING #: MW-25-12D		
PROJECT: RI FIELI					D INVESTIGATION	ON				DATE CORING STA	ARTED:	11/1/95
SWMU # (AREA) :			SEAD-25					DATE CORING CO	MPLETED:	11/1/95		
SOP NO.:									CONTRACTOR: Empire Soils Investigations			
MONITORING					COMMENTS:		DRILLER: J. Warner					
INTRUMENT IN			NTERVAL		BACKGROUND TIME		No water loss observed during		INSPECTOR:	OR: F. O'Loughlin		
OVM 9.6'-24.6'					0.0 ppm	0840	coring			GEOLOGIST:	F.O.	
Miniram 9.6'-24.6'			0.0 cpm	0840				CHECKED BY:	KED BY: PFM			
CORE EQUIPMENT BARREL LENGTH (				(ft): 5.0	<u> </u>				DATE CHECKED: 2/5/96			
TYPE	TYPE SERIES RANGE			O.D.	1.D.				TOTAL FOOTAGE	CORED:	15'	
DTWL	OTWL HQ 9.6'-24.6'				3.79"	2"				OVERBURDEN TI	HICKNESS:	5'
				1	1			2000 2000 200	GALLONS OF WAT		80 gallons	
DEPTH	RUN #	RECOVERY	MON.	RQD	STRATA/	ANGLES DIP/STRIKE	BEDROCK/ CORE DESCRIPTIONS AND REMARKS (color, major modifiers, rock type, minor components, bedding or foliation,					
FEET	FEET	DATA	PRACTURES	(BD_FL_INT_FC)		ints/fractures relative						
9.6'	_	L				•	9.6'-14.6 - Dark gray SHALE, fractured (predominantly along bedding planes),					
l	#14.4'					some fossils, slightly weathered.			_!			
1	(9.6'-14.6') BGD			48%		0-70						
l		_		1.070								
l	-	-				fractures						-
14.6'												
l	_	_				-	14.6'-19.6' - 1	Dark gr	ray SHALE, fractured	(predominantly ale	ong bedding	planes),
l	#25' BGD 60%				_0-45 some fossils, trace weathering.							
l	(14.6'-19.6')					fractures						
l												_
]	-	<u> </u>				<b>†</b>						-
19.6'												
					19.6'-23.7' - Dark gray SHALE, fracture				d, some fossils, highly weathered.			
l	#3 _	_5'	BGD	74%		_0-85	-					
l	(19.6'-24.6')					fractures						
							23.7'-24.2' - Gray LIMESTONE, some shale.					
	-											
-	1 -					0-85	24.2'-24.6' - Dark gray SHALE, fractured, some fossils.					
	-	+					24.2-24.0	Darre gr	ray SHALE, fractured	, some lossus.		-
24.6'			-		<del> </del>	fractures						
ļ							Coring termin	nated a	t 24.6'			
ı	_	_				-						_
١.	_											_
INVESTIGATION DERIVED WASTE:					E Aussina	From Augering & Air Drilling			From Coring			
DATE					10/10/95	5		11/1/95				
SOIL AMOUNT (fraction of drum)									2 Drums coring water	·		
DRUM #,								2/3 Drum bentonite/I				
		CATION										

### LOG OF BORING NO. MW25-13

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 2.8

BORING LOCATION (N/E): 997866.5 750869.7

ASSOCIATED UNIT/AREA: SEAD-25

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

REFERENCE COORDINATE SYSTEM:

**NY STATE PLANAR** 

PROJECT NO: 728059

GROUND SURFACE ELEVATION (ft):

737.9 DATUM: NGVD 88

**DATE STARTED: 10/11/95** DATE COMPLETED: 10/11/95

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

SAMPLING METHOD: 3 inch Split Spoons

DRILLING METHOD: Hollow Stem Auger

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
	6 18 19 21 21 31 100/.3	1.30	1.4	0	NA NA	- 1	ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.	2.80	TL	
						- 3	Y	Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet, no odor.  SPLIT SPOON REFUSAL AT 3.3 FEET.	4.00	ws	<u> </u>
								AUGER REFUSAL AT 4.0 FEET.  Dark gray to black SHALE.		CS	



**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot

LOG OF BORING MW25-13

**ENGINEERING-SCIENCE, INC.** Romulus, New York

#### LOG OF BORING NO. MW25-14D

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 997866.5 750876.2

ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: 728059 DATE STARTED: 10/31/95 GROUND SURFACE ELEVATION (ft): 738.2

DATUM: NGVD 88

DATE COMPLETED: 10/31/95 DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

INSPECTOR: F. O'Loughlin

DRILLING METHOD: Rock Coring

CHECKED BY: P.Feschbach-Meriney

SAMPLING METHOD: 3.79 inch diameter HQ bit

											_
Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
	6	2.00	1.4	0	NA		ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized	0.00	TL	-17
	18 19 21 21 31 100/.3	1.30	1.1	0	NA	- 1 - 2		Shale, trace very fine Sand, moist, no odor.			
	1007.5					2.8			2.80	14/0	CK.
						- 3		Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet, no odor.		ws	
						4		SPLIT SPOON REFUSAL AT 3.3 FEET.	4.00		
								AUGER REFUSAL AT 4.0 FEET.  Dark gray to black SHALE.		Cs	

NOTES: The soil boring information was obtained from MW25-13.



**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING MW25-14D

ENGINEERING-SCIENCE, INC.

PAGE: 1 OF 1

	-	_		(	CORE	BOR	ING	RI	<b>EPORT</b>			
P	ARSONS EN	GINEER	ING-SC	IENCE,	, INC.		CLIENT:	1	USACOE	BORING #:	MW-25-1	4D
	PROJECT:			RI FIELI	D INVESTIGATION	ON _				DATE CORING STA	ARTED:	10/31/95
	SWMU # (ARE	A):			SEAD-25					DATE CORING CO	MPLETED:	10/31/95
	SOP NO.:	,								CONTRACTOR:	Empire Soi	ls Investigations
		N	MONITO	RING			COMMENTS:			DRILLER:	J. Warner	
	NTRUMENT		NTERVAL		BACKGROUND	TIME	No water loss	observ	ed during	INSPECTOR:	F. O'Lough	lin
оум		9.0'-23.5'			0.1 ppm	1300	coring			GEOLOGIST:	F.O.	
Minirarr		9.0'-23.5'			0.0 cpm	1300				CHECKED BY:	PFM	
	EQUIPMENT		BARREI	LENGTH						DATE CHECKED:	2/5/96	
ТҮРЕ	SERIES		RANGE		O.D.	I.D.				TOTAL FOOTAGE	CORED:	14.5'
DTWL	HQ	9.0'-23.5'			3.79"	2*				OVERBURDEN TI	HICKNESS:	4'
<u> </u>	<u></u>					<u> </u>				GALLONS OF WAT		80 gallons
DEPTH	RUN #	CORE	MON.		SCHEMATIC STRATA/	ANGLES DIP/STRIKE	(color		DROCK/ CORE DES or modifiers, rock type			
FEET	range Feet	FEET	DATA	RQD %	FRACTURES	(BD.FL.INT.FC)			ints/fractures relative			
9'							9'-14 - Dark	gray SI	HALE, fractured (pred	dominantly along b	edding plan	cs),
ľ										, ,	٠.	_
ı	#1 _	4.7'				<b> </b>	some fossils, s	шдпцу	weatherea.			-
	(9'-14')	-	BGD	22%		0-70						_
	i	L				fractures						_
14'												
							14'-10' - Dools		SHALE, fractured (pre	dominantly slong	hadding also	
	-	_				-	14-19 - Daik	. gray 3	эгилге, пассыев (рге	Additional transfer along	occoming pian	
ĺ	#2	4.8'	BGD	50%		0-70						-
l	(14'-19')	_				fractures						_
1												
19'	_	Γ				Г						
19			<del> </del>									
l	-	-				-	19'-23.5' - Da	rk gray	y SHALE, fractured (1	predominantly alon	ig bedding p	lancs),
l	#3 _	4.5'	BGD	88%		0-45	some fossils.					-
	(19'-23.5')	L				fractures						_
200	-	T										
23.5'_						<del>                                     </del>	<del>                                     </del>					
1	-	+				-	Coring termin	nated at	t 23.5'.			-
1	-	_				-						-
I	_											_
	-	Γ										
ĺ	-	<u> </u>										-
		<u> </u>				<u> </u>						_
INV	ESTIGATION I	DERIVED	WASTE	:	From Augering	& Air Drilling	<b>.</b>		From Coring			
		DATE			10/22/95				10/31/95			
	SOIL AMOU	NT (fraction	n of drum	1)	1 Drum - Full				1.5 water (coring) dr	um		
	D	RUM#,							3/4 Drum - bentonite	/H20		
1	LC	CATION										

## LOG OF BORING NO. MW25-15

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 4.0

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 997974.2 750764.4

ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

GROUND SURFACE ELEVATION (ft): 739.6

PROJECT NO: 728059 DATE STARTED: 10/10/95

DATUM: NGVD 88

INSPECTOR: F. O'Loughlin

DATE COMPLETED: 10/10/95

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

SAMPLING METHOD: 3 inch Split Spoons

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	. B	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB25- 14-00 SB25- 14-01	4 5 8 10	2.00	1.5	0	NA	- 1	ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.	0.00	TL	
SB25- 14-02	10 21 15 14	2.00	1.6	0	NA	- 3			4.00		
	23 17 35 100/.3	1.80	0.9	o	NA	- <b>4</b> 4.0		Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, dry, no odor.  SPLIT SPOON REFUSAL AT 5.5 FEET.	4.00	ws	
						- 6		AUGER REFUSAL AT 6.2 FEET.  Dark gray to black SHALE.	6.20	cs	

NOTES: The soil boring information was obtained from SB25-14.



**ENGINEERING-SCIENCE, INC.** 

UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING MW25-15

#### LOG OF BORING NO. MW25-16D

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 997975.4 750773.2

ASSOCIATED UNIT/AREA: SEAD-25 PROJECT NO: 728059

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

GROUND SURFACE ELEVATION (ft): 739.8

DATE STARTED: 10/25/95

DATUM: NGVD 88

DATE COMPLETED: 10/25/95

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Rock Coring

SAMPLING METHOD: 3.79 inch diameter HQ bit

	UNILFUM				*****	ulamete					
Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB25	4	2.00	1.5	0	NA		ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized	0.00	TL	
14-00 SB25 14-01	5 8					- 1		Shale, trace very fine Sand, moist, no odor.			
SB25	10	2.00	1.6	0	NA	- 2					
14-02	21 15										X
	14					- 3					
						4.0			4.00		
	23	1.80	0.9	0	NA	4 4.0		Dark gray highly fissile SHALE, some interstitial brown Silt, Clay,	4.00	Ws	-A.A.
	17 35							and very fine Sand, dry, no odor.			
	100/.3					- 5					!
								SPLIT SPOON REFUSAL AT 5.5 FEET.			
						- 6		SPET SPOON REPOSAL AT 3.5 PEET.			
								AUGER REFUSAL AT 6.2 FEET.	6.20	CS	
İ								Dark gray to black SHALE.			
	_					]			$\perp$		

NOTES: The soil boring information was obtained from SB25-14.



UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING MW25-16D

**ENGINEERING-SCIENCE, INC.** 

PAGE: 1 OF 1

				(	CORE	BOR	ING	RJ	EPORT			
P	ARSONS EN	GINEER	ING-SC	HENCE,	, INC.		CLIENT:		USACOE	BORING #:	MW-25-16D	
	PROJECT:			RI FIELI	D INVESTIGATIO	ON				DATE CORING STA	ARTED: 10/25/95	
	SWMU # (ARE	A):			SEAD-25					DATE CORING CO	MPLETED: 10/25/95	_
	SOP NO.:									CONTRACTOR:	Empire Soils Investigations	
		P	MONITO	RING			COMMENTS:			DRILLER:	J. Warner	_
n	TRUMENT		NTERVAL		BACKGROUND	ТІМЕ	Lost 5 gallon	s of cor	ring water	INSPECTOR:	F. O'Loughlin	_
оум		10'-25'			0.0 ppm	0730	into formation	ı.		GEOLOGIST:	F.O.	_
Miniram		10'-25'			0.0 cpm	0730				CHECKED BY:	PFM	_
CORE	EQUIPMENT		BARREI	LENGTH	(ft):					DATE CHECKED:	02/05/96	_
TYPE	SERIES		RANGE		O.D.	I.D.				TOTAL FOOTAGE	CORED: 15'	_
DWIL	HQ	10'-25'			3.79"	2"				OVERBURDEN TI	HICKNESS: 4'	_
			1	· · · · · ·						GALLONS OF WAT	ER USED 80 gallons	_
DEPTH	Run # Range	CORE	MON.	RQD	SCHEMATIC STRATA/	ANGLES DIP/STRIKE	(color		DROCK/ CORE DES		O REMARKS s, bedding or foliation,	
PEET	PET	PEET	DATA	*	FRACTURES	(AD,FL,NT,FC)					ring on fractures, etc.)	_
10'							10'-15 - Dark	gray S	SHALE, fractured (pr	edominantly along	bedding planes),	
	#1	5'/5'										
	_	_ 3/3				_	trace fossils, slightly weathered.					
	(10'-15')	_	BGD	0%		_5-45	,					$\dashv$
	_	L				fractures						_
15'												
							15'-19 1' - Day	rk orav	SHALE, fractured (	predominantly trac	e fossile)	
						<b>-</b>	15-15.1 - 154	ik gray	DIFFEE, Hactmon	precommissiny use	C TOBBIES).	-
	#2	_ 5'/5'	BGD	10%		_0-90						$\exists$
	(15'-20')	_				fractures						4
	-					L						
20'												
						<u> </u>						╛
	_	_				-	19.1'-20.5' - 1.	Jark gra	ay SHALE, fractured	predominantly alon	ng bedding planes,	-
	#3 _	4.9'/5'	BGD	60%		_5-75	some fossils, s	lightly	weathered.			4
	(20'-25')	L				fractures						
	ı						20.5'-25' - Day	rk grav	SHALE, fractured, o	lav filled fractures		
	<del></del> -	-						6)		,	•	
25'			<del>                                     </del>						·			-
	_	-				-	Coring Termin	nated a	nt 25'			4
	_	L				L						
	_	Γ										٦
	_				:	_						٦
-	_	H				_						4
INVE	ESTIGATION I	ERIVED	WASTE	:	From Augering &	Air Drilling			From Coring			
		DATE							10/25/95			٦
	SOIL AMOUN		n of drum	)					2 Full drums coring I	120		
		RUM#,							1.0 Drum bentonite/I			
	LO	CATION										

### LOG OF BORING NO. MW25-17

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 5.6

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 998187.6 750963.0

ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: 728059 DATE STARTED: 10/16/95 GROUND SURFACE ELEVATION (ft): 742.2

DATUM: NGVD 88

DATE COMPLETED: 10/16/95

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

SAMPLING METHOD: 3 inch	ı Split Sı	oons
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Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB25- 12-00	3 5 6 7	2.00	1.8	0	NA	- 1	ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.	0.00	TL	
SB25- 12-02	23 25 35 60	2.00	1.6	0	NA	- 2 - 3					
SB25- 12-03	25 23 35 41	2.00	1.6	0	NA	- <b>4</b> - 5				<u>.</u>	
	75 100/.4	0.90	0.8	0	NA	- 6	3	Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, wet, no odor.  SPLIT SPOON REFUSAL AT 6.9 FEET.			
	37 100/.2	0.70	0.6	0		- 8 - 9		Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet, no odor.	7.50	WS	
						10		AUGER REFUSAL AT 9.9 FEET.	9.90		

NOTES: The soil boring information was obtained from SB25-12.

**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot

LOG OF BORING MW25-17

**ENGINEERING-SCIENCE, INC.** 

Romulus, New York

PROJECT: SEAD-25 & SEAD-26 RI/FS G
PROJECT NO: 728059
PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541 GROUND SURFACE ELEVATION: 742.2
INSPECTOR: F. O'Loughlin
1 CHECKED BY: P.Feschbach-Meriney

PI	ROJEC	CT LOCA	ATION:	Sen	<u>eca</u>	<u>Arm</u>	y Depot	ACU	vity, Romulus, NY 14541 CHECKED BY: P.Fe:	schba	<u>ch-N</u>	<u>lerine</u>
:	Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
l		-							Dark gray to black SHALE.		CS	

NOTES: The soil boring information was obtained from SB25-12.

ENGINEERING-SCIENCE, INC.



**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING MW25-17

## LOG OF BORING NO. MW25-18

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 6.0

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541 ASSOCIATED UNIT/AREA: SEAD-25

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

BORING LOCATION (N/E): 998116.3 751082.0

PROJECT NO: **728059** 

GROUND SURFACE ELEVATION (ft): 743.1

DATE STARTED: 10/16/95

DATUM: NGVD 88

DATE COMPLETED: 10/16/95

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DRILLING METHOD: Hollow Stem Auger

CHECKED BY: P.Feschbach-Meriney

SAMPLING METHOD: 3 inch Split Spoons

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Масго	Macro Lithology
W25 8-01	3 5 7 11	2.00	1.7	0	NA	- 1	ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.	0.00	TL	
	21 23 28 35	2.00	1.5	0	NA	- 2					
	60 65 70 72	2.00	1.5	0	NA	- <b>4</b> - 5					
/25 -04	14 17 15 16	2.00	1.4	0	NA	- <b>6</b> - 7	1	Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, wet, no odor.			
	62 100/.4	0.90	0.8	0	NA	- 8 8.0 - 9		Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet, no odor.  SPLIT SPOON REFUSAL AT 8.9 FEET.	8.00	ws	
						10			10.00		



**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING MW25-18

ENGINEERING-SCIENCE, INC.

PROJECT: SEAD-25 & SEAD-26 RI/FS PROJECT NO:

PROJECT LOCATION:

728059

GROUND SURFACE ELEVATION:

F. O'Loughlin INSPECTOR: CHECKED BY: P.Feschbach-Meriney

Seneca Army Depot Activity, Romulus, NY 14541 This log is part of a report prepared by Parsons
Engineering-Science, Inc. for the named project and should be
read together with the report for complete interpretation. This
summary applies only at the location of this boring and at the
time of drilling. Subsurface conditions may differ at other Blow Counts (# Blows per 6") VOC Screen-PID (ppm) Macro Lithology **USCS CLASS** Rad Screen (cps) Depth (ft.) Sample Recovery Sample Advance Macro Depth DESCRIPTION CS AUGER REFUSAL AT 10.0 FEET. Dark gray to black SHALE. NOTES:



UNITED STATES ARMY **CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING MW25-18

### LOG OF BORING NO. MW25-19

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 8.0

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541 BORING LOCATION (N/E): 998135.0 750762.5 REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

ASSOCIATED UNIT/AREA: SEAD-25

PROJECT NO: **728059** 

GROUND SURFACE ELEVATION (ft): 740.1

DATUM: NGVD 88

DATE STARTED: 10/07/95

DATE COMPLETED: 10/07/95

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger SAMPLING METHOD: 3 inch Split Spoons

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB25- 13-00	4 6 10 20	2.00	1.0	0	NA	- 1	ML	Grayish brown SILT and CLAY, little fine to medium gravel-sized Shale, trace very fine Sand, moist, no odor.	0.00	TL	
SB25- 13-02	8 12 16 17	2.00	1.0	0	NA	- 2					
	20 17 23 18	2.00	1.8	0	NA	- <b>4</b> - 5					
SB25- 13-04	36 52 53 67	2.00	1.5	0	NA	- <b>6</b> - 7					
	37 60 100/.4	1.40	<u>⊥</u>	0	NA	- 8 8.0		Dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet, no odor.	8.00	ws	
						- 9					

UNITED STATES ARMY **CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING MW25-19

**ENGINEERING-SCIENCE, INC.** 

PROJECT: SEAD-25 & SEAD-26 RI/FS
PROJECT NO: 728059

GROUND SURFACE ELEVATION: 740.1
INSPECTOR: F. O'Loughlin
P. Faschbach-Merine

PROJE	CT LOC	ATION:	Sen	eca	Arm	y Depot	Acti	vity, Romulus, NY 14541 CHECKED BY: P.	Feschba	<u>ch-</u> N	leriney
Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
								DESCRIPTION	40.00		
								AUGER REFUSAL AT 10.2 FEET.  Dark gray to black SHALE.	10.20	CS	

NOTES: The soil boring information was obtained from SB25-13.



**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot

**LOG OF BORING MW25-19** 

SEAD-26

.

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 992227.7 751590.6

ASSOCIATED UNIT/AREA: SEAD-26 PROJECT NO: 728059

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

DATE STARTED: 11/17/93

GROUND SURFACE ELEVATION (ft): 751.2

DATUM: NGVD 88

DATE COMPLETED: 11/17/93

INSPECTOR: E. Schacht

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: F. O'Loughlin

DRILLING METHOD: Hollow Stem Auger

MPLING METHOD:	3	inch	Split	Spoons
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Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB26	40	2.00	1.7	0	NA		GM	Dark gray to black fine gravel-sized SHALE fragments, little fine	0.00	FL	0
-1.1	24 22							Sand, moist, no odor.			0
	30					1.0			1.00		0
						-1	ML	Grayish brown SILT, some Clay, little fine to medium gravel-sized Shale fragments, trace very fine Sand, trace oxidation, moist, no odor.		TL	
SB26 -1.2	39 20 24	2.00	1.7	0	NA	2					
	100/.4					- 3					
						3.9	5		3.50		
	100/.1	0.10				- 4		Gray to dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, moist, no odor.  SPLIT SPOON REFUSAL AT 3.9 FEET.		ws	
						- 5					
									6.00		
						6		AUGER REFUSAL AT 6.0 FEET. Gray to dark gray SHALE.		CS	

NOTES: Monitoring Well MW26-1 was installed in this soil boring.



UNITED STATES ARMY **CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB26-1

Sheet 1 of 1

ENGINEERING-SCIENCE, INC.

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 11.5

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541 BORING LOCATION (N/E): 992768.1 751107.0

ASSOCIATED UNIT/AREA: SEAD-26

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: **728059** DATE STARTED: 11/18/93 GROUND SURFACE ELEVATION (ft): 753.8

DATUM: NGVD 88

DATE COMPLETED: 11/18/93

INSPECTOR: E. Schacht

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: F. O'Loughlin

DRILLING METHOD: Hollow Stem Auger

SAMPLING	METHOD:	3	inch	<b>Split</b>	Spoons

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB26- 2.1 SB26- 2.5	8 12 15 17	2.00	1.7	0	NA	0.6	ML GM	Topsoil.  Dark gray to black fine gravel-sized SHALE fragments, little fine Sand, no odor.	0.00	FL	0
SB26- 2.2	16 23 43 21	2.00	1.3	0	NA	- 2		Dark gray to black fine gravel-sized SHALE fragments, little fine Sand, moist, no odor.			0
SB26- 2.3	10 15 14 15	2.00	1.5	0	NA	- <b>4</b> 4.0	ML	Grayish brown SILT, some Clay, little fine to medium gravel-sized Shale fragments, trace very fine Sand, moist, no odor.			0
SB26- 2.4	3 4 6 9	2.00	1.0	0	NA	- 6 6.0 - 7	ML	Grayish brown SILT, some Clay, little fine to medium gravel-sized Shale fragments, trace very fine Sand, trace oxidation, moist, no odor.			о
SB26- 2.6	8 9 10 15	2.00	1.9	0	NA	- 8					ō

NOTES: Monitoring Well MW26-2 was installed in this soil boring.



UNITED STATES ARMY **CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB26-2

**ENGINEERING-SCIENCE, INC.** 

PROJECT: SEAD-25 & SEAD-26 RI/FS

GROUND SURFACE ELEVATION: 753.8

728059 PROJECT NO: INSPECTOR: E. Schacht PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541 CHECKED BY: F. O'Loughlin This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be Blow Counts # Blows per 6") VOC Screen-PID (ppm) read together with the report for complete interpretation. This Macro Lithology **USCS CLASS** summary applies only at the location of this boring and at the Sample Advance Sample Recovery Depth (ft.) time of drilling. Subsurface conditions may differ at other Depth Macro locations. DESCRIPTION SB26-6 2.00 2.0 0 NA Grayish brown SILT, some Clay, little fine to medium gravel-sized ML Shale fragments, trace very fine Sand, trace oxidation, moist, 2.7 7 10.50 10.5 7 no odor. SM 9 Light brown fine SAND, some Silt, trace oxidation, moist. 11 11.5 ML Grayish brown SILT, some Clay, little fine to medium gravel-sized 12.00 Shale fragments, trace very fine Sand, trace oxidation, wet, 12.0 12 no odor. 100/.4 0.40 ws Gray to dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, no odor. SPLIT SPOON REFUSAL AT 12.4 FEET. 13 14.00 CS AUGER REFUSAL AT 14.0 FEET. Gray to dark gray SHALE, dry.

NOTES: Monitoring Well MW26-2 was installed in this soil boring.



UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB26-2

Sheet 2 of 2

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 12.0

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 992216.8 751115.5

ASSOCIATED UNIT/AREA: SEAD-26

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: 728059 DATE STARTED: 11/18/93 GROUND SURFACE ELEVATION (ft): 751.5

DATUM: NGVD 88

DATE COMPLETED: 11/18/93

INSPECTOR: E. Schacht

DRILLING CONTRACTOR: Empire Soils Investigation, Inc. DRILLING METHOD: Hollow Stem Auger

CHECKED BY: F. O'Loughlin

SAMPLING METHOD: 3 inch Split Spoons

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB26-	6	2.00	1.7	0	NA		ML	Topsoil.	0.00	FL	0
3.1	9 12 14					- 1	GM	Dark gray to black fine gravel-sized SHALE fragments, little fine Sand, trace oxidation, moist, no odor.			.0
B26- 3.2	9	2.00	1.6	o	NA	- 2					0
	7 8					- 3					•
B26- 3.3	5 5 7	2.00	1.6	o	NA	- 4					0
1	9					- 5					o o
3.4	10 10 15	2.00	2.0	0.6	NA	- 6 6.0	ML	Grayish brown SILT, some Clay, little fine to medium gravel-sized Shale fragments, little oxidation, trace very fine Sand, moist to wet, no odor.			0
	10					- 7					О
3.5	7 9 10	2.00	1.5	0	NA	- 8					o o
	10					- 9					0

NOTES: Monitoring Well MW26-3 was installed in this soil boring.



**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB26-3

**ENGINEERING-SCIENCE, INC.** 

PROJECT: SEAD-25 & SEAD-26 RI/FS

GROUND SURFACE ELEVATION: 751.5

INSPECTOR: E. Schacht PROJECT NO: 728059

PROJE	CT LOC	ATION:	Sen	eca	Arm	y Depot	Acti	ivity, Romulus, NY 14541 CHECKED BY: F. O	'Loug	hlin	
Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB26-	6	2.00	1.7	0	NA		ML	Grayish brown SILT, some Clay, little fine to medium gravel-sized	-	TL	UN.
3.6	10 29 19	2.00				- 11		Shale fragments, little oxidation, trace very fine Sand, moist to wet, no odor.	12.00		
	52	0.90		i		12.0		Gray to dark gray highly fissile SHALE, some interstitial brown	12.00	WS	27.2
	100/.4	0.50						Silt, Clay, and very fine Sand, wet, no odor.		***3	
						- 13		SPLIT SPOON REFUSAL AT 12.9 FEET.			
						14			14.00		
								AUGER REFUSAL AT 14.0 FEET. Gray to dark gray SHALE, dry.		CS	
											1

NOTES: Monitoring Well MW26-3 was installed in this soil boring.



**UNITED STATES ARMY** CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB26-3

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): NA

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 991690.8 751126.3

ASSOCIATED UNIT/AREA: SEAD-26

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

PROJECT NO: 728059 DATE STARTED: 11/19/93 GROUND SURFACE ELEVATION (ft): 750.1

DATE COMPLETED: 11/19/93

DATUM: NGVD 88

INSPECTOR: E. Schacht

DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: F. O'Loughlin

SAMPLING METHOD: 3 inch Split Spoons

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB26- 4.1	7	2.00	1.2	0	NA		ML	Topsoil.	0.00	FL	0
4.1	12 12 9					0.5		Dark gray to black fine gravel-sized SHALE fragments, little fine Sand, no odor.			0 0
SB26- 4.2	9 8 9 6	2.00	1.4	0	NA	2 2.0	ML	Medium brown SILT and dark gray fine gravel-sized SHALE fragments, moist, no odor.			0 0 0 0
SB26- 4.3	8 9 10 12	2.00	1.4	0	NA	- 4					0 0 0 0
SB26- 4.4	11 10 17 24	2.00		0	NA	- 6 6.0		Grayish brown SILT, some Clay, little fine to medium gravel-sized Shale fragments, trace very fine Sand, moist, no odor.	6.00	TL	
SB26-	38	1.00	+1.0	0	NA	- 7 - 8		Gray to dark gray highly fissile SHALE, some interstitial brown	8.00	WS	

NOTES: Monitoring Well MW26-4 was installed in this soil boring.



4.5

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UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

Silt, Clay, and very fine Sand, dry, no odor.

SPLIT SPOON REFUSAL AT 9.0 FEET.

LOG OF BORING SB26-4

Sheet 1 of 2

ENGINEERING-SCIENCE, INC.

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT NO: 728059

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

GROUND SURFACE ELEVATION: 750.1

INSPECTOR: E. Schacht
CHECKED BY: F. O'Loughlin

PROJEC	JI LOCA	ATION:	Sen	eca	Arm	y Depot	ACT	vity, Romulus, NY 14541 CHECKED BY: F. O	'Loug	hlin	
Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
							вк	Gray to dark gray highly fissile SHALE, some interstitial brown			
						- 11		Silt, Clay, and very fine Sand, dry, no odor.	11.50		
								AUGER REFUSAL AT 11.5 FEET.  Gray to dark gray SHALE, dry.	11.50	CS	

NOTES: Monitoring Well MW26-4 was installed in this soil boring.



UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB26-4

**ENGINEERING-SCIENCE, INC.** 

Sheet 2 of 2

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 8.5

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 992271.2 751169.2

ASSOCIATED UNIT/AREA: SEAD-26 PROJECT NO: 728059

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR GROUND SURFACE ELEVATION (ft): 754.6

DATE STARTED: 09/24/95

DATUM: NGVD 88

DATE COMPLETED: 09/24/95

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

INSPECTOR: F. O'Loughlin

DRILLING METHOD: Hollow Stem Auger

CHECKED BY: P.Feschbach-Meriney

SAMPLING METHOD: 3 inch Split Spoons

Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	
B26-	11	2.00	1.5	0	NA		SM	Brown SILT and fine SAND, some fine to coarse gravel-sized	0.00	FL	0
5-00	19 17 25	2.00		0	NA	- 1		Shale fragments, dry, no odor.			0 0
	21 25 21					2.7	ML	Consider the control of the control			0
26-	4 5 6 4	2.00	1.4	0	NA	- 3 - 4 - 5	IME	Grayish brown SILT, some Clay, little fine to medium gravel-sized Shale fragments, trace very fine Sand, moist, no odor.			c c
	4 6 10 14	2.00	1.3	0	NA	- 6 - 7		Grayish brown SILT, some Clay, little fine to medium gravel-sized Shale fragments, trace very fine Sand, saturated, no odor.			c
26- 05	8 9 7 8	2.00	1.4	0	NA	- 8 8.0 - 9	1	Olive gray-brown SILT and very fine SAND, little fine to medium gravel-sized Shale fragments, trace Clay, wet, no odor.	8.00	TL	

NOTES: Monitoring Well MW26-5 was installed in this soil boring.



UNITED STATES ARMY **CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB26-5

**ENGINEERING-SCIENCE, INC.** 

PROJECT: SEAD-25 & SEAD-26 RI/FS

GROUND SURFACE ELEVATION: 754.6

INSPECTOR: F. O'Loughlin
CHECKED BY: P.Feschbach-Meriney PROJECT NO: 728059 PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

OJE	CT LOC	ATION:	Sen	eca	Arm	y Depot	Acti	vity, Romulus, NY 14541 CHECKED BY: P.Fe	schba	ch-N	<u>lerir</u>
Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.	Depth	Macro	Macro Lithology
								DESCRIPTION			
	6 59	1.30	1.0	0	NA	10.4	ML	Olive gray-brown SILT and very fine SAND, little fine to medium gravel-sized Shale fragments, trace Clay, wet, no odor.	10.40		
	100/.3					- 11		Gray to dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet, no odor.		ws	
								SPLIT SPOON REFUSAL AT 11.3 FEET			
						- 12					
	58 100/.3	0.80	0.8	0	NA						
						- 13					
			!								
	107	0.50		0	NA	- 14					
	107	0.50			IVA						
_						15			15.00	CS	
								AUGER REFUSAL AT 15.0 FEET. Gray to dark gray SHALE, dry, no odor.		CS	

NOTES: Monitoring Well MW26-5 was installed in this soil boring.



UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB26-5

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 13.0

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 992233.8 751252.0

ASSOCIATED UNIT/AREA: SEAD-26 PROJECT NO: 728059

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

**DATE STARTED: 09/23/95** 

GROUND SURFACE ELEVATION (ft): 754.7

DATUM: NGVD 88

DATE COMPLETED: 09/23/95

INSPECTOR: F. O'Loughlin

DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

SAMPLING METHOD: 3 inch Split Spoons

					., тр						
Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB26- 6-00	11 26 25 32	2.00	1.6	0	NA	- 1	SM	Brown SILT and fine SAND, some fine to coarse gravel-sized Shale fragments, moist, no odor.	0.00	FL	0 0
	22 28 38 33	2.00	0.9	0	NA	- 2					0 0
	33		_			- 3	ML	Grayish brown SILT, some Clay, little fine to medium gravel-sized Shale fragments, trace very fine Sand, moist, no odor.			0
	9 9 8 6	2.00	0.6	0	NA	- <b>4</b>					0 0 0 0 0
SB26- 6-04	3 8 10	2.00	1.6	0	NA	- 6					0 0 0
	8 10 17	2.00	1.4	o	NA	- 7 - 8					0 0 0 0
	17					- 9					

NOTES: Monitoring Well MW26-6 was installed in this soil boring.



UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB26-6

Sheet 1 of 2

10.00

**ENGINEERING-SCIENCE, INC.** 

PROJECT: SEAD-25 & SEAD-26 RI/FS PROJECT NO:

728059

GROUND SURFACE ELEVATION: 754.7

INSPECTOR: F. O'Loughlin

Seneca Army Depot Activity, Romulus, NY 14541 PROJECT LOCATION: CHECKED BY: P.Feschbach-Meriney This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be Blow Counts # Blows per 6") VOC Screen-PID (ppm) read together with the report for complete interpretation. This Macro Lithology **USCS CLASS** summary applies only at the location of this boring and at the Sample Recovery Sample Advance Depth (ft.) time of drilling. Subsurface conditions may differ at other Macro Depth locations. \* DESCRIPTION SB26 2.00 1,7 0 NA SM Olive gray-brown SILT and very fine SAND, little fine to medium TL gravel-sized Shale fragments, trace Clay, moist to wet, no 6-06 8 12 19 11 12.00 12 30 2.00 1.4 0 NA Gray to dark gray highly fissile SHALE, some interstitial brown WS 41 Silt, Clay, and very fine Sand, wet, no odor. 57 33 13 工<sub>0.1</sub> 100/.3 0.30 NA SPLIT SPOON REFUSAL AT 14.3 FEET. 15.00 AUGER REFUSAL AT 15.0 FEET. CS Gray to dark gray SHALE, dry, no odor.

NOTES: Monitoring Well MW26-6 was installed in this soil boring.



**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB26-6

Sheet 2 of 2

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 15.0

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541 BORING LOCATION (N/E): 992178.9 751194.1

ASSOCIATED UNIT/AREA: SEAD-26

PROJECT NO: 728059

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

DATE STARTED: 09/23/95

GROUND SURFACE ELEVATION (ft): 754.4

DATUM: NGVD 88

DATE COMPLETED: 09/23/95

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

INSPECTOR: F. O'Loughlin

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

SAMPLING METHOD: 3 inch Split Spoons

SB26   8   2.00   1.3   0   NA     SM   Brown SILT and fine SAND, some fine to coarse gravel-sized   0.00   FL   0   0.00   0.	Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
12   2.00		8 11	2.00	1.3	0	NA	- 1	SM		0.00	FL	0
SB26- 6 2.00		11 11	2.00		30	NA	2.6	SM	· · · · · · · · · · · · · · · · · · ·			0 0
9 2.00 To.6 19 NA 6 7 7 15 14 10 6 SM Olive gray-brown SILT and very fine SAND, little fine to medium gravel-sized Shale fragments, moist to wet, petroleum odor.		5 5	2.00		156	NA	- 4	ML	Olive gray-brown SILT and very fine SAND, some Clay, little fine to medium gravel-sized Shale fragments, moist to wet,			0 0 0 0 0
15 14 10 6 NA 8 8.0 SM Olive gray-brown SILT and very fine SAND, little fine to medium gravel-sized Shale fragments, moist to wet, petroleum odor.		8 7	2.00		19	NA						6 0 0
10.00		14 10	2.00	0.9	19	NA	8	-		_		0 0

NOTES: Monitoring Well MW26-7 was installed in this soil boring.



**ENGINEERING-SCIENCE, INC.** 

UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB26-7

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT: **SEAD-25 & SEAD-26**PROJECT NO: **728059** 

GROUND SURFACE ELEVATION: 754.

INSPECTOR: F. O'Loughlin

Seneca Army Depot Activity, Romulus, NY 14541 P.Feschbach-Meriney PROJECT LOCATION: CHECKED BY: This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be Blow Counts # Blows per 6") VOC Screen-PID (ppm) read together with the report for complete interpretation. This summary applies only at the location of this boring and at the Macro Lithology **USCS CLASS** Depth (ft.) Sample Recovery time of drilling. Subsurface conditions may differ at other Macro Depth \* DESCRIPTION 2.00 108 NA Olive gray-brown SILT and very fine SAND, little fine to medium 11 gravel-sized Shale fragments, moist to wet, petroleum odor. 32 17 11 12.00 12.0 12 SB26-2.00 153 NA WS 25 1.1 Gray to dark gray highly fissile SHALE, some interstitial brown 7-07 13 Silt, Clay, and very fine Sand, wet, petroleum odor. 9 9 13 SB26-8 2.00 1.8 40 NA 7-08 10 22 28 15 16 18 1.40 0.8 3.7 NA 24 100/.4 17 SPLIT SPOON REFUSAL AT 17.0 FEET. 18.00 AUGER REFUSAL AT 18.0. CS Gray to dark gray SHALE, dry.

NOTES: Monitoring Well MW26-7 was installed in this soil boring.



UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB26-7

**ENGINEERING-SCIENCE, INC.** 

Sheet 2 of 2

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 9.0

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 991754.6 751203.8

ASSOCIATED UNIT/AREA: SEAD-26 PROJECT NO: 728059

GROUND SURFACE ELEVATION (ft): 750.5

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

**DATE STARTED: 09/21/95** 

DATUM: NGVD 88

DATE COMPLETED: 09/21/95

INSPECTOR: F. O'Loughlin

DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

SAMPLING METHOD: 3 inch Split Spoons

Sample Number Blow Counts	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
5B26- 18 8-00 19 24 27	2.00	1.4	0	NA	- 1	GM	Dark gray to black fine gravel-sized SHALE fragments, little fine Sand, dry to moist, no odor.	0.00	FL	0
26 26 25 24	2.00	0.9	0	NA	- 2					0
22 23 26 22	2.00	1.0	0	NA	- 4 4.5 - 5	ML	Grayish brown SILT, some Clay, little fine to medium gravel-sized Shale fragments, trace very fine Sand, moist, no odor.			o o
B26- 19 1-04 20 23 24	2.00	1.6	0	NA	- 6 6.0 - 7	ML	Grayish brown SILT, some Clay, little fine to medium gravel-sized Shale fragments, trace very fine Sand, moist, no odor.	6.00	TL	0
B26- 27 B-05 52	2.00	1.6	0	NA	- 8 8.3	3	Gray to dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, moist, no odor.	8.30	ws	

**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

**LOG OF BORING SB26-8** 

ENGINEERING-SCIENCE, INC.

PROJECT: SEAD-25 & SEAD-26 RI/FS PROJECT NO: 728059

GROUND SURFACE ELEVATION: 750.5
INSPECTOR: F. O'Loughlin PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541 CHECKED BY: P.Feschbach-Meriney

FROJE	CT LOC	TION.	0011	cou	A	Depot	700	VITY, ROMUIUS, NY 14541 CHECKED BY: P.Fe	<u>scnba</u>	CII-IV	remile
Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
	55	0.70	0.3	0	NA		ВК	Gray to dark gray highly fissile SHALE, some interstitial brown	-		
	100/.2							Silt, Clay, and very fine Sand, moist to wet, no odor.			
						- 11		SPLIT SPOON REFUSAL AT 10.7 FEET.			
1									11 50		
								AUGER REFUSAL AT 11.5 FEET. Gray to dark gray SHALE, dry.	11.50	CS	
1											
L				L		j	L	<u> </u>	<u> </u>		

NOTES: Monitoring Well MW26-8 was installed in this soil boring.



**UNITED STATES ARMY CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB26-8

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 8.9

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 991722.5 751224.7

ASSOCIATED UNIT/AREA: SEAD-26

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

DATE STARTED: 09/25/95

PROJECT NO: 728059

GROUND SURFACE ELEVATION (ft): 750.9

DATUM: NGVD 88

DATE COMPLETED: 09/25/95

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

CHECKED	D1:	г.г	Caciin	au

SAMPLING METHOD:	3 inch Split Spoo	ns
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Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB26- 9-00	8 14 25 20	2.00	1.2	0	NA	- 1	SM	Brown SILT and fine SAND, some fine to coarse gravel-sized Shale fragments, moist, no odor.	0.00	FL	0
	8 10 13 20	2.00	0.3	0	NA	- 2					0
	15 32 9	2.00	0.55	0	NA	- 4 4.0 - 5	SM	Olive gray-brown SILT and very fine SAND, little fine to medium gravel-sized Shale fragments, trace Clay, moist, no odor.			0 0
SB26- 9-04	7 9 12 22	2.00	1.55	0	NA	- 6 6.0	SM	Olive gray-brown SILT and very fine SAND, little fine to medium gravel-sized Shale fragments, trace Clay, moist, no odor.	6.00	TL	
SB26- 9-05	14 18 18 25	2.00		0	NA	- 8 8.0		Gray to dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, wet to saturated, no odor.	8.00	ws	

NOTES: Monitoring Well MW26-9 was installed in this soil boring.

**PARSONS** 

**ENGINEERING-SCIENCE, INC.** 

UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB26-9

PROJECT: SEAD-25 & SEAD-26 RI/FS PROJECT NO: 728059

PROJECT: SEAD-25 & SEAD-26 RI/FS GROUND SURFACE ELEVATION: 750.9
PROJECT NO: PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541 CHECKED BY: P.Feschbach-Meriney

LUOJ	ECT LOCA	4 HON	: Sen	eca	MIIII	y Deput	AUI	VITY, ROMULUS, NY 14541 CHECKED BY: P.Fes	cnba	CII-IV	erine
Sample	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
	40	0.70	0.7	0	NA			Gray to dark gray highly fissile SHALE, some interstitial brown			
1	100/.2							Silt, Clay, and very fine Sand, wet to saturated, no odor.			
								SPLIT SPOON REFUSAL AT 10.7 FEET.			
						- 11					
						- 12					
$\vdash$			-					AUGER REFUSAL AT 12.2 FEET.	12.20	CS	-
								Gray to dark gray SHALE, dry, no odor.			
İ											
						J				L	Ĺˈ

NOTES: Monitoring Well MW26-9 was installed in this soil boring.



**UNITED STATES ARMY** CORPS OF ENGINEERS Seneca Army Depot

LOG OF BORING SB26-9

Sheet 2 of 2

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 8.9

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 991652.5 751206.3

ASSOCIATED UNIT/AREA: SEAD-26

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

**DATE STARTED: 09/20/95** 

PROJECT NO: 728059

GROUND SURFACE ELEVATION (ft): 751.5

DATUM: NGVD 88

DATE COMPLETED: 09/20/95

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

SAMPLING METHOD: 3 inch Split Spoons

Sample Number Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
B26- 23 0-00 17 14 14	2.00	1.1	0	NA	- 1	SM	Olive gray brown SILT, little Clay, very fine Sand and fine to coarse gravel-sized Shale fragments, moist, no odor.	0.00	FL	0
14 12 9 8	2.00		0	NA	- 2					0
B26 5 0-03 7 7 5	2.00		0	NA	- 4 4.8 4.8		Yellow-brown fine to medium SAND, some Pottery-like material, trace black Ash, wet.  Olive gray brown SILT, little Clay, very fine Sand and fine to			0
B26- 7 D-04 8 8 12	2.00	1.3	0	NA	- 6 - 7 7.0	D	coarse gravel-sized Shale fragments, wet to saturated, no odor.	7.00		0.
28	0.90		0	NA	- 8 8.9	SM	Olive gray-brown SILT and very fine SAND, little fine to medium gravel-sized Shale fragments, trace Clay, trace oxidation, wet, no odor.  Gray to dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, trace oxidation, wet, no odor.	8.50	TL WS	

UNITED STATES ARMY **CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB26-10

Sheet 1 of 2

ENGINEERING-SCIENCE, INC.

PROJECT: SEAD-25 & SEAD-26 RI/FS
PROJECT NO: 728059

GROUND SURFACE ELEVATION: 751.5

INSPECTOR: F. O'Loughlin

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541 P.Feschbach-Meriney CHECKED BY: This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be Blow Counts # Blows per 6") VOC Screen-PID (ppm) read together with the report for complete interpretation. This summary applies only at the location of this boring and at the Macro Lithology **USCS CLASS** Depth (ft.) Sample Advance Sample Recovery time of drilling. Subsurface conditions may differ at other Macro Depth locations. \* DESCRIPTION 100/.3 0.30 0.3 NA Gray to dark gray highly fissile SHALE, some interstitial brown Silt, Clay, and very fine Sand, no odor. 11 12.00 AUGER REFUSAL AT 12.0 FEET. CS Gray to dark gray SHALE, dry, no odor.

NOTES: Monitoring Well MW26-10 was installed in this soil boring.



UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB26-10

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 12.0

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 992690.3 751235.7

ASSOCIATED UNIT/AREA: SEAD-26 PROJECT NO: 728059

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

GROUND SURFACE ELEVATION (ft): 754.9

DATE STARTED: 10/19/95

DATUM: NGVD 88

DATE COMPLETED: 10/19/95

INSPECTOR: F. O'Loughlin

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger SAMPLING METHOD: 3 inch Split Spoons

- 54	INPLINE	IVICIE	100:	3 1110	п эрі	it Spoon	5				
Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB26- 11-00 SB26- 11-01	44	2.00	0.6	0	NA	- 1	SM	Olive gray brown SILT, little Clay, very fine Sand, and fine to coarse gravel-sized Shale fragments, moist, no odor.	0.00	FL	0 0 0
	8 10 7 9	2.00	1.3	0	NA	- 2 2.6 2.9	SM	Olive gray brown SILT, little Clay, very fine Sand, and fine to			0 0
	9					- 3	ML	coarse gravel-sized Shale fragments, saturated, no odor.			0
						3.3	SM	Grayish brown SILT and CLAY, trace fine to medium gravel-sized			0
							SIVI	Shale fragments, moist, no odor.			0
SB26- 11-03	6	2.00	1.5	0	NA	- 4		Grayish brown SILT, some Clay, little fine to medium gravel-sized Shale fragments, trace very fine Sand, moist, no odor.			o o o
	9 11					- 5					0
	6 8 9	2.00	1.5	0	NA	- 6					0 0 0
	9					- 7					0
	9	2.00	<u> </u>	0	NA	- 8					0
	6 7 9										0 0
						- 9					0
						10					0

NOTES: Monitoring Well MW26-11 was installed in this soil boring.



UNITED STATES ARMY **CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB26-11

Sheet 1 of 2

**ENGINEERING-SCIENCE, INC.** 

PROJECT: SEAD-25 & SEAD-26 RI/FS

GROUND SURFACE ELEVATION: 754.9

INSPECTOR: F. O'Loughlin

PROJECT NO: 728059 PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541 CHECKED BY: P.Feschbach-Merinev

			vity, Romulus, NY 14541 CHECKED BY: P.F			
Sample Number Blow Counts (# Blows per 6") Sample Advance	Sample Recovery VOC Screen-PID (ppm) Rad Screen	Depth (ft.) USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
5 000						
B26- 5 2.00 1-06 9 14 14	1.7 0 NA	11 SM	Grayish brown SILT, some Clay, little fine to medium gravel-sized Shale fragments, trace very fine Sand, moist, no odor.			0
		12.0	,	12.00		o
B26- 9 1.90 1-07 24 41 100/.4	1.5 0 NA	SM SM	Grayish brown SILT, some Clay, little fine to medium gravel-sized Shale fragments, trace very fine Sand, moist, no odor.	13.30	TL	
		13.3	Gray to dark gray highly fissile SHALE, some interstitial brown	13.30	ws	•
100/.3 0.30	0 0 NA	14	Silt, Clay, and very fine Sand, wet, no odor.  SPLIT SPOON REFUSAL AT 13.9 FEET.			
	-15	15		15.00		
			Gray to dark gray SHALE, dry, no odor.			

NOTES: Monitoring Well MW26-11 was installed in this soil boring.



UNITED STATES ARMY **CORPS OF ENGINEERS** Seneca Army Depot Romulus, New York

LOG OF BORING SB26-11

PROJECT: SEAD-25 & SEAD-26 RI/FS

DEPTH TO WATER (ft): 14.5

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

BORING LOCATION (N/E): 992193.2 751175.9

ASSOCIATED UNIT/AREA: SEAD-26 PROJECT NO: 728059

REFERENCE COORDINATE SYSTEM: NY STATE PLANAR

DATE STARTED: 10/18/95

GROUND SURFACE ELEVATION (ft): 753.7

DATUM: NGVD 88 INSPECTOR: F. O'Loughlin

DATE COMPLETED: 10/18/95

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

CHECKED BY: P.Feschbach-Meriney

DRILLING METHOD: Hollow Stem Auger

Sample Number	Blow Counts (# Blows per 6")	Sample Advance	Sample Recovery	VOC Screen-PID (ppm)	Rad Screen (cps)	Depth (ft.)	USCS CLASS	This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This summary applies only at the location of this boring and at the time of drilling. Subsurface conditions may differ at other locations.  DESCRIPTION	Depth	Macro	Macro Lithology
SB26- 12-00		1.00	0.5	0	NA		GM	Dark gray to black fine gravel-sized SHALE fragments, little fine Sand, saturated, no odor.	0.00	FL	0
12-00		1.50	<u></u>	6	NA	- 1 - 2 2.0	SM	Brown SILT and fine SAND, some fine to coarse gravel-sized Shale fragments, moist, petroleum odor.			0 0 0 0
								Chaic Hagments, moist, petroleum ouor.			0
	80 35 32 30	2.00	0.9	0	NA	- 3 3.3 - 4	ML	Grayish brown SILT, some Clay, little fine to medium gravel-sized Shale fragments, trace very fine Sand, trace oxidation, wet to saturated, petroleum odor.			0 0 0 0
SB26- 12-04	26 24 33 50	2.00		15	NA	- 6 - 7					о О О
	20 58 75 46	2.00	1.2	0	NA	- 8					o o o o
NOT						10					0

NOTES: This soil boring was drilled at a 50 degree angle to the horizontal. The first 4 feet of the boring were advanced by pushing the split spoon into the overburden.



UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB26-12

ENGINEERING-SCIENCE, INC.

PROJECT: SEAD-25 & SEAD-26 RI/FS PROJECT NO: 728059

5 & SEAD-26 RI/FS GROUND SURFACE ELEVATION: 753.7
INSPECTOR: F. O'Loughlin

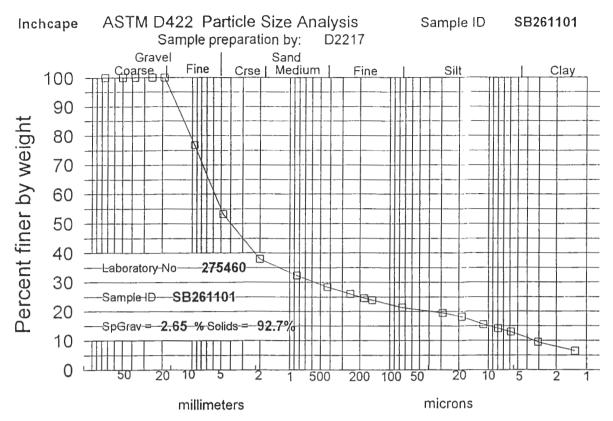
Seneca Army Depot Activity, Romulus, NY 14541 PROJECT LOCATION: P.Feschbach-Merinev CHECKED BY: This log is part of a report prepared by Parsons Engineering-Science, Inc. for the named project and should be read together with the report for complete interpretation. This Blow Counts # Blows per 6") VOC Screen-PID (ppm) Macro Lithology **USCS CLASS** Screen (cps) summary applies only at the location of this boring and at the Sample Advance Sample Recovery Depth (ft.) time of drilling. Subsurface conditions may differ at other Depth Macro Rad \* DESCRIPTION 80 2.00 0 NA ML Grayish brown SILT, some Clay, little fine to medium gravel-sized 0 12 Shale fragments, trace very fine Sand, trace oxidation, wet to 19 saturated, petroleum odor. .0 28 11 0 ò 12.0 12 24 2.00 NA ML Olive gray-brown SILT and very fine SAND, little fine to medium 1.1 ٥ 16 gravel-sized Shale fragments, moist to wet, no odor. 0 18 20 13 0 14.00 14 SB26-7 2.00 1.0 0 NA ML Olive gray-brown SILT and very fine SAND, little fine to medium TL 12-08 16 gravel-sized Shale fragments, moist to wet, no odor. 7 15 16.0 16.00 8 2.00 1.7 0 NA ws Gray to dark gray highly fissile SHALE, some interstitial brown 18 Silt, Clay, and very fine Sand, saturated, no odor. 60 150 17 17.50 SPLIT SPOON REFUSAL AT 17.5 FEET. CS AUGER REFUSAL AT 18.0 FEET. Gray to dark gray SHALE, saturated, no odor.

NOTES: This soil boring was drilled at a 50 degree angle to the horizontal. The first 4 feet of the boring were advanced by pushing the split spoon into the overburden.



UNITED STATES ARMY CORPS OF ENGINEERS Seneca Army Depot Romulus, New York

LOG OF BORING SB26-12



Particle Size, millimeters (mm) and microns (um)

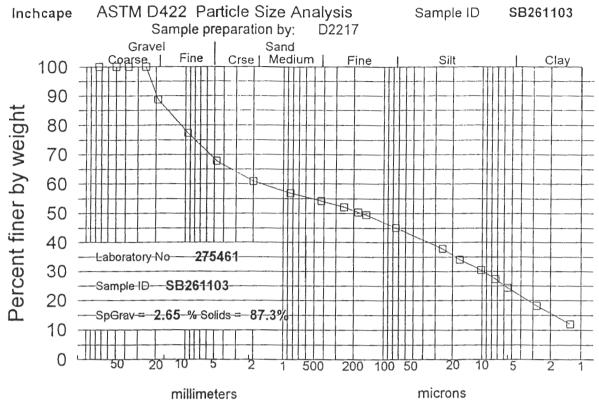
Maximum		
particle size:	19	mm

Shape and hardness (>#10): Subrounded Hard to brittle

Sieve size	Particle Size	Percent finer	Incremental percent	Specific Gravity assumed
3 inch	75.00 mm	100.0	0.0	
2 inch	50.00	100.0	0.0	
1.5 inch	37.50	100.0	0.0	
1 inch	25.00	100.0	0.0	
3/4 inch	19:00	100.0	0.0	
3/8 inch	9.50	76.8	23.2	
#4	4.75	53.2	23.6	
#10	2:00	37.9	15.3	
#20	850.0 um	32.3	5.6	
#40	425.0	28.3	3.9	
#60	250.0	25.9	2.4	
#80	180.0	24.5	1.4	
#100	150.0	23.9	0.6	
#200	75.0	21.3	2.6	
Hydrometer	29.0	19.5	1.8	Dispersion of soil
	18.7	18.2	1.3	for hydrometer test
	11.2	15.6	2.6	by mechanical mixer
	7.9	14.3	1.3	with metal paddle
	5.9	13.0	1.3	operated for one
	3.1	9.5	3.4	minutes within a
V	1.3	6.4	3.2	dispersion cup

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10:36 on 10-Nov-95

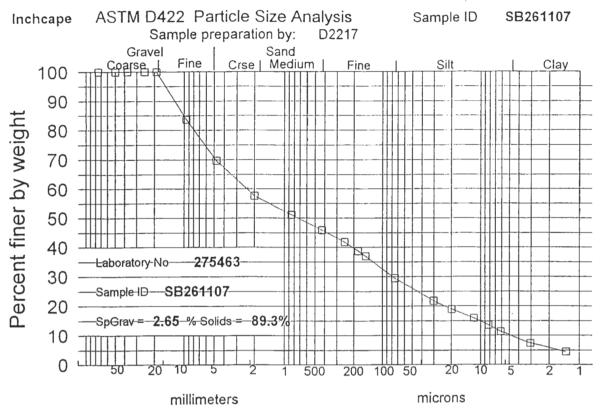


Particle Size, millimeters (mm) and microns (um)

Maximum			
particle size:	25	mm	

Shape and hardness (>#10): Subrounded Hard to brittle

Sieve size	Particle Size	Percent finer	Incremental percent	Specific Gravity assumed
3 inch	75.00 mm	100.0	0.0	assumed
2 inch	50.00	100.0	0.0	
1.5 inch	37.50	100.0	0.0	
1 inch	25.00	100.0	0.0	
3/4 inch	19.00	88.7	11.3	
3/8 inch	9.50	77.4	11.3	
#4	4.75	67.9	9.5	
#10	2.00	60.9	7.0	
#20	850.0 um	56.8	4.1	
#40	425.0	54.2	2.6	
#60	250.0	52.1	2.1	
· <b>#</b> 80	180.0	50.3	1.7	
#100	150.0	49.4	0.9	
#200	75.0	45.0	4.4	
Hydrometer	25.3	37.8	7.2	Dispersion of soil
	16.9	34.1	3.7	for hydrometer test
	10.2	30.5	3.7	by mechanical mixer
1	7.3	27.4	3.1	with metal paddle
1	5.5	24.3	3.1	operated for one
	2.7	18.3	6.0	minutes within a
V	1.3	12.0	6.3	dispersion cup



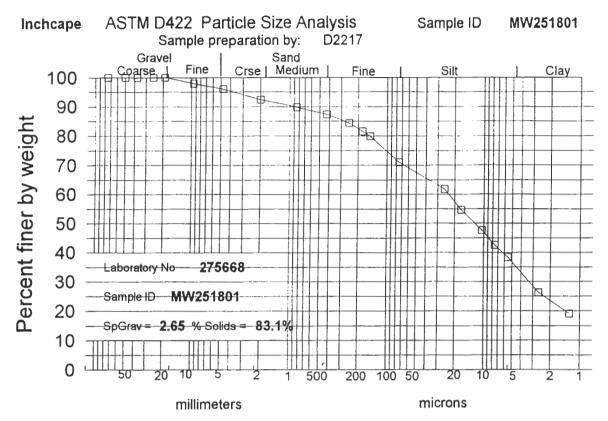
Particle Size, millimeters (mm) and microns (um)

Maxi	mum		
particle	size:	19	mm

Shape and hardness (>#10): Subrounded Hard to brittle

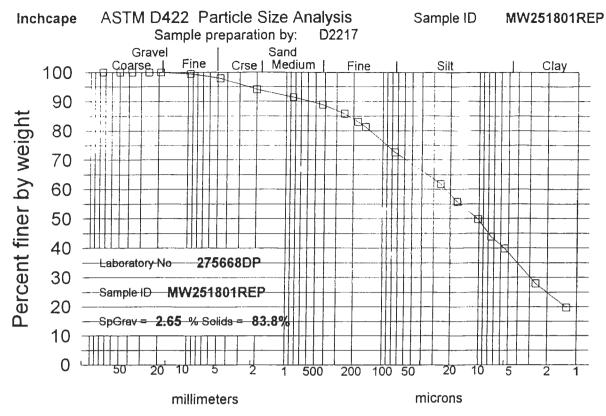
Sieve size	Particle Size	Percent finer	Incremental percent	Specific Gravity
3 inch	75.00 mm	100.0	0.0	assumed
2 inch	50.00	100.0	0.0	
1.5 inch	37.50	100.0	0.0	
1 inch	25.00	100.0	0.0	
3/4 inch	19.00	100.0	0.0	
3/8 inch	9.50	83.6	16.4	
#4	4.75	69.6	<b>14</b> .0	
#10	2.00	57.6	12.1	
#20	850.0 um	51.1	6.5	
#40	425.0	45.9	5.2	
#60	250.0	41.8	4.1	
· <b>#</b> 80	180.0	38.7	3.1	
#100	150.0	37.0	1.7	
#200	75.0	29.4	7.5	
Hydrometer	30.4	21.8	7.6	Dispersion of soil
1	19.8	18.9	2.9	for hydrometer test
İ	11.8	16.0	2.9	by mechanical mixer
į	8.2	13.7	2.3	with metal paddle
į	6.1	11.4	2.3	operated for one
İ	3.0	7.4	4.0	minutes within a
V	1.3	4.3	3.1	dispersion cup

Set 180 Lab No. 275463



Particle Size, millimeters (mm) and microns (um)

Maximum				
particle size: 19 mm	Shape and hardnes	ss (>#10): R	lounded S	Soft to Brittle
Sieve size	Particle Size	Percent finer	Incremental percent	Specific Gravity assumed
3 inch	75.00 mm	100.0	0.0	
2 inch	50.00	100.0	0.0	
1.5 inch	37.50	100.0	0.0	
1 inch	25.00	100.0	0.0	
3/4 inch	19.00	100.0	0.0	
3/8 inch	9.50	98.0	2.0	
#4	4.75	96.0	2.0	
#10	2.00	92.4	3.6	
<b>#20</b>	850.0 um	89.8	2.6	
. # <b>4</b> 0	425.0	87.4	2.5	
#60	250.0	84.4	3.0	
#80	180.0	81.6	2.8	
#100	150.0	79.8	1.7	
#200	75.0	71.0	8.9	
Hydrometer	25.6	61.8	9.2	Dispersion of soil
	17.1	54.6	7.1	for hydrometer test
1	10.4	47.6	7.1	by mechanical mixer
1	7.6	42.5	5.1	with metal paddle
I	5.5	38.4	4.1	operated for one
1	2.6	26.3	12.1	minutes within a
V	1.3	19.0	7.3	dispersion cup



Particle Size, millimeters (mm) and microns (um)

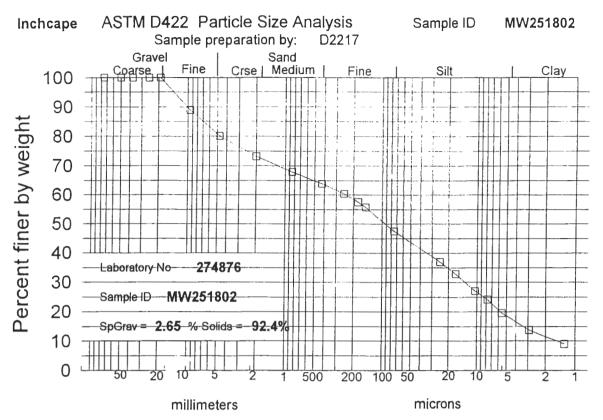
Maximum			
particle size: 19 mm	Shape and hardness (>#10):	Rounded	Soft to Brittle

Sieve size	Particle Size	Percent finer	Incremental percent	Specific Gravity assumed
3 inch	75.00 mm	100.0	0.0	assumed
2 inch	50.00	100.0	0.0	
1.5 inch	37.50	100.0	0.0	
1 inch	25.00	100.0	0.0	
3/4 inch	19.00	100.0	0.0	
3/8 inch	9.50	99.5	0.5	
#4	4.75	97.9	1.6	
#10	2.00	94.1	3.8	
#20	850.0 um	91.4	2.6	
#40	425.0	88.9	2.5	
#60	250.0	85.9	3.0	
#80	180.0	83.0	2.8	
#100	150.0	81.3	1.7	
#200	75.0	72.5	8.8	
Hydrometer	25.3	61.8	10.7	Dispersion of soil
1	16.9	55.8	6.0	for hydrometer test
į	10.2	49.8	6.0	by mechanical mixer
j	7.5	43.8	6.0	with metal paddle
	5.5	39.8	4.0	operated for one
	2.6	27.9	11.9	minutes within a
V	1.3	19.7	8.2	dispersion cup

Printed by ZL 2 Lab No. 275668DP 13:45 on 16-Nov-95

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Set



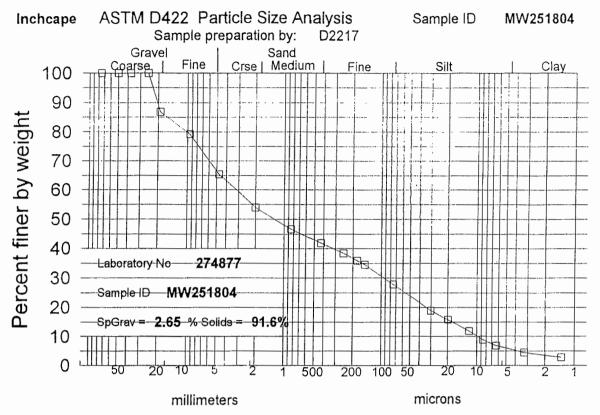
Particle Size, millimeters (mm) and microns (um)

Maximum			
particle size: 19 mm	Shape and hardness (>#10):	Rounded	Hard to brittle

•	5			
Sieve	Particle	Percent	Incremental	Specific
size	Size	finer	percent	Gravity
				assumed
3 inch	75.00 mm	100.0	0.0	
2 inch	50.00	100.0	0.0	
1.5 inch	37.50	100.0	0.0	
1 inch	25.00	100.0	0.0	
3/4 inch	19.00	100.0	0.0	
3/8 inch	9.50	89.0	11.0	/
#4	4.75	80.2	8.8	Į.
#10	2.00	73.1	7.0	.*
#20	850.0 um	67.9	5.2	
# <b>4</b> 0	<b>425</b> .0	63.8	4.1	
#60	250.0	60.3	3.5	
#80	180.0	57.5	2.9	
#100	150.0	55.8	1.7	
#200	75.0	47.4	8.3	
Hydrometer	24.9	36.9	10.5	Dispersion of soil
ĺ	16.8	32.9	4.1	for hydrometer test
i	10.4	27.1	5.8	by mechanical mixer
i	7.8	24.2	2.9	with metal paddle
	5.5	19.5	4.6	operated for one
,	2.9	13.8	5.7	minutes within a
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
V	1.3	9.0	4.8	dispersion cup

Printed by 1200 200

10:35 on 10-Nov-95



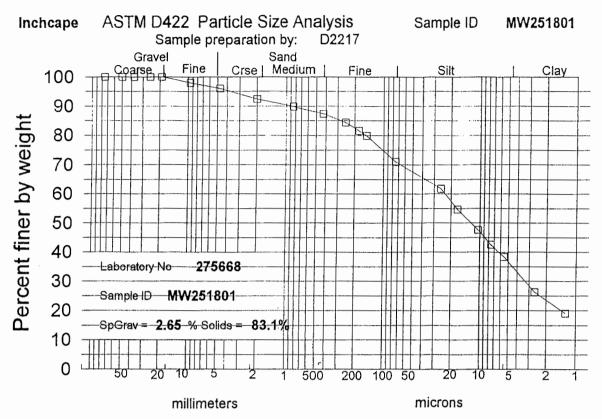
Particle Size, millimeters (mm) and microns (um)

Maximum		
particle size:	25	mm

Shape and hardness (>#10): Subrounded Hard to brittle

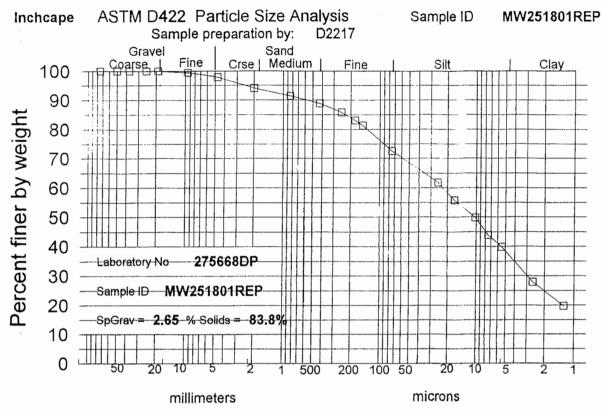
Sieve size	Particle Size	Percent finer	Incremental percent	Specific Gravity assumed
3 inch	75.00 mm	100.0	0.0	accumou.
2 inch	50.00	100.0	0.0	
1.5 inch	37.50	100.0	0.0	
1 inch	25:00	100.0	0.0	
3/4 inch	19.00	86.8	13.2	
3/8 inch	9.50	79.2	7.6	
#4	4.75	65.4	13.8	
#10	2.00	54.0	11.4	
#20	850.0 um	46.6	7.3	
<b>#4</b> 0	425.0	41.8	4.8	
<b>#</b> 60	250.0	38.4	3.4	
#80	180.0	35.9	2.5	
#100	150.0	34.5	1.4	
#200	75.0	27.8	6.7	
Hydrometer	30.4	18.9	8.9	Dispersion of soil
	<b>19</b> .9	15.9	3.0	for hydrometer test
ĺ	12.0	11.8	4.0	by mechanical mixer
İ	8.6	8.9	3.0	with metal paddle
ĺ	6.3	6.9	2.0	operated for one
	3.2	4.4	2.5	minutes within a
V	1.4	2.8	1.6	dispersion cup

· Set 180 Lab No. 274877



Particle Size, millimeters (mm) and microns (um)

Particle Size, millimeters (mm) and microns (um)						
Maximum particle size: 19 mm	Shape and hardnes	ss (>#10): R	tounded S	Soft to Brittle		
Sieve	Particle	Percent	Incremental	Specific		
size	Size	finer	percent	Gravity		
				assumed		
3 inch	75.00 mm	100.0	0.0			
2 inch	50.00	100.0	0.0			
1.5 inch	37.50	100.0	0.0			
1 inch	25.00	100.0	0.0			
3/4 inch	19:00	100.0	0.0			
3/8 inch	9.50	98.0	2.0			
#4	4.75	96.0	2.0			
<b>#10</b>	2.00	92.4	3.6			
<i>,</i> #20	850.0 um	89.8	2.6			
. # <b>4</b> 0	425.0	87.4	2.5			
#60	250.0	84.4	3.0			
#80	180.0	81.6	2.8			
#100	150.0	79.8	1.7			
#200	75.0	71.0	8.9			
Hydrometer	25.6	61.8	9.2	Dispersion of soil		
	17.1	54.6	7.1	for hydrometer test		
i	10.4	47.6	7.1	by mechanical mixer		
į	7.6	42.5	5.1	with metal paddle		
i	5.5	38.4	4.1	operated for one		
į	2.6	26.3	12.1	minutes within a		
Ÿ	1.3	19.0	7.3	dispersion cup		

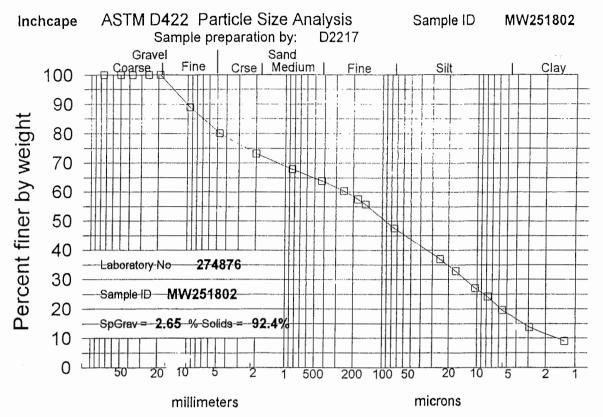


Particle Size, millimeters (mm) and microns (um)

Maximum			
particle size: 19 mm	Shape and hardness (>#10):	Rounded	Soft to Brittle

Sieve size	Particle Size	Percent finer	Incremental percent	Specific Gravity assumed
3 inch	75.00 mm	100.0	0.0	
2 inch	50.00	100.0	0.0	
1.5 inch	37.50	100.0	0.0	
1 inch	25.00	100.0	0.0	
3/4 inch	19.00	100.0	0.0	
3/8 inch	9.50	99.5	0.5	
#4	4.75	97.9	1.6	
#10	2.00	94.1	3.8	
#20	850.0 um	91.4	2.6	
#40	425.0	88.9	2.5	
#60	250.0	85.9	3.0	
#80	180.0	83.0	2.8	
#100	150.0	81.3	1.7	
#200	75.0	72.5	8.8	
Hydrometer	25.3	61.8	10.7	Dispersion of soil
	16.9	55.8	6.0	for hydrometer test
	10.2	49.8	6.0	by mechanical mixer
ĺ	7.5	43.8	6.0	with metal paddle
	5.5	39.8	4.0	operated for one
1	2.6	27.9	11.9	minutes within a
V	1.3	19.7	8.2	dispersion cup

Set 181 Lab No. 275668DP

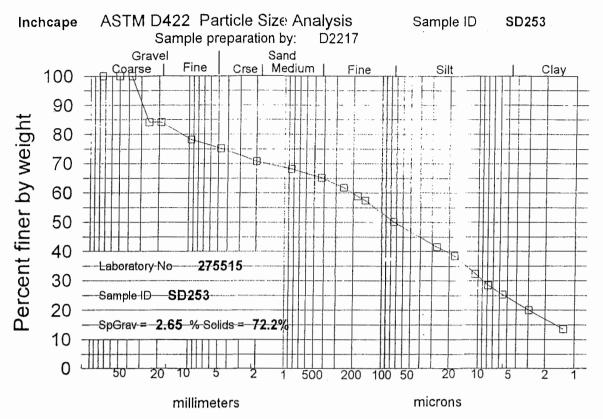


Particle Size, millimeters (mm) and microns (um)

Maximum	
particle size:	19 mm

Shape and hardness (>#10): Rounded Hard to brittle

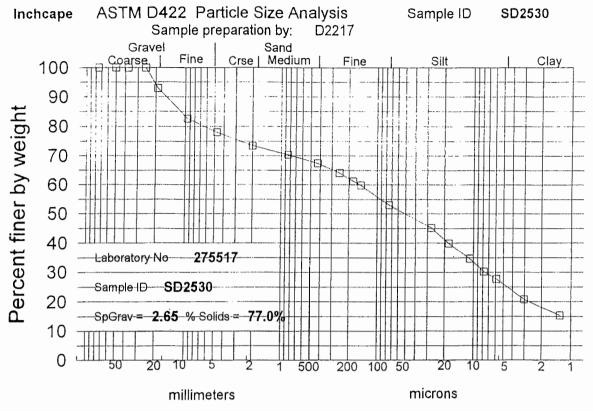
Sieve size	Particle Size	Percent finer	Incremental percent	Specific Gravity
3 inch	75.00 mm	100.0	0.0	assumed
2 inch	50.00	100.0	0.0	
1.5 inch	37.50	100.0	0.0	
1 inch	25.00	100.0	0.0	
3/4 inch	19.00	100.0	0.0	
3/8 inch	9.50	89.0	11.0	/
#4	4.75	80.2	8.8	ſ
#10	2.00	73.1	7.0	.'
#20	850.0 um	67.9	5.2	
<b>#4</b> 0	425.0	63.8	4.1	
#60	250.0	60.3	3.5	
#80	180.0	57.5	2.9	
#100	150.0	55.8	1.7	
#200	75.0	47.4	8.3	
Hydrometer	24.9	36.9	10.5	Dispersion of soil
	16.8	32.9	4.1	for hydrometer test
İ	10.4	27.1	5.8	by mechanical mixer
į	7.8	24.2	2.9	with metal paddle
ĺ	5.5	19.5	4.6	operated for one
	2.9	13.8	5.7	minutes within a
V	1.3	9.0	4.8	dispersion cup



Particle Size, millimeters (mm) and microns (um)

Maximum particle size: 37.5 mm	Shape and hardn	ess (>#10): R	ounded l	Hard to brittle
Sieve	Particle	Percent	Incremental	Sp

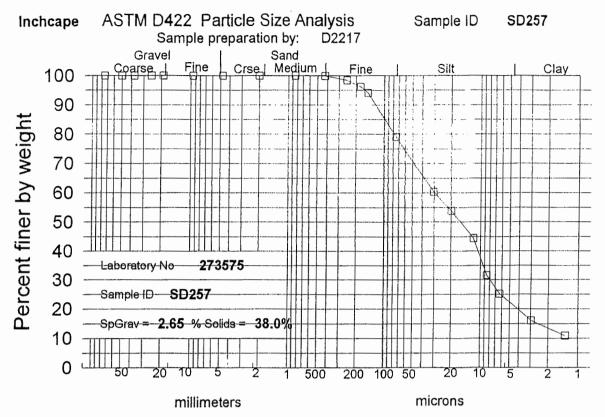
Sieve	Particle	Percent	Incremental	Specific
size	Size	finer	percent	Gravity
	75.00			assumed
3 inch	75.00 mm	100.0	0,0	
2 inch	50.00	100.0	ე.0	
1.5 inch	37.50	100.0	0.0	
1 inch	25.00	84.1	15.9	
3/4 inch	19.00	84.1	0.0	
3/8 inch	9.50	78.2	6.0	
#4	4.75	75.1	3.0	
<b>#</b> 10	2.00	70.8	4.3	
#20	850.0 um	68.2	2.6	
<b>#4</b> 0	425.0	65.2	3.0	
<b>#</b> 60	250.0	61.8	3.4	
#80	180.0	58.9	2.9	
#100	150.0	57.3	1.6	
#200	75.0	50.1	7.2	
Hydrometer	27.0	41.6	8.6	Dispersion of soil
	17.6	38.5	3.1	for hydrometer test
j	10.7	32.3	6.2	by mechanical mixer
ĺ	7.8	28.4	3.9	with metal paddle
	5.5	<b>25</b> .3	3.1	operated for one
	2.9	20.0	5.3	minutes within a
V	1.3	13.6	6.4	dispersion cup



Particle Size, millimeters (mm) and microns (um)

Maximum				
particle size: 25 mm	Shape and hardnes	s (>#10): R	ounded I	Hard to brittle
Sieve size	Particle Size	Percent finer	Incremental percent	Specific Gravity assumed
3 inch	75.00 mm	100.0	0.0	
2 inch	50.00	100.0	0.0	
1.5 inch	37.50	100.0	0.0	
1 inch	25.00	100.0	0.0	
3/4 inch	19.00	93.0	7.0	
3/8 inch	9.50	82.7	10.3	
<del>#4</del>	4.75	78.0	4.7	
#10	2.00	73.4	4.5	
#20	850.0 um	70.4	3.1	
<b>#4</b> 0	425.0	67.4	3.0	
#60	250.0	64.0	3.3	
#80	180.0	61.2	2.8	
#100	150.0	59.7	1.5	
#200	75.0	<b>5</b> 3.0	6.8	
Hydrometer	27.4	45.1	7.8	Dispersion of soil
!	18.1	39.9	5.2	for hydrometer test
	10.9	34.6	5.3	by mechanical mixer
	7.8	30.3	4.3	with metal paddle
	5.9	27.7	2.6	operated for one
	3.0	20.8	6.9	minutes within a
V	1.3	15.3	5.5	dispersion cup

Set 180 275517 Lab No.



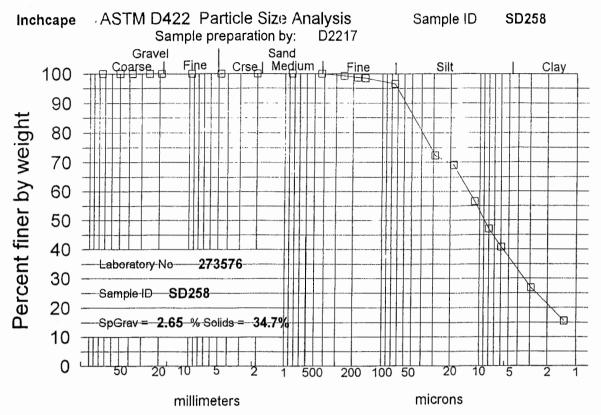
Particle Size, millimeters (mm) and microns (um)

Maximum	
particle size:	Med sand

Shape and hardness (>#10):

Sieve size	Particle Size	Percent finer	Incremental percent	Specific Gravity
3 inch	75.00 mm	100.0	0.0	assumed
2 inch	50.00	100.0	0.0	0
1.5 inch	37.50	100.0	0.0	Some
1 inch	25.00	100.0	0.0	Organic
3/4 inch	19.00	100.0	0.0	Material
3/8 inch	9,50	100.0	0.0	in Sieves
#4	4.75	100.0	0.0	
#10	2.00	100.0	0.0	
#20	850.0 um	100.0	0.0	
<b>#4</b> 0	<b>4</b> 25.0	99.9	0.1	
#60	250.0	98.4	1.5	
#80	180.0	96.3	2.2	
#100	150.0	94.2	2.1	
#200	75.0	79.0	15.2	
Hydrometer	30.7	60.4	18.6	Dispersion of soil
1	19.9	53.9	6.5	for hydrometer test
į	11.8	44.4	9.6	by mechanical mixer
	8.6	31.6	12.8	with metal paddle
i	6.3	25.2	6. <b>4</b>	operated for five
i	3.0	16.1	9.1	five minutes within a
Ÿ	1.3	10.9	5.2	dispersion cup

Set 177 Lab No. 273575



Particle Size, millimeters (mm) and microns (um)

Maximum

particle size: Fine sand

Shape and hardness (>#10):

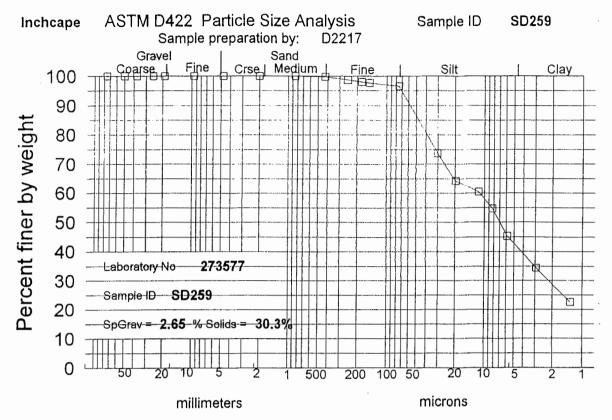
Sieve size	Particle Size	Percent finer	Incremental percent	Specific Gravity assumed
3 inch	75.00 mm	100.0	0.0	
2 inch	50.00	100.0	0.0	
1.5 inch	37.50	100.0	0.0	Some
1 inch	25.00	100.0	0.0	Organic
3/4 inch	19.00	100.0	0.0	Material
3/8 inch	9.50	100.0	0.0	in Sieves
#4	4.75	100.0	0.0	
#10	2.00	100.0	0.0	
#20	850.0 um	100.0	0.0	
<b>#4</b> 0	425.0	100.0	0.0	
#60	250.0	99.2	8.0	
#80	180.0	98.7	0.5	
#100	150.0	98.4	0.3	
#200	75.0	96.6	1.8	
Hydrometer	29.0	72.3	24.3	Dispersion of soil
1	18.6	69.1	3.2	for hydrometer test
	11.3	56.5	12.7	by mechanical mixer
	8.0	47.0	9.5	with metal paddle
	6.0	40.7	6.3	operated for five
	2.9	26.9	13.9	five minutes within a
V	1.3	15.5	11.3	dispersion cup

Set 177

Lab No. 273576

Printed by M1522ey

31-Oct-95



Particle Size, millimeters (mm) and microns (um)

M	laxin	านm		

particle size: Med sand

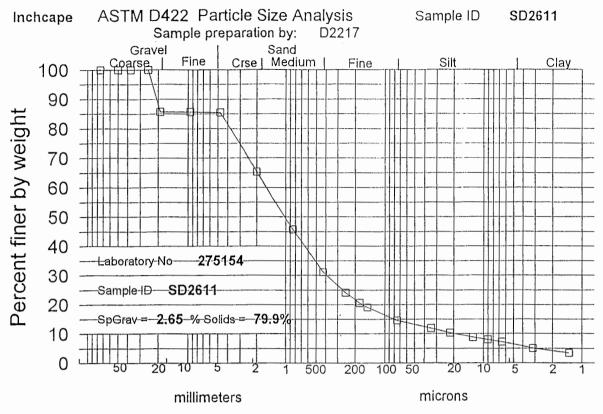
Shape and hardness (>#10):

Sieve size	Particle Size	Percent finer	Incremental percent	Specific Gravity assumed
3 inch	75.00 mm	100.0	0.0	
2 inch	50.00	100.0	0.0	
1.5 inch	37.50	100.0	0.0	Some
1 inch	25.00	100.0	0.0	Organic
3/4 inch	19.00	100.0	0.0	Material
3/8 inch	9.50	100.0	0.0	in Sieves
#4	4.75	100.0	0.0	
#10	2.00	100.0	0.0	
#20	850.0 um	100.0	0.0	
#40	425.0	99.8	0.2	
#60	250.0	98.7	1.1	
#80	180.0	98.0	0.7	
#100	150.0	97.7	0.3	
#200	75.0	96.6	1.1	
Hydrometer	30.4	73.7	22.8	Dispersion of soil
.	19.8	64.2	9.5	for hydrometer test
j	11.5	60.4	3.8	by mechanical mixer
	8.3	54.8	5.6	with metal paddle
ĺ	5.9	45.3	9.5	operated for five
	2.9	34.4	10.9	five minutes within a
Ý	1.3	22.5	11.9	dispersion cup

Set 177 Lab No. 273577

Printed by 115 124

11:23 on 31-Oct-95



Particle Size, millimeters (mm) and microns (um)

particle size: 25 mm	Shape and hardnes	s (>#10): R	Rounded I	Hard to soft
Sieve size	Particle Size	Percent finer	Incremental percent	Specific Gravity assumed
3 inch	75.00 mm	100.0	0.0	assumed
2 inch	50.00	100.0	0.0	
1.5 inch	37.50	100.0	0.0	
1 inch	25.00	100.0	0.0	
3/4 inch	19.00	85.7	14.3	
3/8 inch	9.50	85.7	0.0	
#4	4.75	85.5	0.2	
#10	2.00	65.2	20.2	
#20	850.0 um	45.7	19.5	
, <b>#4</b> 0	425.0	31.1	14.6	
#60	250.0	24.1	7.1	
· <b>#8</b> 0	180.0	20.6	3.5	
#100	150.0	19.0	1.6	
#200	75.0	14.5	4.5	
Hydrometer	34.2	11.8	2.6	Dispersion of soil
1	21.9	10.3	1.5	for hydrometer test
1	12.7	8.8	1.5	by mechanical mixer
	9.1	8.0	0.8	with metal paddle
	6.5	7.3	0.7	operated for one

minutes within a

dispersion cup

Maximum

5.1

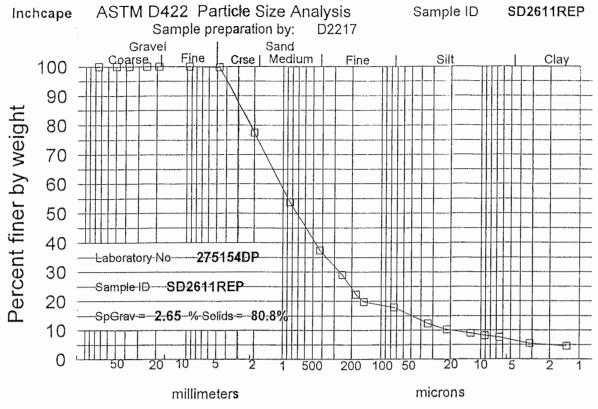
3.4

2.2

1.7

3.1

1.3

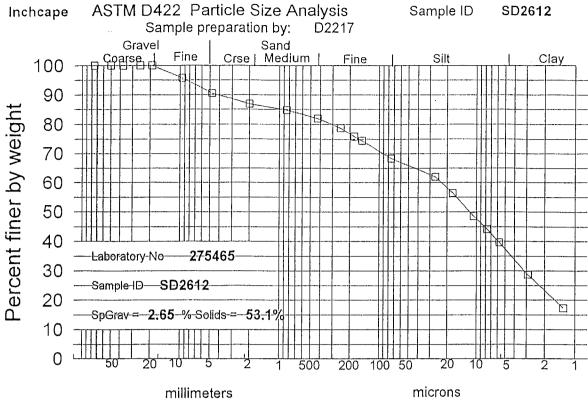


Particle Size, millimeters (mm) and microns (um)

	,	` '
Maximum		
particle size: 9.5 mm	Shape and hardness (>#	10): Rounded

Hard to soft

Sieve size	Particle Size	Percent finer	Incremental percent	Specific Gravity assumed
3 inch	75,00 mm	100.0	0.0	
2 inch	50.00	100.0	0.0	
1.5 inch	37.50	100.0	0.0	
1 inch	25.00	100.0	0.0	
3/4 inch	19.00	100.0	0.0	
3/8 inch	9.50	100.0	0.0	
#4	4.75	99.7	0.3	
#10	2.00	77.5	22.3	
#20	850.0 um	53.7	23.7	
#40	425.0	37.4	16.4	
#60	250.0	29.1	8.3	
#80	180.0	22.3	6.8	
#100	150.0	19.8	2.5	
#200	75.0	17.9	1.9	
Hydrometer	33.9	12.4	5.5	Dispersion of soil
1	21.8	10.3	2.1	for hydrometer test
	12.7	8.9	1.4	by mechanical mixer
	9.2	8.2	0.7	with metal paddle
	6.5	7.5	0.7	operated for one
[	3.2	5.4	2.1	minutes within a
V	1.3	4.6	0.9	dispersion cup

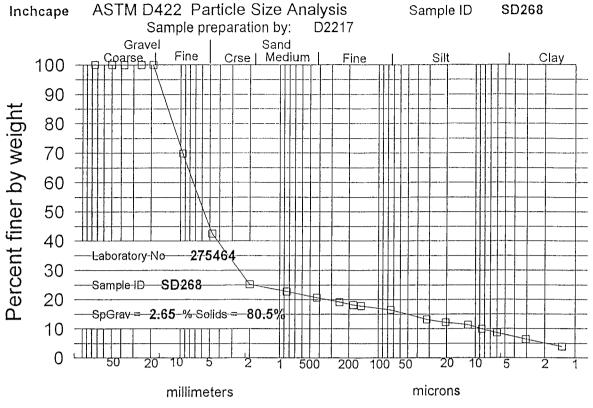


Particle Size, millimeters (mm) and microns (um)

Maximum	
particle size:	19 mm

Shape and hardness (>#10): Subrounded Hard to brittle

Sieve	Particle	Percent	Incremental	Specific
size	Size	finer	percent	Gravity assumed
3 inch	75.00 mm	100.0	0.0	aosamea
2 inch	50.00	100.0	0.0	
1.5 inch	37.50	100.0	0.0	
1 inch	25.00	100.0	0.0	
3/4 inch	19,00	100.0	0.0	
3/8 inch	9.50	95.8	4.2	
#4	4.75	90.5	5.2	
#10	2.00	87.0	3.6	
#20	850.0 um	84.9	2.1	
#40	425.0	82.0	2.9	
#60	250.0	78.7	3. <b>3</b>	
#80	180.0	75.9	2.8	
#100	150.0	74.4	1.5	
#200	75.0	68.4	6.0	
Hydrometer	26.6	61.9	6.4	Dispersion of soil
	17.5	56.4	5.6	for hydrometer test
	10.6	48.6	7.8	by mechanical mixer
	7.7	44.1	4.4	with metal paddle
	5.7	39.7	4.5	operated for one
	2.9	28.7	11.0	minutes within a
V	1.3	17.3	11.4	dispersion cup



Particle Size, millimeters (mm) and microns (um)

N	1a	ıxim	num
			_

Shape and hardness (>#10): Subrounded Hard to brittle particle size: 19 mm

Sieve size	Particle Size	Percent finer	Incremental percent	Specific Gravity assumed
3 inch	75.00 mm	100.0	0.0	accamina
2 inch	50.00	100.0	0.0	
1.5 inch	37.50	100.0	0.0	
1 inch	25.00	100.0	0.0	
3/4 inch	19:00	100.0	0.0	
3/8 inch	9.50	69.8	30.2	
#4	4.75	42.5	27.3	
#10	2.00	25.2	17.3	
#20	850.0 um	22.8	2.4	
#40	425.0	20.6	2.1	
#60	250.0	19.1	1.5	
· #80	180.0	18.2	0.9	
#100	150.0	17.8	0.4	
#200	75.0	16.5	1.3	
Hydrometer	32.0	13.2	3.3	Dispersion of soil
	20.5	12.2	0.9	for hydrometer test
	11.9	11.3	0.9	by mechanical mixer
	8.6	10.0	1.4	with metal paddle
	6.0	8.6	1.4	operated for five
	3.0	6.4	2.2	five minutes within a
V	1.3	3.9	2.5	dispersion cup

Set 180 Lab No. 275464

			TEST	PIT REPO	RT		. •
ENGINE	ERING-SCIE	NCE, INC.	CLIENT:			TEST PI	Γ #: TP26-1
PROJECT:	SENE	CA 7		TNIK 57-164770N		JOB NUMBE	R: 720477-61000
LOCATION:	557			P/T #1		EST. GROU	ND ELEV.
mean pim p						INSPECTOR	
TEST PIT DA	WIDTH	DEPTH	T E	XCAVATION/SHORING METHOD		CONTRACTO START DAT	20/00
13'	4'6"	7'4"		BACKHOE			N DATE: 11/18/93
						CHECKED B	
						DATE CHEC	CKED:
MONITORIN		T			COMMENTS	_	
	UMENT -580B	DETECTOR	BACKGROUND	3:05 PM	SEAL	726 .	-LevelB
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	1A-1700			3:05 AM_			
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SEE MASTER ACRONYM LIST FOR COMPLETE LISTING OF ABBREVIATIONS

TEST PIT #: TP26-1

				TEST	PIT REI	PORT		. '
ENC	INEE	RING-SCIE	NCE, INC.	CLIENT: 5	SEAD		TEST PI	Γ #: TP26-2
PROJE	CT:	SENEC	A 7		INVESTIGATIO	)N		ER: 720477-01000
LOCAT	'ION:	SEAD		TEST F	T #2		EST. GROUI	ND ELEV.
TEST P							CONTRACT	43/0/0
	GTH	2.5'-3'	DEPTH		XCAVATION/SHORING ME	THOD	START DAT	
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							DATE CHEC	
MONIT	ORING	DATA				COMMENT		
	INSTRU		DETECTOR	BACKGROUND	TIME/DATE	SEA	026-1	LevelB
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						TOTAL SAM	IPLES: [8]	2 sets
SCALE	VOC./	SAM	PLE	STRATA		ION OF MATERIALS		
(FT)	RAD.	NUMBER	DEPTH RANGE	SCHEMATIC	(BURMEIS	TER METHODOLOGY)		REMARKS
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		TP26-2-1	0-8"	mm		D SHÁLE L		
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ENG	INEER	ING-SCII	ENCE, INC.	CLIENT:	SEAD	TEST PIT	#:TP26-7
		DATA					4 ,
	NSTRUM	ENT	DETECTOR	BACKGROUND	TIME/DATE	DATE START: DATE FINISH:	11/18/93
		A<	AR	ve on	PAGE 1	INSPECTOR:	JWC.
		11-2	1100	VC. UN	7/16E I	CONTRACTOR:	ES/UXB
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SCALE	VOC./		MPLE	STRATA	DESCRIPTION OF MATER		
(FT)	RAD.	NUMBER	DEPTH RANGE	SCHEMATIC	(BURMEISTER METHODOI	OGY)	REMARKS
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TEST PIT REPORT									
EN	GINEE	RING-SCIEI	NCE, INC.	CLIENT:	SEAD		TEST PI	Γ#:TP26~3	
PROJE				DePor		HION)	JOB NUMBI		
LOCATION: SEAD 26 LOCATION #3								ND ELEV.	
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TEST I									
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	instru M – S		DETECTOR	BACKGROUND	TIME/DATE 11/17/93 10:30	L SEA	1D 26-	LevelB	
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						VOA (I)	140 ML 30	OX, TPH, Rot. /PBB HULLDES (1) SOOML I, NITH ATE (1) SOOTML	
						METAL(	1)40ml CA		
14						TOTAL SAM	PLE3:   8	(z sets)	
SCALE (FT)	VOC./ RAD.	SAM	PLE DEPTH RANGE	STRATA SCHEMATIC	DESCRIPTION OF (BURMEISTER MET			DEMARKO	
(F1)	KAD,	NUMBER	DEPTH RANGE	SCHEWATIC	(BURMEISTER MET	.nototoo1)		REMARKS	
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SEE MASTER ACRONYM LIST FOR COMPLETE LISTING OF ABBREVIATIONS

TEST PIT #:

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					PIT REPORT		
			ENCE, INC.	CLIENT: 5	EAD 7 SWMU	TEST PIT	#: TP26-3
	NSTRUM	DATA ENT	DETECTOR	BACKGROUND	TIME/DATE	DATE START: DATE FINISH:	11/17/93
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SCALE (FT)	VOC./ RAD.		MPLE DEPTH RANGE	STRATA SCHEMATIC	DESCRIPTION OF MATERIAL (BURMEISTER METHODOLOG		REMARKS
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					LIST FOR COMPLETE LISTING OF ABBRE		TEST PIT #:

PAGE OF TEST PIT REPORT 7 SWMU INVESTIGATEST PIT #: 26 CLIENT: SEAD ENGINEERING-SCIENCE, INC. SEAD 26 SENECA ARMY JOB NUMBER: PROJECT: LOCATION: EST. GROUND ELEV. LOCATION 4 INSPECTOR: CONTRACTOR: TEST PIT DATA EXCAVATION/SHORING METHOD WIDTH DEPTH START DATE: LENGTH COMPLETION DATE: 11 117 351 51 BACKHOE CHECKED BY: DATE CHECKED: COMMENTS: MONITORING DATA SEAD 26 - LEVELB DETECTOR BACKGROUND TIME/DATE INSTRUMENT 9:30 11/17/93 11/17/93 OVM-580B 10.0 eV investigation 9:3010 LEL/02/H2S WEATHER WAS POOR TOTAL SAMPLES: [8] (2 Sets) DESCRIPTION OF MATERIALS SCALE VOC./ STRATA SAMPLE (BURMEISTER METHODOLOGY) RAD. DEPTH RANGE SCHEMATIC REMARKS VERY THIN TOPSOIL 0-8" ZONE WITH BROKEN FRAGMENTS SHALE WELL SORTED LARGE 9"-20" SecTIONS of SHALE (USED APPARENTY AS FILL NATIVE 3 Anomaly was nonmetallic AND PROBABLY THE DENSE SHALE COMPONEUT BOTTOM OF PIT 46"-5" WASELY DISTORY

SEE MASTER ACRONYM LIST FOR COMPLETE LISTING OF ABBREVIATIONS

TEST PIT #: TP26-4

				TEST	PIT REP	ORT		
ENG	JINEEL	RING-SCIEN	ICE, INC.	CLIENT:	SEAD		TEST PIT	" #: TP26-5
PROJE		SENER					JOB NUMBE	7.5 7.7 7.5.
LOCATION: SEAD 26				TEST	T #5		EST. GROUN	<u> </u>
TEST P	TT DAT	'A					CONTRACTO	XIV
LEN	GTH	WIDTH	DEPTH		XCAVATION/SHORING MET	THOD	START DAT	E: 11/17/93
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<u> </u>						DATE CHEC		
MONI	ORING	DATA				COMMENT		
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SEE MASTER ACRONYM LIST FOR COMPLETE LISTING OF ABBREVIATIONS

TEST PIT #:

TEST PIT REPORT TEST PIT #: TP26-ENGINEERING-SCIENCE, INC. | CLIENT: MONITORING DATA DETECTOR TIME/DATE DATE START: INSTRUMENT BACKGROUND DATE FINISH: INSPECTOR: CONTRACTOR: SCALE VOC SAMPLE STRATA DESCRIPTION OF MATERIALS (BURMEISTER METHODOLOGY) RAD. NUMBER DEPTH RANGE SCHEMATIC REMARKS RED-ORANGE BRICKS & probable Geogrysical Anomaly IN A LARGE CLUSTER 5'-6" TP26-52 5 N-66 6'8" BOTTOM OF TEST PIT

SEE MASTER ACRONYM LIST FOR COMPLETE LISTING OF ABBREVIATIONS

TSTPITP2.WK1

				TEST	PIT	REPO	RT		
EN	GINEEL	RING-SCIE	NCE, INC.	CLIENT:	SEAD			TEST PI	T #: TP26-6
PROJE	CT:	SENECA	4 7 5	VMG IN	uestign	1-1-10N	_	JOB NUMBE	BR: 720477-0100
LOCAT	TION:	SEAD	26 7	EST PI	T #6		_	EST. GROU	
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						Market Annual Control	WEATH	IER WA	is overcast
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SCALE (FT)	VOC./ RAD.	SAM NUMBER	PLE DEPTH RANGE	STRATA SCHEMATIC		DESCRIPTION O (BURMEISTER MI			REMARKS
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	MSTRUM		DETECTOR	BACKGROUND	TIME/DATE 9:15 And	DATE START:	11/18/93			
		580B 1/Hz S	ICERV		9:15 AM	DATE FINISH:	11/18/93			
	2/02	-/ 117 3			4,1.5	INSPECTOR:	INC			
						CONTRACTOR:				
•					DESCRIPTION OF MA	701410				
SCALE (FT)	VOC./ RAD.		MPLE DEPTH RANGE	STRATA SCHEMATIC	DESCRIPTION OF MAT (BURMEISTER METHOD		REMARKS			
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				TEST	PIT REPO	RT			
EN	GINEE	RING-SCIE	NCE, INC.	CLIENT:	SEAD		TEST PI	Γ#: TP26-7	
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						WEAT	mer	27/3 00/01/	
						TOTAL SAM	IPLES: 8	2 sets	
SCALE (FT)	VOC./ RAD.	SAM NUMBER	PLE DEPTH RANGE	STRATA SCHEMATIC	DESCRIPTION ( (BURMEISTER M			REMARKS	
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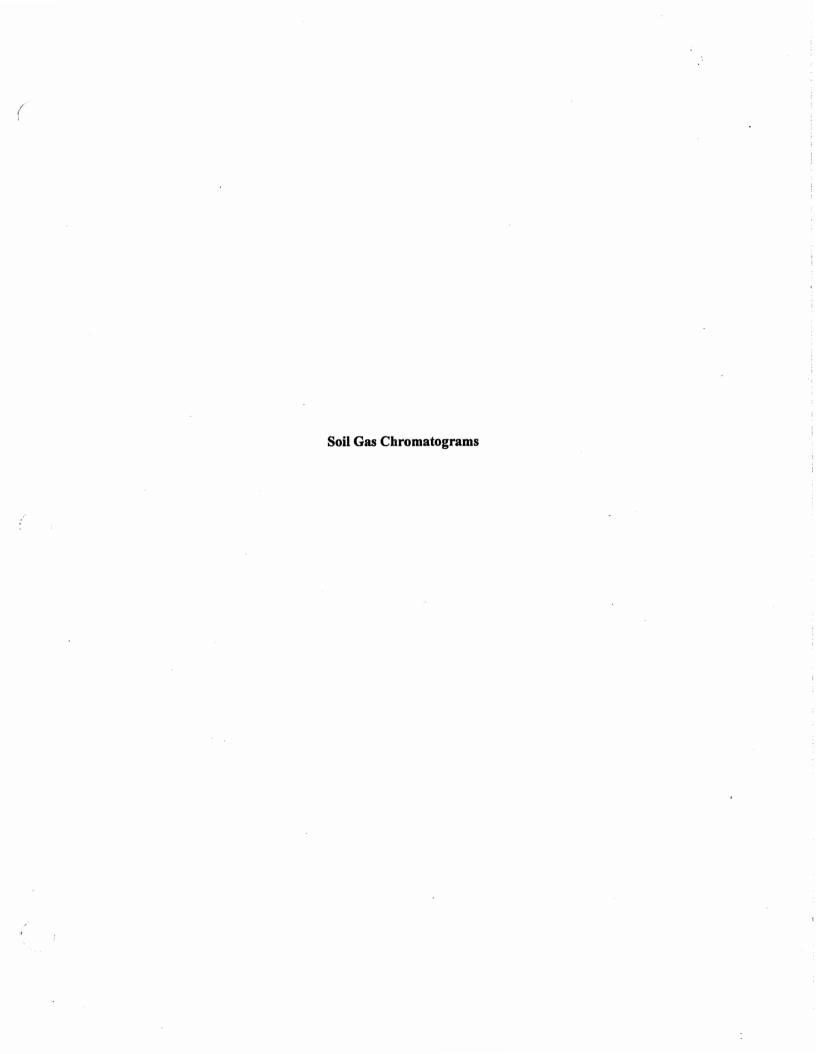
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ENG	NEER	ING-SCII	ENCE, INC.	CLIENT:	SENEZA 7 SWMU	TEST PIT	#: TP26-7
		DATA					1 6
1	NSTRUM	ENT	DETECTOR	BACKGROUND	TIME/ DATE	DATE START: DATE FINISH:	11/18/93
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		AS	ABOV	EON	PAGE I	INSPECTOR:	JWC
						CONTRACTOR:	ES/UXB
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SCALE	VOC./	SA	MPLE	STRATA	DESCRIPTION OF MATERIAL	LS	
(FT)	RAD.	NUMBER	DEPTH RANGE	SCHEMATIC	(BURMEISTER METHODOLOG		REMARKS
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				TEST	PIT REPO	RT	· · · ·
EN	GINEE	RING-SCIE		CLIENT:		TEST PI	T #: TP26-8
PROJE		SENE	CA 7	SWMU		JOB NUMB	ER: 720477-01
LOCA	TION:	SEAD	26	TEST *	*8	EST. GROU	
TEST I	PIT DA	ΤA				INSPECTOR CONTRACT	
LEN	NGTH	WIDTH	DEPTH		XCAVATION/SHORING METHOL	START DA	TE: 11/19/93
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						CHECKED DATE CHE	
MONI		G DATA				COMMENTS:	
	INSTRU	JMENT -580B	DETECTOR	BACKGROUND	7:00 AM	SEAD 26 -	I EVE I R
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	RADIA				9:00 AM	INVESTIGA-	
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						TOTAL SAMPLES:	7 2 sets
SCALE	VOC./	SAM	PLE	STRATA	DESCRIPTION (	OF MATERIALS	
(FT)	RAD.	NUMBER	DEPTH RANGE	SCHEMATIC	(BURMEISTER M	METHODOLOGY)	REMARKS
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		1126-6-1	0-8			<b>FRAGMENTS</b>	
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SEE MASTER ACRONYM LIST FOR COMPLETE LISTING OF ABBREVIATIONS

TEST PIT #:

	TEST PIT REPORT									
			ENCE, INC.	CLIENT:	EAD	>			TEST PIT	#: TP26-8
	ORING	DATA ENT	DETECTOR	BACKGROUND		TIME/DA	ТЕ		DATE START: DATE FINISH:	11/19/93
AS A			sove	01	PAGE			INSPECTOR: CONTRACTOR:	J.WC	
SCALE (FT)	VOC./ RAD.	SA NUMBER	MPLE DEPTH RANGE	STRATA SCHEMATIC			PTION OF M STER METH			REMARKS
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CLIENT ACOF : SEAD - 25 BY KES /PFN DATE 7-20-25 SUBJECT Soil Cas Std. Dilutions

BTEX Std. from Scott Specialty Gas

Benzene 51.5 ppm/M Ethylonzene 50.4 Tolvere 50.0 M-Xylene 50.3

50.3 0-Xylene P-Xylene 50.1

Balance Nitrogen

Dilution Formula

1,000,000 × C × V

V = volume of gas required, ul c = desired std. concentration, ppm c = inital gas concentration , ppm V = volume of std. vessel, L

= 1,000,000 × 1ppm × .5L 10,000 1 10 ml

5 ppm 5+d -

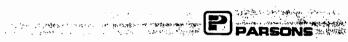
= 1,000,000 x Sppm x .5 L. 50ppm

1,000,000 × 10 ppm × .25L 10 ppm Std -50 ppm · 50 ml

1,000,000 × 20 ppm × .125 L 50.01

100

1000 ppb = 1,000,000 x ..... ppm x .5 L Vega.



100 miles 100 miles 100 miles

COMPOUND NAME PEAK R.T. AREA/PPM

LIENT ACOE - SEAD	72	JOB NO SI	HEET )OF_ 12
SUBJECT Soil Gas		BY KKS / PFM DA	ATE 9-20-95
	•	CKDR	EVISION
		-	
PHOTOLIACI	PHOTOUAC	DUOTOI.	
SEP 20 95 8:11	START # 1	<u>                                     </u>	
F1ELD: 30	316	START # 1	
FOWER: 52 SAMPLE 8.0 10.0	P 2 Page t	3	
SAMPLE 8.0 10.0 CAL 0.0 0.0 EVENT 3 0.0 40.0	P" Repeat  Inj.		
EVENT 4 0.0 0.0 EVENT 5 10.0 50.0	1-,		•
EVENT 5 0.0 0.0 EVENT 7 0.0 0.0 EVENT 8 0.0 0.0		<b>*</b> 1	•
EVENT 8 0.0 0.0			
Column oven @ 30°C			
Flow 7 in/min			
PHOTOVAC	STOP @ 350.0 SAMPLE LIBRARY 1 SEP 20 95 9:10	STOP @ 350.0	If on to so so so at low sp as the sp
START	ANALYSIS # 2 1 PPM STD BLK INTERNAL TEMP 33 1.0 ML INJ	SAMPLE LIBRARY 1 SEP 20 ANALYSIS # 3 1 PPM	STD BLK
}	GAIN 10 SYR P	INTERNAL TEMP 22 1.0 ML BAIN 10 SYR P	143
	OFFSET 71.8 mV CHART SPEED 1 off/fin SLOPE SENS. 4 10 4 mV/Seo	DFFSET 78.8 mU CHART SPEED 1 077/	
}	MINDDW +/- 1 Percent MINIMUM AREA 28 mUSec	SLOPE SENS. 4 10 4 WINDOW +/- 1 Per MINIMUM AREA 20 MUS	cent
	TIMER DELAY 10.0 Sec ANALYSIS TIME 350.0 Sec CYCLE TIME 0 Min	TIMER DELAY 10.0 Sec ANALYSIS TIME 350.0 Sec	
	CYCLE TIME 0 MIN  COMPOUND NAME PEAK R.T. AREA/PPM	CYCLE TIME 0 MIN	
	UNKNOWN 2 61.9 274.2 mUS		AREA/PPN 4 23.7 mUS
STOP # 227.4	UNKNOWN 3 141.8 683,4 mUS		, 20,7 140
SAMPLE LIBRARY 1 SEP 20 95 91 2 ANALYSIS # 1 NO INJ		DUOTO	1007
GAIN 10 ST		PHUTUL	THU .
CUMPOUND NAME PEAK R.T. AREA/PPM		START # 1	
1 11.5 45.3 mUS	·	} # 4	
•		, .	
	* 4	<b>*</b> 5	
	Report Inj.		
	STOP @ 132.5		
	SAMPLE LIBRARY 1 SEP 20 95 9:24 ANALYSIS # 4 I PPM STO BLK INTERNAL TEMP 24 1.0 ML INJ		
	GAIN 10 SYR P		
	COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 2 18.8 52.1 mus		
	UNKNOHN 2 18.8 52.1 mUS UNKNOHN 3 25.2 1.0 US	STOP @ 350.0	
•		SAMPLE LIBRARY 1 SEP 20 ANALYSIS # 5 \$ PPM	STD BLK
	·	INTERNAL TEMP 23 1.0 M GAIN IB SYR P	r Im



5 123.8 4.8 6 268.3 3.1 7 289.8 18.4 8 346.1 4.9

US

V5

CINKNOPA

UNKNOUN

UNKNOUN

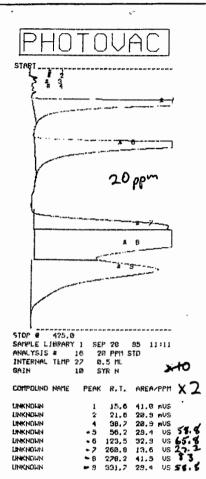
\_OF\_ 12 JOB NO. -SHEET\_ CLIENT\_ PFH DATE 9-20-25 KICS SUBJECT. CKD. REVISION # 2 \* 3 Change events 425 500. STOP # 959.0 SEP 20 95 9:38
SMMPLE LIBRARY 1 SEP 20 95 9:38
ANALYSIS # 6 0 PPM STO BLK
INTERNAL IEMP 24 1.0 ML INJ
GAIN 10 SYR P STOP 8 350.0 SAMPLE LIBRARY 1 SEP 20 95 9:51 ANALYSIS # 8 1.0 PPM STD WITERNAL TEMP 24 8.5 ML STOP @ 350.0 SAMPLE LIBRARY 1 SEP 20 95 10: 3 ANALYSIS # 9 1.0 PPM STD INTERNAL TEMF 25 0.5 ML 12 RIAD SYR N PENK R.T. AREAZPPM COMPOLIND NAME PEAK R.T. PREAZPPM COMPOUND NAME 4 64.7 2.9 VS 5 146.9 2.5 VS 6 238.3 24.5 mVS 53.4 119.9 2.6 VS UNKNOUN 3 UNKNOWN こまえるのだったころまるのまってころのできます。 2.5 VS 1.9 VS 5.6 VS 4 UNKNOWN 262.8 283.8 UNKNOWN BTEX CALIBRATION SEF 20 9:55 POWER: SAMPLE 10.0 ·10 0.0 0.0 CAL. EVENT 3 EVENT 4 EVENT 5 10.0 100.0 10.0 0.0 EVENT 6 EVENT 2 0.0 0.0 0.0 10 cm/-in Edel # 4 M+0 **27**1 P 41 1 PPM STOP 6 425.0 STOP @ 326.1 SAMPLE LIBRARY 1 SEP 20 ANALYSIS # 7 20 PPM INTERNAL TEMP 24 1.0 ML GAIN 10 SYR N STOP # 425.0 SAMPLE LIBRARY 1 SEP 20 95 10:18 ANALYSIS # 10 1.0 PPN STD INTERNAL TEMP 25 1.0 ML 95 20 PPM SID BLK 1.0 ML INU SYR N COMPOUND NAME PERK R.T. COMPOUND NAME PEAK R.T. AREA/PPM UNKNOUN

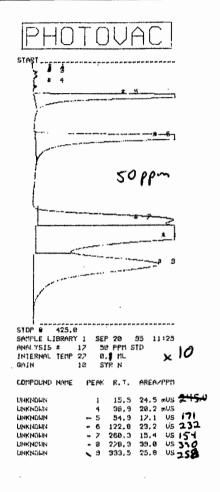


LIENT.	JC	OB NO SHEET_3 OF 10
SUBJECT	B	Y KES PF4 DATE 9-20-98
	c	KDREVISION
PHOTOVAC	PHOTOVAC	PHOTOVAC
# 3	# 3	START
# 4	2 1	a 1
STOP 9 234.5 SAMPLE LIBRARY 1 SEP 20 95 10:23 ANALYSIS 9 11 SYR BLK INTERNAL TEMP 27 1.0 ML GAIN 10 SYR N	STOP 9 231.2  SAMPLE LIBRARY 1 SEP 20 95 12:35  ANALYSIS # 19 SYR BLK  INTERNAL TEMP 20 0.5 HL  GAIN 10 SYR N	-
COMPOUND NAME PEAK R.T. AREA/PPH UNKNOWN 4 148.0 64.6 MVS	COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 4 123,5 24.1 MUS	* 2 # 3
PHOTOUAC	PHOTOUAC	STOP @ 425.0 SAMPLE LIBRARY 1 SEP 20 95 10:52 ANALYSIS # 15 SYR BLK
	***	INTERNAL TEMP 27 1.0 ML GAIN 5 SYR N  COMPOUND NAME PEAK R.T. AREA/PPM  UNKNOWN 2 281.8 265.5 mUS
		:
# B	* 9	
* 18	10 ppm	
STOP 0 125.0 SAMPLE LIBRARY 1 SEP 20 95 10:30 ANALYSIS 0 12 5.0 PPM STD INTERNAL TEMP 26 1.0 ML GAIN . 10 SYR N	STOP # 425.0 SAMPLE LIBRARY 1 SEP 20 95 10:42 ANALYSIS # 14 10 PPM STD INTERNAL TEMP 27 0.5 ML GAIN 10 SYR N	
COMPOUND NAME PEAK R.T. AREA/PPM  UNKNOWN 2 15.9 31.8 mUS UNKNOWN 3 21.0 25.8 mUS UNKNOWN 5 54.8 ~23.3 US UNKNOWN 7 121.1 -22.9 US UNKNOWN 8 257.8 ~11.2 US UNKNOWN 9 275.9 ~52.4 US UNKNOWN 10 329.3 ~24.1 US	COMPOUND NAME PEAK R.T. AREA/PPM  UNKNOWN 6 54.1-18.2 US 37.4  UNKNOWN 7 121.7-19.9 US 39.9  UNKNOWN 8 258.8-11.8 US 22.0  UNKNOWN 9 277.1 44.8 US 89.4  UNKNOWN 10 331.1 20.3 US 49.4	



| SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEET | SHEE



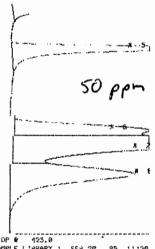




SAMPLE LIBRARY 1 SEP 20 95 11:30
ANALYSIS # 17 50 PPM STD
INTERNAL TEMP 28 0.1 ML
GAIN 10 SYR

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOWN 1 15.4 26.7 mUS



STOP @ 125.8 SAMPLE LIRRARY 1 SEP 20 95 11:36 ANALYSIS # 18 50 PPF STD INTERNAL TEMP 22 9.1 ML GAIN 10 SYR 3

COMPOUND NAME PEAK R.T. AREA/PPM

 SUNKHOLIN
 1
 15.4
 26.7 mUs

 LINKNDLIN
 -4
 55.1
 17.3
 VS 173

 LINKNDLIN
 -5
 123.4
 23.1
 US 171

 LINKNDLIN
 -6
 259.2
 15.1
 VS 171

 LINKNDLIN
 -7
 278.4
 36.9
 US 369

 LINKNDLIN
 -8
 392.3
 24.9
 US 249

SOIL GAS CALIBRATION DATA FOR MIXED BTEX STANDARDS COE ENGINEERING-SCIENCE CLIENT: DATE: PROJECT: Operator: RI SEAD-25 LOCATION: SEAD-25 Instrument Specs: Photoup Type of GC: Column Type: Chart Speed: cm/min 5/10 Sensitivity. 10 M/Min 1850 psi Gas Flow Rate: Tank Pressure: BTEX 20 PPM 0.5 ml Comments: .5 ml Injection -multiplied Arcalppm by 2 Standard: Tedlar Glass Bulb Concentration: or Inj. volume: Analysis #: Time: 1111 Actual Std. Normalized Area Retention Response Delta Injection Vol.(ml) Time (sec.) Analyte: Conc.(ppmV) Conc.(ppmV) (vs) Factor RF +71 58. 56.2 123.5 Benzene 20.6 0.5 m 10.5 -36.34 Toluene 10.0 0.30 Ethylbenzene 260.6 0,74 20.16 10.8 340 83 340 83 258 58.8 O-Xylenes M-Xylenes 276.2 0.24 20.17 + Area (vs); Actual Std. Conc. is to be obtained from analysis of gas standard;

BTEX

Tedlar

Tedlar

Tedlar 20.2 0.24 P-Xylenes 20.04 Notes: RF = Conc. Conc. normalized to 1 ml injection. Comments: but multiple ! The Standard: Concentration: Inj. volume: 0.5 M Analysis #: Time: 10:42 Actual Std. Normalized Area(x x) Retention Delta Injection Response RF Conc.(ppmV) Vol.(ml) Conc.(ppmV) (vs) Time (sec.) Factor 5.15 5.00 37.4 54.1 0,27 Benzene 10.3 0.5 ~ Toluene 10.00 121.7 258.8 2)7.1 0.25 Ethylbenzene 10.08 5.04 22.0 0.46 O-Xylenes 10.06 5.03 84.6 0.11 277.1 M-Xylenes 10.06 5.03 89.6 0.11 Area (vs); Actual Std. Conc. is to be obtained from analysis of gas standard; 6.24 P-Xylenes 10.02 Notes: RF = Conc. Conc. normalized to 1 ml injection. BTEX 5 PP Standard: Comments: Tedlar Glass Bulb Concentration: Inj. volume: <u>ml</u> Analysis # 10:30 Time: Delta Actual Std. Injection Normalized Area Retention Response Conc.(ppmV) Time (sec.) Factor RF Vol.(ml) Conc.(ppmV) (vs) Analyte: 0.28 0.28 0.45 0.096 0.096 0.208 5.000 54.0 Benzene 5.15 <u>l</u>ml Toluene 5.00 MI 5.004 5.04 Ethylbenzene /mi O-Xylenes 5.03 5.03 IN M-Xylenes 5.03 52.4 5.03 M P-Xylenes 5.01 5-01 m Conc. normalized to 1 ml injection. Notes: RF = Conc. Actual Std. Conc. is to be obtained from analysis of gas standard;

5ppm

30 lbv

	SOIL GAS	CALIBRATIO	ON DATA FO	R MIXED B	TEX STAN	DARDS	
ENGINEERI	NG-SCIENCE		CLIENT: A	COE	DATE:	1/20/95	
PROJECT:					Operator:		
LOCATION:							
		······································			1		in the second
Standard			75-11-	- D. II	Comments:		
Concentration			Tedlar or G	lass Bulb	4		
Inj. volume Analysis #		<u>.                                    </u>			-		
Analysis #					-		
111110	. 20,11	0			L		
ŀ	Actual Std.	Injection	Normalized	Area	Retention	Response	Delta
Analyte:		x Vol.(ml) =	Conc.(ppmV)	(vs)	Time (sec.)	Factor	RF
Benzene	\$451.03		6471.03	4.9	53.8	0-21	
Toluene	5001.0	LMI	10001.0	4.8	123.8	0.21	
Ethylbenzene	\$64401.008	LANA	55741.008	3.1	268.3	6.325	
O-Xylenes /,	006 40 150.3	Inl	200,181,000	10.4	289.8	0.00	>
M-Xylenes /.	100 <del>36 3</del>	IM	99731.00b	10.4	289.8	0.09	7
P-Xylenes	##41.002	IM	50011.002	4.9	3461	0.20	
Notes: $RF = 0$		s); Actual Std. C	onc, is to be obtained	from analysis of ga		onc: normalized to	1 ml injection.
Standard				2	Comments: 0	I mal To inc	tion -
Concentration		<u> </u>	(Tedlar) or G	ass Bulb	A-0 / 00	m multiplied	h. 10x
Inj. volume		<u>. l</u>			711000/ //	n monghice	<i>by</i> 102
Analysis #	The state of the s	18			_		
Time	·	36			<u> </u>		
	Actual Std.	Injection	Normalized	A	Retention	Dasmana	Delta
Analyte:	Conc.(ppmV)	x Vol.(ml) =	Conc.(ppmV)	Area (vs)	Time (sec.)	Response Factor	RF
Benzene	51.5	0.1 51	5.15	173	55.1	0.29	Kr .
Toluene	50.0	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2.0	23)	123,4	0.24	····
Ethylbenzene	50.7		5.04	151	259.7	0.33	
O-Xylenes	50.3		5.03	369	278,4	0.13	
M-Xylenes	50,3		5.03	369	278.4	0.13	
P-Xylenes	50.1	V	5.01	249	3323	0,20	.,
Notes: DE - C		Actual Std C	and is to be obtained	from analysis of so		no normalized to	1 ml injection

PAGE 2 OF 2

1ppm

50ppm

BJECT	ACOE Calibration ( 2,5,10,20,				es /PFn	SHEET OF OF DATE REVISION
° (a)	50	8	Anca Vsec		200	250
5.	+ 1					
20	+ 50		Princi	Constitution of Contractions		
30						

0

口

A : Berzere

0 = Tolvere

+ = Ethylbersere

II = P xylmes

mangang at manganggapanggapanggapanggapanggapanggapanggapanggapanggapanggapanggapanggapanggapanggapanggapangga Manganggapanggapanggapanggapanggapanggapanggapanggapanggapanggapanggapanggapanggapanggapanggapanggapanggapangg

CLIENT\_

SUBJECT\_

PARSONS \_ SHEET\_S JOB NO. \_\_ KKS / PFM

CKD	REVISION

DATE \_\_\_

# 5 # 6 # 7 # 10 STOP 9 415.2 STOP 9 418,2 SAMPLE LIBRARY I SEP 2P 95 11:59 ANALYSIS # 19 SYR BLK INTERNAL TEMP 27 9.5 ML GAIN 12 SYR A

START # ... STOP 6 425.0 SAMPLE LIBRARY 1 SEP 20 35 12: 9 ANALYSIS # 21 SYR BLK INTERNAL TEMP 28 1.0 ML GAIN 10 SYR F COMPOUND NAME PEAK R.T. - AREA/PPM UNKNOWN 5 251,8 36,2 mUS

< Changed 444 # 9 # 10 # 13 # 19 STOP 9 323,4
SAMPLE LIBRARY 1 SEP 20
ANALYSIS 1 SYR BLK
INTERNAL TEMP 29 1,0 ML
GAIN 10 SYR G. SEP 28 95 13:17 COMPOUND NAME PEAK R.T. AREAZPPM UNKHOWN 1 48.6 426.3 mUS 1 40.0 420.3 mod 10 229.7 30.6 mUS 11 255.8 21.5 mUS 13 314.9 39.3 mUS UNKNOWN UNKNOWN DNKHOWN

START # 1 # 3 1 163.5 SAMPLE LIBRARY 1 SEP 20 95 12: 2 ANALYSIS 4 20 SYR BLK ANALYSIS # 20 SYR BLK INTERNAL TEMP 30 1.0 ML GAIN 10 SYR H COMPOUND NAME PEAK R.T. AREAZPPM

COMPOUND NAME PEAK R.T. AREA/FFT

START # 1 # 2 # 3 STDP 9 268.2 SAMPLE LIBRARY 1 SEP 20 95 12:52 22 SYR BLK P 28 1.0 ML 10 SYR J ANALYSIS # INTERNAL TEMP 28 COMPOUND NAME PEAK R.1. AREA/PPM

# 5 STOP 9 495.7 SMMPLE LIBRARY 1 SEP 20 95 19123 ANALYSIS 8 2 SYR BLK INTERNAL TEMP 30 0.5 ML 10 SYR B GAIN

COMPOUND MANE PEAK R.T. AREA/PPM

5 265.8 51.3 mUS UNKNOWN



CLIENT		JOB NO SHEET 6 OF 12
SUBJECT		BY KKS PFM DATE 9-20-35
		CKDREVISION
PHOTOUAC	PHOTOUAC	PHOTOVAC
# 5		STABI # 1
A 5	# 2	<b>1</b> 8
		1 6
# B	# 3	* 5 SG1-1
SAMPLE LIBRARY 1 SEP 20 95 13:29 ANALYSIS # 9 SYR BLK INTERNAL TEMP 91 1.0ML GAIN 10 SYR E		
COMPOUND NAME PEAK R.T. AKEA/FPM		
UNKNOWN 6 259,3 46.1 m/s	GAIN 10 SYR L  GAIN 10 SYR L  GAIN 10 SYR L  GAIN 10 SYR L	STOP # 425.0 SAMPLE LIBRARY 1 SEF 20 95 14:19
PHOTOUAC	COMPDUND NAME PEAK R.T. AREA/PPM UNKNOWN 3 25/.8 73.1 mUS	AMPLYSIS # 0 501-1 INTERNOL TEMP 41 1.0ML GOIN 20 SYR F COMMOUND NAME PEAK R.T. AMEA/PPM
	PHOTOUAC	UNKNOWN 2 16.7 682.3 mUS W 19KNOWN 3 20.9 41.2 mUS 1.8 UNKNOWN 5 120.2 1.1 US W 19KNOWN 5 221.3 376.7 mUS 19KNOWN 9 254.3 386.7 mUS
# 4	STANT # 1	2.5 vs 0.7 vs
		PHOTOVACI
# 5	4 4	START 4
# 6		я 4
• 7	<b>*</b> 5	
STDP # 401.2 SAMPLE LIBRARY 1 SEP 20 93 13:36	# 6 # 2	. u s 
ANALYSIS # 4 SYR BLK INTERNAL TEMP 31 10 SYR T	4 6	a 11
COMPOUND NAME PEAK R.T. AREA/PPM	STOP # 125.0	STOP @ 297.9 SAMPLE LIBRARY   SEP 20 95 14:24
	SAMPLE LIBRARY I SEP 20 95 13:50 ANALYSIS 0 5 SYR BLK INTERNAL TEMP 31 1.0ML GAIN 10 SYR K	ANALYSIS # 9 SYP BLK INTERNAL TEMP 32 1.0ML GAIN 20 SYR F
	COMPOUND NAME PEAK R.T. MREAZPPM	COMPOUND NAME PEAK R.I. AREA/PPM UNKNOWN 1 4.2 25.4 mUS

2 15.4 20.8 mUS 5 256.3 25.1 mUS

DHKNOPH DHKNOPH

LIENT		JOB NO.	SHEET 7 OF 12
SUBJECT		BY KKS PEM	DATE 9-20-95
		CKD.	REVISION
PHOTOVAC	PHOTOVAC	PH(	TOVAC:
steet # 2	STARI	START	
# 4	SIDP 0 234.9  SMMFLE LIBRARY 1 SEF 20 95 14:36 ANALYSIS # 11 SYR BLK INTERNAL 1EMP 33 1.0ML GAIN 20 SYR F  COMPOUND NAME PEAK R.T. AREAZPPM UNKNOWN 1 440 26.2 mus UNKNOWN 2 13.2 25.0 mus	STOP @ 17. SAMPLE LIAK ANALYSIS # INTERNAL TE GAIN	7,0 ARY 1 SEP 20 55 14:48 13 SYR BLK MP 94 1.0ML 20 SYR J ME PEAK R.T. AREAZPPM
STOP # 425.8 SAMPLE LIBRARY 1 SEP 2R 95 14: 4 ANALYSIS # 7 SYR BLK INTERNAL TEMP 31 1.0ML GAIN 12 SYR M. COMPOUND NAME PEAK R.T. AREA/PPM UNKROWN 1 15.4 23.7 MUS	FHCTCUAC START # 1	FHI stept.#	OTOVAC Ø
Ambient	5 SG1-3		5 SG1-4
STDP 8 425.0  SAMPLE LIBRARY 1 SEP 20 95 14132  AMALYSIS# 10 AMB. AIR INTERNAL TEMP 32 1.0TL  GAIN 20 SYR F  COMPOUND NAME PEAK R.T. AREA/PPM  LINKNOUN 1 4.0 25.6 mUS LINKNOUN 3 16.5 9.1 US W LINKNOUN 4 69.7 72.9 mUS LINKNOUN 5 117.7 1.8 US W	STOP @ 425.0 SAMPLE LIBRARY 1 SEP 20 95 14144 ANALYSIS # 12 S01-3 INTERNAL TEMP 92 1.0ML GAIN 20 SYR J COMPOUND NAME PEAK R.T. AREA/PPM LINKNOUN 2 16.8 14.0 US LINKNOUN 3 69.5 65.4 mUS LINKNOUN 4 118.5 1.7 US LINKNOUN 4 118.5 1.7 US LINKNOUN 5 259.3 144.1 mUS	ANALYSIS INTERNAL GAIN  COMPOUND UNKNOUN UNKNOUN UNKNOUN UNKNOUN UNKNOUN UNKNOUN	38ARY 1 SEP 20 35 14:55 # 14 SQ1-4 TEMP 33 1.0ML 20 SYR H



3.8 45 x 2

1 = = 1

SHEET FOF 12 CLIENT\_ JOB NO. -PFM \_ DATE\_ S-20-15 BY. SUBJECT\_ CKD. REVISION. 4 5 \$ \$ # 9 # 10 | STOP # 387.8 SAMPLE LIBRARY 1 SEP 20 95 15:28 ANALYSIS # 13 SYR BLK INTERNAL TEFM 24 1.0 ML GAIN 20 SYR G | STOF 0 313.2 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15:15 | SEP 22 95 15: 1 510 P 337.9

SAMPLE LIBRARY 1 SEP 20 95 15: 0

ANALYSIS 4 15 SYRF BLK

INTERNAL TEMP 42 1.0HL

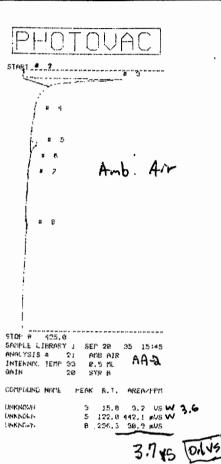
GAIN 20 SYR H COMPOUND NAME PEAK R.T. AREAZPPM COMPOUND NAME PEAK R.T. AREA/PPM UNKKONK 3 24.5 21.8 mUS 2 : 16.0 46.9 mVS 5 255.8 79.9 mVS UNKNOWN 3 266.8 85.4 mVS HINKNOWN COMPOUND NAME PEAK R.T. AREA/PPM FHKHDMM 3.8 22.3 mUS 4 28.2 42.9 mUS 10 255.3 49.1 mUS UNKNOWN STAPT # - 2 34 . 3 9 12 # 11 # 11 561-5 SG1-6 561-7 # 12 # 13 # 13 # 14 STDP @ 425.2 SATPLE LIBRARY 1 SEP 20 95 15:36 STOP # 425.0 SAMPLE LIBRARY | SEP 20 95 15:22 STOP # 425.0 SAMPLE LIBRARY 1 SEP 20 95 15: 8 SG1-6 1.0 ML SYR G 501-7 B.5 ML ANALYSIS # 18 ANALYSIS # 16 INTERNAL TEMP 93 561-5 0.5 ML INTERNAL TEMP 33 INTERNAL TENE 93 20 'SYR A 14 COMPOUND NAME PEAK R.T. AREAZPPM COMPOUND NAME PEAK R.T. AREAZPEM COMPOUND NAME PEAK R.T. AREA/PPM 2 7.2 25.3 mUS 3 15.6 2.9 US W 9 110.1 46.1 mUS 10 113.9 595.1 mUS W 11 157.1 40.0 mUS 12 256.3 285.2 mUS 1 3.5 20.2 MUS 2 16.1 8.0 US W 3 78.1 44.5 MUS חאאטפיא NKHONH 3 15.9 145.5 MUS 4 28.7 228.6 MUS W 11 124.4 133.8 MUS W 12 256.3 463.8 MUS UNKNOWN UNKNOWN IJNKNOWN UNKNOUN 4 119.6 737.4 MVS W 5 254.3 132.5 MVS **LINK**HDUN LINKNOUN UNKNOUN UNKNOUN UNKNOW 13 296,3 22,7 mUS DHKNOHN INKNOUN 8,9305

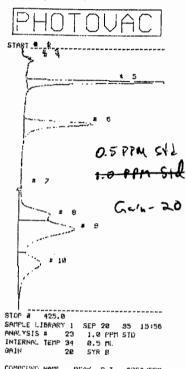
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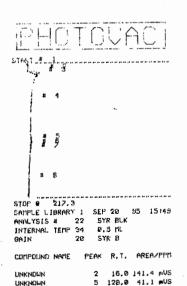
LIENT	JOB NO	SHEET_ 0F_/2_
SUBJECT	BY KKS PFM	DATE 9-20-95
	CKD	REVISION





COMPOUND N	ME PEAK	R. T.	AREA	/PPM
<b>UNKNOWN</b>	4	20.4	41.3	mUS
ピスススロごス	5	53.4	5.3	บร
ころ不ろりだろ	6	123.8	5.0	US
ごろ不るのにろ	8	224.3	4.4	US.
UNKNOWN	é	286.3	10.2	US
UNKNUKN	10	351.5	5.0	US

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STOP 0 425.8
SAMPLE LIBRARY 1 SEP 20 95 16.5 ANALYSIS # 24 SYR BLK
INTERNAL TEMP 33 0.5 PL
GAIN 20 SYR B
COMPOUND NAME PEAK R.T. AREAZER
UNKNOWN 1 5.0 22.9 mUS
UNKNOWN 2 6.6 26.3 mus
UNKNOWN 3 16.1 368.1 mUS
UNKNOWN 4 18.3 191.6 #US
UNKNOWN 5 20.4 134.4 mUS
UNKNOWN 12 406.2 25.3 mUS



**UNKNOWK** UNKNOWN

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IT	JOB	NO.	SHEET 10 OF 12
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	CKD		REVISION
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START 4 R	START # 4	START _	2
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STOP @ 425.0 SAMPLE LIBRARY 1 SEP C0 05 16:10	STOP # 425.0 SAMPLE LIBRARY 1 SEF 20 95 16:26	STOP & SAMPLE L	425.0 IBRARY 1 SEP 20 95 16:43
ANALYSIS # 25 S01-9 INTERNAL TEMP 30 1,8 mL	ANALYSIS # 27 SYR BLK INTERNAL TEMP 33 1.2 ML GAIN 20 SYR E		# 29 SYR BLK TEMP 32 1.0 ML 20 SYR F
GAIN 20 SYR E  COMPOUND NAME PEAK R.T. AREA/PFM	COMPOUND NAME PERK R.T. AREA/PPM		NAME PEAK R.T. AREA/PPM
UNKNOWN 2 1.3 20.2 mUS UNKNOWN 5 12.1 11.8 US W 7	UNKNOWN 1 4.1 27.4 mVS UNKNOWN 6 254.3 171.8 mVS	האגאסמא האגאסמא	1 3.4 40.0 mUS 5 187.3 67.4 mUS
UNKNOWN 5 68.9 28.2 MUS W	PHOTOUAC.	1.NKWDHW	6 250.8 25.6 mUS
13.16 VS 0.46 VS	START # 1		HU I UVAL I P
(377-77)	13 13	STAST	1.2
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***	V	<b> </b>	# 6
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Re-Flush		,	` , \$61-9 <b>⊅</b>
84x =	* 5 SG1-9	<b>\</b>	* 8
	# <b>9</b>		
# 5 STOP 9 209,1	# 18		- AMERICA
SATIFLE LIBRARY 1 SEP 20 95 16:19 ANALYSIS # 26 SYK BLK INTERNAL TETP 95 1.0 ML	V(2.08 ■ 11 <sup>(2)</sup> ≥ 3	j	
GAIN 20 SYR E			424 5
GAIN 20 SYR E  COMPOUND NAME PEAK R.T. AREA/PPM	STOP # 425.8	STOP @	727.5
GAIN 28 SYR E COMPOUND NAME PEAK R.T. AREA/PPM	SAMPLE LIBRARY SEP 20 95 16:35	SAMPLE L ANALYSIS	.IBMARY 1 SEP 20 95 16:52 5 # 30 SG1-9D
GAIN 28 SYR E  COMPOUND NAME PEAK R.T. AREA/PPM  LANKNOWN 2 16.6 1.4 US  LANKNOWN 4 123.5 157.6 AUS	SAMPLE LIBRARY : SEP 20 95 16:35	SAMPLE I ANALYSIS INTERNAL GAIN	JBNARY 1 SEP 20 95 16:52



IENT		JOB NO.	SHEET 11 OF 12
JBJECT	· · · · · · · · · · · · · · · · · · ·	BY KIES / PFM	DATE 5-20-95
		CKD	REVISION
PHOTOUAC	PHOTOVAC		
START # 1	STAST # 1	<u>F-F-IL</u>	HUVAC:
# 3		STAGT _#2	
		. 3	
# 4 # 5	# 3	# 4	
1 . 6	# 4		
	1 # 5		
) # 7	* 5	# 5	-
STOP # 300.5 SAMPLE LIBRARY 1 SEP 20 95 18:57			
ANALYSIS 0 31 SYR BLK Internal 1emp 33 1.0 ml Gain 20 Syr H		SAMPLE LIBRAR	Y 1 SEP 20 95 17:28
COMPOUND NAME PEAK R.T. AREA/PPM	CT00 0 405 0	INTERNAL TEMP	35 SYN BLK 35 1.0 ML 20 SYR J
UNKNOUN 4 117.1 25.7 mUS	SAMPLE LIMPARY 1 SEP 20 95 17:13 ANALYSIS # 99 SYR BLK INTERWAL TEMP 99 1.0 ML GAIN 20 SYR M	COLFIDAND NAME	PERK R.T. AREAZPPM
PHOTOUAC 0	COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 1 4.2 20.2 mUS		TOUAS! 4
START _#	UNKNEWN 2 16.7 21.1 mVS	START #	IUVAL, 9
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	f	, · ·	
J " 5 SG1-10	<b>1</b> • •	= 4	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	592-10		SG a-9
		, n 5	
	# 6	# 7	
	1 2		
STOP 9 425,0 SAMPLE LIBRARY 1 SEP 20 95 12:4		# 8	
Analysis # 32 sg1-18 Internal Temp 33 1.0 ml Gain 20 syr n		STOP @ 425. SAMPLE LIBRAR ANALYSIS #	Y 1 SEP 20 95 17:36 36 SG2-9
COMPDUND NAME PEAK R.T. AREA/PPM  UNKNOWN 1 2,7 22,4 mUS	STOP # 425.0 SAMPLE LIBRARY ! SEP 20 95 17:21 ANALYSIS # 34 SG2-10	· INTERNAL TEM GAIN COMPOUND MAN	20 SYR T
UNKNOUN 2 17.5 21.2 US W 21.4 UNKNOUN 3 29.9 556.8 MUS W 101KNOUN 4 119.3 566.8 MUS W	INTERNAL TEMP 33 1.0 ML BAIN 20 5YR J	UNKNOHN UNKNOHN	1 3.5 21.4 mUS 2 18.1 18.4 US W \
1 1 1 2 2 3 3 2 2 2 2 6 mus 2 2 3 3 3 2 7 4 mus 2 3 3 3 3 3 3 5 4 mus 2 3 3 3 3 5 4 mus 2 3 3 5 6 7 5	COMPOUND NAME PEAK R.T. AREA/PPF  UNKNOWN 2 17.0 13.7 US  UNKNOWN 3 30.0 2.3 US	trialities to	3 121.7 535.5 NUS W 5 255.3 525.4 NUS
11.1vs 23,042	UNKNOWN 6 253.3 423.8 mVS	: <b>W</b>	(9)

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PARSONS

_	CLIENT		SHEET 12 OF T
)	SUBJECT	BY KIRS/PFN	DATE 5-20-55
		CKD	REVISION

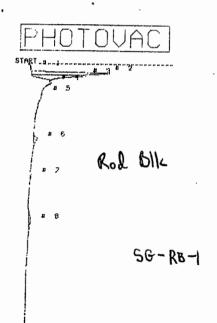
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SG1-11 } not collected

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PHOT	OVAC
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# 7	
\$ 8 STOP 6 202.6	
SAMPLE LIBRARY 1 ANALYSIS # 37 INTERNAL TEMP 34 GAIN 20	SEP 20 95 17:40 SYR BLK 1.0 ML SYR T

COMPOUND NAME PEAK R.T. AREAZPPM



STOP @ 425.0

STOP @ 425.0

SAMPLE LIBRARY 1 SEP 20 95 12:52

ANALYSIS # 38 SG-RB |

INTERNAL TEMP 32 0.5 ML

GAIN 20 SYR A

COMPOUND NAME PEAK R.T. AREA/PPM

UNKNOUN 1 7.9 24.8 NUS LINKNOUN 2 15.8 2.1 US W 2.3 UNKNOUN 3 20.0 1.3 US W 2.3 INKNOUN 6 123.2 186.3 NUS W INKNOUN 8 256.8 259.0 NUS W

End of Day

1 ml equivalent

3.2 44

LIENT	ACOE	: SEA	D 25		JOB NO	SHEETL_OF(
SUBJECT	Soil G.	s Std.	Dilution	Calculations	BY	DATE 9-21-85
					CKD	REVISION

Over pre-heated to 30°C

Scott Specialty Gases - BTEX Std.

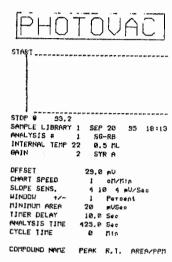
Calibration Dilutions: 20 ppm Std =

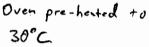
BTEX Std. Injections:

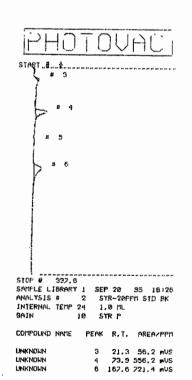
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CLIENT	ACOE - SEAD 25	JOB NO	SHEET   OF 17
SUBJECT	Soil Gas	BY KKS/PFM	DATE 9-21-95
		CKD	REVISION







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START # 15

# 4

# 5

STEP # 236.5

SAMPLE LIBRARY 1 SEP 20 95 18:31

ANALYSIS # 3 SYR-20PPY STD BK

INTERNAL TEMP 27 1.0 ML

GAIN 10 SYR 0

COMPOUND NAME PEAK R.T. AREA/FPM

UNKNOUN 1 6.1 34.5 mUS

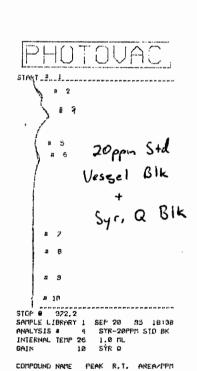
UNKNOUN 4 39.6 47.2 mUS

UNKNOUN 5 64.3 1.4 US

UNKNOUN 5 64.3 1.4 US

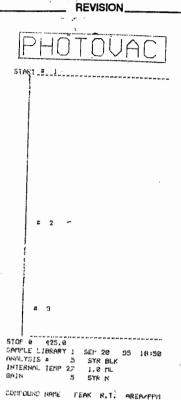
UNKNOUN 6 111.5 32.6 mUS

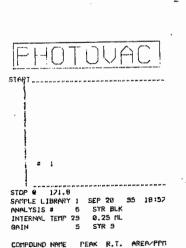
UNKNOUN 7 147.2 1.6 US
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2 27.7 91.5 mUS 3 56.2 56.7 mVS 6 131.6 99.1 mVS 8 290.8 55.7 mVS

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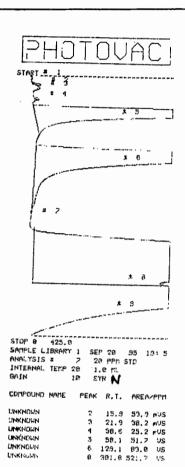




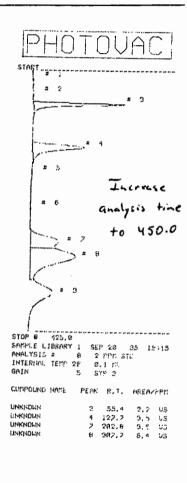


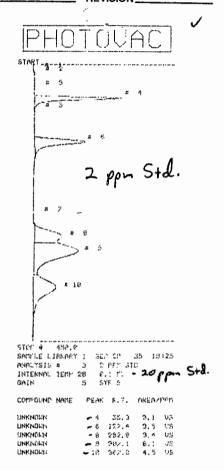
ACOE - SEAD 25 SHEET\_2 CLIENT\_ JOB NO. \_ Soil Gas KICS / PFM DATE 9-21-95 SUBJECT\_

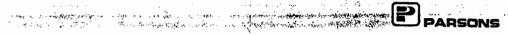
> CKD. REVISION



UNKNOUN UNKNOWN



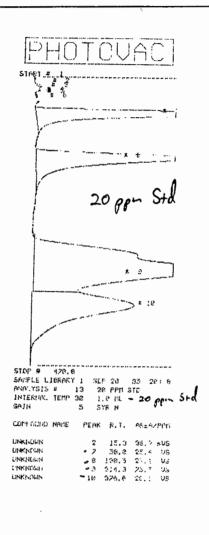


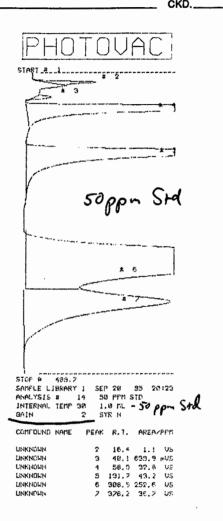


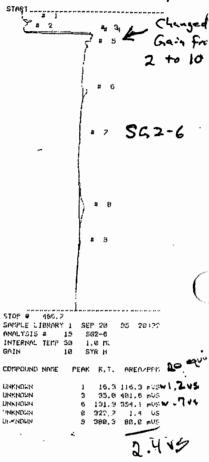
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SHEET 3 OF 17 CLIENT\_ JOB NO. -KES/PFN DATE 9-21-95 SUBJECT. START 4 **#** 3 **#** 3 # 3 5 10 ppm Std 5 ppm Std 500 sec. # 9 STOP @ 450.0 STOP & 450.0 SAMPLE LIBRARY 1 SEP 20 95 19:41 5TOP 8 450.0 SOTPLE LIBRARY 1 SEP 20 95 13:34 ANALYSIS # 10 5 PPM STD INTERNAL TEMP 29 8.25 ML - 20 ppm Std GAIN 5 SYR 9 STOP # 482.5
SMPTLE LIBRARY 1 SEP 28 95 28: 8
ANALYSIS # 12 18 PPH STD
INTERNAL TEMP 23 8.5 ML • 20 ppm Std.
GAIN 5 SYR N ANALYSIS # 11 INTERNAL TEMP 28 10 PPM STD P.5 ML GAIN 5 SYR N COMPOUND NAME COMPOUND NAME PEAK R.T. ARENZPEN PEAK R.T. AREAZEPM . 4 55.2 6.4 Us .5 126.9 6.6 Us .6 285.8 6.3 Us .2 318.7 15.3 Us .8 371.2 9.4 IE 4 . 36.2 12.8 US 5 123.5 11.6 US 6 282.3 8.9 US 7 912.5 23.3 US LINK: Diate UNKNOWN COMPOUND NAME FEAK R.T. AREAZPEM **NNKNOME** UNKNOWN DUKNOWN UNKNOPE UNKNOPE UNKNOW 57.2 12.7 95 ENKAOSIN IINKAOSIN 131.6 11.9 US 298.6 6.5 US 316.1 24.8 US 276.8 15.1 US - 5 - 6 - 7 **UNKHOWN** Duknomu UNKHOUN **FINKNOWN** 

		SHEET 4 OF 17
SUBJECT	BY KKS/PFN	DATE 9-21-95
· · · · · · · · · · · · · · · · · · ·	CKD	REVISION_





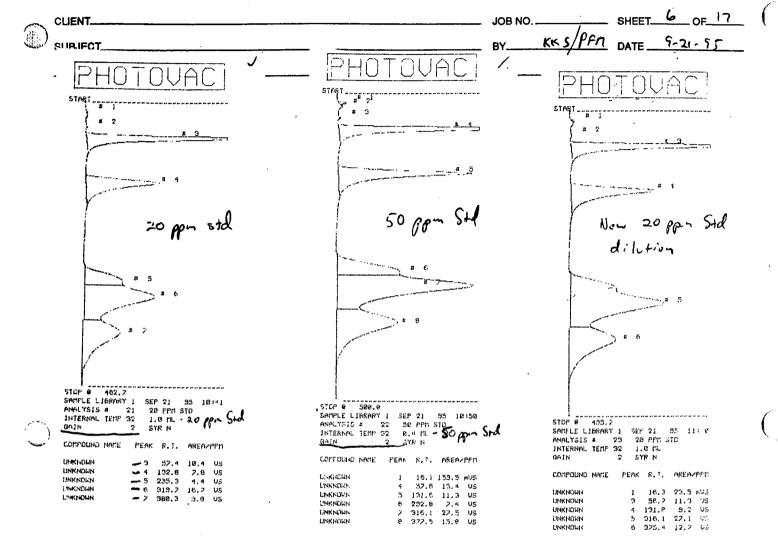


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LIENT	JOB NO	SHEET 5 OF 17
SURIFOT	BYK	KS / PFM DATE 4-21-35
PHOTOUAC	PHOTOUAC	PHOTOUAC 6
n 2	* 3	n 4 n 5
	1 4 SG2-7	562-8
# 9 # 4	# 5 # E	u fi
	# 7	
STEP 0 455.4 SAFFLE LIBRARY 1 SEP 21 95 9:96 PANTISIS # 18 SYR BLK INTERNAL TEMP 31 1.0 ML GAIN 18 SYR H	# 8 STEE # SOM.R SMEEL LIFENARY 1 SEP 21 35 10: 3	; STOP \$ 454.4 SOFFILE LIBRERY : SEP 21 95 12-18 ANALYSIS # 19 SO2-8 INTERNAL TEMP 92 1.0 ML GAIN 10 SYR J
CORPOUND NAME PEAK R.T. AREA/Phy.  UNKKUDAN 3 237.8 48.0 mus  UNKNOUN 4 323.3 41.0 mus	ANALYSIS # 12 SB2-2 INTERNAL TERM 9: 1.0 FB. GAIN 10 SYR E COMPOUND NAME PEAK R.T. AREAZPPM	COMPOUNT NAME PEAK R.T. AREA/IPY  UNKNOWN 2 15.4 9.7 USW 3 4.4 1 126.8 29.7 mUSW
	LIRKIDAN 2 16.4 3.6 US W 3.9 (1886) CHRISTIAN 5 129.8 329.8 m/JS W 7.849 CHRISTIAN 5 291.8 78.5 m/JS (1886) LIRKICAN 6 319.1 296.3 m/JS (1886) CHRISTIAN 7 328.2 188.8 m/JS	DINKHOLIN   6 202.9 32.7 ***
	CG. N 20 = 8.9V5 44 VS = (1.0V3)	START # (C.8)
	START.#i	я 5
	r 3	
	g 4	n 3
	# 5 # 6 STDP 9 322,5	4 4
	SAMPLE LIBRARY 1 SEP 21 95 10:11 ANALYSIS # 18 SYR BLK INTERNAL TEMP 32 1.0 ML GAIN 10 SYR E	# 5
· · · · · · · · · · · · · · · · · · ·	CDTPOUND NAME FEAK R.T. AREA/PPM UNKNOUN 5 276,3 98.4 MUS UNKNOUN 6 315.5 28.9 MUS	STOP 0 SQD.0  SAMPLE LIBRARY 1 SEP 21 95 10:27  ANALYSIS # 20 SYR BLK  INTERNAL TEMP 32 1.0 ML 2  GAIN 10 SYR J  *COMPOUND NAME PEAK R.T. AREA/PPM





	SOIL GAS C	ALIBRATI	ON DATA FO	R MIXED BT	EX STANI	DARDS	
ENGINEERII	NG-SCIENCE		CLIENT: AC	06	DATE: 9	121/95	
PROJECT: ()	emedial =	toward -	12:		Operator:	2/00	
LOCATION:			TICON		K	3/Ptm	:
LOCATION:	SEAD -	ょて		i		$\mathcal{A}$	
	20 110 "	<i>^</i> 3				- *	
					-		
Instrument Specs:	$\sim 1$					-	
Type of GC:	. Photo	DUAC					
Column Type:		11-5					
Chart Speed:		/min					
Gain		/	,				
Sensitivity: Gas Flow Rate:		10 ml/	Man				
Tank Pressure		0 051					-
		<del>- / - /</del>					
Standard					Comments: 50	4. × wag	= 20 ppm
Concentration Inj. volume				Blass Bulb		11	1 11
Analysis #		Mel Com			(start u	Ah 20 pr	m polls
Time		5				-	
						_	
A	Actual Std.	Injection	Normalized	Area	Retention	Response	Delta
Analyte: Benzene	Conc.(ppmV)	x Vol.(ml)	= Conc.(ppmV)	(vs) 3, (	Time (sec.) 5 5 5 7 3	Factor	RF
Toluene	20.00	01	2,00	3,5	127.4	0.57	
Ethylbenzene	20.16	6.1	2.16	3.5	282.8	0,62	
O-Xylenes	80.18	0.1	a.01	8.1	307,1	0,25	
M-Xylenes P-Xylenes	<u>30. (2</u>	01	3.01	8.1	307.1	0,25	
Notes: RF = 0	20.04 Conc. + Area(v	S): Actual Std. (	Conc. is to be obtained	from analysis of gas	<b>367,0</b>	nc. normalized to	o 1 ml injection.
Standard	The second secon	1/_/			Comments:		,
Concentration		PPM		lass Bulb	Colin	· h	any lastly
Inj. volume:		(Dain-	· S		(SAMLA	with zo	there more
Analysis #: Time:		<u>o</u>		•			
	1607						
1	Actual Std.	Injection	Normalized	Area	Retention	Response	Delta
Analyte:		x Vol.(ml)	= Conc.(ppmV)	(vs)	Time (sec.)	Factor	RF
Benzene Toluene	20, 6	0,25	5,15	<b>5.4</b>	55.7	- Use	
Ethylbenzene	20.00	<del>                                     </del>	5-07	6.6	285.8	0.80	
O-Xylenes	20,12	725	5-03	15.3	310,7	().33	
M-Xylenes	20,12	0.25	5,03	15.3	310.7	0.33	
P-Xylenes	20,04	0.25	1 5.01	9.4	371,2	0.53	
Notes: $RF = 0$			Conc. is to be obtained	from analysis of ga	s standard; Co	nc. normalized to	o 1 ml injection.
Standard:		<u>m</u>		11 17 10	Comments:		
Concentration: Inj. volume:				Blass Bulb			
Analysis #		· · · · · · · · · · · · · · · · · · ·	* 4				
Time		)					
						_	
	Actual Std.	Injection	Normalized	Area	Retention	Response	Delta RF
Analyte: Benzene	Conc.(ppmV) 20.6	x Vol.(ml)	= Conc.(ppmV)	(vs) <del>57.</del> 7 12.7	Time (sec.)	Factor O. 91	7.7
Toluene	20.00	+	10.00	131-6, 11.0	14.0 131.6	0.91	
Ethylbenzene	20.16		10.08	<del>210-8</del> 8.5	\$ 290.8		
O-Xylenes	20.12		10.06	316-124.0	74 316.1	0.42	
M-Xylenes	20.12		10.06	3-15-1 24.0	316.1	0.42	
P-Xylenes	20.04	m) . Agree 1 54-4	20.02 Conc. is to be obtained	from analysis of ga	374.8	onc. normalized t	o 1 ml injection
Notes: $RF = 0$	Conc. + Area (v	a) , racidal sid.	Conc. is to be obtained	i ii oin anaiysis ot ga	o ocanical u , C	normanzeu t	o a ma mileonolli

	a deli deli deli deli deli deli deli deli	THE RESERVE TO STREET, AND ADDRESS OF THE PARTY AND ADDRESS OF THE PART	Sections properties in the second		del Constant de la co		
	SOIL GAS	CALIBRATIO	ON DATA FO	R MIXED BI	EX STAN	DARDS	
ENGINEERII	G-SCIENCE		CLIENT:	ROF	DATE:	921	95
PROJECT: LOCATION:	Remedi SEAD-	al Ime	estigati	an.	Operator:	n sesser Line and	
Standard Concentration Inj. volume Analysis # Time			Tedlar or (	Glass Bulb	Area adjuby multi	ain @12 sted to pling (X2	Ge: @5
Analyte:	Actual Std. Conc.(ppmV)	Injection x Vol.(ml) =	Normalized Conc.(ppmV)	Area (vs)	Retention Time (sec.)	Response Factor	Delta RF
Benzene	20.6	1.0	20.6	10.4 (x2.5)=26	57.4	,79	
Toluene	20.0		20.0	7.8 ( = 19.5		1.02	
Ethylbenzene	20.16		20.16	4.4 = 11	295.3	1.83	
O-Xylenes	20.12		20.12	16.7 = 41.75		0.48	
M-Xylenes	20.12	1-()	20.12	16.7 1 =41.75		0.48	
P-Xylenes	20.04	W Astro-1 Std. C	20.04	$9.8 \ \Psi = 24.5$ d from analysis of gas	3 <b>60</b> · 3	0.81	ed to 1 ml injection.
Notes: RF = C		(s); Actual Std. C	one, is to be obtaine	d from analysis of ga	Comments:	one, normanz	ed to 1 mi injection.
Concentration:			Tedlar or	Glass Bulb	Comments.		
Inj. volume:		·	a Cuidi Oi	Cinno Dato			
Analysis #:							
Time:							
Analista	Actual Std.	Injection x Vol.(ml) =	Normalized	Area	Retention	Response Factor	Delta RF
Analyte: Benzene	Conc.(ppmV)	$\times$ Vol.(ml) =	Conc.(ppmV)	(vs)	Time (sec.)	Factor	INT.
Toluene		<del> </del>	<del> </del>	<del>                                     </del>		<del>                                     </del>	
Ethylbenzene							
O-Xylenes							
M-Xylenes		<del> </del>					
P-Xylenes		1					
Notes: RF = C	onc. + Area (v	s); Actual Std. Co	onc. is to be obtaine	d from analysis of gas	standard ; Co	onc. normaliz	ed to 1 ml injection.

SUBJECT CAMBRAG	ok von Cerre		JOB NO BY_ <i>KS   FFM</i> CKD	SHEETOF DATE 9/21/95
A = Benzene.  0 = Tolvene.  + = Ethylban rame.  1 = p - kylane.	Calibration	Carpenes Some Andrews Some Some Some Some Some Some Some Some	BTEX + G  H  G  G  G  G  G  G  G  G  G  G  G	L' L' L' L' L' L' L' L' L' L' L' L' L' L
8	o, o,	2	 S	

。 Supplied (**Street)** を見れる (Street) できない。 これが、これで、**発育者が発**性によるできまっています。 المنتشرة · 

JOB NO. -. SHEET. LIENT SUBJECT. START # 42 START ... # 5 # 5 # 78 # 5 # 13 # 6 \* = 30 # 11 # 12 # E Lecky # 13 # 14 # 18 Injection Septum, # 15 # 15 # 13 # 14 # 15 # 31 replace # 16 # 18 # 1.9 # 20 # 21 # 24 SG 2-4 # 17 # 25 £ 18 562-5 # 23 # 24 # 25 # 29 **# 29** # 26 # 32 # 27 # 3B Lock - blow out # 29 # 22 injection port # 30 # 31 # 32 J 483.8 SEP 21 95 1.:22 STOP # 483.8 SEP 21 95 1.:22 ANALYSIS # 25 SYR BLK INTERNAL IERP 92 1.0 ML GAIR 10 SYR G STOF # 502.0 500.0 SAMPLE LIBRARY 1 SEP 2) 35 11-32 SAMPLE LIBRARY 1 DEP 21 95 1::11 ANALYSIS # 26 502-4 INTERNAL TEMP 39 1.0 ML ANALYSIS # 24 SG2-S INTERNAL TEMP 32 1.0 ML GFIIN 2 B SYR F 12 SYR G COMPOUND HAME PEAK R.T. AREA/FPM COMPOUND NAME PEAK R.T. AREAZPPT COMPOUND NAME PEAK R.T. AREA/FFM 2.3 21.1 mU3 6.3 178.8 FUS 17.1 4.7 US W 38.5 22.3 FUS 128.6 347.5 FUS W UNKNOUN UNKNOWN TINKNOWN 2 7.3 42.3 mUS 16.5 3.7 US ₩ 2 11.2 20.2 mV3 13.5 102.4 mVS 30.1 28.5 mVS 120.8 60.4 mVS 7.3 42.3 mUS W 16.5 5.7 US W 68.9 53.0 mUS 98.5 42.4 mUS 127.2 421.4 mUS W 203.3 133.5 mUS CUKNOWN CUKNOWN LINKNUTN 4 5 9 UNKNOWN UNKNOUN 4.1 **によれるでき** こまれるできる じょえいりじょ CINKNOUN FINKMONN 12 14 16 UNKNOWN 24 268.8 32.2 # \$ 10 124.1 31.8 mVS 138.4 62.6 mVS UNKNOUN GINKROPIN FINKNOPIN UNKNOWN 5.214 242.8 23.6 mUS 272.8 54.3 mUS 194.6 56.8 mUS 267.8 94.1 mUS 12 UNKNOWN 17 CINKNOON Gain 20 equinilo,4 VS NHKNONN UNKNOKH 316.1 162.1 mUS 322.6 616.3 mUS 21 277.8 147.5 mVS 25 322.7 22.4 mVS UNKNOWN 29 INKISTILIN =0.2vs UNKNOWN NKNUUN 380.3 534.2 mUS 489.5 62.1 mUS UNKNOUN 438.0 34.7 mUS UNKNOUN 5.9 05 START 1 Gun 20 equi. = 11.8 vg -3.6V5 10 # 15 STOP 9 257.1 SAMPLE LIBRARY 1 SEP 21 95 11:35 ANALYSIS # 27 5YR BLK INTERNAL TEMP 34 1.0 ML

 UNKNOWN
 2
 6.8
 65.5
 #VS

 UNKNOWN
 5
 15.4
 26.4
 #US

 UNKNOWN
 7
 146.6
 118.0
 #US

PEAK R.T. AREA/PPT

COMPOUND NAME

COMPOUND NAME PEAK R.T. AREA/PPM

NT	JOB NO	SHEET 8 OF 17
JECT	BY CKD	KKS/PFM DATE 9-21-98
HUTOVAC P	PHOTOUAC	PHOTOUAC STAFF 4
\$ 562-3	# 5 # 8 # 9 SC 2-1	# 11 SG 3-1
= 10 = 10	# 11 # 12 # 14	# 15 = 16
# 15 # 16   SPE 1   SEP 21   SEP 11:48   SPE 1   SPE 1   SEP 21   SEP 11:48   SPE 1	510F # 588.8 SHOPLE LIMPARY : SEP 21 95 12-1 ANALYSIS = 38 502-1 INTERNOL TEMP 34 1.0 ML GOLD SYR M	STOP # 500.0 SAMPLE LIBRARY 1 SEP 21 95 12:16 ANALYSIS # 32 S03-1 INTERNAL TEMP 34 1.0 ML GAIN 10 SYR L
CONTINUE NAME	COMPACIND NAME PEAK R.T. AREA/PPM  LOWINGHAM 2 16.6 1.3 US W 1988/PPM 3 51.3 245.9 mUS LOWINGHAM 6 124.7 255.2 mUS W 1988/PPM 18 251.6 293.3 mUS LOWINGHAM 15 481.5 195.2 mUS 2 2 2 3 5	UNKNOUN 3 16.6 3.5 US W UNKNOUN 4 20.4 1.4 US W UNKNOUN 5 122,9 192.7 mUS W UNKNOUN 17 422,0 39.6 mUS UNKNOUN 18 470.8 313.9 mVS
Gevn 20 agom = 8.4 vs 6.2 vs	HOTOUAC	Gain 20 equin = 1142
# 9 # 4	# 4	
# 8  SIDP 9 266.9  SAFFLE LIBRARY 1 SEP 21 95 11:53  ANALYSIS # 29 502 SYC 814.	# 18  # 11  SIDP @ 281.1  SATIFIE LIBRARY 1 SEP 21 95 12: 8  ANALYSIS # 31 SYR BLK  INTERNAL TENF 35 1.0 KL	

3 16.2 46.1 mUS 11 263.8 22.2 mUS

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SHEET\_9 \_\_OF\_17 LIENT. JOB NO. 9-21-45 KILS SUBJECT. ٥. ـ í ş # 3 # E 9 8 \$ £ # 10 # 10 ž jā 1 15 STEP 6 192.4 4 7 SAMPLE LIESARY : SEP 2: 95 12:35 # 8 35 SYR BLK # SIRYALAN # 17 # 18 INTERNAL TERE 36 # 13 # 28 # 21 # 22 10 SYR E 4 3 # 16 COTTBUNE NOTE PENK F.T. AREAZPEN STDP @ 223,9 STOP # 327.3 UNKNOWN 5.5 45.7 mbs SANTLE LIBRARY 1 SEF 21 95 12:49 SOMPLE LIFRARY : SE: 21 syr Bile ANALYSIS # 37 1.0 ML PARE TELL II INTERNAL TENT 35 SYN BLK 1.8 ML JYR L 18 COMPOUND NAME PERK K.T. AREA/FPK CONTINUE NAME FEAR R.T. AREAUTED UNKNOUN 9 82.7 34.5 mus LINKLICAN 18 427.5 21.0 905 51067 **4...**\$ ..... # 5 <u>ئ</u>ے 5 1 8 = 10 Han Han a d **#** 9 £ 30 S63-3 # 12 # 11 # 29 # 23 563-4 # 12 # 24 **=** 9 3 25 # 13 # 113 # 35 a 15 # 16 f 12 # 26 # 17 # 29 £ 18 4 15 # 1.9 STOP 0 423.9 SAMPLE LIBRARY 1 SEP 21 35 12:57 4 16 # 21 # 28 ANALYSIS # 38 SYR BLK INTERNAL TEMP 34 0.50 ML # 17 STOP @ 500.0 SAMPLE LIBRARY 1 SEP 21 35 12:43 BAIN SYR N STOP 9 Sep. 0 SAMPLE LIBRARY 1 SEP 21 35 12:31 ANALYSIS # 34 503-3 COMPOUND NAME PEAK R.T. AREA/PPM ANALYSIS # 563-4 INTERNAL TEMP 34 1.0 ML UNKNOWN 31.0 40.6 mVS INTERNAL TEMP 34 93.3 22.2 mUS 156.8 76.2 mUS 168.8 25.3 mUS 1.0 ML ロアスマロポン LINKNOWN 17 PEAK R.T. AREA/PPM ロススさりだる 20 21 23 24 25 COMPOUND NAME PEAK R.T. AREAZPEN HUKNDHN 186.5 159.6 mUS 132.1 113.2 mUS 3 16.5 2.7 US W 2.8 7 122.8 135.4 mUS W 2.8 9 196.5 25.0 mUS NAKADNA UNKHONH RINKHONH 16.3 483.2 mUS W 0,65 31.1 41.7 mUS W 0,65 123.2 125.2 mUS W ころスプロドラ UNKHOWK 226.5 62.0 mUS 255.8 107.8 mUS DUKNDMU UNKNOUN NUKHONK UNKNOWN 12 252.8 22.6 aUS 272.8 231.8 mUS 301.7 206.4 mUS 308.3 100.0 mUS 374.0 80.4 mUS UNKNOWN 2.845 9 254.8 474.3 mUS 14 376.1 151.9 mUS NAKADHA RAKADHA HINKNELIN LINKNOUN 333.6 144.5 mUS 448.4 23.0 mUS NAKADHA - 5.645 ... Gain 20 EquA. 1.5 VS = 0.0 YS Garin 20 0444 = 343



CLIENT	JOB NO	SHEET 10 OF 17
SUBJECT	ВҮ	KKS /PFM DATE 5-21-95
PHOTOUACI	PHOTOUAD & Single Strain Prom 2 to 10	PHOTOUAC
20 ppm Std.	2 C 3 - 2 D	# 18 Variance in Carrier gas flow
STOP 4 420.1  SOUTHLE LIBRARY 1 SET 11 95 10: 3  ANALYSIS 3 30 28 PM STL  INTESTED 14 8.58 II. 44 20pp Std  2 SYN N  COMMOND MOTE PEAK N. 1. ANEANYMO  DINKNOWN 2 10: 4.8 M2  UNKNOWN 5 10: 4.8 M2  UNKNOWN 4 272.9 3.8 W3  UNKNOWN 5 361.1 9.8 W3  UNKNOWN 5 255.1 6.1 V5	# 23  # 24  # 25	# 20 # 36  STOP 6 411.4  SOMPLE LIBRORY   SEF 21 95 19:21  SWOLTSIS # 4. FM BLK  INTERNOL TEMP 94 1.9 DL  GAIN  LOUGIEND NAME FEAT R.T. AREA/FOT  LISTERNAL   SER 2   SER 2   SER 3
	Gan 23 egus = 10.605	

ANALYSIS # 45 INTERNAL TEMP 32

10 COMPOUND NAME PEAK R.T. AREA/PPM

SYR BLK 1.0 ML SYR T

\_\_\_\_ SHEET\_11 \_\_OF\_17 JOB NO. ..... CLIENT. KKS/PFM DATE 9-21-95 STOT START#\_4 STORT # 1 # 3 \_\_\_\_\_ 1 3 # 14 # 6 # 6 # 4 # 14 # 18 a 2 116 # 12 # 8 # 11 563-5 563-6 # 23 # 10 # 24 # 25 \$ STOP @ 396.5 SAMPLE LIBRARY 1 SEP 21 95 19139 ANALYSIS # 42 SYR BLK # 26 # 29 # 50 ANALYSIS # 42 SYR BLK INTERNAL TEMP 34 1.0 ML GAIN 10 SYR F # 31 a 13 # 14 COMPOUND NAME PEAK R.T. ABEAZPOM STOP 6 300.0 j = 15 SAMPLE LIBRARY 1 SEP 21 95 10:32 2 13.3 58.4 mUS 18 222.7 48.2 mUS 11 255.3 172.1 mUS 12 308.5 59.7 mUS UNKNOWN \$750 6 502.0 \$600LE LIBRARY 1 551 21 32 10:46 ANALYE:5 # ANALYEIS # 42 S63-5 INTERNAL TEMP 35 1.0 ML GGIN 10 SYR F UNKNOWN UNKNOVN ANDLYSIS # 44 483-6 INTERNAL TERM 34 1.0 ML 96IN 18 SYR T UNKNOWN COMPOUND NAME FERK R.T. AMERIPPE 3 16.3 3.8 US W 3.2 3 83.9 22.6 mUS W 28 258.3 24.4 mUS W 28 258.3 24.4 mUS W 25 345.3 26.4 mUs 25 378.2 20.1 mUs 20 422.4 20.2 mUs 21 485.2 48.1 mUs UNKNOUN CONFOUND HORE FEAK R.T. ANEAZPHIA LINKKOUN 2 18.4 1.9 US W 3 20.8 3.4 US W SEVS 3 121.4 197.6 mUS W 6 213.7 22.3 mVS UNKNOWN UNKNOWN UNKNOWN UNKREW DINKNOMIN DISKNOWN LINKSCHUN UNKNOWN UNKNOWN 9 254.3 271.4 mVs 9 254.3 271.4 mVs 10 9.3.7 00.4 mVs 10 452.4 21 7 mVs 14 462.8 24.7 mUs DINKNOWN UNKNOWN KK WENN 465.2 40.1 mUS HAST INCOMEN UNINOUS 3.3 44 Gain 20 equis = 11.8 vs Ger 20 equiv. = 6.6 45 = 0.8 45 = 10.2.5 # 6 # 2 STOP 0 172.3 SAMPLE LIBRARY 1 SEP 21 95 13:51 ANALYSIS 0 45 SYR BLK

In the state of the party of the state of

CLIENT		JOB NO	SHEET 12 OF 17
SUBJECT		BY KKS/PFM	DATE 9-21-15
PHOTOUAC P	PHOTOUAC A	PHO STAST #. J.	TOUACJØ
* SG3-7	# \$	# 4 # 4	S43-9
# 12 # 13	я 11 я 12 я 13		
STOP W SAR A STOP W SAR A STOP W SAR A SAPTLE LIEPACY : SEP 21 SS 14 0 ANALYSIS # 46 SUS-7 INTERNAL TEMP 34 P.5 ML CAIN 18 SYR B COMPOUND NAME PEAK R.I. AREA/PM	STOP 9 SEC.R  SMEPLE LIBRARY I SEP 21 95 14.15  ANALYSIS # 48 SG2-6  INTENNOL TEMP 95 1.0ML  04IN 10 SYR R  COMPOUND NAME PERS R.T. AREASED	STOP 0 500.0 SAMPLE LIBRAN	50 5 563-9
16.8   1.8 US W   2.6	UNKHODN 2 16.3 4.8 US W UNKHODN 6 1.3.1 181.1 MJS W Garn 20 cquw = 8.4	COMPOUND MARE  SUNKNOUN UNKNOUN UNKNOUN UNKNOUN UNKNOUN UNKNOUN UNKNOUN	2 16.5 6.7 US W 7.0 116.5 286.2 #78 247.3 122.4 #78 6 447.6 .50.2 #78 VS 7.3 VS
STANT 199.6 SAPITE LIBRARY 1 SEF 21 95 141 5 ANALYSIS # 42 SYR BLK INTERNOL TEHP 36 8.5 RL  GAIN 10 SYR B	START # 1	Gair	~ 7 4 egun = 14. 645
COMPOUND NAME PEAK R.T. AREA/PPH	STOP 9 242.8 SAFIPLE LIBRARY 1 SEP 21 95 14:20 ANALYSIS 4 49 SYR BLK INTERNAL TEMP 36 1.0FK. GAIN 10 SYR N  COMPOUND NAME PEAK R.T. AREA/PPM		

the second secon

CLIENT		JOB NO	SHEET 12 OF 17
SUBJECT		BY KIS/PFM	DATE 9-12-55
PHOTOVACI -	FHOTOUAC	CKD.	TOVACIÓ
# 4.	# 10 # 10 # 10 # 10 # 10	# A 2 2 4 10 4 12 4 12 4 12 12 12 12 12 12 12 12 12 12 12 12 12	SG3-11
= 6 = 7 = 5 = 10 SILT A 422.7 SREELE LIBRARY 1 SEC C1 35 14.36	# 12 # 12	rja	
######################################	SIDE # 40.0 SAPPLE LIBAGAM 1 SEP 21 US 14.45 ONOLYDIS # 51 SEP-IR INTERNAL TELY 25 1.0%. GBIN 10 SYA. COMPOUND HAVE FEAK E.T. AREAVICA	SID# 9 - 820.	Y 1 SEP 2. 30 14193 54 186-71
THE PRINT 2 322.5 [86, 4 AUE	UNKIGEN 0 12.7 0.2 43 W 1981 271 0 20.3 173.5 470 M 1981 271 0 20.3 173.5 470 M 1981 271 171 171 171 171 171 171 171 171 17	DISKNOUN DISKNOUN DISKNOUN DISKNOUN DISKNOUN	2 18.6 8.7 0 US W 5.1 7 18.2 88 7 8.5 9 W 5.1 19 82.3 7 8.5 7 8.5 19 404.5 19 404.5 18.5 7 8.5 15 404.5 18.5 18.5 18.5 18.5 18.5 18.5 18.5 18
	2160 - 10 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	<i>G</i> .	5.3 vs cm 20 equin = 10.6 vs
	1 15		
	STOP 9 250.2  SAMPLE LIBRARY 1 SEP 21 95 14:49  ANALYSIS 2 50 SYR BLK  INTERNAL TEMF 95 1.0ML  BAIN 10 SYF J  COMPOUND MAYE PEAK R.T. AREA/PPM		

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CLIENT	JOB NO	SHEET 19 OF 17
PUBLIFOT		KIS PFM DATE 9-15
PHOTOURC -	- PHOTOUAC & -	- PHOTOVACIA
START # 56		STANT
= 11	; = a	# 5
# 17	= 4 5 4 - 11	564-10
# 15 # 15 # 16 # 17	5	
# 15	= e	# 4
STOP 9 Sep. P SOMFILE CIRRARY 1 SEP 21 DE 15-17 ARRANDISE # 55 SYR 91   INTERNAL TEN 36 1.64 BAIN 10 DYR E COMPOUND NAME FEAK K.T. GREATER	STEP & 300.0 SORVER LEMBER : SEP 01 95 15.40 BORNELLE 52 594-11 INTERIOR TEM 05 1.055 0018 10 075.3 CONTUEL MOSE PERK K.T. ANEARER	SIDE S SECTION SERVICES SERVIC
	1881-001 2 18.4 1.2 08 W 4.2 1881-001 3 11.0 36.9 m/S W 4.2 1891-001 5 296.8 896.9 m/S W 4.2 1891-001 6 498.9 160.8 m/S Gan 20 540 = 10.045 - 5,045	19480200 2 16.0 4.8 NJ 3 4.2 19480200 3 182.2 193.3 6.00 3 4.2 198.0 600 5 4.8 NJ 3 4.2 198.0 600 5 19
STAST # LL	STAST . S	Gan 20 equiv = 8,6 vs = 20.2 vs
# 2	# 2	
STOP 9 126.2 SAMPLE LIBRARY 1 SEP 21 DE 15:39 ANALYSIS # 56 SYK BLK INTERNAL TEMP 32 1. CH.	F 2	
GOIR IR SYR E	# \$	-
)	STOF 9 414.2	•
·	SAMPLE LIBRARY I SET 21 95 16:53 ANALYEIS # 58 SYR BLK INTERNAL TEMP 35 1.0% GAIN 10 SYR G	

PARSONS	MAIN	- INI



SUBJECT	JOB BYCKE	SNO. SHEET 15 OF 17  KKS/PFM DATE 9- 20-55  D. REVISION
PHOTOUAC Ø	PHOTOUAC Ø	FHOTOUAC Ø
# 3 4 6 # 6	# 9 # 4 # 5	# 4
SG4-M	J SGY-8	. s S G 4 - 7
) # 7		
Plumbing Pinched	<b>a</b> 2	# 6
F 580.2 STOP # 580.2 SAYPLE LIBRARY 1 SEP 21 95 17:13 ANALYSIS # 48 SOM-3 INTERNAL TEMP 36 1.0% 441N 10 57K F	STOT # 580.0 SAMPLE CLEARNY I SEP 21 09 17-12 ANALYSIS = 61 564-8 INTERNAL TERM 08 1,89. OATA 18 578 M	TICH W 527.0 SPECIE LIBERRY 1 SEP 21 AS 12130 ANALYZIS = 62 SA4-2 INTERNAL TEXT SA 1.000 Grin 10 SYN N
COMPOUND NOTE PENK R.T. AREDZOPO	COMPOUND NOTE PERK R.T. AREAUPPE	CONTRONS NAME - PEAK N.T. AREAZPON
1000 1000 9 16.6 4.8 05 W 9 1000 1000 1000 1000 1000 1000 1000	UNKINDE 2 16.8 5.8 US W 5.6 UNKINDE 4 183.3 52.4 m/s W 5.6 UNKINDE 5 172.1 53.8 m/s UNKINDE 2 480.2 23.8 m/s	19655-98 2 12.3 8.1 95 <b>W 5.2</b> 19655-98 4 110.2 86.3 808 <b>W</b> 19655-98 5 207.2 47.1 408 11675-98 5 183.7 22.4 800
Gam 20 0900 = 9.6 45 = [1.9 \s)	Guin 20 equipment = 11.4 vs = [0.245]	Gin 20 equi. = 10.645



CLIENT	JOB NO	O SHEET 16 OF 17 (
SUBJECT	BY	KKS / PFM DATE S-#- 55
PHOTOUAC Ø —	PHOTOURC &	- PHOTOUACIØ
# 4 	# 5 .	
SG4-6	S G 4 - 5	# " SG - AB - 2
\$100 # 500.8 \$60.00 1.186687 1 SET 21 95 12:39 600.1818 # 63 506-6 INTERNOT. TENT 96 1.000 6018 10 578 T	\$ 7 \$TOP 8 424.7 \$ARCLE LIBRARY 1 5EM 21 05 1248 ANALYSIS 8 54 074-5 INTERNAL TENT 93 1.200 6410 18 5YK B	STOP 8 480.0 SAMPLE LIBRORM : 92H 21 00 12.56 ANDLYSIS # 05 504F - 2 INTERFACTION 90 2.5 %
CONTICUENT NAME	COMPOUNT NAME OFFIT. AREALYTY  UNFNOWN 2 16.8 2.6 US W 3.7  LIMPNOWN 3 28.1 1.1 US W 3.7  UNKNOWN 5 111.9 20.6 MUS  UNKNOWN 6 223.3 25.2 MUS  3.8 15	COMPONING NAME FERK N.T. ORLANDS WITH STREET
6.645 Gain 20 equiv. = 13.2 -[0.001]	Gan 20 cqu. = 7.6 = 0.245	1 ml equivalent = 2.0 vs Gain 20 equiu = 11.0 vs = 0.0 vs

;LIENT	JOB NO	SHEET 17 OF 17
SUBJECT	BY KKS/PFM	DATE 5 -21-15
	CKD.	REVISION

PHOTOMAC
STALT 22
\(\frac{1}{2} \)
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# 17
STOR BY GENERAL SERVICE OF THE A PARTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF T
MAC TO DE BE - 20 Pp in Std
INTERNOL IET 35
SYR N
COMPOUND NOME PEAK R.T. AREAZENT
UNKSDUR 1 15.= 1.0.0 mVd
UNKINGN 5 52,1 20,7 02
UNKNOUN 6 112,4 26,7 95
INKNOST. 2 2.5.5 60.1 mbs
0KMP94 3 2A. 42.3 03 - MKNCOM 12 233.0 15.4 16
A Michigan Company of the Company of

· will lower flow to ~? milmin to get better separation

KOD 2M

. , · - • 40.00

ENT ACOE		OB NO	SHEETOF.
EUECT SEAD 25 - S	oil Cas Survey 1	BY_KKS	DATE 9-22-
		KD	REVISION
PHOTOVACI	PHUTOUAC	PH	iotovac
TAKT	. Sinci	STORTALL	 ?
	. # %	£	
TUM # 158,3 AMPLE LJBRARY 1 SEP 21 95 18:44 NALYSIA 1 SYR BLK NTERNAL TEMP 25 1.0 ML	STEP 9 188.7 SAMME LIRRARY 1 SEP 22 55 7:55 ANALYSIS 2 4 SYR BLK INTERNAL TEMP 28 1.0 ML GAIN 10 SYR H	`\$	4
AIN 2 SYR J DYPCUND NAME PEAK R.T. AREA/PPM	COMPOUND NAME PEAK R.T. AREAZPPH	<b>2</b> 1	3
PHUTOUAC.			
	PHOTOUAC		
	STA-T # 1	ANALYSIS	588.0 BRARM I SEP 72 35 9:10 4 6 SYR BLK TEMP 27 1.0 M.
	± 3	•	en Temp @ 30
50 # 258.9 **LE LIBRARY 1 SEP 22 95 2:51 *LTSIS		Flo	w @ # 7 cm
IERNAL TEMP 26 I.A ML IN IP SYR F	= 4 ·	Ince	esection to a

# 7

and the second s

STOP # 465.4
SAMPLE LIMMARY 1 SEP 22 95 8: 3
ANALYSIS # 5 SYR BLK
INTERNAL TEMP 27 1.0 ML
GAIN 10 SYR M

COMPOUND NAME PEAK R.T. AREA/PPM

SAMPLE
CAL
EVENT 3
EVENT 4
EVENT 5
EVENT 6
EVENT 7
EVENT 8

10.0 2.0 126.0 6.0 120.0 0.0

6.0 6.0 6.0 6.0 6.0

CLIENT.

SUBJECT

s 2

STOP 0 502.0 SOMPLE LINGURY 1 ONALYSIS 5 2

ANALYCIS S INTERNAL TEN: 28

OFFSET

CHART SPEED SLOPE SENS.

MINDON TZ-

TIMER DELAY ANALYSIS TIME

COMPOUND NAME

CACTE 1148.

LITTE NOVE

UNKNOWN

SEF 22 95

1 oM/Kir 4 10 4 FU/Sec 1 Fernent 20 mUSec 10.0 Sec

PEAK R.T. AREA/FPM

4 194.6 21.0 mUN 5 325.1 98.5 mUS

0.0 mU

500.0 Sea

0 Mir

SYN-VESSEL BLK 1.0 ML

8:28

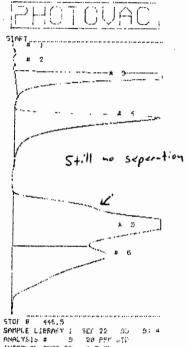


				10
JOB NO 8	SHEET	2_	OF	<b>§</b>

DATE 9-22-15 KK S

**REVISION** 

# Increase flow to 10



20 ppm Std (Vol)

PEAR R. T. AREAZAIN

9 56.6 22.1 US 4 125.2 21.2 US 5 203.6 55.8 US

6 388,7 23,6 US

BY. # 1 # 3 STOP # 630.0 SAMPLE LIBRARY 1 SEP 72 95 ANALYSIS # 6 20 PFM STE ANALYSIS # 5 20 1.8 ML INTERNAL JEMP 30 1.8 ML BAIN 5 SYF N INTERNAL TEMP 25 GAIN SYR N Flow-7 COMPOUND NAME OFFSET CHART SPEED SLOFE SENS. B.B mU
1 chirtin
4 118 4 mUrSec
1 Percent
28 mUSec UNKNOUN UNKNOWN MINDON 12-20 mV5ec 10.0 Sec UNKNOUN TIMED DELOY ANALYSIS TIME 600.0 Sea CYCLE TIME D Min COMPOUND NAME PEAK R.T. ASEAZPEN

9 22.1 61.1 US 5 153.2 22.2 US 6 326.2 56.3 US 2 488.0 23.2 US

20 ppm

UNKNOWN

DRINGSEN DINKNOW

UNKNOWN

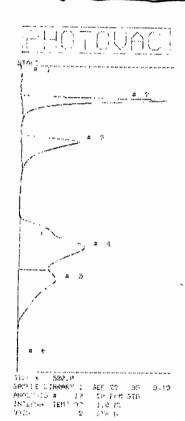
		and the second of the second	_			- '
	to	シーンストンとは大きなないできる。 このこのではないのである。 このこのではないのである。		A STORE STORE	100 100	· 197 . 1944
	444	A STATE OF THE STA		MAR	1601	1e 🗀
100	· · · · · · · · · · · · · · · · · · ·	S. r. Store . 14 1 Shill & coll to the William Shill hard Some at the same		PA	120)	43

Language State of the state of

CKD.\_

CLIENT	JOB NO		SHEET 3		_
		krs		<b>-</b>	

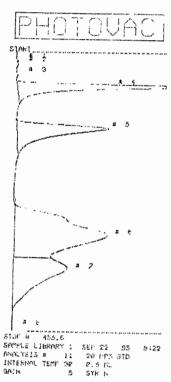
SUBJECT REVISION



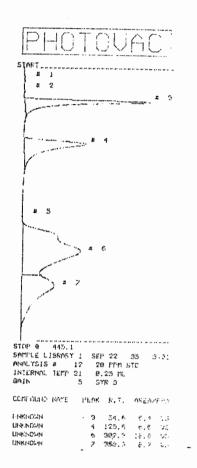
DESCRIPTION DAME FROM B.C. AMERICAN

PNEUMA UNKHO HI OMEGO HI 2 125.8 5.6 02 3 125.8 6.1 03 4 233.8 21.7 02 5 352.2 11.4 03

Gain 5 Decreased Inj. Vol to .5 ml



CONTCLINE NAME	PERK	R.T.	ASENZ	TPT:
CONFICURE CONKINCON CONKINCON CONKINCON	ŧ	34, 2 123, 5 300, 8 356, 3	31.8	U.S US US



•	P	PARSONS
		10

CLIENT		NO. SHEET 9 OF 3
SUBJECT	BY_	18105 DATE 9-22-95
PHOTOUAC -	- PHOTOVAC #	PHOTOVACIØ
	STAKT # 1	STAFT # 7
2	   = 6   = 4	# 3 # 4 # 5
	* SG4-Y	= 6 564-3
u 9	± 6	# 7 # 6 # 3
5 . 3	= 7	. # 3
		n 18
STOP # 800.0 50071E 0.000000 1 SOF 22 50 1000 60071S # 10 20 800 500	\$ 8 STOF 4 462.6 SAPTUE LIFRARY 1 SEP 50 95 9:56 ANALYCIS \$ 14 574-4 1/12FT-AN TENP 51 1.0 ML	STOP 9 139.0 SAMME 1190ARY 1 SEP 22 35 10:14 ONDUTYSIS # 17 SEP-26 INTERNOL TENE 92 1.9 ML SAIN 12 SYR E
INTERNAL TERM BE 10.10 STILL B SYN B CON COOR NAME   FERS. R.T.   OREOZERS	COMPOSING NAME PEAK R.T. AREA/FFTS  LINEARYN 2 16.6 1.3 US W 1.7	COMPOUND SAME FEAK R.T. AREALPHY  DANKAGEN 2 16.2 1.6 US W ( 9  DANKAGEN 3 118.1 69.9 MUS W ( 9  UNKNOCK 5 146.2 92.1 MUS
1 54.5 2.9 05 1 147.5 2.9 05 1 147.5 2.9 05 1 147.5 2.9 05 1 202.5 2.6 05 1 202.5 2.6 05	DINKHESIN 6 256.6 31.9 mJs	DAKNON 15 440% 0618 MAG
CM-SIN 5 388, 9 4,8 95	Gain 20 equi = 2.8 vs = [0.2 vb]	2.0 US Gein 20 equen = 4.0 US = [6.2 US]
· · · · · · · · · · · · · · · · · · ·	FUTCUAC	PHOTOUAC
2 ppm S+d (V01)	;	ST0-1.1.
	£ 8	# 5
	STOF # 198.8	STOP # 163.6
	SAMPLE LIBRARY 1 SEP 22 95 10: 2 ANALYSIS # 15 SYR BLK INTERNAL TEMP 34 1.0 ML GAIN 10 SYR 0	SAMPLE LIBRARY: SEP 22 05 10:16 ANALYSIS # 16 SYR BLK INTERNAL TEMP 95 1.0 ML GAIN 10 SYR E
	COMPOUND NAME PEAK R.T. AREA/PPM	COMPOUND NAME FEAK R.T. AREA/PPM

	SOIL GAS CA		N DATA EO	D MIVED D	PEV CTAN	DADDC	
	SOIL GAS CA	LIBRATIC	7			7. 7	_ 7
ENGINEERIN				COE	DATE:	1/22/98	
PROJECT:	Remedial	Inves	stigation	1	Operator:	0100	
LOCATION:	SFAD-3					0/44m	
Instrument Specs:							
Type of GC:	Drodous	ė					
Column Type:	CPSH.	- 5			-		
Chart Speed:	1 cm	min			•		
Gain:	5	<u>,                                     </u>			-		
Sensitivity: Gas Flow Rate:	10 5/	<i>,</i> 0	- · · · · · · · · · · · · · · · · · · ·		-		
Tank Pressure:	160	O PSI			-		
Standard:	20 PP1		m		Comments:	4-011	)
Concentration:		Δ	Tedlar or	ilass Bulb	1 100	scotm H	
Inj. volume: Analysis #:					0	n ether be	refre
Time:		<b>(</b>				₫	
	Actual Std.	Injection	Normalized	Area	Retention	Response	Del
Analyte:	Conc.(ppmV) x	Vol.(ml) =	Conc.(ppmV)	(vs)	Time (sec.)	Factor	RF
Benzene	20.6	[ml	20.6	27.1	56.6	0,76	
Toluene	20.00		20.00	21.7	126.2	0.92	
Ethylbenzene O-Xylenes	20.16	(m)	20.16	65.8	299.0	0.31	
M-Xylenes	20,12	(m)	20.12	65.8	297.0	0.31	<del> </del>
P-Xylenes	20,04	Inil	20.04	29.6	352.7	0.68	-
Notes: RF = C			onc. is to be obtained		s standard ; Co	onc. normalized to	o 1 ml inje
Standard:	20 PPM				Comments:	= 000 - 00-7	O. O.
Concentration:	20 Ppn		Tedlar or C	lass Bulb	_ ~	ceparatz ylbenzeme	an on
Inj. volume:	0.5 ml				野儿	y henzewe	_
Analysis #:_ Time:_	0122					V	****
	Actual Std.	Injection	Normalized	Area	Retention	Response	Del
Analyte:	Conc.(ppmV) x	Vol.(ml) =	Conc.(ppmV)	(vs)	Time (sec.)	Factor	RF
Benzene	20.6	0.5-1	10.3	27.1 12.9	54.7	0.80	
Toluene	70.00		10.0	<del>21-</del> 7 11.7	125.3	0.45	
Ethylbenzene	20.16		16.98	21.0	300 5	0.22	
O-Xylenes M-Xylenes	20.12		10.06	31.8	360,5	0.33	
P-Xylenes	20.12	<del></del>	10.06	22-6 16.1	356.3	-0.62	
Notes: RF = C	onc. ÷ Area (vs)	: Actual Std. Co	onc. is to be obtained	from analysis of ga	s standard : Co	onc. normalized to	o 1 ml inic
Standard:	20 ppm			_	Comments:		
Concentration:	20 PPn		Tedlar or (C	ilass Bulb	- Nuc	September	ou c
Inj. volume:	0.25 ml				'n	sepandi When zew	
Analysis #:	12				e e e	yven zew	_
Time:	0931		***************************************		l		
A malesta.	Actual Std.	Injection	Normalized	Area	Retention	Response Factor	Del RF
Analyte:	Conc.(ppmV) x		Conc.(ppmV)	(vs) .	Time (sec.) 54.6	0.80	KI
Benzene Toluene	20.6	0.25-1	5.15	6.4	125.6	0.76	
Ethylbenzene	20.0		5.04	6.5		)	
O-Xylenes	20,12		5.03	18.8	302.3	0.26	
					722	A 7	
M-Xylenes	20.12	}	5.03	18.8	302.2	0.26	

	SOIL GAS	AI	IBRAT	10	N DATA FO	R MIXED I	BTEX STAN	DARDS	
ENGINEERII	ENGINEERING-SCIENCE			CLIENT: DATE: 4/22/95					
PROJECT:							Operator:		
LOCATION:								· .	
Standard:	20 PP	n					Comments:	0 0 01	
Concentration	20 88	M		•	Tedlar or (	Glass Bulb	and and	SEPAGE E	10019a
Inj. volume:	0.10	ml						-1 ~	-
Analysis #	13							BE BL	
Time	0941	)						70.	
	Actual Std.		Injection		Normalized	Area	Retention	Response	Delta
Analyte:	Conc.(ppmV)	X	Vol.(ml)	=	Conc.(ppmV)	(vs)	Time (sec.)	Factor	RF
Benzene	20.6	<u> </u>	0.10m	$\sqcup$	2.06	2.9	543	0.71	
Toluene	20.0	⊢			2.00	3.2	1 25,3	0.63	
Ethylbenzene	20.16				2.02	<del>                                     </del>	2723	0.96	<del> </del>
O-Xylenes	20.12	<del> </del>			2.01	7.6	299,3	0.26	<del></del>
M-Xylenes	2012				2.01	7.6	299.3		ļ
P-Xylenes	20.04	Ļ	<u> </u>	ᆜ	2.00	4.0	3.56.9	0.50	. 11 !!!
Notes: $RF = 0$		s) ;	Actual Std.	Col	ac. is to be obtained	i trom analysis of		onc. normalized t	o 1 mi injection.
Standard:				—,	Tedlar or C	Glass Bulb	Comments:		
Concentration:					redlar or C	JIASS BUID			
Inj. volume:									
Analysis #:									
Time:				—				.,	
A	Actual Std.	_	Injection Vol.(ml)	=	Normalized	Area	Retention	Response Factor	Delta RF
Analyte: Benzene	Conc.(ppmV)	<u>x</u>	voi.(mi)	=	Conc.(ppmV)	(vs)	Time (sec.)	Factor	IXI.
Toluene				$\dashv$					
Ethylbenzene									
O-Xylenes									
M-Xylenes		-	<del></del>						
P-Xylenes		-		$\dashv$					
Notes: RF = C	Conc. + Area (v	<del></del>	Actual Std	Cor	c. is to be obtained	from analysis of	gas standard · Co	onc. normalized to	o 1 ml injection
HOICS: ICE = C	Onc. T ALCA (V	<u></u>	ricinal old.	<u> </u>	ic, is to be obtained	HOM analysis Of	gas statiuatu , Co	nic. noi manzeu t	o a mi injection.

CLIENT	Jo	OB NO	SHEET 5 OF THE
SUBJECT	. B'	Y KICS	DATE 9-22- 55
PHOTOUACIØ	- PHOTOUACIØ		PHOTOUAC &
			g 4 g 5
, +> SG4-1	54 545-1		\$45-3
, s p	at to		# 6 # 7
# 0 # 1P  Site # 472.7  Sende Libite # 1 # 20 # 19429  HARLY # 13 Send   18729  HARLY # 10 Send   18729  GAIN # 10 ON.	570F 6 422.3  570F 6 422.3  570F 6 422.3  570F 6 422.3  570F 6 422.3  570F 2 35 10.39 77  680F 7 3 10.9 10.9 10.9 10.9 10.9 10.9 10.9 10.9	5i Ai 1i 9i	# 9 # 10 # 11 # 11 # 11 # 11 # 12 # 12 # 12
COMMODING   NAME   PEAK   N.T.   MEENING   N.T.	2.4 VS Gain 20 equivo 4.8 us		DEPOCASO NAME FEAK F.T. AREALS SA  NKNOWN 2 15.2 2.4 USW 2.4  NKNOWN 5 256.3 26.5 MJS  NKNOWN 8 356.4 36.4 MJS  2.575
Cain 20 equ. = 8.2 4 4 , ( 15 = (1.2 vs)	= 0.2 vs	7	Gain 20 equive 5.0
	= 11070;/n0:		FHOTUUAUT
4 4	# C C F C C F C C F C C F C C F C C F C C F C		z 2
STOP 0 132.3 SAMPLE LIBRARY 1 SEE 27 .35 13.30 ANALYSIS # 20 SYR BLK INTERNAL TEMP 35 1.0 ML GAIN 10 SYR J	STOP 6 192.8 SMYPLE LIRRARY 1 SEP 22 35 18:41 ANALYSIS 4 22 SYR BLK INTERNAL TEMF 36 1.0 ML GAIN 10 SYR F		# 3
COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 2 15.3 81.9 mUS	COMPCUNE NAME PEAK P.T. AREA/PPM		
1 14.3 C1.7 MVS		S A I	TDF @ 317.9  TDF @ 317.9  AMPLE LIBRARY 1 SEP 22 95 10:55  NALYSIS # 24 SYR BLK  NTERNAL TEMP 33 1.0 KL  AIN 10 SYR F

2 16.5 480.8 mUS

NKNDNI ·

CLIENT	JOB NO	SHEET6 OF	(O F %)
SUBJECT	BY	KES DATE 9-22	-97
FHOTOURIO Ø	STATE A STATE OF THE STATE OF T	PHOTOUAC	ø
STAFT # J	3 4	5.5	
565-4	5G5-5	565-6	
# 5	# # 2	2	
2 6	F 8 ST. 9 425,5 SOT: E DIFFORM I SER C1 DE 11913	# 8 STAY 6 458.0	
SION 6 495.8 SHOULE HISTORY 1 MET 21 15 11:2 HARVIST END 95 1.0 PL BOIN 10 35 PP PL BOIN 10 35 PP	Memoria # 22 585-5 Die 100 Tedmos I.O.M. Hell De SYS K. U. 1.050 DAME PERK K.T. GEZAZPEN	SOMPLE LIBERARY : SEP C2 95 11:05 AND YELS # 29 SEP-C HITERARY TEPP 91 1.0 ML 641N 18 SYN E COTYCUNG NAME FERN R.T. AREAZEPH	
COMPOSE NAME FEAK R.T. AREASHM LINKHOUN 2 16.2 4.2 15 W LINKHOUN 3 122.1 114.3 628 W	Gun 20 epus = 1.90	186,500, 3 16.2 170,8 pts 186,500, 6 284,8 28,1 mus  Gom 20 equ = 0.4 5.2	w,172 _45
Gen 20 equiu = 8,6		STORT # 1	
THUTCUAC;	# 3 # 1	# 4	
STOF # 177.6 SAMPLE LIBRARY 1 SEF 22 95 11: 5 ANALYSIS 3 26 SYK BLK	# 5	# 5	
INTERNAL TENP 35 1.0 ML GAIN 10 SYR N COMPOUND NAME PEAK R.T. AREA/PPM		# 6	
	STOP # 450.0 SAMPLE LIFRARY 1 SET 22 95 11:21 ANALYSIS # 28 SYR PLK INTERNAL TEMP 32 1.0 ML GAIN 10 SYR K	STOP # 450.0 SAMPLE LIBRARY I SEP 22 35 11: ANALYSIS # 30 SYR BLK INTERNAL TEMP 91 1.0 ML BAIN . 10 SYR E	44
	COMPOUND MAME PEAK R.T. AREAZPPM	COMPOUND NAME PEAK R.T. AREA/P	<b>₽</b> M

nukhonu nukhonu 2 16.4 32.5 mUS 4 136.4 68.1 mUS

IENT	JOB NO	SHEET 7 OF 9
JBJECT	BY	KICS DATE 9-22-95
PHOTOTACI —	- FHOTOVACIØ -	- PHOTOVAC
	STORY: #	STAFT
	Section - management of the section	\(\frac{1}{2}\)
	1 2	2 2 12
	: ; = -q	* 17
TO 6 157.5	= 5	1 a 10
FOR COUNTY 1 SEP 22 98 11:42 NOTENNO TENE 34 1.0 MC ALL 10 5YK L	\$G5-7	10 ppm StD
Direction wass peak B.T. AREAZEPH		
•	± 0	# 14
		* 15
		hammed and the second second second
THE TOTAL CO. I	****	Spanner and a second a second and a second and a second and a second and a second a
	\$700 0 488.0 \$000 12 1.85000 1 35 20 05 12: 2 \$400 0:15 4 23 545-7 Billion 1 Term 52 1:2 pt \$400 12 pts 5	SION # 480.0 SACTE TIPPEROTI FEE 22 55 12-11 AMERICANS # 34 20 FFM SIO INTERNACTION OF PLACE SAID #4 585 N
	CONTROL TOTAL PEON N.T. ASSOVERM	Culture their methods, AREAUTT
	1 18.8 3.8 W 3.3	(399,000) 2 16.8 26.1 eV0 (390,00) 6 50.7 20.4 9.5 (390,00) 2 52.4 23.4 eVs
	3.345	UNKNOWN 9 00.7 224.2 60.7 UNKNOWN 0 100.1 52.3 60.0 UNKNOWN 10 100.6 27.5 03
	3.345 Gim 20 equu= 6.645	DMKNODIN 14 514,3 15.5 VS DMKNODIN 15 52,6 VV
# 4	= [0.0 45]	
70 8 265.7		
WHILE LIBRARY I SEP 22 05 11-52 WHILE LIBRARY I SEP 22 05 11-52 WHILE LIBRARY I SEP 22 05 11-52 ALTO 12 57K 7		
MY LUND NOME - HEAK R.T. AREA/F/M	-	Seperation returned
		with coolen column temp
	~	Increasing analysis time to 600 sec.
		to 600 sec.
Turned off oven appl	_	Lower flow to 8 cm/see Re-run Volumetric Calibra
terms of oven aga		+1)-
× • • • • • • • • • • • • • • • • • • •	_	Ambient temp. 20°C



JOB NO. \_\_ SHEET CLIENT. KKS 9-22-95 BY. CHID IECT SJART\_. Ħ 4.5.\_ **8** 3 **1** 9 # 3 1 STEP 6 582.3 SOMPLE LIBORRY 1 SEP 72 35 10.24 ANOLYSIS 9 36 18 PPY 2TE INTERNAL TEMP 23 R.1R F. 341K 5 5YR 3 STOP 6 522.2 SAMPLE RIBARRY 1 SEE CO 98 10-74 FRANCIS 8 20 24 674 SE SOLD 5 SYX 8 | STOP 6 - 600.0 SAMPLE LIMMANY 1 - SEM 30 - SEM 10-12 ANALYSIS 6 - 35 - 20 MPH STO INTERNAL TEMP 28 - 0.16 M. 3916 - 5 - 376 M CELPOUND NOSE - PEAK E.T. ANDAMPER CONFIDENCIAL CLAK R. T. AREAZPEN 5 68.2 5.3 55 6 198.3 6.3 95 2 372.6 6.3 95 6 488.2 8.7 95 3 488.2 8.7 95 -1 67,5 0,6 0s -2 155 5 911 05 -4 528,7 0.5 03 -5 980,7 2,0 0s -6 985,1 4,1 0s CRKROWN LINENDAIN UNKRIPE). COMPOUND NAME FERRY R.T. AREAUTEM UNKNOCK LINKNOVIII LINKNOVIII ONKNOWN

Repeat Injection

LINKNOON

LOUIS NOWN DINKHOWN FINKING MIN 9 21.5 2.9 03 5 129.6 9.2 05 8 4.6.1 4.8 03 0 438.8 8.8 05

Increased flow to 9 cm/sec

2 ppm

PHYSICAN

INCHESIN

10 ppm

NUMBER

20 ppm

PSKSCS.5

IBUS

20.3/VS

Gan 20 apr. = 2.2.5

UNRINDER

UNKNOWN UNYNDER A Consideration of the Constitution of the Con

SOIL GAS CALIBRATION DATA FOR MIXED BTEX STANDARDS							
ENGINEERIN	NG-SCIENCE		CLIENT: A	20E	DATE: 9	122/95	(6)
PROJECT:	Renelial	Invest			Operator:	SIPA	
LOCATION:	SP40-2	5				of I'm	
						<u> </u>	
Instrument Specs:							
Type of GC: Column Type:		4c		<del></del>	<del></del>		
Chart Speed:	- <del> </del>				<del></del>		
Gain: Sensitivity:					_		
Gas Flow Rate:		· · · · · · · · · · · · · · · · · · ·			_		
Tank Pressure:					<del>-</del>		
Standard:	20x 8	PM			Comments:		
Concentration:		M	Tedlar or G	lass Bulb			
Inj. volume:					4		
Analysis #: Time:		~			-		ĺ
				<del></del>			
	Actual Std.	Injection	Normalized	Area	Retention	Response	Delta
Analyte: Benzene	Conc.(ppmV)	$\frac{x \text{ Vol.(ml)}}{\sqrt{n}}$	Conc.(ppmV)	(vs) 	Time (sec.)	Factor 0.85	RF
Toluene	20.00	ml	20,00	19.6	155.0	1.02	
Ethylbenzene	20,16	1 ml	20.16	ાવડા	362.7	1.43	
O-Xylenes	20.12	1,ml	20.12	42, 2	397.8	0.47	
M-Xylenes	20.12	/m/	20.12	23.8	3928	0,47	
P-Xylenes Notes: RF = C	Zo. Of Conc. ÷ Area (vs	) · Actual Std. C	nc. is to be obtained		979.7	onc. normalized to	1 ml injection
Standard:		·	one. Is to be obtained	dom analysis of g	Comments:	MC. HOLMANIZCO K	o i un injection.
Concentration			Tedlar or C	lass Bulb	]		
Inj. volume:		<u> </u>					
Analysis #: Time:		75			4		
Time.	12.	1 <i>0</i>					
	Actual Std.	Injection	Normalized	Area	Retention	Response	Delta
Analyte:		x Vol.(ml) =	Conc.(ppmV)	(vs)	Time (sec.)	Factor	RF
Benzene Toluene	20.6	0,5	10.3	11.7	65.7	0.88	5-90.04 5-96.05
Ethylbenzene	20.00 20.16	0.5	10.0	10.3 9,3	369.8	1.08	,28
O-Xylenes	20.12	05	10.06	22.8	402.7	0,44	107
M-Xylenes	20.12	0.5	10.06	22.8	402.7	0.44	.07
P-Xylenes	20.04	0.5	10.02	13,4	4833	-0,75	11-
Notes: RF = C			onc. is to be obtained	from analysis of g		onc. normalized to	o 1 ml injection.
Standard: Concentration:		·	Tedlar or C	lass Bulb	Comments:		
Inj. volume:							
Analysis #:	37				4		
Time	13:3	<u></u>					
	Actual Std.	Injection	Normalized	Area	Retention	Response	Delta
Analyte:		x = Vol.(ml) =	Conc.(ppmY)	(vs)	Time (sec.)	Factor	RF
Benzene	20.8	0,25	5.15	5,5 6,3	66,7	8,94	,07
Toluene	20.00	035	5,00	6,3	158.9	0,79	34
Ethylbenzene	20,16	852	5.04	6.3	372.6	0.80	.30
O-Xylenes M-Xylenes	20.12 20.12	733	5.03	140	406.3	0.36	.20
P-Xylenes	20.04	623	5.01	8.5	488.7	0,69	.24
Notes: RF = C	Conc. ÷ Area (v.	); Actual Std. C	onc. is to be obtained	from analysis of g	as standard; Co	onc. normalized to	o 1 ml injection.

SOIL GAS CALIBRATION DATA FOR MIXED BTEX STANDARDS							
engineering-science client: ACOE					date: 9	122/95	_
PROJECT:	Kenedy	Al In	restigate	Tes	Operator:		
LOCATION: SPAD-25							
Standard		m			Comments:		
Concentration		en	Tedlar or	Glass Bulb	_		
Inj. volume:		u/			4		
Analysis #		- 17			4		
Time	/3	24					
Analysis	Actual Std.	Injection x Vol.(ml)	Normalized = Conc.(ppmV)	Area (vs)	Retention Time (sec.)	Response Factor	Delta RF
Analyte: Benzene		x Vol.(ml)	2.06	2.6	665	0.79	1
Toluene	20.00	0.1	2.00	3,0	158.6	0.64	<del> </del>
Ethylbenzene	20.16	0.1	2.02	3.5	370.5	0.58	<del> </del>
O-Xylenes	20.12	21	2.01	7.3	402.7	0.28	<del> </del>
M-Xylenes	20.12	0.1	2.01	7.2	402,7	0.28	
P-Xylenes	2004	0.1	2.00	4.0	485-1	0.8	
Notes: RF = 0			Conc. is to be obtained		s standard ; Co	onc. normalized t	o 1 ml injection.
Standard:					Comments:		
Concentration			Tedlar or C	Glass Bulb	1 _		
Inj. volume:							
Analysis #:							
Time:					1		
Analyte:	Actual Std. Conc.(ppmV)	Injection x Vol.(ml)	Normalized — Conc.(ppmV)	Airea (vs)	Retention Time (sec.)	Response Factor	Delta RF
Benzene	сонс.(ррш у)	, vo.,,	Constpant	1	1	T	T
Toluene	····				1		
Ethylbenzene				1			
O-Xylenes							
M-Xylenes							
P-Xylenes							
Notes: RF = C	Conc. + Area (va	); Actual Std. (	Conc. is to be obtained	from analysis of ga	s standard; Co	nc. normalized t	o 1 ml injection.

SUBJECT SEAD 25

SOIL GOS Survey Colibration Curve

SOIL GOS Survey Colibration Curve

SOIL GOS Survey Colibration Curve

SOIL GOS Survey Colibration Curve

SOIL GOS SURVEY Colibration Curve

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SOIL GOS SURVEY Colibration Curve

SOIL GOS SURVEY Colibration Curve

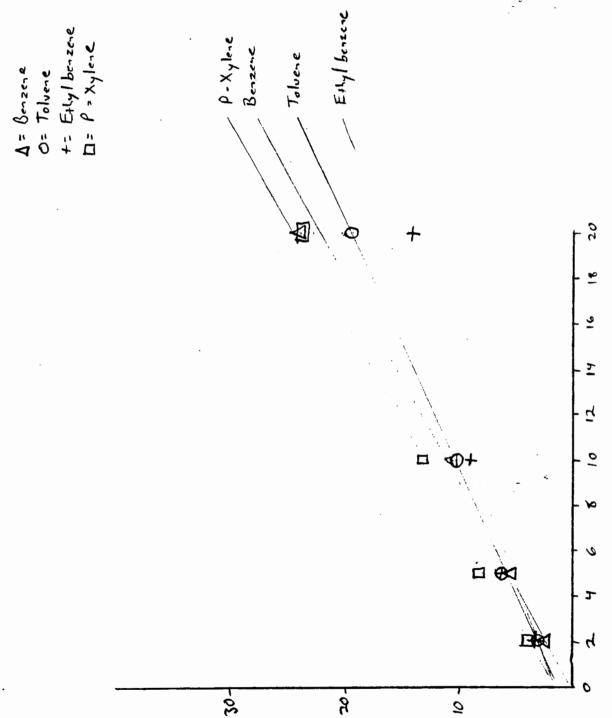
SOIL GOS SURVEY Colibration Curve

SOIL GOS SURVEY Colibration Curve

SOIL GOS SURVEY Colibration Curve

SOIL GOS SURVEY Colibration Curve

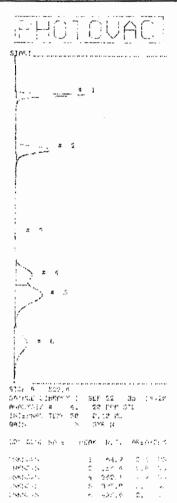
SOIL GOS SURVEY Colibration Curve



The second secon 



;LIENT	JOB NO	SHEET 10 OF 19
SUBJECT	BY	DATE 9/22/95
	CKD.	REVISION



End of Day

SUBJECT Soil Ges Survey - SEAD 25

SUBJECT Soil Ges Survey - SEAD 25

SKD. REVISION

SEP 23 95 8:26 FIELD: 30 POWER: 38 SAMPLE 8.0 0.0 16.0 CAL EVENT 3 0.0 0.0 120.0 EVENT 5 12.0 120.0 0.0 EUEKI 2 0.0 e.e 2.0 Flow @ 9 Ambient Temp 16°C Column Oven @ 20°C

ENOTOUPO

= 1

20 ppm Calibration
dilution vessel Blk

+
Syr. Q Blk
(Used to transfer 50ppm

" " std to vessel.)

PERSON OF THE CONTROL

COMPOUND NAME PEAK R.T. AREAZERS

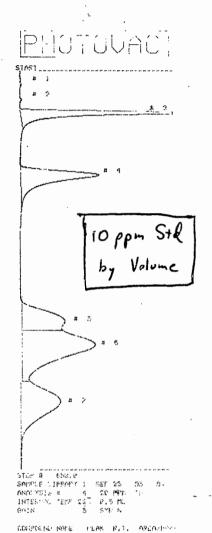
\$ 100 489.2 \$FIFFLE LLERRRY 1 SEP 20 95 8:00 RNALTSIS # 2 SYE PLK INTERNAL TEMP 22 1.P ML 9011- 5 SYE K

COMPCIND MADE PEAK N.T. AMERIPPM UNKNOWN 3 122.6 23.2 mUS

PHOTOVAC,

COMPOUND NAME PEAK BUT, OREAZERM,

Concelled Injection Turned off oven Ambient Temp 18°C



5 69.6 (11.1 05 4 171.8 (0.1 05 5 410.2 8.0 08 6 450.4 22.4 0.

PHALIDMA DUKHUMA

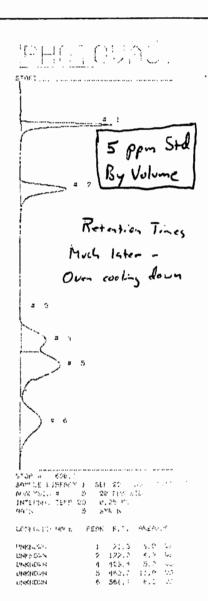
DRKNOVE

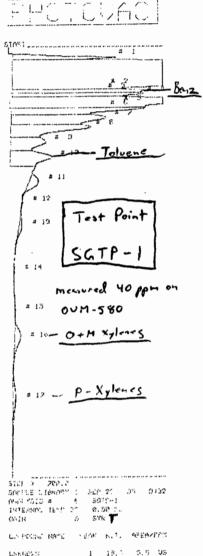
LINKING AT

 SUBJECT
 JOB NO.
 SHEET 2 OF 13

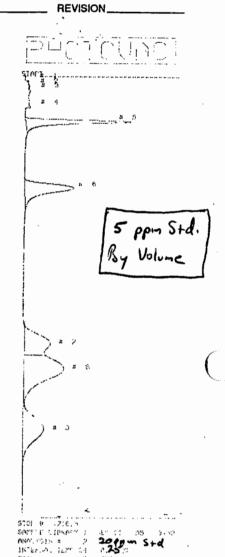
 BY KKS
 DATE 9-23-95

CKD.





		•		
Confrontial NAT	E SEAK	P	4FEAZ	rre
LNKKESK	1	18. 7	5.5	us
ENKROPES	2	4. 4	250.5	V.3
SASKSGG-PR	- 3	20.0	5.10	93
reakter was	- 1	27.3		UC,
DRESSOR	3	81.1	22.1	ڌب
CONTROL OF THE	€.	182.0	2.4	
	2	116.1	3.6	V.S
LINE PERSONS	ন	103.3		
CNKNOWN		155.5	4.2	IJ.,
THRHOPH	-15	123.2	5.5	US
LINKINDUN	11	220,1	1.2	V.S
CHANGEN	12	237.8	53, 9	r:VS
UNKNOWN	15	232.3	525. 2	$\pi M_{\rm s}$
L MINITEN	15	430.8	105.0	p 13
LINKHOLIN	16	475.4	1.3	VΩ
CHKNOSIN	17	525.1	625.4	n.U.3



Total Accessas. 7 vs

1 ml equivalent = 647.4 avs Gain 20 cquw = 2589.6 vs

2586145

COMMISSION NAME OF EAST BUT. ANEARTY

OBKRLON POKRODA POKROM CARTEGO POKROM POKROM POKROM 4 50.3 40.2 a03 5 24.1 4.1 03.4 6 180.3 5.4 0... 2 40.6 5.3 90 6 42.2 11.2 05 3 882.1 6.0 05

	SOIL GAS CALIBRATION DATA FOR MIXED BTEX STANDARDS							
ENGINEERIN	NG-SCIENCE			OE	/	9/23/95		
PROJECT:	Domodia	ig Investig	chon	•	Operator:			
LOCATION:	remening				K5/P	EM		
LOGITION.	6.700-25				1,0/1	r wi		
	שמחשב					-· ,		
Standard:	50.47	0754	6.4		Comments:			
Concentration:			Tedlar or	Glass Bulb	Comments:			
Inj. volume:	0.5	PH U. IVER	regial of	Jiass Dulo	1			
Analysis #:		<u> </u>			1			
Time:		רכ			1			
'								
	Actual Std.	Injection	Normalized	Area	Retention	Response	Delta	
Analyte:		x Vol.(ml) =	Conc.(ppmV)	(vs)	Time (sec.)	Factor	RF	
Benzene	20.6	Q5 N/	10,3	11.5	69.6	040.93		
Toluene	20.0	0.5 M	/0	10.01	171.8	1198 D.99		
Ethylbenzene	20,16	0.5 ml	10,08	8.9	4/3.2	1, 13		
O-Xylenes	20,12	0.5 ml	10.06	23,4	4.52,4	0.43		
M-Xylenes	20.12	0,5 m!	10.06	23.4	452.4	0:43		
P-Xylenes	20.04	0,5 ml	10.02	/3.2	546.1	0.76		
Notes: RF = C		s); Actual Std. Co	nc. is to be obtained	d from analysis of gas	s standard; C	onc. normalized to	1 ml injection.	
Standard:					Comments:			
Concentration:			Tedlar or C	Glass Bulb				
Inj. volume:								
Analysis #:								
Time:								
	Actual Std.	Injection	Normalized	Area	Retention	Response	Delta	
Analyte:		x Vol.(ml) =	Conc.(ppmV)	(vs)	Time (sec.)	Factor	RF	
Benzene	20.6	2.5	5.75	43 7 4.9	74.1	106		
Toluene	20,0	,23	5,00	4.9 5.5	183.3	4.030.91		
Ethylbenzene	20,16	25	5.04	2.5	439.6	0.92		
O-Xylenes	20.12	.25	5.03	5-5-11.7	479,7	0,43		
M-Xylenes	20,12	:25	5.03	11.7	479,7	0,43		
P-Xylenes	20,04	, 25	5.01	6,2	580.1	0.81		
Notes: RF = C				from analysis of gas		onc. normalized to	1 ml injection.	

And the strange of th -

# PARSONS MAIN, INC. 18 1 2022 1 2022 2022



LIENT		JOB NO	SHEET 3 OF 13
SUBJECT		BY the	DATE 9-23-95
	- FHITEMALI		REVISION
PHOTOURO	STAR#	- T	o insure max, separation
START		- Flow	will be @ 8
STAKT.			oven not used. bient temp should be
			· @ 18°C. lysis dunation @ 750s
Tolone	STOP 6 240.6 SABULE LIBRARY I SEP 25 00 10:19 ANG YOLE 6 240.6 SABULE LIBRARY I SEP 25 00 10:19 HOLEWOOT LEAD 6 5 10:19	,	
5 2 2	Europe State (September 1997) (September 1997)		
	THE COURT OF THE SECTION AS IN THE		
= 10 + Ethyllorsece			
1 0+M Xyberre	]		
# 11 P-Xylencs	\$G 5 -9		
GWTP-1 Ground mater Headspace			.5 · ` · · · · · · · · · · · · · · · · ·
# 13 STCT #			
0918 5 SYR T  COMPOUND NAME PERK 8.1. OPERABIT  LIMINDAN 1 18.4 1.6 9.  ONKNOWN 2 28.7 26.2 9.  ONKNOWN 5 88.0 189.1 95	STOP 6 400.0 SAMPLE LIBBERT 1 DEP 20 35 .2426 ANGUNID 8 1P 505-5 INTERNAL TEPS 27 1.9 M. GAIN 1P 5WR E		
DIRKNOWN 4 194.2 12.9 UT  CHRISTON 5 149.2 22.9 UT  CHRISTON 5 149.2 22.9 UT  CHRISTON 6 200.1 24.0 UT  CHRISTON 7 200.6 6.6 UT  CHRISTON 9 006.7 06.6 UT  CHRISTON 9 960.7 0.6 F UT  CHRISTON 19 400.6 0.6 UT	COMPOUNT NAME	w ,5	
12   126   17   126		45	
	0.6 Gain 20 equv. = 1.	205	
•	-/0		

PARSONS	MAIN.	INC.



CLIENT	JOB NO	SHEET 4 OF 13
SUBJECT	BY	KKS DATE 9-23-45
	PHUTCHIC	
, 5G5-10	D.I. Water  Headspace  Reported with  Analysis * 17  Grain 20	SG5-11 Gain 10
DORN TEN ON THE ME SE DONN THE ME SE DONN THE PROPERTY OF THE	TOP 9 CADE AND TO US TRANSPORT OF THE PROPERTY	a 5
Grim 20 equiu = 4.4 04 = [0.003]	Normalizat = x2 = to  Demonstrated 1 minis  Analyte - Free 4.000  Water - DAFW  Gam. 20 equiv = 8.000  = 0.4007	STO. 8 - 618.0 50 11. 1. 1900 11. 11. 12. 12. 12. 12. 12. 12. 12. 12.
STOCA 188.7  SMALE LIMPORTY: 0: 20 05 .v.// ONCOUNT : 11 57% FUK .CIEMON TERM NO 1.8 DL TOTAL IP DYF P  COFFORM MORE MECK B.T. ASSOCRED		Gein 20 equil. = 3.645

DLIENT	JOB N	NO SHEET 5 OF 13
SUBJECT	BY	KKS DATE 9-23-95
		a q
# v.	# 7	D.T. Water Blk
SG5-11D		Sain @ 20
Gain @ 20	3 0	
	# 0	
# 12		
STATE OF THE STATE		STAN A COURT OF THE PROPERTY O
The same way again out, memorial way 8.2  The same and the same and the way 8.2  The same and th	•	Demonstrated Another free [0.5v;
U 17		

1 MANUSAN

2 .8.5 0.0.4 %



	JOB NO.	SHEET_ 6 OF 13
ENT	RY	KICS DATE 9-23-95
	√ 18 - 19 - 19 - 19 - 19 - 19 - 19 - 19 -	
STA 9 107.0 STA 9 107.0 WHAT I CLEAN 1 TO TO TO TO TO TO TO TO TO TO TO TO TO	SG6-11	SG6-10
Time is the con-	# 3 # 12	Carin @ 20
	4 17 Galy @ 20	= .:
	<b>=</b> :.	= 12
STAM WE 1994.  STAM SE LIMPARAM CONTROL OF STA	STON A CHARLETT CONTROL OF THE CONTR	Size of the second of the seco
	10 10 10 10 10 10 10 10 10 10 10 10 10 1	5.0 xc
	12.249 [1.6 vs]	6.200
# 0		

P	ARS	<b>ONS</b>	5 N	ΛA	IN,	INC.



IENT	JOB NO	SHEET 7 OF 13
BJECT	BY	KICS DATE 9-23-95
台前,何人	<u> </u>	
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	7	. * * * * * * * * * * * * * * * * * * *
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a t	ý # S	= (
# <i>7</i>	!	; ;
	566-8	566-7
= 556-9	3,000	700-1
!		# 3
) a 3	# 1	
m 12	) # )·	ĺ
# 17		
# 15	<b>=</b> 100	1
SN A CEEN	•	
EST A CHELD COLD COLD STORM COLD COLD COLD COLD COLD COLD COLD COLD	oter in color and a second and	A TOTAL SEEK TOTAL SEEK TOTAL SEEK TOTAL
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₩ 3, <b>\$</b>	de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la	
	~ 5.2 NS O.4	
3.9 45	75745	
0.140	3.217	6.6
	lar.	0,5
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	SIGE R 1/8.1	
	STOP R CREAT CONTROL OF DEPTH OF THE PER CREAT CONTROL OF THE PER CREAT	

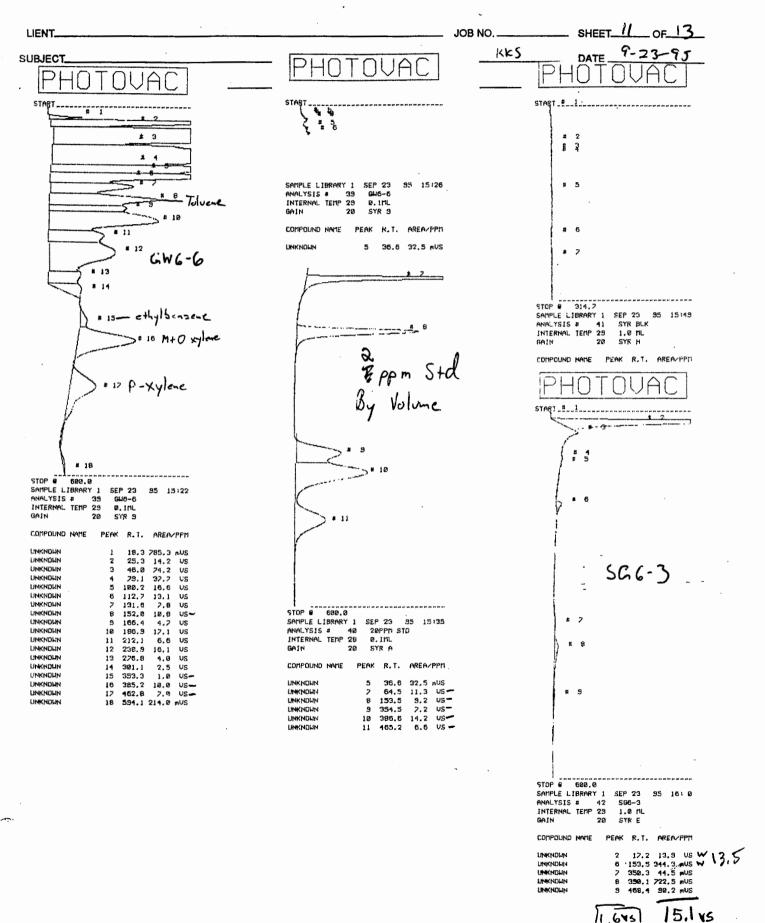
CUENT		JOB NO.		SHEET_ 8 OF 13
SUBJECT		NK	ıcş	DATE 9-23-95
. <u>EDGTGV41                                    </u>			.	
190gr. # 12	1. A. J. J. J. J. J. J. J. J. J. J. J. J. J.			
	4 4		:	
1001846			1 00	
- ·			¥ 13	
Tolvene	The second secon		# 13	
1				
A # 10	2 ppm & By Volume	STD	# 14	
( * 15	By Volume		# 15	
26.6-6	, , , , , , , , , , , , , , , , , , , ,		# 16	
1 = 10 - Ethylberzene	2 14		- 16	
= 10 +1 + 0-xylene	man and an an an and a 12		# 17	
No. 5 V. L. C		_		******************
= 12 P-Xylene	* "	S A	NALYSIS #	' 1 SEP 23 95 13:16 29 SYR BLK
	ľ	G	NTERNAL TEMP	20 SYR K
Sampled by own	5768 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		NKNOMN NAWE	PEAK R.T. AREA/PPN 16 368,4 136.8 mUS
sampled by oun	<ul> <li>Medical Conference of State of Conference of</li></ul>	•	-	
1 to 18 1 to 19 to	e de la companya de l		РНО	TOUGO
		- l	FART # 1	
		=	\$ 3	
			1 8	
			# 7	
			}	
			# 10	
		STO	DP € 281.5	4 050 00 05 14 15
Story of a Olin		FINE	PLTSIS # 3 TERNAL TEMP 2	9 0,5 ML
THE NOTE OF THE PARTY OF THE PA				Ø SYR T PEAK R.T. AREA/PPN
98.6 vs		UN	KNOHN .	5 68.5 65.9 mUS



CLIENT	JOB!	NO SHEET 9 OF 13
PHOTOVAC	PHOTOVAC	((C) DATE 9 - 23-95
START	START	<u>.</u>
	STOP @ 129.0 SAMPLE LIBRARY 1 SEP 23 95 13140 ANALYSIS # 33 SYR BLK INTERNAL TEMP 32 8,5 TLL GAIN 20 SYR A	
	COMPOUND NAME PEAK R.T. AREA/PPM	
STOP @ 259.5  SAMPLE LIBRARY 1 SEP 23 95 13:30  AMALYSIS # 31 SYR BLK  INTERNAL TEMP 30 8.5 ML  GAIN 20 SYR L	PHOTOUAC	PHOTOUAC
COMPOUND NAME PEAK R.T. AREA/PPM		1
PHOTOVAC	# 58 # 7 # 188 # 11 # 12	
# 5	# 13 # 14 # 15	# <b>4</b>
1 9	# 16	* 5
# 9	STOP @ 396.5 SAMPLE LIBRARY 1 SEP 23 95 13146 ANALYSIS # 34 SYR BLK INTERNAL TEMP 30 0.5 ML GAIN 20 SYR E	
# 10	COMPOUND NAME PEAK R.T. AREA/PPM	
# 11 STOP @ 425.6 SAMPLE LIBRARY 1 SEF 23 95 13:32 ANALYSIS # 32 57R BLK	UNKNOUN 7 88.9 34.0 mUS UNKNOUN 8 102.7 29.0 mUS UNKNOUN 13 167.0 29.9 mUS	# 6
INTERNAL TEMP 29 0.5 ML		SAMPLE LIBRARY I SEP 23 95 13:57
GAIN 20 SYR M  COMPOUND NAME PEAK R.T. AREA/PPM		analysis # 35 syr blk Internal temp 29 8.5 ml Gain 20 syr d
THE PARTY IN THE PARTY IN		COMPOUND NAME PEAK R.T. AREA/PPM
		UNKNOWN 5 360.0 39.8 MUS

SHEET 10 OF 13 JOB NO. -CLIENT KKS 9-23-95 BY. DATE START\_\_\_\_ Ç) D # 10 - Tolvene 566-4 546-5 SG6-5D (0014-5 50: 240 ppm # 11 2 11 £ 12 Gain @ 5 # 13 # 14 # 15 # 16 3 9 17 **s** 12 B 18 3  $\mathcal{G}$ # 19 # 28 # 13 STOP @ 600.0 SAMPLE LIBRARY 1 SEP 23 95 14:39 STOP @ 600.0 SAMPLE LIBRARY 1 STOP @ 600.0 SAMPLE LIBRARY 1 SEP 29 95 14:55 SEP 23 MALTSIS # 36 INTERNAL TEMP 28 \$G6-4 0.5 ML SYR T 5G6-5 0.25 ML ANALYSIS # 38 INTERNAL TEMP 29 INTERNAL TEMP 29 Ø. 25 ML GAIN 20 SYR A x 2=1. COMPOUND NAME PEAK R.T. AREA/PPM COMPOUND NAME PEAK R.T. AREA/PPM COMPOUND NAME PEAK R.T. AREA/PPM 3.7 US W 3.7 UNKNOUN UNKNOWN 16.9 38.0 NAKADNik 19.0 NWKWONW 58.5 mVS 134.3 13.8 US 153.8 2.1 US = 185.2 2.8 US UNKNOUN 56.7 223.7 102.6 13.9 UNKHOUN US KIN 46.4 mUS 26.5 mUS 31.8 mUS 23.7 mUS 76.7 1**0**4.5 **DMKNORN** UNKNOWN NINKHONN US AV **UNKNOWN** UNKNOUN 185.7 113,5 133,1 9.6 US NO UNKNOUN HINKNDUN 9 137.0 NUKNOWN **NNKNONN** 18 INKNOUN 457.2 21.0 mUS UNKNOWN 3,4 1.5 6 152.3 US K 11 34.7 mUS 23.6 mUS UNKNOWN 338.9 UNKNOWN US No 184.1 NKHOHN 356.3 **NUKNONN** 214.1 16.9 US 235.7 24.3 US UNKNOUN 16 420.4 26.0 mUS 67.5 mUS **UNKNOWN** 18 1024.8 VS HINKNOUN 449.2 412.3 mUS HINKNOWN 516.6 570.1 85.4 mUS 23,4 mUS **NWKNOH**N ሂ ጘ 2,663.6 Vs 1 ml equir - 4,099.2 1 ml equir -> 13,318.0 vs In lequivalent · Gain of 5 440.) x4 equa. Gair 20 = 16,396.8 45 16,39705







CLIENT		JOB NO	SHEET 12 OF 13	(
PHOTOUAC	PHOTOUAC START.		PHOTOUAC	
B- Tolvere , woter	# 5 # 6 # 7 # 8		# 4 # 5 # 6	
S GG-1	SG7-1		567-2	
# 13	. a 10 ·		# 5	
STDP # 533,0	# 11		# 11 # 12	(
SAMPLE LIBRARY 1 SEP 23 95 16:10 ANALYSIS 43 SG6-1 INTERNAL TEMP 29 1.6 ML GAIN 20 SYR F  COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 2 19.4 39.6 US W UNKNOWN 4 68.3 53.6 MUS UNKNOWN 5 79.1 51.4 MUS UNKNOWN 6 89.3 37.1 MUS UNKNOWN 6 89.3 37.1 MUS UNKNOWN 5 11.1 161.8 MUS	STOP @ 600.0  SAMPLE I.IBRARY 1 SEP 23 95 16120  ANALYSIS # 44 SG7-1  INTERNAL TEMP 29 1.0 ML  GAIN 20 SYR L  COMPOUND NAME PEAK R.T. AREA/PPM		# 13  SAPE	
114.1   161.0 mUS   114.0   115.0 mUS   114.0   115.0 mUS   1152.9   604.4 mUS   1152.9   604.4 mUS   1152.9   604.4 mUS   1152.9   604.4 mUS   1152.9   604.1 mUS   1152.9	UNKKODIN         2         18.5         26.7         US M           UNKKODIN         3         36.5         351.7         mUS           UNKKODIN         4         66.1         37.6         mUS           UNKKODIN         5         79.7         77.9         mUS           UNKKODIN         6         197.7         25.6         mUS           UNKKODIN         9         241.3         28.6         mUS           UNKNOLIN         10         417.4         228.5         mUS           UNKNOLIN         11         515.7         97.0         mUS	26.0	UNKNOWN	
= (1.3 vs)	27,9 (1.9V)		0,405	

CLIENT	JOB NO	SHEET 13 OF 13
SUBJECT	- K	DATE 9-23-15
PHOTOVACI	[PHOTOVAC]	PHOTOVAC
START # 2	START 5 1 * 3	START
	Z = 6	} # 3
# 3	\$ 10°	
		!
<b>8</b> 4	<b>*</b> 11	# 6
	\$ 12 \$ 13 SG 7-4	# 7
2.5 P D P11	34,1	2 - 4 (1)
8 Rod Blk		7 88 - 21 m
		2 pg - Sid. By Volume
1 7	# 14	) * B
# 8	# 15	. 9
<b>a</b> 9		
		* 10
SG-R8-3	a 16	V
	} * 17	STOP @ 555,2
570P <b>9</b> 600,0	STOP @ 600.0	SAMPLE LIBRARY 1 SEP 23 95 17: 7 ANALYSIS # 48 20 PPM STD INTERNAL TEMP 27 0.1 ML
SAIPLE LIBRARY 1 SEP 23 95 16:42 ANALYSIS 46 SG-RB — 3 INTERNAL TENP 28 1.0 PL	SAMPLE LIBRARY 1 SEP 23 95 16156 ANALYSIS # 47 SG7-4 INTERNAL TEMP 28 0.5 ML	GAIN 20 SYR A COMPOUND NAME PEAK R.I. AREA/PPM
GAIN 20 SYR H	GAIN 20 SYR D	UNKNOWN 5 86.8 12.6 US UNKNOWN 6 159.8 9.9 US
CONFOUND NAME PEAK R.T. AREA/PPM UNKNOWN 2 17.4 5.1 US W 5.1	COMPOUND NAME PEAK R.T. AREA/PPM  UNKNOWN 3 16.7 4.5 US \ 5.7	UNKNOWN 8 372.6 7.2 US UNKNOWN 9 486.2 14.5 US UNKNOWN 10 489.6 6.5 US
UNKNOUN 4 160.2 33.5 mUS	UNKNOUN 4 22,7 1,2 US W UNKNOUN 9 82,5 27,6 mUS UNKNOUN 11 162,8 25,3 mUS	1 18 465.0 0.5 VS
5.115	UNKNOUN 13 218.9 40.6 kUS UNKNOUN 14 358.1 28.0 mUS UNKNOUN 17 527.1 56.6 kUS	
	1 ml equivalent = 11.8 evs	
	<b>₹</b>	PHOTOVAC
	1 ml equivalent = 11.8 evs	START 4
	0.245	4 12
		# 13
		STOP @ 183.6 SAMPLE LIBRARY 1 SEP 23 95 17:12
		ANALYSIS # 49 SYR BLK INTERNAL TEMP 30 0.5 ML GAIN 20 SYR N
		COMPOUND NAME PEAK R.T. AREA/PPM
		UNKNOWN · 1 5.4 35.8 mVs

End of Day

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LIENT ACOE		JOB NO	SHEET OF 14
SUBJECT Soil Gas Survey - SE	EAD 25	bv KKS	DATE 9-24-45
	PHOTOUAC		PHOTOVACI
PHOTOUAC SEP 23 S5 17:15			
FIELD: 30 POWER: 36  SATPLE	1 ½		r 1
Flow - 9  Andread Temp - 26°C	STOP @ 245.3 SAMPLE LIBRARY 1 SEP 29 95 17:30 ANALYSIS # 2 SYR BLK INTERNAL TEMP 19 0.5 ML GAIN 10 SYR L  COMPOUND NAME PEAK R.T. AREA/PPM		STOP 9 271.9  SAMPLE LIBRARY 1 SEP 24 95 8:52  ANALYSIS # 5 SYR BLK  INTERNAL TEMP 22 9.5 ML  GAIN 12 SYP H  COMPOUND NAME PEAK R.T. AREA/FPM
PHOTOVAC	PHOTOUAC		PHOTOVAC
START			* 1
			* 2
	STOP 9 387.2 SAMPLE LIBRARY I SEP 23 95 17:37 ANALYSIS # 3 SYR BLK INTERNAL TEMP 19 8.5 ML GAIN 10 SYR I COMPOUND MANE PEAK R.T. AREA/PPM		STOP & 413.8 SAMPLE LIBRARY 1 SEP 24 95 8:59 ANALYSIS # 6 SYR BLK INTERNAL TEMP 22 0.5 ML GAIN 10 SYR F COMPOUND NAME PEAK R.T. AREA/PPM
STOP @ 491.6 SAMPLE LIBRARY 1 SEP 23 95 17:25 AMALYSIS # 1 SYR BLK INTERNAL TEMP 16 0.5 ML GAIN 10 SYR M	PHOTOUAC		
OFFSET 0.0 mU CHART SPEED 1 OT/MIn SLDPE SENS, 4 10 4 mU/Sec HINDOK +/- 1 Percent HINIMH AREA 20 mU/Sec TIMER DELAY 10.0 Sec ANALYSIS TIME 600.0 Sec CYCLE TIME 0 MIn			
COMPOUND NAME PEAK R.T. AREA/PPM UNKKNOWN 1 38.0 48.8 mUS	STOP \$ 195.4  SAMPLE LIBRARY 1 SEP 24 95 8147  ANALYSIS # 4 SYR BLK  INTERNAL TEMP 22 8.5 ML  BAIN 10 SYR K		

CLIENT		JOB NO	SHEET_2OF_14_
)		BY KKS	DATE 9-24-95
PHOTOVAC _	PHOTOVAC	<b>ж</b> р Р	HOTOVACI
START	START	START	
. 1			
		STOP @ SAMPLE LI ANALYSIS	IBRARY 1 SEP 24 95 9:28 # 11 SYR BLK TEMP 27 0.5 ML
▶ 2		. COMPOUND	NAME PEAK R.T. AREA/PPM
STOP # 272.8 SATIFLE LIBRARY 1 SEP 24 95 9: 4 ANALYSIS # 7 SYR BLK	# 1 # 2 STOF @ 325.5	PH	IOTOVAC
INTERNAL TEMP 23 0.5 ML GAJH 10 SYR J	SAMPLE LIBRARY 1 SEP 24 95 9:16 ANALYSIS # 9 SYR BLK INTERNAL TEMP 24 8.5 ML	START	
CONFOUND NAME PEAK R.T. AREA/PPH	GAIN 10 SYR G COMPOUND NAME PEAK R.T. AREA/PPM		
START			
	PHOTOVAC		
	START	# 2	
		ANALYSIS INTERNAL	267.5 BRARY I SEF 24 95 9:33 # 12 SYR BLK TEMP 26 0:25mL 10 SYR 9
		COMPOUND	NAME PEAK R.T. AREA/PPM
, , 1	# 2		· •
		PH	OTOUACI
STOP @ 407.2		START	
SAMPLE LIBRARY 1 SEP 24 95 9111 ANALYSIS # 6 SYR BLK INTERNAL TEMP 29 8.5 ML GAIN 10 SYR G			
COMPOUND MAME PEAK R.T. AREA/PPM			
	STOP 9 515.4 SAMPLE LIBRARY 1 SEP 24 95 9:25		
	ANALYSIS # 10 SYR BLK INTERNAL TEMP 24 0.5 ML GAIN 10 SYR A		
	COMPOUND NAME PEAK R.T. AREA/PPM	STOP @ 2 SAMPLE LIE AMALYSIS #	165.4 SRARY 1 SEP 24 95 9:38 1 13 SYR BLK TEMP 26 0.5ML
			10 SYR B

JOB NO. .... JLIENT\_ KKS/PFN DATE 9-24-25 SUBJECT 1 3 # 3 BTEX 5 ppn Std. by Volume STOP # 349.1 SAMPLE LIBRARY 1 SEP 24 95 9:44 ANALYSIS # 14 INTERNAL TEMP 26 SYR-UESSEL BLK Chain (6) CUMPOUND NAME PEAK R.T. AREA/PPM 1 216.5 62.2 mUS 3 246.8 32.9 mUS DEKNOUN INKNOWN - Flow @ 9 - Andient temp 28°C - Cim @ 20 - New septum - Blew out injection port - Column neybe wol than 26°C, # 10 STOP 8 756.9

STOP 8 756.9

SAMPLE LIBRARY 1 SEP 24 95 18: 2

ANALYSIS # 15 20 PPN STD

INTERNAL TEMP 24 8.; M.

20 SYR 9 STOP @ 769.2 SAMPLE LIBRARY 1 SEP 24 95 10:15 ANALYSIS # 16 20 PPN STD INTERNAL TEMP 24 8.25 ML GAIN 20 SYR 9 extending Analysis time to 800 sec. COMPOLIND NAME PEAK R.T. AREA/PPM COMPOUND NAME PEAK R.T. AREA/PPM UNKNDWN -29.7 DUKNDMM 5 203.3 12.8 US 7 492.3 14.9 US 8 539.1 29.5 US 9 650.8 15.8 US 23,8 30.6 mUS 6 -78.4 26.6 US 7 196.9 38.0 US 8 478.8 26.7 US 9 521.0 171.2 US UNKNOWN LINKNOWN DINKNOWN LINKHOUN 10 633,2 31.1 US

Column is slowly warming up - retention times decreasing although ambient temp remains.

@ 27-29°C

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	SOIL GAS CALIBRATION DATA FOR MIXED BTEX STANDARDS						
ENGINEERII	NG-SCIENCE			COE_	DATE: 9	24/95	
PROJECT:	Reme dia	1 Imst	Sation		Operator:	7	
LOCATION:	SEAR-	1 Inest 25	, ) = 4 2011				
Instrument Specs	//6 //						
Type of GC	· ///otov	AZ			_		
Column Type	****				_		
Chart Speed					-		•
Gain: Sensitivity:					•		
Gas Flow Rate		· · · · · · · · · · · · · · · · · · ·					
Tank Pressure					-		
Standard			<u> </u>		Comments:		
Concentration Inj. volume		fM	Tedlar or <u>C</u>	lass Bulb_>			
Analysis #		<u> </u>			1		,
Time		2			1		
		<u> </u>		-3-11/	·		***************************************
1	Actual Std.	Injection	Normalized	Area	Retention	Response	Delta
Analyte:		x  Vol.(ml) =	Conc.(ppmV)	(vs)	Time (sec.)	Factor	RF
Benzene Toluene	20.6	0.1	3.00	199	79.7	0.16	
Ethylbenzene	20.6	0.1	3.82	14 4	492.3	C-16	
O-Xylenes	20.13	61.	2.00	<b>AAAAA</b> 29.5	521.1	8.57	
M-Xylenes	70.12	01	2.00	29.5	539.1	2007	
P-Xylenes	20.4	0.0	2.04	12.8	6508	6.13	
Notes: $RF = 0$		s); Actual Std. Co	onc. is to be obtained	l from analysis of ga	s standard; Co	onc. normalized to	1 ml injection.
Standard:			<del></del>		Comments:		
Concentration			Tedlar or C	Blass Bulb			
Inj. volume Analysis #		wl .					
Time		7.5		•			
		- <del></del>			<u> </u>		
	Actual Std.	Injection	Normalized	Area	Retention	Response	Delta
Analyte:		x  Vol.(ml) =	Conc.(ppmV)	(vs)	Time (sec.)	Factor	RF
Benzene	30.6	0.35	2.12	26.6	78.4	0.19	
Toluene Ethylbenzene	20.0	0.25	5.0	38.0	196.9	1 Q 18 1	
O-Xylenes	20.19	O as	5.09	101.2	5240	865	
M-Xylenes	20.Và	0.35	5.53	101.2	521.0	0.05	
P-Xylenes	20.4	0.25	5.1	30.1	633,2	n le	
Notes: $RF = C$		s); Actual Std. Co	onc, is to be obtained	from analysis of ga		onc. normátized to	o 1 ml injection.
Standard:			m u	V 75 . V.	Comments:		
Concentration: Inj. volume:			Tediar or C	ilass Bulb	1		
Analysis #					1		
Time							
Į.	Actual Std.	Injection	Normalized	Area	Retention	Response	Delta
Analyte:	Conc.(ppmV)	x Vol.(ml) =	Conc (ppmV)	(vs)	Time (sec.)	Factor	RF
Benzene			Ţ	ļ			
Toluene Ethylbenzene							
O-Xylenes			1	<u> </u>	<b></b>		
M-Xylenes					<del> </del>		
P-Xylenes							
Notes: RF = 0	Conc. ÷ Area (v.	s); Actual Std. Co	onc. is to be obtained	l from analysis of ga	s standard; C	one, normalized to	o 1 ml injection.

. 

CLIENT. KKS/PFM 9-24-15 # 1 \* 2 # 3 5 ppm Std by Volone. 567-5 Chain @ 10 Eshyl benzene # 9 . 10 \* 11 | STOP @ GR2.9 | SEP 24 95 18:09 | SAFELE LIBRARY | SEP 24 95 18:09 | SAFELE LIBRARY | SEP 24 95 18:09 | SAFELE LIBRARY | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 | SEP 24 95 18:09 STOP 9 700.0 SAMPLE LIBRARY\_1 SEP 24 95 11: 6 ANALYSIS # 19 SG2-6 EARLY INTERNAL 1EMP 25 0.25 ML GAIN 10 SYR K ANALYSIS # 18 INTERNAL TEMP 25 5G7-5 0.5 ML GAIN SYR K COMPOUND NAME PEAK R.T. AREA/FPM COMPOUND NAME PEAK R.T. AREAZPPM COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 27.1 11.5 US 1.5 US X2W 1.5 + 2: 1 94.3 1.5 KUS 2 183.3 23.5 US 3 202.1 11.8 US 4 223.7 56.7 US 5 388.5 26.2 US 6 374.0 3.1 US 1 16.8 1.5 US **X2** 2 23.7 513.1 mUS **X2** 9 443.6 177.8 mUS **X2** HINKNOUN 4 192,9 11.3 US 6 461.2 12.2 US 7 504.9 25.7 US 8 609.0 14.6 US HINKNOWN THKNOWN UNKNOWN **FAKNOMA** UNKNOWN UNKNOWN UNKNOWN UNKHOHN 2. 2vs INKNOWN **UNKNOWN** Iral equivalent = 434.0 808.7 mUS 484.2 2.0 US UNKNOWN 1.405

> SG 7-6 (Intal Sample) OUM-580 - 167 ppm



CLIENT		JOB NO SHEET_ 6 OF 14
SUBJECT		BY KKS PFM DATE 9-24-V
PHOTOVAC _	PHOTOVAC	PHOTOVAC
START	STARF 1	START
3		( 4 S
	<b>= 4</b>	<i>,</i> * 6
. 5		* 7
, 4 6	# 5	z 9
	<b>a</b> 6	SG7-7 E-17
= 5G7-7 Lite (Reg. Sample	. # 7	Early
time)	. 8	# 9
<b>a</b> 9		# 10
# 16		STOP # 448,5
		SAMPLE LIBRARY 1 SEP 24 95 12:128 ANALYSIS # 27 SG2-7 INTERNAL TEMP 28 1.6 ML GAIN 10 SYR M
p 12	STOP @ 551.2	COMPOUND NAME PEAK R.T. AREA/PPM UNKNOUN 1 16.5 12.3 US
	SAMPLE LIBRARY 1 SEP 24 95 12:20 ANALYSIS # 26 SYR BLK INTERNAL TEMP 27 #.5 ML GAIN 18 SYR L	UNKNOWN 2 37.6 112.7 mUS   UNKNOWN 5 82.7 223.2 mUS   UNKNOWN 7 162.2 44.3 mVS   UNKNOWN 8 204.9 77.3 mVS   UNKNOWN 8 204.9 77.3 mVS
STOP @ 629.7 SAMPLE LIBRARY 1 SEP 24 95 12:11 ANALYSIS # 25 SG7-7 LATE	COMPOLIND NAME PEAK R.T. AREA/PPN UNKNGUN 5 215.7 24.8 mUS	UNKNDLIN 9 361.4 24.0 AUS
INTERNAL TEMP 27 1.0 ML GAIN 10 SYR L	UNKNOUN 8 373,3 35.0 mUS	STARF 1
COMPOUND NAME PEAK F.T. AREA/PPN UNKNOWN 1 16.5 9.6 US W		2
UNKNOUN 5 169.4 78.5 MUS UNKNOUN 7 298.8 23.5 MUS UNKNOUN 9 385.2 75.2 MUS		
9818		1
(		
9.845 Coin 20 equiv= 19.6	·	# 3
Torres		
		4 5
		# 6 # 7 # 8
		# B
		STOP @ 434.2 SAMPLE LIBRARY 1 SEP 24 .95 12:36 ANALYSIS @ 28 SYR BLK INTERNAL TEMP 28 1.0 HL BAIN 10 SYR H
		COMPOUND NAME PEAK R.T. AREA/PPM
		UNKNOUN 3 284.5 27.1 mUS UNKNOUN 6 364.9 36.5 mUS UNKNOUN 7 385.2 54.9 mUS UNKNOUN 8 396.4 33 5 mUS



\_\_\_\_ SHEET\_ 7\_OF\_14\_ LIENT\_ JOB NO. \_\_\_\_ KKS/PFM 9-24-55 SUBJECT BY. DATE START # 1 START . 1 START \_# \_1 \_2 # # 3 STOP 9 166.0 SAMPLE 1.1BRARY 1 SEP 24 95 13: 9 ANALYSIS # 32 SYR BLK STOP @ 197.0 ANALYSIS # 32 SYR BLK INTERNAL TEMP 31 1.0 ML STDP & 197.0 SAMPLE LIBRARY 1 SEP 24 95 12:54 ANALYSIS # 30 SYR BLK INTERNAL TEMP 30 1.0 ML GAIN 20 SYR J BAIN SYR F COMPOUND NAME PEAK R.T. AKEA/PPM . . COMPOUND NAME PEAK R.T. AREA/PPM UNKNOUN 2 17.5 76.8 mUS # 7 547-8 STAR1 .#...1..... 4 8 START . 1. # 9 **a** 3 **a** 6 # 7 **B** 4 # 10 **#** 5 # 11 SG7-LO 567-9 **#** 12 STOP 8 800.0 SIDP & BMB. 0 SAMPLE LIBRARY 1 SEP 24 95 12:49 ANALYSIS # 29 SG7-8 INTERNAL TEMP 27 1.0 ML GAIN 20 SYR J # 7 # 11 COMPOUND NAME PEAK R.T. AREA/PPM 2 18.2 18.3 US W A 158.3 310.0 mUS W 5 200.5 52.8 mUS 7 353.9 305.4 mUS TINKNOWN UNKADUA UNKNOWN NHKHONH 428.8 123.4 mUS INKNOUN STOP 9 622.9
SATPLE LIBRARY 1 SEP 24 95 13:20
ANALYSIS # 93 SG7-18
INTERNAL TEMP 26 1.0 FL
GAIN 20 SYR G NHKHOM 11 650.8 517.9 mVS 19.645 0.645 COMPOUND NAME PERK R.T. AREA/PPM STOP @ 658.5 SAMPLE LIBRARY 1 SEP 24 95 13: 5 ANALYSIS # 31 SQ7-2 2 16.7 1.7 US W
4 36.1 22.7 mUS
6 157.7 23.5 mUS W
7 196.5 33.1 mUS
9 344.9 36.8 mUS UNKHOUN HINKNOUN ANALYSIS # 2.
INTERNAL TEMP 28
GAIN 20 FUNKHOWN 1.0 ML NHKNDMH UNKNOWN PEAK R.T. AREA/PPH COMPOUND NAME 1.8 45 2 16.7 12.8 US W 4 156.0 113.6 mUS W 5 197.3 66.2 mUS 6 346.1 24.9 mUS NHKHOMH UNKNOUN UNKNOWN UNKNOWN 0.145 13.0 15

CLIENT	· · · · · · · · · · · · · · · · · · ·	JOB NO	SHEET_\$_OF_14_
SUBJECT		BY KES / PFM	DATE 9-24-15
PHOTOVAC	PHOTOVAC		PHOTOVACI
START # 1	START	sī	ART 2
	, n 3		
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	_B	
·	Y		
	5 - 7	• \	
, * 3 <sup>2</sup>	<b>Y</b>		
4 3	5 onm Std	İ	
**	<i>5                                    </i>		
	5 ppm Std By Volume		
. 5			
· · · - Ethylbenzone	,,,_E		# 3
2 - Oth Lylena	# 8 - M+	•	
- Torm Eyena	Commission of the Commission o		
· · - P Kylenes	7 - P		
			# <b>4</b>
1/			P @ 639.8
567-6	STOP @ 672.9	ANI	PLE LIBRARY I SEP 24 95 11:54 NLYSIS # 23 SYR BLK ERNAL TEMP 27 0.5 ML
sterlant sterlant	SAMPLE LIBRARY : SEP 24 95 11:35 ANALYSIS # 2! 20 PPM STD INTERNAL TEMP 25 0.25 ME.	GA,	N 10 SYR T  PDUND NAME - PEAK R.T. AMEA/PPM
and time	GAIN 10 SYR 9	Cor	TOOM MALE TEEN N.T. MILENTIN
	COMPOUND NAME PEAK R.T. AREA/PPM LINKNOUN 4 /2.7 12.6 US	ſī	
STOP @ 100.0 SAMPLE LIBRARY 1 SEP 24 95 11:23 ANALYSIS # 20 SG7-6 LATE	UNKNOWN 5 179.3 11.8 US UNKNOWN 7 427.6 11.4 US UNKNOWN 8 466.8 25.2 US	11	THU I UVHL
INTERNAL TEMP 25 0.25 ML GAIN 10 SYR A	UNKNOWN 9 563.1 13.7 VS	STA	RT
COMPOUND NAME PEAK R.T. AREA/PPM	<u>PHOTOVACI.</u>	ì	
UNKNOUN 1 18.8 1.5 US KK UNKNOUN 2 132.9 6.5 KUS KK UNKNOUN 3 252.3 17.3 US KK	START	}	<b>3 8</b> 4
UNKNOWN 4 296.3 46.8 US KY UNKNOWN 5 367.0 11.0 US KY	4 3		
UNKNOUN 7 474.8 25.2 US - 100.8 UNKNOUN 8 572.1 24.6 US - 41.4	" Turned on ove	· 1	
UNKNOUN 9 735,4 2,6 US#1	to 20°C	!	
2 567-6(Dop) 8644.645		; ;	
	# 6 # 7		# 5
")		SAM	P @ 292.5 PLE LIBRARY 1 SEP 24 95 12:0 _YSIS # 24 SYR BLK
1 ml equiv. = 34,578.445	STOP @ 260.6 SAMPLE LIBRARY ! SEP 24 95 11:43		ERNAL TEMP 28 0.5 ML
Guin 20 equin =	Analysis # 22 Syr Blk Internal Tenp 28 0.5 ML	con	POUND MARKE PEAK R.T. AREA/PPM
0 0 - 0 - 6/444 -	GAIN 19 SYR I		

COMPOUND NAME PEAK R.T. AREA/PPM



;LIENT.		JOB NO	SHEET_ 8 OF 14
SUBJECT		BY KES	PHOTOVACI
PHOTOVAC	PHOTOVAC		
START 4 1	START		START # 1
!	3 4		6. 6.
* 2			# 4
	ĺ		
	- T		<b>1</b> 5
	5 ppm Std.	,	1 " ° SG7-11
# 3	5 ppm Std. By Volume		36/-11
	by value	•	
2 9	Y		# 7
			; 
	* 9		# 9
	# 18		
STOP # 475.9 SAMPLE LIBRARY 1 SEP 24 95 13:28			
ANALYSIS # 34 SYR BLK INTERNAL TEMP 29 1,0 ML GAIN 20 SYR G	<b>/</b>		·
COMPOUND NAME PEAK R.T. AREALFPM	STOP # 522,1		i
UNKNOWN 2 92.9 238.6 mUS UNKNOWN 4 346.2 57.0 mUS	SAMPLE LIBRARY 1 SEP 24 95 13:39 ANALYSIS # 95 20 PPM STD		
	INTERNAL TEMP 23 0.25 ML GAIN 20 SYR 9		STOP @ 625.0 SAMPLE LIBRARY 1 SEP 24 95 13:55 ANALYSIS # 36 S07-11
	COMPOUND NAME PEAK R.T. AREA/PPM UNKNOUN 4 44.9 22.1 MUS		INTERNAL TEMP 28 1.0ML GA:N 20 SYR E
	มหากอนาท 5 65.1 25.5 US มหากอนาท 6 153.3 33.6 US มหากอนาท 8 355.7 18.1 US		COMPOUND NAME _ PEAK R.T. AREAZPPM UNKNOWN 2 17.3 4.9 US W 4 9
	UNKNOWN 9 385.6 62.1 VS UNKNOWN 10 466.0 22.7 VS		UNKNOWN -5 157.1 24.6 MUS
			4.9 45
	A <del></del>	-40	( 0.0VS
	Ambient lemp : 20	₹ <b>~</b> \$^	L
	Over setting 20	ر المارية	
	Ambient Temp: 20 Oven Setting: 20 Flow: 8. Analysis Time: 600	o sec	
	Comment 20	)	

CLIENT	JOB	NO SHEET 9 OF 14
SUBJECT	BY	KKS PFM DATE 9-24-15
PHOTOVAC	PHOTOVAC	/ PHOTOVAC
START 4 1	START # 1	START # 1
	# 57	}
1	Benere?	i
	A B	# 4
1	= 9- Tolucac	
	) I IP	
	# 12	
,	ļ	1
		<b>\$</b> 5
# 3	13 E-Lylbenzenc	510P 6 340.8
STOP # 347.2 SAMPLE LIBRARY   SEP 24 95 14:   ANALYSIS # 37 SYR BLK	11 0+4 Xylenes	SAMPLE LIBRARY 1 SEF 24 95 14129 ANALYSIS # 40 SYR BLK INTERNAL TEMP 30 1.2m.
INTERNAL TEMP 30 1.0ML GAIN 20 SYR E		GAIN 20 SYR T COMPOUND NAME PEAK R.T. AREA/FIM
COMPOUND NAME PEAK R.T. AREA/FFM  LAMMANDUM 3 335.9 45.5 MUS	* 15 P-Xytenc	UNKNOWN 2 16.6 24.5 MUS
PHOTOUAC		
START # 1	SG8-10	
3.4.3	1	
j # 4	STOP & 600.0 SAMPLE LIBRARY 1 SEP 24 95 14:23	•
A 5	ANALYSIS # 33 SGB-10 INTERNAL YEMP 23 1.0ML GAIN 20 SYR T	
(, m c	COMPOUND NAME PEAK R.T. AREA/PPM	
1 2	UNKNOUN 2 16.4 6.7 US W 6.7 UNKNOUN 3 72.3 4.7 US	÷
	UNKNOUN 4 37.0 1.6 US UNKNOUN 5 14.5 1.2 US UNKNOUN 6 77.7 1.6 US	•
<b>#</b> 8	UNKNOWN 7 97.9 712.4 mUS UNKNOWN 8 128.5 42.7 mUS	•
) i	UNKNOUN — 159.8 102.5 mUS— UNKNOUN 10 177.8 44.9 mUS UNKNOUN 12 238.1 459.1 mUS	
<b>4</b> 9	UNKNOUN —13 336.5 278.9 mUS — UNKNOUN —14 378.9 298.1 mUS — UNKNOUN —15 452.4 189.7 mUS —	
CAS 1)		
5G8-11	17.843	
	(1.1 vs)	
# 10		
# 11		·
STOP 9 625.0 SAMPLE LIBRARY 1 SEP 24 95 14:12		
MALYSIS # 36 507-11 INTERNAL TEMP 29 1.0ML GAIN 20 SYR H		

FINKNOWN FINKNOWN FINKNOWN

SHEET 10 LIENT. JOB NO. \_\_ BY\_KKS / PFn DATE 9-24-45 SUBJECT START # ...1 START # .... # 51 e # 3 Benzene 1 5 - Berzac? Lenzene 4 10 ໌ a 6 \* 11 : 9 - Toluence # 12 - Tolvene Tolvene 1 12 # 12 2 ppm # 15 # 11 By Volume # 12 - Ethylberson # 16 - Ethyl benzenc 113 - Ethylbenzene 117 O+M Xylencs 119 - O+M Xylenes STOP 0 550.7 SAMPLE LIBRARY 1 SEF 24 95 15: 0 STOP 9 560.2 SAMPLE LIBRARY 1 SEP 24 55 14:38 ANALTSIS # 43 INTERNAL TEMP 30 S68-8 ANALYSIS # 568--9 8.5 ML INTERNAL TEMP 30 1.0ML GAIN SYR A COMPOUND NAME PERK R.T. AREA/FPM PEAK R.T. AREA/PPM COMPOLIND NAME PEAK R.T. AREA/PPM COMPOUND NAME пикиоми 16.8 2.4 US W 22.3 2.0 US 35.7 272.7 mUS 16.4 13.0 US W \3 96.5 547.5 mUS 27.3 390.2 mUS 37.1 127.4 mUS FINKNOWN -5 62.3 20.1 VS -6 144.3 31.1 VS -8 338.5 17.1 VS -3 352.6 54.2 US -10 431.6 22.5 VS UNKNOWN UNKNOWN TINKHONN NNKHUMH LINKNOWN FINKHOWN UNKNOWN IINKHONN LINKNOWN 44.3 643.6 mUS LINKNOUN 7 63.1 56.2 mUS 8 73.5 580.2 mUS 9 77.1 921.1 mUS 10 95.7 1.1 US 11 125.9 713.1 mUS UNKNOUN を フ UNKNOWN 109.5 124.5 mUS 126.8 21.5 mUS UNKNOWN UNKNOWN にちれてりだす HINKNOUN **LINKNOWN** 150.2 139.4 mUS-FINKHONIN UNKHOWN 183.7 401.7 mVS DINKNOWN 12 HINKNOUN 235.7 46.2 mUS -THKHOUN 146.0 319.0 mUS-171.2 273.3 mUS NHKHOMH UNKNOWN --13 UNKNOWN 13 UNKNOWN 976.1 2.6 US-450.8 2.1 US-DUKUDHU DUKUDHU 14 126.9 326.8 mUS UNKNOWN --15 228.3 709.0 mVS NHKNONH 332.3 153.9 mVS-964.2 1.3 VS-9.245 UNKHOWN - 12 964.2 1.3 US--18 435.6 924.5 mVS-UNKHOWN 1 ml equivalent = 25.1 ev STOP # 303.5 SAMPLE LIBRARY 1 SEP 24 AVALYSIS # 42 SYR BL 95 14:50

and the second of the second o

16.7 27.8 mVS UNKNOUN

SYR BLK

R.T. AREA/PPM

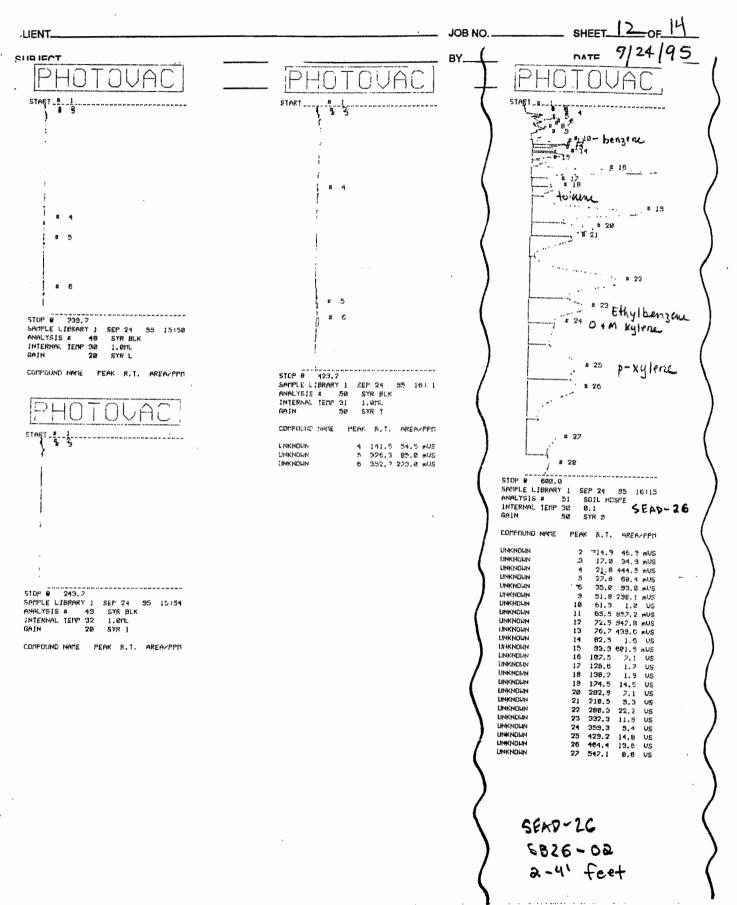
ANALYSIS # 42 INTERNAL TEMP 30 BAIN 20

COMPOUND NAME



CLIENT JOB NO. -SHEET. 9-24-95 BY. DATE SUBJECT START 4 12 A\_b\_\_\_\_ 6- Benzenc **5** 4 # 5 4 6 5 í, \* 10 - Tolvene Tolvenc # 11 **a** 9 # 10 F 19 # 11 568-7 568-6 # 12 # 11 # 17 F 12 - O+M Kylency # 13 + 13 - O+M Kylenc ± 13 # 14 **a** 14 # 15 # 15 stop # 570.6 SAMPLE LIBRARY I ANALYSIS # 45 SEP 24 STOP & 600.0 SAMPLE LIBRARY 1 SEP 24 STOP . E00.0 SG8--7 ANALYSIS # 12 INTERNAL TEMP 38 OGIN 20 SAMPLE LIBRARY 1 SEP 24 95 15:29 1.0ML SYR N 95 15:42 ANALYSIS # 46 INTERNAL TEMP 30 S39-€ ANALYSIS # 5G6-4 INTERNAL TEMP 30 1.0ML SYR L I.ØML SYR T GAIN MIAD COMFIGURD NAME PEAK R.T. AREA/PPM 9,6 US W COMPOUND HAME PEAK R.1. AREAZEPM CUMPOUND NAME PEAK R.T. AREA/FPM UNKNULN 16.9 21.5 4.6 US 35.9 525.2 mUS THKNOUN HINKNOUN 26,2 mUS **ロススとりに**と 16. # 22.9 US W 27,9 UNKNOWN 13567 35.9 525.2 mUS 75.9 232.5 mUS 84.7 51.0 mUS 100.1 56.7 mUS 141.8 181.7 mUS 181.3 368.3 mUS 19.3 43.4 US W 34.8 4.1 US 39.2 240.8 mUS UNKNDWN 35.1 107.5 mUS 72.9 298.6 mUS 31.4 197.0 mUS 140.0 316.6 mUS UNKNOWN UNKNOWN DUKNORN THE MININ 6 NKNONN **UNKNOWN -**.6 UNKNOUN 73.7 137.1 mVS 81.3 32.7 mUS 185.1 228.3 mVS UNKNOWN NHKNONH UNKNEHN UNKNOUN UNKNOUN 1) 302,3 26.0 mVS UNKNOWN UNKNOUN 10 200.1 37.6 mUS 308.3 110.8 mUS UNKNOUN **UNKHOMM ~**10 142.3 1.1 US-176.6 199.5 mUS UNKNONN 11 353.9 306.0 mUS 419.6 76.7 mUS 23,9 vs UNKNOWN UNKNDUN 301.1 22.4 mUS 348.5 335.8 mUS NAKHORN 12 FINKHOMU UNKNOWN 459.6 308.2 mUS 454.0 132.3 mUS 7.045 50.0 ve 16.5 45 6.945 6.645





CLIENT	JOB NO, -	SHEET 13 OF 14
SUBJECT	BY KIC	5/FFN DATE 9/24/\$ _
		<u>PHOTOVACI</u>
	PHOTOVACI	SIARI
	STARE	u 5
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	f # 5	<b>=</b> 6
[0110=01100]	# 6	# S
STARTE_1	# 2	# 10
12	4 9	
33	# 12	# 11
# 6 # 7 # 8	# 11	FMANA/AVIV
/	1 12 5G8-1	# 12 # 13 SG9-1
الله الله الله الله الله الله الله الله	J G D - 1	# 14
1 /	# 14 # 15	
13 14 15		STOP 9 531.0  SAMPLE LIBRARY 1 SEP 24 95 16:46  ANALYSIS # 54 503-1  INTERNAL TEMP 40 1.0 ML  GAIN 20 578 E
60	# 16	COMPOUND NAME PEAK R.T. AREA/PPM
SG-8-3 6	\$10P @ 680.0 \$ANFLE LIBRARY 1 \$EP 24 95 16:36 ANALYSIS # 53 \$GB-1 INTERNAL TEMP 23 1.0 ML GAIN 20 SYR F	INKKNIN   2   15.8   4.2   US W   6.7
S	COMPOUND NAME PEAK R. 1. AREA/PPH  UNKNOWN 4 28.8 3P.3 US W 31.3  UNKNOWN 5 146.8 324.3 MUS W 31.3	
	UNKNOWN 7 179.0 26.1 mUS UNKNOWN 11 318.5 210.4 mUS	6.8 vs
STOP @ 579.8 SAMPLE LIBRARY 1 SEP 24 95 16:26 ANALYSIS # 52 SOB-3	UNKNOWN 12 388.7 132.4 mUS UNKNOWN 15 478.8 454.1 mUS UNKNOWN 16 598.1 300.3 mUS	10.EAZ
INTERNAL TEMP 25 1.0 ML GAIN 20 SYR K  COMPOUND NAME PEAK R.I. AREA/PPM	32.4vs	
	2 0 Crim 50 [1.1 u2]	
LINKHOLIN 5 24.5 45.0 mUS 21.3	Gain 20 equiv.	
UNKNOUN 7 122,9 44.8 MUS MKNOUN 8 145.1 2.1 US M 145.0 MKNOUN 11 295.8 44.5 MUS UNKNOUN 13 328.3 26.2 MUS	20.34 0,84 = 21.14	
LINKNOLIN 15 383.5 211.1 mUS LINKNOLIN 16 438.8 42.3 mUS LINKNOLIN 17 468.4 36.0 mUS		
		(
21.715		
0.645		



SHEET 19 OF 14 JOB NO. ... LIENT. DV KKS/PFM SUBJECT. REVISION\_ # 6 100 ppb Std Rod Blank # 10 # 10 SG-RB-4 # 11 B 12 STOP 9 389.9
SMIPLE LIBRARY 1 SEP 24 95 16:53
MNALYSIS 9 55 SG-RB — H
INTERNAL TEMP 30 0.5 IL
DAIN 20 SYR D # 13 COMPOUND NAME PEAK R.T. AREA/PPM 1 16.8 2.7 US W 2.7 2 22.2 141.8 mUS 4 33.5 79.7 mUS 10 332.3 133.6 mUS UNKNOUN STDP 0 527.4 SAPPLE LIBRARY 1 SEP 24 95 17: 2 ANALYSIS 4 56 100 PPB STD INTERNAL IEPP 30 1,0 ML GAIN 20 SYR N **DWKWORW** DWKWOWW UNKNOUN 3.7 45 . COMPOUND NAME PEAK R.T. AREA/PPM 3 16.0 182.7 mUS 2 63.7 1.4 US 8 130.5 1.2 US 9 206.5 21.5 mUS 11 346.7 1.2 US 12 372.5 3.0 US 13 454.8 971.4 mUS UNKNONN RUKNONN 1.005 DUKUDHU DUKUDHU UNKNOWN UNKNOWN THKNOWN

NO

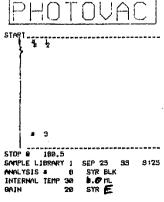
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	CLIENT		JOB NO	SHEET/_OF_14
s	SUBJECT		BY KKS / E	DS DATE 9/26/95
	PHOTOVACI _	·	CKD	PHOTOVACI
	START			START # 1
	**2 1	Made I ppm standong	1	
		1 1.1	<b>~</b> 1	a 3
		10,000.41=1,000,000 x 1ppm		
		(10 ml) 50 ppm		
	1			# 4
	Std. run to			
	determine response	START # 1		
	time + required	# 3		
	s analysis time.			
	* , Turning on oven to		•	# 5
	20°C.	= 4 Syr. + Vessel	Blk.	epenskipped -
	Flow @ 9 ml/min	a 5		shoot again
	) * 9			1 7
	<i></i>			
	STOP 0 600.0 SAMPLE LIBRARY 1 SEP 25 95 2:40			
	ANALYSIS # 1 100 PPB STD INTERNAL TEMP 27 1.0 ML RAIN 70 SYR N			
	OFFSET 8.8 mV CHART SPEED 1 off/file	6		CTOD 0 700 7
B	SLOPE SENS. 4 10 4 mU/Sec WINDOW +/- 1 Percent	) = > Clan Syn 1		STOP # 700,0 SAMPLE LIBRARY=1 SEP 25 95 8137 ANALYSIS # 3 SYR-VESSEL BLK
_	TIMER DELAY 10.0 Sec ANALYSIS TIME 600.0 Sec	vessel again		INTERNAL TEMP 26 1.0 ML GAIN 20 SYR 8
μ	CYCLE TIME 0 MIN COMPOUND NAME PEAK R.T. AREA/PPM	# 6		COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 5 489.2 32.6 mVs
Setup	UNKNOUN 1 39,7 105,0 mUS UNKNOUN 2 43,7 21.1 mUS			LINKNOUN 6 452.8 84.8 mUS
Ϋ́	UNKNOUN 3 83,4 15.5 US UNKNOUN 4 210.1 10.1 US UNKNOUN 5 366,3 25.8 mUS			
	ארע 8 507.6 2.1 US			
	PHOTOVAC	STOP 9 700.0 SAMPLE LIBRARY I SEP 25 95 8125 ANALYSIS # 2 SYR-VESSEL BLK		
	SEP 25 85 7147	INTERNAL TEMP 25 1.0 ML GAIN 20 SYR 8		
	POMEL: 36	COMPOUND NAME PEAK R.T. AREA/PPM		
	SAMPLE 6.0 10.0 Cal 0.0 0.0 Event 3 10.0 120.0	UNKNOWN 4 179.3 96.4 mUS UNKNOWN 6 422.0 496.2 mUS UNKNOWN 2 462.0 1.5 US		
· · · · · · · · · · · · · · · · · · ·	EVENT 4 0.0 0.0 EVENT 5 10.0 120.0 EVENT 6 0.0 0.0	UNKNOUN 8 556.1 399.1 mUS		
	EVENT 7 8.0 8.0 EVENT 8 0.0 8.0			

Status report printout.

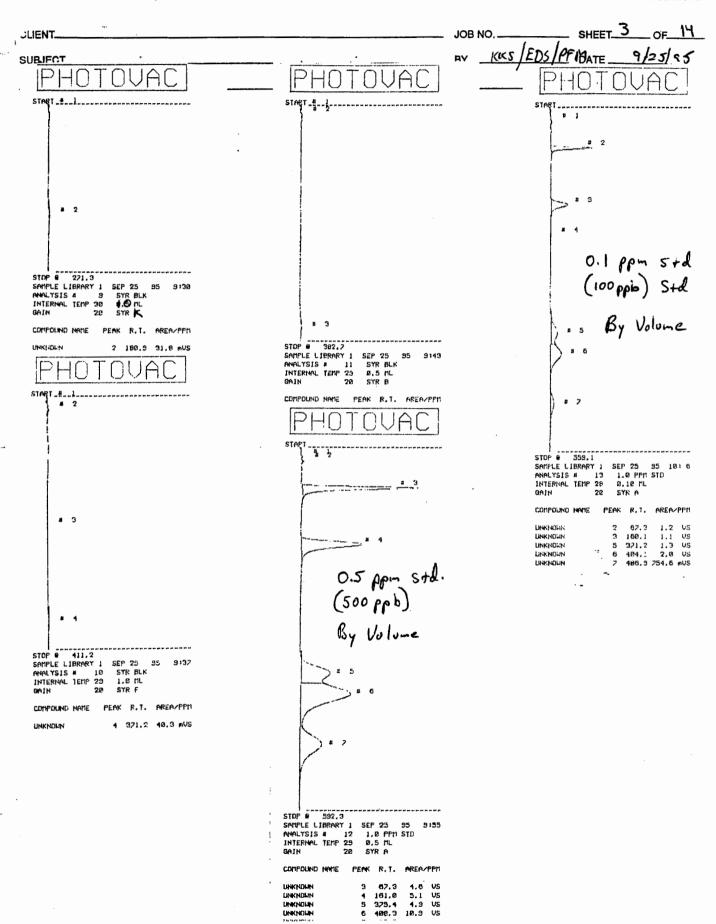


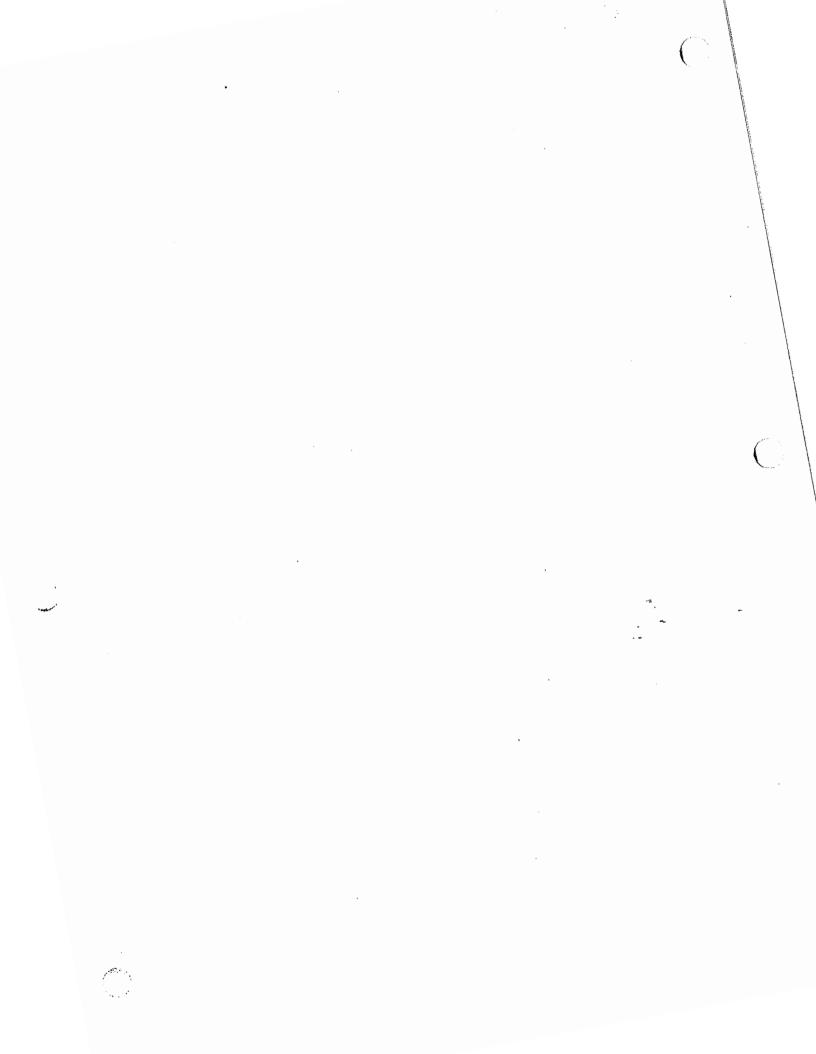
CLIENT	<u>.</u>	JOB NO SHEET 2 OF 14
		BY KKS / EDS DATE 9/25/55
PHOTOVAC	PHOTOVAC	- PHOTOVAC
START	STER: = 1	START # 1
# 3		* 3
8 1 Syr. + Vessel Blk.	# 3	* 5
		1.0 ppm Std
4 S	= 4	* 2
# B	\$10P & 485.5 \$AMPLE LIRRARY 1 SEP 25 95 9111 ANALYSIS # 6 SYR BLK INTER-AL TEMP 27 1.0 ML GAI! 20 SYR N	. 8
# 7 # 8	COMPOLIC NAME PEAK R.T. AREA/PPM UNKKICC: 4 383,) 40.0 mUS	* 9
• 9		1 533.3 STOP 6 533.3 SAMPLE LIBRARY 1 SEP 25 95 9121 ANALYSIS # 2 1.0 PPH STO INTERNAL TEMP 26 1.0 ML GAIN 20 SYR N
STOP # 200.0		COMPOUND NAME PEAK R.T. AREA/PPM
SAMPLE LIBRARY 1 SEP 25 95 8:58 AMALYSIS # 5 SYR-VESSEL BLK INTERNAL TEMP 27 1.0 ML GAIN 20 SYR 8		UNKKOLIN = 4 63.0 3.1 US UNKKOLIN 5 167.3 3.6 US UNKKOLIN 7 331.5 8.8 US UNKKOLIN 8 420.8 22.3 US
COMFIGURD NAME PEAK R.T. AREA/PPM		UNKNOUN '- 3 513.3 10.7 US
UNKNOWN 5 388,8 23.3 MUS		



COMPOUND NAME PEAK R.T. AREA/PPM







SOIL GAS CALIBRATION DATA FOR MIXED BTEX STANDARDS							
ENGINEERII	NG-SCIENCE		CLIENT: A	COE	DATE: 9/	25/95	
PROJECT: Remedial Investigation				Operator:			
LOCATION:	Semicina	muesinganon			KS/PF	n /ES	
Eccarrion.	STAI	0-25			,,,,,,	. ,	
	20171	J 20					
Instrument Specs	And a physical and a					and the same of the same of the same of	
		inker					
Type of GC: Column Type:		. jo\$50			-		
Chart Speed		7			<del>-</del>		
Gain	10				_		
Sensitivity.					<b>-</b>		
Gas Flow Rate: Tank Pressure:					-		
Tank Treasme	•				_		
Standard	50 ppm	BTEX SAL.			Comments:		
Concentration Inj. volume		Dilution	Tedlar or	Glass Bulb	-{		
Analysis #					-		
Time					<u> </u>		
	4 1 50-1	T-!	Name of the of	A	Detection	D	D-14-
Analyte:	Actual Std. Conc.(ppmV)	Injection x Vol.(ml) =	Normalized Conc.(ppmV)	Area (vs)	Retention Time (sec.)	Response Factor	Delta RF
Benzene	1.03	1.0	1.03	9.1	49	0.11	
Toluene	1.00	1	1.00	.9.6	167.3	0.10	
Ethylbenzene	1.01		1.01	y.4	391.5	0.11	
O-Xylenes M-Xylenes	1.01	<del></del>	1.01	22.3 22.3	426.8	0.11	
P-Xylenes	1.01	<b>-</b>	1.00	10.7	5139	0.09	
Notes: $RF = C$	Conc. + Area (v	s); Actual Std. Co				nc. normalized to	1 ml injection.
Standard:		BTEK SALI	<del> </del>		Comments:		
Concentration: Inj. volume:		Dilution	Tedlar or (	Glass Bulb	-{		
Analysis #:					1		
Time:							
	Actual Std.	Injection	Normalized	Area	Retention	Response	Delta
Analyte:		x Vol.(ml) =	Conc.(ppmV)	(vs)	Time (sec.)	Factor	RF
Benzene	1.03	0.5	0.52	4.6	67.3	0.11	
Toluene	1.00		0.50	5.1	161.0	0,10	
Ethylbenzene O-Xylenes	1.01	<u> </u>	0.50	10.9	408.3	0,10	
M-Xylenes	1.01	<del>  </del>	0.50	10.9	405.3	0.05	
P-Xylenes	1.00	•	0.50	5.1	792.3	0,10	
Notes: RF = Conc. + Area (vs); Actual Std. Conc. is to be obtained from analysis of gas standard; Conc. normalized to 1 ml injection.							
Standard: Concentration:		BTEX Std	Tedlar or C	Glass Bulb	Comments:		
Inj. volume:			regial of C	J1838 DUIO	-		
Analysis #:		=,1			]		-
Time:							
	Actual Std.	Injection	Normalized	Area	Retention	Response	Delta
Analyte:		x Vol.(ml) =	Conc.(ppmV)	(vs)	Time (sec.)	Factor	RF
Benzene	102	0.1	0.1	1.2	67.3	0.08	
Toluene	1.00		0.1	1.1	160.1	0,09	
Ethylbenzene	1.01		0.1	1.3	371.2	0.08	
O-Xylenes M-Xylenes	1.01		8:1	2.0	404.1	0,05	
P-Xylenes	1.00	<b>V</b>	0.1	.75	486.9	0,13	
Notes: RF = C		s); Actual Std. Co	nc. is to be obtained	d from analysis of g	as standard; Co	nc. normalized to	o 1 ml injection.

and the second s . . . **.** 

COMPOUND NAME PEAK R.T. AREA/PPM

ENT	JOB NO	
B.IFCT.	BY	DATE 9-25-9
PHOTOVAC	_ PHOTOVAC _	_ PHOTOVAC
START	STAGI .= .1	START_#
	2 3	
# 5	1 8	∫ # 4 # 5
4 6	# 7 # 8	
# 2	, , ,	<b>+</b> 6
	Ì	# 7
	ļ	569-6
SG9-4	* 12 SC 9 - 5	3413
		# B
# 5	1 "	
	s 12 .	# 9
	# 19	# 10
± 10	a 14	
ANTILE LIBRARY I SEP 25 95 10:118  NALYSIS # 14 509-4  NTERNAL TEMP 28 1.0 ML  AIN 20 SYR J  DIPPULITO NAME PEAK R.T. AREA/PPM  NKNOUN 1 17.5 3.5 US W 5.5  NKNOUN 2 23.3 2.0 US W  NKNOUN 3 30.7 56.6 mUS  NKNOUN 4 37.5 114.6 mUS  NKNOUN 5 71.5 11.9 mUS  NKNOUN 7 162.5 23.6 mUS  O-3 v.7 5.6 V.5  TAGT # 1	STOP 9 628.0  SAMPLE LIBRARY 1 SEP 25 95 18:35  ANALYSIS 4 16 S49-5  INTERNAL TEMP 29 1.0 ML  BAIN 28 SYR T  COMPOUND NAME PEAK R.T. AREA/PPM  UNKNOWN 2 18.4 2.3 US W 6.5  UNKNOWN 3 24.4 4.2 US W  UNKNOWN 4 32.8 29.0 m/VS  UNKNOWN 3 161.6 24.5 m/VS  UNKNOWN 11 349.7 282.1 m/VS  O.3 VS  START 2 1.	STOP # 620.2  SAMPLE LIBRARY 1 SEP 25 95 :2:4  ANALYSIS # 19 SG9-6  INTERNAL TEMP 03 1.0 ML  GAIN 20 SYR L  COMPOUND NAME FEAK R.T. AFE4 55  LINKHOLM 2 15.8 20.2  LINKHOLM 6 347.3 22.3  LINKHOLM 9 347.3 22.3  LINKHOLM 9 395.2 98.7  LINKHOLM 9 395.2 98.7  LINKHOLM 9 395.2 98.7
	STDP @ 160.0  SAMPLE LIBRARY 1 SEP 25 95 10:39  ANALYSIS # 12 SYR BLK  INTERNAL TEMP 31 1.0 ML  GAIN 20 SYR T	collected; Located in mad,

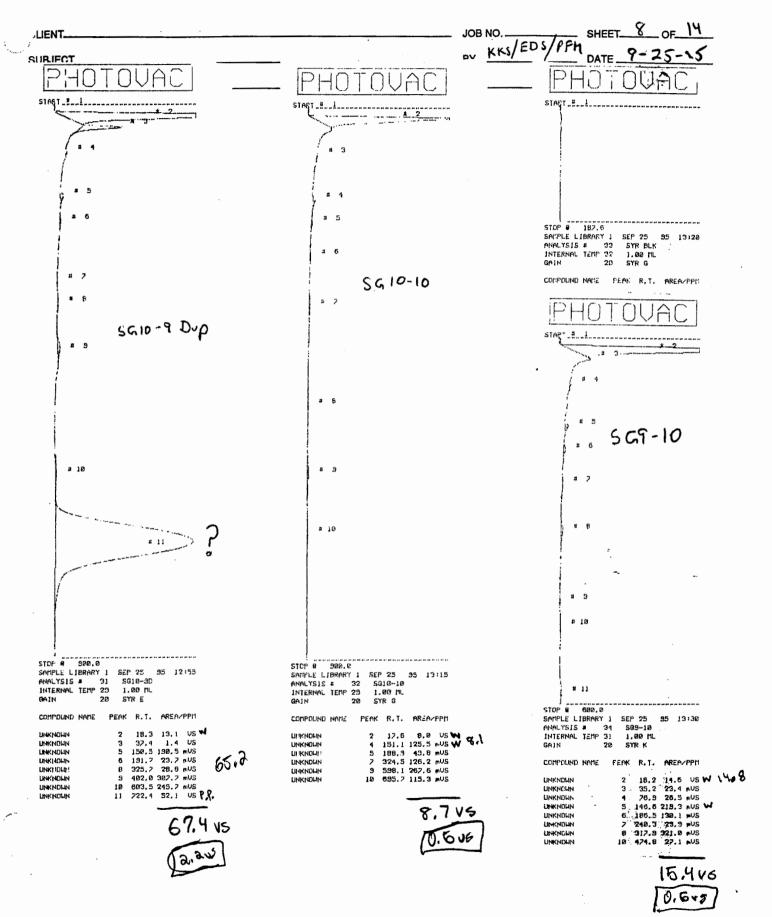


CLIENT	JOB NO,	SHEET_5 OF 14
SUBJECT	BY	nate 9-25-15
PHOTOVAC	_ PHOTOVAC	PHOTOVAC
START # 2	START # . 4 . 2	START # 1
	s 5 a 6	/ / * 3
	SG9-7	∫ <sub>3</sub> 5 549-8
# 3	p 5	6
		я 7
STOP 0 473.9  SMIPLE LIBRARY 1 SEP 25 95 11: 0  ANALYSIS = 13 SYR BLANK  INTERNAL TAMP 29 1.0 ML	a 10	# 8
GAIN 28 SYR L		
COMPOUND NAME FERK R.T. AREA/PPM UNKNOWN 1 5.7 20.2 MUS	•	
UNKNOWN 3 345.5 24.6 MUS	STOP # 620.0 SAIPLE LIBRARY 1 SEP 25 95 11:12 ANALYSIS # 20 569-7 INTERNAL TEMP 28 1.0 ML	\$ 620.0 SAMPLE LIBRARY 1 SEP 25 95 11:26 ANALYSIS # 27 SA9-8 INTERNAL TEMP 29 1.0 HL
	GAIN 20 SYR G	GAIN 20 SYR E
	COMPOUND MANE PEAK R.T. AREA/PPN	COMPOUND NAME PEAK R.1. AREA/PPM
	UNKNOLIN 2 18.1 3.2 US W 5.3 UNKNOLIN 3 22.2 2.1 US W UNKNOLIN 2 158.3 151.7 MUS UNKNOLIN 9 344.3 121.5 MUS  0.3 V3	UNKKOLIN 2 18.2 9.7 US W UNKKOLIN 4 155.9 230.7 MUS W (0.2 \\  UNKKOLIN 6 344.2 333.6 MUS (0.2 \\  START 4 1
	PHOTOVAC	0
	START_#_1	
	1	
		8 2
		1
	STOP 9 255,8	B 3
	SAMPLE LIBRARY 1 SEP 25 95 11:17 AMALYSIS 4 21 SYR BLK INTERNAL TEMP 30 1.0 ML GAIN 20 SYR G	STOP # 367.0 SAMPLE LIBRARY 1 SEP 25 95 11:34 NIALYSIS # 23 SYR BLK INTERNAL TEMP 30 1.0 ML
	COMPOUND NAME PEAK R.T. AREA/PPM	GAIH 20 SYR E
		COMPOUND NOTE PEAK R.T. AREA/PPTI

LIENT		JOB NO	_ SHEET_ 6 OF_ 17
SUBJECT		BY KKS/EDS/PF	M DATE 9-25-95
PHOTOVAC	PHOTOVAC	P	HOTOVAC
ST661_#1	START 1	START -	
. 3	3		
	; 		# 3
59-9-9	O.1 ppm St	D	syr. blk -
= 5 = 6	0.1 ppm St (100 ppb)	, a page of District	syr. blk -
	5		
= 7	= 6	,	я 5 я 6
	STCP 9 520.7  SAMPLE LIBRARY 1 SEF 23 95 11:54  ANALYSIS = 25 1.0 PPM STD  INTERNAL TEMP 29 0,1 ML STD  GAIN 20 SYR A	SAMPLE ANALYS INTERN	IAL TEMP 29 1,00 HL
STOP 9 62%.0	COMPOUND NAME PEAK R.T. AREA/PFM	COMEDI	20 SYR F IND NAME PEAK R.T. AREA/PPM
SAMPLE LIBRARY 1 SEP 25 95 11:45 ANALYSIS # 24 SG-9-9 INTERNAL TEMP 29 1.0 ML GOIN 20 SYR F  COMPDUND NAME PEAK R.T. AREA/PPM	UNKNOUN 2 65,9 1,4 US UNKNOUN 3 155,3 1,2 US UNKNOUN 4 556.3 1,2 US UNKNOUN 5 368.7 2,2 US UNKNOUN 6 466,8 825.7 MUS	UNKNOL	
17.3 3.6 US W UNKNOWN 3 155,8 238,8 MUS UNKNOWN 4 195,3 32,5 MUS		IDIIC	
UNKNOWN 5 343.1 23.5 MUS UNKNOWN 6 368.7 84.4 MUS		PFC	JIUCHU.
10.0 45		START_#I	
		# 2	
		PRAPILYSIS #	.8 RY 1 SEP 25 95 12:6 27 SYR BLK P 32 1.00 ML 20 SYR F
	,	COMPOUND NAM	E PEAK R.T. AREAZPRM

CLIENT		NO SHEET/ OF
SUBJECT	RY	KKS/ED/PFM DATE 9-25-55
PHOTOVAC	_ PHOTOVAC	- PHOTOVAC
STORT 2	START 4 1 2 4 3	STAGT # 1
	n 5	# 2
same as Tolorac		.3
3	, , ,	carry over peak!
Water (Distilled) Headspace from	a 7	Analyze SG 10 OUP
Headspace train	SG10-9	Analyze SG 10 OUP  and lengthen  analysis time to
CON VILL	# 10	900 sec.
" 1 = Too take for	# 11	B 4
Ethyl benzen C		
	r 12	syr blank
£ 5		STOP 9 455.9  SAMPLE LIBRARY 1 SEP 25 95 12:39  ANALYSIS 8 90 9010 9  INTERNAL TEMP 30 1.00 ML 5G10-9  GAIN 20 5YR L
a 6		COMPOUND NAME PEAK R.T. AREA/PPM
STOP # 591.0 SAMPLE LIBRARY 1 SEP 25 95 12:12	n 12	UNKHOLIN 2 63.7 33.7 US <b>?.?.</b> UNKNOLIN 4 323.9 25.9 mUS
ANALYSIS # 28 WATER MOSPE INTERNAL TEMP 30 1.00 ML DAFW-3 GAIN 20 SYR F DAFW-3 COMPOUND NAME PEAK R.T. AREA/PPM	STOP 9 620.0  SAMPLE LIPRARY 1 SEP 29 95 12:31  ANALYSIS # 29 5010-9  INTERNAL TEMP 29 1.00 ML  GAIN 20 SYR L	39.7 15
UNKNOWN 2 17.3 4.1 U5 W 4.1 UNKNOWN 3 154.1 38.5 mU5 W	COMPOUND NAME PEAK R.T. AREA/PPM	<u>.</u>
1 393.5 1.2 US 5.3 N 5	UNKNOUN 2 16.8 7.9 US WUNKNOUN 3 21,8 3.5 US WUNKNOUN 4 37.9 1.3 US WUNKNOUN 5 98.5 36.8 mUS UNKNOUN 6 153.5 128.7 mUS WUNKNOUN 11 331.1 30.3 mUS	(252 vs
(1,2.5)	UNKNOWN 12 406.2 238.8 NVS	
	(2.3 vs	
		1.645







~~.	DUENT.	JOB NO SHEET_ 9 OF_ 14
الرب	CLIENT	BY KKS /EDS / PFM DATE 9-25-15
ŗ	PHOTOVAC]	CKD
	START	TAST # 2 - ;
	<b>4</b> 6	, n 1 , n 1 , n 5
	* 3	# 6
	* 10	, , , , , , , , , , , , , , , , , , , ,
	569-11	SG10-11
	# 12 # 13	4 8
•••	STOP # 500.0 SMITLE LIBRARY 1 SEP 25 95 13147 MALVSIS # 96 509-11 INTERNAL TEMP 31 1,00 ML GAIN 20 SYR T	# 9  STOP @ @00.0  SAMPLE LIRRARY 1 SEF 25 95 14: 9  ANALYSIS # 3R 5010-11  INTERNAL TEMP 31 1.00 ML
	COMPOUND MADE PEAK R.T. AREA/PPM	GAIN 20 SYR J COMPOUND NAME PEAK F.T. AREA/PPM
	INKKULM   2   17.1   3.8   US W   6.9   UMKKULM   3   21.4   3.8   US W   6.9   UMKKULM   4   35.8   42.0 mUS   UMKKULM   5   75.3   73.6 mUS   UMKKULM   7   146.6   132.7 mUS   W   UMKKULM   10   314.3   294.5 mUS	UNKNOWN 2 19.8 14.4 US W M.7 UNKNOWN 5 140.7 369.7 mUS W M.7 UNKNOWN 6 182.5 34.9 mUS UNKNOWN 7 383.5 287.5 mUS
	PHOTOUAC DANS	0.3 -5
- - )	e 4	· ·
	STOP @ 300,0 SAMPLE LIBRARY I SEP 25 95 13:52 ANALYSIS # 37 SG INIERNAL TEMP 32 1.00 ML GAIN 20 SYR I	

· FINKHOPIN

2 17.3 25.2 eVS

COMPOUND NAME PEAK R.T. AREA/PPM



SHEET 10 OF 14 JOB NO. -LIENT\_ 9-25-95 DATE \_.#. 3. **#** 3 # 1 STOP @ 282.9 SAMPLE LIBRARY 1 SEP 25 95 14:45 ANALYSIS # 41 SYRR BLK LITERNAL TEMP 92 1.0ML INJ SIDP 9 349.3 SAFELE LIPRARY 1 SEP 25 95' 13132 ANALYSIS 9 35 SYR BLK INTERNAL TEPP 31 1.00 ML GAIN 20 SYR K @ MINUTES SUMMARY OF LAST COMPOUND NAME MAXIKUM COMPOUND NAME PEAK R.T. AREAZEEN COMPOUND NAME PERK R.T. AREA/CPM 5 316.7 21 4 milic # 8 SG10-7 3 1 # 5 4 6 # 10 # 2 SG9-11D # B STOP @ 848.5 SAMPLE LIBRARY I SEP 25 95 14:38 \$610-7 1.0ML INJ SYR H ANALYSIS # 40 INTERNAL TEMP 30 COMPOUND NAME PEAK R.T. AREA/PPM 18.0 17.1 US W 35.1 20.3 pUS 73.9 31.8 pUS 105.3 24.8 pUS 141.8 238.0 pUS 175.4 24.2 pUS 305.9 163.1 pUS 374.0 451.7 pUS 374.0 451.7 pUS SIDP @ 680.0 SAMPLE LIBRARY 1 SEP 25 95 14:23 ANALYSIS # 39 589-11D ....republ Temp 31 0,5ML INJ NHKNOHN FINKNONN INKNONN INKNONN ANALYSIS # 31 INTERNAL TEMP 31 110415 HKHONN HKHONN FINKHOHN COMPOUND NAME PEAK R.T. AREA/PPM PHKNONN PHKNONN 556.1 216.2 MUS 663.3 48.2 US P.P 16.5 3.5 US W 22,0 1.5 US W 30.2 33.3 MUS 143.9 91.5 MUS W 303.5 25.2 MUS CHKNDHN **Пикиоли Пикиоли** 20 7:23 NHKHOMH **THKHOM**H

COMPOUND NAME PEAK R.T. AREA/PPM

5 322.1 90.6 aVS

CLIENT		JOB NO SHEETOF14
		BY KKS/EDS/PFN DATE 9-25-55
PHOTOVAC:	PHOTOVAC	- PHOIOVAC
START 4 1	START # 1	START # 1 2
2	1	
	; ;	
J2- 1 3		
f = 4 f		
z 5	# 2	
.1 ppm Stp		į
	# 5	# 3
.1 ppn Stp by Volume	STOP @ 322.5	
	SAMPLE LIBRARY 1 SEP 25 #5 15: 7 ANALYSIS # 49 SYR BLK INTERNAL TEMP 32 1.0 ML	1
, # 8	GAIN . 20 SYR J	# 4
	COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 5 300.5 23.9 mUS	, , a 5
		; u 6
* # 9		# P
		STOF # 340,0 SAMPLE LIBRARY 1 SEP 25 35 15124 ANALYSIS # 45 SYR BLK
	PHOTOVACI	INTERNAL TEMP 30 1.0 HL GAIN 20 SYR L
* 10	S1ART # 1	COMPOUND NAME PEAK R.T. AREA/PPM
•	1	
		Pruidvali
SIOP # 748.1 SAMFLE LIBRARY 1 SEP 25 95 14:52 ANALYSIS # 42 1.0 PPM STD	l i	START # 1
INTERNAL TEMP 31 M. L ML. GAIN 20 SYR A		) 
COMPOUNT NAME PEAK R.T. AREA/PEN		а 3
UNKNOWN 2 61.1 1.4 US ИМКИОИН 3 142.9 1.1 US ИИКИОИН 6 317.3 1.8 US	в 2	
UNKNOWN 7 344.9 1.9 US UNKNOWN 8 413.2 657.9 mUS		; •
UNKNOUN 10 868.1 23.€ mUS	<b>*</b> 3	1 !
	ĺ	18 A
	ļ I	
		# 5
	STOP • 447.9	
	SAMPLE LIBRARY 1 SEP 25 95 15:14 ANALYSIS # 44 SYR BLK	
	internal temp 31 1.0 ml Gain 20 syr £	1 STOP @ 189.3 SAMPLE LIBRARY 1 SEP 25 85 15:32
	COMPOUND NAME PEAK R.T. AREA/PPM	analysis # 46 Syr Blk Internal Temp 29 1.0 ml
	UNKNOWN 3 296,8 22.6 mUS	gain 20 syr n

SHEET 12 OF 14 JOB NO. ..... \_IENT\_ BY KKS/EDS/PFM DATE 9/25/95 ---\* 2 # 3 --# B # 5 5610-5 # 11 # 16 5010-4 # 5 # 12 4 10 # 11 # 7 # 8 # 3 a 13 Pine Pitch STOP # 600.0 SAMPLE LIBRARY 1 SEP 25 95 16:21 STOF \$ 620.8 SAMPLE LIPHARY 1 SEF 25 95 16:31 ANALYSIS # 49 5010-5 5010-5 ANALYSIS # 48 INTERNAL TEMP 26 S019~4 INTERNAL TEMP 27 1.0 ML SYR 1.9 ftL GAIN # 10 SUBSTITUTE SAME PEAK R.T. AREA/PEA COMPOUND NAME PEAK R.T. AREAZPPM 17.5 18.3 US W 14.3 22.3 4.0 US W 38.2 58.3 MUS 2 16.8 6.5 US W 3 21.2 3.3 US W 8 210.1 32.1 mUS 710 324.2 352.8 mUS RINKNOWN UNKNOWN UNKNOUN 4 38.2 58.3 AUS 7 122.6 86.0 AUS 8 165.8 110.2 AUS **NAKAUNI** UNKHOWN NHKNOHN UNKNOUN **DMKNORN** 12 561.1 27.3 mUS UNKNOUS 11 285.8 45.5 mUS 12 365.1 73.9 mUS **DNKNO!!N** 10.2VS 14.7vs 0.405 10.3 VS (0.6 vs STOP @ 1000.0 SAMPLE LIBRARY 1 SEP 25 95 16: 8 ANALYSIS # 42 PINE PITCH SEP 25 95 16:35 FIELD: INTERNAL TEMP 26 GAIN 20 8.5 ML SYR B POWER 1 SAMPLE COMPOUND NAME PEAK R.T. AREA/PPM 10.0 CAL 2.0 110.0 EVENT 3 16.8 835.2 mUS W 23.0 1.2 US W 349.1 656.1 mUS P.P. 694.5 3.1 US P.P. THIKNOUN EVENT 4 0.0 110.0 0.0 **THKHONH** TINKHUMN EVENT 6 0.0 0.0 0.0 be calculated - good EVENT 7 0.0 9.'0 Pine Needles in visual comparison - retention time VOA JAR

V1 ml equivalent= 11.6 vs

· verification of source

SHEET 13 CLIENT JOB NO. BY KUS/EDS/ PFM DATE 9-25-95 ٤ 1 2 -#- 2---B 4 # 6 # 7 Lost tolvene **#** 5 peak to a carryover STOP 8 235.4 5610-6 pine pitch peak from SAMPLE LIBRARY 1 SEP 25 95 16:52 SYR BLK 51 ANALYSIS # previous analysis. INTERNAL TEMP 28 1.0 ML SYR T PEAK P.I. AREAZPPM COMPOUND NAME 4 148.8 28.8 pUS # 9 UNKROWN CII FPM STD (100 ppb) START\_#\_\_i\_\_\_\_ E 19 STOP @ 600.0 SAMPLE LIBRARY 1 SEP 25 99 1614/ ANALYSIS # 50 5910-6 10 6 600.0 SANFLE LIBRARY 1 SEP 25 25 12.10 ANOLYSIS # 52 1.0PPT 510 INTERNAL TEMP 26 0.1 ML 5010-6 1.0 ML INTERNAL TEMP 26 GAIN SYR K GAIN SYR A # 7 COMPOUND NAME PEAK R.T. AREAZPPN COMPOUND NAME PEAK R.T. SHEAZPEN UNKNOWN 18.6 23.1 US W UNKNOUN 20.9 1.7 08 SG10-8 UNKHOUN 5 190.3 233.6 mUS 6 397.9 1.2 US 77 434.0 2.4 US 8 522.3 776.6 mUS 38.3 465.3 MUS **NKNONN** 4 86.1 36.6 mUS 6 123.6 24.0 mUS 2 214.5 30.9 mUS 9 388.3 324.3 mUS UNKNOUN UNKNOWN UNKHOUN PINKNONIA UNKNULIN **UNKNOWN** UNKNOWN UNKNOWN 569.1 57.1 MUS 24.215 # 9 = 10 S10P # 562.2 SAMPLE LIRKHRY 1 SEP 25 95 17: 2
AMALYSIS # 52 SG10-8 SG10-8 1.0 KL INTERNAL TEMP 27 GAIN SYR G EDMPOLIND NAME PEAK R.T. AREA/PPM 17.1 3,2 US W 31.1 mVS UNKNOWN NWKNDNN 125.0 23.6 m/s 174.2 20.5 m/s 215.0 119.2 m/s 320.3 41.0 m/s 382.4 32.6 m/s 462.8 243.4 m/s NWKNONW UNKNONW NWKNOUN UNKNOWN NHKNONN 0.545 10 MAKNOUN

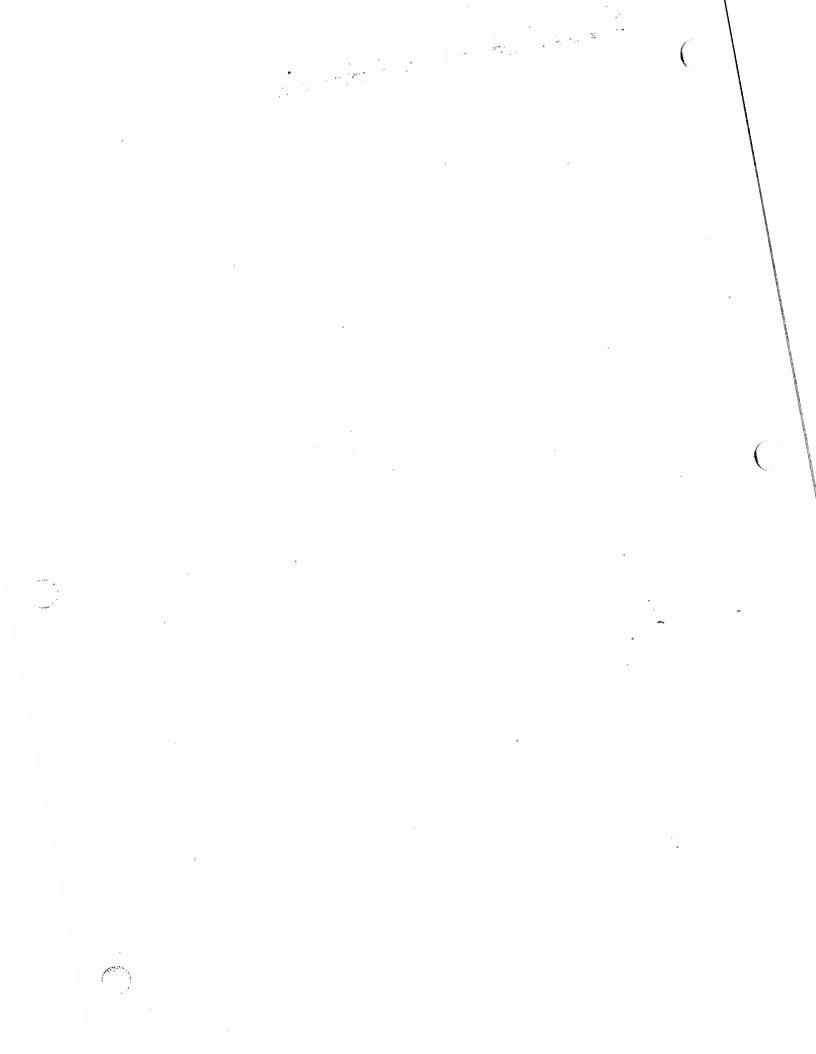
<del>2</del>9 04

# PARSONS MAIN, INC.



PHOTOUAC	JOB NO.  BY KKS/EDS / PP M  CKD.	SHEET_14 OF_14  DATE_9-25-15  REVISION
# 3		
# 5 # 6		
# 10 = 11		
SAMPLE LIFRORY 1 SEP 25 95 17:24 ANALYSIS # 54 ROD BLK INTERNAL TEMP 27 1.0ML BAIN 20 SYR J  COMPOUND NAME PEAK R.T. AREA/PPM  LMKNOUM 2 17.2 1.3 US UNKNOUM 7 381.7 36.8 m.US		•

End of Any

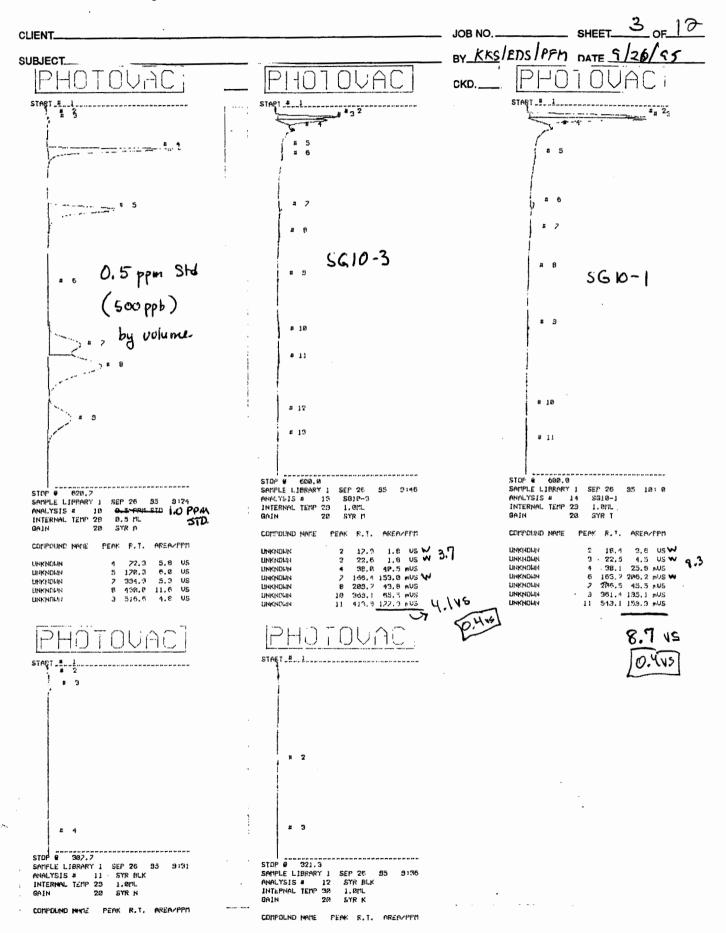


	CLIENT ACOE - Senes Army	Depot	JOB NO SHEET   OF 17
	SURIFOT Soil Gas Survey - SE		BY KKS/FDS/PFM DATE 9-26-95
	PHOTOVAC	PHOTOVAC	PHOTOVAC:
i tainud	SEP 26 95 7:20 FIELD: 30 POWER: 36	STORT A. J	START E. L.
m st, ohon	SAMPLE 8.0 10.0 CAL 8.0 0.0 EVENT 3 10.0 110.0 EVENT 4 0.0 0.0 EVENT 5 10.0 110.0 EVENT 6 0.0 0.0 EVENT 7 0.0 0.0 EVENT 7 0.0 0.0		
	PHOTOUAC	# 3	a 3
	·	p 4	å 1 å 5
	1 COMPOUND ID # R.T. LIMIT	# 5	1
	Ambient temp 14°C Over @ 20°C Flow @ 7.5 ml/nin	STOP 9 124.3	COMPOUND NAME FEAK R.Y. AREAUTH:
	Flow @ 7.5 ml/nin	SAMPLE LIPRARY 1 SEP 26 55 81 8 ANALYSIS # 2 FA BLK INTERNAL TEM 25 1.0ML GAIN 20 SYR J	PHOTOUAC
		CONFOUND NAME PERK R.T. OREA/PPM UNKNOWN S 199.2 252.4 MUS	
	# 3	PHOTOUAC	a 2
	<b>3</b> 4	START	n 2
	# 5		# 4
	я 6		я 5
	SIDP 8 574.7 SAMPLE LIBRARY 1 SEP 26 95 2133	4 1	
	ANALYSIS # 1 STABLK INTERNAL TEMP 24 1.0ML GAIN 20 SYR F	# 2	Re-clean sy + vessel. Redo Analysis
	OFFSET 0.0 mV CHART SPEED 1 OFFMIN SLOPE SENS. 4 10 4 mU/Seo HINJUSU +/- 1 Persent HINJUTUR AREA 20 mVSec	r 3	Redo Analysis
	TIMER DELAY 10.0 Sec ANALYSIS TIME 600.0 Sec CYCLE TIME 8 Min	STOP # 413.6 SAMPLE LIBRARY 1 SEP 26 95 8: 7 ANALYSIS # 3 SYR BLK INTERNAL TEMP 26 1.0ML GAIN 20 SYR G	STOP # 000.0
	COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 5 461.2 428,0 MUS	COMPOUND NAME PEAK R.T. AREA/PPM	SAMPLE LIBRARY 1 SEP 26 95 8:24 ANALYSIS & 5 SYR-VESSEL BLK INTERNAL TEMP 27 1.0ML GAIN 20 SYR 8
			COMPOUND NAME PEAK R.T. AREA/FFS
			UNKNOUN 3 138.1 128.5 #VS UNKNOUN 6 423.6 729.6 #VS

COMPOUND MANE PEAK R.T. AREA/PPM



SHEET\_2 CLIENT. JOB NO. -DATE 9/26/95 BY KN/EDS/PFM START # 2 START E.L. # 2 11 3 Syr. + Vessel blank 1.0 ppm Std. STOP % 988.2 SAMPLE LIBRARY 1 SEP 26 95 9: 0 ANALYSIS # 8 SYR BLK INTERMAL TEMP 26 1.0ML JAIN 20 SYR A COMPOUND NAME PERK R.T. AREA/PPM STOP @ 638.8 SAMPLE LIFERRY 1 SEP 26 55 ANALYSIS # 3 1 PPH SID INTERNAL TEMP 28 1.6ML GAIN 20 SYR K SIDP 0 050.0 SAMPLE LIBRARY 1 SEP 26 95 8: MYALYSIS 0 SYR-VESSEL BLK HITERNAL TEMP 27 1.0ML GAIN 20 SYR 0 COMPOUND NAME . PEAK R.T. AKEAZPPM COMPOUND NAME PEAK R.T. AREA/PFM 4 70.3 11.7 US 5 170.8 10.5 US 6 398.5 8.8 US 2 434.8 21.2 US 8 522.9 9.5 US TINKKOUN 4 411.1 142.2 mUS 5 450.8 308.9 mUS 6 543.1 115.0 mUS UNKITAT: NWKNUM UNKNOWN UNKNOWN -UNKHOEM UNKNOWN **UNKNOW!** STOP # 287.3
SAMPLE LIBRARY 1 SEP 26 35
ANALYSIS # 2 SYR BLK
INTERNAL TEMP 28 1.0ML
20 SYR K



· 

	SOIL GAS C	ALIBRATIO	N DATA FOI	R MIXED B	TEX STANI	DARDS	
ENGINEERII	NG-SCIENCE		CLIENT: AC	DE	DATE: 9	126/95	
PROJECT:  LOCATION:  SED D-25			Operator:	n/ES			
Instrument Specs:			<del></del>	-			
Type of GC: Column Type: Chart Speed: Gain: Sensitivity: Gas Flow Rate: Tank Pressure:	CPS,1- 1 cm/ 20 5/10 7.5 X m	5					
Standard: Concentration:		BTEX Stel	Tedlar or G	lass Bulb	Comments:		
Inj. volume: Analysis #: Time:	1 191	diluhun '	Tedial of O	iass Build )			
	Actual Std.	Injection	Normalized	Area	Retention	Response	Delta
Analyte:		x Vol.(ml) =	Conc.(ppmV)	(vs)	Time (sec.)	Factor	RF
Benzene Toluene	1.03	1.0	1.00	1/.7	70,3	, 09	
Ethylbenzene	1.00 1.01	1.0	1.01	10.6 8.8	174 O 398,5	.09	
O-Xylenes	101	1.0	1.01	21, 2	4348	:05	
M-Xylenes	1.01	1.0	1.01	21, Z	4 34.8	.05	· · · · · · · · · · · · · · · · · · ·
P-Xylenes	1.00	6.0	1.00	9.6	5229	. 10	
Notes: $RF = C$			nc. is to be obtained	from analysis of g	as standard; Co	nc. normalized to	1 ml injection.
Standard:					Comments:		
Concentration:		on delution	Tedlar or <b>G</b>	lass Bulb)	_		
Inj. volume:		<u>/</u>					
Analysis #:							
Time:	9!24	<u> </u>	· · · · · · · · · · · · · · · · · · ·		<u> </u>	······································	
Analyte:	Actual Std. Conc.(ppmV)	Injection x Vol.(ml) =	Normalized Conc.(ppmV)	Area (vs)	Retention Time (sec.)	Response Factor	Delta RF
Benzene	// O.3	100,5	1.0 30,52	5.8	72.3	÷18 0.09	
Toluene	1.00	1.00,5	1.000.50	6,0	170.3	.170.08	
Ethylbenzene	1.01	10 0.5	1.01 0.51	5,3	394,3	190.10	
O-Xylenes	1.01	1005	1010.57	11.6	430.0	.090.04	
M-Xylenes	1.01	1,005	1. or 0.51	11,6	430.0	.09 004	
P-Xylenes	1.00	1005	1.00 0,5	4.8	516.6	250.10	
Notes: $RF = C$		s); Actual Std. Con	nc. is to be obtained	from analysis of g		nc. normalized to	1 ml injection.
Standard:			T 11		Comments:		
Concentration:			Tedlar or G	lass Bulb	-		
Inj. volume: Analysis #:					-		
Time:			······································		┦		
Time.							
Analyte:	Actual Std. Conc.(ppmV)	Injection x Vol.(ml) =	Normalized Conc.(ppmY)	Area (vs)	Retention Time (sec.)	Response Factor	Delta RF
Benzene				······································	T	T	
Toluene							
Ethylbenzene							
O-Xylenes							
M-Xylenes							.,
P-Xylenes /						<u> </u>	
Notes: RF = C	Conc. + Area (v.	s); Actual Std. Co.	nc. is to be obtained	from analysis of g	as standard; Co	onc. normalized to	1 ml injection.

Sh

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nwkhonh nwkhonh

CLIENT		JOB NO	SHEET 4 OF 12
SUBJECT		BY KKS/EDS/PFM	DATE 9/26/95
PHOTOVAC _	PHOTOVAC	CKD. PHUT	DUAC _
STACT # 1	START # 1	S1A61	12
# 3 # 4 # 5	# 9 	;	
	: . SG11-1		SG8-5
# 6 # 7	# 2	# 7 # 9	
	# 8	:	
SICP # 589.8	STOP @ 68tz. 6	STOP W ORR, C	
5AFFLE LIBRARY 1 SEP 26 95 10:11 ANALYSIS # 15 SYP BLK INTERNAL TEMP 29 1.8CL GAIN 20 SYR T	SAMPLE LIRRARY 1 SEM 26 03 18:24 ANALYSIS # 16 SG11-1 INTERNAL TEMP 23 1.9ML GAIN 28 SYP H	SAMPLE LIPRARY 1 ANALYSIS # 18 INTERNAL TEMP 28 GAIN 20	SEP 26 93 10:40 SGB-5 6 MJN 1.0ML SYR N
COMPCINE MAKE FERM R.T. AREA/PPM LINYYCLAN 7 353,3 22.6 mVs	COMPOUND NAME PEAK R.T. AREA/PER  UNKNOWN 2 18.1 18.3 US W W  UNKNOWN 4 138.7 285.8 BUS W  UNKNOWN 5 280.1 118.4 BAG W  UNKNOWN 2 346.1 315.3 BAG W.0	.e sinkhorin	AK R.T. AREA/PEN 2 17.4 11.7 US ** 3 97.4 91.6 yUS 4 161.9 165.0 mUS ** 2 956.3 44.4 mUS
PHOTOUAC START # 1	START # 1	प्पार्ट	(1.9 vs
Recleaned	Rerun		L
Recleaned Syringe ->	Rerun *3 Syr Blank.		
STOP @ 324.0 SATIFLE LIBRARY 1 SEP 26 95 10:30 ANALYSIS # 17 SYR BLK INTERNAL TETIP 29 1.0ML GAIN 20 SYR H COMPOUND NAME PEAK R.T. AREA/PM	STUP @ 266.8 SHIPLE LIBRARY 1 SEF 26 95 12:38 ANALYSIS # 18 SYR BLK INTERNAL TEMP 30 1.0ML GAIN 20 SYR H COMPOUND NAME PLAK K.1. AKEA/FPA		

COMPOUND NAME PEAK R.T. AREA/PFM

CLIENT		_ JOB NO SHEET_5OF_12	
SUBJECT		BY KKS/KIS/PFM DATE 9/26/95	
STAGE - 1  STAGE - 1  SC 8-5P  Early	SYR BLK.	SG-11-3	
# 12 # 12	# 4  STEP @ 435.8  SMIPLE LIBRARY 1 SEP 25 95 11: 7  AMALYSIS # 21 SYR BLK  INTERNAL TEMP 28 1.2ML  GAIN 20 SYR N  COMPOUND NAME PEAK R.I. AREA/PPM  UNKNOWN 4 967.8 23.1 p.US	# P	
STOF # 622.3  SAMPLE LIBRARY: SEP 28 95 18153  ANALYSIS # 20 S88-5 EARL  JOE STR K  COMPOUND NAME PEAK R.T. AREA/FIR  LINKNOWN 2 17.2 12.8 US W LINKNOWN 3 92.5 93.6 MUS LINKNOWN 4 68.1 71.3 MUS LINKNOWN 5 84.5 41.7 MUS LINKNOWN 6 286.9 27.4 MUS LINKNOWN 9 376.1 313.5 MUS LINKNOWN 9 376.1 313.5 MUS LINKNOWN 8 286.9 27.4 MUS LINKNOWN 9 376.1 314.3 MUS LINKNOWN 10 411.8 984.2 MUS LINKNOWN 11 436.8 101.8 MUS LINKNOWN 11 436.8 101.8 MUS	SYR BLK.	DMKNDSS 3 58,8 20,1 mUS DMKNDSSN 2 3,24,2 193,3 mUS	0.   vs   3v
	SIDP # 432.9 SIDP # 432.9 SAMPLE LIBRARY I SEP 26 95 11:10 ANALYSIS # 22 SYK BLK INTERNAL TEMP 28 1.0PL OHIN 20 SYK K COMPOUND NAME PERK R.I. AREA/PPM	STDP & 365.0 SAM*LE LIBRARY ! SEP 26 95 !1:34 ANALYSIS # 24 SYR BLK INTERNAL TEN'P 26 J.OMT. GOIN 20 SYP L	(

CLIENT	·	JOB NO	SHEET 6 OF 12
SUBJECT	- magnetistation of the state o	BYKS/EDS/PFAL	
PHOTOUAC -	PHUTOUAC   START.#1	жь <u>РНС</u>	TOVAC;
8 1	) = 4		* 2
se 11-4	5G 11-5		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	<b>=</b> 0		) a 5
# 7 * e	. 7		
# n	# 19		5611-6
STOP # 628,0 SAMPLE LIBRARY 1 SEP 28 35 11:44 ANALYSIS # 25 SG11-4 INTERNAL TEMP 28 1,0ML GAIN 20 SYR E	STEP # 000.0 SAMPLE LIBRARY 1 SEP 20 05 12: 2 ANALYSIS # 27 SS11-5 INTERNAL TEMP 23 1.0ML GAIN 20 SYR J COMPOUND NAME PEAK R.T. AREA/PPM	1	# S
CUMPROLING NAME PEAK R.T. AREA/PPM  UNKNOWN 2 19.2 18.5 US W 4.8  UNKNOWN 5 178.9 327.1 mUS W  UNKNOWN 7 398.3 21.9 mUS W  UNKNOWN P 452.0 231.3 mUS	UNKNOUN 2 19.8 28.5 US W 28 UNKNOUN 4 162.9 328.2 mUS W UNKNOUN 5 219.3 76.5 mUS UNKNOUN 7 454.8 184.5 mUS	.8	
PHOTOURC START # 1	START 9	STOP 9 655.3 SAMPLE LIBRARY ANALYSIS 4	' 1 SEP 26 95 12:25 23 SQ11-6
· 			20 SYP 0
		PAKADIN OMKADIN OMKADIN OMKADIN OMKADIN OMKADIN CGALQUIND WALE	PEAK R.1. AREA/FPN  2 62.7 1.4 KUS 3 164.0 21.3 US 4 204.5 16.6 US 5 302.7 1.3 US 6 352.5 182.3 mUS 7 442.8 11.5 US 8 660.9 1.7 US
	# 2		1,453,815
SAMPLE LIBRARY 1 SEP 26 S5 11:52 ANALYSIS # 26 SYR BLK	# 3  STOP 8 481.9  SANTIL LIRRARY 1 SET 28 95 12:18  ANALYSIS # 28 SYR BLK  INTERNAL TEMP 98 1.8ML  GRIN 28 SYR J		·

COMPOUND NAME PEAK & T AREA /PPM

SHEET\_7 OF\_17 CLIENT\_ JOB NO. KS/EDS/PFM DATE CHID IECT CKD. START\_#\_\_\_ STAKT \_#\_\_1\_\_\_ \* 2 .! # 4-3 # 2 # 3 ន ន 0.5 ppm std. # 19 By Volume 5685-65 # 11 SG 8.5-4.5 E 0+1 # 11 ρ # 12 n 12 # 13 4 1? | STOP 4 695.5 SAMPLE LIPRARY 1 SEP 26 95 12:30 ANALYSIS 4 90 1.8 PPM STO INTERNAL TEMP 22 0.5 NA. GAIN 28 SYR A SICP 6 202.3 STOP 6 /12.9 SAMPLE LISHAMY 1 SEP 25 98 AMALYSIS # 92 S98.5-6.5 SAMPLE 11BRANY : SEP 26 35 12:48 ANALYSIS 4 31 868,3-4.5 INTERNAL TEMP 38 1.0 ML COMPOUND NAME PEAK R.T. AREAZEPM ANALYSIS # 52 INTERNAL TEMP 30 20 DEKNOHN 2 19.2 5... 3 24.1 24.3 mUS 5 63.0 16.5 US 6 162.2 12.2 US 9 324.0 8.2 US 19.2 33.0 mVS 1.0 mL STR T UNKNOWN GA:N SYR N NKHONN DIAKAOPIA TIAKAOPIA COMPOUND NAME FEAR R.T. MESKIPP COMPOUND NAME PEAK R.T. APEAZPEN 21.3 86.3 US W 37.9 6.3 US 71.3 88.4 mVS — 6 82.5 137.1 mUS 186.2 23.0 488.7 3.2 TINKROWN UNKNOWN **UNKNOWN** 20.6 39.0 US W HINKHOPIK 3.2 VS LINKINDLIN 36.6 2.7 VS 65.3 62.5 mVS UNKNOUG DINKNOWN UNKNO!! **NIKKNONA UNKNOWN** £1.9 43.0 mUS 159.2 318.3 mUS 31.4 38.0 mUS 117.9 382.4 mUS UNKNOWN DUKNONN UNKNUMN 158.9 493.9 AUS -T 200.5 249.1 AUS UNKNOWN 198.5 161,1 mUS UHKHOUN NHKHONH 258.8 214.2 mUS 341.3 1.8 US 518.4 250.1 mUS 633.2 436.2 mUS DIKKNUNN 3 200.5 243.1 nOS 12 261.3 244.3 mVS 11 348.5 788.6 nVS 12 318.4 277.6 nVS 13 635.4 973.9 nVS DUKNOMU DUKNOMU UNKNOUN 12 ПИКИОМИ UNKNOWN NKVDNV UNKNOUN 69,2 vs 45.0 45 9.905 6.0 VS

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SHEET 8 OF 17 CLIENT JOB NO. -BY KES / DS /PFM DATE\_ 9-26-95 SUBJECT CKD. START # 1 STOET # \_\_\_ # 5 # 4 # 8 # 3 # 7 5G7-85 568.5-8.5 SG 11-10 # 11 # 10 **p** 3 # 22 STOP 6 682.0 2 169 # 12 ANALYSIS 4 35 SOZ-8.0 INTERNAL TEMP 38 1.3 NL GAIN 20 SYR E COMPOUND NAME PEAK R.T. AREA/FOR # 13 20,8 32,7 V3W UNKNOWN 2 28.8 32.1 U3W 3 36.9 647.3 a.3 2 152.5 261.4 a.3 6 135.2 116.3 a.3 3 252.8 353.3 a.4 10 321.2 234.3 a.3 11 221.2 33 a.4 DINKNOWN UNKNOWN UNKHOWE STUF 6 780.2 DISKNOWN SAMPLE LIBRARY 1 ANALYSIS # 39 PUKNEPH SEP 26 95 10:14 568.5-8.5 UNKREUN INTERNAL TEMP 22 BAIN 20 1.0 ML SYR H 39.4 COMPOUND NAME PEAK R.I. AREAZPEN 4.8 2P.8 mUS W LINKNEUM 3.245 20.2 26.9 US
37.1 439.4 MUS
66.3 82.2 MUS — 8
91.3 84.2 MUS DMKNUMM UNKNOUS UNKNOUN **UNKHOUN** 157.1 708,1 MUS - 1 PHKHOM 137.1 726.1 MOS 137.3 26.3 mUS 8 236.8 27.2 mUS 3 340.1 371.4 mUS 10 388.7 183.1 mUS 11 465.2 35.2 mUS 12 623.3 711.2 mUS DIKNOUN 1000,0 SAMFLE LIFFARY 1 SEP 26 95 13 ANALYSIS # 34 SG11-18 INTERNAL TEMP 29 1,0 ML UI4KMDHI4 UNKNOWN 95 13:34 UNKNOWN じるスさいだる SYR M COMPOUND NAME FEAK R.T. AREAZPPM 28.7 vs 20.8 44.1 US W 27.4 245.4 mUS 82.3 100.6 mUS 156.2 374.8 mUS MINKNOWN UNKNOWN DNKNDEN 6 196.9 184.0 p.VS 7 289.3 725.1 mVS 9 413.2 1.9 VS 10 615.6 646.6 p.VS **THKNDMM** UHKHOLIN HINKNOUN

= 48.3 vs + pine pitch peak

SHEET 9 JOB NO. \_ CLIENT\_ BYKKS/PFM/EDS DATE 9-26-95 S1661 .#...!....... # 3 # 2 BTEX 0.5 ppm std. By Volume SG11-11 # 8 SG 8.5-10.5 1 1: STOP 9 513.4 STOP W 513.4 SAPPLE LIBRARY 1 SEP 06 95 18.65 ANNLYSIS # 90 1.0 PPM 1NTERNAL TEPP 32 0,5 M GASH 20 EVE A 4 12 699.9 COMPOUND NAME FEAY S.T. GREAVEST STOP & SAFFLE LIFFREY 1 SEP 26 95 15:2F UNKHOUN ANALYSIS # 36 INTERNAL TEMP 32 569.5-12.5 1.0 ML 69.5 9.9 95 -UNKHOWN 6, 146.6 2.5 US 2 329.3 5.7 U4 8 252.5 19.3 U3 20 SYR J UNKNOSK COMPOUND NAME FERN R.T. AREASTAN LINKROWN 400.0 5,2 US 22.7 128.0 02 ₩ 56.0 27.2 678 TIME NOUS. UNKNOW! 5 56.0 07.2 ± 35 4 65.3 108.3 ± 95 6 88.2 64.2 ± 95 2 115.1 527.1 ± 15 8 150.2 1.1 US UNKNEWN DINKNOWN UNKNOWN UNKNUZ 9 192.5 464.3 mVS 10 325.1 206.3 mVS 11 404.1 223.0 mVS UNKNOWN DINKNOSIN DIMENTURY 181.4 VS 2.800 STOF 9 1888.8 SANTLE LIBRARY 1 SEF 26 95 15:46 MNRLYSIS # 97 SG1:-11 INTERNAL TEMP 32 1.0 M. STRF BAIN STAN DAJONAD PEAK P.T. APEAZPPP NUKNONK 28.6 45.6 USW 85.2 53.1 mUS 112.5 20.5 mUS UNKUGUN NKNUNIN 6 147.8 517.8 #VS W 7 188.5 155.9 #VS DNKNDLIK DNKHONN 8 275.3 732.0 mUs 3 395.7 2.3 Us 16 380,: 626,5 mUs LINKNOUN DINKNOUN UNKNOEN

~ 50.3+ pineptch peak missing

_IENT	JOB NO	SHEET ID OF 12
SUBJECT	BY KRS/E	DS/PFM DATE 9/26/95
. PHOTOUAC _	PHUTOVNO	_ IPHOTOVAC
5)	S1061 3 1	SIASI F. A.
and the same of th		
j d a	4.6	<b>(</b>
) = s	2	; # 3
), n 6	= 2 Tolvere	1 * 4
į = ? [	/- "	40 ml VOA
;	<i>,</i> # 11	filled with
·	1	20 ml Distilled
n g	± .2	water.
# 5	1 ma with twomet	secled 9-25-95
	13 - Mto tylenes	
	\$ G55-5,5 P Kylenes	. !
# 1.02	Phylenes	Di lana can
SG6-1A		DI her on hor
1 200 111		1
: # 1.1 if	n 28	DAFW-4
: B 12	STOP 9 642.6	
·	59991.5 E186997 ( 582-26 95 16)23 89817510 4 43 583,5-3,5	# >
	INTERNAL TELS SE 1.8 ME SALE 20 SYR L	STOP 9 622,7 SAMPLE CLEARNY 1 SEP 26 LD 15 TH ANYLYSIS # 41 WOMER HEAD LD
:	COMPOUND NOME PEAK F.I. APEA/PPH	INTERNAL TERM 3: 1.0 ML GOIN 20 - SYS L
1	UNKKOMN 2 22,6 78,6 US W UNKKOMN 3 94,2 16,8 US UNKKOMN 4 53,4 8,5 US	LOMBOURD NOTE PERK R.T. 67-325
:	ыккышк 5 22.3 20.4 US ыккышк 6 35.5 5.0 US	UNKINGN 2 18.2 5.7 €3 ₩ UNKNOWN 4 143.5 1.4.5 8.1 ₩
:	UNKNUMN 2 183.2 3.2 V3 UNKNUMN 8 126.5 222.3 mVS UNKNUMN 3 145.7 294.3 mVS	UNKNOWN 5 314.3 7.7 1.4 7.7 1.
	บหหายนท 10 127.8 1.9 03 บหหายนท 11 224.1 165.3 r 05 บหนายนท 12 312.3 672.8 r 05	12 7
SidP 9 92).8 SoMPLE LIPPROV 1 SEP 26 95 16:1)	UNKNOWN 19 362.8 1.3 US - M+O UNKNOWN 14 434.8 246.2 mU3 - P	13.7 vs
ANA YSIS # 35 SOCHA INTERNAL TEMP 31 1.0 ML	UNGRUEN 15 52:.1 734.3 nUS	DAFW SAMPLE
GH.N 20 SYR K COMPOUND NAME PEAK P.T. AREAZPPM	(37.7 vs	DAFW Sample
UNKNOWN 2 28.7 36.8 US ₩	[ 79 7. ]	
UNKNOUN 5 112.1 22.2 mUS	51.103	
UNKNOWN 2 180.1 25.4 m/s UNKNOWN 8 306.1 290.2 m/s UNKNOWN 3 351.5 85.1 m/s		
UNKNOWN 12 452, 263, 1 m/s UNKNOWN 12 557, 299,6 m/s		

39.3 vs

## PARSONS MAIN, INC.

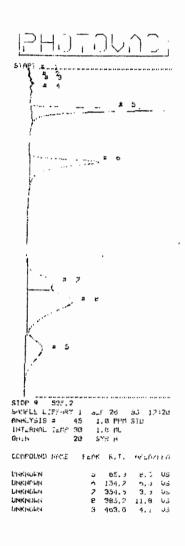


CLIENT	JOB N	•
SUBJECT	BY_K	CS/ DATE 4-24-98
PHUTOUA:	<u> </u>	PHUTOUND
Sinci 1. # 1	Singi_#_1	SIA\$1.4.i
	7	The same of the sa
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1	, a 3	1 CENTROUND ID # R.T. LIMIT
	]: " <sup>4</sup>	Name 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Fresh H20	1.3
	Fresh H20 Headspace	, · · · · · · · · · · · · · · · · · · ·
!	Heid's pice	
	j	<b>#</b> 5
<b>\$</b> 3	) # 5	
:	н 6	
•		i I
i	I	1
Stur 4 434.2		6
SAMPLE LIBRARY 1 SEP 25 95 16:42 ANALYSIS # 42 SYR BLK 1812RNoL TEMP 31 1.0 ML	DAFW-5	
Grein 20 Str. L	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
COMPOUND NAME PEAK R.T. AREAZEPH UNKNOWN 3 910.7 01.8 PMS	i 	
		1
	510F # 651.5 56F-LE LIMANNY 1 SEF 26 63 16.56 688 61.5 # 43 LMTEP 16876866E	
	19751196 1218 91 1.2 (1 661): 28 595 1	* 2
	COMPONENT NAME PEAK 5.7. OFEENPHIN	1 .
	96761376 2 12.5 6.0 US W Green 4 156.6 256, 7 505 W	ļ
	PRESENTAL 5 220, 5 213, 4 605 PRESENTAL 7 592, 1 215, 7 603	STDF 6 635,4
	7845	SACHLE LIBOHRY 1 SEC 28 35 12:1. ANSEYSIS # 44 SB25-0 461
	7.8 vs	GHAN SE PAR W TATERING TERM 31 1.0 MF
	0.608	COMPOUND NAME FERR R.T. OREGIFFE
		UNKYDUN 2 18.6 10.5 US UNKNDUN 4 88.5 96.8 mUS UnkkUDUN 3 151.7 401.6 m.US
		Шккиын 6 325.1 3.4 95 Иккиын 7 888.2 329 9 603

### PARSONS MAIN, INC.



CLIENT	JOB NO	SHEET 12 OF 12
SUBJECT	BY KKS/PFM/EDS	DATE 4/01/95
	CKD	REVISION



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Soil Gas Calibration Curves and Statistics

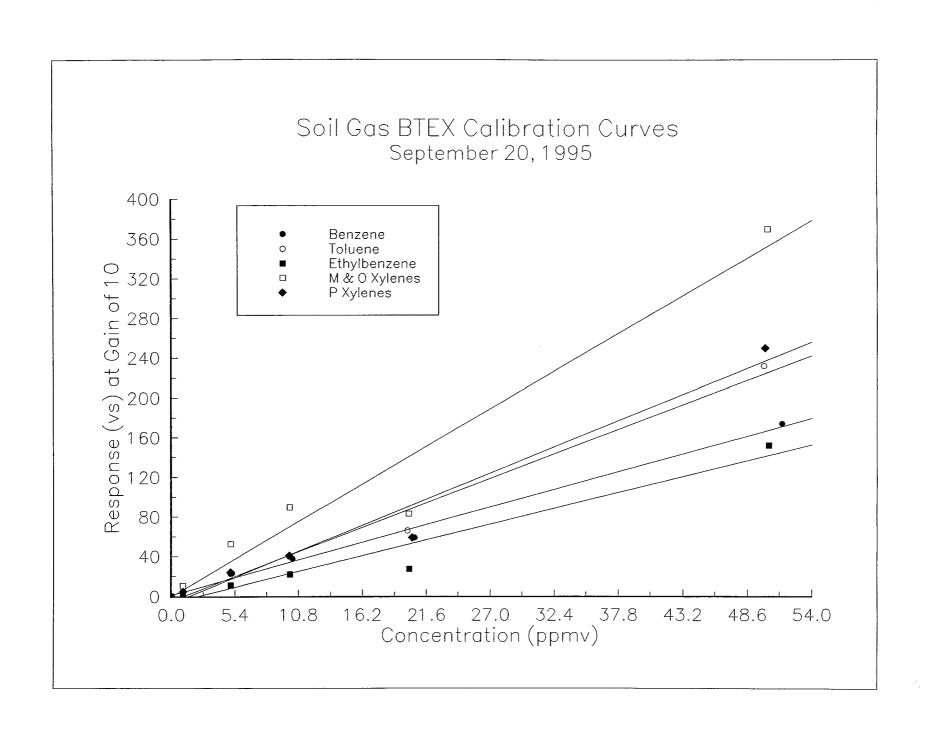
DATE:

SEPTEMBER 20, 1995

Gain of 10

D	·		
Benzene     X variable     (conc ppm)     51.5     20.6     10.3     5.15     1.03     0	Y variable (response Vs) 173 58.8 37.4 23.3 4.9	Regression Output:  Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom  X Coefficient(s) 3.311559 Std Err of Coef. 0.095626	0 5.41812 0.992879 6 5
		Std Err of Coef.         0.095626           Slope =         0.301973	
Toluene X variable (conc ppm) 50 20 10 5 1	Y variable (response Vs) 231 65.8 39.8 22.9 4.8	Regression Output:  Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom  X Coefficient(s) 4.422769 Std Err of Coef. 0.204199  Slope = 0.226103	0 11.23282 0.983267 6 5
Ethylbenzene X variable (conc ppm) 50.4 20.16 10.08 5.04 1.008	Y variable (response Vs) 151 27.2 22 11.2 3.1	Regression Output:  Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom  X Coefficient(s) 2.745091 Std Err of Coef. 0.253907  Slope = 0.364287	0 14.07896 0.939903 6 5
O-Xylenes and M X variable (conc ppm) 50.3 20.12 10.06 5.03 1.006 0	Y variable (response Vs) 369 83 89.6 52.4 10.4 0	Regression Output:  Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom  X Coefficient(s) 6.989918 Std Err of Coef. 0.530261  Slope = 0.143063	0 29.3442 0.95373 6 5
P-Xylenes X variable (conc ppm) 50.1 20.4 10.02 5.01 1.002 0	Y variable (response Vs) 249 58.8 40.6 24.1 4.9	Regression Output:  Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom  X Coefficient(s) 4.653913 Std Err of Coef. 0.323163  Slope = 0.214873	0 17.85507 0.96375 6 5

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#### **SOIL GAS CALIBRATION DATA**

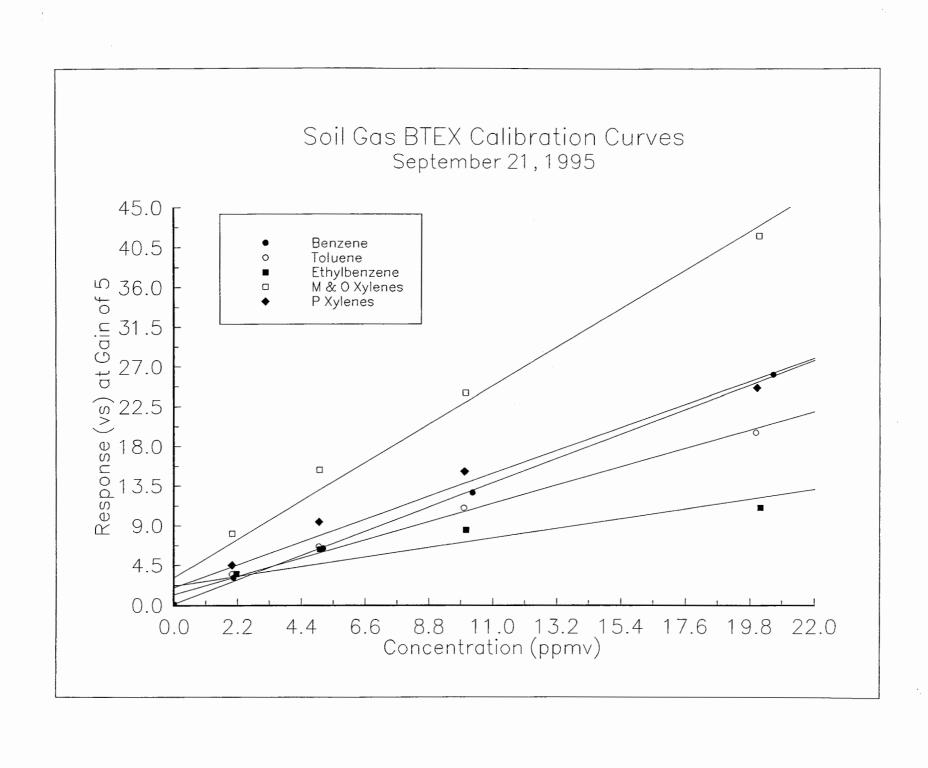
DATE:

**SEPTEMBER 21, 1995** 

Gain of 5

Benzene X variable (conc ppm)	Y variable (response Vs)	Regressio	on Output:	0
20.6 10.3 5.15 2.06	26 12.7 6.4 3.1 0	Std Err of Y Est R Squared No. of Observations Degrees of Freedom		0.290768 0.999201 5
U	Ü	X Coefficient(s) Std Err of Coef.	1.257548 0.012274	
		Slope =	0.795198	
Toluene X variable	Y variable	Pograpaia	on Outmits	
(conc ppm)	(response Vs)	Regressio Constant	on Output:	0
20	19,5	Std Err of Y Est		1.207401
10	11	R Squared		0.974355
5 2 0	6.6 3.5 0	No. of Observations Degrees of Freedom		5 4
	-	X Coefficient(s) Std Err of Coef,	1.020794 0.052496	
		Slope =	0.97963	
Ethylbenzene				
X variable	Y variable	Regressio Constant	n Output:	0
(conc ppm) 20.16	(response Vs) 11	Std Err of Y Est		0 2.33144
10.08	8.5	R Squared		0.704152
5.04 2.16	6.3 3.5	No. of Observations Degrees of Freedom		5 4
2.10	0.5	-		4
		X Coefficient(s) Std Err of Coef.	0.6 <b>44402</b> 0.100506	
		Slope =	1.551827	
O-Xylenes and M X variable	I-Xylenes Y variable	Regressio	n Output:	
(conc ppm)	(response Vs)	Constant	ii Output.	0
20.12	41.75	Std Err of Y Est		3.211157
10.06 5.03	24	R Squared		0.959925
	15.3	No. of Observations		5
2.01	8.1	No. of Observations Degrees of Freedom		4
		Degrees of Freedom	2 19421	
2.01	8.1		2.19421 0.138784	5 4
2.01	8.1	Degrees of Freedom X Coefficient(s)		
2.01 0 P-Xylenes	8.1 O	Degrees of Freedom X Coefficient(s) Std Err of Coef. Slope =	0.138784	
2.01 0 P-Xylenes X variable	8.1 0 Y variable	Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =	0.138784	
2.01 0 P-Xylenes	Y variable (response Vs)	Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =  Regressic Constant Std Err of Y Est	0.138784	0 2.152681
P-Xylenes X variable (conc ppm) 20.04 10.02	Y variable (response Vs) 24.5 15.1	Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =  Regressic Constant Std Err of Y Est R Squared	0.138784	0 2.152681 0.949135
P-Xylenes     X variable (conc ppm)     20.04     10.02     5.01	8.1 0 Y variable (response Vs) 24.5 15.1 9.4 4.5	Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =  Regressic Constant Std Err of Y Est	0.138784	0 2.152681
2.01 0 P-Xylenes X variable (conc ppm) 20.04 10.02 5.01	8.1 0 Y variable (response Vs) 24.5 15.1 9.4	Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =  Regressic Constant Std Err of Y Est R Squared No. of Observations	0.138784	0 2.152681 0.949135 5

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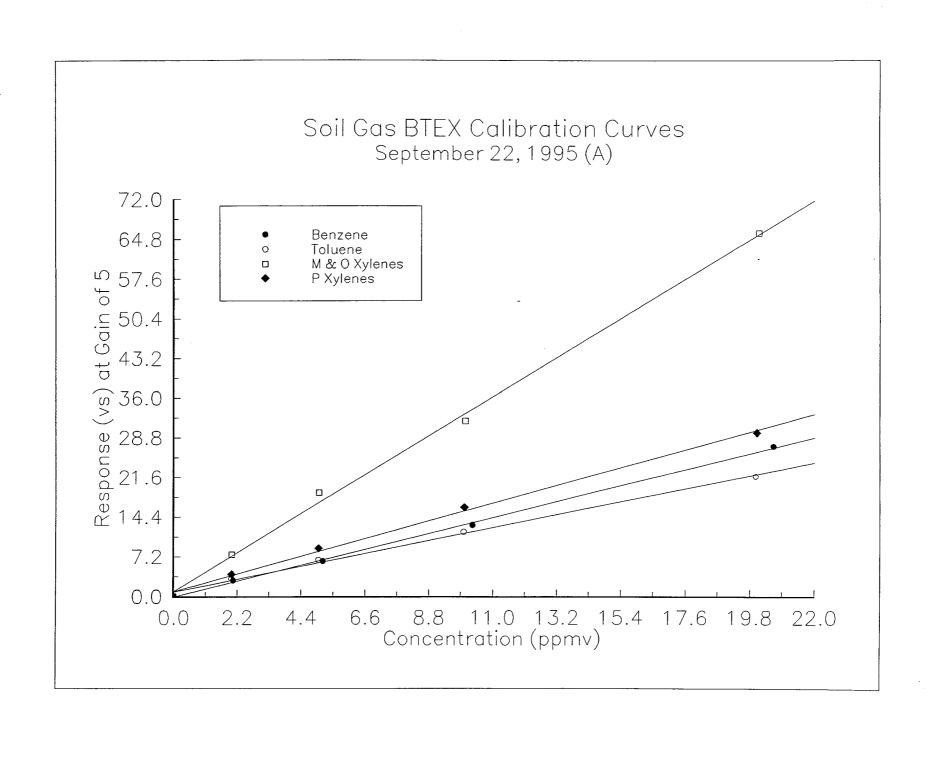
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#### **SOIL GAS CALIBRATION DATA**

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SEPTEMBER 22, 1995 A Gain of 5

Benzene				
X variable	Y variable	Regressio	n Output:	
(conc ppm)	(response Vs)	Constant	•	
20.6	27.1	Std Err of Y Est		0.3458
10.3	12.9	R Squared		
	. —,-			0.99896
5.15	6.4	No. of Observations		
2.06	2.9	Degrees of Freedom		
0	0			
		X Coefficient(s)	1.300861	
		Std Err of Coef.	0.014598	
		Old Ell Ol Occil	0.01-1000	
		Slope =	0.768722	
F - 1				. ,
<b>Foluene</b> X variable	Y variable	Regressio	n Output:	
(conc ppm)	(response Vs)	Constant		
20	21.7	Std Err of Y Est		0.81446
10	11.7			
		R Squared		0.99079
5	6.6	No. of Observations		;
2	3.2	Degrees of Freedom		
0	0			
		X Coefficient(s)	1.116068	
		Std Err of Coef.	0.035412	
		Slope =	0.896003	
Ethylebenzene X variable (conc ppm)	Y variable (response Vs)	Regressio	n Output:	
20.16 10.08	NA NA	NOT AVA	ILABLE	
20.16		NOT AVA	ILABLE	
20.16 10.08 5.04 2.02 0	NA NA 3.2 0			
20.16 10.08 5.04 2.02 0	NA NA 3.2 0 ; no separation of ethyli	NOT AVA		
20.16 10.08 5.04 2.02 0 NA = Not Available	NA NA 3.2 0 ; no separation of ethyli		ogram	
20.16 10.08 5.04 2.02 0 NA = Not Available M-Xylenes and Ox X variable	NA NA 3.2 0 ; no separation of ethylt 	penzene peak on the chromate	ogram	
20.16 10.08 5.04 2.02 0 NA = Not Available M-Xylenes and O- X variable (conc ppm)	NA NA 3.2 0 ; no separation of ethylt  -Xylenes Y variable (response Vs)	penzene peak on the chromate Regressio Constant	ogram	
20.16 10.08 5.04 2.02 0 NA = Not Available M-Xylenes and O X variable (conc ppm) 20.12	NA NA 3.2 0 ; no separation of ethylt  -Xylenes Y variable (response Vs) 65.8	penzene peak on the chromate Regressio Constant Std Err of Y Est	ogram	1.39386
20.16 10.08 5.04 2.02 0 NA = Not Available W-Xylenes and O X variable (conc ppm) 20.12 10.06	NA NA NA 3.2 0  ; no separation of ethylt  -Xylenes     Y variable (response Vs) 65.8 31.8	penzene peak on the chromate Regressio Constant Std Err of Y Est R Squared	ogram	1.39386 0.99709
20.16 10.08 5.04 2.02 0 NA = Not Available W-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03	NA NA NA 3.2 0  ; no separation of ethylt  -Xylenes     Y variable (response Vs) 65.8 31.8 18.8	Regressio Constant Std Err of Y Est R Squared No. of Observations	ogram	1.39386 0.99709
20.16 10.08 5.04 2.02 0 NA = Not Available M-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03 2.01	NA NA 3.2 0 ; no separation of ethyli  -Xylenes Y variable (response Vs) 65.8 31.8 18.8 7.6	penzene peak on the chromate Regressio Constant Std Err of Y Est R Squared	ogram	1.39386 0.99709
20.16 10.08 5.04 2.02 0 NA = Not Available M-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03	NA NA NA 3.2 0  ; no separation of ethylt  -Xylenes     Y variable (response Vs) 65.8 31.8 18.8	Regressio Constant Std Err of Y Est R Squared No. of Observations	ogram	
20.16 10.08 5.04 2.02 0 NA = Not Available W-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03 2.01	NA NA 3.2 0 ; no separation of ethyli  -Xylenes Y variable (response Vs) 65.8 31.8 18.8 7.6	Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	ogram n Output:	1.39386 0.99709
20.16 10.08 5.04 2.02 0 NA = Not Available W-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03 2.01	NA NA 3.2 0 ; no separation of ethyli  -Xylenes Y variable (response Vs) 65.8 31.8 18.8 7.6	Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s)	ogram n Output: 3.275641	1.39386 0.99709
20.16 10.08 5.04 2.02 0 NA = Not Available W-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03 2.01	NA NA 3.2 0 ; no separation of ethyli  -Xylenes Y variable (response Vs) 65.8 31.8 18.8 7.6	Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	ogram n Output:	1.39386 0.99709
20.16 10.08 5.04 2.02 0 NA = Not Available W-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03 2.01	NA NA 3.2 0 ; no separation of ethyli  -Xylenes Y variable (response Vs) 65.8 31.8 18.8 7.6	Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s)	ogram n Output: 3.275641	1.39386 0.99709
20.16 10.08 5.04 2.02 0 NA = Not Available VI-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03 2.01	NA NA 3.2 0 ; no separation of ethyli  -Xylenes Y variable (response Vs) 65.8 31.8 18.8 7.6	Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef.	ogram in Output: 3.275641 0.060242	1.39386 0.99709
20.16 10.08 5.04 2.02 0 NA = Not Available VI-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03 2.01	NA NA 3.2 0 ; no separation of ethyli  -Xylenes Y variable (response Vs) 65.8 31.8 18.8 7.6	Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef.	ogram n Output: 3.275641 0.060242 0.305284	1.39386 0.99709
20.16 10.08 5.04 2.02 0 NA = Not Available  W-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03 2.01 0	NA NA 3.2 0  ; no separation of ethyli  -Xylenes Y variable (response Vs) 65.8 31.8 18.8 7.6 0	Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef.	ogram n Output: 3.275641 0.060242 0.305284	1.39386 0.99709
20.16 10.08 5.04 2.02 0  NA = Not Available  W-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03 2.01 0  P-Xylenes X variable (conc ppm)	NA NA 3.2 0  ; no separation of ethylt  -Xylenes Y variable (response Vs) 65.8 31.8 18.8 7.6 0  Y variable (response Vs)	Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef. Slope =  Regressio Constant	ogram n Output: 3.275641 0.060242 0.305284	1.39386 0.99709
20.16 10.08 5.04 2.02 0 NA = Not Available  M-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03 2.01 0  P-Xylenes X variable (conc ppm) 20.20 20.4	NA NA 3.2 0  The property of the second of t	Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef. Slope =  Regressio Constant Std Err of Y Est	ogram  n Output:  3.275641 0.060242 0.305284	1.39386 0.99709 0.94775
20.16 10.08 5.04 2.02 0  NA = Not Available  N-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03 2.01 0  P-Xylenes X variable (conc ppm) 20.04 10.02	NA NA 3.2 0  ; no separation of ethylt  -Xylenes     Y variable     (response Vs)     65.8     31.8     18.8     7.6     0   Y variable     (response Vs)     29.6 16.1	Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef. Slope =  Regressio Constant Std Err of Y Est R Squared	ogram  n Output:  3.275641 0.060242 0.305284	1.39386 0.99709 0.94775 0.99340
20.16 10.08 5.04 2.02 0  NA = Not Available  N-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03 2.01 0  P-Xylenes X variable (conc ppm) 20.04 10.02 5.01	NA NA 3.2 0  ; no separation of ethylt  -Xylenes Y variable (response Vs) 65.8 31.8 18.8 7.6 0   Y variable (response Vs) 29.6 16.1 8.7	Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef. Slope =  Regressio Constant Std Err of Y Est R Squared No. of Observations	ogram  n Output:  3.275641 0.060242 0.305284	1.39386 0.99709 0.94775 0.99340
20.16 10.08 5.04 2.02 0  NA = Not Available  N-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03 2.01 0  P-Xylenes X variable (conc ppm) 20.04 10.02	NA NA 3.2 0  ; no separation of ethylt  -Xylenes     Y variable     (response Vs)     65.8     31.8     18.8     7.6     0   Y variable     (response Vs)     29.6 16.1	Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef. Slope =  Regressio Constant Std Err of Y Est R Squared	ogram  n Output:  3.275641 0.060242 0.305284	1.39386 0.99709 0.94775 0.99340
20.16 10.08 5.04 2.02 0  NA = Not Available  N-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03 2.01 0  P-Xylenes X variable (conc ppm) 20.04 10.02 5.01	NA NA 3.2 0  ; no separation of ethylt  -Xylenes Y variable (response Vs) 65.8 31.8 18.8 7.6 0   Y variable (response Vs) 29.6 16.1 8.7	Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef. Slope =  Regressio Constant Std Err of Y Est R Squared No. of Observations	ogram  n Output:  3.275641 0.060242 0.305284	1.39386 0.99709 0.94775 0.99340
20.16 10.08 5.04 2.02 0  NA = Not Available  N-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03 2.01 0  P-Xylenes X variable (conc ppm) 20.04 10.02 5.01 2	NA NA 3.2 0  ; no separation of ethyli  -Xylenes Y variable (response Vs) 65.8 31.8 18.8 7.6 0  Y variable (response Vs) 29.6 16.1 8.7 4	Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef. Slope =  Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	ogram  3.275641 0.060242 0.305284	1.39386 0.99709 0.94775 0.99340
20.16 10.08 5.04 2.02 0  NA = Not Available  N-Xylenes and O  X variable (conc ppm) 20.12 10.06 5.03 2.01 0  P-Xylenes  X variable (conc ppm) 20.04 10.02 5.01 2	NA NA 3.2 0  ; no separation of ethyli  -Xylenes Y variable (response Vs) 65.8 31.8 18.8 7.6 0  Y variable (response Vs) 29.6 16.1 8.7 4	Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef. Slope =  Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	3.275641 0.060242 0.305284 on Output:	1.39386 0.99709 0.94775 0.99340
20.16 10.08 5.04 2.02 0  NA = Not Available  N-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03 2.01 0  P-Xylenes X variable (conc ppm) 20.04 10.02 5.01 2	NA NA 3.2 0  ; no separation of ethyli  -Xylenes Y variable (response Vs) 65.8 31.8 18.8 7.6 0  Y variable (response Vs) 29.6 16.1 8.7 4	Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef. Slope =  Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	ogram  3.275641 0.060242 0.305284	1.39386 0.99709
20.16 10.08 5.04 2.02 0  NA = Not Available  N-Xylenes and O X variable (conc ppm) 20.12 10.06 5.03 2.01 0  P-Xylenes X variable (conc ppm) 20.04 10.02 5.01 2	NA NA 3.2 0  ; no separation of ethyli  -Xylenes Y variable (response Vs) 65.8 31.8 18.8 7.6 0  Y variable (response Vs) 29.6 16.1 8.7 4	Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef. Slope =  Regressio Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	3.275641 0.060242 0.305284 on Output:	1.39386 0.99709 0.94775



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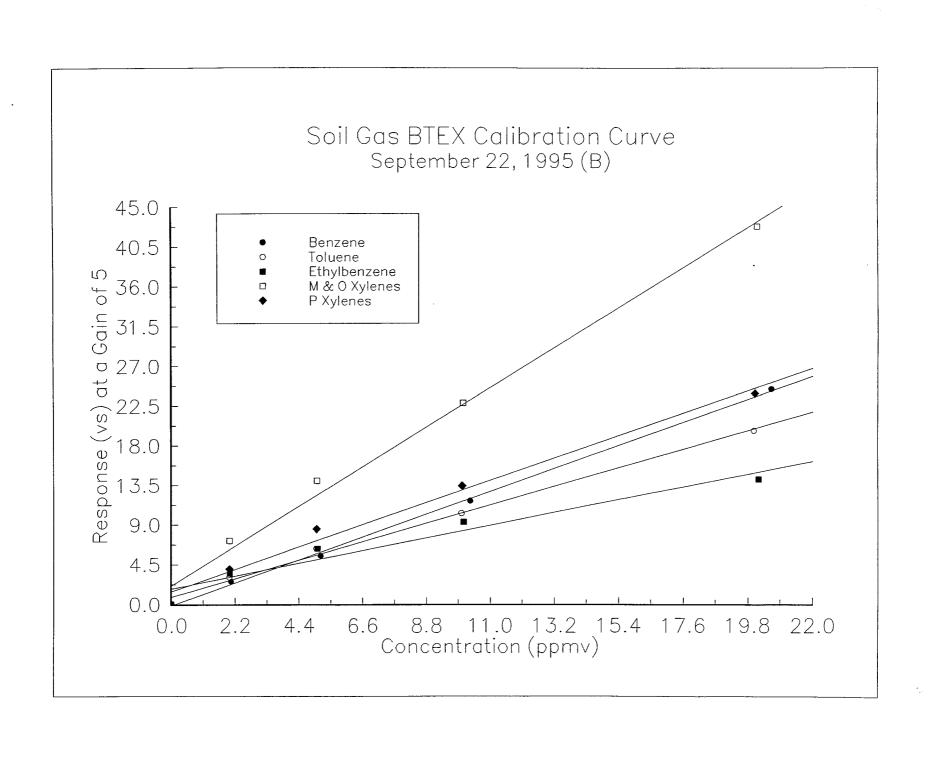
#### SOIL GAS CALIBRATION DATA

DATE:

SEPTEMBER 22, 1995 B Gain of 5

Benzene				
X variable	Y variable	Regressio	n Output:	
(conc ppm)	(response Vs)	Constant		
20.6	24.3	Std Err of Y Est		0.34222
10.3	11.7	R Squared		0.99875
5,15	5.5	No. of Observations		
2.06 0	2.6 0	Degrees of Freedom		
Ū	· ·	X Coefficient(s)	1.1667	
		Std Err of Coef.	0.014446	
		Siope =	0.857118	
Toluene				
X variable	Y variable	Regressio	n Output:	
(conc ppm)	(response Vs) 19.6	Constant Std Err of Y Est		0.88375
20 10	10.3	R Squared		0.98645
5	6.3	No. of Observations		0.90040
2	3.1	Degrees of Freedom		·
0	0	V 0 45 - 1 1/- \	4 000004	
		X Coefficient(s) Std Err of Coef.	1.006994 0.038424	
		Std Eff of Coef.	0.036424	
		Slope =	0.993054	
Ethylbenzene				
X variable	Y variable	Regressio	n Output:	
(conc ppm)	(response Vs)	Constant		4.07450
20.16	14.1	Std Err of Y Est		1.87150
10.08 5.04	9.3 6.3	R Squared No. of Observations		0.88004
2.02	3.5	Degrees of Freedom		,
2.02	0	Degrees or Freedom		•
		X Coefficient(s)	0.775463	
		Std Err of Coef.	0.080723	
		Slope =	1.289553	
M-Xylenes and O		Daggarasia	m Ocalmicate	
X variable (conc ppm)	Y variable (response Vs)	Regressio Constant	ii Output.	
20.12	42.7	Std Err of Y Est		2.18984
10.06	22.8	R Squared		0.98236
5.03	14	No. of Observations		0.00200
2.01	7.2	Degrees of Freedom		
0	0			
		X Coefficient(s)	2.19177	
		Std Err of Coef.	0.094644	
		Slope =	0.456252	
P-Xylenes				
X variable	Y variable	Regression	n Output:	
(conc ppm)	(response Vs)	Constant		4 = 4700
20.04	23.8	Std Err of Y Est		1.54729
10.02	13.4	R Squared		0.97185
5.01	8.5	No. of Observations Degrees of Freedom		
_	4 0	Degrees of Freedom		
2				
0	U	X Coefficient(s)	1 246098	
	Ū	X Coefficient(s) Std Err of Coef.	1.246098 0.06714	
	Ü			

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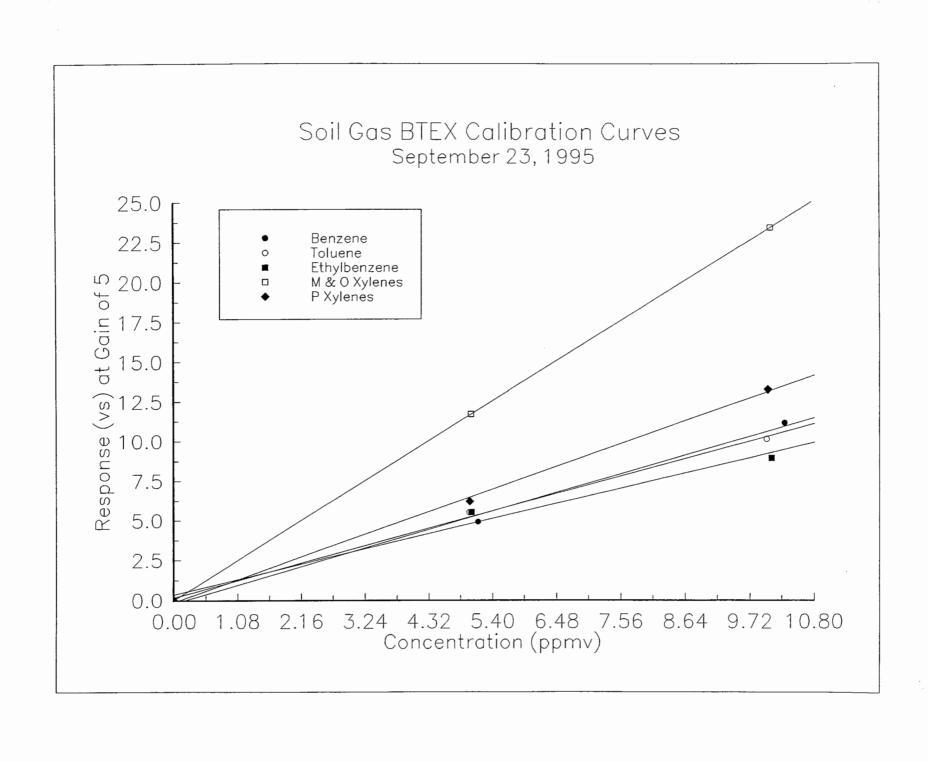


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DATE:

SEPTEMBER 23, 1995

Benzene X variable	Y variable	Regression	Output:	
(conc ppm) 10.3 5.15 0	(response Vs) 11.1 4.9 0	Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom		0.411096 0.994538 2
		X Coefficient(s) Std Err of Coef.	1.052427 0.035699	
		Slope =	0.950185	
Toluene X variable (conc ppm) 10 5 0	Y variable (response Vs) 10.1 5.5 0	Regressior Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	ı Output:	0.284605 0.996832
		X Coefficient(s) Std Err of Coef.	1.028 0.025456	
		Slope =	0.972763	
Ethylbenzene X variable (conc ppm) 10.08 5.04	Y variable (response Vs) 8.9 5.5 0	Regressior Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	ı Output:	0.664078 0.978136 3
		X Coefficient(s) Std Err of Coef.	0.924603 0.058926	
		Slope =	1.081545	
M-Xylenes and O	-Xylenes Y variable	Regression	o Output:	
(conc ppm) 10.06 5.03 0	(response Vs) 23.4 11.7 0	Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom		0 0 1 3
		X Coefficient(s) Std Err of Coef.	2.326044 0	
		Slope =	0.429915	
P-Xylenes X variable (conc ppm) 10.02 5.01	Y variable (response Vs) 13.2 6.2 0	Regression Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	n Output:	0.252982 0.998533
		X Coefficient(s) Std Err of Coef.	1.301397 0.022582	
		Slope =	0.768405	

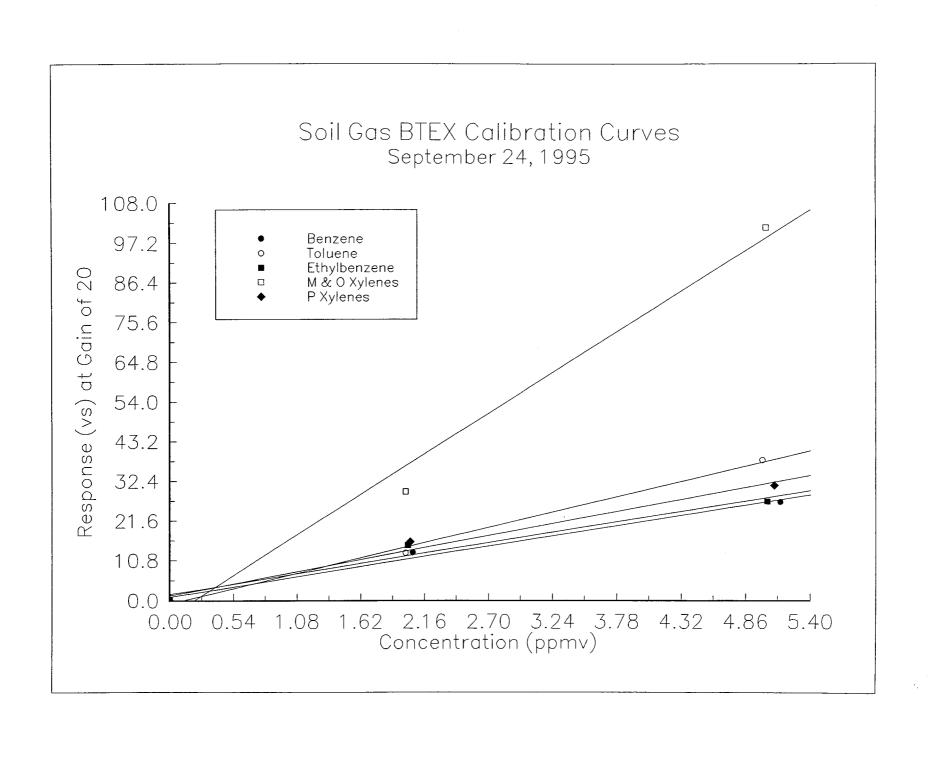


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SEPTEMBER 24, 1995

Benzene X variable (conc ppm) 5.15 2.06 0	Y variable (response Vs) 26.6 12.9 0	Std Err of Coef. 0	tput: 0 1.483763 0.987558 3 2 3.316371 1.267503
Toluene X variable (conc ppm) 5 2 0	Y variable (response Vs) 38 12.8 0		tput: 0 1.575677 0.993358 3 2 434483 .292596
		Slope = 0	.134508
Ethylbenzene X variable (conc ppm) 5.04 2.02	Y variable (response Vs) 26.7 14.9 0	Regression Out Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	put: 0 2.755899 0.957575 3 2
		Std Err of Coef. 0	.585306 .507557 .179041
		Slope - 0	.179041
M-Xylenes and O X variable (conc ppm) 5.03 2 0	- <b>Xylenes</b> Y variable (response Vs) 101.2 29.5	Regression Out Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	put: 0 7.056005 0.98162 3 2
			19.3863 .303522
		Slope = 0	0.051583
P-Xylenes X variable (conc ppm) 5.1 2.04	Y variable (response Vs) 31.1 15.8 0	Regression Out Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	2.205948 0.979877 3
X variable (conc ppm) 5.1 2.04	(response Vs) 31.1 15.8	Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s)	tput: 0 2.205948 0.979877 3 2 6.32522 0.401602

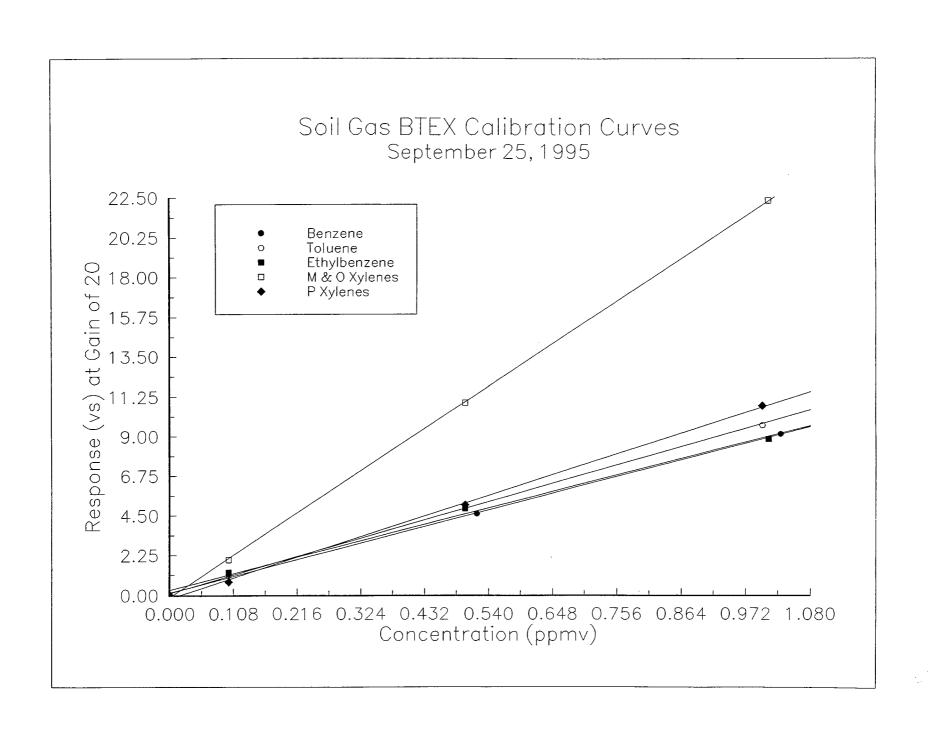


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SEPTEMBER 25, 1996

Benzene				
X variable	Y variable	Regression	Output:	
(conc ppm)	(response Vs)	Constant		C
1.03	9.1	Std Err of Y Est		0.181946
0.52	4.6	R Squared		0.99801
0.1	1.2	No. of Observations		4
0	0	Degrees of Freedom		3
		X Coefficient(s)	8.860807	
		Std Err of Coef.	0.157101	
		Slope =	0.112857	
Toluene X variable	Y variable	Regression	n Output:	
(conc ppm)	(response Vs)	Constant	•	0
1 1	9.6	Std Err of Y Est		0.171517
0,5	5.1	R Squared		0.998451
0.1	1.1	No. of Observations		4
0	0	Degrees of Freedom		3
		X Coefficient(s)	9.730159	
		Std Err of Coef.	0.152799	
		Slope =	0.102773	
Ethylbenzene X variable	Y variable	Dogranaia	- Outen et	
(conc ppm)		Regression Constant	1 Output:	0
1.01	(response Vs) 8.8	Std Err of Y Est		0.366021
0.5	4.9	R Squared		0.991429
0.1	1.3	No. of Observations		4
0	0	Degrees of Freedom		3
		-		_
		X Coefficient(s)	8.958675	
		Std Err of Coef.	0.323507	
		Slope =	0.111624	
M-Xylenes and C	)-Xylenes			
M-Xylenes and C	Y variable	Regression	n Output:	
X variable (conc ppm)	Y variable (response Vs)	Constant	n Output:	0
X variable (conc ppm) 1.01	Y variable (response Vs) 22.3	Constant Std Err of Y Est	n Output:	0.137002
X variable (conc ppm) 1.01 0.5	Y variable (response Vs) 22.3 10.9	Constant Std Err of Y Est R Squared	n Output:	0.137002 0.999819
X variable (conc ppm) 1.01 0.5 0.1	Y variable (response Vs) 22.3 10.9 2	Constant Std Err of Y Est R Squared No. of Observations	n Output:	0.137002 0.999819 4
X variable (conc ppm) 1.01 0.5	Y variable (response Vs) 22.3 10.9	Constant Std Err of Y Est R Squared	n Output:	0.137002 0.999819
X variable (conc ppm) 1.01 0.5 0.1	Y variable (response Vs) 22.3 10.9 2	Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	•	0.137002 0.999819 4
X variable (conc ppm) 1.01 0.5 0.1	Y variable (response Vs) 22.3 10.9 2	Constant Std Err of Y Est R Squared No. of Observations	22.00844 0.121089	0.137002 0.999819 4
X variable (conc ppm) 1.01 0.5 0.1	Y variable (response Vs) 22.3 10.9 2	Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s)	22.00844	0.137002 0.999819 4
X variable (conc ppm) 1.01 0.5 0.1	Y variable (response Vs) 22.3 10.9 2	Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef.	22.00844 0.121089	0.137002 0.999819 4
X variable (conc ppm) 1.01 0.5 0.1	Y variable (response Vs) 22.3 10.9 2	Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef.	22.00844 0.121089 0.045437	0.137002 0.999819 4
X variable (conc ppm) 1.01 0.5 0.1 0	Y variable (response Vs) 22.3 10.9 2 0	Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef. Slope =	22.00844 0.121089 0.045437	0.137002 0.999819 4 3
X variable (conc ppm) 1.01 0.5 0.1 0	Y variable (response Vs) 22.3 10.9 2 0	Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef. Slope =  Regression Constant Std Err of Y Est	22.00844 0.121089 0.045437	0.137002 0.999819 4 3
X variable (conc ppm) 1.01 0.5 0.1 0  P-Xylenes X variable (conc ppm) 1 0.5	Y variable (response Vs) 22.3 10.9 2 0  Y variable (response Vs) 10.7 5.1	Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef. Slope =  Regression Constant Std Err of Y Est R Squared	22.00844 0.121089 0.045437	0.137002 0.999819 4
X variable (conc ppm) 1.01 0.5 0.1 0  P-Xylenes X variable (conc ppm) 1.0.5 0.1	Y variable (response Vs) 22.3 10.9 2 0  Y variable (response Vs) 10.7 5.1 0.75	Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =  Regression Constant Std Err of Y Est R Squared No. of Observations	22.00844 0.121089 0.045437	0.137002 0.999819 4 3 3 0.220104 0.997998
X variable (conc ppm) 1.01 0.5 0.1 0  P-Xylenes X variable (conc ppm) 1 0.5	Y variable (response Vs) 22.3 10.9 2 0  Y variable (response Vs) 10.7 5.1	Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef. Slope =  Regression Constant Std Err of Y Est R Squared	22.00844 0.121089 0.045437	0.137002 0.999819 4 3 3 0.220104 0.997998
X variable (conc ppm) 1.01 0.5 0.1 0  P-Xylenes X variable (conc ppm) 1.0.5 0.1	Y variable (response Vs) 22.3 10.9 2 0  Y variable (response Vs) 10.7 5.1 0.75	Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =  Regression Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	22.00844 0.121089 0.045437 n Output:	0.137002 0.999819 4 3
X variable (conc ppm) 1.01 0.5 0.1 0  P-Xylenes X variable (conc ppm) 1.0.5 0.1	Y variable (response Vs) 22.3 10.9 2 0  Y variable (response Vs) 10.7 5.1 0.75	Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =  Regression Constant Std Err of Y Est R Squared No. of Observations	22.00844 0.121089 0.045437	0.137002 0.999819 4 3 3 0.220104 0.997998 4
X variable (conc ppm) 1.01 0.5 0.1 0  P-Xylenes X variable (conc ppm) 1.0.5 0.1	Y variable (response Vs) 22.3 10.9 2 0  Y variable (response Vs) 10.7 5.1 0.75	Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef. Slope =  Regression Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom X Coefficient(s)	22.00844 0.121089 0.045437 n Output:	0.137002 0.999819 4 3 3 0.220104 0.997998 4





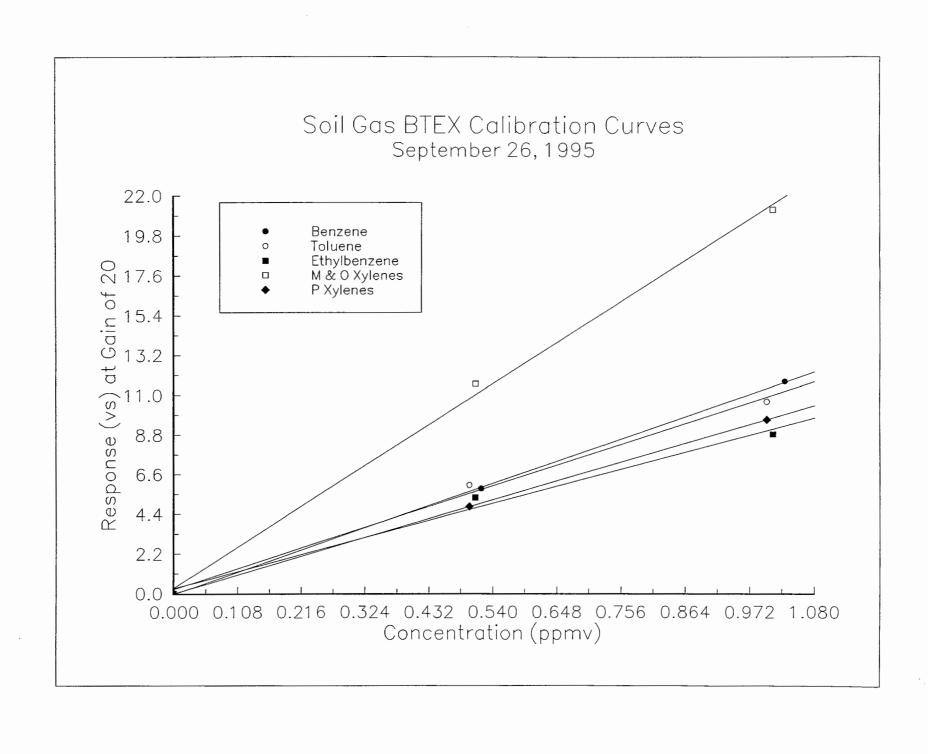
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**SEPTEMBER 26, 1995** 

Benzene X variable	Y variable	Regression	o Output:	
(conc ppm) 1.03 0.52 0	(response Vs) 11.7 5.8 0	Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	т Ошрии.	0.067412 0.999867 3
		X Coefficient(s) Std Err of Coef.	11.31751 0.058425	
		Slope =	0.088359	
Toluene X variable (conc ppm) 1 0.5 0	Y variable (response Vs) 10.6 6 0	Regressior Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	n Output:	0 0.442719 0.993063 3 2
		X Coefficient(s) Std Err of Coef.	10.88 0.39598	
		Slope =	0.091912	
Ethylbenzene X variable (conc ppm) 1.01 0.51	Y variable (response Vs) 8.8 5.3 0	Regressior Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	n Output:	0 0.540583 0.985113 3 2
		X Coefficient(s) Std Err of Coef.	9.054054 0.477775	
		Slope =	0.110448	
M-Xylenes and O X variable (conc ppm) 1.01 0.51	-Xylenes Y variable (response Vs) 21.2 11.6 0	Regressior Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	n Output:	0 0.564956 0.997168 3 2
		X Coefficient(s) Std Err of Coef.	21.34666 0.499316	
		Slope =	0.046846	
P-Xylenes X variable (conc ppm) 1 0.5 0	Y variable (response Vs) 9.6 4.8 0	Regression Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	n Output:	0 0 1 3 2
		X Coefficient(s) Std Err of Coef.	9.6 0	
		Slope =	0.104167	

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COMPONISH NAME FROM B.T. BREAKPAIN

13.



CLIENT		JOB NO	SHEETOF_BAT
SIRIFCT		BY KKS/PFM/EDS	DATE 9/27/95
PHOTOUAC	_ PHOTOUAC	(D	OTOUNCE
Ambient temp 17°C Oven at 20°C Flow at 9.0 ml/min	SYR. BLK.		Sye. BIK,
SYR BLANK	- i	E 2	12. 27.0
DYTCH W 660.01 SARYLE LIBMARY I SEP 27 95 20% SARYLE LIBMARY I SEP 27 95 20% ONLYSIS 4 37N BLK INTERNAL TEMP 2. 1.8 ML GAIN 2 SYR M  CH-SLI 2.8 MU CH-SLI 2.	STON 9 COR.H SEP 27 85 81 9 SAMPLE LIBRARY 1 SEP 27 85 81 9 ANALYSIS 4 2 SYR BLA INTERNAL TETT 22 1.P.M. GHIN 2 SYR PM. COTPTURE THE FEAK 8 ANALYMPT	STOP F COMPOUND N	BARY 1 SEF 27 35 8123 3 SYR BLK 12PF 23 1.€ ML 2 SYR ■ N



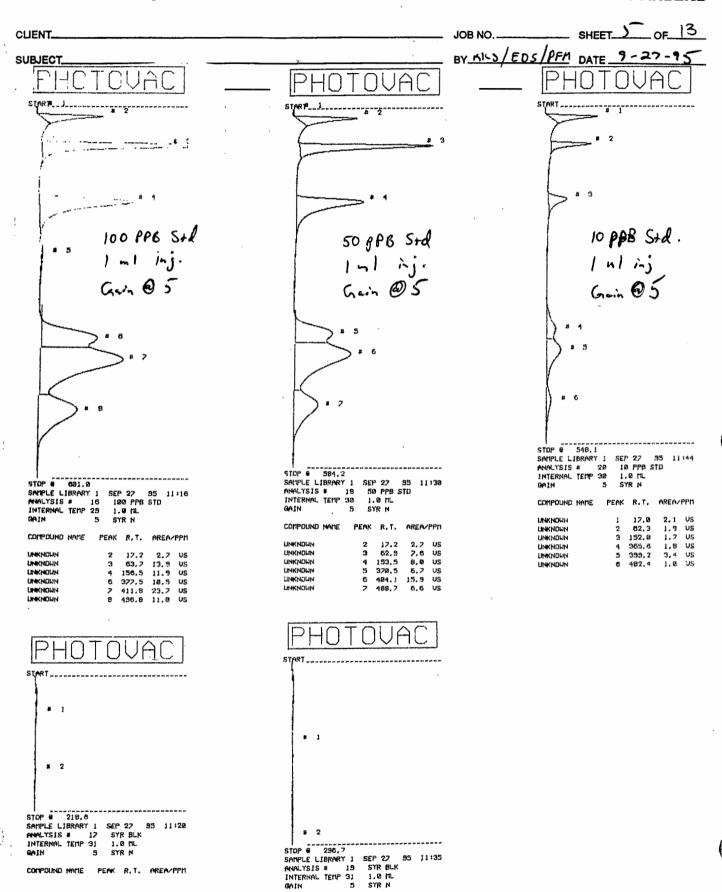
CLIENT	JOB NO	SHEET OF DA		
SUBJECT		BY KKS PFM/EQS		
PHOTOUAC:	THETOUAC	CKD FIRST	19VAC, _	
		# 1		
Syr. Blk	Syr. Bit.		Sye. Bit.	
		s 2		
<i>a</i> ;				
STOF # GRO.0 SMITCH LIBRARY 1 SEP 27 D5 9:35 ANDLYSIS # SYF ELK INTERNAL TERS 24 1.9 ML GAIN 2 SYR L COMPUTED NOTE PERK F.T. ANEAGED	STOP & GEO.G SOMPLE LIBRARY 1 SEP 27 95 8451 ANCLYSIS # 5 SYM BLK IMTERNAL TELP 25 1.6 ML 3015 2 SYM F	STOP & GOC.Q SAMPLE LIBRARY I ANALYSIS 4 INTERNAL TEMP 20 GAIN 2	i syr plk i 1.8 ml	

CLIENT		JOB NO SHEETOF
SIIR IFOT		BY_KKS/EDS/PFM DATE 9/27/95 _
PHOTOVAC .	_ PHOTOVAC	CKD PIOTOUNC
START	START	STAR (
2 Rod blant	SYR BLK.	* 1
# 3		SYR BLK.
		F 2
	# 1	
	# 2	* 3
1		- 1
# 9	. 3	# 5 # 6
STOP # 600.0 SAUPLE LIBRARY   SEP 27 95 8:15 ANALYSIS # 7 ROD BLK INTERNAL TEMP 25 1.0 ML GAIN 2 SYP M	STOP # 600.0 SAMPLE LIBRARY . SEP 27 55 9:34 HANLYSIS # 8 SYR PLK INTERNAL TEMP 26 1.0 ML GOIN 2 SYR T	STOP # GDC.C SAUFLE LIBRARY 1 SEP 12 3E 1P 4 HARLYSIS # 3 SYR BLK INTERNAL 1EFF 25 .E ML BAIN 2 SYP P
COMMOUND NAME PERK R.T. ALLANSE	CONFIDENCE PERK R.T. AREAVEN	CONFIGURE to a PErro R.T. Assesse:
UNKLOUP. 1 12, 2, 27P, 3, 495		

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JOB NO. \_ CLIENT.... BY EDS KES PFN DATE 9/27/95 SUBJECT. ī 1 \*\*\*\* \*\*\* \*\*\* 4 # 3 200 PPB S+d. **= 5 #** 5 € STOF & SMB. G 9 9012 622.0 SAMPLE LIBRARY 1 SEP 27 05 10:21 SIDP & GSC.0 SAFELE LIBRAPY I SET 2) 95 10:42 ANALYSIS = 13 10 PPE ATO INTERNAL TEMP 28 1.0 ML GAIN 28 SYR N SYP KA ANALYWIS # 10 INTERNAL TEMP 22 STOP 0 650,0 SAPPLE LIBNARY 1 525 77 95 1. 3 ANGLYSIA 2 14 200 PP\$ STE INTERPAL TEMP 28 1.0 ML OGIN 5 SYR N COMPOUND NAME PERK F.T. ASLAZPET COMPLEME NAME PEAK R.T. AGENTED 2 18.1 18.1 Us 3 68.8 19.1 US 4 174.2 8.5 US 6 426.8 2.5 US 2 165.2 11.2 US DERDICKL. 4 126,1 26,8 pUS UNKROUN CONFIDENCE PEAK S.T. SHEAVEST UNKNEW 1 12.5 5.8 02 2 64.7 06.7 08 3 161.6 16.3 08 4 362.3 18.6 03 5 425.6 33.6 03 5 382.4 12.5 03 DUKKUL! DISKNOUS UNKNOWS THIKKDEH LINKNOWN UNKNOWN UniK: 61sas Preliminary Calibration injection - increase analysis time to 650 sec. Flow increased to 12 ml/min oven @ 20°C Ambient temp 20°C +/- 1°C STUP 0 143.1 SAMPLE LIBRARY 1 SEP 27 95 11: 6 ANALYSIS # 15 SYR BLK INTERNAL TEMP 31 1.0 ML GAIN 5 SYR N COMPOUND NAME PEAK F. T. AREAZIPE





COMPOUND NAME PEAK R.T. AREA/PPM

LIENT. USACOE	JOB NO	SHEET OF
SUBJECT Senece Army Depot - SEAD 25	BY_KICS	DATE 9-27-95
BTEX Liquid Standard Dilutions	CKD	REVISION

Manufacturer: Chem Service Standard: BEEX Mixture (200 ug/ml in Methanol) Lot #: 136-144A

Benzene
Tolvene
Tolvene
Ethyl benzene
0-xylene
m-xylene
p-xylene

# Dilution Procedure

100 ul of 200 ppm Standard added to 100 ml flask (" ) = 200 ppb Std.

50 ul of 200 ppm Standard added to 100 ml flask (" ) = 100 ppb Std.

10 ml of 100 ppb Std added to 10 ml distilled water = 20 ml - 50 ppb Std.

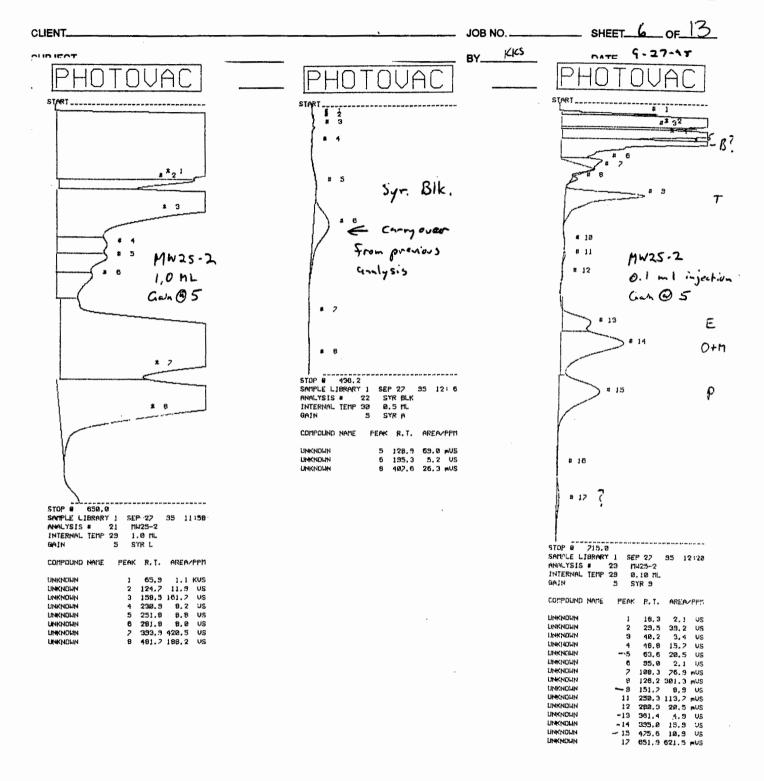
10 ml of 100 ppb Std added to 10 ml flask (" ) = 10 ppb Std.

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SOIL GAS CALIBRATION DATA FOR MIXED BTEX STANDARDS					
ENGINEERING-SCIENCE	CIENCE CLIENT: USACOE			-27-95	
PROJECT: Senece Army Depot RI	Operator:				
LOCATION: SEAD - 25	_		K	KS	
LOCATION: SETUP - 6-0			1		
			•		
Instrument Spect:				<del></del>	
Type of GC: Photo use 10 \$50					
Column Type:			<del></del>		
Gain: 5			<del>_</del>		}
Sensitivity:					
Gas Flow Rate: 12 ml/min					
Tank Pressure: 40			<b>-</b>		
Standard: STEX			Comments:		
Concentration: 200 PPB	Tediar or C	Blass Bulb	_		
Inj. volume:			╡	1	
Analysis #: 14 Time: 1103			- Water hea	Repare	
1100					
Actual Std. Injection	Normalized	Area	Retention	Response	Delta
i biblyte: Collet(ppb:// x -toll(in/)	= Conc.(ppmV)	(vs)	Time (sec.)	Factor	RF
Benzene 200 PPB 1.0	200 PPB	18.3	161-6	7,49	
Ethylbenzene		15.6	387,3	12.82	
O-Xylenes		35.6	423.6	5.62	
M-Xylenes		35.6	423.6	5.62	
P-Xytenes V Notes: RF = Conc. + Area (vs); Actual Std. (	Conc. is to be obtained	17.6	509,4	nc. normalized to	1 ml injection
Standard: RTEX	John. Is to be obtained	Hom analysis of	Comments:	ne. nor managed te	/ Turt anjection
Concentration: 100 PPB	Tedlar or C	Glass Bulb			
Inj. volume:					
Analysis #: 16 Time: 1116			-		
11100					
Actual Std. Injection	Normalized	Area	Retention	Response	Delta
	= Conc.(ppmV)	(vs)	Time (sec.)	Factor 7.19	RF
Benzene 100 PPB   m	100 PPB	13.9	156.5	8.40	
Ethylbenzene	- <del></del>	10.5	377.5	9,52	
O-Xylenes		23.7	411.8	4,22	
M-Xylenes		23.7	411.8	4.22	
Notes: RF = Conc. + Area (vs); Actual Std. (	Conc. is to be obtained	11.0	gas standard : Co	9.09	1 ml injection.
Standard: BTEX	To the Continue	. LOW WILLIAM OF	Comments:		
Concentration: 50 PPB					
Inj. volume: 1.0 ml			_		
Analysis #: 18 Time: 1130					
			<del></del>		
Actual Std. Injection	Normalized	Area	Retention	Response	Delta
granding.	= Conc.(ppmV)	(vs)	Time (sec.)	Factor	RF
Benzene 50 PPB 1.0	50 ppB	7.6	153.5	6.58	
Ethylbenzene		6.7	370.5	7 46	
O-Xylenes		15.9	404.1	3.14	
M-Xylenes		15.9	404.1	3.14	
P-Xylenes V V V Notes: RF = Conc Area (vs); Actual Std. (	Conc. is to be obtained	L 6.6 I from analysis of	gas standard : Co	7.57 onc. normalized to	1 ml injection.

SOIL GAS CALIBRATION DATA FOR MIXED BTEX STANDARDS									
ENGINEERI	NG-SCIENCE				CLIENT:			-27-95	
PROJECT:							Operator:		
LOCATION:									
Standard	BTEX						Comments:		
Concentration		<u> </u>			redlar or (	Glass Bulb			
Inj. volume		1				***	_		
Analysis #							4		
Time	1144						<u> </u>		
	Actual Std.		Injection		Normalized	Area	Retention	Response	Delta
Analyte:	Conc.(ppmV)	x	Vol.(ml)	=	Conc.(ppmV)	(vs)	Time (sec.)	Factor	RF
Benzene	10 PPB		100		io aps	74.1.9	62.3	5.26	
Toluene				$\perp$		1.7	152.0	2.88	
Ethylbenzene						1.8	365.6	3.55	
O-Xylenes				_		3.4	399.2	2.94	
M-Xylenes						3.4	399.2	2,94	
P-Xylenes	ν		<u> </u>		v	1.0	482,4	10.0	
Notes: $RF = 0$		/s) <u>;</u>	Actual Std.	Cor	c. is to be obtained	l from analysis of g		onc. normalized t	o 1 ml injection.
Standard							Comments:		
Concentration					redlar or C	Hass Bulb	4		
. Inj. volume							4		
Analysis #							4		
Time									to the state of th
	Actual Std.		Injection		Normalized	Area	Retention	Response	Delta
Analyte:	Conc.(ppmV)	X	Vol.(ml)	=	Conc.(ppmV)	(vs)	Time (sec.)	Factor	RF
Benzene									
Toluene									
Ethylbenzene									
O-Xylenes									
M-Xylenes									
P-Xylenes				$\Box$					
Notes: RF = C	Conc. + Area (v	's);	Actual Std.	Cor	c. is to be obtained	from analysis of g	as standard; Co	nc. normalized t	o 1 ml injection.





JOB NO. ... SHEET. CLIENT. RY KKS 5-22-15 CHIR IECT START # 1 START ..... Tolora Bersone # 3 **8** 2 # 3 Distilled Hw25-3 Water Headspice Gen @ 5 MU25-3 Gan @ 20 Ga: - @ 20 **#** 7 # 5 # 8 1 STOP 8 615.0 SAMPLE LIBRARY 1 SEP 27 95 12:34 ANALYSIS # 24 ML25-3 INTERNAL TEMP 29 1.0 ML STOP 9 702.8 SAMPLE LIBRARY 1 SEP 27 95 12150 ANALYSIS # 26 MI25-INTERNAL TEMP 30 1.8 ML COMPOUND NAME PEAK R.T. AREA/PPM 17.7 5.5 US 63.9 144.6 mUS 151.1 191.9 mUS **(INKNON**N STOP @ 747.6 UNKNOWN SAMPLE LIBRARY 1 SEP 27 95 13: 6
ANALYSIS # 28 LATER HEADSPACE
INTERNAL TEMP 90 1.2 ML 20 UNKNOWN 344.3 29.4 mUS COMPOUND NAME PEAK R.T. AREA/PPM MIAĐ 20 SYR H 18.7 21.9 US 62.1 665.3 mUS 84.1 48.7 mUS 147.5 734.5 mUS UNKNOWN UNKNOWN 2 COMPOUND NAME PEAK R.T. AREA/PPM THKHORH NAKHORH UNKNOUN 18.3 20.0 US 83.5 72.5 mUS 2 269.8 66.4 mUS 337.1 4.4 US UNKNOUN 147.8 784.7 mUS 265.8 53.0 mUS 335.9 457.2 mUS 386.6 45.0 mUS NUKNDUN TINKNOWN UNKNOUN 1,0 US UNKNOUN 622,2 308,5 NUS UNKNOUN STOP @ 169.6 SAMPLE LIBRARY 1 SEP 27 95 12138 AVALYSIS # 25 SYR BLK INTERNAL TEMP 32 1.0 ML SYR M PEAK R.T. AREA/PPM STOP @ 169.9 SAMPLE LIBRARY 1 SEP 27 95 12:53 27.4 51.6 mUS SYR BLK ANALYSIS # 27 INTERNAL TEMP 32 SYR N COMPOUND NAME PEAK R.T. AREA/PPM

16.6 37.3 mUS

NHKNOHN

CLIENT JOB NO. -BY KKS 9-27-95 el IB IECT DATE START\_#\_1 MW25-G 10 PPB S+l. 1.0 ML Inj. STOP 262.5 SAMPLE LIBRARY 1 SEP 27 ANALYSIS # 31 SYR BL Cain @ 20 SYR BLK INTERNAL TEMP 30 SYR K \* 7 COMPOUND NAME PEAK R.T. AREA/PFM 5 STOP 9 570.9

SAMPLE LIBRARY 1 SEP 27 95 13117

ANALYSIS 29 10 PPB STD

INTERNAL TEMP 30 1.0 ML

20 SYR N # 18 COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 12.6 19.5 US 7.8 US 6.3 US 6.5 US UNKNOWN UNKNOWN 61.4 149.0 # 11 Пикиоли 352.7 9.4 US 2.7 US UNKNOWN 387.3 STOP @ 800.0 SAMPLE LIBRARY | SEP 27 95 13:32 AMALYSIS # 30 MU25-6 INTERNAL TEMP 29 GAIN SYR K COMPDUND NAME PEAK R.T. AREA/PPM 40.4 US 1.0 US 6.8 US UNKNOWN 22.2 45,5 NKNONN **UNKNOWN** 6.5 US 1.9 US 8.9 US 149.0 NKNONN UNKNOUN NUKNDNN 463.2 UNKNOWN UNKNOWN # 11 STOP @ 664.9 SAMPLE LIBRARY 1 SEP 27 95 13:56 Lovered Flow after ANALYSIS # 32 INTERNAL TEMP 29 1.0 ML this analysis so not to 20 SYR K lose Eythel Benzene penk. COMPOUND NAME PEAK R.T. AREA/PPM 2 17.9 20.1 US 7 153.5 499.3 mUS 8 352.1 463.5 mUS INKNOUN Ambient temp @ 23°C and **LINKNOUN** 

risi-y.



COMPOUND NAME PEAK R.T. AREA/PPM

CLIENT		JOB NO	SHEET 9 OF 13
SUBJECT		BY KKS	DATE 9-27-15
PHOTOVAC	PHOTOVAC		PHOTOVAC
START	START 4		START .1.1
note			
this			* 3
perk	# 4		\
* 5			<b>6</b>
Hw25-6			Y
?			
1	STOP @ 300.7	•	Mw25-3
see resumpted	SAMPLE LIBRARY 1 SEP 27 95 14:14 ANALYSIS # 34 SYR BLK INTERNAL TEMP 30 1.0 ML		
an alysis	BAIN 20 STRN		* ?
* * * * * * Y2	COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN 3 15,8 25,0 mUS		
₹ 39			
<b>)</b> * 8			
V	•		
. 9			
			<b>#</b> 6
STOP # 752.2 SANTLE LIBRARY 1 SEP 27 95 14: 9			
ANALYSIS # 33 MU25-6 INTERNAL 18MP 29 1.0 ML			STOP @ 800.0
GAIN 20 SYR N  COMPOUND NAME PEAK R.T. AREA/PM			SAMPLE LIBRARY 1 SEP 27 95 14.25 ANALYSIS # 95 MH25-3
UNKNOWN 2 22,2 48,1 US			INTERNAL TEMP 23 1.0 ML GAIN 20 SYR N
UNKNOWN 4 69.9 5.8 US UNKNOWN 5 156.2 5.5 US	v		COMPOUND MAME PEAK R.T. AREA/PEM  UNKNOWN 2 18.9 13.5 4.5
UNKKNOLIN 6 355,7 5,3 US UNKKNOLIN 7 489,0 6,3 US UNKKNOLIN 8 496,8 2,6 US			UNKNOUN 3 68.5 680.5 HUS UNKNOUN 6 168.2 257.2 HUS
UNKNDUN 5 664.5 612.7 mUS			UNKNOUN 7 383,8 179,1 mVS UNKNOUN 8 716,1 496,4 mVS
I am sure this was			PHOTOVAC
well water labeled			START
" MW25-6"			Bad Injution
Kony			1
I			# 1
			STOP @ 150.4
			SAMPLE LIBRARY 1 SEP 27 95 14:46 ANALYSIS # 97 MW25-6 DUP INTERNAL TEMP 32 1,0 ML



SHEET\_10\_ OF 13 CLIENT JOB NO. ..... BY\_ KKS 9-27-95 CHE IECT ----untel 1 2 VATE Bad Injection \* 3 B STOP @ 180.9 SAMPLE LIBRARY 1 SEP 27 95 14149 # 8 T ANALYSIS # 38 INTERNAL TEMP 33 GAIN 20 1.0 ML SYR N Mw25-6 DUP (2-d Sc-ple) COMPOLIND MANE PEAK R.T. AREA/PPM 10 PPB 2 183,9 24.8 mUS 3 123,2 232,5 mUS UNKNOUN UNKNOUN S+d. E ethylberzenc # 2 # 3<sub>4</sub> 8-1 # 10 B 11 40 10 PPB STD 28 1.0 ML 20 SYR N GAIN 1 STDP @ 352,7 SAMPLE LIBRARY 1 SEP 27 95 14:43 COMPOUND NAME PEAK R.T. AREA/PPM STOP # 080.0 SAMPLE LIBRARY 1 SEP 27 95 15: 3 ANALYSIS # 99 MW25-6 DUP INTERNAL TEMP 29 1.0 ML Пикиоли ANALYSIS # 36 INTERNAL TEMP 29 #₩25-9 2 19.3 3 74.1 4 192.1 5 449.2 6 514.8 DUKNOMH 8.8 VS 6.9 VS 4.8 VS 8.2 VS 5.2 VS UNKNOWN UNKNOWN SYR N LINKNOUN COMPOUND NAME PEAK R.T. AREA/PPM COMPOUND NAME PEAK R.T. AREA/PPM UNKNOWN UNKNOWN 4 103.7 66.7 mUS 8,1 38,4 mUS 21,2 28,4 US 72,9 786,7 mUS 134,0 31,0 mUS 188,9 515,6 mUS 448,4 3,3 US 501,3 548,0 mUS 615,6 306,4 mUS ЛИКИОЛИ UNKNOWN UNKNOWN RINKNOWN UNKNOUN NHKHDMH UNKNOWN **UNKHOHN** 



SHEET\_ CLIENT JOB NO. .... DATE 9-27-95 SUBJECT START # 1 # 3 # 5 # 3 Mw25-6 Dup (2nd Sample) | SIDP @ 254.8 SMPLE LIBRARY 1 SEP 27 95 15129 ANALYSIS # 41 SYR BLK INTERNAL TENP 30 1.0 ML SYR M STDP 9 345.4 SAMPLE LIBRARY 1 SEP 27 95 15:47 ANALYSIS 4 43 SYR BLK INTERNAL TEMP 30 1.0 ML BAIN 20 SYR K COMPOUND NAME PEAK R.I. AREA/PPM COMPOUND NAME PEAK R.T. AREA/PPM IJHKNOUN 5.2 20.5 mUS 1 <u>\$ 7</u> # 10 # 4 STOP @ 754.7 SAMPLE LIBRARY 1 SEP 27 95 15:41 ANALYSIS # 42 MW25-6 DUP INTERNAL TEMP 29 1.0 ML GAIN 20 SYR M COMPOUND NAME PEAK R.T. AREA/PPM UNKNOUN 22,6 44.0 US 2 22,6 44,8 05 3 75.1 895.2 mUS 6 166.4 32.6 mUS 7 192,9 1.1 US 3 452,4 11.3 US UNKNOUN IJNKHDUN THKNOUN NUKWONN UNKNOUN 10 631.0 324.0 mUS 1 6.9 32.4 mUS 2 19.9 13.5 US 3 101.7 22.1 mUS 4 192.5 565.2 mUS 7 451.6 348.7 mUS **NWKNDHN** UNKNOUN

UNKNOUN

I've got blisters on my figers



SHEET 12 OF 13 JOB NO. .... CLIENT DATE 9-27-95 CHE IECT ·BY\_ REVISION START \_A.L. ซี 13 # 15 # 16 # 19 # 20 2 **s** 21 # 22 # 23 # 24 # 26 # 27 STOP 6 292.1 STOP 6 292.1 SAMPLE LIBRARY 1 SEP 22 95 16:26 ANALYSIS # 46 MCRH-2 INTERNAL TEMP 29 10-11 0.1 NL GAIN 12 SYR K STOP # 800.0 SAMPLE LIBRARY 1 SEP 27 95 16:11 MCRW-2 ANALYSIS # 45 INTERNAL TEMP 29 COMPOUND NAME PEAK R.T. AREA/PPM COMPOUND NAME PEAK R.T. AREA/PPM 20.7 259.2 mUS 26.2 494.3 mUS 29.5 449.6 mUS 42.5 1.2 US 46.5 1.0 US 53.2 832.3 mUS 6,5 33,1 mUS 164,2 11.5 KVS 365,6 17.3 US 413.9 28.7 US 478.8 35.2 US 512.1 124.6 US 620.0 71.8 US ПИКИОИИ ликиоли NHKHDHH UNKNOWN UNKNOWN **NAKNOM TINK** ND N N UNKNOUN **NAKNONI**A **NAKNO**NIA UNKNOUN 6 7 64.1 547.5 mVS 75.7 912.4 mVS 98.7 1.2 VS 94.1 1.0 VS 102.5 1.0 VS 118.9 262.6 mVS UNKNOUN UNKNOWN · NUKNDMM **NWKNONN** NWKNONN 10 11 12 13 14 15 16 17 18 19 22 21 22 24 25 26 **TIMK H**DHH T**IMK**HOHH

118.9 262.6 mUS
137.6 742.6 mUS
137.6 742.6 mUS
128.9 1.6 US
287.7 391.8 mUS
237.7 1.8 US
237.7 1.8 US
291.9 563.1 mUS
293.9 563.1 mUS
395.7 28.6 mUS
467.6 191.5 mUS
518.3 1.6 US
518.3 1.6 US
615.6 821.0 mUS

NWKHONH NWKHONH FINK NOWN TINK NOWN DUKUDAH NUKUDAH DWKNONY DWKNONY **NAKNOMA NAKNOMA TIMK NOTIN** TIMK NOTIN

JENT	JOB NO	SHEET 13 OF 13
PHOTOVAC	BY KES	DATE \$ -27-95
STPRT#	CKD	REVISION
2		ÿ
T 7 Benzene		17.4 4.8 20.0 20.0 20.0 20.0 20.0 20.0 20.0 20
16	•.	10 <b>6</b> ) 106 107
# 12		<i>∳</i> •
" 14 Tolvene		124 1 1 1
# 15		
# 16		5 a - 5 2
# 17	•	₩ .3 .4.
* 18		학 
and therethe		[%) 
= 19 Ethylbenzene		
" 21 M+0-Kylenes		
<del>                                     </del>		
1 22 P- Kylenes		
MAR 213 - 7		
MCRW-2		
<u>'</u>		
"24 Gain 10	adj to 6.5 (186:2)	x 2.5 = 232.5
j	and something	
   STOP	TOTAL AREA = 5	232.5 us I ml E
ANALYSIS # 47 MCRW-2 INTERNAL TEMP 29 0.4 ML		
GAIN 10 SYR A COMPOUND NAME PEAK R.T. AREA/PPM	1 ml Equiv	
INKNOUN 2 20,7 4,2 US UNKNOUN 3 28.5 14.5 US		cain Adi
UNKNOWN 4 44.3 14.4 US UNKNOWN 5 53.0 6.0 US	**	- 6
いかれのいい 6 64.1 6.8 VS いかれのいい 7 25.5 5.8 VS <b> 5</b> いれれのいい 8 88.7 5.7 VS	B 14.5 vs	
UNKNOUN 9 93,3 5,7 US UNKNOUN 10 102,1 2,4 US	4 38,26 V	
UNKKNOUK 11 117.5 6.0 US UNKKNOUK 12 136.7 8.1 US UNKKOUK 13 161.6 6.8 US		5 = a = 24.13 vs
UNKNOUN 13 161.6 6.8 US T UNKNOUN 14 189.3 15.3 US T UNKNOUN 15 235.3 15.8 US UNKNOUN 15 235.3 15.8 US UNKNOUN 16 268.8 6.2 US UNKNOUN 17 296.8 12.9 US UNKNOUN 18 358.1 4.3 US US UNKNOUN 19 439.6 13.9 US E T UNKNOUN 19 439.6 13.9 UK E T UNKNOUN 19 439.0 UK E T UNKNOUN 19 439.0 UK E T UNKNOUN 19 439.0 UK E T UNKNOUN 19 439.0 UK E T UN	ie areas P-44 50.25	5 - 4 2 = 24.13vs
UNKNOUN 17 296,8 12.9 US UNKNOUN 18 358.1 1.3 US	re accuss 12-14/ 60.42	n2 44 9212 A2
UNKNOUN 20 461.2 5.4 US - E)		
UNKNOUN 22 611.2 28.1 US P-WU UNKNOUN 23 775.7 4.8 US	•	,

**Groundwater Headspace Calibration Curves and Statistics** 

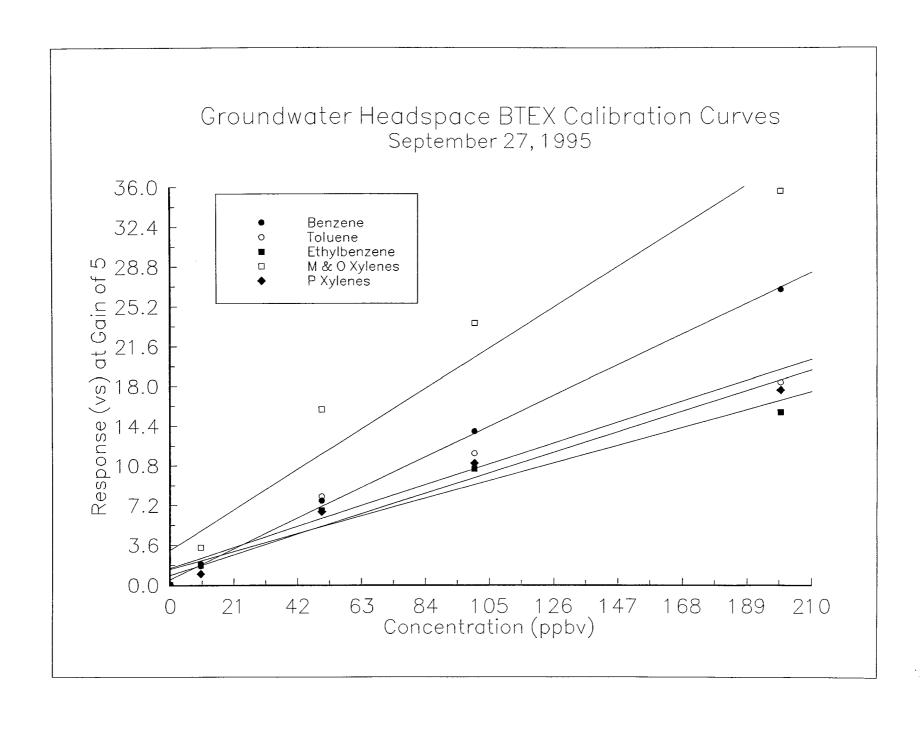
#### **GROUNDWATER HEADSPACE CALIBRATION DATA**

DATE:

**SEPTEMBER 27, 1995** 

Gain of 5

Benzene				
X variable	Y variable	Regression	Output:	
(conc ppb)	(response Vs)	Constant		
200	26.7	Std Err of Y Est		0.64809
100	13.9	R Squared		0.99629
50	7.6	No. of Observations		
10	1.9	Degrees of Freedom		
		X Coefficient(s) Std Err of Coef.	0.135532 0.002826	
		Slope =	7.378314	
Toluene				
X variable	Y variable	Regression	Output:	
(conc ppb)	(response Vs)	Constant		0.00004
200	18.3	Std Err of Y Est		2.30861
100	11.9	R Squared		0.89002
50	. 8	No. of Observations		•
10	1.7	Degrees of Freedom		;
		X Coefficient(s)	0.100133	
		Std Err of Coef.	0.010066	
		Slope =	9.98671	
Ethylbenzene X variable	Y variable	Pograpajar	Output	
	(response Vs)	Regressior Constant	Output.	
(conc ppb)		±		0.00000
200	15.6	Std Err of Y Est		2.066688
100	10,5	R Squared		0.874928
50	6.7	No. of Observations		
10	1.8	Degrees of Freedom		3
		X Coefficient(s)	0.085989	
		Std Err of Coef.	0.009011	
		Slope =	11.62945	
D-Xylenes and M X variable	-Xylenes Y variable	Regression	Output	
(conc ppb)	(response Vs)	Constant	Output.	(
200	, , ,	Std Err of Y Est		
	35.6			
	35.6			
100	23.7	R Squared		0.874206
100 50	23.7 15.9	R Squared No. of Observations		0.874206
100	23.7	R Squared		4.797636 0.874206 4
100 50	23.7 15.9	R Squared No. of Observations Degrees of Freedom	0.196179	0.874206
100 50	23.7 15.9	R Squared No. of Observations	0.196179 0.020919	0.87420
100 50	23.7 15.9	R Squared No. of Observations Degrees of Freedom X Coefficient(s) Std Err of Coef.	0.020919	0.874206
100 50	23.7 15.9	R Squared No. of Observations Degrees of Freedom X Coefficient(s)		0.874206
100 50 10	23.7 15.9 3.4	R Squared No. of Observations Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =	0.020919 5.097393	0.87420
100 50 10 2-Xylenes X variable	23.7 15.9 3.4 Y variable	R Squared No. of Observations Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =	0.020919 5.097393	0.87420
7-Xylenes X variable (conc ppb)	23.7 15.9 3.4 Y variable (response Vs)	R Squared No. of Observations Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =  Regression Constant	0.020919 5.097393	0.87420
2-Xylenes X variable (conc ppb)	23.7 15.9 3.4 Y variable (response Vs) 17.6	R Squared No. of Observations Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =  Regressior Constant Std Err of Y Est	0.020919 5.097393	0.87420  1.59258
2-Xylenes X variable (conc ppb) 200 100	23.7 15.9 3.4 Y variable (response Vs) 17.6 11	R Squared No. of Observations Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =  Regressior Constant Std Err of Y Est R Squared	0.020919 5.097393	0.87420 1.59258 0.94848
7-Xylenes X variable (conc ppb) 200 100 50	23.7 15.9 3.4 Y variable (response Vs) 17.6 11 6.6	R Squared No. of Observations Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =  Regressior Constant Std Err of Y Est R Squared No. of Observations	0.020919 5.097393	1.59258 0.94848
7-Xylenes X variable (conc ppb) 200 100	23.7 15.9 3.4 Y variable (response Vs) 17.6 11	R Squared No. of Observations Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =  Regressior Constant Std Err of Y Est R Squared	0.020919 5.097393	1.59258 0.94848
7-Xylenes X variable (conc ppb) 200 100 50	23.7 15.9 3.4 Y variable (response Vs) 17.6 11 6.6	R Squared No. of Observations Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =  Regression Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom	0.020919 5.097393 Output:	1.59258 0.94848
7-Xylenes X variable (conc ppb) 200 100 50	23.7 15.9 3.4 Y variable (response Vs) 17.6 11 6.6	R Squared No. of Observations Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =  Regressior Constant Std Err of Y Est R Squared No. of Observations	0.020919 5.097393	1.59258 0.94848
7-Xylenes X variable (conc ppb) 200 100 50	23.7 15.9 3.4 Y variable (response Vs) 17.6 11 6.6	R Squared No. of Observations Degrees of Freedom  X Coefficient(s) Std Err of Coef.  Slope =  Regression Constant Std Err of Y Est R Squared No. of Observations Degrees of Freedom  X Coefficient(s)	0.020919 5.097393 Output:	0.87420



			• ;	
				(

SEAD-25

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 998032.1 751123.1

GROUND SURFACE ELEVATION: 740.3 DRILLING CONTRACTOR: Empire Soils Investigation, Inc. DATUM: NGVD 88 GEOLOGIST: E. Schacht

DRILLING METHOD: Hollow Stem Auger

CHECKED BY: P.Feschbach-Meriney

WELL INSTALLATION STARTED: 12/03/93 WELL INSTALLATION COMPLETED: 12/03/93

WELL INSTALLATION COMPLETED:	12/03/93			CONSULTANT:
STRATA	_		N	
MACRO H DESCRIPTION (from boring log) (1;	WELL DETAILS	DEPTH (ft.)	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
			TPC 737.6	DROTECTIVE COVED
		2.7	TR 737.6	PROTECTIVE COVER
		0.0	TC   GS   740.3	Diameter: 4 inches Type: Square Box Riser
FL 0		0.0	d5 /40.5	Interval: 2.98 feet
				RISER
		1.3	TBS 739.0	Diameter: 2 inches
	•	2.0	TSP 738.3	Type: SCHEDULE 40-PVC
				Interval: NA
		3.1	TSC 737.2	SCREEN
				Diameter: 2 inches
		4.1	BSC 736.2	Type: SCH 40-PVC, 0.010" slot
WS				Interval: 1 foot
CS 5.0 5		5.0	POW 735.3	SURFACE SEAL Type: CEMENT
Co				Interval: NA
				GROUT
				Type: CEMENT-BENTONITE
				Interval: 1.3 feet
				SEAL
				Type: BENTONITE
		. !		Interval: 0.7 feet
				SANDPACK
				Type: #1 and #3
				Interval: 3.0 feet
				WELL DEVELOPMENT DATA WATER LEVELS  Date: 1/8/94 Date Depth,TR
				Method: Bail & Pump 1/8/94 1420 5.95 ft 1/8/94 1440 6.20 ft
				Duration: 1 Day 1/8/94 1500 6.60 ft  Rate: 1.5 L/minute 2
				Rate: 1.5 L/minute 💆
				Final Measurements:
				Temperature Conductivity pH (degrees C) (micromhos/cm) Turbidity (NTU)
				7.00 4 600 4.44
				LEGEND GRAVEL TPC TOP OF PROTECTIVE CASING
				SURFACE GS GROUND SURFACE
				SEAL SAND TBS TOP BENTONITE SEAL
				GROUT SILT TSP TOP OF SANDPACK TSC TOP OF SCREEN
				BSC BOTTOM OF SCREEN
				DOW POINT OF WELL
				SANDPACK NO RECOVERY
				COMPLETION REPORT OF
PARSONS		Sene	ca Army I	Depot WELL No. MW25-1
ENGINEERING-S	CIENCE, INC.		ulus, New	

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 998023.1 750973.4

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DRILLING METHOD: Hollow Stem Auger

WELL INSTALLATION STARTED: 11/07/93

DATUM: NGVD 88
GEOLOGIST: E. Schacht

GROUND SURFACE ELEVATION: 743.8

CHECKED BY: P.Feschbach-Meriney

WELL INSTALLATION COMPLETED: 11/07/93 CONSULTANT: EVATION (ft.) **STRATA** DEPTH (ft.) SYMBOI **WELL MACRO** WELL CONSTRUCTION DETAILS DESCRIPTION **DETAILS** (from boring log) 핍 TPC 2.6 741.1 PROTECTIVE COVER TR 741.1 2.6 Diameter: 4 inches TC 0.0 GS 743.8 Type: Square Box Riser Interval: 2.84 feet TL RISER TBS 742.6 1.2 Diameter: 2 inches Type: SCHEDULE 40-PVC 741.8 2.0 TSP Interval: NA SCREEN 740.4 3.4 TSC Diameter: 2 inches Type: SCH 40-PVC, 0.010" slot Interval: 4 feet SURFACE SEAL WS Type: CEMENT Interval: NA CS **GROUT** Type: CEMENT-BENTONITE Interval: 1.2 feet BSC 736.4 7.4 SEAL Type: BENTONITE 8.5 8.5 POW 735.3 Interval: 0.8 feet SANDPACK Type: #1 and #3 Interval: 6.5 feet WELL DEVELOPMENT DATA WATER LEVELS Date: 11/11/93 <u>Date</u> <u>Time</u> Depth,TR ☑ 11/11/93 5.12 ft 10.24 ft 1015 Method: Bail & Pump ¥ 11/11/93 ¥ 11/21/93 1430 4.68 ft Duration: 11 Days 1450 Rate: 0.513 L/minute 11/22/93 4.74 ft Final Measurements: Conductivity Temperature pН (degrees C) (micromhos/cm) Turbidity (NTU) 7.19 700 1.23 TOP OF PROTECTIVE CASING TPC **LEGEND GRAVEL** TR TOP OF WELL RISER SURFACE GS **GROUND SURFACE** SAND TBS TOP BENTONITE SEAL SEAL TOP OF SANDPACK GROUT SILT TOP OF SCREEN TSC **BOTTOM OF SCREEN** SEAL CLAY TOTAL DEPTH TD POW POINT OF WELL SANDPACK NO RECOVERY **COMPLETION REPORT OF** PARSONS WELL No. MW25-2 Seneca Army Depot Sheet 1 of 1 ENGINEERING-SCIENCE, INC. Romulus, New York

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 998078.3 750926.3

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DRILLING METHOD: Hollow Stem Auger

WELL INSTALLATION STARTED: 11/07/93

DATUM: NGVD 88

GROUND SURFACE ELEVATION: 743.3

GEOLOGIST: E. Schacht

CHECKED BY: P.Feschbach-Meriney

WELL INSTALLATION COM	PLETED:	11/07/93			CONSULTANT:
STRATA				NC	
MACRO DESCRIPTION (from boring log)	DEPTH (ft.)	WELL DETAILS	DEPTH (ft.)	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
			2.6	TPC 740.7	
			2.5	TR 740.7	PROTECTIVE COVER Diameter: 4 inches
			0.0	GS 743.3	<b>-</b>
TL	- 0 -		<b>*</b>		Interval: 2.55 feet
. –		<b></b>	₩		RISER
			₩ 1.5	TBS 741.8	Diameter: 2 inches
	•	: <b>÷</b> :	\		Type: SCHEDULE 40-PVC
			2.5	TSP 740.8	
	1				SCREEN
ws .				700 0	Diameter: 2 inches Type: SCH 40-PVC, 0.010" slot
VV3	+		4.0	TSC 739.3	Interval: 2 feet
					SURFACE SEAL
CS	- 5 +				Type: CEMENT
			6.0	BSC 737.3	Interval: NA
6.8	5		6.5	POW 736.8	
					Type: CEMENT-BENTONITE
					Interval: 1.5 feet
	1				SEAL Type: BENTONITE
					Interval: 1.0 feet
					SANDPACK
					Type: #1 and #3
					Interval: 4.0 feet
					WELL DEVELOPMENT DATA WATER LEVELS  Date: 11/9/93 Date Time Depth,TR
					Mathed: Boil 8 Burns ¥ 11/9/93 1345 4.80 ft
					Duration: 2 Days \$\frac{11/3/33}{2} \tag{11/11/93} \tag{0930} \tag{4.90 ft}
					Rate: 1.0 L/minute
					Final Measurements:
					Temperature Conductivity pH (degrees C) (micromhos/cm) Turbidity (NTU)
					7.42 12.2 500 1.73
					LEGEND GRAVEL TPC TOP OF PROTECTIVE CASING
					SURFACE SAND GS GROUND SURFACE
					SEAL IBS TOP BENTONITE SEAL
					GROUT ISLT TSC TOP OF SCREEN
					SEAL CLAY BSC BOTTOM OF SCREEN TD TOTAL DEPTH
					SANDPACK NO RECOVERY POW POINT OF WELL
					النا النا النا النا النا النا النا النا
					COMPLETION PERCET OF
PARS	DNS	i			COMPLETION REPORT OF WELL No. MW25-3
ENGINEERIN	1G-SC	IENCE IN		eca Army Julus, New	Depot
			RUII	ulus, INDV	· i Oir

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 998022.1 750983.2

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DRILLING METHOD: Rock Coring WELL INSTALLATION STARTED: 10/31/95

GROUND SURFACE ELEVATION: 743.8

DATUM: NGVD 88 GEOLOGIST: F. O'Loughlin

CHECKED BY: P.Feschbach-Meriney

ELL INSTALLATION COMPLETED:	10/31/95		7 7	CONSULTANT:
STRATA  MACRO DESCRIPTION (from boring log)  (f)	WELL DETAILS	DEPTH (ft.)	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
			PC 742.0	PROTECTIVE COVER
		1.6 T		Diameter: 4 inches
		0.0 G		Type: Round Box Riser
TL				Interval: 10.6 feet
+		1		RISER
	•;• <b>:</b>	<b>1</b>		Diameter: 2 inches
	≟÷≟‱ ₩	1		Type: SCHEDULE 40-PVC Interval: NA
1	•\•\•\	1		SCREEN
+	:♦:₩₩			Diameter: 1.875 in.
_	<b>₹</b> `₹₩₩ ₩₩			Type: WIRE & PVC, 0.010"
ws ° †				Interval: 9 feet
CS				SURFACE SEAL
				Type: CEMENT
				Interval: NA
		1		GROUT Type: CEMENT-BENTONITE
		9.4 Ti	35 734.4	Interval: 8.4 feet
	- IIII III	0.4   1.	704.4	SEAL
			1	Type: BENTONITE
		11.4 T	SP 732.4	Interval: 2.0 feet
		1		SANDPACK
		1		Type: Morie 0 and #1Q Rock Interval: 12.4 feet
		13.7 T	SC 730.1	WELL DEVELOPMENT DATA WATER LEVELS
				Date: 11/2/95 Date Time Depth,T
		]		Metring: Suige block •
		1		Duration: 1 Day  Rate: 0.936 L/minute
		1		Final Measurements:
		]		Temperature Conductivity
				pH         (degrees C)         (micromhos/cm)         Turbidity (NTU)           7.16         13.8         600         12.1
		1		7.10 13.0 000 12.1
				LEGEND GRAVEL TPC TOP OF PROTECTIVE CASH
				SURFACE GS GROUND SURFACE
		:		SEAL TBS TOP BENTONITE SEAL
		3		GROUT SILT TSC TOP OF SCREEN
		3	204 -	SEAL CLAY BSC BOTTOM OF SCREEN TO TOTAL DEPTH
		22.7 B	SC 721.1	POW POINT OF WELL
23.8		23.8 PG	ow 720.0	SANDPACK NO RECOVERY
PARSONS	3			COMPLETION REPORT OF
	CIENCE, INC		a Army [ lus, New	

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 998080.2 750937.0 GROUND SURFACE ELEVATION: 743.4 DRILLING CONTRACTOR: Empire Soils Investigation, Inc. DATUM: NGVD 88 DRILLING METHOD: Rock Coring GEOLOGIST: F. O'Loughlin

WELL INSTALLATION STARTED: 10/30/95 CHECKED BY: P.Feschbach-Meriney

WELL BUSTALL ATION COMPLETES 10/20/95

WELL INSTALLATION COMPLETED:	10/30/95				CONSULTANT:
MACRO HE (Trom boring log)	WELL DETAILS	DEPTH (ft.)		ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
(trom poring log)	S   DETAILS	□		E.E.	
		1.8	TPC	741.7	
		1.6	TR	741.8	PROTECTIVE COVER Diameter: 4 inches
		0.0	GS	743.4	Type: Round Box Riser
TL °					Interval: 8.7 feet
1					RISER
	₹ <b>∤</b> \$₩₩₩₩				Diameter: 2 inches Type: SCHEDULE 40-PVC
			İ		Interval: 13.22 feet
1	<u> </u>				SCREEN
WS -					Diameter: 1.875 in.
5 -					Type: WIRE & PVC, 0.010" slot Interval: 9 feet
CS					SURFACE SEAL
					Type: CEMENT
		7.7	TBS	735.7	Interval: NA
					GROUT Type: CEMENT-BENTONITE
					Interval: 6.7 feet
		9.6	TSP	733.8	SEAL
					Type: BENTONITE
		11.6	TSC	731.8	Interval: 1.9 feet
					SANDPACK Type: Morie 0 and #1Q Rock
					Interval: 12.1 feet
					WELL DEVELOPMENT DATA WATER LEVELS  Date: 11/1/95 Date Time Depth,TR
					Mathed Surre Block \(\frac{1}{2}\) 11/1/95 1505 6.35 ft
					Duration: 2 Days
					Rate: 0.370 L/minute
					Final Measurements:
					pH (degrees C) (micromhos/cm) Turbidity (NTU)
					6.96 14.8 700 11.0
					LEGEND GRAVEL TPC TOP OF PROTECTIVE CASING
					L IN TOP OF WELL RISER
		20.6	BSC	722.8	SEAL TBS TOP BENTONITE SEAL
21.7		21.7	POW	721.7	GROUT SILT TSC TOP OF SCREEN
					SEAL CLAY BSC BOTTOM OF SCREEN TD TOTAL DEPTH
					SANDPACK NO RECOVERY
					العنفا العنا
					COMPLETION REPORT OF
PARSONS	5			· ~	WELL NO MW25-5D
ENGINEERING-SC	CIENCE, INC.			Army D , New	Depot

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 998276.8 751006.2

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DATUM: NGVD 88

DRILLING METHOD: Hollow Stem Auger

GEOLOGIST: F. O'Loughlin CHECKED BY: P.Feschbach-Meriney

WELL INSTALLATION STARTED: 09/25/95 ON COMPLETED. 00/26/05

GROUND SURFACE ELEVATION: 742.2

WELL INSTALLATION COMP	LETED:	09/	26/95				CONSULTANT:
STRATA						Z	
MACRO DESCRIPTION (from boring log)	DEPTH (ft.)	SYMBOL	WELL DETAILS	DEPTH (ft.)		ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
				2.3	TPC	739.9	
				2.2	TR	740.1	PROTECTIVE COVER
					TC		Diameter: 4 inches
	0 +	<b>.</b> .		0,0	GS	742.2	Type: Round Box Riser
TL	Ŀ				ł		Interval: 4.0 feet
		• •					RISER
			<b>****</b>				Diameter: 2 inches Type: SCHEDULE 40-PVC
	-			2.0	TBS	740.2	Interval: 6.46 feet
		ě, ě					SCREEN
		•		3.3	TSP	738.9	Diameter: 2 inches
		3.3					Type: SCH 40-PVC, 0.010" slot
	4			4.3	TSC	737.9	Interval: 6.8 feet
		••					SURFACE SEAL
	5 -				1		Type: CEMENT
					1		Interval: NA
		• •					GROUT
		•					Type: CEMENT
							Interval: 1.5 feet
							SEAL
							Type: BENTONITE
	_].						Interval: 1.3 feet
	,						SANDPACK
	10						Type: Morie 0 and Morie 000
WS							Interval: 8.9 feet WELL DEVELOPMENT DATA WATER LEVELS
	4			11.1	BSC	731. <b>1</b>	WELL DEVELOPMENT DATA WATER LEVELS  Date: 10/30/95 _ Date Time Depth,TR
							Method: Surga Black \( \frac{10}{30}\) 10/30/95 1125 6.06 ft
12.2				12.2	POW	7 <b>30</b> .0	Duration: 1 Day 10/30/95 1320 8.24 ft
CS							Rate: 0.540 L/minute 10/30/95 1341 10.24 ft
							Final Measurements:
					ļ		Temperature Conductivity pH (degrees C) (micromhos/cm) Turbidity (NTU)
							pH         (degrees C)         (micromhos/cm)         Turbidity (NTU)           7.18         15         790         2.85
							2.00
							LEGEND GRAVEL TPC TOP OF PROTECTIVE CASING
							LEGEND GRAVEL TR TOP OF WELL RISER  SURFACE GS GROUND SURFACE
							SURFACE SAND GS GROUND SURFACE TBS TOP BENTONITE SEAL
							GROUT SILT TSP TOP OF SANDPACK TSC TOP OF SCREEN
							RSC ROTTOM OF SCREEN
							SEAL CLAY TD TOTAL DEPTH
							SANDPACK NO RECOVERY
				L	L	L	COMPLETION REPORT OF
PARSC	DNS	5		_			MELL NO MIMOS G
ENGINEERIN	G-54		NCE INC			Army D	<i>y</i> epot
EUGINEEKIN	7-21		TCE, INC.	Kon	nulus	, New	T OFK

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 998277.7 751015.9

GROUND SURFACE ELEVATION: 742.2 DRILLING CONTRACTOR: Empire Soils Investigation, Inc. DATUM: NGVD 88 GEOLOGIST: F. O'Loughlin

DRILLING METHOD: Rock Coring WELL INSTALLATION STARTED: 10/24/95

CHECKED BY: P.Feschbach-Meriney

WELL INSTALLATION COMPLETED		/24/95 /24/95				CHECKED BY: P.Feschbach-Meriney  CONSULTANT:
STRATA  MACRO DESCRIPTION (from boring log)  ###################################	SYMBOL	WELL DETAILS	DEPTH (ft.)		ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
o			2.1 1.8 0.0	TPC TR TC GS	740.2 740.5 742.2	PROTECTIVE COVER Diameter: 4 inches Type: Round Box Riser
TL 5		₩				Interval: 17.6 feet RISER Diameter: 2 inches Type: SCHEDULE 40-PVC Interval: 21.88 feet SCREEN Diameter: 1.875 in. Type: WIRE & PVC, 0.010" slot Interval: 9 feet SURFACE SEAL
WS 10		ŧ				Type: CEMENT Interval: 1 foot GROUT Type: CEMENT-BENTONITE
CS			16.0	TBS	726.2	Interval: NA SEAL Type: BENTONITE Interval: 2.1 feet
			18.1	TSP	724.1	SANDPACK Type: Morie 0 and #1Q Rock Interval: 12.4 feet
			20.1	TSC	722.1	WELL DEVELOPMENT DATA  Date: 10/31/95  Method: Surge Block  Duration: 1 Day  Rate: 0.280 L/minuteç  WATER LEVELS  Date Time Depth,TR  10/31/95 0952 5.81 ft
			29.1	BSC POW	713.1 712.0	Final Measurements:  Temperature Conductivity pH (degrees C) (micromhos/cm) Turbidity (NTU)  7.32 10.0 700 10.6  LEGEND GRAVEL TPC TOP OF PROTECTIVE CASING TR TOP OF WELL RISER SURFACE SEAL SAND GS GROUND SURFACE SEAL TBS TOP BENTONITE SEAL TOP OF SANDPACK
30.Б		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	30,2	r U VV	, 12.0	SEAL CLAY TO TOP OF SCREEN BSC BOTTOM OF SCREEN TD TOTAL DEPTH POW POINT OF WELL  NO RECOVERY
PARSON	5					COMPLETION REPORT OF
ENGINEERING-S		NCE, INC.			Army D , New	

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 998076.8 750856.9

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DRILLING METHOD: Hollow Stem Auger

WELL INSTALLATION STARTED: 09/26/95 WELL WISTALL LEIGHT COLUMN TERM 00/26/05

GROUND SURFACE ELEVATION: 741.4

DATUM: NGVD 88 GEOLOGIST: F. O'Loughlin

CHECKED BY: P.Feschbach-Meriney

SURFACE SEAL SAND GS GROUND SURFACE SEAL TSP TOP OF WELL RISER GROUND SURFACE TSEAL TOP OF SANDPACK TSEAL TOP OF SANDPACK TSEAL TOP OF SCREEN TSEAL TOP OF SCREEN TSEAL TOP OF SCREEN TSEAL TOP OF SCREEN TSEAL TOP OF SCREEN TSEAL TOP OF SCREEN TSEAL TOP OF SCREEN TSEAL TOP OF SCREEN TSEAL TOP OF SCREEN TSEAL TOP OF SCREEN TSEAL TOP OF SCREEN TSEAL TOP OF SCREEN TSEAL TSEAL TSEAL TOP OF SCREEN TSEAL TS	WELL INSTALLATION COMPLETED:	09/26/95			CONSULTANT:
1.1   TR   740.1     1.1   TR   740.2     0.0   GS   741.4     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.5   TSS   TSS   TSS     1.5   TSS   TSS     1.5   TSS   TSS   TSS     1.5   TSS   TSS   TSS     1.5   TSS   TSS     1.5   TSS   TSS   TSS     1.5   TSS   TSS	STRATA	ب_		N C	
1.1   TR   740.1     1.1   TR   740.2     0.0   GS   741.4     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.4   TBS   740.0     1.5   TSS   TSS   TSS     1.5   TSS   TSS     1.5   TSS   TSS   TSS     1.5   TSS   TSS   TSS     1.5   TSS   TSS     1.5   TSS   TSS   TSS     1.5   TSS   TSS	MACRO HACRO DESCRIPTION (from boring log)	WELL DETAILS		ELEVATIC (ft.)	WELL CONSTRUCTION DETAILS
Diameter: 4 inches   Type: Round Box Riser   Interval: 2,50 feet   RISER   RISER   RISER   RISER   RISER   RISER   RISER   Type: SCHEDULE 40-PVC   Interval: 4.34 feet   SCREEN   SCREEN   Type: SCH 40-PVC, 0.010* slot   Interval: 0.8 feet   SURFACE SEAL   Type: CEMENT   Interval: NA   GROUT   Type: NA   Interval: NA   SEAL   Type: Morie 0 and Morie 000   Interval: 2.1 feet   NA   SEAL   Type: Morie 0 and Morie 000   Interval: 2.1 feet   NA   SEAL   Type: Morie 0 and Morie 000   Interval: 2.1 feet   NA   SEAL   Type: Morie 0 and Morie 000   Interval: 2.1 feet   NA   NA   NA   NA   NA   NA   NA   N				PC 740.1	PROTECTIVE COVER
TL    1.4   TBS   740.0					
Interval: 2.50 feet   RISER					<del>-</del>
## PARSONS    1.4   TBS   740.0   TSP   739.0   Type: SCHEDULE 40-PVC   Interval: 4.34 feet   SCREEN   Clameter: 2 inches   Type: SCH 40-PVC   Interval: 4.34 feet   SCREEN   Clameter: 2 inches   Type: SCH 40-PVC   O.010" slot   Interval: 0.8 feet   SURFACE SEAL   Type: CEMENT   Interval: 0.8 feet   SURFACE SEAL   Type: Marine of and Morie 000   Interval: 1.0 foot   SANDPACK   Type: Morie 0 and Morie 000   Interval: 2.1 feet   WELL DEVELOPMENT DATA   Dete: 10/22/95   1040   1.26 ft   Rate: 0.900 L/minuter   10/22/95   1004   1.26 ft   Rate: 0.900 L/minuter   10/22/95   1056   1.32 ft   Type: SEAL   SAND   Type: SEAL   SAND   Type: SEAL   SAND   Type: SEAL   SAND   Type: SEAL   SAND   Type: SEAL   SAND   Type: SEAL   SEAL   SAND   Type: SEAL   SEAL	TL 0		0.0	771.4	
1.4   TBS	•				RISER
WS    3.2   TSC   738.2   SCREN   Diameter: 2 Inches   Type: SCH 40-PVC, 0.010" slot   Interval: 0.8 feet   SURFACE SEAL   Type: CEMENT   Interval: NA   SEAL   Type: NA   Interval: NA   SEAL   Type: NA   Interval: NA   SEAL   Type: Morie 0 and Morie 000   Interval: 2.1 feet   WELL DEVELOPMENT DATA   WATER LEVELS   Durston: 3 Days   Water 1.0/22/95   Method: Surge Block   Tol/22/95   Tol/20/95   1624   3.32 ft   Durston: 3 Days   Water 1.0/22/95   Tol/20/95   1624   3.32 ft   Durston: 3 Days   Water 1.0/22/95   Tol/20/95   1056   1.32 ft   Tol/20/95   Tol/20/95   1056   1.32 ft   Tol/20/95   Tol/20/9			1.4 TE	3S 740.0	ł
SCREEN Diameter: 2 inches Type: SCH 40-PVC, 0.010" slot Interval: 0.8 feet SURFACE SEAL Type: OEMENT Interval: NA GROUT Type: Ma Interval: 1.0 foot SANDPACK Type: Method: Surge Block WELL DEVELOPMENT Date: 10/22/95 Method: Surge Block Well Development Data Date: 10/22/95 Method: Surge Block Type: Morio and Morie 000 Interval: 2.1 feet Well Development Data Method: Surge Block Type: Morio and Morie 000 Interval: 2.1 feet Well Development Data Method: Surge Block Type: Morio and Morie 000 Interval: 2.1 feet Well Development Data Method: Surge Block Type: Morio and Morie 000 Interval: 2.0 feet Well Development Data Method: Surge Block Type: Morio and Morie 000 Interval: 2.0 feet Well Development Data Temperature Type: NA Interval: 2.1 feet Well Development Data Type: SCH 40-PVC, 0.010" slot Interval: 0.8 feet SURFACE Type: BENTONITE Interval: 1.0 foot SANDPACK Type: Morie on done on done on the control of the c					Type: SCHEDULE 40-PVC
S			2.4 TS	SP 739.0	
Diameter: 2 Inches   Type: SCH 40-PVC, 0.010" slot			3.2 т	SC 738.2	
There is a series of the serie	WS		] _		
SURFACE SEAL Type: CEMENT Interval: NA GROUT Type: NA Interval: NA SEAL Type: Bentonite Interval: 1.0 foot SANDPACK Type: Morie 0 and Morie 000 Interval: 2.1 feet WELL DEVELOPMENT DATA Date: 10/22/95 Method: Surge Block	CS 4.5		4		
Type: CEMENT Interval: NA GROUT Type: NA Interval: NA SEAL Type: BENTONITE Interval: 1.0 foot SANDPACK Type: Moris 0 and Moris 000 Interval: 2.1 feet WELL DEVELOPMENT DATA Date: 10/22/95 Method: Surge Block 10/20/95 1627 3.21 ft Duration: 3 Days 1/20/295 1056 1.32 ft Rate: 0.900 L/minuty 10/22/95 1056 1.32 ft Final Measurements: Temperature pH (degrees C) (micromhos/cm) Turbidity (NTU) 7.35 14.5 350 7.3  LEGEND GRAVEL TPC TOP OF PROTECTIVE CASING TREE SAND TES TOP BRINDING SEAL GROUT SILT TSP TOP OF SANDPACK GROUT SILT TSP TOP OF SANDPACK GROUT SILT TSP TOP OF SANDPACK SEAL CLAY TO TO TOTAL DEPTH OF OF SANDPACK NO RECOVERY  COMPLETION REPORT OF WELL NO. MW25-8	CO 4.0	100000	4.5 PC	/36.9	at a control of the c
Interval: NA GROUT Type: NA Interval: NA SEAL Type: BENTONITE Interval: 1.0 foot SANDPACK Type: Morie 0 and Morie 000 Interval: 2.1 feet WELL DEVELOPMENT DATA WATER LEVELS Date: 10/22/95 Method: Surge Block 10/22/95 1624 3.32 ft Duration: 3 Days 10/22/95 1624 3.32 ft Duration: 3 Days 10/22/95 1004 4.80 ft Rate: 0.1900 L/minute 10/22/95 1004 1.26 ft Rate: 0.1900 L/minute 10/22/95 1005 1.32 ft Final Measurements: Temperature (degrees C) (micromhos/cm) Turbidity (NTU) 7.35 14.5 350 7.3  LEGEND GRAVEL TPC TOP OF PROTECTIVE CASING TREATMENT TOP OF VELLE RISES SEAL GROUT SEAL TSP TOP OF SANDPACK SEAL SEAL SEAL SSC BOTTOM OF SCREEN SEAL CLAY TOP OF SCREEN SEAL SANDPACK NO RECOVERY  COMPLETION REPORT OF WELL NO. MW25-8					
Type: NA Interval: NA  SEAL  Type: BENTONITE Interval: 1.0 foot  SANDPACK  Type: Morie 0 and Morie 000 Interval: 2.1 feet  WELL DEVELOPMENT DATA  Date: 10/22/95  Method: Surge Block 10/22/95 1624 3.32 ft  Method: Surge Block 10/22/95 1000 4.26 ft Rate: 0.900 L/minute 10/22/95 1004 1.26 ft Rate: 0.900 L/minute 10/22/95 1056 1.32 ft  Final Measurements:  Final Measurements:  Temperature (degrees C) (micromhos/cm) Turbidity (NTU)  7.35 14.5 350 7.3  LEGEND  SURFACE SAND GS GROUDS SURFACE SEAL SAND GS GROUDS SEAL  GROUT SILT TSP TOP OF PROTECTIVE CASING TOP OF WELL RISER  GROUT TOP OF SCREEN TOP OF SC					
Interval: NA SEAL Type: BENTONITE Interval: 1.0 foot SANDPACK Type: Morie 0 and Morie 000 Interval: 2.1 feet WELL DEVELOPMENT DATA Date: 10/22/95 Method: Surge Block # 10/20/95 1760 4.32 ft Method: Surge Block # 10/20/95 1004 4.26 ft Rate: 0.900 L/minutg/# 10/20/95 1006 4.26 ft Rate: 0.900 L/minutg/# 10/20/95 1056 1.32 ft Final Measurements:    PH					GROUT
SEAL Type: BENTONITE Interval: 1.0 foot SANDPACK Type: Morie 0 and Morie 000 Interval: 2.1 feet WELL DEVELOPMENT DATA WATER LEVELS Date: 10/22/95 10/20/95 1624 3.32 ft Method: Surge Block 10/22/95 1004 1.26 ft Rate: 0.900 L/minute Final Measurements: Temperature of (micromhos/cm) 10/22/95 1056 1.32 ft Final Measurements: Temperature of SEAL SAND 188 70 PO FROTECTIVE CASING SURFACE SEAL SAND 188 70 PO FROTECTIVE CASING GROUT SILT 155 70 PO FROTECTIVE CASING GROUT SILT 155 70 PO FROTECTIVE CASING GROUT SILT 155 70 PO FROTECTIVE CASING GROUND SURFACE SEAL CLAY 159 100 PO FROTECTIVE CASING TOP OF SORDHACK NO RECOVERY  COMPLETION REPORT OF WELL NO. MW25-8					1
Type: BENTONITE Interval: 1.0 foot SANDPACK Type: Morie 0 and Morie 000 Interval: 2.1 feet  WELL DEVELOPMENT DATA  Date: 10/22/95					
Interval: 1.0 foot SANDPACK Type: Morie 0 and Morie 000 Interval: 2.1 feet WELL DEVELOPMENT DATA WATER LEVELS Date: 10/22/95 Date Time Depth, TR  WELL DEVELOPMENT DATA WATER LEVELS  Method: Surge Block 1/0/20/95 1624 3.32 ft Method: Surge Block 1/0/20/95 1004 1.26 ft Rate: 0.900 L/minute 1/0/22/95 1004 1.26 ft Rate: 0.900 L/minute 1/0/22/95 1056 1.32 ft  Final Measurements:  Temperature Conductivity PH (degrees C) Gonductivity (micromhos/cm) Turbidity (NTU)  7.35 14.5 350 7.3  LEGEND GRAVEL TPC TOP 0F PROTECTIVE CASING SEAL SAND TBS TOP BENTONITE SEAL STAP TOP 0F SANPACK SEAL SILT TSP TOP 0F SANPACK SEAL SOUTOM OF SCREEN SEAL CLAY TD TOTAL DEPTH SANDPACK NO RECOVERY  PARSONS  COMPLETION REPORT OF WELL No. MW25-8					
SANDPACK Type: Morie 0 and Morie 000 Interval: 2.1 feet  WELL DEVELOPMENT DATA WATER LEVELS Date: 10/22/95 Date 10/22/95 1624 3.32 ft Method: Surge Block 10/22/95 10024 1.28 ft Method: Surge Block 10/22/95 1004 1.28 ft Aste: 0.900 L/minute 10/22/95 1056 1.32 ft Final Measurements:  Temperature Conductivity pH (degrees C) (micromhos/cm) Turbidity (NTU)  7.35 14.5 350 7.3  LEGEND GRAVEL TR TOP OF PROTECTIVE CASING TOP OF WELL RISER GROUND SURFACE SAND TBS TOP BENTONTE SEAL SEAL SAND TBS TOP FORTONTE SEAL GROUT SILT TSC TOP OF SANDPACK SEAL CLAY BSC BOTTOM OF SCREEN TOP OF SCREEN SEAL CLAY TD TOTAL DEPTH SANDPACK NO RECOVERY  COMPLETION REPORT OF WELL NO. MW25-8					
Type: Morie 0 and Morie 000 Interval: 2.1 feet  WELL DEVELOPMENT DATA					
Interval: 2.1 feet   WELL DEVELOPMENT DATA					!
Date: 10/22/95					1 · · · · · · · · · · · · · · · · · · ·
Method: Surge Block					1
Duration: 3 Days Rate: 0.900 L/minuter Rate: 0.900 L/minuter Final Measurements:  Temperature (degrees C) (micromhos/cm) Turbidity (NTU)  7.35 14.5 350 7.3  LEGEND SURFACE SEAL SAND GROUT SEAL GROUT SILT TSP TOP OF PROTECTIVE CASING GS GROUND SURFACE TOP OF SCREEN TOP					Mathed Surga Plack \$\frac{10}{20/95}\$ 1624 3.32 ft
Rate: 0.900 L/minute 10/22/95 1056 1.32 ft  Final Measurements:    PH					Method: Surge Block ▼ 10/20/95 1700 4.80 ft
PH Temperature (degrees C) (degrees C) (micromhos/cm) (NTU)  7.35 14.5 350 7.3  LEGEND					
PH (degrees C) (micromhos/cm) Turbidity (NTU)  7.35 14.5 350 7.3  LEGEND  GRAVEL TPC TOP OF PROTECTIVE CASING TOP OF WELL RISER TOP OF WELL RISER GROUND SURFACE SEAL SILT TSP TOP OF SANDPACK TOP OF SCREEN SEAL CLAY TOP OF SCREEN BSC BOTTOM OF SCREEN TOP					
7.35 14.5 350 7.3  LEGEND GRAVEL TPC TOP OF PROTECTIVE CASING TR TOP OF WELL RISER GS GROUND SURFACE TOP BENTONITE SEAL TOP OF SANDPACK SEAL SAND TBS TOP DENTONITE SEAL TOP OF SCREEN TOP OF SCREEN BSC BOTTOM OF SCREEN TOP OF S					1
LEGEND  GRAVEL  TPC  TOP OF PROTECTIVE CASING TR  TOP OF WELL RISER GS  GROUND SURFACE SEAL  GROUT  SILT  TSP  TOP OF SANDPACK TSP  TOP OF SANDPACK TSP  TOP OF SANDPACK TSP  TOP OF SANDPACK TSP  TOP OF SANDPACK TSP  TOP OF SANDPACK TSP  TOP OF SANDPACK TSP  TOP OF SANDPACK TSP  TOP OF SANDPACK TSP  TOP OF SANDPACK TSP  TOP OF SANDPACK TOP OF SCREEN TSP  TOP OF SANDPACK TOP OF SCREEN TOP OF S				:	
SURFACE SEAL SAND GS GROUND SURFACE TOP DENTONITE SEAL TOP OF SANDPACK TOP OF SANDPACK TOP OF SANDPACK TOP OF SANDPACK TOP OF SANDPACK TOP OF SCREEN TOP OF SANDPACK TOP OF SCREEN TOP OF SCREEN TOP OF SCREEN TOP OF SCREEN TOP OF SCREEN TOP OF SCREEN TOP OF SCREEN TOP OF SCREEN TOP OF SCREEN TOP OF SCREEN TOP OF SCREEN TOP OF SCREEN TOP OF SCREEN TOP OF SANDPACK TOP OF SCREEN TOP OF SANDPACK TOP OF SCREEN TOP OF SANDPACK TOP OF					
SURFACE SEAL SAND GS GROUND SURFACE SEAL TSP TOP BENTONITE SEAL TSP TOP OF SANDPACK TSC TOP OF SCREEN BSC BOTTOM OF SCREEN BSC BOTTOM OF SCREEN TOP TOTAL DEPTH POW POINT OF WELL NO. MW25-8  SANDPACK COMPLETION REPORT OF WELL No. MW25-8					[ F(3FNI)   GRAVEL
SEAL SAND TBS TOP BENTONITE SEAL TSP TOP OF SANDPACK TSC TOP OF SCREEN TO TOTAL DEPTH POW POINT OF WELL  COMPLETION REPORT OF WELL No. MW25-8					TR TOP OF WELL RISER
SEAL CLAY TSC TOP OF SCREEN BSC BOTTOM OF SCREEN TD TOTAL DEPTH POW POINT OF WELL  COMPLETION REPORT OF WELL No. MW25-8					SEAL TBS TOP BENTONITE SEAL
SEAL CLAY TD TOTAL DEPTH POW POINT OF WELL  SANDPACK NO RECOVERY  COMPLETION REPORT OF WELL No. MW25-8					GROUT III SILT TSC TOP OF SCREEN
SANDPACK NO RECOVERY NO RECOVERY NO RECOVERY POW POINT OF WELL  COMPLETION REPORT OF WELL No. MW25-8					LEGG CEAL V// CLAV
COMPLETION REPORT OF WELL No. MW25-8				ŀ	POW POWER OF WELL
PARSONS Seneca Army Depot WELL No. MW25-8					I NO RECOVERY
Seneca Army Depot VVELL NO. IVIVV25-8	P				COMPLETION REPORT OF
	PARSONS	) 	Senec	a Army D	Depot WELL No. MW25-8
ENGINEERING-SCIENCE, INC. Romulus, New York Sheet 1 of 1	ENGINEERING-SC	IENCE, INC.			

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 998005.3 750898.1 GROUND SURFACE ELEVATION: 741.3

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DATUM: NGVD 88 GEOLOGIST: F. O'Loughlin

DRILLING METHOD: Hollow Stem Auger

WELL INSTALLATION STARTED: 09/26/95 CHECKED BY: P.Feschbach-Meriney WELL INSTALLATION COMPLETED 19/26/95

WELL INSTALLATION COMPLET	ED: <b>09</b>	/26/95				CONSULTANT:
STRATA					N N	
MACRO H DESCRIPTION L (from boring log)	(ft.) SYMBOL	WELL DETAILS	DEPTH (ft.)		ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
			1.3	TPC	740.0	DDOTTOTIVE COVED
			1.1	TR	740.2	PROTECTIVE COVER
				GS	741.0	Diameter: 4 inches
TL	0 <del>  • . •</del>		0.0	US.	741.3	Type: Round Box Riser Interval: 2.57 feet
1 L						
			1.4	TBS	739.9	RISER Diameter: 2 inches
						Type: SCHEDULE 40-PVC
			2.4	TSP	738.9	Interval: 4.27 feet
						SCREEN
	•		3.2	TSC	738.1	Diameter: 2 inches
WS			4.0	BSC	737.3	Type: SCH 40-PVC, 0.010" slot
			4.5	POW	736.8	Interval: 0.8 feet
4.8 CS	-	1				SURFACE SEAL
CG						Type: CEMENT
		]				Interval: NA
						GROUT
						Type: NA Interval: NA
						SEAL
	İ					Type: BENTONITE
						Interval: 1.0 foot
						SANDPACK
						Type: Morie 0 and Morie 000
						Interval: 2.1 feet
	1					WELL DEVELOPMENT DATA WATER LEVELS
						Date: 10/20/95
		!				Method: Surge Block ₹ 10/22/95 1910 3.10 ft 10/22/95 0948 1.27 ft Duration: 3 Days ₹ 10/22/95 1040 2.87 ft
						Rate: 0.320 L/minute 10/22/95 1150 3.50 ft
						Final Measurements:
						Temperature Conductivity
						pH (degrees C) (micromhos/cm) Turbidity (NTU) 7,18 14.0 490 4.44
						7.18 14.0 490 4.44
						LEGEND GRAVEL TPC TOP OF PROTECTIVE CASING
						TR TOP OF WELL RISER
						SURFACE GS GROUND SURFACE TBS TOP BENTONITE SEAL
						GROUT TSP TOP OF SANDPACK TSC TOP OF SCREEN
						BSC BOTTOM OF SCREEN
						SEAL CLAY TD TOTAL DEPTH POW POINT OF WELL
						SANDPACK NO RECOVERY
<b>P</b>		1	<u> </u>	L	L	COMPLETION REPORT OF
PARSO	<b>45</b>		San	eca /	Army D	webot WELL No. MW25-9
ENGINEERING	-SCIE	NCE. INC.	Ron	nulue	New	Vork Sheet 1 of 1

**ENGINEERING-SCIENCE, INC.** Romulus, New York

Sheet 1 of 1

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 997965.0 751000.0 GROUND SURFACE ELEVATION: 741.8

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DRILLING METHOD: Hollow Stem Auger GEOLOGIST: F. O'Loughlin

WELL INSTALLATION STARTED: 09/27/95 CHECKED BY: P.Feschbach-Meriney

WELL INSTALLATION COMPLETED: 09/	27/95				CONSULTANT:		
STRATA				N O			
MACRO DESCRIPTION (from boring log) OSAMBOL	WELL DETAILS	DEPTH (ft.)		ELEVATION (ft.)	WELL CONSTRUCTION DETAILS		
		1.4	TPC	740.4			
		1.2	TR	740.6	PROTECTIVE COVER		
			TC		Diameter: 4 inches		
0 -		0.0	GS	741.8	Type: Round Box Riser Interval: 2.29 feet		
TL 1		1.3	TBS	740.5	RISER		
		2.4	TSP	739.4	Diameter: 2 inches Type: SCHEDULE 40-PVC Interval: 4.41 feet		
				/55. 1	SCREEN		
Þ: <b>-</b>		3.2	TSC	738.6	Diameter: 2 inches		
					Type: SCH 40-PVC, 0.010" slot		
					Interval: 2.0 feet		
ws .					SURFACE SEAL		
5.6		5.2 5.6	POW	736.6 736.2	Type: CEMENT Interval: 0.8 feet		
CS					GROUT		
					Type: NA		
					Interval: NA		
					SEAL		
					Type: BENTONITE		
					Interval: 1.1 feet		
					SANDPACK		
					Type: Morie 0 and Morie 000		
					Interval: 2.8 feet		
					WELL DEVELOPMENT DATA WATER LEVELS		
					Date: 10/25/95		
					Method: Surge Block		
					Duration: 4 Days 10/23/95 1643 2.38 ft Rate: 0.090 L/minute 10/24/95 1315 2.86 ft		
					Final Measurements:		
					Temperature Conductivity		
					pH (degrees C) (micromhos/cm) Turbidity (NTU)		
					7.30 14.9 425 5.46		
					LECEND TPC TOP OF PROTECTIVE CASING		
					LEGEND GRAVEL TR TOP OF WELL RISER		
					SURFACE GS GROUND SURFACE SEAL TBS TOP BENTONITE SEAL		
					GROUT SILT TSP TOP OF SANDPACK TSC TOP OF SCREEN		
					SEAL CLAY BSC BOTTOM OF SCREEN TD TOTAL DEPTH		
					SANDPACK NO RECOVERY		
					Lad Total Port Later Lat		
					COMPLETION REPORT OF		
PARSONS		Ca-		\ emir P	WELL NO MW25 10		
ENGINEERING-SCIE	NCE, INC.		Seneca Army Depot Romulus, New York Sheet 1				

Sheet 1 of 1

#### COMPLETION REPORT OF WELL No. MW25-11

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 997865.7 750956.7

GROUND SURFACE ELEVATION: 738.7 DATUM: NGVD 88

DRILLING METHOD: Hollow Stem Auger

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

GEOLOGIST: F. O'Loughlin

WELL INSTALLATION STARTED: 10/11/95

CHECKED BY: P.Feschbach-Meriney

ENGINEERING-SCIENCE, INC.

10/11/95 WELL INSTALLATION COMPLETED: CONSULTANT: EVATION (ft.) **STRATA** DEPTH (ft.) SYMBOL WELL DEPTH (ft.) **MACRO** WELL CONSTRUCTION DETAILS DESCRIPTION **DETAILS** (from boring log) 핍 1.6 TPC 737.1 PROTECTIVE COVER 1.5 TR 737.2 TC Diameter: 4 inches GS Type: Round Box Riser 0.0 738.7 Interval: 4.53 feet TL **RISER** TBS 737.3 1.4 Diameter: 2 inches Type: SCHEDULE 40-PVC Interval: 5.35 feet 736.0 2.7 **TSP** SCREEN Diameter: 2 inches 3.8 TSC 734.9 Type: SCH 40-PVC, 0.010" slot Interval: 1.5 feet SURFACE SEAL 5 5.3 BSC 733.4 WS Type: CEMENT 5.7 **5.7** POW 733.0 Interval: 1.4 feet CS **GROUT** Type: NA Interval: NA SEAL Type: BENTONITE Interval: 1.3 feet SANDPACK Type: Morie 0 and Morie 000 Interval: 3.0 feet WELL DEVELOPMENT DATA WATER LEVELS Date Time Depth,TR Date: 10/23/95 ¥ 10/23/95 1620 4.18 ft Method: Surge Block ¥ 10/24/95 ¥ 10/24/95 1335 2.92 ft Duration: 3 Days 1650 3.00 ft Rate: 1.020 L/minute 10/25/95 3.29 ft 0830 Final Measurements: Conductivity Temperature Ηд (degrees C) (micromhos/cm) Turbidity (NTU) 7.11 14 920 25.1 TOP OF PROTECTIVE CASING GRAVEL LEGEND TR TOP OF WELL RISER SURFACE GS **GROUND SURFACE** SAND TOP BENTONITE SEAL TBS SEAL TSP TOP OF SANDPACK **GROUT** SILT TSC TOP OF SCREEN BSC BOTTOM OF SCREEN SEAL CLAY TD **TOTAL DEPTH** POW POINT OF WELL SANDPACK NO RECOVERY **COMPLETION REPORT OF PARSONS WELL No. MW25-11** 

Seneca Army Depot

Romulus, New York

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 997866.1 750967.3 GROUND SURFACE ELEVATION: 738.9 DATUM: NGVD 88 DRILLING CONTRACTOR: Empire Soils Investigation, Inc. DRILLING METHOD: Rock Coring GEOLOGIST: F. O'Loughlin

WELL INSTALLATION STARTED: 11/01/95 CHECKED BY: P.Feschbach-Meriney

WELL INSTALLATION COMPLETED: 11/01/95 CONSULTANT:

STRATA	11/01/95	Т		Z	CONSULTANT:
MACRO DESCRIPTION (from boring log)	WELL DETAILS	DEPTH (ft.)		ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
			TPC :	737.5	PROTECTIVE COVER
		1.2	TR TC	737.7	Diameter: 4 inches
		0.0		738.9	Type: Round Box Riser
TL 0	<u> </u>				Interval: 16.18 feet
-	≟÷≟‱ ‱				RISER
					Diameter: 2 inches
	∵÷‱ ‱				Type: SCHEDULE 40-PVC
+					Interval: 15.08 feet
					SCREEN
	<b>*</b> : <b>****</b>		ĺ		Diameter: 1.875 in Type: WIRE & PVC, 0.010" slot
WS	<del>*•</del>				Interval: 9.5 feet
CS					SURFACE SEAL
03					Type: CEMENT
					Interval: 1 foot
					GROUT
					Type: CEMENT-BENTONITE
			1		Interval: NA
		9.9	TBS 7	729.0	SEAL
					Type: BENTONITE
					Interval: 8.9 feet
		11.9	TSP 7	727.0	SANDPACK
					Type: Morie 0 and #1Q Rock Interval: 12.3 feet
					WELL DEVELOPMENT DATA WATER LEVELS
		13.9	TSC 7	725.0	Date: 11/3/95 Date Time Depth,TR
					Method: Surge Block
					Duration: 1 Day 11/3/95 1443 7.80 ft Rate: 1.920 L/minute 11/3/95 1456 7.90 ft
					Final Measurements:
					Temperature Conductivity
					pH (degrees C) (micromhos/cm) Turbidity (NTU)
					7.58 11 400 13.3
					TPC TOP OF PROTECTIVE CASING
					LEGEND GRAVEL TPC TOP OF PROTECTIVE CASING TR TOP OF WELL RISER
					SURFACE GS GROUND SURFACE SEAL TBS TOP BENTONITE SEAL
					CROUT TSP TOP OF SANDPACK
					BSC BOTTOM OF SCREEN
					SEAL CLAY TO TOTAL DEPTH
		23.4	BSC 7	71 <b>5</b> .5	SANDPACK NO RECOVERY
				714.7	العسفا الخسا
24.6	0 0 0 4 10 0 0 0			,	
PARSONS					COMPLETION REPORT OF
		Sene	ca Arı	my D	epot WELL No. MW25-12D
	CIENCE, INC.			New '	

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 997866.5 750869.7

DRILLING CONTRACTOR: Empire Soils Investigation, Inc. DRILLING METHOD: Hollow Stem Auger

WELL INSTALLATION STARTED: 10/11/95

GROUND SURFACE ELEVATION: 737.9

DATUM: NGVD 88 GEOLOGIST: F. O'Loughlin

CHECKED BY: P.Feschbach-Meriney

WELL INSTALLATION COMPLETED: 10/11/95	5	CONSULTANT:
STRATA		NO
MACRO E   E	DEPT (#)	WELL CONSTRUCTION DETAILS  (#:)
	1.8 TPC	736.2
	1.7 TR	736.3 PROTECTIVE COVER
1	TC	Diameter: 4 inches
0 -	0.0 GS	737.9 Type: Round Box Riser
TL R		Interval: 2.76 feet
	1.0 TBS	736.9 RISER
<b>3 3 3</b>		Diameter: 2 inches Type: SCHEDULE 40-PVC
<b>}</b> :★]	2.1 TSP	735.8 Interval: 4.38 feet
	<b>₩</b> 2.7 TSC	735.2 SCREEN
ws ⊞∷∷	3.5 BSC	734.4 Diameter: 2 inches
4.0	4.0 POW	733.9 Type: SCH 40-PVC, 0.010" slot
CS	4.0 FOW	Interval: 0.8 feet
		SURFACE SEAL
		Type: CEMENT
		Interval: 1.4 feet
		GROUT
		Type: NA
		Interval: NA
		SEAL
		Type: BENTONITE
		Interval: 1.1 feet
		SANDPACK
		Type: Morie 0 and Morie 000
		Interval: 1.9 feet WELL DEVELOPMENT DATA WATER LEVELS
		Date: 10/25/95 _ Date Time Dept
		Method: Surge Block ▼10/24/95 6.7 1035 4.4
		Duration: 9 Days ¥ 10/25/95 1202 4.6
		Rate: 0.050 L/minut 10/30/95 1040 5.5
		Final Measurements: \$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
		Temperature Conductivity pH (degrees C) (micromhos/cm) Turbidity (NTU)
		7.10 14.0 1000 9.66
		LEGEND GRAVEL TPC TOP OF PROTECTIVE CO
		STEPEACE GS GROUND SUBSACE
		SEAL TBS TOP BENTONITE SEAL
		GROUT SILT TSP TOP OF SANDPACK TSC TOP OF SCREEN
		BSC BOTTOM OF SCREEN
		POW POINT OF WELL
		SANDPACK NO RECOVERY
		COMPLETION REPORT O
PARSONS	_	WELL NO MW25-13
ENGINEERING-SCIENCE		Army Depot Sheet 1

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 997866.5 750876.2 GROUND SURFACE ELEVATION: 738.2

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DRILLING METHOD: Rock Coring GEOLOGIST: F. O'Loughlin

WELL INSTALLATION STARTED: 10/31/95 CHECKED BY: P.Feschbach-Meriney

WELL INSTALLATION COMPLETED: 10/31/95 CONSULTANT LEVATION (ft.) **STRATA** DEPTH (ft.) SYMBOI WELL DEPTH (ft.) **MACRO** WELL CONSTRUCTION DETAILS DESCRIPTION **DETAILS** (from boring log) 핍 1.8 TPC 736.4 PROTECTIVE COVER 736.6 TR 1.6 Diameter: 4 inches TC 738.2 Type: Round Box Riser 0.0 GS Interval: 12.39 feet TL RISER Diameter: 2 inches Type: SCHEDULE 40-PVC Interval: 14.69 feet WS SCREEN Diameter: 1.875 in CS Type: WIRE & PVC, 0.010" slot Interval: 9 feet SURFACE SEAL Type: CEMENT Interval: 1 foot **GROUT** Type: CEMENT-BENTONITE 9.2 TBS 729.0 Interval: 8.2 feet SEAL Type: BENTONITE 727.0 Interval: 2.0 feet 11.2 TSP SANDPACK Type: Morie 0 and #1Q Rock 13.1 TSC 725.1 Interval: 12 feet WELL DEVELOPMENT DATA WATER LEVELS Date Time Depth, TR Date: 11/2/95 ☑ 11/2/95 Method: Surge Block ¥ 11/3/95 1532 6.06 ft Duration: 2 Days Rate: 0.960 L/minute Final Measurements: Temperature Conductivity pН (degrees C) (micromhos/cm) Turbidity (NTU) 7.66 390 16.9 TPC TOP OF PROTECTIVE CASING LEGEND **GRAVEL** TOP OF WELL RISER TR SURFACE GROUND SURFACE GS SAND TBS TOP BENTONITE SEAL SEAL TOP OF SANDPACK TSP GROUT SILT TSC TOP OF SCREEN 22.1 BSC 716.1 BSC BOTTOM OF SCREEN SEAL CLAY TD TOTAL DEPTH POW POINT OF WELL POW 715.0 23.2 SANDPACK NO RECOVERY 23.5 **COMPLETION REPORT OF** PARSONS WELL No. MW25-14D Seneca Army Depot Sheet 1 of 1 ENGINEERING-SCIENCE, INC. Romulus, New York

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 997974.2 750764.4

GROUND SURFACE ELEVATION: 739.6

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DATUM: NGVD 88

DRILLING METHOD: Hollow Stem Auger

GEOLOGIST: F. O'Loughlin
CHECKED BY: P.Feschbach-Meriney

WELL INSTALLATION STARTED: 10/10/95

CONSULTANT:

WELL INSTALLATION COM	IPLETED:	10/	10/95				CONSULTANT:	
STRATA		ļ				NO		
MACRO DESCRIPTION (from boring log)	DEPTH (ft.)	SYMBOL	WELL DETAILS	DEPTH (ft.)		ELEVATION (ft.)	WELL CONSTRUCTION DETAILS	
				1.6	TPC	738.0	PROTECTIVE COVER	
				1.4	TR	738.2	PROTECTIVE COVER	
				0.0	TC GS	739.6	Diameter: 4 inches Type: Round Box Riser	
TL	- 0 +			0.0	- 00	733.0	Interval: 3.22 feet	
'-							RISER	
	1;		<b>                                     </b>	1.6	TBS	738.0	Diameter: 2 inches	
				1.0	100	700.0	Type: SCHEDULE 40-PVC	
	Ī						Interval: 5.29 feet	
	- [			2.9	TSP	736.7	SCREEN	
							Diameter: 2 inches	
	- 1	•		3.9	TSC	735.7	Type: SCH 40-PVC, 0.010" slot Interval: 1.5 feet	
ws							at most feature 1976, 1981 (1981) 41 W.C. A. C. C. C. C. C. C. C. C. C. C. C. C. C.	
	5 -			5.4	BSC	734.2	SURFACE SEAL Type: CEMENT	
				5.8	POW	733.8	Interval: 1 foot	
6.	.2						GROUT	
cs							Type: NA	
							Interval: NA	
							SEAL	
							Type: BENTONITE	
•							Interval: 1.3 feet	
							SANDPACK	
							Type: Morie 0 and Morie 000 Interval: 2.9 feet	
							WELL DEVELOPMENT DATA WATER LEVELS	
							Date: 10/22/95	
							Method: Surge Block ▼ 10/25/95 1300 3.20 ft	
							Duration: 10 Days   ▼ 10/30/95 1018 4.36 ft  Rate: 0.050 L/minute 11/1/95 1520 5.00 ft  4.7 ft	
							Hate: 0.050 L/minute 11/1/95 1007 4.57 ft Final Measurements: \$\frac{1}{2}\$ 11/2/95 1030 4.66 ft	
			·				Temperature Conductivity	
							pH (degrees C) (micromhos/cm) Turbidity (NTU)	
							6.93 15.0 450 8.38	
							TPC TOP OF PROTECTIVE CASING	
							LEGEND TR TOP OF WELL RISER	
							SURFACE SEAL SAND GS GROUND SURFACE TBS TOP BENTONITE SEAL	
							CPOUT TSP TOP OF SANDPACK	
							BCC POTTOM OF CORFEN	
							SEAL CLAY TD TOTAL DEPTH	
							SANDPACK NO RECOVERY POW POINT OF WELL	
				1			Manual Manual	
	COMPLETION REPORT OF							
PARS	PARSONS WELL No. MW25-15							
				Ser		Army D	рерот	
ENGINEERIN	NG-5	CIE	NCE, INC.	Ror	nulus	, New	York Sheet 1 of 1	

Sheet 1 of 1

#### COMPLETION REPORT OF WELL No. MW25-16D

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 997975.4 750773.2

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DRILLING METHOD: Rock Coring

WELL INSTALLATION STARTED: 10/25/95

**ENGINEERING-SCIENCE, INC.** 

GROUND SURFACE ELEVATION: 739.8

DATUM: NGVD 88

GEOLOGIST: F. O'Loughlin

CHECKED BY: P.Feschbach-Meriney 10/25/95 WELL INSTALLATION COMPLETED: CONSULTANT: EVATION (ft.) **STRATA** DEPTH (ft.) SYMBOI WELL MACRO WELL CONSTRUCTION DETAILS DESCRIPTION **DETAILS** (from boring log) 핍 TPC 738.1 PROTECTIVE COVER 738,4 1.3 TR TC Diameter: 4 inches Type: Round Box Riser 0.0 739.8 GS Interval: 12.67 feet TL RISER Diameter: 2 inches Type: SCHEDULE 40-PVC Interval: 16.25 feet SCREEN Diameter: 1.875 in WS Type: WIRE & PVC, 0.010" slot Interval: 9 feet SURFACE SEAL CS Type: CEMENT Interval: 1 foot **GROUT** Type: CEMENT-BENTONITE Interval: 9.9 feet SEAL Type: BENTONITE TBS 10.9 728.9 Interval: 1.9 feet **SANDPACK** Type: Morie 0 and #10 Rock 12.8 TSP 727.0 Interval: 12.2 feet WATER LEVELS WELL DEVELOPMENT DATA Date Depth, TR Date: 10/30/95 <u>Time</u> ¥ 10/30/95 5.84 ft Method: Surge Block 14.9 TSC 724.9 Duration: 1 Day Rate: 1.200 L/minute Final Measurements: Conductivity Temperature На (degrees C) (micromhos/cm) Turbidity (NTU) 6.98 480 4.64 TPC TOP OF PROTECTIVE CASING **GRAVEL** LEGEND TOP OF WELL BISER TR SURFACE GROUND SURFACE GS SAND SEAL TRS TOP BENTONITE SEAL TSP TOP OF SANDPACK **GROUT** SILT TSC TOP OF SCREEN BSC **BOTTOM OF SCREEN** SEAL CLAY TD TOTAL DEPTH POW POINT OF WELL SANDPACK NO RECOVERY 23.9 BSC 715.9 25.0 POW 714.8 **COMPLETION REPORT OF** PARSONS WELL No. MW25-16D Seneca Army Depot

Romulus, New York

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 998187.6 750963.0

GROUND SURFACE ELEVATION: 742.2

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DATUM: NGVD 88 GEOLOGIST: F. O'Loughlin

DRILLING METHOD: Hollow Stem Auger

CHECKED BY: P.Feschbach-Meriney

WELL INSTALLATION STARTED: 10/16/95 WELL INSTALLATION COMPLETED: 10/16/95

WELL INSTALLATION COMPLETED	: 10	/16/95				CONSULTANT:		
STRATA					NO			
MACRO H DESCRIPTION LA H (from boring log) H	SYMBOL	WELL DETAILS	DEPTH (ft.)		ELEVATION (ft.)	WELL CONSTRUCTION DETAILS		
	<u> </u>		1.7	TPC	740.5			
			1.7	TR	740.6	PROTECTIVE COVER		
				TC		Diameter: 4 inches		
0 -			0.0	GS	742.2	Type: Round Box Riser		
TL		₩ ₩				Interval: 5.25 feet		
		<b>                                     </b>				RISER		
		₩ ₩				Diameter: 2 inches		
		<b>!</b>	2.0	TBS	740.2	Type: SCHEDULE 40-PVC		
						Interval: 6.28 feet		
						SCREEN		
			3.6	TSP	738.6	Diameter: 2 inches		
						Type: SCH 40-PVC, 0.010" slot		
	• 🗢		4.6	TSC	737.6	Interval: 4.5 feet		
5 -						SURFACE SEAL		
_	- 1					Type: CEMENT		
	<b>ġ</b> ₹;					Interval: NA		
						GROUT		
						Type: NA		
	<b>6.</b> (					Interval: NA		
WS .						SEAL		
						Type: BENTONITE		
			9.1	BSC	733.1	Interval: 1.6 feet		
						SANDPACK		
9,9			9.9	POW	732.3	Type: Morie 0 and #1Q Rock		
CS						Interval: 6.3 feet		
						WELL DEVELOPMENT DATA WATER LEVELS  Date: 10/31/95 Date Time Depth,TR		
						V 10/31/95 1031 5.70 ft		
						Method: Surge Block 10/31/95 1415 5.07 ft  Duration: 1 Day		
						Rate: 0.780 L/minutes		
						Final Measurements:		
						Temperature Conductivity		
						pH (degrees C) (micromhos/cm) Turbidity (NTU)		
						7.12 13.0 550 4.16		
						LEGEND GRAVEL TPC TOP OF PROTECTIVE CASING TR TOP OF WELL RISER		
						SURFACE GS GROUND SURFACE		
/						GROUT SILT TSP TOP OF SANDPACK TSC TOP OF SCREEN		
•	ĺ					BSC BOTTOM OF SCREEN ,		
						POW POINT OF WELL		
						SANDPACK NO RECOVERY		
	l							
	_					COMPLETION REPORT OF		
PARSON	<b>-</b>		Son	eca A	rmy D	enot WELL No. MW25-17		
ENGINEERING-S	CIE	NCE, INC.		Romulus, New York  Sheet 1 o				

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 998116.3 751082.0 GROUND SURFACE ELEVATION: 743.1

DRILLING CONTRACTOR: DATUM: DATUM: NGVD 88

DRILLING METHOD: Hollow Stem Auger GEOLOGIST: F. O'Loughlin

WELL INSTALLATION STARTED: 10/16/95 CHECKED BY: P.Feschbach-Meriney

WELL INSTALLATION COMPLETED: 10/16/95 CONSULTANT: \_EVATION (ft.) **STRATA** DEPTH (ft.) SYMBOI WELL **MACRO** WELL CONSTRUCTION DETAILS DESCRIPTION **DETAILS** (from boring log) 핍 1.6 TPC 741.4 PROTECTIVE COVER 741.7 TR 1.3 Diameter: 4 inches TC 743.1 Type: Round Box Riser 0.0 GS Interval: 5.02 feet TL RISER Diameter: 2 inches 1.9 TBS 741.2 Type: SCHEDULE 40-PVC Interval: 5.74 feet **SCREEN** 739.7 3.4 TSP Diameter: 2 inches Type: SCH 40-PVC, 0.010" slot 4.4 TSC 738.7 Interval: 4.5 feet SURFACE SEAL Type: CEMENT Interval: NA **GROUT** Type: NA Interval: NA SEAL WS Type: BENTONITE 734.2 8.9 BSC Interval: 1.5 feet SANDPACK POW 733.4 9.7 10.0 10 Type: Morie 0 and #1Q Rock Interval: 6.3 feet CS WELL DEVELOPMENT DATA WATER LEVELS Time Date: 10/30/95 Depth,TR ☑ 10/30/95 1518 Method: Surge Block 10/31/95 11/1/95 5.98 ft 6.04 ft 0921 Duration: 4 Days 0900 Rate: 0.090 L/minute 11/2/95 0825 5.95 ft Final Measurements: Temperature Conductivity pН (micromhos/cm) Turbidity (NTU) (degrees C) 7.00 14.5 1480 8.57 TPC TOP OF PROTECTIVE CASING **LEGEND GRAVEL** TR TOP OF WELL RISER SURFACE GROUND SURFACE SAND TBS TOP BENTONITE SEAL SEAL TOP OF SANDPACK TSP **GROUT** SILT TSC TOP OF SCREEN BSC BOTTOM OF SCREEN SEAL CLAY TD TOTAL DEPTH POW POINT OF WELL SANDPACK NO RECOVERY **COMPLETION REPORT OF** PARSONS **WELL No. MW25-18** Seneca Army Depot Sheet 1 of 1 ENGINEERING-SCIENCE, INC. Romulus, New York

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 998135.0 750762.5 GROUND SURFACE ELEVATION: 740.1

DRILLING CONTRACTOR: DATUM: NGVD 88

DRILLING METHOD: Hollow Stem Auger GEOLOGIST: F. O'Loughlin

WELL INSTALLATION STARTED: 10/07/95 CHECKED BY: P.Feschbach-Meriney

WELL INSTALLATION COMPLETED: 10/07/95 CONSULTANT: EVATION (ft.) **STRATA** SYMBOL DEPTH (ft.) WELL DEPTH (ft.) MACRO WELL CONSTRUCTION DETAILS DESCRIPTION **DETAILS** (from boring log) ᇳ 1.9 TPC 738.1 PROTECTIVE COVER 738.2 TR 1.9 TC Diameter: 4 inches Type: Round Box Riser 0.0 GS 740.1 Interval: 3.95 feet TL RISER Diameter: 2 inches Type: SCHEDULE 40-PVC 738.1 2.0 TRS Interval: 7.15 feet **SCREEN** Diameter: 1.875 in. Type: WIRE & PVC, 0.010" slot 4.0 **TSP** 736.1 Interval: 4.5 feet SURFACE SEAL 734.8 5.3 TSC Type: CEMENT Interval: NA **GROUT** Type: NA Interval: NA SEAL WS Type: BENTONITE Interval: 2.0 feet SANDPACK BSC 730.3 9.8 Type: Morie 0 and Morie 000 10.2 10 10.2 POW 729.9 Interval: 6.2 feet CS WELL DEVELOPMENT DATA WATER LEVELS Date Depth,TR Date: 10/22/95 Time ¥ 10/22/95 1505 2.94 ft Method: Surge Block Duration: 1 Day Rate: 0.780 L/minute Final Measurements: Conductivity Temperature pΗ (degrees C) (micromhos/cm) Turbidity (NTU) 6.96 550 5.87 TPC TOP OF PROTECTIVE CASING LEGEND GRAVEL TOP OF WELL RISER TR SURFACE GROUND SURFACE GS SAND SEAL TBS TOP BENTONITE SEAL TSP TOP OF SANDPACK **GROUT** SILT TSC TOP OF SCREEN BSC **BOTTOM OF SCREEN** CLAY SEAL **TOTAL DEPTH** POW POINT OF WELL SANDPACK NO RECOVERY **COMPLETION REPORT OF** PARSONS **WELL No. MW25-19** Seneca Army Depot ENGINEERING-SCIENCE, INC. Sheet 1 of 1 Romulus, New York

SEAD-26

Sheet 1 of 1

DATUM: NGVD 88

#### COMPLETION REPORT OF WELL No. MW26-1

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 992227.7 751590.6 GROUND SURFACE ELEVATION: 751.2

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

ENGINEERING-SCIENCE, INC.

DRILLING METHOD: Hollow Stem Auger GEOLOGIST: E. Schacht

WELL INSTALLATION STARTED: 11/17/93 CHECKED BY: F. O'Loughlin 11/17/93 WELL INSTALLATION COMPLETED: CONSULTANT: -EVATION (ft.) **STRATA** DEPTH (ft.) SYMBOI WELL DEPTH (ft.) **MACRO** WELL CONSTRUCTION DETAILS DESCRIPTION **DETAILS** (from boring log) 피 2.7 TPC 748.5 PROTECTIVE COVER TR 2.6 748.6 Diameter: 4 inches TC Type: Square Box Riser 0.0 751.2 GS Interval: 3.5 feet FL RISER TL TBS 749.7 Diameter: 2 inches 1.5 Type: SCHEDULE 40-PVC 2.3 TSP 748.9 Interval: NA **SCREEN** 3.3 TSC 747.9 Diameter: 2 inches WS Type: SCH 40-PVC, 0.010" slot Interval: 2 feet SURFACE SEAL BSC 745.9 5.3 Type: CEMENT Interval: NA 6.0 POW 745.2 6.0 CS **GROUT** Type: NA Interval: NA SEAL Type: BENTONITE Interval: 0.8 feet SANDPACK Type: #1 and #3 Interval: 3.7 feet WELL DEVELOPMENT DATA WATER LEVELS Date <u>Time</u> Depth,TR Date: 1/9/94 ¥ 11/20/93 ¥ 11/23/93 4.76 ft 7.15 ft 1500 Method: Bail & Pump 1345 Duration: 1.5 Months 1130 6.85 ft 1/8/94 1400 7.20 ft Rate: 0.3 L/minute 1/9/94 1105 7.32 ft Final Measurements: Conductivity Temperature pН (degrees C) (micromhos/cm) Turbidity (NTU) 7.62 10.5 550 5.23 TOP OF PROTECTIVE CASING TPC **LEGEND GRAVEL** TR TOP OF WELL RISER SURFACE GS GROUND SURFACE SAND TOP BENTONITE SEAL SEAL TOP OF SANDPACK TSP **GROUT** SILT TSC TOP OF SCREEN BOTTOM OF SCREEN BSC SEAL CLAY TD TOTAL DEPTH POW POINT OF WELL SANDPACK NO RECOVERY **COMPLETION REPORT OF** PARSONS WELL No. MW26-1 Seneca Army Depot

Romulus, New York

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 992768.1 751107.0

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DRILLING METHOD: Hollow Stem Auger

WELL INSTALLATION STARTED: 11/18/93

GROUND SURFACE ELEVATION: 753.8

DATUM: NGVD 88

GEOLOGIST: E. Schacht

CHECKED BY: F. O'Loughlin

11/18/93 WELL INSTALLATION COMPLETED: CONSULTANT: ELEVATION (ft.) **STRATA** DEPTH (ft.) WELL MACRO WELL CONSTRUCTION DETAILS SYM **DESCRIPTION DETAILS** (from boring log) 3.0 TPC 750.8 PROTECTIVE COVER TR 751.0 TC Diameter: 4 inches GS Type: Square Box Riser 0.0 753.8 Interval: 4.86 feet FL RISER Diameter: 2 inches TBS 751.9 Type: SCHEDULE 40-PVC 1.9 Interval: NA **TSP** 750.9 2.9 SCREEN Diameter: 2 inches Type: SCH 40-PVC, 0.010" slot 3.9 TSC 749.9 Interval: 9 feet SURFACE SEAL 5 Type: CEMENT ٠ò٠ Interval: NA **GROUT** Type: NA Interval: NA SEAL Type: BENTONITE Interval: 1.0 feet SANDPACK Type: #1 and #3 Interval: 11.1 feet WELL DEVELOPMENT DATA WATER LEVELS TL Date Depth.TR Date: 1/9/94 Time ¥ 11/21/93 15.48 ft Method: Bail ¥ 11/22/93 ¥ 1/9/94 15.64 ft Duration: 3 Days 15.67 ft Rate: **NA - Well Dry**  $\frac{\bar{v}}{\bar{v}}$  1/12/94 WS Dry well 12.9 BSC 740.9 Final Measurements: Temperature Conductivity 14.0 14.0 POW 739.8 Нα (degrees C) (micromhos/cm) Turbidity (NTU) CS NA NA NA TOP OF PROTECTIVE CASING **GRAVEL** LEGEND TOP OF WELL RISER TR SURFACE GROUND SURFACE GS SAND SEAL TBS TOP BENTONITE SEAL TSP TOP OF SANDPACK GROUT SILT TSC TOP OF SCREEN BSC **BOTTOM OF SCREEN** SEAL CLAY **TOTAL DEPTH** POW POINT OF WELL NO RECOVERY SANDPACK **COMPLETION REPORT OF** PARSONS WELL No. MW26-2 Seneca Army Depot Sheet 1 of 1 **ENGINEERING-SCIENCE, INC.** Romulus, New York

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 992216.8 751115.5

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DRILLING METHOD: Hollow Stem Auger

WELL INSTALLATION STARTED: 11/18/93
WELL INSTALLATION COMPLETED: 11/18/93

GROUND SURFACE ELEVATION: 751.5

DATUM: NGVD 88

GEOLOGIST: E. Schacht
CHECKED BY: F. O'Loughlin

CONSULTANT:

WELL INSTALLATION CON	WIFEE IED,		10/93		:		CONSULTANT:
STRATA		ب		_		EVATION (ft.)	
MACDO		စ္က	WELL	Ε_		Ĕ	
MACRO	- ⊨	₹		<u>`</u>		(ft.)	WELL CONSTRUCTION DETAILS
DESCRIPTION (from boring log)	DEPTH (ft.)	SYMBOL	DETAILS	DEPTH (ft.)		≧ ⊂	
(Hour pointy log)		S					
				2.7	TPC	748.8	
				2.6	TR	748.9	PROTECTIVE COVER
İ					TC		Diameter: 4 inches
i	_			0.0	GS	751.5	Type: Square Box Riser
FL	— o -	. 0					Interval: 4.55 feet
'-	ļ		₩₩ ₩₩				
ļ	4		<b>****</b>		1		RISER
		.0	<b>****</b>	1.8	TBS	749.7	Diameter: 2 inches
	]	0		1.0	163	745.7	Type: SCHEDULE 40-PVC
		· 0 · . · ·			ļ		Interval: NA
				2.8	TSP	748.7	SCREEN
	1						Diameter: 2 inches
		0					
]	-	0		4.3	TSC	747.2	Type: SCH 40-PVC, 0.010" slot
1		0		4.0	130	77.2	Interval: 9 feet
	5 -						SURFACE SEAL
l	3						Type: CEMENT
		. 0					Interval: NA
	1	0	::::::⊟::::::				GROUT
		o.					
	- 1						Type: CEMENT-BENTONITE
	-	· · · ·					Interval: 1.8 feet
	]	.0					SEAL
		o,					Type: BENTONITE
	ŀ	. ი ∵					Interval: 1.0 feet
	†						
	ŀ	: : : š					SANDPACK
	10 -	· Q · . · ·					Type: #1 and #3
TL	-						Interval: 11.2 feet
	]						WELL DEVELOPMENT DATA WATER LEVELS
	Į.	ĕ.; ĕ	∷∷ <u>⊟</u> ∷∷				Date: 11/20/93
	Ŀ						Method: Ball & Pump ¥ 11/20/93 1635 11.76 ft
MC	1						Duration: 1 Day 11/20/93 1650 11.68 ft
WS			<b>=</b> 1				Rate: 1.26 L/minute $\frac{V}{\nabla}$
	4			122	BSC	720 2	Final Measurements:
				13.3	B3C	738.2	Temperature Conductivity
14.	.0			14.0	POW	737.5	pH (degrees C) (micromhos/cm) Turbidity (NTU)
CS	_ †						6.64 11 700 5.32
							0.02
							TOO TOO OF OPPOTED THE CAME
							LEGEND GRAVEL TPC TOP OF PROTECTIVE CASING TR TOP OF WELL RISER
							SUBSEACE GS GROUND SUBSEACE
							SEAL SAND TBS TOP BENTONITE SEAL
							GROUT SILT TSP TOP OF SANDPACK TSC TOP OF SCREEN
							SEAL CLAY BSC BOTTOM OF SCREEN TD TOTAL DEPTH
							POW POINT OF WELL
							SANDPACK   NO RECOVERY
							المحقا العجا
			· · · · · · · · · · · · · · · · · · ·				COMPLETION DEDOCT OF
<b>    </b>		_					COMPLETION REPORT OF
PARS		5		•			WELL No. MW26-3
			145			rmy D	epot
ENGINEERIN	NG-S	CIEP	ICE, INC.	Ron	nulus,	New '	York Sheet 1 of 1
							WHICH I STATE OF THE STATE OF T

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 991690.8 751126.3 GROUND SURFACE ELEVATION: 750.1

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DATUM: NGVD 88 DRIBLING METHOD: Hollow Stem Auger GEOLOGIST: E. Schacht WELL INSTALLATION STARTED: 11/19/93 CHECKED BY: F. O'Loughlin

WELL BUST ALL ATION COMPLETED 11/19/93

WELL INSTALLATION COM	APLETED:	11/19/93				CONSULTANT:
STRATA		<b>.</b>			NO	
MACRO DESCRIPTION (from boring log)	DEPTH (ft.)	WELL DETAILS	DEPTH (ft.)		ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
			2.6	TPC	747.6	PROTECTIVE COVER
			2.5	TR	747.6	PROTECTIVE COVER Diameter: 4 inches
			0.0	GS	750.1	Type: Square Box Riser
FL	- o <del> </del>					Interval: 5.53 feet
						RISER
						Diameter: 2 inches
						Type: SCHEDULE 40-PVC
						Interval: NA
	1		3.0	TBS	747.1	SCREEN Diameter: 2 inches
						Type: SCH 40-PVC, 0.010" slot
			4.5	TSP	745.6	Interval: 4 feet
	5 -					SURFACE SEAL
						Type: CEMENT
			6.4	TCC	740.7	Interval: NA
TL			6.4	TSC	743.7	GROUT Type: CEMENT-BENTONITE
			1			Interval: 3.0 feet
	7.		}			SEAL
WS						Type: BENTONITE
						Interval: 1.5 feet
						SANDPACK
	10 -		10.4	BSC	739.7	Type: #1 and #3
	1		10.4	ВЗС	/35.7	Interval: 7.0 feet WELL DEVELOPMENT DATA WATER LEVELS
11.	.5		11.5	POW	738.6	Date: 11/21/93 Date Time Depth,TR
CS	<u></u>	e_e_e_e_e	15	"	755.0	Method: Bail & Pump
						Duration: 1 Day 11/21/93 1140 11.10 ft Rate: 1 L/minute 11/21/93 1155 11.10 ft
	-					Final Measurements:
						Temperature Conductivity
						pH (degrees C) (micromhos/cm) Turbidity (NTU)
						7.07 12 850 6.13
						LEGEND GRAVEL TPC TOP OF PROTECTIVE CASING
						IN TOP OF WELL RISER
						SEAL TBS TOP BENTONITE SEAL
						GROUT SILT TSP TOP OF SANDPACK TSC TOP OF SCREEN
						SEAL CLAY BSC BOTTOM OF SCREEN TD TOTAL DEPTH
						POW POINT OF WELL
						SANDPACK NO RECOVERY
<u></u>			l			COMPLETION DEPORT OF
PARS	ONS					COMPLETION REPORT OF WELL No. MW26-4
ENGINEERII	NG-SC	IENCE. INC			Army D , New	pepot
FIAGUAEEKII			HOI	ilulus	, ivew	TOIK

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 992271.2 751169.2 GROUND SURFACE ELEVATION: 754.6

DRILLING CONTRACTOR: DATUM: NGVD 88

DRILLING METHOD: Hollow Stem Auger GEOLOGIST: F. O'Loughlin

WELL INSTALLATION STARTED: 09/24/95 CHECKED BY: P.Feschbach-Meriney

WELL INSTALLATION CON	MPLETED:	09/	24/95				CONSULTANT:
STRATA						NC	
MACRO DESCRIPTION (from boring log)	DEPTH (ft.)	SYMBOL	WELL DETAILS	DEPTH (ft.)		ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
				2.4	TPC	752.3	
				2.1	TR	752.6	PROTECTIVE COVER
					TC		Diameter: 4 inches
FL	o -	· o		0.0	GS	754.6	Type: Square Box Riser Interval: 4.9 feet
FL		0					RISER
	1	0	<b>                                     </b>				Diameter: 2 inches
		0	<b>                                     </b>				Type: SCHEDULE 40-PVC
	-(	0	₩ ₩	2.5	TBS	752.1	Interval: 6.8 feet
		0					SCREEN
	1	0					Diameter: 2 inches
		٥		3.8	TSP	750.8	Type: SCH 40-PVC, 0.010" slot
		0					Interval: 8.95 feet
	5 -	0.		4.9	TSC	749.7	SURFACE SEAL
		0					Type: CEMENT Interval: NA
	-	0					
		0					GROUT Type: NA
	-	o					Interval: NA
		.0					SEAL
TL	1						Type: BENTONITE
, -							Interval: 1.3 feet
	1						SANDPACK
	10 -						Type: Morie 0 and Morie 000
		<b></b>					Interval: 10.05 feet
WS	-						WELL DEVELOPMENT DATA WATER LEVELS  Date: 10/19/95 Date Time Depth,TR
							Market Corres Block ₹ 10/17/95 1514 12.66 ft
	-						Duration: 3 Days ¥ 10/18/95 1253 13.57 ft
							Rate: 0.24 L/minute $\frac{\nabla}{2}$ 10/18/95 1712 12.74 ft
	-						Final Measurements:
				13.9	BSC	740.8	Temperature Conductivity pH (degrees C) (micromhos/cm) Turbidity (NTU)
	1						6.55 15.5 925 8.5
15	5.0 15 -			15.0	POW	739.6	
CS	- 15 -						LEGEND GRAVEL TPC TOP OF PROTECTIVE CASING
							THE TOT OF WELL MISEN
							SEAL TBS TOP BENTONITE SEAL
							GROUT SILT TSP TOP OF SANDPACK TSC TOP OF SCREEN
							SEAL BSC BOTTOM OF SCREEN
							POW POINT OF WELL
							SANDPACK NO RECOVERY
			1				
							COMPLETION REPORT OF
PARS	ONS	5					WELL NO MW26-5
ENGINEERII	NG-S	CIE	NCE INC			Army D	pepot
ENGINEERI	140-2	CIE	MCE, INC.	Ror	nulus	, New	YORK

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 992233.8 751252.0 GROUND SURFACE ELEVATION: 754.7

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DATUM: NGVD 88 DRILLING METHOD: Hollow Stem Auger GEOLOGIST: F. O'Loughlin

WELL INSTALLATION STARTED: 09/23/95

CHECKED BY: P.Feschbach-Meriney

WELL INSTALLATION COMPLETED: 09/23/95

CONSULTANT: EVATION (ft.) **STRATA** DEPTH (ft.) SYMBOL WELL **MACRO** WELL CONSTRUCTION DETAILS DESCRIPTION **DETAILS** (from boring log) ᇳ 2.3 TPC 752.4 PROTECTIVE COVER 752.7 TR 2.0 Diameter: 4 inches TC Type: Square Box Riser 0,0 754.7 GS o Interval: 4.78 feet FL RISER Diameter: 2 inches Type: SCHEDULE 40-PVC Interval: 6.9 feet 2.5 **TBS** 752.2 SCREEN Diameter: 2 inches 3.8 **TSP** 750.9 Type: SCH 40-PVC, 0.010" slot Interval: 9 feet 4.9 TSC 749.8 SURFACE SEAL 5 Type: CEMENT Interval: 2.5 feet **GROUT** Type: NA Interval: NA SEAL Type: BENTONITE Interval: 1.3 feet SANDPACK Type: Morie 0 and Morie 000 Interval: 11.2 feet TL WELL DEVELOPMENT DATA WATER LEVELS Date: 10/18/95 Time Depth,TR ☑ 10/18/95 0950 12.70 ft 12.73 ft Method: Surge Block **10/19/95** 0932 Duration: 2 Days WS Rate: 0.650 L/minute Final Measurements: Temperature Conductivity BSC 740.8 13.9 Ηq (degrees C) (micromhos/cm) Turbidity (NTU) 6.55 16.5 490 3.4 15.0 15 15.0 POW 739.7 CS TPC TOP OF PROTECTIVE CASING **GRAVEL LEGEND** TR TOP OF WELL RISER SURFACE GROUND SURFACE SAND TOP BENTONITE SEAL TBS SEAL TSP TOP OF SANDPACK **GROUT** SILT TOP OF SCREEN TSC BSC BOTTOM OF SCREEN SEAL CLAY TOTAL DEPTH TD POW POINT OF WELL SANDPACK **NO RECOVERY COMPLETION REPORT OF** PARSONS WELL No. MW26-6 Seneca Army Depot Sheet 1 of 1 ENGINEERING-SCIENCE, INC. Romulus, New York

Sheet 1 of 1

### COMPLETION REPORT OF WELL No. MW26-7

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 992178.9 751194.1

GROUND SURFACE ELEVATION: 754.4

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DATUM: NGVD 88
GEOLOGIST: F. O'Loughlin

DRILLING METHOD: Hollow Stem Auger

ENGINEERING-SCIENCE, INC.

CHECKED BY: P.Feschbach-Meriney

WELL INSTALLATION STARTED: 09/23/95

09/23/95 WELL INSTALLATION COMPLETED: CONSULTANT: EVATION (ft.) **STRATA** DEPTH (ft.) SYMBOL WELL **MACRO** WELL CONSTRUCTION DETAILS DEPTI (ft.) **DESCRIPTION DETAILS** (from boring log) 딥 2.4 TPC 752.0 PROTECTIVE COVER 2.3 TR 752.1 Diameter: 4 inches TC Type: Square Box Riser 0.0 GS 754.4 Ö Interval: 6.59 feet FL **RISER** Diameter: 2 inches Type: SCHEDULE 40-PVC Interval: 10.21 feet SCREFN Diameter: 2 inches Type: SCH 40-PVC, 0.010" slot 4.2 TBS 750.2 Interval: 8.95 feet SURFACE SEAL 5 Type: CEMENT o. Interval: NA 6.0 **TSP** 748.4 **GROUT** Type: NA Interval: NA 7.9 TSC 746.5 SEAL Type: BENTONITE Interval: 1.8 feet **SANDPACK** Type: Morie 0 and Morie 000 TL Interval: 12 feet WELL DEVELOPMENT DATA WATER LEVELS Date Date: 10/20/95 Time Depth,TR 1358 13.83 ft 11.32 ft Method: Surge Block ¥ 10/23/95 Duration: 4 Days WS Rate: 2.000 L/minute Final Measurements: Temperature Conductivity pΗ (degrees C) (micromhos/cm) Turbidity (NTU) 6.60 15 750 13.3 15 TOP OF PROTECTIVE CASING TPC LEGEND GRAVEL TOP OF WELL RISER TR SURFACE GROUND SURFACE GS SAND SEAL TBS TOP BENTONITE SEAL BSC 737.5 16.9 TSP TOP OF SANDPACK **GROUT** SILT TOP OF SCREEN **BOTTOM OF SCREEN** BSC SEAL CLAY 18.0 POW 736.4 18.0 TD TOTAL DEPTH POW POINT OF WELL CS SANDPACK NO RECOVERY **COMPLETION REPORT OF** PARSONS WELL No. MW26-7

Seneca Army Depot

Romulus, New York

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 991754.6 751203.8

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DATUM: NGVD 88

GROUND SURFACE ELEVATION: 750.5

DRILLING METHOD: Hollow Stem Auger

GEOLOGIST: F. O'Loughlin

WELL INSTALLATION STARTED: 09/21/95

CHECKED BY: P.Feschbach-Meriney

VELL INSTALLATION COMPLETED	: 09	/21/95		· · · · · · · · · · · · · · · · · · ·	<b>,</b>	CHECKED BY: P.Feschbach-Weriney CONSULTANT:
STRATA	اج ا		-		ON	
MACRO DESCRIPTION (from boring log)  (from boring log)	SYMBOL	WELL DETAILS	DEPTH (ft.)		ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
			2.1	TPC	748.4	PROTECTIVE COVER
			1.9	TR TC	748.7	PROTECTIVE COVER Diameter: 4 inches
			0.0	GS	750.5	Type: Square Box Riser
FL 0	O					Interval: 5.13 feet
	0					RISER
	.0					Diameter: 2 inches
	· · · °.	<u> </u>		1		Type: SCHEDULE 40-PVC Interval: 8.17 feet
	0		0.0	TDO		
	- °		3.0	TBS	747.5	SCREEN Diameter: 2 inches
	0.					Type: SCH 40-PVC, 0.010" slot
	· · · °	1888				Interval: 4 feet
5 -	] ,		4.7	TSP	745.8	SURFACE SEAL
5						Type: CEMENT
			6.3	TCC	744.0	Interval: NA
TL			6.3	TSC	744.2	GROUT
						Type: NA
						Interval: NA
						SEAL TURN PENTONITE
WS						Type: BENTONITE Interval: 1.7 feet
	1					SANDPACK
10 -						Type: Morie 0 and Morie 000
10 -			10.3	BSC	740.2	Interval: 6.8 feet
						WELL DEVELOPMENT DATA WATER LEVELS
11.5			11.5	POW	739.0	Date: 10/16/95
CS						Duration: 2 Days ¥ 10/17/95 0755 10.60 ft
						Rate: 0.160 L/minute 10/17/95 1133 10.73 ft
						Final Measurements:
						Temperature Conductivity pH (degrees C) (micromhos/cm) Turbidity (NTU)
						6.71 15.0 700 17.1
						LEGEND GRAVEL TPC TOP OF PROTECTIVE CASING
						TR TOP OF WELL RISER  SURFACE  GS GROUND SURFACE
						SURFACE SAND GS GROUND SURFACE TBS TOP BENTONITE SEAL TSP TOP OF SANDPACK
						GROUT SILT TSP TOP OF SANDPACK TSC TOP OF SCREEN
						SEAL CLAY BSC BOTTOM OF SCREEN TD TOTAL DEPTH
						POW POINT OF WELL
						SANDPACK NO RECOVERY
PARSON	5					COMPLETION REPORT OF
			Sen	eca A	Army D	Depot WELL No. MW26-8
<b>ENGINEERING-S</b>	CIE	NCE, INC.			, New	

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 991722.5 751224.7

GROUND SURFACE ELEVATION: 750.9
DATUM: NGVD 88

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

GEOLOGIST: F. O'Loughlin

DRILLING METHOD: Hollow Stem Auger WELL INSTALLATION STARTED: 09/25/95

GEOLOGIST: F. O'Loughlin
CHECKED BY: P.Feschbach-Meriney

LATION COMPLETED: 09/25/95 CONSULTAR

STRATA  MACRO DESCRIPTION (from boring log)  A  B  MACRO DESCRIPTION (from boring log)  MELL DETAILS  MELL DETAILS  DETAILS  MELL DETAILS  MELL DETAILS  MELL DETAILS  MELL DETAILS  MELL DETAILS  MELL DETAILS  MELL DETAILS  PROTECTIVE COVER Diameter: 4 inches Type: Square Box Riser Interval: 5.25 feet RISER Diameter: 2 inches Type: SCHEDULE 40-PVC Interval: 9.14 feet  SCREEN Diameter: 2 inches Type: SCHEDULE 40-PVC, 0.010" slot Interval: 4 feet
2.2   TPC   748.6     2.1   TR   748.8
2.2   TPC   748.6     2.1   TR   748.8
FL  TC  O.0 GS 750.9  Type: Square Box Riser Interval: 5.25 feet RISER Diameter: 2 inches Type: SCHEDULE 40-PVC Interval: 9.14 feet  SCREEN Diameter: 2 inches Type: SCH 40-PVC, 0.010" slot
FL  O.O GS 750.9 Type: Square Box Riser Interval: 5.25 feet RISER Diameter: 2 inches Type: SCHEDULE 40-PVC Interval: 9.14 feet  3.0 TBS 747.9 SCREEN Diameter: 2 inches Type: SCH 40-PVC, 0.010" slot
FL Interval: 5.25 feet RISER Diameter: 2 inches Type: SCHEDULE 40-PVC Interval: 9.14 feet  3.0 TBS 747.9 SCREEN Diameter: 2 inches Type: SCH 40-PVC, 0.010" slot
RISER Diameter: 2 inches Type: SCHEDULE 40-PVC Interval: 9.14 feet  3.0 TBS 747.9 SCREEN Diameter: 2 inches Type: SCH 40-PVC, 0.010" slot
Diameter: 2 inches Type: SCHEDULE 40-PVC Interval: 9.14 feet  3.0 TBS 747.9 SCREEN Diameter: 2 inches Type: SCH 40-PVC, 0.010" slot
3.0 TBS 747.9 SCREEN Diameter: 2 inches Type: SCH 40-PVC, 0.010" slot
3.0 TBS 747.9 SCREEN Diameter: 2 inches Type: SCH 40-PVC, 0.010" slot
Diameter: 2 inches Type: SCH 40-PVC, 0.010" slot
Type: SCH 40-PVC, 0.010" slot
H-1-1 V-10000001 10000001 1 1 1 1
interval: 4 leet
5.0 TSP 745.9 SURFACE SEAL
5 5.0 TSP 745.9 SURFACE SEAL Type: CEMENT
Interval: NA
TL GROUT
7.1 TSC 743.8 Type: NA
Interval: NA
SEAL SEAL
WS Type: BENTONITE
Interval: 2.0 feet
SANDPACK
Type: Morie 0 and Morie 000
WELL DEVELOPMENT DATA WATER LEVELS
Date: 10/16/95 Date Time Dept
[]   Method: Surge Block ★ 10/16/95 1338 10.6
12.2 1 12.2 POW 738.7 Duration: 1 Day
CS Rate: 0.280 L/minute
Final Measurements:  Temperature Conductivity
pH (degrees C) (micromhos/cm) Turbidity (NTU)
6.90 13.75 625 8.38
LEGEND GRAVEL TPC TOP OF PROTECTIVE CA
SURFACE SAND GS GROUND SURFACE
SEAL L. TBS TOP BENTONITE SEAL
GROUT SILT TSC TOP OF SCREEN
SEAL CLAY TO TOTAL DEPTH
SANDPACK NO RECOVERY POW POINT OF WELL
COMPLETION REPORT O
PARSONS Seneca Army Depot WELL No. MW26-9
ENGINEERING-SCIENCE, INC. Romulus, New York Sheet 1

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 991652.5 751206.3

GROUND SURFACE ELEVATION: 751.5

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.

DATUM: NGVD 88 GEOLOGIST: F. O'Loughlin

DRILLING METHOD: Hollow Stem Auger

CHECKED BY: P.Feschbach-Meriney

WELL INSTALLATION STARTED: 09/20/95

VELL INSTALLATION COMPLETED	: 09	/20/95				CONSULTANT:
STRATA MACRO 王	SYMBOL	WELL	DEPTH (ft.)		ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
MACRO DESCRIPTION (from boring log)  (#)	SYN	DETAILS			ELEV.	WEEL GONOTHOU DETAILS
			1.8	TPC TR TC	749.5 749.7	PROTECTIVE COVER Diameter: 4 inches
	· o		0.0	GS	751.5	Type: Square Box Riser Interval: 3.95 feet
	0 0		2.0	TBS	749.5	RISER Diameter: 2 inches Type: SCHEDULE 40-PVC
	0		3.2	TSP	748.3	Interval: 6.10 feet  SCREEN  Diameter: 2 inches
	٥		4.3	TSC	747.2	Type: SCH 40-PVC, 0.010" slot Interval: 6.9 feet
5 -	0					SURFACE SEAL Type: CEMENT Interval: NA GROUT
TL	0					Type: NA Interval: NA
WS						SEAL Type: BENTONITE Interval: 1.2 feet
10 -						SANDPACK Type: Morie 0 and Morie 000
			11.2	BSC	740.3	Interval: 8.3 feet  WELL DEVELOPMENT DATA WATER LEVELS  Date: 10/16/95 Date Time Depth,TR
12.0 CS			12.0	POW	739.5	Method: Surge Block ▼ 10/16/95 1504 9.83 ft  Duration: 9 Days  Rate: 0.100 L/minute ■ 10/16/95 1504 9.83 ft  0.100 L/minute ■ 10/16/95 1504 9.83 ft  10/16/95 1504 9.83 ft  10/16/95 1504 9.83 ft
						Final Measurements:  Temperature Conductivity pH (degrees C) (micromhos/cm) Turbidity (NTU)
						7.25 15.6 1250 3.41
						LEGEND  GRAVEL  TPC TOP OF PROTECTIVE CASIN TR TOP OF WELL RISER GS GROUND SURFACE TBS TOP BENTONITE SEAL TSP TOP OF SANDPACK TSC TOP OF SCREEN
						SEAL CLAY TSC TOP OF SCREEN BSC BOTTOM OF SCREEN TD TOTAL DEPTH POW POINT OF WELL  SANDPACK NO RECOVERY
PARSON	5		- Ca		Army D	COMPLETION REPORT OF WELL No. MW26-10
ENGINEERING-S	CIE	NCE, INC.			, New	

PROJECT: SEAD-25 & SEAD-26 RI/FS

PROJECT LOCATION: Seneca Army Depot Activity, Romulus, NY 14541

WELL LOCATION (N/E): 992690.3 751235.7

DRILLING CONTRACTOR: Empire Soils Investigation, Inc.
DRILLING METHOD: Hollow Stem Auger

WELL INSTALLATION STARTED: 10/19/95

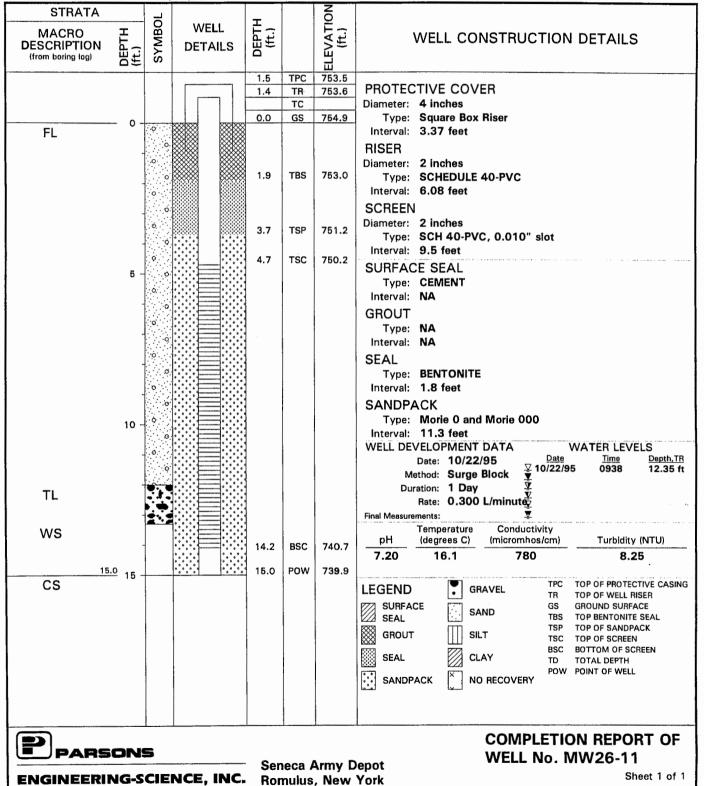
WELL INSTALLATION STARTED: 10/19/95
WELL INSTALLATION COMPLETED: 10/19/95

GROUND SURFACE ELEVATION: 754.9

DATUM: NGVD 88
GEOLOGIST: F. O'Loughlin

CHECKED BY: P.Feschbach-Meriney

CONSULTANT:





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SEAD-25

		C

MW25-1 Hand-run Slug test with Stopwatch and Electronic Water Level Meter 12/04/95 3:01pm

VARIABLE	UNITS
Elapsed Time	Minutes
INPUT 1	Drawdown from Static, feet

Elapsed Time	INPUT 1
0.12	0.96
0.3	0.61
0.37	0.51
0.42	0.46
0.5	0.42
0.53	0.36
0.6	0.33
0.63	0.31
0.67	0.29
0.73	0.26
0.8	0.24
0.87	0.22
0.95	0.2
1	0.19
1.03	0.18
1.1	0.17
1.15	0.16
1.25	0.15
1.3	0.14
1.57	0.12
1.85	0.1
2.3	0.08
2.55	0.07
3.32	0.06
8.48	0.04
10	0.04

MW25-2 SE1000C Environmental Logger 12/01 18:28

## Unit# 00001 Test 7

Reference 0.000 Linearity 0.010
Scale factor 9.940
Offset -0.020
Delay mSEC 50.000 VARIABLE UNITS

Elapsed Time Minutes
INPUT 1 Drawdown from Static, feet

Step 0 12/01 13:43:30

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	5.188	0.1866	1.322	0.5333	1.319	6.6	1.234
0.0033	3.883	0.19	1.319	0.55	1.319	6.8	1.231
0.0066	-1.32	0.1933	1.326	0.5666	1.316	7	1.234
0.01	1.873	0.1966	1.319	0.5833	1.319	7.2	1.231
0.0133	2.125	0.2	1.322	0.6	1.313	7.4	1.225
0.0166	0.432	0.2033	1.326	0.6166	1.313	7.6	1.225
0.02	1.848	0.2066	1.319	0.6333	1.316	7.8	1.222
0.0233	1.392	0.21	1.329	0.65	1.316	8	1.222
0.0266	1.071	0.2133	1.335	0.6666	1.313	8.2	1.219
0.03	1.621	0.2166	1.335	0.6833	1.31	8.4	1.219
0.0333	1.247	0.22	1.329	0.7	1.31	8.6	1.215
0.0366	1.316	0.2233	1.329	0.7166	1.31	8.8	1.212
0.04	1.445	0.2266	1.329	0.7333	1.31	9	1.212
0.0433	1.275	0.23	1.332	0.75	1.31	9.2	1.209
0.0466	1.37	0.2333	1.326	0.7666	1.31	9.4	1.206
0.05	1.37	0.2366	1.329	0.7833	1.31	9.6	1.209
0.0533	1.319	0.24	1.329	0.8	1.31	9.8	1.206
0.0566	1.366	0.2433	1.329	0.8166	1.31	10	1.206
0.06	1.348	0.2466	1.329	0.8333	1.307	11	1.197
0.0633	1.341	0.25	1.329	0.85	1.31	12	1.184
0.0666	1.357	0.2533	1.329	0.8666	1.307	13	1.178
0.07	1.341	0.2566	1.319	0.8833	1.307	14	1.165
0.0733	1.341	0.26	1.322	0.9	1.307	15	1.156
0.0766	1.348	0.2633	1.329	0.9166	1.307	16	1.146
0.08	1.335	0.2666	1.322	0.9333	1.307	17	1.137
0.0833	1.344	0.27	1.322	0.95	1.307	18	1.127
0.0866	1.341	0.2733	1.322	0.9666	1.307	19	1.118
0.09	1.335	0.2766	1.326	0.9833	1.307	20	1.112
0.0933	1.341	0.28	1.326	1	1.307	21	1.102
0.0966	1.338	0.2833	1.322	1.2	1.304	22	1.096
0.1	1.335	0.2866	1.326	1.4	1.3	23	1.087
0.1033	1.335	0.29	1.326	1.6	1.294	24	1.077
0.1066	1.335	0.2933	1.322	1.8	1.291	25	1.068
0.11	1.332	0.2966	1.322	2	1.291	26	1.061
0.1133	1.332	0.3	1.319	2.2	1.291	27	1.055
0.1166	1.332	0.3033	1.322	2.4	1.285	28	1.046
0.12	1.332	0.3066	1.322	2.6	1.282	29	1.039
0.1233	1.332	0.31	1.322	2.8	1.278	30	1.03
0.1266	1.332	0.3133	1.322	3	1.275	31	1.024
0.13	1.329	0.3166	1.322	3.2	1.275	32	1.014
0.1333	1.329	0.32	1.326	3.4	1.275	33	1.008
0.1366	1.326	0.3233	1.319	3.6	1.269	34	1.002
0.14	1.329	0.3266	1.322	3.8	1.266	35	0.995
0.1433	1.332	0.33	1.326	4	1.263	36	0.986
0.1466	1.329	0.3333	1.322	4.2	1.26	37	0.98
0.15	1.332	0.35	1.319	4.4	1.26	38	0.973
0.1533	1.332	0.3666	1.319	4.6	1.26	39	0.964
0.1566	1.329	0.3833	1.319	4.8	1.253	40	0.957
0.16	1.329	0.4	1.319	5	1.253	41	0.951
0.1633	1.332	0.4166	1.316	5.2	1.253	42	0.945
0.1666	1.329	0.4333	1.319	5.4	1.25	43	0.939
0.17	1.326	0.45	1.319	5.6	1.247	44	0.929
0.1733	1.329	0.4666	1.319	5.8	1.244	45	0.923
0.1766	1.326	0.4833	1.316	6	1.241	46	0.917
0.18	1.322	0.5	1.319	6.2	1.241	47	0.91
0.1833	1.326	0.5166	1.322	6.4	1.241	48	0.904

MW25-2 SE1000C Environmental Logger 12/01 18:28

## Unit# 00001 Test 7

Reference	0.000
Linearity	0.010
Scale factor	9.940
Offset	-0.020
Delay mSEC	50.000

VARIABLE
'Elapsed Time
INPUT 1

UNITS
Minutes
Drawdown from Static, feet

Step 0 12/01 13:43:30

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
49	0.898	105	0.624	161	0.46
50	0.891	106	0.621	162	0.457
51	0.885	107	0.618	163	0.457
52	0.882	108	0.611	164	0.451
53	0.873	109	0.605	165	0.451
54	0.866	110	0.602	166	0.445
55	0.86	111	0.602	167	0.448
<b>5</b> 6	0.857	112	0.599	168	0.445
57	0.851	113	0.593	169	0.438
58	0.844	114	0.589	170	0.442
59	0.838	115	0.589	171	0.435
60	0.832	116 117	0.586	172 173	0.432 0.432
61 62	0.829 0.822	117	0.583 0.58	173	0.432
63	0.822	119	0.577	175	0.432
64	0.81	120	0.574	176	0.423
65	0.803	121	0.567	177	0.423
66	0.8	122	0.564	178	0.42
67	0.794	123	0.561	179	0.416
68	0.788	124	0.561	180	0.42
69	0.784	125	0.555		
70	0.778	126	0.552		
71	0.775	127	0.555		
72	0.769	128	0.558		
73	0.762	129	0.542		
74	0.759	130	0.549		
75	0.753	131	0.545		
<b>7</b> 6	0.747	132	0.533		
77	0.744	133	0.542		
78	0.744	134	0.533		
79	0.731	135	0.527		
80	0.728	136	0.533		
81	0.725	137	0.523		
82	0.725	138	0.517		
83 84	0.725	139 140	0.52 0.511		
84 85	0.718	141	0.508		
86	0.715 0.712	141	0.508		
87	0.7	143	0.508		
88	0.696	144	0.501		
89	0.696	145	0.498		
90	0.687	146	0.495		
91	0.684	147	0.492		
92	0.677	148	0.489		
93	0.674	149	0.489		
94	0.668	150	0.486		
95	0.665	151	0.482		
96	0.665	152	0.486		
97	0.659	153	0.476		
98	0.652	154	0.479		
99	0.652	155	0.479		
100	0.646	156	0.47		
101	0.643	157	0.47		
102	0.643	158	0.467		
103	0.64	159	0.47		
104	0.627	160	0.457		

MW25-3 SE1000C Environmental Logger 12/03 11:02

Unit# 00001 Test 13

 Reference
 0.000

 Linearity
 0.000

 Scale factor
 9.910

 Offset
 -0.140

 Delay mSEC
 50.000

VARIABLE UNITS
Elapsed Time Minutes
INPUT 1 Drawdown from Static, feet

Set -0.140

Step 0 12/03 07:15:38

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	3.476	0.1866	2.605	0.5333	2.533	6.6	1.915	49	0.579
0.0033	7.179	0.19	2.605	0.55	2.529	6.8	1.902	50	0.567
0.0066	0.36	0.1933	2.605	0.5666	2.526	7	1.89	51	0.554
0.01	3.392	0.1966	2.602	0.5833	2.526	7.2	1.881	52	0.539
0.0133	2.68	0.2	2.598	0.6	2.523	7.4	1.868	53	0.529
0.0166	2.746	0.2033	2.598	0.6166	2.52	7.6	1.855	54	0.514
0.02	2.805	0.2066	2.598	0.6333	2.517	7.8	1.843	55	0.501
0.0233	2.724	0.21	2.598	0.65	2.514	8	1.83	56	0.489
0.0266	2.758	0.2133	2.598	0.6666	2.511	8.2	1.821	57	0.476
0.03	2.721	0.2166	2.595	0.6833	2.508	8.4	1.808	58	0.464
0.0333	2.73	0.22	2.595	0.7	2.508	8.6	1.796	59	0.454
0.0366	2.708	0.2233	2.595	0.7166	2.504	8.8	1.783	60	0.445
0.04	2.705	0.2266	2.592	0.7333	2.501	9	1.774	61	0.432
0.0433	2.705	0.23	2.592	0.75	2.498	9.2	1.761	62	0.423
0.0466	2.702	0.2333	2.592	0.7666	2.495	9.4	1.752	63	0.413
0.05	2.689	0.2366	2.592	0.7833	2.495	9.6	1.743	64	0.404
0.0533	2.686	0.24	2.592	0.8	2.492	9.8	1.73	65	0.395
0.0566	2.677	0.2433	2.592	0.8166	2.492	10	1.721	66	0.385
0.06	2.674	0.2466	2.589	0.8333	2.489	11	1.664	67	0.379
0.0633	2.667	0.25	2.589	0.85	2.486	12	1.617	68	0.369
0.0666	2.667	0.2533	2.586	0.8666	2.482	13	1.57	69	0.36
0.07	2.664	0.2566	2.589	0.8833	2.479	14	1.523	70	0.357
0.0733	2.661	0.26	2.586	0.9	2.476	15	1.479	71	0.347
0.0766	2.658	0.2633	2.589	0.9166	2.476	16	1.432	72	0.341
0.08	2.655	0.2666	2.583	0.9333	2.473	17	1.391	73	0.332
0.0833	2.655	0.27	2.583	0.95	2.473	18	1.351	74	0.326
0.0866	2.649	0.2733	2.583	0.9666	2.47	19	1.31	75	0.319
0.09	2.649	0.2766	2.583	0.9833	2.467	20	1.272	76	0.326
0.0933	2.645	0.28	2.58	1	2.467	21	1.238	77	0.351
0.0966	2.645	0.2833	2.58	1.2	2.442	22	1.2	78	0.341
0.1	2.642	0.2866	2.58	1.4	2.413	23	1.169	79	0.332
0.1033	2.639	0.29	2.58	1.6	2.382	24	1.134	80	0.326
0.1066	2.639	0.2933	2.58	1.8	2.354	25	1.134	81	0.319
0.11	2.633	0.2966	2.58	2	2.326	26	1.069	82	0.313
0.1133	2.63	0.3	2.576	2.2	2.298	27	1.04	83	0.304
0.1166	2.633	0,3033	2.576	2.4	2.272	28	1.012	84	0.297
0.12	2.624	0.3066	2.576	2.6	2.25	29	0.984	85	0.294
0.1233	2.63	0.31	2.573	2.8	2.229	30	0.959	86	0.288
0.1266	2.627	0.3133	2.573	3	2.207	31	0.931	87	0.282
0.13	2.624	0.3166	2.573	3.2	2.194	32	0.906	88	0.275
0.1333	2.624	0.32	2.573	3.4	2.175	33	0.884	89	0.269
0.1366	2.62	0.3233	2.573	3.6	2.153	34	0.859	90	0.263
0.14	2.62	0.3266	2.573	3.8	2.131	35	0.837	91	0.26
0.1433	2.617	0.33	2.57	4	2.109	36	0.811	92	0.253
0.1466	2.62	0.3333	2.57	4.2	2.091	37	0.793	93	0.247
0.15	2.614	0.35	2.567	4.4	2.072	38	0.771	94	0.241
0.1533	2.617	0.3666	2.564	4.6	2.053	39	0.752	95	0.238
0.1566	2.614	0.3833	2.561	4.8	2.037	40	0.73	96	0.235
0.16	2.614	0.4	2.555	5	2.025	41	0.714	97	0.225
0.1633	2.611	0.4166	2.551	5.2	2.009	42	0.695	98	0.222
	2.611	0.4333	2.548	5.4	1.997	43	0.677	99	0.222
0.1666	2.611	0.45	2.545	5.6	1.981	44	0.658	100	0.222
0.17		0.4666	2.545	5.8	1.968	45	0.642	101	0.218
0.1733	2.608 2.608	0.4833	2.543	5.8	1.956	46	0.623	101	0.213
0.1766		0.4833	2.539	6.2	1.943	47	0.614	102	0.203
0.18	2.608	0.5	2.539	6.4	1.943	48	0.598	103	0.2
0.1833	2.608	0.0100	٥٥ د. ٤	U. <del>**</del>	1.740	70	0.370		

# MW25-4D SE1000C Environmental Logger 12/01 09:17

#### Unit# 00001 Test 2

Reference	0.000
Linearity	0.000
Scale factor	9.910
Offset	-0.140
Delay mSEC	50.000

VARIABLE UNITS

Elapsed Time Minutes
INPUT 1 Drawdown from Static, feet

# Step 0 11/30 15:14:42

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	1.94	0.1866	1.956	0.5333	1.583	6.6	0.175
0.0033	2.589	0.19	1.95	0.55	1.567	6.8	0.166
0.0066	2.379	0.1933	1.946	0.5666	1.551	7	0.159
0.01	2.354	0.1966	1.943	0.5833	1.539	7.2	0.153
0.0133	2.323	0.2	1.937	0.6	1.523	7.4	0.147
0.0166	2.294	0.2033	1.934	0.6166	1.511	7.6	0.144
0.02	2.42	0.2066	1.928	0.6333	1.495	7.8	0.137
0.0233	2.395	0.21	1.924	0.65	1.482	8	0.134
0.0266	2.351	0.2133	1.921	0.6666	1.467	8.2	0.128
0.03	2.319	0.2166	1.918	0.6833	1.454	8.4	0.125
0.0333	2.247	0.22	1.912	0.7	1.442	8.6	0.119
0.0366	2.291	0.2233	1.909	0.7166	1.429	8.8	0.116
0.04	2.229	0.2266	1.906	0.7333	1.417	9	0.116
0.0433	2.229	0.23	1.899	0.75	1.404	9.2	0.112
0.0466	2.185	0.2333	1.896	0.7666	1.391	9.4	0.106
0.05	2.169	0.2366	1.893	0.7833	1.379	9.6	0.106
0.0533	2.185	0.24	1.89	0.8	1.366	9.8	0.103
0.0566	2.178	0.2433	1.884	0.8166	1.354	10	0.1
0.06	2.156	0.2466	1.881	0.8333	1.344	11	0.087
0.0633	2.153	0.25	1.877	0.85	1.332	12	0.081
0.0666	2.144	0.2533	1.874	0.8666	1.319	13	0.075
0.07	2.138	0.2566	1.868	0.8833	1.307	14	0.069
0.0733	2.131	0.26	1.865	0.9	1.297	15	0.062
0.0766	2.125	0.2633	1.862	0.9166	1.285	16	0.059
0.08	2.119	0.2666	1.859	0.9333	1.275	17	0.056
0.0833	2.113	0.27	1.852	0.95	1.263	18	0.056
0.0866	2.106	0.2733	1.849	0.9666	1.254	19	0.053
0.09	2.103	0.2766	1.846	0.9833	1.244	20	0.05
0.0933	2.097	0.28	1.843	1	1.232	21	0.046
0.0966	2.091	0.2833	1.84	1.2	1.084	22	0.046
0.1	2.084	0.2866	1.837	1.4	0.981	23	0.043
0.1033	2.078	0.29	1.83	1.6	0.893	24	0.043
0.1066	2.072	0.2933	1.827	1.8	0.818	25	0.04
0.11	2.069	0.2966	1.824	2	0.749	26	0.04
0.1133	2.062	0.3	1.821	2.2	0.686	27	0.04
0.1166	2.056	0,3033	1.818	2.4	0.633	28	0.04
0.12	2.053	0.3066	1.815	2.6	0.583	29	0.037
0.1233	2.047	0.31	1.812	2.8	0.539	30	0.037
0.1266	2.04	0.3133	1.808	3	0.498	31	0.037
0.13	2.037	0.3166	1.802	3.2	0.464	32	0.037
0.1333	2.031	0.32	1.799	3.4	0.432	33	0.037
0.1366	2.025	0.3233	1.796	3.6	0.401	34	0.034
0.14	2.022	0.3266	1.793	3.8	0.373		
0.1433	2.015	0.33	1.79	4	0.351		
0.1466	2.012	0.3333	1.786	4.2	0.329		
0.15	2.006	0.35	1.768	4.4	0.307		
0.1533	2	0.3666	1.749	4.6	0.291		
0.1566	1.997	0.3833	1.73	4.8	0.272		
	1.993	0.4	1.711	5	0.26		
0.16	1.987	0.4166	1.696	5.2	0.244		
0.1633 0.1666	1.981	0.4333	1.677	5.4	0.232		
	1.978	0.45	1.661	5.6	0.219		
0.17		0.4666	1.645	5.8	0.21		
0.1733	1.971	0.4833	1.63	6	0.2		
0.1766	1.968	0.4833	1.614	6.2	0.191		
0.18	1.965	0.5166	1.598	6.4	0.181		
0.1833	1.959	0.5100	1.570	0.7			

# MW25-5D SE1000C Environmental Logger 12/02 22:21

Unit# 00001 Test 10

 Reference
 0.000

 Linearity
 0.000

 Scale factor
 9.910

 Offset
 -0.140

 Delay mSEC
 50.000

VARIABLE UNITS
Elapsed Time Minutes
INPUT 1 Drawdown from Static, feet

Step 0 12/02 11:46:13

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	0	0.1866	3.216	0,5333	2.812	6.6	0.617	49	0.068
0.0033	8.219	0.19	3.21	0.55	2.793	6.8	0.595	50	0.068
0.0066	6.36	0.1933	3.207	0.5666	2.777	7	0.576	51	0.068
0.01	2.37	0.1966	3.2	0.5833	2.758	7.2	0.554	52	0.065
0.0133	2.99	0.2	3.194	0.6	2.743	7.4	0.536	53	0.068
0.0166	3.41	0,2033	3.191	0.6166	2.727	7.6	0.52	54	0.062
0.02	3.564	0.2066	3.188	0.6333	2.711	7.8	0.504	55	0.065
0.0233	3.567	0.21	3.185	0.65	2.692	8	0.485	56	0.068
0.0266	3.598	0.2133	3.178	0.6666	2.677	8.2	0.473	57	0.062
0.03	3.583	0.2166	3.175	0.6833	2.664	8.4	0.457	58	0.062
0.0333	3.561	0.22	3.169	0.7	2.649	8.6	0.438	59	0.068
0.0366	3.539	0.2233	3.166	0.7166	2.633	8.8	0.429	60	0.062
0.04	3.53	0.2266	3.16	0.7333	2.617	9	0.413	61	0.062
0.0433	3.523	0.23	3.156	0.75	2.602	9.2	0.404	62	0.062
0.0466	3.504	0.2333	3.153	0.7666	2.589	9.4	0.391	63	0.059
0.05	3.492	0.2366	3.15	0.7833	2.573	9.6	0.382	64	0.059
0.0533	3.482	0.24	3.144	0.8	2.558	9.8	0.373	65	0.062
0.0566	3.473	0.2433	3.141	0.8166	2.545	10	0.36	66	0.059
0.06	3.461	0.2466	3.135	0.8333	2.533	11	0.322	67	0.059
0.0633	3.451	0.25	3.131	0.85	2.52	12	0.285	68	0.056
0.0666	3.442	0.2533	3.128	0.8666	2.504	13	0.257	69	0.059
0.07	3.429	0.2566	3.122	0.8833	2.492	14	0.235	70	0.056
0.0733	3.423	0.26	3.119	0.9	2.479	15	0.216	71	0.056
0.0766	3.414	0.2633	3.113	0.9166	2.464	16	0.2	72	0.053
0.08	3.404	0.2666	3.109	0.9333	2.451	17	0.184	73	0.053
0.0833	3.398	0.27	3.106	0.95	2.442	18	0.175	74	0.053
0.0866	3.388	0.2733	3.103	0.9666	2.426	19	0.166	75	0.053
0.09	3.382	0.2766	3.1	0.9833	2.413	20	0.156	76	0.053
0.0933	3.376	0.28	3.094	1	2.404	21	0.147	77	0.056
0.0966	3.37	0.2833	3.091	1.2	2.222	22	0.144	78	0.053
0.1	3.363	0.2866	3.087	1.4	2.091	23	0.134	79	0.056
0.1033	3.354	0.29	3.084	1.6	1.975	24	0.128	80	0.053
0.1066	3.348	0.2933	3.078	1.8	1.865	25	0.125	81	0.053
0.11	3.341	0.2966	3.075	2	1.761	26	0.119	82	0.053
0.1133	3.335	0.3	3.072	2.2	1.667	27	0.115	83	0.05
0.1166	3.329	0.3033	3.066	2.4	1.58	28	0.115	84	0.053
0.12	3.323	0.3066	3.062	2.6	1.501	29	0.109	85	0.053
0.1233	3.316	0.31	3.059	2.8	1.423	30	0.106		
0.1266	3.31	0.3133	3.056	3	1.354	31	0.106		
0.13	3.304	0.3166	3.05	3.2	1.285	32	0.103		
0.1333	3.298	0.32	3.047	3.4	1.225	33	0.1		
0.1366	3.294	0.3233	3.044	3.6	1.166	34	0.097		
0.14	3.288	0,3266	3.04	3.8	1.119	35	0.094		
0.1433	3.282	0.33	3.034	4	1.062	36	0.09		
0.1466	3.276	0.3333	3.031	4.2	1.012	37	0.09		
0.15	3.272	0.35	3.009	4.4	0.971	38	0.09		
0.1533	3.269	0.3666	2.99	4.6	0.927	39	0.087		
0.1566	3.26	0.3833	2.971	4.8	0.887	40	0.084		
0.16	3.254	0.4	2.953	5	0.849	41	0.084		
0.1633	3.254	0.4166	2.931	5.2	0.815	42	0.081		
0.1666	3.244	0.4333	2.918	5.4	0.78	43 44	0.081		
0.17	3.241	0.45	2.893	5.6	0.752		0.078		
0.1733	3.235	0.4666	2.881	5.8	0.721	45 46	0.075 0.075		
0.1766	3.232	0.4833	2.862	6	0.695 0.67	46 47	0.075		
0.18	3.222	0.5	2.843	6.2	0.67	48	0.073		
0.1833	3.219	0.5166	2.827	6.4	0.042	40	0.072		

#### MW25-6 SE1000C Environmental Logger 12/01 09:20

#### Unit# 00001 Test 3

 Reference
 0.000

 Linearity
 0.000

 Scale factor
 9.910

 Offset
 -0.140

 Delay mSEC
 50.000

VARIABLE UNITS
Elapsed Time Minutes
INPUT 1 Drawdown from Static, feet

Step 0 11/30 16:23:53

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	4.703	0.1866	0.583	0.5333	0.292	6.6	0.032	49	0.013
0.0033	1.781	0.19	0.577	0.55	0.286	6.8	0.032	50	0.013
0.0066	0.383	0.1933	0.571	0.5666	0.279	7	0.028	51	0.013
0.01	1.22	0.1966	0.565	0.5833	0.276	7.2	0.028	52	0.013
0.0133	1.668	0.2	0.558	0.6	0.27	7.4	0.028	53	0.013
0.0166	1.229	0.2033	0.555	0.6166	0.267	7.6	0.025	54	0.013
0.02	1.138	0.2066	0.549	0.6333	0.26	7.8	0.025	55	0.013
0.0233	1.242	0.21	0.543	0.65	0.257	8	0.025	56	0.013
0.0266	1.229	0.2133	0.539	0.6666	0.251	8.2	0.025	57	0.013
0.03	1.154	0.2166	0.533	0.6833	0.248	8.4	0.025	58	0.013
0.0333	1.129	0.22	0.527	0.7	0.245	8.6	0.025	59	0.013
0.0366	1.126	0.2233	0.524	0.7166	0.239	8.8	0.025	60	0.013
0.04	1.107	0.2266	0.518	0.7333	0.235	9	0.025	61	0.013
0.0433	1.079	0.23	0.514	0.75	0.232	9.2	0.022	62	0.013
0.0466	1.057	0.2333	0.508	0.7666	0.229	9.4	0.022	63	0.013
0.05	1.041	0.2366	0.505	0.7833	0.226	9.6	0.022	64	0.01
0.0533	1.022	0.24	0.499	0.8	0.223	9.8	0.019	65	0.01
0.0566	1.003	0.2433	0.496	0.8166	0.22	10	0.022	66	0.01
0.06	0.985	0.2466	0.492	0.8333	0.217	11	0.019	67	0.01
0.0633	0.969	0.25	0.486	0.85	0.213	12	0.019	68	0.01
0.0666	0.953	0.2533	0.483	0.8666	0.21	13	0.016	69	0.01
0.07	0.934	0.2566	0.48	0.8833	0.207	14	0.019	70	0.01
0.0733	0.922	0.26	0.477	0.9	0.204	15	0.016	71	0.01
0.0766	0.906	0.2633	0.47	0.9166	0.201	16	0.016		
0.08	0.891	0.2666	0.467	0.9333	0.198	17	0.016		
0.0833	0.878	0.27	0.461	0.95	0.195	18	0.016		
0.0866	0.862	0.2733	0.458	0.9666	0.191	19	0.016		
0.09	0.85	0.2766	0.455	0.9833	0.191	20	0.013		
0.0933	0.837	0.28	0.452	1	0.188	21	0.013		
0.0966	0.825	0.2833	0.449	1.2	0.16	22	0.013		
0.1	0.812	0.2866	0.445	1.4	0.138	23	0.01		
0.1033	0.8	0.29	0.442	1.6	0.126	24	0.01		
0.1066	0.79	0.2933	0.439	1.8	0.113	25	0.01		
0.11	0.778	0.2966	0.436	2	0.104	26	0.01		
0.1133	0.768	0.3	0.433	2.2	0.094	27	0.01		
0.1166	0.756	0.3033	0.43	2.4	0.085	28	0.01		
0.12	0.746	0.3066	0.427	2.6	0.079	29	0.01		
0.1233	0.737	0.31	0.423	2.8	0.072	30	0.007		
0.1266	0.728	0.3133	0.42	3	0.069	31	0.01		
0.13	0.718	0.3166	0.417	3.2	0.069	32	0.007		
0.1333	0.709	0.32	0.414	3.4	0.066	33	0.01		
0.1366	0.699	0.3233	0.411	3.6	0.063	34	0.007		
0.14	0.69	0.3266	0.408	3.8	0.06	35	0.007		
0.1433	0.681	0.33	0.408	4	0.057	36	0.007		
0.1466	0.671	0.3333	0.405	4.2	0.054	37	0.01		
0.15	0.665	0.35	0.389	4.4	0.05	38	0.007		
0.1533	0.655	0.3666	0.38	4.6	0.047	39	0.01		
0.1566	0.649	0.3833	0.367	4.8	0.047	40	0.01		
0.16	0.643	0.4	0.358	5	0.041	41	0.01 0.01		
0.1633	0.634	0.4166	0.348	5.2	0.041	42	0.01		
0.1666	0.627	0.4333	0.336	5.4	0.038	43			
0.17	0.618	0.45	0.326	5.6	0.038	44	0.01		
0.1733	0.612	0.4666	0.32	5.8	0.038	45	0.01		
0.1766	0.605	0.4833	0.314	6	0.035	46	0.013		
0.18	0.599	0.5	0.304	6.2	0.035	47 48	0.01		
0.1833	0.593	0.5166	0.298	6.4	0.032	48	0.013		

MW25-7D SE1000C Environmental Logger 12/01 08:59

Unit# 00001 Test 1

 Reference
 0.000

 Linearity
 0.010

 Scale factor
 9.940

 Offset
 -0.020

 Delay mSEC
 50.000

VARIABLE UNITS Elapsed Time Minutes

INPUT 1 Drawdown from Static, feet

Step 0 11/30 12:41:30

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	2.227	0.1866	4.119	0.5333	4.053	6.6	3.354
0.0033	4.197	0.19	4.119	0.55	4.053	6.8	3.332
0.0066	4.415	0.1933	4.116	0.5666	4.05	7	3.313
0.01	4.32	0.1966	4.116	0.5833	4.046	7.2	3.294
0.0133	4.301	0.2	4.116	0.6	4.043	7.4	3.275
0.0166	4.282	0.2033	4.116	0.6166	4.043	7.6	3.256
0.02	4.254	0.2066	4.113	0.6333	4.04	7.8	3.237
0.0233	4.251	0.21	4.113	0.65	4.037	8	3.218
0.0266	4.241	0.2133	4.113	0.6666	4.034	8.2	3.199
0.03	4.232	0.2166	4.109	0.6833	4.034	8.4	3.18
0.0333	4.229	0.22	4.109	0.7	4.031	8.6	3.162
0.0366	4.207	0.2233	4.109	0.7166	4.027	8.8	3.143
0.04	4.204	0.2266	4.109	0.7333	4.024	9	3.127
0.0433	4.207	0.23	4.106	0.75	4.024	9.2	3.108
0.0466	4.194	0.2333	4.106	0.7666	4.021	9.4	3.092
0.05	4.188	0.2366	4.106	0.7833	4.018	9.6	3.073
0.0533	4.182	0.24	4.103	0.8	4.015	9.8	3.055
0.0566	4.188	0.2433	4.106	0.8166	4.015	10	3.039
0.06	4.185	0.2466	4.103	0.8333	4.012	11	2.951
0.0633	4.175	0.25	4.103	0.85	4.012	12	2.866
0.0666	4.182	0.2533	4.103	0.8666	4.009	13	2.79
0.07	4.175	0.2566	4.103	0.8833	4.005	14	2.711
0.0733	4.169	0.26	4.1	0.9	4.002	15	2.636
0.0766	4.179	0.2633	4.1	0.9166	4.002	16	2.566
0.08	4.166	0.2666	4.1	0.9333	3.999	17	2.5
0.0833	4.16	0.27	4.1	0.95	3.996	18	2.434
0.0866	4.166	0.2733	4.097	0.9666	3.996	19	2.368
0.09	4.166	0.2766	4.097	0.9833	3.993	20	2.308
0.0933	4.153	0.28	4.097	1	3.99	21	2.248
0.0966	4.15	0.2833	4.097	1.2	3.955	22	2.192
0.1	4.153	0.2866	4.097	1.4	3.93	23	2.135
0.1033	4.15	0.29	4.094	1.6	3.905	24	2.082
0.1066	4.153	0.2933	4.094	1.8	3.88	25	2.031
0.11	4.15	0.2966	4.094	2	3.854	26	1.981
0.1133	4.147	0.3	4.094	2.2	3.832	27	1.934
0.1166	4.144	0.3033	4.094	2.4	3.804	28	1.886
0.12	4.144	0.3066 0.31	4.09 4.09	2.6	3.782	29 30	1.842
0.1233 0.1266	4.141 4.141	0.3133	4.09	2.8 3	3.76 3.735	31	1. <b>798</b> 1. <b>75</b> 7
0.1266	4.138	0.3166	4.09	3.2	3.713	32	1.716
0.13	4.138	0.31	4.09	3.4	3.691	33	1.678
0.1366	4.134	0.3233	4.09	3.6	3.669	34	1.641
0.14	4.134	0.3266	4.087	3.8	3.646	35	1.606
0.1433	4.134	0.33	4.087	4	3.621	36	1.568
0.1466	4.131	0.3333	4.087	4.2	3.602	37	1.537
0.15	4.131	0.35	4.084	4.4	3.58	38	1.505
0.1533	4.128	0.3666	4.081	4.6	3.558	39	1.471
0.1566	4.128	0.3833	4.078	4.8	3.536	40	1.442
0.16	4.128	0.4	4.075	5	3.514	41	1.414
0.1633	4.125	0.4166	4.071	5.2	3.495	42	1.383
0.1666	4.125	0.4333	4.068	5.4	3.473	43	1.357
0.17	4.125	0.45	4.068	5.6	3.451	44	1.329
0.1733	4.122	0.4666	4.065	5.8	3.432	45	1.301
0.1766	4.122	0.4833	4.062	6	3.413	46	1.279
0.18	4.122	0.5	4.059	6.2	3.392	47	1.253
0.1833	4.119	0.5166	4.056	6.4	3.373	48	1.231

MW25-7D SE1000C Environmental Logger 12/01 08:59

## Unit# 00001 Test 1

Reference	0.000	VARIABLE	UNITS
Linearity	0.010	Elapsed Time	Minutes
Scale factor	9.940	INPUT 1	Drawdown from Static, feet
Offset	-0.020		
Delay mSEC	50.000		

# Step 0 11/30 12:41:30

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
49	1.209	105	0.642
50	1.184	106	0.639
51	1.162	107	0.636
52	1.143	108	0.63
53	1.124	109	0.627
54	1.105	110	0.623
55	1.086	111	0.62
56	1.071	112	0.617
57	1.052	113	0.617
58	1.036	114	0.614
59	1.017	115	0.611
60	1.002	116	0.608
61	0.989	117	0.608
62	0.973	118	0.605
63	0.96	119	0.602
64	0.945	120	0.598
65	0.932	121	0.595
66	0.92	122	0.592
67	0.907	123	0.592
68	0.894	124	0.589
69	0.885	125	0.586
70	0.872	126	0.586
71	0.863	127	0.583
72	0.85	128	0.583
73	0.841	129	0.579
74	0.831	130	0.579
75 76	0.822	131	0.579
76	0.812	132	0.576
77	0.806	133	0.576
78 79	0.797	134	0.573
80	0.787 0.778	135	0.57
81	0.778		
82	0.772		
83	0.759		
84	0.75		
85	0.743		
86	0.737		
87	0.731		
88	0.724		
89	0.718		
90	0.712		
91	0.709		
92	0.702		•
93	0.696		
94	0.69		
95	0.687		
96	0.68		
97	0.677		
98	0.671		
99	0.665		
100	0.661		
101	0.658		
102	0.655		
103	0.649		
104	0.646		

# MW25-8 Hand-run Slug test with Stopwatch and Electronic Water Level Meter 12/06/95 12:58pm

VARIABLE UNITS Elapsed Time Minutes

INPUT 1 Drawdown from Static, feet

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	1.87	2.3	0.73
0.25	1.63	2.4	0.71
0.28	1.61	2.47	0.69
0.33	1.57	2.55	0.67
0.37	1.53	2.63	0.65
0.4	1.51	2.73	0.63
0.43	1.49	2.82	0.61
0.47	1.47	3.1	0.53
0.5	1.45	3.2	0.51
0.55	1.42	3.28	0.49
0.62	1.39	3.55	0.47
0.63	1.37	3.65	0.45
0.67	1.35	3.78	0.43
0.75	1.31	3.9	0.41
0.82	1.29	4.05	0.39
0.85	1.27	4.2	0.37
0.88	1.25	4.37	0.35
0.92	1.23	4.55	0.33
0.97	1.21	4.75	0.31
1.03	1.19	4.95	0.29
1.1	1.15	5.17	0.27
1.32	1.07	5.45	0.25
1.43	1.01	5.72	0.23
1.55	0.97	6.02	0.21
1.6	0.95	6.35	0.19
1.67	0.93	6.77	0.17
1.72	0.91	7.27	0.15
1.78	0.89	7.8	0.13
1.83	0.87	8.6	0.11
1.9	0.85	9.7	0.09
1.97	0.83	10.8	0.07
2.03	0.81	12.65	0.05
2.08	0.79	16.72	0.03
2.17	0.77	19.33	0.02
2.25	0.75	24.83	0.01

MW25-9 SE1000C Environmental Logger 12/02 22:13

Unit# 00001 Test 12

 Reference
 0.000

 Linearity
 0.010

 Scale factor
 9.940

 Offset
 -0.020

 Delay mSEC
 50.000

VARIABLE Elapsed Time INPUT 1 UNITS
Minutes
Drawdown from Static, feet

Step 0 12/02 16:57:21

Elapsed Time	INPUT 1	Elapsed Time	INPUT I	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	3.852	0.1833	1.849	0.5	1.776	6	0.959
0.0033	2.179	0.1866	1.849	0.5166	1.77	6.2	0.94
0.0066	1.943	0.19	1.849	0.5333	1.767	6.4	0.918
0.01	1.908	0.1933	1.846	0.55	1.764	6.6	0.899
0.0133	1.949	0.1966	1.846	0.5666	1.761	6.8	0.88
0.0166	1.94	0.2	1.846	0.5833	1.758	7	0.861
0.02	1.934	0.2033	1.842	0.6	1.754	7.2	0.842
0.0233	1.915	0.2066	1.842	0.6166	1.751	7.4	0.827
0.0266	1.921	0.21	1.842	0.6333	1.745	7.6	0.808
0.03	1.912	0.2133	1.842	0.65	1.742	7.8	0.792
0.0333	1.912	0.2166	1.839	0.6666	1.739	8	0.773
0.0366	1.908	0.22	1.839	0.6833	1.736	8.2	0.757
0.04	1.905	0.2233	1.839	0.7	1.732	8.4	0.742
0.0433	1.902	0.2266	1.839	0.7166	1.729	8.6	0.726
0.0466	1.899	0.23	1.836	0.7333	1.726	8.8	0.71
0.05	1.899	0.2333	1.836	0.75	1.723	9	0.698
0.0533	1.896	0.2366	1.836	0.7666	1.72	9.2	0.682
0.0566	1.893	0.24	1.836	0.7833	1.717	9.4	0.669
0.06	1.89	0.2433	1.833	0.8	1.714	9.6	0.654
0.0633	1.89	0.2466	1.833	0.8166	1.71	9.8	0.641
0.0666	1.886	0.25	1.833	0.8333	1.707	10	0.625
0.07	1.871	0.2533	1.833	0.85	1.704	11	0.565
0.0733	1.877	0.2566	1.83	0.8666	1.701	12	0.509
0.0766	1.883	0.26	1.83	0.8833	1.695	13	0.459
0.08	1.88	0.2633	1.83	0.9	1.692	14	0.418
0.0833	1.88	0.2666	1.827	0.9166	1.692	15	0.377
0.0866	1.88	0.27	1.827	0.9333	1.685	16	0.342
0.09	1.877	0.2733	1.827	0.95	1.682	17	0.314
0.0933	1.877	0.2766	1.827	0.9666	1.682	18	0.286
0.0966	1.874	0.28	1.824	0.9833	1.676	19	0.26
0.1	1.874	0.2833	1.824	1	1.673	20	0.238
0.1033	1.874	0.2866	1.824	1.2	1.629	21	0.219
0.1066	1.871	0.29	1.824	1.4	1.594	22	0.204
0.11	1.871	0.2933	1.82	1.6	1.556	23	0.188
0.1133	1.868	0.2966	1.82	1.8	1.522	24	0.175
0.1166	1.868	0.3	1.82	2	1.487	25	0.163
0.12	1.868	0.3033	1.82	2.2	1.456	26	0.15
0.1233	1.868	0.3066	1.82	2.4	1.421	27	0.144
0.1266	1.864	0.31	1.817	2.6	1.39	28	0.135
0.13	1.864	0.3133	1.817	2.8	1.361	29	0.128
0.1333	1.864	0.3166	1.817	3	1.33	30	0.122
0.1366	1.861	0,32	1.814	3.2	1.301	31	0.116
0.14	1.861	0.3233	1.814	3.4	1.273	32	0.109
0.1433	1.861	0.3266	1.814	3.6	1.245	33	0.106
0.1466	1.861	0.33	1.814	3.8	1.22	34	0.1
0.15	1.858	0.3333	1.811	4	1.191	35	0.097
0.1533	1.858	0.35	1.808	4.2	1.166	36	0.094
0.1566	1.855	0.3666	1.805	4.4	1.141	37	0.094
0.16	1.855	0.3833	1.802	4.6	1.116	38	0.09
0.1633	1.855	0.4	1.798	4.8	1.094	39	0.087
0.1666	1.855	0.4166	1.792	5	1.069	40	0.087
0.17	1.852	0.4333	1.789	5.2	1.047	41	0.084
0.1733	1.852	0.45	1.786	5.4	1.025	42	0.084
0.1766	1.852	0.4666	1.783	5.6	1.003	43	0.081
0.18	1.849	0.4833	1.78	5.8	0.981	44	0.081
0.10							

MW26-9 SE1000C Environmental Logger 12/02 22:13

Unit# 00001 Test 12

Reference	0.000
Linearity	0.010
Scale factor	9.940
Offset	-0.020
Delay mSEC	50.000

VARIABLE UNITS
Elapsed Time Minutes
INPUT 1 Drawdown from Static, feet

Step 0 12/02 16:57:21

Elapsed Time	INPUT 1
45	0.081
46	0.081
47	0.078
48	0.078
49	0.078
50	0.081
51	0.078
52	0.078
53	0.078

MW25-10 Hand-run Slug test with Stopwatch and Electronic Water Level Meter 12/06/95 11:21am

VARIABLE Elapsed Time INPUT 1 UNITS Minutes Drawdown from Static, feet

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0.10	1 60	4.0	0.66
0.18	1.58 1.45	4.8	0.66
0.25		5.7	0.64
0.3	1.4	6.42	0.62
0.37	1.28	7.32	0.6
0.43	1.23	8.42	0.58
0.53	1.1	9.05	0.54
0.6	1.06	9.73	0.52
0.7	1	10.1	0.5
0.77	0.96	10.67	0.48
0.82	0.94	11.23	0.46
0.87	0.92	11.87	0.44
0.92	0.9	12.18	0.42
1.02	0.88	12.97	0.4
1.08	0.86	13.73	0.38
1.22	0.84	14.43	0.36
1.38	0.82	15.22	0.34
1.6	0.8	16.05	0.32
1.87	0.78	16.92	0.3
2.03	0.76	17.95	0.28
2.57	0.74	19.13	0.26
3	0.72	20.33	0.24
3.43	0.7	21.65	0.22
4.07	0.68		

#### MW25-11 SE1000C Environmental Logger 12/03 17:09

Unit# 00001 Test 15

 Reference
 0.000

 Linearity
 0.000

 Scale factor
 9.910

 Offset
 -0.140

 Delay mSEC
 50.000

VARIABLE Elapsed Time INPUT 1 UNITS Minutes Drawdown from Static, feet

Step 0 12/03 14:25:01

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	1.953	0.1833	1.667	0.5	1.498	6	0.3
0.0033	1.896	0.1866	1.664	0.5166	1.489	6.2	0.285
0.0066	1.884	0.19	1.664	0.5333	1.482	6.4	0.272
0.01	1.877	0.1933	1.661	0.55	1.476	6.6	0.26
0.0133	1.865	0.1966	1.658	0.5666	1.467	6.8	0.247
0.0166	1.855	0.2	1.655	0.5833	1.457	7	0.238
0.02	1.846	0.2033	1.655	0.6	1.451	7.2	0.222
0.0233	1.837	0.2066	1.652	0.6166	1.442	7.4	0.213
0.0266	1.83	0.21	1.652	0.6333	1.435	7.6	0.203
0.03	1.818	0.2133	1.649	0.65	1.429	7.8	0.194
0.0333	1.83	0.2166	1.645	0.6666	1.423	8	0.181
0.0366	1.815	0.22	1.645	0.6833	1.413	8.2	0.175
0.04	1.808	0.2233	1.642	0.7	1.407	8.4	0.166
0.0433	1.802	0.2266	1.639	0.7166	1.401	8.6	0.159
0.0466	1.799	0.23	1.639	0.7333	1.391	8.8	0.153
0.05	1.793	0.2333	1.636	0.75	1.385	9	0.147
0.0533	1.79	0.2366	1.636	0.7666	1.379	9.2	0.137
0.0566	1.783	0.24	1.633	0.7833	1.373	9.4	0.134
0.06	1.78	0.2433	1.63	0.8	1.366	9.6	0.128
0.0633	1.774	0.2466	1.63	0.8166	1.36	9.8	0.125
0.0666	1.771	0.25	1.627	0.8333	1.351	10	0.119
0.07	1.768	0.2533	1.623	0.85	1.344	11	0.097
0.0733	1.761	0.2566	1.623	0.8666	1.338	12	0.084
0.0766	1.758	0.26	1.62	0.8833	1.332	13	0.072
0.08	1.755	0.2633	1.617	0.9	1.322	14	0.062
0.0833	1.752	0.2666	1.617	0.9166	1.316	15	0.056
0.0866	1.749	0.27	1.614	0.9333	1.31	16	0.05
0.09	1.746	0.2733	1.614	0.95	1.304	17	0.043
0.0933	1.743	0.2766	1.611	0.9666	1.297	18	0.04
0.0966	1.736	0.28	1.611	0.9833	1.294	19	0.04
0.1	1.733	0.2833	1.608	1	1.288	20	0.037
0.1033	1.733	0.2866	1.605	1.2	1.2	21	0.034
0.1066	1.727	0.29	1.605	1.4	1.131	22	0.034
0.11	1.724	0.2933	1.601	1.6	1.062	23	0.034
0.1133	1.721	0.2966	1.601	1.8	1.003	24	0.031
0.1166	1.717	0.3	1.598	2	0.946	25	0.031
0.12	1.714	0.3033	1.598	2.2	0.893	26	0.031
0.1233	1.711	0.3066	1.595	2.4	0.843	27	0.031
0.1266	1.708	0.31	1.595	2.6	0.793	28	0.031
0.13	1.708	0.3133	1.592	2.8	0.755	29	0.031
0.1333	1.705	0.3166	1.589	3	0.708	30	0.031
0.1366	1.702	0.32	1.589	3.2	0.667	31	0.025
0.14	1.699	0.3233	1.586	3.4	0.627	32	0.021
0.1433	1.696	0.3266	1.586	3.6	0.592	33	0.021
0.1466	1.692	0.33	1.583	3.8	0.561		
0.15	1.692	0.3333	1.583	4	0.529		
0.1533	1.689	0.35	1.573 1.564	4.2	0.501 0.473		
0.1566	1.686	0.3666		4.4			
0.16	1.683	0.3833	1.554	4.6	0.445		
0.1633	1.68	0.4	1.548	4.8	0.423		
0.1666	1.677	0.4166	1.539	5	0.398		
0.17	1.677	0.4333	1.529	5.2	0.379		
0.1733	1.674	0.45	1.52	5.4	0.357		
0.1766	1.674	0.4666	1.514	5.6	0.338		
0.18	1.67	0.4833	1.504	5.8	0.322		

#### MW25-12D SE1000C Environmental Logger 12/01 09:26

## Unit# 00001 Test 4

 Reference
 0.000

 Linearity
 0.010

 Scale factor
 9.940

 Offset
 -0.020

 Delay mSEC
 50.000

VARIABLE Elapsed Time INPUT 1 UNITS
Minutes
Drawdown from Static, feet

# Step 0 12/01 07:37:45

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	6.092	0.1866	2.597	0.5333	1.719	6.6	0.229
0.0033	3.715	0.19	2.585	0.55	1.69	6.8	0.226
0.0066	3.633	0.1933	2.572	0.5666	1.659	7	0.223
0.01	3.592	0.1966	2.563	0.5833	1.631	7.2	0.217
0.0133	3.526	0.2	2.55	0.6	1.606	7.4	0.214
0.0166	3.495	0.2033	2.541	0.6166	1.577	7.6	0.21
	3.466	0.2066	2.528	0.6333	1.552	7.8	0.207
0.02		0.21	2.515	0.65	1.527	8	0.201
0.0233	3.441	0.2133	2.506	0.6666	1.502	8.2	0.201
0.0266	3.391	0.2166	2.497	0.6833	1.476	8.4	0.198
0.03	3.365		2.497	0.7	1.454	8.6	0.195
0.0333	3.381	0.22		0.7166	1.432	8.8	0.193
0.0366	3.337	0.2233	2.474		1.432	9	0.192
0.04	3.328	0.2266	2.462	0.7333 0.75	1.388	9.2	0.185
0.0433	3.302	0.23	2.453		1.366	9.4	0.183
0.0466	3.277	0.2333	2.443	0.7666			
0.05	3.246	0.2366	2.434	0.7833	1.347	9.6	0.182
0.0533	3.233	0.24	2.421	0.8	1.328	9.8	0.179
0.0566	3.199	0.2433	2.411	0.8166	1.306	10	0.176
0.06	3.174	0.2466	2.402	0.8333	1.288	11	0.166
0.0633	3.155	0.25	2.393	0.85	1.272	12	0.157
0.0666	3.139	0.2533	2.383	0.8666	1.253	13	0.148
0.07	3.12	0.2566	2.374	0.8833	1.237	14	0.144
0.0733	3.101	0.26	2.361	0.9	1.221	15	0.138
0.0766	3.082	0.2633	2.352	0.9166	1.202	16	0.132
0.08	3.066	0.2666	2.342	0.9333	1.187	17	0.129
0.0833	3.051	0.27	2.333	0.95	1.168	18	0.122
0.0866	3.032	0.2733	2.327	0.9666	1.152	19	0.119
0.09	3.016	0.2766	2.314	0.9833	1.139	20	0.119
0.0933	3	0.28	2.304	1	1.124	21	0.113
0.0966	2.985	0.2833	2.295	1.2	0.932	22	0.113
0.1	2.969	0.2866	2.286	1.4	0.818	23	0.11
0.1033	2.953	0.29	2.279	1.6	0.73	24	0.107
0.1066	2.937	0.2933	2.27	1.8	0.658	25	0.103
0.11	2.922	0.2966	2.26	2	0.598	26	0.103
0.1133	2.909	0.3	2.251	2.2	0.554	27	0.1
0.1166	2.893	0.3033	2.241	2.4	0.51	28	0.097
0.12	2.878	0.3066	2.235	2.6	0.475	29	0.097
0.1233	2.865	0.31	2.226	2.8	0.447	30	0.094
0.1266	2.849	0.3133	2.216	3	0.421	31	0.094
0.13	2.837	0.3166	2.207	3.2	0.403	32	0.094
0.1333	2.824	0.32	2.201	3.4	0.384	33	0.091
0.1366	2.808	0.3233	2.191	3.6	0.368	34	0.091
0.14	2.796	0.3266	2.182	3.8	0.352	35	0.088
0.1433	2.783	0.33	2.175	4	0.337	36	0.088
0.1466	2.77	0.3333	2.166	4.2	0.324		
0.15	2.758	0.35	2.122	4.4	0.314		
0.1533	2.745	0.3666	2.078	4.6	0.302		
0.1566	2.726	0.3833	2.037	4.8	0.292		
0.16	2.72	0.4	1.996	5	0.283		
0.1633	2.704	0.4166	1.958	5.2	0.274		
0.1666	2.692	0.4333	1.92	5.4	0.267		
0.17	2.679	0.45	1.886	5.6	0.261		
0.1733	2.663	0.4666	1.851	5.8	0.251		
0.1766	2.651	0.4833	1.816	6	0.248		
0.18	2.635	0.5	1.782	6.2	0.242		
0.1833	2.61	0.5166	1.75	6.4	0.236		
0.1000							

MW25-13 Hand-run Slug test with Stopwatch and Electronic Water Level Meter 12/04/95 1:49pm

VARIABLE Elapsed Time INPUT 1 UNITS Minutes

Drawdown from Static, feet

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0.17	1.95	2.38	0.83	5.82	0.35
0.27	1.54	2.47	0.81	5.98	0.34
0.45	1.45	2.55	0.79	6.22	0.32
0.5	1.43	2.65	0.77	6.37	0.31
0.62	1.37	2.73	0.75	6.55	0.3
0.68	1.35	2.85	0.73	6.7	0.29
0.73	1.33	2.93	0.71	6.85	0.28
0.77	1.31	3.07	0.69	6.98	0.27
0.82	1.29	3.17	0.67	7.15	0.26
0.87	1.27	3.27	0.65	7.27	0.25
0.93	1.25	3.4	0.63	7.53	0.24
1	1.23	3.5	0.61	7.68	0.23
1.03	1.21	3.63	0.59	7.95	0.22
1.1	1.19	3.77	0.57	8.15	0.21
1.15	1.17	3.9	0.55	8.52	0.2
1.22	1.15	4.07	0.53	8.7	0.19
1.3	1.13	4.23	0.51	8.95	0.18
1.33	1.11	4.32	0.5	9.3	0.17
1.4	1.09	4.38	0.49	9.52	0.16
1.43	1.07	4.48	0.48	9.78	0.15
1.52	1.05	4.55	0.47	10.63	0.13
1.58	1.03	4.65	0.46	11.15	0.12
1.67	1.01	4.75	0.45	11.7	0.11
1.72	0.99	4.85	0.44	12.42	0.09
1.82	0.97	4.93	0.43	14.5	0.07
1.88	0.95	5.05	0.42	16.98	0.05
1.95	0.93	5.23	0.4	18.53	0.04
2.03	0.91	5.35	0.39	20.93	0.03
2.12	0.89	5.48	0.38	25.6	0.02
2.18	0.87	5.58	0.37	27.97	0.01
2.27	0.85	5.68	0.36	41	0.01

MW25-14D SE1000C Environmental Logger 12/01 18:33

Unit# 00001 Test 6

 Reference
 0.000

 Linearity
 0.000

 Scale factor
 9.920

 Offset
 -0.140

 Delay mSEC
 50.000

VARIABLE Elapsed Time INPUT 1 UNITS
Minutes
Drawdown from Static, feet

Step 0 12/01 12:56:23

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	7.478	0.1866	3.094	0.5333	2.394	6.6	0.225
0.0033	5.25	0.19	3.084	0.55	2.366	6.8	0.219
0.0066	3.36	0.1933	3.075	0.5666	2.337	7	0.213
0.01	3.834	0.1966	3.069	0.5833	2.312	7.2	0.207
0.0133	3.775	0.2	3.059	0.6	2.284	7.4	0.2
0.0166	3.756	0.2033	3.053	0.6166	2.259	7.6	0.194
0.02	3.696	0.2066	3.044	0.6333	2.234	7.8	0.194
0.0233	3.649	0.21	3.037	0.65	2.209	8	0.185
0.0266	3.646	0.2133	3.028	0.6666	2.184	8.2	0.182
0.03	3.621	0.2166	3.022	0.6833	2.159	8.4	0.175
0.0333	3.608	0.22	3.012	0.7	2.133	8.6	0.172
0.0366	3.615	0.2233	3.006	0.7166	2.112	8.8	0.172
0.04	3.593	0.2266	2.996	0.7333	2.086	9	0.166
0.0433	3.574	0.23	2.99	0.75	2.064	9.2	0.163
0.0466	3.555	0.2333	2.981	0.7666	2.042	9.4	0.16
0.05	3.596	0.2366	2.974	0.7833	2.021	9.6	0.16
0.0533	3.674	0.24	2.968	0.8	1.999	9.8	0.153
0.0566	3.477	0.2433	2.959	0.8166	1.977	10	0.153
0.06	3.495	0.2466	2.953	0.8333	1.955	11	0.147
0.0633	3.521	0.25	2.946	0.85	1.933	12	0.134
0.0666	3.401	0.2533	2.94	0.8666	1.914	13	0.128
0.07	3.442	0.2566	2.931	0.8833	1.892	14	0.122
0.0733	3.426	0.26	2.924	0.9	1.873	15	0.119
0.0766	3.401	0.2633	2.918	0.9166	1.851	16	0.113
0.08	3.389	0.2666	2.909	0.9333	1.832	17	0.109
0.0833	3.379	0.27	2.902	0.95	1.813	18	0.106
0.0866	3.367	0.2733	2.896	0.9666	1.795	19	0.106 0.103
0.09	3.357	0.2766	2.89	0.9833	1.776	20 21	0.103
0.0933	3.348	0.28	2.88	1	1.757	22	0.1
0.0966	3.335	0.2833	2.874	1.2 1.4	1.496 1.33	23	0.097
0.1	3.326	0.2866 0.29	2.868 2.862	1.6	1.189	23	0.097
0.1033	3.317	0.2933	2.855	1.8	1.07		
0.1066	3.307 3.295	0.2966	2.833	2	0.96		
0.11 0.1133	3.295	0.3	2.84	2.2	0.872		
0.1166	3.276	0.3033	2.833	2.4	0.794		
0.12	3.266	0.3066	2.827	2.6	0.721		
0.1233	3.257	0.31	2.821	2.8	0.665		
0.1266	3.248	0.3133	2.814	3	0.608		
0.13	3.238	0.3166	2.808	3.2	0.561		
0.1333	3.229	0.32	2.799	3.4	0.517		
0.1366	3.219	0.3233	2.796	3.6	0.483		
0.14	3.21	0.3266	2.786	3.8	0.451		
0.1433	3.204	0.33	2.78	4	0.423		
0.1466	3.194	0.3333	2.774	4.2	0.398		
0.15	3.185	0.35	2.739	4.4	0.376		
0.1533	3.175	0.3666	2.705	4.6	0.354		
0.1566	3.166	0.3833	2.67	4.8	0.335		
0.16	3.16	0.4	2.636	5	0.316		
0.1633	3.15	0.4166	2.604	5.2	0.301		
0.1666	3.141	0.4333	2.573	5.4	0.288		
0.17	3.131	0.45	2.541	5.6	0.276		
0.1733	3.125	0.4666	2.51	5.8	0.263 0.254		
0.1766	3.116	0.4833	2.479	6 6.2	0.234		
0.18	3.109	0.5	2.45	6.4	0.244		
0.1833	3.1	0.5166	2.422	0.4	0.233		

MW25-15 SE1000C Environmental Logger 12/02 22:25

Unit# 00001 Test 9

Reference 0.000 VARIABLE UNITS
Linearity 0.000 Elapsed Time Minutes
Scale factor 9.910 INPUT 1 Drawdown from Static, feet

Scale factor	9.910
Offset	-0.140
Delay mSEC	50.000

Step 0 12/02 08:43:36

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	2.307	0.1866	1.658	0.5333	1.589
0.0033	3.887	0.19	1.658	0.55	1.589
0.0066	2.028	0.1933	1.658	0.5666	1.586
0.01	1.765	0.1966	1.655	0.5833	1.583
0.0133	1.802	0.2	1.652	0.6	1.583
0.0166	1.802	0.2033	1.652	0.6166	1.58
0.02	1.777	0.2066	1.652	0.6333	1.58
0.0233	1.777	0.21	1.649	0.65	1.58
0.0266	1.768	0.2133	1.649	0.6666	1.576
0.03	1.739	0.2166	1.649	0.6833	1.576
0.0333	1.755	0.22	1.645	0.7	1.576
0.0366	1.755	0.2233	1.645	0.7166	1.573
0.04	1.749	0.2266	1.645	0.7333	1.576
0.0433	1.746	0.23	1.645	0.75	1.573
0.0466	1.743	0.2333	1.642	0.7666	1.57
0.05	1.739	0.2366	1.642	0.7833	1.57
0.0533	1.733	0.24	1.642	0.8	1.573
0.0566	1.733	0.2433	1.639	0.8166	1.57
0.06	1.73	0.2466	1.639	0.8333	1.57
0.0633	1.727	0.25	1.636	0.85	1.567
0.0666	1.724	0.2533	1.636	0.8666	1.567
0.07	1.721	0.2566	1.636	0.8833	1.564
0.0733	1.718	0.26	1.636	0.9	1.564
0.0766	1.718	0.2633	1.633	0.9166	1.57
0.08	1.714	0.2666	1.633	0.9333	1.564
0.0833	1.711	0.27	1.633	0.95	1.564
0.0866	1.708	0.2733	1.633	0.9666	1.561
0.09	1.708	0.2766	1.63	0.9833	1.561
0.0933	1.705	0.28	1.63	1	1.561
0.0966	1.702	0.2833	1.63	1.2	1.554
0.1	1.702	0.2866	1.627	1.4	1.548
0.1033	1.699	0.29	1.627	1.6	1.545
0.1066	1.696	0.2933	1.627	1.8	1.539
0.11	1.696	0.2966	1.627	2	1.533
0.1133	1.692	0.3	1.627	2.2	1.529
0.1166	1.692	0.3033	1.623	2.4	1.526
0.12	1.689	0.3066	1.623	2.6	1.523
0.1233	1.689	0.31	1.623	2.8	1.517
0.1266	1.686	0.3133	1.62	3	1.514
0.13	1.683	0.3166	1.62	3.2	1.507
0.1333	1.683	0.32	1.62	3.4	1.504
0.1366	1.68	0.3233	1.62	3.6	1.504
0.14	1.68	0.3266	1.62	3.8	1.498
0.1433	1.677	0.33	1.617	4	1.492
0.1466	1.677	0.3333	1.617	4.2	1.489
0.15	1.677	0.35	1.617	4.4	1.482
0.1533	1.674	0.3666	1.614	4.6	1.479
0.1566	1.67	0.3833	1.611	4.8	1.476
0.16	1.67	0.4	1.608	5	1.473
0.1633	1.667	0.4166	1.605	5.2	1.473
0.1666	1.667	0.4333	1.602	5.4 5.6	1.467
0.17	1.667	0.45	1.598		1.46
0.1733	1.664	0.4666	1.598	5.8 6	1.457 1.457
0.1766	1.664	0.4833	1.595	6.2	1.457
0.18	1.661	0.5	1.592 1.595	6.4	1.448
0.1833	1.661	0.5166	1.333	0.4	1.440

MW25-15 SE1000C Environmental Logger 12/02 22:25

Unit# 00001 Test 9

Reference 0.000 VARIABLE UNITS
Linearity 0.000 Elapsed Time Minutes
Scale factor 9.910 INPUT 1 Drawdown from Static, feet
Offset -0.140
Delay mSEC 50.000

Sten 0 12/02 08:43:36

Step U 12	J02 0	5:45:50
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Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT I
6.6	1.445	49	0.871	105	0.451
6.8	1.442	50	0.865	106	0.451
7	1.438	51	0.855	107	0.448
7.2	1.432	52	0.843	108	0.442
7.4	1.429	53	0.833	109	0.442
7.6	1.426	54	0.824	110	0.435
7.8	1.423	55	0.815	111	0.429
8	1.42	56	0.805	112	0.426
8.2	1.417	57	0.796	113	0.416
8.4	1.413	58	0.786	114	0.413
8.6	1.407	59	0.777	115	0.41
8.8 9	1.407	60 61	0.768	116	0.404
9.2	1.401 1.398	62	0.758 0.752	117 118	0.401 0.395
9.4	1.395	63	0.732	116	0.393
9.6	1.391	64	0.733		
9.8	1.388	65	0.724		
10	1.388	66	0.714		
11	1.37	67	0.708		
12	1.354	68	0.699		
13	1.335	69	0.689		
14	1.319	70	0.683		
15	1.304	71	0.674		
16	1.291	72	0.667		
17	1.275	73	0.658		
18	1.26	74	0.655		
19	1.247	75	0.645		
20	1.232	76	0.639		
21	1.216	77	0.633		
22	1.203	78	0.623		
23 24	1.191	79 <b>8</b> 0	0.617		
25	1.175 1.163	81	0.608 0.601		
26	1.147	82	0.595		
27	1.134	83	0.586		
28	1.119	84	0.579		
29	1.109	85	0.57		
30	1.097	86	0.567		
31	1.084	87	0.561		
32	1.069	88	0.554		
33	1.056	89	0.548		
34	1.043	90	0.542		
35	1.031	91	0.536		
36	1.018	92	0.529		
37	1.009	93	0.523		
38	0.996	94	0.517		
39	0.987	95 96	0.511		
40	0.971	96 97	0.504 0.501		
41 42	0.959 0.949	98	0.301		
42	0.949	99	0.492		
44	0.927	100	0.485		
45	0.915	101	0.479		
46	0.906	102	0.473		
47	0.893	103	0.47		
48	0.884	104	0.457		

MW25-16D SE1000C Environmental Logger 12/01 18:36

Unit# 00001 Test 5

 Reference
 0.000

 Linearity
 0.010

 Scale factor
 9.940

 Offset
 -0.020

 Delay mSEC
 50.000

VARIABLE Elapsed Time INPUT 1 UNITS
Minutes
Drawdown from Static, feet

Step 0 12/01 11:02:30

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	7.297	0.1866	2.94	0.5333	2.32	6.6	0.519
0.0033	2.818	0.19	2.934	0.55	2.298	6.8	0.507
0.0066	3.68	0.1933	2.925	0.5666	2.273	7	0.497
0.01	3.605	0.1966	2.918	0.5833	2.251	7.2	0.488
0.0133	3.57	0.2	2.909	0.6	2.229	7.4	0.475
0.0166	3.538	0.2033	2.903	0.6166	2.21	7.6	0.469
0.02	3.586	0.2066	2.893	0.6333	2.188	7.8	0.456
0.0233	3.494	0.21	2.887	0.65	2.169	8	0.45
0.0266	3.476	0.2133	2.88	0.6666	2.147	8.2	0.44
0.03	3.453	0.2166	2.871	0.6833	2.128	8.4	0.431
0.0333	3.428	0.22	2.865	0.7	2.109	8.6	0.425
0.0366	3.409	0.2233	2.859	0.7166	2.09	8.8	0.415
0.0366	3.397	0.2266	2.852	0.7333	2.071	9	0.409
0.0433	3.381	0.23	2.843	0.75	2.052	9.2	0.403
0.0455	3.365	0.2333	2.836	0.7666	2.037	9.4	0.393
0.05	3.35	0.2366	2.83	0.7833	2.018	9.6	0.39
0.0533	3.337	0.24	2.824	0.8	2.002	9.8	0.384
0.0566	3.324	0.2433	2.818	0.8166	1.983	10	0.374
0.06	3.312	0.2466	2.811	0.8333	1.968	11	0.349
0.0633	3.299	0.25	2.805	0.85	1.952	12	0.321
0.0666	3.287	0.2533	2.796	0.8666	1.936	13	0.302
0.000	3.274	0.2566	2.789	0.8833	1.92	14	0.283
0.0733	3.265	0.26	2.783	0.9	1.905	15	0.267
0.0766	3.252	0.2633	2.777	0.9166	1.889	16	0.252
	3.236	0.2666	2.77	0.9333	1.873	17	0.242
0.08	3.227	0.27	2.764	0.95	1.861	18	0.229
0.0833 0.0866	3.214	0.2733	2.758	0.9666	1.845	19	0.217
	3.205	0.2766	2.752	0.9833	1.829	20	0.207
0.09	3.192	0.28	2.745	1	1.816	21	0.198
0.0933	3.192	0.2833	2.743	1.2	1.621	22	0.192
0.0966 0.1	3.173	0.2866	2.729	1.4	1.492	23	0.182
	3.173	0.29	2.726	1.6	1.385	24	0.176
0.1033	3.154	0.2933	2.72	1.8	1.287	25	0.166
0.1066	3.134	0.2966	2.72	2	1.206	26	0.16
0.11	3.136	0.3	2.707	2.2	1.133	27	0.154
0.1133	3.126	0.3033	2.701	2.4	1.07	28	0.151
0.1166	3.117	0.3066	2.695	2.6	1.013	29	0.144
0.12	3.117	0.31	2.689	2.8	0.963	30	0.141
0.1233	3.098	0.3133	2.682	3	0.916	31	0.135
0.1266 0.13	3.088	0.3166	2.676	3.2	0.875	32	0.135
0.1333	3.079	0.32	2.67	3.4	0.84	33	0.129
0.1366	3.073	0.3233	2.663	3.6	0.803	34	0.126
	3.063	0.3266	2.657	3.8	0.771	35	0.119
0.14	3.054	0.33	2.651	4	0.746	36	0.116
0.1433		0.3333	2.648	4.2	0.721	37	0.116
0.1466	3.044	0.35	2.616	4.4	0.696	38	0.11
0.15	3.035	0.3666	2.585	4.6	0.673	39	0.11
0.1533	3.022 3.016	0.3833	2.553	4.8	0.651	40	0.107
0.1566		0.3633	2.525	5	0.633	10	0.10
0.16	3.006	0.4166	2.496	5.2	0.617		
0.1633	2.997	0.4333	2.490	5.4	0.601		
0.1666	2.991	0.4333	2.443	5.6	0.588		
0.17	2.981	0.4666	2.443	5.8	0.573		
0.1733	2.975		2.418	6	0.56		
0.1766	2.966	0.4833	2.393	6.2	0.50		
0.18	2.959	0.5	2.345	6.4	0.529		
0.1833	2.95	0.5166	2.343	0.4	0.125		

#### MW25-17 SE1000C Environmental Logger 12/03 11:11

Unit# 00001 Test 14

 Reference
 0.000

 Linearity
 0.010

 Scale factor
 9.940

 Offset
 -0.020

 Delay mSEC
 50.000

VARIABLE Elapsed Time INPUT 1 UNITS Minutes Drawdown from Static, feet

Step 0 12/03 09:18:55

0.0033         2.576         0.19         1.566         0.55         1.406         6           0.0066         7.592         0.1933         1.566         0.5666         1.399           0.01         -3.184         0.1966         1.563         0.5833         1.396         7           0.0133         2.406         0.2         1.56         0.6         1.393         7           0.0166         3.271         0.2033         1.56         0.6166         1.387         7           0.02         0.066         0.2066         1.557         0.6333         1.377         7           0.0233         2.891         0.21         1.557         0.65         1.371           0.0266         1.384         0.2133         1.557         0.6666         1.365         8           0.03         1.579         0.2166         1.554         0.6833         1.362         8           0.0333         2.057         0.22         1.55         0.7         1.352         8	5.8 (7 7.2 (6) 7.4 (6) 7.6 (7) 7.8 (6) 8 (7) 8 (	0.324 0.311 0.298 0.286 0.273 0.264 0.254 0.248 0.232 0.223
0.0033         2.576         0.19         1.566         0.55         1.406         6           0.0066         7.592         0.1933         1.566         0.5666         1.399           0.01         -3.184         0.1966         1.563         0.5833         1.396         7           0.0133         2.406         0.2         1.56         0.6         1.393         7           0.0166         3.271         0.2033         1.56         0.6166         1.387         7           0.02         0.066         0.2066         1.557         0.6333         1.377         7           0.0233         2.891         0.21         1.557         0.65         1.371         0.0266         1.384         0.2133         1.557         0.6666         1.365         8           0.03         1.579         0.2166         1.554         0.6833         1.362         8           0.0333         2.057         0.22         1.55         0.7         1.352         8	5.8 (c) 7 (c) 7.2 (c) 7.2 (c) 7.4 (c) 7.6 (c) 7.8 (c) 8 (c) 8.4 (c) 8.6 (c) 8.6 (c) 9.8 (c) 9.	0.311 0.298 0.286 0.273 0.264 0.254 0.248 0.232 0.223
0.0066     7.592     0.1933     1.566     0.5666     1.399       0.01     -3.184     0.1966     1.563     0.5833     1.396     7       0.0133     2.406     0.2     1.56     0.6     1.393     7       0.0166     3.271     0.2033     1.56     0.6166     1.387     7       0.02     0.066     0.2066     1.557     0.6333     1.377     7       0.0233     2.891     0.21     1.557     0.65     1.371       0.0266     1.384     0.2133     1.557     0.6666     1.365     8       0.03     1.579     0.2166     1.554     0.6833     1.362     8       0.0333     2.057     0.22     1.55     0.7     1.352     8	7 (0.7.2 (0.7.4 (0.7.6 (0.7.8	0.298 0.286 0.273 0.264 0.254 0.248 0.232 0.223
0.01     -3.184     0.1966     1.563     0.5833     1.396     7       0.0133     2.406     0.2     1.56     0.6     1.393     7       0.0166     3.271     0.2033     1.56     0.6166     1.387     7       0.02     0.066     0.2066     1.557     0.6333     1.377     7       0.0233     2.891     0.21     1.557     0.65     1.371       0.0266     1.384     0.2133     1.557     0.6666     1.365     8       0.03     1.579     0.2166     1.554     0.6833     1.362     8       0.0333     2.057     0.22     1.55     0.7     1.352     8	7.2 0 7.4 0 7.6 0 7.8 0 8 0 3.2 0 3.4 0	0.286 0.273 0.264 0.254 0.248 0.232 0.223
0.0133     2.406     0.2     1.56     0.6     1.393     7       0.0166     3.271     0.2033     1.56     0.6166     1.387     7       0.02     0.066     0.2066     1.557     0.6333     1.377     7       0.0233     2.891     0.21     1.557     0.65     1.371       0.0266     1.384     0.2133     1.557     0.6666     1.365     8       0.03     1.579     0.2166     1.554     0.6833     1.362     8       0.0333     2.057     0.22     1.55     0.7     1.352     8	7.4 0 7.6 0 7.8 0 8 0 3.2 0 3.4 0	0.273 0.264 0.254 0.248 0.232 0.223
0.0166     3.271     0.2033     1.56     0.6166     1.387     7       0.02     0.066     0.2066     1.557     0.6333     1.377     7       0.0233     2.891     0.21     1.557     0.65     1.371       0.0266     1.384     0.2133     1.557     0.6666     1.365     8       0.03     1.579     0.2166     1.554     0.6833     1.362     8       0.0333     2.057     0.22     1.55     0.7     1.352     8	7.6 07.8 07.8 07.8 07.8 07.8 07.8 07.8 07.8	0.264 0.254 0.248 0.232 0.223
0.02     0.066     0.2066     1.557     0.6333     1.377     7       0.0233     2.891     0.21     1.557     0.65     1.371       0.0266     1.384     0.2133     1.557     0.6666     1.365     8       0.03     1.579     0.2166     1.554     0.6833     1.362     8       0.0333     2.057     0.22     1.55     0.7     1.352     8	7.8 0 8 0 3.2 0 3.4 0 3.6 0	0.254 0.248 0.232 0.223
0.0233     2.891     0.21     1.557     0.65     1.371       0.0266     1.384     0.2133     1.557     0.6666     1.365     8       0.03     1.579     0.2166     1.554     0.6833     1.362     8       0.0333     2.057     0.22     1.55     0.7     1.352     8	8 0 3.2 0 3.4 0	0.248 0.232 0.223
0.0266     1.384     0.2133     1.557     0.6666     1.365     8       0.03     1.579     0.2166     1.554     0.6833     1.362     8       0.0333     2.057     0.22     1.55     0.7     1.352     8	3.2 0 3.4 0 3.6 0	0.232 0.223
0.03         1.579         0.2166         1.554         0.6833         1.362         8           0.0333         2.057         0.22         1.55         0.7         1.352         8	3.4 0 3.6 0	0.223
0.0333 2.057 0.22 1.55 0.7 1.352 8	3.6	
0.0000 1.57 0.2255 1.55 0.7100 1.540 0		0.217
	9 0	0.21
		0.201 0.195
		0.185
		0.182
		0.176
		0.169
		0.141
		0.122
		0.106
		0.094
		0.081
		0.072
		0.069
		0.062
		0.056
		0.056
		0.05
		0.047
		0.047
		0.04
		0.037
		0.037
		0.034
		0.034
		0.031
	30 0	0.031
0.1266 1.604 0.3133 1.506 3 0.748		
0.13 1.601 0.3166 1.506 3.2 0.714		
0.1333 1.598 0.32 1.506 3.4 0.679		
0.1366 1.595 0.3233 1.503 3.6 0.648		
0.14 1.595 0.3266 1.5 3.8 0.616		
0.1433 1.591 0.33 1.503 4 0.588		
0.1466 1.588 0.3333 1.5 4.2 0.56		
0.15 1.588 0.35 1.491 4.4 0.534		
0.1533 1.585 0.3666 1.484 4.6 0.509		
0.1566 1.585 0.3833 1.475 4.8 0.487		
0.16 1.582 0.4 1.469 5 0.468		
0.1633 1.582 0.4166 1.462 5.2 0.443		
0.1666 1.579 0.4333 1.453 5.4 0.424		
0.17 1.579 0.45 1.447 5.6 0.405		
0.1733 1.576 0.4666 1.44 5.8 0.386		
0.1766 1.573 0.4833 1.434 6 0.374		
0.18 1.573 0.5 1.428 6.2 0.355		
0.1833 1.569 0.5166 1.421 6.4 0.339		

# MW25-18 Hand-run Slug test with Stopwatch and Electronic Water Level Meter 12/04/95 1:49pm

VARIABLE Elapsed Time INPUT 1 UNITS
Minutes
Drawdown from Static, feet

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0.33	2.26	12.48	1.23
0.38	2.15	13.32	1.21
0.43	2.06	14.28	1.19
0.48	2	15.47	1.17
0.52	1.91	16.32	1.15
0.57	1.88	18	1.1
0.62	1.85	20.38	1.07
0.67	1.8	21.9	1.05
0.77	1.75	23.15	1.03
0.83	1.73	24.25	1.01
0.9	1.71	25.68	0.99
0.97	1.69	26.77	0.97
1.08	1.67	28.67	0.93
1.18	1.65	30.45	0.86
1.32	1.63	31.63	0.81
1.48	1.61	32.3	0.79
1.72	1.59	32.7	0.77
1.97	1.57	33.3	0.75
2.28	1.55	34.5	0.71
2.47	1.53	36.57	0.65
2.93	1.51	37.78	0.61
3.43	1.49	39.32	0.57
3.82	1.47	41.85	0.51
4.32	1.45	43.63	0.47
4.88	1.43	46.77	0.41
5.52	1.41	49.43	0.36
6.18	1.39	52.77	0.31
6.77	1.37	57.37	0.25
7.43	1.35	61.62	0.21
8.23	1.33	65.95	0.17
9	1.31	72.63	0.13
9.88	1.29	76.78	0.11
10.67	1.27	80.48	0.09
11.55	1.25	85.97	0.07

MW25-19 SE1000C Environmental Logger 12/02 22:17

Unit# 00001 Test 11

 Reference
 0.000

 Linearity
 0.010

 Scale factor
 9.940

 Offset
 -0.020

 Delay mSEC
 50.000

VARIABLE

UNITS VARIABLE UNITS
Elapsed Time Minutes
INPUT 1 Drawdown from Static, feet

Step 0 12/02 13:25:26

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	0.802	0.1866	1.469	0,5333	1.198	6.6	0.059
0.0033	1.151	0.19	1.465	0.55	1.189	6.8	0.059
0.0066	2.755	0.1933	1.462	0.5666	1.176	7	0.053
0.01	1.579	0.1966	1.459	0.5833	1.167	7.2	0.05
0.0133	1.296	0.2	1.456	0.6	1.157	7.4	0.047
0.0166	2.117	0.2033	1.453	0.6166	1.148	7.6	0.044
0.02	1.739	0.2066	1.45	0.6333	1.135	7.8	0.044
0.0233	1.462	0.21	1.447	0.65	1.126	8	0.04
0.0266	1.84	0.2133	1.443	0.6666	1.113	8.2	0.037
0.03	1.739	0.2166	1.44	0.6833	1.104	8.4	0.034
0.0333	1.56	0.22	1.44	0.7	1.094	8.6	0.034
0.0366	1.714	0.2233	1.437	0.7166	1.085	8.8	0.031
0.04	1.704	0.2266	1.434	0.7333	1.072	9	0.031
0.0433	1.604	0.23	1.431	0.75	1.066	9.2	0.031
0.0466	1.66	0.2333	1.425	0.7666	1.053	9.4	0.028
0.05	1.67	0.2366	1.425	0.7833	1.044	9.6	0.028
0.0533	1.616	0.24	1.421	0.8	1.034	9.8	0.025
0.0566	1.632	0.2433	1.418	0.8166	1.028	10	0.025
0.06	1.638	0.2466	1.415	0.8333	1.019	11	0.018
0.0633	1.61	0.25	1.412	0.85	1.009	12	0.018
0.0666	1.613	0.2533	1.409	0.8666	0.997	13	0.015
0.07	1.616	0.2566	1.406	0.8833	0.99	14	0.012
0.0733	1.601	0.26	1.403	0.9	0.984	15	0.012
0.0766	1.598	0.2633	1.403	0.9166	0.972	16	0.009
0.08	1.594	0.2666	1.399	0.9333	0.965	17	0.006
0.0833	1.588	0.27	1.396	0.95	0.956	18	0.006
0.0866	1.582	0.2733	1.393	0.9666	0.946	19	0.006
0.09	1.579	0.2766	1.39	0.9833	0.937	20	0.006
0.0933	1.575	0.28	1.387	1	0.931	21	0.006
0.0966	1.569	0.2833	1.384	1.2	0.814	22	0.006
0.1	1.566	0.2866	1.384	1.4	0.729	23	0.006
0.1033	1.563	0.29	1.38	1.6	0.654	24	0.009
0.1066	1.557	0.2933	1.377	1.8	0.585	25	0.009
0.11	1.553	0.2966	1.374	2	0.522	26	0.009
0.1133	1.55	0.3	1.371	2.2	0.468	27	0.009
0.1166	1.544	0.3033	1.371	2.4	0.418	28	0.006
0.12	1.541	0.3066	1.368	2.6	0.374	29	0.006
0.1233	1.535	0.31	1.365	2.8	0.336	30	0.009
0.1266	1.531	0.3133	1.362	3	0.301	31	0.006
0.13	1.528	0.3166	1.358	3.2	0.27	32	0.009
0.1333	1.522	0.32	1.355	3.4	0.245	33	0.006
0.1366	1.522	0.3233	1.355	3.6	0.223	34	0.006
0.14	1.519	0.3266	1.352	3.8	0.201	35	0.003
0.1433	1.513	0.33	1.349	4	0.182	36	0.003
0.1466	1.509	0.3333	1.346	4.2	0.163	37	0.003
0.15	1.506	0.35	1.333	4.4	0.151	38	0
0.1533	1.503	0.3666	1.321	4.6	0.135	39	0
0.1566	1.5	0.3833	1.305	4.8	0.125	40	0
0.16	1.494	0.4	1.292	5	0.113	41	0.003
0.1633	1.491	0.4166	1.283	5.2	0.103	42	0
0.1666	1.487	0.4333	1.27	5.4	0.097	43	0
0.17	1.484	0.45	1.258	5.6	0.091	44	0.003
0.1733	1.481	0.4666	1.245	5.8	0.084	45	0.003
0.1766	1.478	0.4833	1.233	6	0.078	46	0
0.18	1.475	0.5	1.223	6.2	0.069	47	0
0.1833	1.472	0.5166	1.211	6.4	0.066		

## AQTESOLV RESULTS Version 1.10

01/25/96 12:52:29

#### TEST DESCRIPTION

Data set..... mw251.dat

Data set title..... Rising Head Slug Test for MW25-1

Knowns and Constants:

A, B, C..... 0.000, 0.000, 0.763

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#### ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

## RESULTS FROM STATISTICAL CURVE MATCHING

#### STATISTICAL MATCH PARAMETER ESTIMATES

Estimate Std. Error K = 6.7687E-003 +/- 3.6255E-004y0 = 1.0965E+000 +/- 5.3364E-002

# ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual \* weight

Weighted Residual Statistics:

## Model Residuals:

Time Observed Calculated Residual Weight

0.12	0.96	0.87616	0.083845	1
0.3	0.61	0.62576	-0.015764	1
0.37	0.51	0.54899	-0.038993	1
0.42	0.46	0.49999	-0.039993	1
0.5	0.42	0.43053	-0.010526	1
0.53	0.36	0.40704	-0.04704	1
0.6	0.33	0.3571	-0.027103	1
0.63	0.31	0.33762	-0.027623	1
0.67	0.29	0.31329	-0.023292	1
0.73	0.26	0.28004	-0.020044	1
0.8	0.24	0.24569	-0.0056866	1
0.87	0.22	0.21554	0.0044552	1
0.95	0.2	0.1856	0.014402	1
1	0.19	0.16903	0.020968	1
1.03	0.18	0.15981	0.020188	1
1.1	0.17	0.14021	0.029795	1
1.15	0.16	0.12769	0.032309	1
1.25	0.15	0.10591	0.044086	1
1.3	0.14	0.096461	0.043539	1
1.57	0.12	0.058223	0.061777	1
1.85	0.1	0.034492	0.065508	1
2.3	0.08	0.014869	0.065131	1
2.55	0.07	0.0093171	0.060683	1
3.32	0.06	0.002208	0.057792	1
8.48	0.04	1.4249E-007	0.04	1
10	0.04	8.307E-009	0.04	1

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## RESULTS FROM VISUAL CURVE MATCHING

# VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 6.7687E-003y0 = 1.0965E+000

# TYPE CURVE DATA

K = 6.76868E-003y0 = 1.09655E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0 000E+000	1.097E+000	1.000E+001	8.307E-009		

# TYPE CURVE DATA

K = 6.76868E-003y0 = 1.09655E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown

# AQTESOLV RESULTS Version 1.10

02/07/96 19:06:37

#### TEST DESCRIPTION

Data set..... mw252.dat

Data set title.... Rising Head Slug Test for MW25-2

Knowns and Constants:

A, B, C..... 0.000, 0.000, 1.386

#### ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

#### RESULTS FROM STATISTICAL CURVE MATCHING

#### STATISTICAL MATCH PARAMETER ESTIMATES

Estimate Std. Error
K = 1.3716E-005 +/- 6.2935E-008
y0 = 1.3112E+000 +/- 1.6707E-003

## ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual \* weight

Weighted Residual Statistics:

#### Model Residuals:

Time Observed Calculated Residual Weight

0.0833	1.344	1.3105	0.03352	
0.0866	1.341	1.3105	0.03352	1
0.09	1.335	1.3103	0.03055	1
0.0933	1.341			1
0.0933		1.3104	0.030611	1
	1.338	1.3104	0.027641	1
0.1	1.335	1.3103	0.024672	1
0.1033	1.335	1.3103	0.024702	1
0.1066	1.335	1.3103	0.024733	1
0.11	1.332	1.3102	0.021764	1
0.1133	1.332	1.3102	0.021794	1
0.1166	1.332	1.3102	0.021824	1
0.12	1.332	1.3101	0.021855	1
0.1233	1.332	1.3101	0.021885	1
0.1266	1.332	1.3101	0.021915	1
0.13	1.329	1.3101	0.018946	1
0.1333	1.329	1.31	0.018976	1
0.1366	1.326	1.31	0.016007	1
0.14	1.329	1.31	0.019038	1
0.1433	1.332	1.3099	0.022068	1
0.1466	1.329	1.3099	0.019098	1
0.15	1.332	1.3099	0.022129	1
0.1533	1.332	1.3098	0.022159	1
0.1566	1.329	1.3098	0.019189	1
0.16	1.329	1.3098	0.01922	1
0.1633	1.332	1.3097	0.02225	1
0.1666	1.329	1.3097	0.019281	1
0.17	1.326	1.3097	0.016312	1
0.1733	1.329	1.3097	0.019342	1
0.1766	1.326	1.3096	0.016372	1
0.18	1.322	1.3096	0.012403	1
0.1833	1.326	1.3096	0.016433	1
0.1866	1.322	1.3095	0.012463	1
0.19	1.319	1.3095	0.0094942	1
0.1933	1.326	1.3095	0.016524	1
0.1966	1.319	1.3094	0.0095545	1
0.2	1.322	1.3094	0.012586	1
0.2033	1.326	1.3094	0.016616	1
0.2066	1.319	1.3094	0.0096458	1
0.21	1.329	1.3093	0.019677	
0.2133	1.335	1.3093	0.025707	1 1
0.2166	1.335	1.3093	0.025737	1
0.22	1.329	1.3092	0.019768	1
0.2233	1.329	1.3092	0.019798	1
0.2266	1.329	1.3092	0.019828	1
0.23	1.332	1.3091	0.022859	1
0.2333	1.326	1.3091	0.016889	1
0.2366	1.329	1.3091	0.01992	1
0.24	1.329	1.309	0.019951	1
0.2433	1.329	1.309	0.019981	1
0.2466	1.329	1.309	0.020011	1
0.25	1.329	1.309	0.020042	1
0.2533	1.329	1.3089	0.020072	1
0.2566	1.319	1.3089	0.010102	1
0.26	1.322	1.3089	0.013133	1
0.2633	1.329	1.3088	0.020163	1
0.2666	1.322	1.3088	0.013193	1
0.27	1.322	1.3088	0.013224	1
0.2733	1.322	1.3087	0.013254	1
0.2766	1.326	1.3087	0.017285	1

0.28	1.326	1.3087	0.017316	1
0.2833	1.322	1.3087	0.017316	1
	1.326	1.3087	0.013346	1
0.2866				1
0.29	1.326	1.3086	0.017407	1
0.2933	1.322	1.3086	0.013437	
0.2966	1.322	1.3085	0.013467	1
0.3	1.319	1.3085	0.010498	1
0.3033	1.322	1.3085	0.013528	1
0.3066	1.322	1.3084	0.013558	1
0.31	1.322	1.3084	0.013589	1
0.3133	1.322	1.3084	0.013619	1
0.3166	1.322	1.3084	0.01365	1
0.32	1.326	1.3083	0.017681	1
0.3233	1.319	1.3083	0.010711	1
0.3266	1.322	1.3083	0.013741	1
0.33	1.326	1.3082	0.017772	1
0.3333	1.322	1.3082	0.013802	1
0.35	1.319	1.308	0.010954	1
0.3666	1.319	1.3079	0.011106	1
0.3833	1.319	1.3077	0.011258	1
0.4	1.319	1.3076	0.01141	1
0.4166	1.316	1.3074	0.0085614	1
0.4333	1.319	1.3073	0.011714	1
0.45	1.319	1.3071	0.011866	1
0.4666	1.319	1.307	0.012017	1
0.4833	1.316	1.3068	0.0091692	1
0.5	1.319	1.3067	0.012321	1
0.5166	1.322	1.3065	0.015473	1
0.5333	1.319	1.3064	0.012625	1
0.55	1.319	1.3062	0.012777	1
0.5666	1.316	1.3061	0.0099279	1
0.5833	1.319	1.3059	0.01308	1
0.6	1.313	1.3058	0.007232	1
0.6166	1.313	1.3056	0.0073831	1
0.6333	1.316	1.3055	0.010535	1
0.65	1.316	1.3053	0.010687	1 1
0.6666	1.313	1.3052	0.0078382	
0.6833	1.31	1.305	0.0049901	1
0.7	1.31	1.3049	0.0051421	1 1 1
0.7166	1.31	1.3047	0.0052931	1
0.7333	1.31	1.3046	0.005445	1
0.75	1.31	1.3044	0.0055969	1
0.7666	1.31	1.3043	0.0057478	1
0.7833	1.31	1.3041	0.0058997	1
0.8	1.31	1.3039	0.0060515	1
0.8166	1.31	1.3038	0.0062024	1
0.8333	1.307	1.3036	0.0033542	1
0.85	1.31	1.3035	0.006506	1
0.8666	1.307	1.3033	0.0036568	1
0.8833	1.307	1.3032	0.0038085	1
0.9	1.307	1.303	0.0039603	1
0.9166	1.307	1.3029	0.0041111	1
0.9333	1.307	1.3027	0.0042627	1 1 1 1 1 1 1
0.95	1.307	1.3026	0.0044144	1
0.9666	1.307	1.3024	0.0045652	1
0.9833	1.307	1.3023	0.0047168	1 1
1	1.307	1.3021	0.0048684	1
1.2	1.304	1.3003	0.0036828	1
1.4	1.3	1.2985	0.0014947	1
1.6	1.294	1.2967	-0.002696	1

1.8	1.291	1 2010	0 0030003	1
		1.2949	-0.0038892	1
2	1.291	1.2931	-0.0020849	1
2.2	1.291	1.2913	-0.00028313	1
2.4	1.285	1.2895	-0.0044839	1
2.6	1.282	1.2877	-0.0056871	1
2.8	1.278	1.2859	-0.0078928	1
3	1.275	1.2841	-0.0091011	1
3.2	1.275	1.2823	-0.0073118	1
3.4	1.275	1.2805	-0.005525	1
3.6			-0.0097408	1
	1.269	1.2787		1 1
3.8	1.266	1.277	-0.010959	1
4	1.263	1.2752	-0.01218	1
4.2	1.26	1.2734	-0.013403	1
4.4	1.26	1.2716	-0.011628	1
4.6	1.26	1.2699	-0.0098566	1
4.8	1.253	1.2681	-0.015087	1
5	1.253	1.2663	-0.01332	1
5.2	1.253	1.2646	-0.011556	1
5.4	1.25	1.2628	-0.012794	1
				1
5.6	1.247	1.261	-0.014034	1
5.8	1.244	1.2593	-0.015277	1
6	1.241	1.2575	-0.016522	1
6.2	1.241	1.2558	-0.01477	1
6.4		1.254		1
	1.241		-0.01302	1
6.6	1.234	1.2523	-0.018273	1
6.8	1.231	1.2505	-0.019528	1
7	1.234	1.2488	-0.014786	1
7.2	1.231	1.247	-0.016046	1
7.4				1
	1.225	1.2453	-0.020308	1
7.6	1.225	1.2436	-0.018573	1
7.8	1.222	1.2418	-0.01984	1 1 1
8	1.222	1.2401	-0.01811	1
8.2	1.219	1.2384	-0.019382	1
				1
8.4	1.219	1.2367	-0.017656	1
8.6	1.215	1.2349	-0.019933	1
8.8	1.212	1.2332	-0.021212	1
9	1.212	1.2315	-0.019494	1
9.2	1.209	1.2298	-0.020778	1
	1.206	1.2281	-0.022064	
9.4				1
9.6	1.209	1.2264	-0.017353	1
9.8	1.206	1.2246	-0.018644	1
10	1.206	1.2229	-0.016938	1
11	1.197	1.2144	-0.017441	1
12	1.184	1.206	-0.022004	1
13	1.178	1.1976	-0.019625	1
14	1.165	1.1893	-0.024304	1
15	1.156	1.181	-0.025042	1
16	1.146	1.1728	-0.026836	1
	1.137	1.1647	-0.027688	1
17				
18	1.127	1.1566	-0.029596	1
19	1.118	1.1486	-0.030561	1
20	1.112	1.1406	-0.028581	1
21	1.102	1.1327	-0.030656	1
22	1.096	1.1248	-0.028787	1
		1.117	-0.029973	1
23	1.087			
24	1.077	1.1092	-0.032212	1
25	1.068	1.1015	-0.033506	1
26	1.061	1.0939	-0.032853	1
27	1.055	1.0863	-0.031254	1
28	1.046	1.0787	-0.032707	1
20	1.010	1.0,0,		_

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29	1.039	1.0712	-0.032212	1
30	1.03	1.0638	-0.03377	1
31	1.024	1.0564	-0.032379	1
32	1.014	1.049	-0.03504	1
33		1.0418	-0.033752	1
34 35	1.002	1.0345	-0.032514 -0.032327	1
36 37	0.986	1.0202	-0.034189 -0.033101	1
38	0.973	1.0061	-0.033063	1
39	0.964	0.99907	-0.035073	1
40	0.957	0.99213	-0.035132	1
41	0.951	0.98524	-0.034239	1
42	0.945	0.97839	-0.033394	
43	0.939	0.9716	-0.032596	1
44		0.96485	-0.035846	1
45	0.923	0.95814	-0.035143	1
46	0.917	0.95149	-0.034486	1
47 48	0.91	0.94488 0.93831	-0.034875 -0.034311	1
49	0.898	0.93179	-0.033792	1
50	0.891	0.92532	-0.034318	1
51	0.885	0.91889	-0.033889	1
52 53	0.882 0.873	0.91889 0.91251 0.90617	-0.033005 -0.030505 -0.033166	1
54 55	0.866	0.89987 0.89362	-0.03387 -0.033618	1 1 1
56	0.857	0.88741	-0.030409	1
57	0.851	0.88124	-0.030244	
58	0.844	0.87512	-0.031122	1
59	0.838	0.86904	-0.031042	1
60	0.832	0.863	-0.031004	1
61	0.829	0.85701	-0.028008	1
62	0.822	0.85105	-0.029054	
63	0.816	0.84514	-0.029141	1
64		0.83927	-0.029269	1
65 66	0.803	0.83344 0.82765	-0.030439 -0.027648	1
67	0.794	0.8219	-0.027898	1
68	0.788	0.81619	-0.028188	1
69	0.784	0.81052	-0.026517	1
70	0.778	0.80489	-0.026886	1
71	0.775	0.79929	-0.024294	
72	0.769	0.79374	-0.024741	1
73	0.762	0.78823	-0.026226	
74 75	0.759 0.753	0.78275 0.77731	-0.02375 -0.024312 -0.024911	1 1 1
76	0.747	0.77191	-0.024911	1
77	0.744	0.76655	-0.022548	
78	0.744	0.76122	-0.017223	
79	0.731	0.75593	-0.024934	1
80	0.728	0.75068	-0.022682	1
81	0.725	0.74547	-0.020467	1
82	0.725	0.74029	-0.015287	
83 84	0.725 0.718 0.715	0.73514 0.73004 0.72496	-0.010144 -0.012037 -0.0099648	1 1 1
85 86 87	0.713	0.71993 0.71493	-0.007928 -0.014926	1 1
88	0.696	0.70996	-0.013959	1

89 90 91 92 93	0.696 0.687 0.684 0.677 0.674	0.70503 0.70013 0.69526 0.69043 0.68564	-0.0090267 -0.013128 -0.011264 -0.013434 -0.011637	1 1 1 1
94	0.668	0.68087	-0.012873	1
95	0.665	0.67614	-0.011143	1
96	0.665	0.67145	-0.0064455	1
97	0.659	0.66678	-0.0077805	1
98	0.652	0.66215	-0.010148	1 1 1
99	0.652	0.65755	-0.0055477	
100	0.646	0.65298	-0.0069793	
101	0.643	0.64844	-0.0054427	
102	0.643	0.64394	-0.00093753	1 1 1
103	0.64	0.63946	0.00053628	
104	0.627	0.63502	-0.008021	
105	0.624	0.63061	-0.0066091	
106	0.621	0.62623	-0.0052279	1 1 1
107	0.618	0.62188	-0.0038771	
108	0.611	0.61756	-0.0065566	
109	0.605	0.61327	-0.008266	
110	0.602	0.60901	-0.0070053	1
111	0.602	0.60477	-0.0027742	1
112	0.599	0.60057	-0.0015725	1
113	0.593	0.5964	-0.0033999	1
114	0.589	0.59226	-0.0032564	1 1 1
115	0.589	0.58814	0.00085838	
116	0.586	0.58406	0.0019446	
117	0.583	0.58	0.0030023	
118 119 120 121	0.58 0.577 0.574 0.567	0.57597 0.57197 0.56799 0.56405	0.0040319 0.0050335 0.0060073 0.0029535	1 1 1
122 123 124 125	0.564 0.561 0.561 0.555	0.56013 0.55624 0.55237 0.54853	0.0038723 0.0047638 0.0086283 0.006466	1 1 1
126 127 128 129	0.552 0.555 0.558 0.542	0.54472 0.54094 0.53718 0.53345	0.007277 0.014061 0.02082 0.0085518	1 1 1
130 131 132 133 134	0.549 0.545 0.533 0.542 0.533	0.52974 0.52606 0.52241 0.51878 0.51517	0.019258 0.018938 0.010593 0.023223 0.017827	1 1 1
135 136 137 138	0.533 0.527 0.533 0.523 0.517	0.51517 0.51159 0.50804 0.50451 0.501	0.017827 0.015406 0.024961 0.01849 0.015995	1 1 1 1
139	0.52	0.49752	0.022476	1 1 1
140	0.511	0.49407	0.016933	
141	0.508	0.49063	0.017365	
142	0.508	0.48723	0.020774	
143	0.508	0.48384	0.024159	1
144	0.501	0.48048	0.020521	1
145	0.498	0.47714	0.020859	1
146	0.495	0.47383	0.021174	1
147	0.492	0.47053	0.021466	1
148	0.489	0.46727	0.021735	1

149	0.489	0.46402	0.024981	1
150	0.486	0.46079	0.025205	
151	0.482	0.45759	0.024406	1
152	0.486	0.45441	0.031586	1
153	0.476	0.45126	0.024743	1
154	0.479	0.44812	0.030878	1
155	0.479	0.44501	0.033991	1 1 1 1 1
156	0.47	0.44192	0.028083	1
157	0.47	0.43885	0.031153	1
158	0.467	0.4358	0.031202	1
159	0.47	0.43277	0.03723	1 1 1 1 1 1
160	0.457	0.42976	0.027237	1
161	0.46	0.42678	0.033222	1
162	0.457	0.42381	0.033188	1
163	0.457	0.42087	0.036132	
164	0.451	0.41794	0.033056	1
165	0.451	0.41504	0.03596	1 1 1
166	0.445	0.41216	0.032843	1
167	0.448	0.40929	0.038707	1
168	0.445	0.40645	0.03855	1
169	0.438	0.40363	0.034374	1
170	0.442	0.40082	0.041178	1 1 1
171	0.435	0.39804	0.036963	1
172	0.432	0.39527	0.036729	1
173	0.432	0.39253	0.039475	1
174	0.432	0.3898	0.042202	1
175	0.429	0.38709	0.04191	1
176	0.423	0.3844	0.038599	1
177	0.423	0.38173	0.04127	1
178	0.42	0.37908	0.040922	1
179	0.416	0.37644	0.039556	1
180	0.42	0.37383	0.046171	1

## RESULTS FROM VISUAL CURVE MATCHING

# VISUAL MATCH PARAMETER ESTIMATES

Estimate = 2.0137E-005

K = 2.0137E-005y0 = 1.3380E+000

# TYPE CURVE DATA

K = 1.71538E-005y0 = 1.31713E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E±000	1 317E+000	1.800E+002	2.742E-001		

TYPE CURVE DATA

K = 1.71538E-005y0 = 1.31713E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	1.317E+000	1.800E+002	2.742E-001		

# AOTESOLV

A Program for

Automatic Estimation of Aquifer Coefficients

From Aquifer Test Data

By:

Glenn M. Duffield and James O. Rumbaugh, III

Geraghty & Miller Modeling Group 1895 Preston White Drive, Suite 301 Reston, VA 22091

(703) 476 - 0335

A Q T E S O L V is a user-friendly program designed to analyze data from aquifer tests automatically. Aquifer coefficients for a variety of aquifer test conditions can be estimated by A Q T E S O L V , including the following:

- o confined aquifers, unconfined aquifers, and leaky aquifers
- o pumping tests, injection tests, recovery tests, and slug tests

#### Features:

- o Interactive, menu-driven program design
- o Nonlinear least-squares estimation of aquifer coefficients
- o Statistical analysis of results
- o Complete graphical display of results

# AQTESOLV RESULTS Version 1.10

02/07/96 19:10:52 TEST DESCRIPTION Data set..... mw253.dat Data set title..... Rising Head Slug Test for MW25-3 Knowns and Constants: No. of data points..... 278 Radius of well casing..... 0.086 Radius of well................ 0.33 Aguifer saturated thickness..... 5.96 Well screen length..... 2 Static height of water in well..... 5.96 A, B, C..... 0.000, 0.000, 0.988 ANALYTICAL METHOD Pouwer-Rice (Unconfined Aguifer Slug Test) \_\_\_\_\_\_ RESULTS FROM STATISTICAL CURVE MATCHING STATISTICAL MATCH PARAMETER ESTIMATES Std. Error Estimate K = 1.1148E-004 + /- 1.4500E-006 y0 = 2.5772E+000 + /- 7.3150E-003ANALYSIS OF MODEL RESIDUALS residual = calculated - observed weighted residual = residual \* weight Weighted Residual Statistics: Number of residuals..... 273 Number of estimated parameters.... 2 Degrees of freedom..... 271 Residual mean..... 0.01519 Residual standard deviation..... 0.08973 Residual variance..... 0.008051

del Residuals:

0.02	2.805	2.5755	0.22945	1
	2.724	2.5753	0.14873	1
0.0233				1
0.0266	2.758	2.575	0.18301	
0.03	2.721	2.5747	0.1463	1
0.0333	2.73	2.5744	0.15557	1
0.0366	2.708	2.5741	0.13385	1
0.04	2.705	2.5739	0.13114	1
0.0433	2.705	2.5736	0.13142	1
		2.5733	0.12869	1
0.0466	2.702			
0.05	2.689	2.573	0.11598	1
0.0533	2.686	2.5727	0.11326	1
0.0566	2.677	2.5725	0.10454	1
0.06	2.674	2.5722	0.10182	1
0.0633	2.667	2.5719	0.095102	1
0.0666	2.667	2.5716	0.09538	1
	2.664	2.5713	0.092666	1
0.07			0.089944	1
0.0733	2.661	2.5711		
0.0766	2.658	2.5708	0.087222	1
0.08	2.655	2.5705	0.084508	1
0.0833	2.655	2.5702	0.084786	1
0.0866	2.649	2.5699	0.079064	1
0.09	2.649	2.5697	0.07935	1
0.0933	2.645	2.5694	0.075628	1
0.0966	2.645	2.5691	0.075905	1
		2.5688	0.073191	1
0.1	2.642			1
0.1033	2.639	2.5685	0.070469	
0.1066	2.639	2.5683	0.070746	1
0.11	2.633	2.568	0.065032	1
0.1133	2.63	2.5677	0.06231	1
0.1166	2.633	2.5674	0.065587	1
0.12	2.624	2.5671	0.056873	1
0.1233	2.63	2.5668	0.063151	1
0.1266	2.627	2.5666	0.060428	1
0.13	2.624	2.5663	0.057714	1
0.1333	2.624	2.566	0.057991	1
				1
0.1366	2.62	2.5657	0.054268	
0.14	2.62	2.5654	0.054554	1
0.1433	2.617	2.5652	0.051831	1
0.1466	2.62	2.5649	0.055109	1
0.15	2.614	2.5646	0.049394	1
0.1533	2.617	2.5643	0.052671	1
0.1566	2.614	2.5641	0.049948	1
0.16	2.614	2.5638	0.050234	1
0.1633	2.611	2.5635	0.047511	1
	2.611	2.5632	0.047788	ī
0.1666		2.5629	0.048073	ī
0.17	2.611			1
0.1733	2.608	2.5626	0.04535	
0.1766	2.608	2.5624	0.045627	1
0.18	2.608	2.5621	0.045913	1
0.1833	2.608	2.5618	0.046189	1
0.1866	2.605	2.5615	0.043466	1
0.19	2.605	2.5612	0.043752	1
0.1933	2.605	2.561	0.044028	1
0.1966	2.602	2.5607	0.041305	1
0.1966	2.598	2.5604	0.03759	1
		2.5601	0.037867	ī
0.2033	2.598	2.5599	0.038144	1
0.2066	2.598		0.038144	1
0.21	2.598	2.5596		1
0.2133	2.598	2.5593	0.038705	1

0.2166 0.22 0.2233 0.2266 0.23 0.2333 0.2366 0.24 0.2433 0.2466 0.25 0.2533 0.2566 0.2633 0.2666 0.27 0.2733 0.2766 0.28 0.2833 0.2866 0.29 0.2933 0.2966 0.31 0.3133 0.3166 0.32 0.3233 0.3266 0.33 0.3266 0.33 0.3266 0.33 0.345 0.4666 0.4333 0.45 0.4666 0.4833 0.45 0.4666 0.4833 0.55 0.5666 0.5333 0.5566 0.5333 0.5566 0.5333 0.5566 0.5333 0.5566 0.5333 0.5566 0.5333 0.5566 0.5333 0.5566 0.55333	2.595 2.595 2.595 2.5992 2.5992 2.5992 2.5992 2.5992 2.5992 2.5999 2.5889 2.5889 2.5883 2.5588 2.5576 2.5573 2.557	2.5587 2.55885 2.55587 2.55587 2.55557 2.5555555555555555555555555555	0.035982 0.036267 0.036543 0.03382 0.034105 0.034381 0.034657 0.034942 0.035218 0.032495 0.032779 0.030056 0.033332 0.030616 0.033892 0.028169 0.028453 0.028729 0.029005 0.026566 0.026566 0.026566 0.027402 0.027402 0.027402 0.027677 0.023962 0.024237 0.024513 0.021797 0.022073 0.022073 0.022349 0.022633 0.022908 0.022633 0.022908 0.023184 0.020468 0.020743 0.019137 0.017522 0.015914 0.011306 0.0086882 0.00770782 0.0054675 0.0068477 0.0052355 0.0036225 0.0020005 0.0038536 -0.0024703	
0.4666 0.4833 0.5 0.5166 0.5333 0.55	2.545 2.542 2.539 2.536 2.533 2.529 2.526	2.5382 2.5368 2.5354 2.534 2.5326 2.5312 2.5299	0.0068477 0.0052355 0.0036225 0.0020005 0.00038598 -0.0022293 -0.0038536	1 1 1 1 1 1

				-
0.75	2.498	2.5147	-0.016704	1
0.7666	2.495	2.5133	-0.018338	1
0.7833	2.495	2.512	-0.016963	1
0.7033	2.492	2.5106	-0.01859	1
				1
0.8166	2.492	2.5092	-0.017225	1
0.8333	2.489	2.5079	-0.018853	1
0.85	2.486	2.5065	-0.020482	1
0.8666	2.482	2.5051	-0.02312	1
0.8833	2.479	2.5038	-0.02475	1
		2.5024	-0.026381	ĺ
0.9	2.476			1
0.9166	2.476	2.501	-0.025021	1
0.9333	2.473	2.4997	-0.026654	1
0.95	2.473	2.4983	-0.025287	1
0.9666	2.47	2.4969	-0.026929	1
0.9833	2.467	2.4956	-0.028564	1
		2.4942	-0.0272	1
1	2.467			
1.2	2.442	2.4779	-0.035916	1
1.4	2.413	2.4617	-0.048739	1
1.6	2.382	2.4457	-0.063668	1
1.8	2.354	2.4297	-0.075702	1
2	2.326	2.4138	-0.087839	1
				1
2.2	2.298	2.3981	-0.10008	
2.4	2.272	2.3824	-0.11042	1
2.6	2.25	2.3669	-0.11687	1
2.8	2.229	2.3514	-0.12242	1
3	2.207	2.3361	-0.12907	1
3.2	2.194	2.3208	-0.12682	ī
				1
3.4	2.175	2.3057	-0.13067	
3.6	2.153	2.2906	-0.13761	1
3.8	2.131	2.2757	-0.14466	1
4	2.109	2.2608	-0.1518	1
4.2	2.091	2.246	-0.15504	1
	2.072	2.2314	-0.15938	1
4.4				1
4.6	2.053	2.2168	-0.16381	
4.8	2.037	2.2023	-0.16534	1
5	2.025	2.188	-0.16296	1
5.2	2.009	2.1737	-0.16468	1
5.4	1.997	2.1595	-0.16249	1
5.6	1.981	2.1454	-0.16439	1
		2.1314	-0.16338	1
5.8	1.968			ĺ
6	1.956	2.1175	-0.16147	
6.2	1.943	2.1036	-0.16064	1
6.4	1.928	2.0899	-0.16191	1
6.6	1.915	2.0763	-0.16127	1
6.8	1.902	2.0627	-0.16071	1
7	1.89	2.0492	-0.15925	1
			-0.15487	ī
7.2	1.881	2.0359		
7.4	1.868	2.0226	-0.15458	1
7.6	1.855	2.0094	-0.15437	1
7.8	1.843	1.9963	-0.15325	1
8	1.83	1.9832	-0.15322	1
8.2	1.821	1.9703	-0.14927	1
		1.9574	-0.14941	ī
8.4	1.808		-0.14863	1
8.6	1.796	1.9446		
8.8	1.783	1.9319	-0.14894	1
9	1.774	1.9193	-0.14532	1
9.2	1.761	1.9068	-0.14579	1
9.4	1.752	1.8943	-0.14235	1
9.6	1.743	1.882	-0.13898	1
	1.73	1.8697	-0.13969	1
9.8	1.73	1.0097	0.1000	_

10	1.721	1.8575	-0.13649	1
11	1.664	1.7976	-0.13364	1
12	1.617	1.7397	-0.12272	1
13	1.57	1.6837	-0.11367	1
14	1.523	1.6294	-0.10642	1
15	1.479	1.5769	-0.097926	1
16 17	1.432 1.391	1.5261	-0.094119	1
18	1.351	1.4769 1.4294	-0.085949 -0.078364	1
19	1.31	1.3833	-0.073311	1
20	1.272	1.3387	-0.066742	1
21	1.238	1.2956	-0.05761	1
22	1.2	1.2539	-0.053867	1 1 1 1 1 1
23	1.169	1.2135	-0.044468	1
24	1.134	1.1744	-0.040372	1
25	1.1	1.1365	-0.036535	1
26 27	1.069 1.04	1.0999	-0.030917 -0.024479	1
28	1.012	1.0645 1.0302	-0.024479	1 1
29	0.984	0.99699	-0.012991	1
30	0.959	0.96487	-0.0058694	1
31	0.931	0.93378	-0.0027824	1
32	0.906	0.9037	0.002303	1
33	0.884	0.87458	0.0094191	1
34	0.859	0.8464	0.012597	1
35 36	0.837 0.811	0.81913 0.79274	0.017867	1 1 1 1 1 1
37	0.793	0.7672	0.018259 0.0258	1
38	0.771	0.74248	0.028518	1
39	0.752	0.71856	0.03344	1
40	0.73	0.69541	0.034591	1 1 1 1 1 1
41	0.714	0.673	0.040997	1
42	0.695	0.65132	0.04368	1
43 44	0.677 0.658	0.63034 0.61003	0.046665	1
45	0.642	0.59037	0.047974 0.051628	1
46	0.623	0.57135	0.051649	1
47	0.614	0.55294	0.061057	ī
48	0.598	0.53513	0.062873	1
49	0.579	0.51789	0.061114	1
50	0.567	0.5012	0.065799	1
51 52	0.554 0.539	0.48505	0.068948	1
53	0.529	0.46942 0.4543	0.069575 0.0747	1
54	0.514	0.43966	0.074337	1
55	0.501	0.4255	0.075502	1 1 1 1
56	0.489	0.41179	0.077211	1
57	0.476	0.39852	0.077479	1
58	0.464	0.38568	0.078319	1
59 60	0.454 0.445	0.37326	0.080745	1
61	0.432	0.36123 0.34959	0.083771 0.082409	1
62	0.423	0.33833	0.084672	1 1 1
63	0.413	0.32743	0.085573	1
64	0.404	0.31688	0.087122	1
65	0.395	0.30667	0.088332	1
66	0.385	0.29679	0.088212	1
67 68	0.379	0.28723	0.091774	1
68 69	0.369 0.36	0.27797 0.26902	0.091029 0.090984	1 1
0,5	0.50	0.20702	5.050504	Τ.

70	0.357	0.26035	0.096652	1
71	0.347	0.25196	0.09504	1
72	0.341	0.24384	0.097158	1
73	0.332	0.23599	0.096014	1 1 1
74	0.326	0.22838	0.097617	1
75	0.319	0.22102	0.097976	1
76	0.326	0.2139	0.1121	1
77	0.351	0.20701	0.14399	
78	0.341	0.20034	0.14066	1
79	0.332	0.19389	0.13811	1
80	0.326	0.18764	0.13836	1 1 1 1
81	0.319	0.18159	0.13741	1
82	0.313	0.17574	0.13726	1
83	0.304	0.17008	0.13392	1
84	0.297	0.1646	0.1324	1
85	0.294	0.1593	0.1347	1
86	0.288	0.15417	0.13383	1
87	0.282	0.1492	0.1328	1
88	0.275	0.14439	0.13061	1
89	0.269	0.13974	0.12926	1
90	0.263	0.13524	0.12776	1
91	0.26	0.13088	0.12912	1
92	0.253	0.12666	0.12634	1
93	0.247	0.12258	0.12442	1
94	0.241	0.11863	0.12237	1
95	0.238	0.11481	0.12319	1
96	0.235	0.11111	0.12389	1
97	0.225	0.10753	0.11747	1
98	0.222	0.10407	0.11793	1
99	0.222	0.10071	0.12129	1
100	0.216	0.09747	0.11853	1
101	0.213	0.094329	0.11867	1 1 1 1 1 1 1 1 1 1 1 1
102	0.203	0.09129	0.11171	1
103	0.2	0.088349	0.11165	1

# RESULTS FROM VISUAL CURVE MATCHING

# VISUAL MATCH PARAMETER ESTIMATES

Estimate K = 1.4875E-004 y0 = 2.5847E+000

# TYPE CURVE DATA

K = 1.48749E-004y0 = 2.58466E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	2.585E+000	1.030E+002	2.869E-002		

K = 1.48749E-004y0 = 2.58466E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	2.585E+000	1.030E+002	2.869E-002		

## AOTESOLV

A Program for

Automatic Estimation of Aquifer Coefficients

From Aquifer Test Data

\_\_\_\_\_

By:

Glenn M. Duffield and James O. Rumbaugh, III

Geraghty & Miller Modeling Group 1895 Preston White Drive, Suite 301 Reston, VA 22091

(703) 476 - 0335

A Q T E S O L V is a user-friendly program designed to analyze data from aquifer tests automatically. Aquifer coefficients for a variety of aquifer test conditions can be estimated by A Q T E S O L V , including the following:

- o confined aquifers, unconfined aquifers, and leaky aquifers
- o pumping tests, injection tests, recovery tests, and slug tests

## Features:

- o Interactive, menu-driven program design
- o Nonlinear least-squares estimation of aquifer coefficients
- o Statistical analysis of results
- o Complete graphical display of results

# AQTESOLV RESULTS Version 1.10

02/07/96 19:17:50

# TEST DESCRIPTION

Data set..... mw254.dat

Data set title..... Rising Head Slug Test for MW25-4D

Knowns and Constants:

A, B, C..... 3.265, 0.523, 0.000

#### ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

#### RESULTS FROM STATISTICAL CURVE MATCHING

## STATISTICAL MATCH PARAMETER ESTIMATES

Estimate Std. Error K = 6.6151E-004 +/- 1.1511E-005 y0 = 2.1799E+000 +/- 8.8105E-003

#### ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual \* weight

Weighted Residual Statistics:

#### Model Residuals:

0.02	2.42	2.1563	0.26372	1
0.0233	2.395	2.1524	0.24259	1
0.0266	2.351	2.1485	0.20246	1
0.03	2.319	2.1446	0.17444	1
0.0333	2.247	2.1407	0.10629	1
0.0366	2.291	2.1369	0.15414	1
0.04	2.229	2.1329	0.0961	1
0.0433	2.229	2.1291	0.099935	1
0.0466	2.185	2.1252	0.059762	1
0.05	2.169	2.1213	0.047698	1
0.0533	2.185	2.1175	0.067511	1
0.0566	2.178	2.1137	0.064317	1
0.06	2.156	2.1098	0.046232	1
0.0633	2.153	2.106	0.047024	1
0.0666	2.144	2.1022	0.04181	1
0.07	2.138	2.0983	0.039703	1
0.0733		2.0945		
	2.131		0.036475	1
0.0766	2.125	2.0908	0.03424	1
0.08	2.119	2.0869	0.032112	1
0.0833	2.113	2.0831	0.029864	1
0.0866	2.106	2.0794	0.026608	1
0.09	2.103	2.0755	0.027459	1
0.0933	2.097	2.0718	0.02519	1
0.0966	2.091	2.0681	0.022915	1
0.1	2.084	2.0643	0.019745	1
0.1033	2.078	2.0605	0.017455	1
0.1066	2.072	2.0568	0.01516	ī
0.11	2.069	2.053	0.015969	1
0.1133	2.062	2.0493	0.012659	1
0.1166	2.056	2.0457	0.010343	1
0.12	2.053	2.0419	0.011132	
				1
0.1233	2.047	2.0382	0.0088022	1
0.1266	2.04	2.0345	0.0054661	1
0.13	2.037	2.0308	0.006234	1
0.1333	2.031	2.0271	0.0038845	1
0.1366	2.025	2.0235	0.0015284	1
0.14	2.022	2.0197	0.0022759	1
0.1433	2.015	2.0161	-0.0010934	1
0.1466	2.012	2.0125	-0.00046932	1
0.15	2.006	2.0087	-0.0027422	1
0.1533	2	2.0051	-0.0051313	1
0.1566	1.997	2.0015	-0.0045269	1
0.16	1.993	1.9978	-0.00482	1
0.1633	1.987	1.9942	-0.0072288	1
0.1666	1.981	1.9906	-0.009644	1
0.17	1.978	1.987	-0.0089573	1
0.1733	1.971	1.9834	-0.012386	1
0.1766	1.968	1.9798	-0.01182	1
	1.965	1.9762		
0.18			-0.011154	1
0.1833	1.959	1.9726	-0.013601	1
0.1866	1.956	1.9691	-0.013055	1
0.19	1.95	1.9654	-0.015409	1
0.1933	1.946	1.9619	-0.015876	1
0.1966	1.943	1.9583	-0.015349	1
0.2	1.937	1.9547	-0.017722	1
0.2033	1.934	1.9512	-0.017208	1
			-0.019701	
0.2066	1.928	1.9477		1
0.21	1.924	1.9441	-0.020094	1
0.2133	1.921	1.9406	-0.019599	1

0.2166 0.22 0.2233 0.2266 0.23 0.2333 0.2366 0.24 0.2433 0.2466 0.25 0.2533 0.2566	1.918 1.912 1.909 1.906 1.899 1.896 1.893 1.89 1.884 1.881 1.877 1.874 1.868	1.9371 1.9335 1.93 1.9266 1.923 1.9196 1.9161 1.9126 1.9091 1.9057 1.9022 1.8987 1.8953	-0.019111 -0.021523 -0.021047 -0.020578 -0.02401 -0.023553 -0.023103 -0.022554 -0.025116 -0.024684 -0.025155 -0.024735 -0.027322	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
0.26 0.2633 0.2666 0.27 0.2733 0.2766 0.28 0.2833 0.2866	1.865 1.862 1.859 1.852 1.849 1.846 1.843 1.84	1.8918 1.8884 1.885 1.8815 1.8781 1.8748 1.8713 1.8679 1.8646	-0.026812 -0.026411 -0.026017 -0.029526 -0.029144 -0.028767 -0.028295 -0.027931 -0.027574	1 1 1 1 1 1 1
0.29 0.2933 0.2966 0.3 0.3033 0.3066 0.31 0.3133 0.3166	1.83 1.827 1.824 1.821 1.818 1.815 1.812 1.808 1.802	1.8611 1.8578 1.8544 1.851 1.8477 1.8444 1.8409 1.8376 1.8343	-0.031121 -0.030775 -0.030435 -0.030001 -0.029674 -0.029352 -0.028937 -0.029627 -0.032324	1 1 1 1 1 1 1 1
0.32 0.3233 0.3266 0.33 0.3333 0.35 0.3666 0.3833	1.799 1.796 1.793 1.79 1.786 1.768 1.749 1.73	1.8309 1.8276 1.8244 1.821 1.8177 1.8012 1.785 1.7688 1.7528	-0.031927 -0.031636 -0.03135 -0.030971 -0.031698 -0.033223 -0.035994 -0.038816 -0.041784	1 1 1 1 1 1 1 1
0.4 0.4166 0.4333 0.45 0.4666 0.4833 0.5 0.5166	1.696 1.677 1.661 1.645 1.63 1.614 1.598 1.583 1.567	1.737 1.7212 1.7056 1.6903 1.675 1.6598 1.6448 1.6299	-0.040991 -0.044248 -0.044647 -0.045279 -0.044959 -0.045778 -0.046824 -0.046915 -0.048142	1 1 1 1 1 1 1
0.55 0.5666 0.5833 0.6 0.6166 0.6333 0.65 0.6666 0.6833 0.7 0.7166 0.7333	1.551 1.553 1.523 1.511 1.495 1.482 1.467 1.454 1.454 1.442	1.6006 1.5861 1.5717 1.5575 1.5434 1.5294 1.5157 1.5019 1.4883 1.4749 1.4615	-0.04959 -0.047083 -0.048707 -0.046546 -0.048429 -0.04744 -0.04866 -0.047922 -0.046309 -0.0459 -0.044532	1 1 1 1 1 1 1 1 1

0.7833         1.379         1.4222         -0.043228         1           0.8166         1.354         1.3966         -0.042639         1           0.8166         1.354         1.3966         -0.042639         1           0.85         1.332         1.3714         -0.03998         1           0.8666         1.319         1.3591         -0.04008         1           0.8833         1.307         1.3468         -0.039762         1           0.9165         1.285         1.3225         -0.037555         1           0.9166         1.285         1.3225         -0.037555         1           0.95333         1.275         1.3105         -0.035544         1           0.9666         1.254         1.287         -0.032965         1           0.9833         1.244         1.2753         -0.031741         1           1.22         1.084         1.1322         -0.049186         1           1.40         0.981         1.0161         -0.035119         1           1.5         1.084         1.1322         -0.049186         1           1.6         0.893         0.91115         -0.018146         1	0.75 0.7666	1.404 1.391	1.4483 1.4352	-0.044285 -0.044236	1 1
0.8166					1
0.85333					1
0.85					1
0.86666       1.319       1.3591       -0.04008       1         0.8833       1.307       1.3468       -0.037562       1         0.9166       1.285       1.3225       -0.037531       1         0.9333       1.275       1.3105       -0.035665       1         0.9666       1.254       1.287       -0.032965       1         0.9833       1.244       1.2753       -0.031741       1         1.2       1.084       1.1332       -0.049186       1         1.4       0.981       1.0161       -0.035119       1         1.6       0.893       0.91115       -0.031344       1         1.4       0.981       1.0161       -0.035119       1         1.6       0.893       0.91115       -0.014146       1         1.8       0.818       0.81702       0.00098281       1         2.2       0.749       0.73261       0.016387       1         2.2       0.686       0.65693       0.029072       1         2.4       0.633       0.58906       0.043938       1         2.6       0.583       0.52821       0.054793       1         2.8       0.539 </td <td></td> <td></td> <td></td> <td></td> <td>1</td>					1
0.9					1
0.9166         1.285         1.3225         -0.037531         1           0.933         1.263         1.2987         -0.035665         1           0.9666         1.254         1.287         -0.032965         1           0.9833         1.244         1.2753         -0.031741         1           1         1.232         1.2637         -0.031741         1           1.4         0.981         1.0161         -0.035119         1           1.6         0.893         0.91115         -0.018146         1           1.8         0.818         0.81702         0.00098281         1           1.8         0.818         0.81702         0.00098281         1           2.2         0.749         0.73261         0.016387         1           2.2         0.686         0.65693         0.029072         1           2.4         0.633         0.58906         0.043938         1           2.6         0.583         0.52821         0.054793         1           2.8         0.539         0.47364         0.065361         1           3.2         0.464         0.38083         0.083167         1           3.2					1
0.9333         1.275         1.3105         -0.035645         1           0.955         1.263         1.2987         -0.035665         1           0.9666         1.254         1.287         -0.032965         1           0.9833         1.244         1.2753         -0.0313         1           1.2         1.084         1.1332         -0.049186         1           1.4         0.981         1.0161         -0.035119         1           1.6         0.893         0.91115         -0.018146         1           1.8         0.818         0.81702         0.0098281         1           2.2         0.749         0.73261         0.016387         1           2.2         0.686         0.65693         0.029072         1           2.4         0.633         0.58906         0.043938         1           2.6         0.583         0.52821         0.054793         1           2.8         0.539         0.47364         0.065361         1           3.2         0.464         0.38083         0.083167         1           3.2         0.464         0.38083         0.083167         1           3.8         <					
0.95         1.263         1.2987         -0.035665         1           0.9666         1.254         1.287         -0.0313         1           1         1.232         1.2637         -0.031741         1           1.2         1.084         1.1332         -0.049186         1           1.4         0.981         1.0161         -0.035119         1           1.6         0.893         0.91115         -0.018146         1           1.8         0.818         0.81702         0.00098281         1           1.8         0.818         0.81702         0.00098281         1           2.0         0.686         0.65693         0.029072         1           2.4         0.633         0.58906         0.043938         1           2.6         0.583         0.52821         0.054793         1           2.8         0.539         0.47364         0.065361         1           3.0         0.498         0.42471         0.073292         1           3.2         0.464         0.38083         0.083167         1           3.4         0.432         0.34149         0.09051         1           3.6         0.40					1
0.9866       1.254       1.287       -0.032965       1         0.9833       1.244       1.2753       -0.031741       1         1.2       1.084       1.1332       -0.049186       1         1.4       0.981       1.0161       -0.035119       1         1.6       0.893       0.91115       -0.018146       1         1.8       0.818       0.81702       0.00098281       1         2.0       0.749       0.73261       0.016387       1         2.2       0.686       0.65693       0.029072       1         2.4       0.633       0.58906       0.043938       1         2.6       0.583       0.52821       0.054793       1         2.8       0.539       0.47364       0.065361       1         3.0       0.498       0.42471       0.073292       1         3.4       0.498       0.42471       0.073292       1         3.4       0.432       0.34149       0.09051       1         3.6       0.401       0.30621       0.094789       1         3.8       0.373       0.27458       0.094789       1         4.2       0.329					
1       1.232       1.2637       -0.031741       1         1.2       1.084       1.1332       -0.049186       1         1.4       0.981       1.0161       -0.035119       1         1.6       0.893       0.91115       -0.018146       1         1.8       0.818       0.81702       0.00098281       1         2       0.749       0.73261       0.016387       1         2.2       0.686       0.65693       0.029072       1         2.4       0.633       0.58906       0.043938       1         2.6       0.583       0.52821       0.054793       1         3       0.498       0.42471       0.073292       1         3.2       0.464       0.38083       0.083167       1         3.4       0.432       0.34149       0.09051       1         3.6       0.401       0.30621       0.094789       1         3.8       0.373       0.27458       0.094789       1         4.2       0.329       0.22078       0.10479       1         4.2       0.329       0.22078       0.10479       1         4.4       0.307       0.19797					1
1.2         1.084         1.1332         -0.049186         1           1.4         0.981         1.0161         -0.035119         1           1.6         0.893         0.91115         -0.018146         1           1.8         0.818         0.81702         0.00098281         1           2.2         0.686         0.65693         0.029072         1           2.4         0.633         0.58906         0.043938         1           2.6         0.583         0.52821         0.057493         1           2.8         0.539         0.47364         0.065361         1           3.0498         0.42471         0.073292         1           3.2         0.464         0.38083         0.083167         1           3.4         0.432         0.34149         0.09051         1           3.6         0.401         0.3621         0.094789         1           4.2         0.329         0.22078         0.10822         1           4.2         0.329         0.22078         0.10822         1           4.4         0.307         0.19797         0.10903         1           4.6         0.291         0.1775					1
1.6       0.893       0.91115       -0.018146       1         1.8       0.818       0.81702       0.00098281       1         2       0.749       0.73261       0.016387       1         2.2       0.686       0.65693       0.029072       1         2.4       0.633       0.58906       0.043938       1         2.6       0.583       0.52821       0.054793       1         2.8       0.5339       0.47364       0.065361       1         3       0.498       0.42471       0.073292       1         3.2       0.464       0.38083       0.083167       1         3.4       0.432       0.34149       0.09051       1         3.8       0.373       0.27458       0.094789       1         3.8       0.373       0.27458       0.094789       1         4.2       0.329       0.22078       0.10479       1         4.2       0.329       0.22078       0.10429       1         4.4       0.307       0.19797       0.10903       1         4.8       0.272       0.15918       0.11282       1         5       0.26       0.14273					1
1.6       0.893       0.91115       -0.018146       1         1.8       0.818       0.81702       0.00098281       1         2       0.749       0.73261       0.016387       1         2.2       0.686       0.65693       0.029072       1         2.4       0.633       0.58906       0.043938       1         2.6       0.583       0.52821       0.054793       1         2.8       0.5339       0.47364       0.065361       1         3       0.498       0.42471       0.073292       1         3.2       0.464       0.38083       0.083167       1         3.4       0.432       0.34149       0.09051       1         3.8       0.373       0.27458       0.094789       1         3.8       0.373       0.27458       0.094789       1         4.2       0.329       0.22078       0.10479       1         4.2       0.329       0.22078       0.10429       1         4.4       0.307       0.19797       0.10903       1         4.8       0.272       0.15918       0.11282       1         5       0.26       0.14273					1
2	1.6		0.91115		1
2.2       0.686       0.65693       0.029072       1         2.4       0.633       0.58906       0.043938       1         2.6       0.583       0.52821       0.054793       1         2.8       0.539       0.47364       0.065361       1         3       0.498       0.42471       0.073292       1         3.2       0.464       0.38083       0.083167       1         3.4       0.432       0.34149       0.09051       1         3.6       0.401       0.30621       0.094789       1         3.8       0.373       0.27458       0.098423       1         4       0.351       0.24621       0.10479       1         4.2       0.329       0.22078       0.10822       1         4.4       0.307       0.19797       0.10903       1         4.6       0.291       0.17752       0.11348       1         4.8       0.272       0.15918       0.11282       1         5.2       0.244       0.12799       0.11601       1         5.4       0.232       0.1477       0.11723       1         5.6       0.219       0.10291       <					
2.4       0.633       0.58906       0.043938       1         2.6       0.583       0.52821       0.054793       1         2.8       0.539       0.47364       0.065361       1         3       0.498       0.42471       0.073292       1         3.2       0.464       0.38083       0.083167       1         3.4       0.432       0.34149       0.09051       1         3.6       0.401       0.30621       0.094789       1         3.8       0.373       0.27458       0.098423       1         4       0.351       0.24621       0.10479       1         4.2       0.329       0.22078       0.10822       1         4.4       0.307       0.19797       0.10903       1         4.6       0.291       0.17752       0.11348       1         4.8       0.272       0.15918       0.11282       1         5.2       0.244       0.12799       0.11601       1         5.4       0.232       0.11477       0.11723       1         5.8       0.21       0.92278       0.11772       1         6.2       0.191       0.074196       <					
2.6       0.583       0.52821       0.054793       1         2.8       0.539       0.47364       0.065361       1         3       0.498       0.42471       0.073292       1         3.2       0.464       0.38083       0.083167       1         3.4       0.432       0.34149       0.09051       1         3.6       0.401       0.30621       0.094789       1         3.8       0.373       0.27458       0.098423       1         4       0.351       0.24621       0.10479       1         4.2       0.329       0.22078       0.10822       1         4.4       0.307       0.19797       0.10903       1         4.6       0.291       0.17752       0.11348       1         4.8       0.272       0.15918       0.11282       1         5       0.26       0.14273       0.11727       1         5.2       0.244       0.12799       0.11601       1         5.4       0.21       0.09278       0.11723       1         5.6       0.219       0.10291       0.11609       1         6.2       0.191       0.094796       0					
3					
3.2       0.464       0.38083       0.083167       1         3.4       0.432       0.34149       0.09051       1         3.6       0.401       0.30621       0.094789       1         3.8       0.373       0.27458       0.098423       1         4       0.351       0.24621       0.10479       1         4.2       0.329       0.22078       0.10822       1         4.4       0.307       0.19797       0.10903       1         4.6       0.291       0.17752       0.11348       1         4.8       0.272       0.15918       0.11282       1         5       0.26       0.14273       0.11727       1         5.2       0.244       0.12799       0.11601       1         5.4       0.232       0.11477       0.11723       1         5.6       0.219       0.10291       0.11609       1         5.8       0.21       0.092278       0.11772       1         6.2       0.191       0.074196       0.1168       1         6.4       0.181       0.066531       0.11447       1         6.6       0.175       0.059658					
3.4       0.432       0.34149       0.09051       1         3.6       0.401       0.30621       0.094789       1         3.8       0.373       0.27458       0.098423       1         4       0.351       0.24621       0.10479       1         4.2       0.329       0.22078       0.10822       1         4.4       0.307       0.19797       0.10903       1         4.6       0.291       0.17752       0.11348       1         4.8       0.272       0.15918       0.11282       1         5       0.26       0.14273       0.11727       1         5.2       0.244       0.12799       0.11601       1         5.4       0.232       0.11477       0.11723       1         5.6       0.219       0.10291       0.11609       1         5.8       0.21       0.092278       0.11772       1         6.2       0.191       0.074196       0.1168       1         6.4       0.181       0.066531       0.11477       1         6.8       0.166       0.053495       0.11251       1         7       0.159       0.047969       0.					
3.6					
3.8       0.373       0.27458       0.098423       1         4       0.351       0.24621       0.10479       1         4.2       0.329       0.22078       0.10822       1         4.4       0.307       0.19797       0.10903       1         4.6       0.291       0.17752       0.11348       1         4.8       0.272       0.15918       0.11282       1         5       0.26       0.14273       0.11727       1         5.2       0.244       0.12799       0.11601       1         5.4       0.232       0.11477       0.11723       1         5.6       0.219       0.10291       0.11609       1         5.8       0.21       0.092278       0.11772       1         6.2       0.191       0.074196       0.1168       1         6.2       0.191       0.074196       0.1168       1         6.4       0.181       0.066531       0.11447       1         6.6       0.175       0.059658       0.11251       1         7       0.159       0.047969       0.11103       1         7.2       0.153       0.043013       0.					
4.2       0.329       0.22078       0.10822       1         4.4       0.307       0.19797       0.10903       1         4.6       0.291       0.17752       0.11348       1         4.8       0.272       0.15918       0.11282       1         5       0.26       0.14273       0.11727       1         5.2       0.244       0.12799       0.11601       1         5.4       0.232       0.11477       0.11723       1         5.6       0.219       0.10291       0.11609       1         5.8       0.21       0.092278       0.11772       1         6       0.2       0.082745       0.11726       1         6.2       0.191       0.074196       0.1168       1         6.4       0.181       0.066531       0.11447       1         6.6       0.175       0.059658       0.11251       1         7       0.159       0.047969       0.11103       1         7.2       0.153       0.043013       0.10999       1         7.8       0.147       0.034555       0.10942       1         7.8       0.137       0.031012       0.					1
4.4       0.307       0.19797       0.10903       1         4.6       0.291       0.17752       0.11348       1         4.8       0.272       0.15918       0.11282       1         5       0.26       0.14273       0.11727       1         5.2       0.244       0.12799       0.11601       1         5.4       0.232       0.11477       0.11723       1         5.6       0.219       0.10291       0.11609       1         5.8       0.21       0.092278       0.11772       1         6       0.2       0.082745       0.11726       1         6.2       0.191       0.074196       0.1168       1         6.4       0.181       0.066531       0.11447       1         6.6       0.175       0.059658       0.11534       1         6.8       0.166       0.053495       0.11251       1         7       0.159       0.047969       0.11103       1         7.2       0.153       0.043013       0.10999       1         7.4       0.147       0.038569       0.10843       1         7.6       0.144       0.034585       0					
4.6       0.291       0.17752       0.11348       1         4.8       0.272       0.15918       0.11282       1         5       0.26       0.14273       0.11727       1         5.2       0.244       0.12799       0.11601       1         5.4       0.232       0.11477       0.11723       1         5.6       0.219       0.10291       0.11609       1         5.8       0.21       0.092278       0.11772       1         6       0.2       0.082745       0.11726       1         6.2       0.191       0.074196       0.1168       1         6.4       0.181       0.066531       0.11447       1         6.6       0.175       0.059658       0.11534       1         6.8       0.166       0.053495       0.11251       1         7       0.159       0.047969       0.11103       1         7.2       0.153       0.043013       0.10999       1         7.6       0.144       0.034585       0.10942       1         7.8       0.137       0.031012       0.10599       1         8.2       0.128       0.027808					
4.8       0.272       0.15918       0.11282       1         5       0.26       0.14273       0.11727       1         5.2       0.244       0.12799       0.11601       1         5.4       0.232       0.11477       0.11723       1         5.6       0.219       0.10291       0.11609       1         5.8       0.21       0.092278       0.11772       1         6       0.2       0.082745       0.11726       1         6.2       0.191       0.074196       0.1168       1         6.4       0.181       0.066531       0.11447       1         6.8       0.166       0.053495       0.11251       1         7       0.159       0.047969       0.11251       1         7.2       0.153       0.043013       0.109999       1         7.4       0.147       0.038569       0.10843       1         7.8       0.137       0.031012       0.10599       1         8       0.134       0.027808       0.10619       1         8.4       0.125       0.022359       0.10264       1         8.6       0.119       0.020049					
5.6       0.219       0.10291       0.11609       1         5.8       0.21       0.092278       0.11772       1         6       0.2       0.082745       0.11726       1         6.2       0.191       0.074196       0.1168       1         6.4       0.181       0.066531       0.11447       1         6.6       0.175       0.059658       0.11534       1         6.8       0.166       0.053495       0.11251       1         7       0.159       0.047969       0.11103       1         7.2       0.153       0.043013       0.10999       1         7.4       0.147       0.038569       0.10843       1         7.8       0.137       0.031012       0.10599       1         8       0.134       0.027808       0.10619       1         8.2       0.128       0.024935       0.10306       1         8.4       0.125       0.022359       0.10264       1         8.6       0.119       0.02049       0.098951       1         8.8       0.116       0.017978       0.099879       1         9.4       0.106       0.014455	4.8				
5.6       0.219       0.10291       0.11609       1         5.8       0.21       0.092278       0.11772       1         6       0.2       0.082745       0.11726       1         6.2       0.191       0.074196       0.1168       1         6.4       0.181       0.066531       0.11447       1         6.6       0.175       0.059658       0.11534       1         6.8       0.166       0.053495       0.11251       1         7       0.159       0.047969       0.11103       1         7.2       0.153       0.043013       0.10999       1         7.4       0.147       0.038569       0.10843       1         7.8       0.137       0.031012       0.10599       1         8       0.134       0.027808       0.10619       1         8.2       0.128       0.024935       0.10306       1         8.4       0.125       0.022359       0.10264       1         8.6       0.119       0.02049       0.098951       1         8.8       0.116       0.017978       0.099879       1         9.4       0.106       0.014455					1
5.6       0.219       0.10291       0.11609       1         5.8       0.21       0.092278       0.11772       1         6       0.2       0.082745       0.11726       1         6.2       0.191       0.074196       0.1168       1         6.4       0.181       0.066531       0.11447       1         6.6       0.175       0.059658       0.11534       1         6.8       0.166       0.053495       0.11251       1         7       0.159       0.047969       0.11103       1         7.2       0.153       0.043013       0.10999       1         7.4       0.147       0.038569       0.10843       1         7.8       0.137       0.031012       0.10599       1         8       0.134       0.027808       0.10619       1         8.2       0.128       0.024935       0.10306       1         8.4       0.125       0.022359       0.10264       1         8.6       0.119       0.02049       0.098951       1         8.8       0.116       0.017978       0.099879       1         9.4       0.106       0.014455					1
5.8       0.21       0.092278       0.11772       1         6       0.2       0.082745       0.11726       1         6.2       0.191       0.074196       0.1168       1         6.4       0.181       0.066531       0.11447       1         6.6       0.175       0.059658       0.11534       1         6.8       0.166       0.053495       0.11251       1         7       0.159       0.047969       0.11103       1         7.2       0.153       0.043013       0.10999       1         7.4       0.147       0.038569       0.10843       1         7.6       0.144       0.034585       0.10942       1         7.8       0.137       0.031012       0.10599       1         8       0.134       0.027808       0.10619       1         8.2       0.128       0.024935       0.10306       1         8.4       0.125       0.022359       0.10264       1         8.8       0.116       0.017978       0.098022       1         9       0.116       0.016121       0.099879       1         9.4       0.106       0.012962					
6.2       0.191       0.074196       0.1168       1         6.4       0.181       0.066531       0.11447       1         6.6       0.175       0.059658       0.11534       1         6.8       0.166       0.053495       0.11251       1         7       0.159       0.047969       0.11103       1         7.2       0.153       0.043013       0.109999       1         7.4       0.147       0.038569       0.10843       1         7.6       0.144       0.034585       0.10942       1         7.8       0.137       0.031012       0.10599       1         8.2       0.134       0.027808       0.10619       1         8.2       0.128       0.024935       0.10306       1         8.4       0.125       0.022359       0.10264       1         8.6       0.119       0.020049       0.098951       1         8.8       0.116       0.017978       0.099879       1         9.4       0.106       0.012962       0.093038       1         9.6       0.106       0.011623       0.094377       1	5.8	0.21	0.092278	0.11772	1
6.4       0.181       0.066531       0.11447       1         6.6       0.175       0.059658       0.11534       1         6.8       0.166       0.053495       0.11251       1         7       0.159       0.047969       0.11103       1         7.2       0.153       0.043013       0.10999       1         7.4       0.147       0.038569       0.10843       1         7.6       0.144       0.034585       0.10942       1         7.8       0.137       0.031012       0.10599       1         8       0.134       0.027808       0.10619       1         8.2       0.128       0.024935       0.10306       1         8.4       0.125       0.022359       0.10264       1         8.6       0.119       0.020049       0.098951       1         8.8       0.116       0.017978       0.098022       1         9       0.112       0.014455       0.097545       1         9.4       0.106       0.012962       0.093038       1         9.6       0.106       0.011623       0.094377       1					1
6.6       0.175       0.059658       0.11534       1         6.8       0.166       0.053495       0.11251       1         7       0.159       0.047969       0.11103       1         7.2       0.153       0.043013       0.10999       1         7.4       0.147       0.038569       0.10843       1         7.6       0.144       0.034585       0.10942       1         7.8       0.137       0.031012       0.10599       1         8       0.134       0.027808       0.10619       1         8.2       0.128       0.024935       0.10306       1         8.4       0.125       0.022359       0.10264       1         8.6       0.119       0.020049       0.098951       1         8.8       0.116       0.017978       0.098022       1         9       0.116       0.016121       0.099879       1         9.4       0.106       0.012962       0.093038       1         9.6       0.106       0.01623       0.094377       1					
6.8       0.166       0.053495       0.11251       1         7       0.159       0.047969       0.11103       1         7.2       0.153       0.043013       0.10999       1         7.4       0.147       0.038569       0.10843       1         7.6       0.144       0.034585       0.10942       1         7.8       0.137       0.031012       0.10599       1         8       0.134       0.027808       0.10619       1         8.2       0.128       0.024935       0.10306       1         8.4       0.125       0.022359       0.10264       1         8.6       0.119       0.020049       0.098951       1         8.8       0.116       0.017978       0.098022       1         9       0.116       0.016121       0.099879       1         9.4       0.106       0.012962       0.093038       1         9.6       0.106       0.01623       0.094377       1					
7.2       0.153       0.043013       0.10999       1         7.4       0.147       0.038569       0.10843       1         7.6       0.144       0.034585       0.10942       1         7.8       0.137       0.031012       0.10599       1         8       0.134       0.027808       0.10619       1         8.2       0.128       0.024935       0.10306       1         8.4       0.125       0.022359       0.10264       1         8.6       0.119       0.020049       0.098951       1         8.8       0.116       0.017978       0.098022       1         9       0.116       0.016121       0.099879       1         9.2       0.112       0.014455       0.097545       1         9.4       0.106       0.012962       0.093038       1         9.6       0.106       0.011623       0.094377       1	6.8				1
7.4       0.147       0.038569       0.10843       1         7.6       0.144       0.034585       0.10942       1         7.8       0.137       0.031012       0.10599       1         8       0.134       0.027808       0.10619       1         8.2       0.128       0.024935       0.10306       1         8.4       0.125       0.022359       0.10264       1         8.6       0.119       0.020049       0.098951       1         8.8       0.116       0.017978       0.098022       1         9       0.116       0.016121       0.099879       1         9.2       0.112       0.014455       0.097545       1         9.4       0.106       0.012962       0.093038       1         9.6       0.106       0.011623       0.094377       1					
7.6       0.144       0.034585       0.10942       1         7.8       0.137       0.031012       0.10599       1         8       0.134       0.027808       0.10619       1         8.2       0.128       0.024935       0.10306       1         8.4       0.125       0.022359       0.10264       1         8.6       0.119       0.020049       0.098951       1         8.8       0.116       0.017978       0.098022       1         9       0.116       0.016121       0.099879       1         9.2       0.112       0.014455       0.097545       1         9.4       0.106       0.012962       0.093038       1         9.6       0.106       0.011623       0.094377       1					1
7.8       0.137       0.031012       0.10599       1         8       0.134       0.027808       0.10619       1         8.2       0.128       0.024935       0.10306       1         8.4       0.125       0.022359       0.10264       1         8.6       0.119       0.020049       0.098951       1         8.8       0.116       0.017978       0.098022       1         9       0.116       0.016121       0.099879       1         9.2       0.112       0.014455       0.097545       1         9.4       0.106       0.012962       0.093038       1         9.6       0.106       0.011623       0.094377       1					1
8.2       0.128       0.024935       0.10306       1         8.4       0.125       0.022359       0.10264       1         8.6       0.119       0.020049       0.098951       1         8.8       0.116       0.017978       0.098022       1         9       0.116       0.016121       0.099879       1         9.2       0.112       0.014455       0.097545       1         9.4       0.106       0.012962       0.093038       1         9.6       0.106       0.011623       0.094377       1					1
8.4       0.125       0.022359       0.10264       1         8.6       0.119       0.020049       0.098951       1         8.8       0.116       0.017978       0.098022       1         9       0.116       0.016121       0.099879       1         9.2       0.112       0.014455       0.097545       1         9.4       0.106       0.012962       0.093038       1         9.6       0.106       0.011623       0.094377       1					
8.6       0.119       0.020049       0.098951       1         8.8       0.116       0.017978       0.098022       1         9       0.116       0.016121       0.099879       1         9.2       0.112       0.014455       0.097545       1         9.4       0.106       0.012962       0.093038       1         9.6       0.106       0.011623       0.094377       1					
8.8       0.116       0.017978       0.098022       1         9       0.116       0.016121       0.099879       1         9.2       0.112       0.014455       0.097545       1         9.4       0.106       0.012962       0.093038       1         9.6       0.106       0.011623       0.094377       1					1
9       0.116       0.016121       0.099879       1         9.2       0.112       0.014455       0.097545       1         9.4       0.106       0.012962       0.093038       1         9.6       0.106       0.011623       0.094377       1			0.017978		1
9.4       0.106       0.012962       0.093038       1         9.6       0.106       0.011623       0.094377       1	9				1
9.6 0.106 0.011623 0.094377 1					1
					1

10	0.1	0.0093456	0.090654	1
11	0.087	0.0054178	0.081582	1
12	0.081	0.0031408	0.077859	1
13	0.075	0.0018208	0.073179	1
14	0.069	0.0010555	0.067944	1
15	0.062	0.00061191	0.061388	1
16	0.059	0.00035473	0.058645	1
17	0.056	0.00020565	0.055794	1
18	0.056	0.00011922	0.055881	1
19	0.053	6.9112E-005	0.052931	1
20	0.05	4.0065E-005	0.04996	1
21	0.046	2.3227E-005	0.045977	1
22	0.046	1.3465E-005	0.045987	1
23	0.043	7.8058E-006	0.042992	1
24	0.043	4.5252E-006	0.042995	1
25	0.04	2.6233E-006	0.039997	1
26	0.04	1.5208E-006	0.039998	1
27	0.04	8.8162E-007	0.039999	1
28	0.04	5.1109E-007	0.039999	1
29	0.037	2.9629E-007	0.037	1
30	0.037	1.7176E-007	0.037	1
31	0.037	9.9575E-008	0.037	1
32	0.037	5.7725E-008	0.037	1
33	0.037	3.3464E-008	0.037	1 1 1 1 1
34	0.034	1.94E-008	0.034	1

# RESULTS FROM VISUAL CURVE MATCHING

# VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 6.6151E-004y0 = 2.1799E+000

# TYPE CURVE DATA

K = 6.61515E-004y0 = 2.17993E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0 000E+000	2.180E+000	3.400E+001	1.940E-008		

# TYPE CURVE DATA

K = 6.61515E-004y0 = 2.17993E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	2.180E+000	3.400E+001	1.940E-008		

# AQTESOLV RESULTS Version 1.10

02/07/96 19:22:04

TEST DESCRIPTION

Data set..... mw255.dat

Data set title.... Rising Head Slug Test for MW25-5D

Knowns and Constants:

THE TOTAL METHOD

ANALYTICAL METHOD

Rouwer-Rice (Unconfined Aquifer Slug Test)

RESULTS FROM STATISTICAL CURVE MATCHING

STATISTICAL MATCH PARAMETER ESTIMATES

Estimate Std. Error K = 3.4799E-004 +/- 5.1697E-006 y0 = 3.3835E+000 +/- 1.0687E-002

ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual \* weight

Weighted Residual Statistics:

del Residuals:

0.0266	3.598	3.3573	0.24066	1
0.03	3.583	3.354	0.22899	1
0.0333	3.561	3.3508	0.21023	1
0.0366	3.539	3.3475	0.19146	1
0.04	3.53	3.3442	0.18578	1
0.0433	3.523	3.341	0.18201	1
0.0455	3.504	3.3378	0.16623	1
0.0400	3.492	3.3345	0.15755	1
0.0533	3.482	3.3312	0.15076	1
0.0566	3.473	3.328	0.14497	1
0.0566	3.461	3.3247	0.13628	1
0.0633	3.451	3.3215	0.12949	1
0.0666	3.442	3.3183	0.12369	1
0.000	3.429	3.315	0.12303	1
0.0733	3.423	3.313	0.11118	1
0.0766	3.414	3.3086	0.10537	1
0.0766	3.414	3.3053	0.098661	1
0.0833	3.398	3.3022	0.095848	1
0.0866	3.388	3.299	0.089032	1
0.086	3.382	3.2957	0.086309	1
0.0933	3.376	3.2925	0.083487	1
0.0966	3.37	3.2893	0.080661	1
0.0966	3.363	3.2861	0.076929	1
0.1033	3.354	3.2829	0.071098	1
0.1033	3.348	3.2797	0.068263	1
0.1000	3.341	3.2765	0.064521	ĺ
0.1133	3.335	3.2733	0.06168	1
0.1166	3.329	3.2702	0.058836	1
0.12	3.323	3.2669	0.056085	1
0.1233	3.316	3.2638	0.052235	ī
0.1266	3.31	3.2606	0.049382	1
0.13	3.304	3.2574	0.046621	1
0.1333	3.298	3.2542	0.043762	1 1
0.1366	3.294	3.2511	0.0429	ī
0.14	3.288	3.2479	0.040129	1
0.1433	3.282	3.2447	0.037261	1
0.1466	3.276	3.2416	0.03439	1
0.15	3.272	3.2384	0.03361	1
0.1533	3.269	3.2353	0.033732	
0.1566	3.26	3.2321	0.027852	1 1
0.16	3.254	3.2289	0.025063	1
0.1633	3.254	3.2258	0.028176	1
0.1666	3.244	3.2227	0.021286	1 1 1
0.17	3.241	3.2195	0.021488	1
0.1733	3.235	3.2164	0.018592	1
0.1766	3.232	3.2133	0.018693	1
0.18	3.222	3.2101	0.011886	1
0.1833	3.219	3.207	0.011981	1
0.1866	3.216	3.2039	0.012073	1
0.19	3.21	3.2007	0.0092559	1
0.1933	3.207	3.1977	0.009342	1
0.1966	3.2	3.1946	0.0054252	1 1 1 1 1 1 1
0.2	3.194	3.1914	0.0025988	1
0.2033	3.191	3.1883	0.0026759	1
0.2066	3.188	3.1852	0.0027501	
0.21	3.185	3.1821	0.0029144	1
0.2133	3.178	3.179	-0.0010174	1
0.2166	3.175	3.176	-0.00095216	1
0.22	3.169	3.1728	-0.0037971	1

0.2233 0.2266 0.23 0.2333	3.166 3.16 3.156 3.153	3.1697 3.1667 3.1635 3.1605	-0.0037379 -0.0066816 -0.0075358 -0.0074855	1 1 1
0.2366	3.15	3.1574	-0.0074381	1
0.24	3.144	3.1543	-0.010301	1
0.2433	3.141	3.1513	-0.01026	1
0.2466 0.25 0.2533 0.2566	3.135 3.131 3.128 3.122	3.1482 3.1451 3.1421 3.139	-0.013222 -0.014094 -0.014062 -0.017032	1 1 1
0.26	3.119	3.1359	-0.016914	1
0.2633	3.113	3.1329	-0.01989	1
0.2666	3.109	3.1299	-0.020869	1
0.27	3.106	3.1268	-0.02076	1
0.2733	3.103	3.1237	-0.020745	1
0.2766	3.1	3.1207	-0.020733	1
0.28	3.094	3.1176	-0.023633	1
0.2833	3.091	3.1146	-0.023627	1
0.2866	3.087	3.1116	-0.024624	1
0.29	3.084	3.1085	-0.024533	1
0.2933	3.078	3.1055	-0.027535	1
0.2966	3.075	3.1025	-0.027541	1
0.3	3.072	3.0995	-0.027459	1
0.3033	3.066	3.0965	-0.03047	1
0.3066	3.062	3.0935	-0.031485	1
0.31	3.059	3.0904	-0.031412	1
0.3133	3.056	3.0874	-0.031432	1
0.3166 0.32 0.3233 0.3266	3.05 3.047 3.044 3.04	3.0845 3.0814 3.0784 3.0755	-0.034455 -0.034391 -0.03442 -0.035452	1 1 1
0.33	3.034	3.0724	-0.038396	1
0.3333	3.031	3.0694	-0.038434	1
0.35	3.009	3.0545	-0.045486	1
0.3666 0.3833 0.4 0.4166	2.99 2.971 2.953 2.931	3.0397 3.0249 3.0102 2.9956	-0.0497 -0.053897 -0.057166 -0.064594	1 1 1
0.4333	2.918	2.981	-0.063005	1
0.45	2.893	2.9665	-0.073488	1
0.4666	2.881	2.9521	-0.071128	1
0.4833 0.5 0.5166 0.5333	2.862 2.843 2.827 2.812	2.9378 2.9234 2.9093 2.8951	-0.075751 -0.080445 -0.082293 -0.083125	1 1 1
0.55	2.793	2.881	-0.088026	1
0.5666	2.777	2.8671	-0.090079	1
0.5833	2.758	2.8531	-0.095116	1
0.6	2.743	2.8392	-0.096222	1
0.6166	2.727	2.8255	-0.098478	1
0.6333	2.711	2.8117	-0.10072	1
0.65	2.692	2.798	-0.10602	1
0.6666 0.6833 0.7 0.7166	2.677 2.664 2.649 2.633	2.7845 2.7709 2.7574 2.7441	-0.10748 -0.10692 -0.10843 -0.11108	1 1 1
0.7166 0.7333 0.75 0.7666	2.633 2.617 2.602 2.589	2.7307 2.7174 2.7043	-0.11371 -0.11542 -0.11526	1 1 1

0.7833 0.8 0.8166 0.8333 0.85 0.8666 0.8833	2.573 2.558 2.545 2.533 2.52 2.504 2.492	2.6911 2.678 2.665 2.652 2.6391 2.6264 2.6136	-0.11809 -0.11999 -0.12002 -0.11904 -0.11913 -0.12235	1 1 1 1 1 1
0.9 0.9166 0.9333 0.95 0.9666 0.9833	2.479 2.464 2.451 2.442 2.426 2.413	2.6008 2.5882 2.5756 2.5631 2.5507 2.5383	-0.12183 -0.12424 -0.12464 -0.1211 -0.12469 -0.12527 -0.12191	1 1 1 1 1
1 1.2 1.4 1.6 1.8 2 2.2	2.404 2.222 2.091 1.975 1.865 1.761 1.667	2.5259 2.3825 2.2472 2.1196 1.9992 1.8857 1.7786	-0.12191 -0.16046 -0.15617 -0.14455 -0.13419 -0.12465 -0.11157	1 1 1 1 1
2.4 2.6 2.8 3 3.2 3.4 3.6	1.58 1.501 1.423 1.354 1.285 1.225	1.6776 1.5823 1.4924 1.4077 1.3277 1.2523	-0.097568 -0.081301 -0.069444 -0.05369 -0.042749 -0.027348 -0.015228	1 1 1 1 1
3.8 4 4.2 4.4 4.6 4.8	1.119 1.062 1.012 0.971 0.927 0.887	1.1141 1.0509 0.9912 0.93491 0.88182 0.83174	0.0048521 0.011123 0.020801 0.03609 0.045182 0.05526	1 1 1 1 1
5 5.2 5.4 5.6 5.8 6	0.849 0.815 0.78 0.752 0.721 0.695 0.67	0.78451 0.73996 0.69793 0.6583 0.62092 0.58565 0.5524	0.064493 0.075044 0.082066 0.0937 0.10008 0.10935 0.1176	1 1 1 1 1
6.4 6.6 6.8 7 7.2 7.4 7.6	0.642 0.617 0.595 0.576 0.554 0.536 0.52	0.52103 0.49144 0.46353 0.43721 0.41238 0.38896 0.36687	0.12097 0.12556 0.13147 0.13879 0.14162 0.14704 0.15313	1 1 1 1 1
7.8 8.2 8.4 8.6 8.8	0.504 0.485 0.473 0.457 0.438 0.429	0.34604 0.32639 0.30785 0.29037 0.27388 0.25833 0.24366	0.15796 0.15861 0.16515 0.16663 0.16412 0.17067 0.16934	1 1 1 1 1 1
9 9.2 9.4 9.6 9.8 10	0.413 0.404 0.391 0.382 0.373 0.36 0.322	0.24366 0.22982 0.21677 0.20446 0.19285 0.1819 0.13579	0.17418 0.17423 0.17754 0.18015 0.1781 0.18621	1 1 1 1 1

1.0	0.205	0 10108	0 10050	_
12 13	0.285 0.257	0.10137 0.075676	0.18363 0.18132	1 1
14	0.235	0.056494	0.17851	1
15	0.216	0.042174	0.17383	1
16	0.2	0.031484	0.16852	1
17	0.184	0.023504	0.1605	1
18 19	0.175 0.166	0.017546 0.013099	0.15745 0.1529	1
20	0.156	0.0097784	0.1329	1 1
21	0.147	0.0072999	0.1397	1
22	0.144	0.0054495	0.13855	1
23	0.134	0.0040682	0.12993	1
24 25	0.128 0.125	0.003037 0.0022672	0.12496 0.12273	1 1
26	0.119	0.0016925	0.12273	1
27	0.115	0.0012635	0.11374	1
28	0.115	0.00094325	0.11406	1
29	0.109	0.00070416 0.00052568	0.1083	1
30 31	0.106 0.106	0.00032368	0.10547 0.10561	1 1
32	0.103	0.00029296	0.10271	1
33	0.1	0.0002187	0.099781	1
34	0.097	0.00016327	0.096837	1
35 36	0.094 0.09	0.00012188 9.0989E-005	0.093878 0.089909	1 1
37	0.09	6.7925E-005	0.089932	1
38	0.09	5.0708E-005	0.089949	1
39	0.087	3.7855E-005	0.086962	1
40 41	0.084 0.084	2.826E-005 2.1097E-005	0.083972 0.083979	1 1
42	0.081	1.5749E-005	0.083979	1
43	0.081	1.1757E-005	0.080988	ī
44	0.078	8.777E-006	0.077991	1
45 46	0.075 0.075	6.5522E-006 4.8914E-006	0.074993 0.074995	1 1
47	0.075	3.6516E-006	0.074996	1
48	0.072	2.726E-006	0.071997	1
49	0.068	2.035E-006	0.067998	1
50	0.068	1.5192E-006	0.067998	1
51 52	0.068 0.065	1.1341E-006 8.4665E-007	0.067999 0.064999	1 1
53	0.068	6.3205E-007	0.067999	1
54	0.062	4.7184E-007	0.062	1
55 5.6	0.065	3.5224E-007	0.065	1
56 57	0.068 0.062	2.6296E-007 1.963E-007	0.068 0.062	1 1
58	0.062	1.4655E-007	0.062	1
59	0.068	1.094E-007	0.068	1
60	0.062	8.167E-008	0.062	1
61 62	0.062 0.062	6.0969E-008 4.5515E-008	0.062 0.062	1 1
63	0.059	3.3978E-008	0.059	1
64	0.059	2.5365E-008	0.059	1
65	0.062	1.8936E-008	0.062	1
66 67	0.059 0.059	1.4136E-008 1.0553E-008	0.059 0.059	1 1
68	0.056	7.8781E-009	0.056	1
69	0.059	5.8812E-009	0.059	1
70	0.056	4.3905E-009	0.056	1
71	0.056	3.2776E-009	0.056	1

72	0.053	2.4468E-009	0.053	1
73	0.053	1.8266E-009	0.053	1
74	0.053	1.3636E-009	0.053	1
75	0.053	1.018E-009	0.053	1
76	0.053	7.5994E-010	0.053	1
77	0.056	5.6732E-010	0.056	1
78	0.053	4.2352E-010	0.053	1
79	0.056	3.1617E-010	0.056	1
80	0.053	2.3603E-010	0.053	1
81	0.053	1.762E-010	0.053	1
82	0.053	1.3154E-010	0.053	1
83	0.05	9.8196E-011	0.05	1
84	0.053	7.3306E-011	0.053	1
85	0.053	5.4725E-011	0.053	1

## RESULTS FROM VISUAL CURVE MATCHING

## VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 3.4799E-004y0 = 3.3835E+000

#### TYPE CURVE DATA

K = 3.02982E-004y0 = 2.97212E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	2.972E+000	8.500E+001	1.196E-009		

# AQTESOLV

A Program for

Automatic Estimation of Aquifer Coefficients
From Aquifer Test Data

By:

Glenn M. Duffield and James O. Rumbaugh, III

Geraghty & Miller Modeling Group

# AQTESOLV RESULTS Version 1.10

02/07/96 19:25:36 TEST DESCRIPTION Data set..... mw256.dat Data set title..... Rising Head Slug Test for MW25-6 Knowns and Constants: No. of data points..... 246 Radius of well casing..... 0.086 Radius of well..... 0.33 Aguifer saturated thickness..... 10.29 Well screen length..... 7 Static height of water in well..... 10.29 A, B, C..... 0.000, 0.000, 1.698 \_\_\_\_\_\_ ANALYTICAL METHOD Pouwer-Rice (Unconfined Aguifer Slug Test) \_\_\_\_\_\_ RESULTS FROM STATISTICAL CURVE MATCHING The tribe street. STATISTICAL MATCH PARAMETER ESTIMATES Std. Error Estimate K = 3.9042E-003 +/- 1.0390E-004 Y0 = 1.1172E+000 +/- 1.5833E-002ANALYSIS OF MODEL RESIDUALS residual = calculated - observed weighted residual = residual \* weight Weighted Residual Statistics: Number of residuals..... 240 Number of estimated parameters.... 2 Degrees of freedom..... 238 Residual mean..... 0.01963 Residual standard deviation..... 0.05912 Residual variance..... 0.003495

del Residuals:

0.0233	1.242	1.0429	0.1991	1
0.0255	1.229	1.0328	0.19622	1
		1.0326	0.13154	1
0.03	1.154			1
0.0333	1.129	1.0125	0.11646	
0.0366	1.126	1.0027	0.12329	1
0.04	1.107	0.99269	0.11431	1
0.0433	1.079	0.98306	0.095943	1
0.0466	1.057	0.97352	0.083482	1
0.05	1.041	0.96379	0.077213	1
0.0533	1.022	0.95444	0.067565	1
0.0566	1.003	0.94517	0.057826	1
0.06	0.985	0.93573	0.049274	ı
0.0633	0.969	0.92665	0.042354	1
	0.953	0.91765	0.035345	1
0.0666			0.035545	
0.07	0.934	0.90848		1
0.0733	0.922	0.89967	0.022333	1
0.0766	0.906	0.89094	0.015063	1
0.08	0.891	0.88203	0.0089689	1
0.0833	0.878	0.87347	0.0045276	1
0.0866	0.862	0.865	-0.0029968	1
0.09	0.85	0.85635	-0.0063503	1
0.0933	0.837	0.84804	-0.011041	1
0.0966	0.825	0.83981	-0.014812	1
0.1	0.812	0.83142	-0.019417	1
0.1033	0.8	0.82335	-0.02335	1
0.1066	0.79	0.81536	-0.02536	1
0.11	0.778	0.80721	-0.02921	ī
0.1133	0.768	0.79938	-0.031377	1
		0.79338	-0.031377	1
0.1166	0.756			1
0.12	0.746	0.78371	-0.037708	
0.1233	0.737	0.7761	-0.039103	1
0.1266	0.728	0.76857	-0.040572	1
0.13	0.718	0.76089	-0.04289	1
0.1333	0.709	0.75351	-0.044507	1
0.1366	0.699	0.7462	-0.047195	1
0.14	0.69	0.73874	-0.048736	1
0.1433	0.681	0.73157	-0.050568	1
0.1466	0.671	0.72447	-0.053469	1
0.15	0.665	0.71723	-0.052227	1
0.1533	0.655	0.71027	-0.055268	1
0.1566	0.649	0.70338	-0.054376	1
0.16	0.643	0.69634	-0.053345	1
0.1633	0.634	0.68959	-0.055588	1
	0.627	0.6829	-0.055897	1
0.1666	0.618	0.67607	-0.058071	ī
0.17			-0.05751	1
0.1733	0.612	0.66951		
0.1766	0.605	0.66301	-0.058014	1
0.18	0.599	0.65639	-0.057386	1
0.1833	0.593	0.65002	-0.057017	1
0.1866	0.583	0.64371	-0.06071	1
0.19	0.577	0.63728	-0.060275	1
0.1933	0.571	0.63109	-0.060092	1
0.1966	0.565	0.62497	-0.059968	1
0.2	0.558	0.61872	-0.060721	1
0.2033	0.555	0.61272	-0.057717	1
0.2066	0.549	0.60677	-0.057772	1
0.21	0.543	0.60071	-0.057706	1
0.2133	0.539	0.59488	-0.055878	1
0.2166	0.533	0.58911	-0.056105	1
0.2100	0.555		<del></del>	

0.22 0.2233 0.2266 0.23 0.2333 0.2366 0.24 0.2433 0.2466 0.25 0.2533 0.2566 0.26 0.26 0.2633 0.2666 0.27 0.2733 0.2766 0.28 0.2833 0.2866 0.29 0.2933 0.2966 0.3	0.527 0.524 0.518 0.514 0.508 0.505 0.499 0.496 0.492 0.488 0.488 0.477 0.467 0.467 0.467 0.461 0.458 0.455 0.455 0.445 0.445 0.445 0.443 0.433	0.58322 0.57756 0.57195 0.56624 0.56074 0.5553 0.54975 0.54442 0.53913 0.53374 0.52856 0.52344 0.5182 0.5182 0.51317 0.5082 0.5082 0.49823 0.49823 0.49847 0.48847 0.48847 0.48847 0.48847 0.48847 0.4903 0.47425 0.46509 0.46044	-0.056217 -0.053557 -0.053953 -0.052236 -0.052742 -0.0503 -0.05075 -0.048415 -0.047133 -0.047743 -0.045564 -0.043436 -0.041203 -0.043175 -0.041195 -0.042116 -0.040234 -0.038399 -0.036467 -0.0384727 -0.034034 -0.032245 -0.030643 -0.029086 -0.027437	
0.33 0.3333 0.35 0.3666 0.3833 0.4 0.4166 0.4333 0.45 0.4666 0.4833 0.5 0.5166 0.5333 0.5 0.5666 0.5333 0.65 0.6166 0.6333 0.65 0.6666 0.6833 0.7 0.7166 0.7333 0.75	0.408 0.405 0.389 0.38 0.367 0.358 0.326 0.326 0.32 0.314 0.304 0.298 0.292 0.286 0.279 0.276 0.277 0.267 0.267 0.257 0.251 0.248 0.245 0.239 0.235 0.232	0.42138 0.41729 0.3972 0.37819 0.35998 0.34265 0.32625 0.31054 0.29559 0.28144 0.26789 0.25499 0.24278 0.23109 0.21997 0.20944 0.19936 0.18976 0.18976 0.18976 0.17198 0.16369 0.15586 0.14121 0.13445 0.12798 0.12182	-0.013379 -0.01229 -0.0081991 0.0018131 0.0070217 0.015354 0.021755 0.025462 0.030414 0.038562 0.046113 0.049011 0.055216 0.060905 0.066032 0.069561 0.076645 0.080243 0.086326 0.088025 0.093305 0.09514 0.099645 0.10379 0.10455 0.10702 0.11018	

0.7666 0.7833 0.8 0.8166 0.8333	0.229 0.226 0.223 0.22 0.217	0.11599 0.1104 0.10509 0.10006 0.095239	0.11301 0.1156 0.11791 0.11994 0.12176	1 1 1 1
0.85 0.8666 0.8833 0.9 0.9166 0.9333	0.213 0.21 0.207 0.204 0.201 0.198	0.090654 0.086315 0.082159 0.078203 0.07446 0.070875	0.12235 0.12369 0.12484 0.1258 0.12654 0.12713	1 1 1 1 1
0.95 0.9666 0.9833 1	0.195 0.191 0.191 0.188 0.16	0.067463 0.064233 0.061141 0.058197 0.032229	0.12754 0.12677 0.12986 0.1298 0.12777	1 1 1 1
1.4 1.6 1.8 2 2.2	0.138 0.126 0.113 0.104 0.094	0.017849 0.0098845 0.005474 0.0030315 0.0016788	0.12015 0.11612 0.10753 0.10097 0.092321	1 1 1 1
2.4 2.6 2.8 3 3.2	0.085 0.079 0.072 0.069 0.069	0.00092974 0.00051489 0.00028514 0.00015791 8.7451E-005	0.08407 0.078485 0.071715 0.068842 0.068913	1 1 1 1
3.4 3.6 3.8 4 4.2 4.4	0.066 0.063 0.06 0.057 0.054 0.05	4.843E-005 2.6821E-005 1.4853E-005 8.2257E-006 4.5554E-006 2.5228E-006	0.065952 0.062973 0.059985 0.056992 0.053995 0.049997	1 1 1 1 1
4.6 4.8 5 5.2 5.4	0.047 0.047 0.041 0.041 0.038	1.3971E-006 7.7371E-007 4.2848E-007 2.3729E-007 1.3141E-007	0.046999 0.046999 0.041 0.041 0.038	1 1 1 1
5.6 5.8 6 6.2 6.4	0.038 0.038 0.035 0.035 0.032	7.2775E-008 4.0303E-008 2.232E-008 1.2361E-008 6.8452E-009	0.038 0.038 0.035 0.035 0.032	1 1 1 1
6.6 6.8 7 7.2 7.4	0.032 0.032 0.028 0.028 0.028	3.7909E-009 2.0994E-009 1.1626E-009 6.4386E-010 3.5657E-010 1.9747E-010	0.032 0.032 0.028 0.028 0.028 0.025	1 1 1 1
7.6 7.8 8 8.2 8.4 8.6	0.025 0.025 0.025 0.025 0.025 0.025	1.9747E-010 1.0936E-010 6.0562E-011 3.3539E-011 1.8574E-011 1.0286E-011	0.025 0.025 0.025 0.025 0.025 0.025	1 1 1 1 1
8.8 9 9.2 9.4 9.6	0.025 0.025 0.022 0.022 0.022	5.6965E-012 3.1547E-012 1.7471E-012 9.6752E-013 5.3581E-013	0.025 0.025 0.022 0.022 0.022	1 1 1 1
9.8 10	0.019 0.022	2.9673E-013 1.6433E-013	0.019 0.022	1 1

11	0.019	8.5599E-015	0.019	1
12	0.019	4.4589E-016	0.019	1
13 14	0.016 0.019	2.3227E-017 1.2099E-018	0.016 0.019	1 1
15	0.019	6.3023E-020	0.019	1
16	0.016	3.2829E-021	0.016	1
17	0.016	1.7101E-022	0.016	1
18	0.016	8.9078E-024	0.016	1
19	0.016	4.6401E-025	0.016	1
20	0.013	2.417E-026	0.013	1
21	0.013	1.259E-027	0.013	1
22	0.013	6.5584E-029	0.013	1
23	0.01	3.4163E-030	0.01	1
24	0.01	1.7796E-031	0.01	1
25 26	0.01 0.01	9.2698E-033 4.8287E-034	0.01 0.01	1 1
27	0.01	2.5153E-035	0.01	1
28	0.01	1.3102E-036	0.01	1
29	0.01	6.8249E-038	0.01	1
30	0.007	3.5551E-039	0.007	1
31	0.01	1.8519E-040	0.01	1
32	0.007	9.6465E-042	0.007	1
33	0.01	5.0249E-043	0.01	1
34	0.007	2.6175E-044	0.007	1
35 36	0.007	1.3635E-045 7.1023E-047	0.007	1
37	0.007 0.01	3.6996E-048	0.007 0.01	1 1
38	0.007	1.9271E-049	0.007	1
39	0.01	1.0038E-050	0.01	1
40	0.01	5.2291E-052	0.01	1
41	0.01	2.7238E-053	0.01	1
42	0.01	1.4189E-054	0.01	1
43	0.01	7.3909E-056	0.01	1
44	0.01	3.8499E-057	0.01	1
45 46	0.01 0.013	2.0054E-058 1.0446E-059	0.01 0.013	1 1
47	0.013	5.4416E-061	0.013	1
48	0.013	2.8345E-062	0.013	1
49	0.013	1.4765E-063	0.013	1
50	0.013	7.6912E-065	0.013	1
51	0.013	4.0064E-066	0.013	1
52	0.013	2.0869E-067	0.013	1
53	0.013	1.0871E-068	0.013	1
54	0.013	5.6627E-070 2.9497E-071	0.013	1
55 56	0.013 0.013	1.5365E-072	0.013 0.013	1 1
57	0.013	8.0038E-074	0.013	1
58	0.013	4.1692E-075	0.013	1
59	0.013	2.1717E-076	0.013	1
60	0.013	1.1313E-077	0.013	1
61	0.013	5.8928E-079	0.013	1
62	0.013	3.0696E-080	0.013	1
63	0.013	1.599E-081	0.013	1
64 65	0.01 0.01	8.329E-083 4.3386E-084	0.01 0.01	1 1
66	0.01	2.26E-085	0.01	1
67	0.01	1.1772E-086	0.01	1
68	0.01	6.1323E-088	0.01	1
69	0.01	3.1943E-089	0.01	1
70	0.01	1.6639E-090	0.01	1

# RESULTS FROM VISUAL CURVE MATCHING

VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 8.1146E-004y0 = 3.6728E-001

TYPE CURVE DATA

K = 8.11461E-004y0 = 3.67282E-001

Time Drawdown Time Drawdown Time Drawdown
0.000E+000 3.673E-001 4.500E+001 3.655E-013

AQTESOLV

A Program for

Automatic Estimation of Aquifer Coefficients

From Aquifer Test Data

By:

Glenn M. Duffield and James O. Rumbaugh, III

Geraghty & Miller Modeling Group 1895 Preston White Drive, Suite 301 Reston, VA 22091

(703) 476 - 0335

A Q T E S O L V  $\,$  is a user-friendly program designed to analyze data from aquifer tests automatically. Aquifer coefficients for a variety of aquifer test conditions can be estimated by A Q T E S O L V , including the following:

o confined aquifers, unconfined aquifers, and leaky aquifers

# AQTESOLV RESULTS Version 1.10

19:29:03 02/07/96 \_\_\_\_\_\_\_ TEST DESCRIPTION Data set..... mw257.dat Data set title..... Rising Head Slug Test for MW25-7D Knowns and Constants: No. of data points..... 310 Radius of well casing..... 0.086 Radius of well............ 0.16 Aguifer saturated thickness..... 420.7 Well screen length..... 9 Static height of water in well..... 28.93 Log (Re/Rw) ..... 3.073 \_\_\_\_\_\_\_\_\_\_\_ ANALYTICAL METHOD Bouwer-Rice (Unconfined Aquifer Slug Test) RESULTS FROM STATISTICAL CURVE MATCHING STATISTICAL MATCH PARAMETER ESTIMATES Std. Error Estimate 2.9288E-005 +/- 3.8864E-007 4.0834E+000 +/- 1.2973E-002 v0 =ANALYSIS OF MODEL RESIDUALS residual = calculated - observed weighted residual = residual \* weight Weighted Residual Statistics: Number of residuals..... 309 Number of estimated parameters.... 2 Degrees of freedom........... 307 Residual mean..... 0.03497 Residual standard deviation..... 0.1662 Residual variance..... 0.02763

del Residuals:

0.0066	4.415	4.0828	0.33223	1
0.01	4.32	4.0824	0.23755	1
0.0133	4.301	4.0821	0.21887	1
0.0166	4.282	4.0818	0.20018	1
	4.254	4.0815	0.1725	1
0.02				
0.0233	4.251	4.0812	0.16981	1
0.0266	4.241	4.0809	0.16012	1
0.03	4.232	4.0806	0.15145	1
0.0333	4.229	4.0802	0.14876	1
0.0366	4.207	4.0799	0.12707	1
0.04	4.204	4.0796	0.12439	1
0.0433	4.207	4.0793	0.12771	1
0.0466	4.194	4.079	0.11502	1
0.0400	4.188	4.0787	0.10934	1
		4.0783	0.10365	1
0.0533	4.182			
0.0566	4.188	4.078	0.10996	1
0.06	4.185	4.0777	0.10729	1
0.0633	4.175	4.0774	0.097597	1
0.0666	4.182	4.0771	0.10491	1
0.07	4.175	4.0768	0.098231	1
0.0733	4.169	4.0765	0.092543	1
0.0766	4.179	4.0761	0.10286	1
0.08	4.166	4.0758	0.090177	1
0.0833	4.16	4.0755	0.084489	1
0.0866	4.166	4.0752	0.090801	ī
0.000	4.166	4.0749	0.091122	1
0.0933	4.153	4.0746	0.078434	1
0.0966	4.15	4.0743	0.075746	1
0.1	4.153	4.0739	0.079067	1
0.1033	4.15	4.0736	0.076379	1
0.1066	4.153	4.0733	0.079691	1
0.11	4.15	4.073	0.077012	1
0.1133	4.147	4.0727	0.074324	1
0.1166	4.144	4.0724	0.071635	1
0.12	4.144	4.072	0.071957	1
0.1233	4.141	4.0717	0.069268	1
0.1266	4.141	4.0714	0.06958	1
0.13	4.138	4.0711	0.066901	1
	4.138	4.0708	0.067213	1
0.1333			0.063524	1
0.1366	4.134	4.0705		
0.14	4.134	4.0702	0.063845	1
0.1433	4.134	4.0698	0.064157	1
0.1466	4.131	4.0695	0.061468	1
0.15	4.131	4.0692	0.061789	1
0.1533	4.128	4.0689	0.059101	1
0.1566	4.128	4.0686	0.059412	1
0.16	4.128	4.0683	0.059733	1
0.1633	4.125	4.068	0.057044	1
0.1666	4.125	4.0676	0.057356	1
0.17	4.125	4.0673	0.057677	1
0.1733	4.122	4.067	0.054988	1
	4.122	4.0667	0.055299	1
0.1766		4.0664	0.05562	ĺ
0.18	4.122		0.052931	1
0.1833	4.119	4.0661		1
0.1866	4.119	4.0658	0.053242	
0.19	4.119	4.0654	0.053563	1
0.1933	4.116	4.0651	0.050874	1
0.1966	4.116	4.0648	0.051185	1
0.2	4.116	4.0645	0.051506	1

0.5     4.059     4.0363     0.022692     1       0.5166     4.056     4.0348     0.021246     1       0.5333     4.053     4.0332     0.019809     1		0.2033 0.2066 0.21 0.2133 0.2166 0.22 0.2233 0.2266 0.23 0.2333 0.2366 0.24 0.2433 0.2466 0.25 0.2533 0.2666 0.27 0.2733 0.2666 0.27 0.2733 0.2766 0.2833 0.2866 0.29 0.2933 0.2966 0.31 0.3133 0.3066 0.31 0.3133 0.3166 0.32 0.3233 0.3266 0.33 0.3466 0.35 0.3666 0.31 0.3133 0.3166 0.32 0.3233 0.3266 0.33 0.3466 0.41666 0.4333 0.45 0.4666 0.4833	4.116 4.113 4.113 4.113 4.109 4.109 4.109 4.106 4.106 4.106 4.103 4.103 4.103 4.103 4.103 4.104 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.1 4.	4.0642 4.0639 4.0636 4.0626 4.0626 4.0623 4.0624 4.0617 4.0614 4.0601 4.0601 4.0598 4.05992 4.05992 4.05992 4.0576 4.05663 4.0557 4.05663 4.0557 4.05531 4.0538 4.0541 4.0538 4.0539 4.0549 4.0441 4.0426 4.0411 4.0394 4.0379	0.051817 0.049128 0.049449 0.04976 0.046071 0.046391 0.0447013 0.044334 0.044644 0.044955 0.042276 0.045586 0.042897 0.043528 0.043839 0.041159 0.04178 0.0421 0.039411 0.039722 0.040042 0.040663 0.037982 0.040663 0.037982 0.038293 0.038603 0.038923 0.038603 0.038923 0.038603 0.035544 0.035544 0.036804 0.037114 0.036484 0.036804 0.037114 0.036484 0.036804 0.037114	
0.4666       4.065       4.0394       0.025564       1         0.4833       4.062       4.0379       0.024128       1         0.5       4.059       4.0363       0.022692       1         0.5166       4.056       4.0348       0.021246       1	0.4666       4.065       4.0394       0.025564       1         0.4833       4.062       4.0379       0.024128       1         0.5       4.059       4.0363       0.022692       1         0.5166       4.056       4.0348       0.021246       1         0.5333       4.053       4.0332       0.019809       1         0.55       4.053       4.0316       0.021371       1         0.5666       4.05       4.0301       0.019923       1         0.5833       4.046       4.0285       0.017484       1         0.6       4.043       4.027       0.016044       1	0.4 0.4166 0.4333	4.075 4.071 4.068	4.0457 4.0441 4.0426	0.029319 0.026876 0.025442	1 1 1
	0.55       4.053       4.0316       0.021371       1         0.5666       4.05       4.0301       0.019923       1         0.5833       4.046       4.0285       0.017484       1         0.6       4.043       4.027       0.016044       1	0.4666 0.4833 0.5 0.5166	4.065 4.062 4.059 4.056	4.0394 4.0379 4.0363 4.0348	0.025564 0.024128 0.022692 0.021246	1 1 1

		4 0100	0.014010	1
0.6833	4.034	4.0192	0.014818	1
0.7	4.031	4.0176	0.013374	1
0.7166	4.027	4.0161	0.010921	1
0.7333	4.024	4.0145	0.0094763	1
0.75	4.024	4.013	0.011031	1
0.7666	4.021	4.0114	0.0095761	1
0.7833	4.018	4.0099	0.0081297	1
0.8	4.015	4.0083	0.0066828	1
0.8166	4.015	4.0068	0.0082259	1 1 1
0.8333	4.012	4.0052	0.0067777	
0.85	4.012	4.0037	0.0083289	1
0.8666	4.009	4.0021	0.0068703	1 1 1 1 1
0.8833	4.005	4.0006	0.0044203	1
0.9	4.002	3.999	0.0029698	1
0.9166	4.002	3.9975	0.0045093	1
0.9333	3.999	3.9959	0.0030576	1
0.95	3.996	3.9944	0.0016052	1
0.9666	3.996	3.9929	0.003143	1
0.9833	3.993	3.9913	0.0016894	1
1	3.99	3.9898	0.00023525	1
1.2	3.955	3.9713	-0.016298	1
1.4	3.93	3.9529	-0.022917	1
1.6	3.905	3.9346	-0.029621	1
1.8	3.88	3.9164	-0.03641	1
2	3.854	3.8983	-0.044282	1
2.2	3.832	3.8802	-0.048239	1
2.4	3.804	3.8623	-0.05828	1 1 1 1 1 1
2.6	3.782	3.8444	-0.062403	1
2.8	3.76	3.8266	-0.066609	1
3	3.735	3.8089	-0.073898	1
3.2	3.713	3.7913	-0.078268	1
3.4	3.691	3.7737	-0.08272	1
3.6	3.669	3.7563	-0.087254	1
3.8	3.646	3.7389	-0.092868	1
4	3.621	3.7216	-0.10056	1 1 1 1 1
4.2	3.602	3.7043	-0.10234	Ţ
4.4	3.58	3.6872	-0.10719	1
4.6	3.558	3.6701	-0.11213	
4.8	3.536	3.6531	-0.11714	1
5	3.514	3.6362	-0.12223	1
5.2	3.495	3.6194	-0.1244	1
5.4	3.473	3.6026	-0.12965	1
5.6	3.451	3.586	-0.13497	1
5.8	3.432	3.5694	-0.13737 -0.13985	1
6	3.413	3.5529	-0.14441	1
6.2	3.392	3.5364	-0.14704	1
6.4	3.373	3.52 3.5037	-0.14975	1
6.6	3.354	3.4875	-0.15553	1
6.8	3.332	3.4714	-0.15839	1
7	3.313	3.4714	-0.16132	1
7.2	3.294	3.4393	-0.16433	1
7.4	3.275	3.4234	-0.16741	1 1 1 1 1 1 1 1 1 1 1 1
7.6	3.256 3.237	3.4234	-0.17057	1
7.8		3.3918	-0.17379	1
8	3.218	3.3761	-0.17709	1
8.2	3.199	3.3605	-0.18047	1
8.4	3.18 3.162	3.3449	-0.18291	1
8.6	3.162	3.3294	-0.18643	1
8.8 9	3.143	3.314	-0.18702	1
9	3.14/	3.314	0,20,02	_

9.2	2 100	2 0005	0 10060	
	3.108	3.2987	-0.19068	1
9.4	3.092	3.2834	-0.19142	ĺ
9.6	3.073	3.2682	-0.19522	1
9.8	3.055	3.2531	-0.19809	1
10	3.039	3.238	-0.19903	1
11	2.951	3.1638	-0.21279	1
12	2.866	3.0912	-0.22524	1
13	2.79	3.0204	-0.23036	
				1 1
14	2.711	2.9511	-0.24011	1
15	2.636	2.8834	-0.24744	1
16	2.566	2.8173	-0.25133	1
17	2.5	2.7527	-0.25273	1
18	2.434	2.6896	-0.25561	1
19	2.368	2.6279	-0.25994	1
20	2.308	2.5677	-0.25968	1
21	2.248	2.5088	-0.26081	1
22	2.192	2.4513	-0.25928	1
23	2.135	2.3951	-0.26008	1
24	2.082	2.3402	-0.25816	1
25	2.031	2.2865	-0.2555	1
				1
26	1.981	2.2341	-0.25307	1
27	1.934	2.1828	-0.24885	1
28	1.886	2.1328	-0.2468	1
29	1.842	2.0839	-0.24189	1
30	1.798	2.0361	-0.23811	
				1
31	1.757	1.9894	-0.23243	1
32	1.716	1.9438	-0.22781	1
33	1.678	1.8992	-0.22124	1
34	1.641	1.8557	-0.21469	1
35	1.606	1.8131	-0.20714	1
36	1.568	1.7716	-0.20357	1
37	1.537	1.7309	-0.19395	1
38	1.505	1.6913	-0.18626	1
39	1.471	1.6525	-0.18148	
				1
40	1.442	1.6146	-0.17259	1
41	1.414	1.5776	-0.16357	1
42	1.383	1.5414	-0.15839	1
43	1.357	1.5061	-0.14905	1
44	1.329	1.4715	-0.14252	1
45	1.301	1.4378	-0.13678	1
46	1.279	1.4048	-0.12581	1
47	1.253	1.3726	-0.1196	1
48	1.231	1.3411	-0.11013	1
49	1.209	1.3104	-0.10138	1
50	1.184	1.2803	-0.09633	1
51	1.162	1.251	-0.088973	1
52	1.143	1.2223	-0.079289	1
			-0.070263	
53	1.124	1.1943		1
54	1.105	1.1669	-0.061879	1
55	1.086	1.1401	-0.054123	1
56	1.071	1.114	-0.042981	1
57	1.052	1.0884	-0.036439	ī
58	1.036	1.0635	-0.027481	1
59	1.017	1.0391	-0.022097	1
60	1.002	1.0153	-0.013271	1
61	0.989	0.99199	-0.0029915	1
	0.973	0.96925	0.0037541	1
62				
63	0.96	0.94702	0.012978	1
64	0.945	0.92531	0.019693	1
65	0.932	0.90409	0.027909	1
-				

78         0.797         0.66873         0.12827         1           79         0.787         0.6534         0.1336         1           80         0.778         0.63841         0.13959         1           81         0.772         0.62378         0.14822         1           82         0.765         0.60947         0.15553         1           83         0.759         0.5955         0.1635         1           84         0.75         0.58184         0.16816         1           85         0.743         0.5685         0.1745         1           86         0.737         0.55547         0.18153         1           87         0.731         0.54273         0.18827         1           88         0.724         0.53029         0.19371         1           89         0.718         0.51813         0.19987         1           90         0.712         0.50625         0.20575         1           91         0.709         0.49464         0.21436         1           92         0.702         0.4833         0.2187         1           93         0.696         0.47222 <td< th=""><th>66 67 68 69 70 71 72 73 74 75 76</th><th>0.92 0.907 0.894 0.885 0.872 0.863 0.85 0.841 0.831 0.822 0.812 0.806</th><th>0.88336 0.86311 0.84332 0.82398 0.80509 0.78663 0.76859 0.75097 0.73375 0.71692 0.70048 0.68442</th><th>0.036639 0.043894 0.050685 0.061021 0.066914 0.076374 0.081411 0.090034 0.097253 0.10508 0.11152 0.12158</th><th>1 1 1 1 1 1 1 1</th></td<>	66 67 68 69 70 71 72 73 74 75 76	0.92 0.907 0.894 0.885 0.872 0.863 0.85 0.841 0.831 0.822 0.812 0.806	0.88336 0.86311 0.84332 0.82398 0.80509 0.78663 0.76859 0.75097 0.73375 0.71692 0.70048 0.68442	0.036639 0.043894 0.050685 0.061021 0.066914 0.076374 0.081411 0.090034 0.097253 0.10508 0.11152 0.12158	1 1 1 1 1 1 1 1
92       0.702       0.4833       0.2187       1         93       0.696       0.47222       0.22378       1         94       0.69       0.46139       0.22861       1         95       0.687       0.45081       0.23619       1         96       0.68       0.44047       0.23953       1         97       0.677       0.43037       0.24663       1         98       0.671       0.4205       0.2505       1         99       0.665       0.41086       0.25414       1         100       0.661       0.40144       0.25956       1         101       0.658       0.39224       0.26576       1         102       0.655       0.38324       0.27176       1         103       0.649       0.37446       0.27454       1         104       0.646       0.36587       0.28013       1         105       0.642       0.35748       0.28452       1         106       0.639       0.34928       0.28972       1         107       0.636       0.3127       0.29473       1         108       0.627       0.3258       0.3012	79 80 81 82 83 84 85 86 87 88	0.787 0.778 0.772 0.765 0.759 0.75 0.743 0.737 0.731 0.724	0.6534 0.63841 0.62378 0.60947 0.5955 0.58184 0.5685 0.55547 0.54273 0.53029 0.51813	0.1336 0.13959 0.14822 0.15553 0.1635 0.16816 0.1745 0.18153 0.18827 0.19371 0.19987	1 1 1 1 1 1 1
103       0.649       0.37446       0.27454       1         104       0.646       0.36587       0.28013       1         105       0.642       0.35748       0.28452       1         106       0.639       0.34928       0.28972       1         107       0.636       0.34127       0.29473       1         108       0.63       0.33345       0.29655       1         109       0.627       0.3258       0.3012       1         110       0.623       0.31833       0.30467       1         111       0.62       0.31103       0.30897       1         112       0.617       0.3039       0.3131       1         113       0.617       0.29693       0.32007       1         114       0.614       0.29013       0.32387       1         115       0.611       0.28347       0.32753       1	91 92 93 94 95 96 97 98 99 100	0.709 0.702 0.696 0.69 0.687 0.68 0.677 0.671 0.665 0.661	0.49464 0.4833 0.47222 0.46139 0.45081 0.44047 0.43037 0.4205 0.41086 0.40144 0.39224	0.21436 0.2187 0.22378 0.22861 0.23619 0.23953 0.24663 0.2505 0.25414 0.25956 0.26576	1 1 1 1 1 1 1 1
	103 104 105 106 107 108 109 110 111 112	0.649 0.646 0.642 0.639 0.636 0.63 0.627 0.623 0.62 0.617 0.617	0.37446 0.36587 0.35748 0.34928 0.34127 0.33345 0.3258 0.31833 0.31103 0.3039 0.29693 0.29013	0.27454 0.28013 0.28452 0.28972 0.29473 0.29655 0.3012 0.30467 0.30897 0.3131 0.32007 0.32387	1 1 1 1 1 1 1 1

126	0.586	0.21963	0.36637	1
127	0.583	0.2146	0.3684	1
128	0.583	0.20968	0.37332	1
129	0.579	0.20487	0.37413	1
130	0.579	0.20017	0.37883	1
131	0.579	0.19558	0.38342	1
132	0.576	0.1911	0.3849	1
133	0.576	0.18672	0.38928	1
134	0.573	0.18243	0.39057	1
135	0.57	0.17825	0.39175	1

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# RESULTS FROM VISUAL CURVE MATCHING

## VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 3.7479E-005y0 = 4.1461E+000

# TYPE CURVE DATA

K = 3.74786E-005y0 = 4.14609E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	4.146E+000	1.350E+002	7.539E-002		

# AQTESOLV

A Program for

Automatic Estimation of Aquifer Coefficients

From Aquifer Test Data

By:

Glenn M. Duffield and James O. Rumbaugh, III

Geraghty & Miller Modeling Group 1895 Preston White Drive, Suite 301 Reston, VA 22091

(703) 476 - 0335

## AQTESOLV RESULTS Version 1.10

02/07/96 19:31:15

TEST DESCRIPTION

Data set..... mw258.dat

Data set title.... Rising Head Slug Test for MW25-8

Knowns and Constants:

A, B, C..... 0.000, 0.000, 0.615

ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

RESULTS FROM STATISTICAL CURVE MATCHING

STATISTICAL MATCH PARAMETER ESTIMATES

Estimate Std. Error K = 2.4015E-003 +/- 1.6447E-005

y0 = 1.7425E + 000 + / - 6.4852E - 003

ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual \* weight

Weighted Residual Statistics:

Model Residuals:

0.28	1.61	1.5702	0.039754	1
				1
0.33	1.57	1.5413	0.028671	1
0.37	1.53	1.5186	0.011421	1
0.4	1.51	1.5017	0.0082622	1
0.43	1.49	1.4851	0.0049171	1
0.47	1.47	1.4632	0.0068367	1
0.5	1.45	1.4469	0.0030638	1
0.55	1.42	1.4203	-0.00028991	1
0.62	1.39	1.3838	0.0061925	1
0.63	1.37	1.3787	-0.0086728	
		1.3583		1
0.67	1.35		-0.0083238	1
0.75	1.31	1.3185	-0.0085224	1
0.82	1.29	1.2847	0.0053459	1
0.85	1.27	1.2704	-0.00040674	1
0.88	1.25	1.2563	-0.0063174	1
0.92	1.23	1.2378	-0.0077743	1
0.97	1.21	1.215	-0.0049799	1
1.03	1.19	1.1882	0.0018199	
1.1	1.15	1.1577	-0.0076598	1 1
1.32	1.07	1.0667	0.0032503	1
1.43	1.01	1.024	-0.014008	
				1 1
1.55	0.97	0.97933	-0.0093313	1
1.6	0.95	0.9613	-0.011296	1 1 1
1.67	0.93	0.9366	-0.0066038	1
1.72	0.91	0.91936	-0.0093557	
1.78	0.89	0.89908	-0.0090767	1
1.83	0.87	0.88252	-0.01252	1
1.9	0.85	0.85985	-0.0098507	1 1 1 1 1 1
1.97	0.83	0.83776	-0.0077641	1
2.03	0.81	0.81928	-0.0092848	1
2.08	0.79	0.8042	-0.014197	1
2.17	0.77	0.77774	-0.0077361	_ 1
2.25	0.75	0.75495	-0.004947	1
2.3	0.73	0.74104	-0.011044	1
2.4	0.71	0.714		1
			-0.0040019	
2.47	0.69	0.69566	-0.0056616	1
2.55	0.67	0.67528	-0.0052774	1
2.63	0.65	0.65549	-0.0054906	1
2.73	0.63	0.63157	-0.0015703	1
2.82	0.61	0.61079	-0.00078934	1
3.1	0.53	0.55041	-0.02041	1
3.2	0.51	0.53032	-0.020324	1
3.28	0.49	0.51478	-0.024785	1
3.55	0.47	0.46562	0.0043765	1
3.65	0.45	0.44863	0.0013681	1
3.78	0.43	0.42747	0.0025336	1
3.9	0.41	0.40882	0.0011836	ī
4.05	0.39	0.38664	0.0033561	1
	0.37	0.36567	0.0033301	1
4.2				
4.37	0.35	0.34328	0.0067204	1
4.55	0.33	0.32106	0.0089391	1
4.75	0.31	0.29806	0.011944	1
4.95	0.29	0.2767	0.0133	1
5.17	0.27	0.25497	0.015029	1
5.45	0.25	0.22977	0.020234	1
5.72	0.23	0.20782	0.022177	1
6.02	0.21	0.18589	0.024108	1
6.35	0.19	0.16443	0.02557	1
6.77	0.17	0.14066	0.029339	1
0.77	0.17	0.11000		-

1	0.033198	0.1168	0.15	7.27
1	0.034086	0.095914	0.13	7.8
1	0.03876	0.07124	0.11	8.6
1	0.04267	0.04733	0.09	9.7
1	0.038556	0.031444	0.07	10.8
1	0.034192	0.015808	0.05	12.65
1	0.026518	0.0034816	0.03	16.72
1	0.018681	0.0013195	0.02	19.33
1	0.0098292	0.00017078	0.01	24.83

#### RESULTS FROM VISUAL CURVE MATCHING

# VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 2.4015E-003y0 = 1.7425E+000

# TYPE CURVE DATA

K = 2.40150E-003y0 = 1.74250E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	1.743E+000	2.500E+001	1.603E-004		

## AOTESOLV

A Program for

Automatic Estimation of Aquifer Coefficients

From Aquifer Test Data

By:

Glenn M. Duffield and James O. Rumbaugh, III

Geraghty & Miller Modeling Group 1895 Preston White Drive, Suite 301 Reston, VA 22091

(703) 476 - 0335

# AOTESOLV RESULTS Version 1.10

02/07/96 19:33:41 TEST DESCRIPTION Data set..... mw259.dat Data set title.... Rising Head Slug Test for MW25-9 Knowns and Constants: No. of data points..... 228 Radius of well casing..... 0.086 Radius of well................. 0.33 Aguifer saturated thickness..... 4.01 Well screen length..... 0.8 Static height of water in well..... 4.01 Log(Re/Rw) ..... 1.441 A, B, C..... 0.000, 0.000, 0.615 \_\_\_\_\_\_\_ ANALYTICAL METHOD Bouwer-Rice (Unconfined Aquifer Slug Test) \_\_\_\_\_\_ RESULTS FROM STATISTICAL CURVE MATCHING STATISTICAL MATCH PARAMETER ESTIMATES Estimate Std. Error 7.3374E-004 +/- 4.7331E-006 v0 = 1.8845E + 000 + / - 2.4559E - 003ANALYSIS OF MODEL RESIDUALS residual = calculated - observed weighted residual = residual \* weight Weighted Residual Statistics: Degrees of freedom..... 223 Residual mean..... 0.007836 Residual standard deviation..... 0.02675 Residual variance..... 0.0007156

del Residuals:

Observed Calculated Residual Weight Time

0.0133	1.949	1.8817	0.067266	1
				1
0.0166	1.94	1.8811	0.05895	
0.02	1.934	1.8803	0.053654	1
0.0233	1.915	1.8797	0.035338	1
0.0266	1.921	1.879	0.042021	1
		1.8783	0.033725	1
0.03	1.912			
0.0333	1.912	1.8776	0.034407	1
0.0366	1.908	1.8769	0.03109	1
0.04	1.905	1.8762	0.028793	1
			0.026475	
0.0433	1.902	1.8755		1
0.0466	1.899	1.8748	0.024157	1
0.05	1.899	1.8741	0.024859	1
0.0533	1.896	1.8735	0.02254	1
0.0566	1.893	1.8728	0.020221	1
0.06	1.89	1.8721	0.017922	1
0.0633	1.89	1.8714	0.018603	1
0.0666	1.886	1.8707	0.015283	1
			0.00098357	1
0.07	1.871	1.87		
0.0733	1.877	1.8693	0.0076633	1
0.0766	1.883	1.8687	0.014343	1
0.08	1.88	1.868	0.012043	1
			0.012722	1
0.0833	1.88	1.8673		
0.0866	1.88	1.8666	0.0134	1
0.09	1.877	1.8659	0.011099	1
0.0933	1.877	1.8652	0.011778	1
0.0966	1.874	1.8645	0.0094556	1
0.1	1.874	1.8638	0.010154	1
0.1033	1.874	1.8632	0.010831	1
0.1066	1.871	1.8625	0.0085086	1
0.11	1.871	1.8618	0.0092061	1
0.1133	1.868	1.8611	0.0068829	1
0.1166	1.868	1.8604	0.0075594	1
0.12	1.868	1.8597	0.0082561	1
0.1233	1.868	1.8591	0.0089321	1
			0.0056079	1
0.1266	1.864	1.8584		
0.13	1.864	1.8577	0.0063038	1
0.1333	1.864	1.857	0.0069791	1
0.1366	1.861	1.8563	0.0046541	1
0.14	1.861	1.8557	0.0053493	1
				1
0.1433	1.861	1.855	0.0060238	
0.1466	1.861	1.8543	0.0066981	1
0.15	1.858	1.8536	0.0043925	1
0.1533	1.858	1.8529	0.0050663	1
0.1566	1.855	1.8523	0.0027398	1
0.16	1.855	1.8516	0.0034335	1
0.1633	1.855	1.8509	0.0041065	1
0.1666	1.855	1.8502	0.0047793	1
0.17	1.852	1.8495	0.0024722	1
			0.0031445	1
0.1733	1.852	1.8489		
0.1766	1.852	1.8482	0.0038165	1
0.18	1.849	1.8475	0.0015087	1
0.1833	1.849	1.8468	0.0021802	1
	1.849	1.8461	0.0028515	1
0.1866				1
0.19	1.849	1.8455	0.0035429	1
0.1933	1.846	1.8448	0.0012137	1
0.1966	1.846	1.8441	0.0018843	1
0.2	1.846	1.8434	0.0025749	1
			-0.000755	1
0.2033	1.842	1.8428		
0.2066	1.842	1.8421	-8.5181E-005	1

\_\_\_\_\_

0.21	1 040	1 0414	0.00060460	1
	1.842	1.8414	0.00060469	1
0.2133	1.842	1.8407	0.001274	1
0.2166	1.839	1.8401	-0.0010569	1
0.22	1.839	1.8394	-0.00036779	1
0.2233	1.839	1.8387	0.0003008	1
0.2266	1.839	1.838	0.00096915	1
0.23	1.836	1.8373	-0.0013425	1
0.2333	1.836	1.8367	-0.00067464	1
0.2366	1.836	1.836	-7.0301E-006	1
0.24	1.836	1.8353	0.00068056	1
0.2433	1.833	1.8347	-0.0016523	1
0.2466	1.833	1.834	-0.00098544	1
0.25	1.833	1.8333	-0.00029861	1
0.2533	1.833	1.8326	0.00036778	1
0.2566	1.83	1.832	-0.0019661	1
0.26	1.83	1.8313	-0.00128	1
0.2633	1.83	1.8306	-0.000128	1
0.2666	1.827	1.8299	-0.0029489	1
0.27	1.827	1.8293	-0.0022636	1
0.2733	1.827	1.8286	-0.0015987	1
0.2766	1.827	1.8279	-0.00093402	1
0.28	1.824	1.8272	-0.0032494	1
0.2833	1.824	1.8266	-0.0025853	1
0.2866	1.824	1.8259	-0.0019213	1
0.29	1.824	1.8252	-0.0012375	1
0.2933	1.82	1.8246	-0.004574	1
0.2966	1.82	1.8239	-0.0039108	1
0.3	1.82	1.8232	-0.0032278	1
0.3033	1.82	1.8226	-0.002565	1
0.3066	1.82	1.8219	-0.0019026	1
0.31	1.817	1.8212	-0.0042203	1
0.3133	1.817	1.8206	-0.0035583	1
0.3166	1.817	1.8199	-0.0028965	1
0.32	1.814	1.8192	-0.0052149	1
0.3233	1.814	1.8186	-0.0045537	1
0.3266	1.814	1.8179	-0.0038926	1
0.33	1.814	1.8172	-0.0032118	1
0.3333	1.811	1.8166	-0.0055513	1
0.35	1.808	1.8132	-0.0052123	1
0.3666	1.805	1.8099	-0.0048993	1
0.3833	1.802	1.8066	-0.0045725	1
0.4	1.798	1.8033	-0.0052518	1
0.4166	1.792	1.8	-0.007957	1
0.4333	1.789	1.7966	-0.0076484	1
	1.786	1.7933	-0.007346	1
0.45			-0.0070693	
0.4666	1.783	1.7901		1
0.4833	1.78	1.7868	-0.0067789	1
0.5	1.776	1.7835	-0.0074946	1
0.5166	1.77	1.7802	-0.010236	1
0.5333	1.767	1.777	-0.0099636	1
0.55	1.764	1.7737	-0.0096974	1
0.5666	1.761	1.7705	-0.0094566	1
0.5833	1.758	1.7672	-0.0092023	1
0.6	1.754	1.764	-0.0099539	1
0.6166	1.751	1.7607	-0.009731	1
0.6333	1.745	1.7575	-0.012495	1
0.65	1.742	1.7543	-0.012264	1
0.6666	1.739	1.7511	-0.012059	1
0.6833	1.736	1.7478	-0.01184	1
0.7	1.732	1.7446	-0.012627	1

0.7166	1.729	1.7414	-0.01244	1
0.7333	1.726	1.7382	-0.012239	ī
0.75	1.723	1.735	-0.012044	1
0.7666	1.72	1.7319	-0.011873	1
0.7833	1.717	1.7287	-0.01169	1
0.8	1.714	1.7255	-0.011513	1
0.8166	1.71	1.7224	-0.01236	1
0.8333	1.707	1.7192	-0.012194	1
0.85	1.704	1.716	-0.012034	1
0.8666	1.701	1.7129	-0.011898	1
0.8833	1.695	1.7097	-0.01475	1
0.9	1.692	1.7066	-0.014607	1
0.9166	1.692	1.7035	-0.011489	1
0.9333	1.685	1.7004	-0.015358	1 1 1
0.95	1.682	1.6972	-0.015232	1
0.9666	1.682	1.6941	-0.012131	1
0.9833	1.676	1.691	-0.015017	1
1	1.673	1.6879	-0.014909	1
1.2	1.629	1.6511	-0.022125	1
1.4	1.594	1.6151	-0.021142	1
1.6	1.556	1.5799	-0.023944	1
1.8	1.522	1.5455	-0.023512	1
2	1.487	1.5118	-0.024831	1
2.2	1.456	1.4789	-0.022884	1
2.4	1.421	1.4467	-0.025655	1 1 1 1 1
2.6	1.39	1.4151	-0.025129	1
2.8	1.361	1.3843	-0.023289	1
3	1.33	1.3541	-0.024122	1
3.2	1.301	1.3246 1.2957	-0.023612 -0.022745	1
3.4 3.6	1.273 1.245	1.2675	-0.022745	1
3.8	1.22	1.2399	-0.019884	1
4	1.191	1.2129	-0.021864	1 1
4.2	1.166	1.1864	-0.020432	1
4.4	1.141	1.1604	-0.019577	1
4.6	1.116	1.1353	-0.019285	1 1 1
4.8	1.094	1.1105	-0.016544	1
5	1.069	1.0863	-0.017342	1
5.2	1.047	1.0627	-0.015667	1
5.4	1.025	1.0395	-0.014509	1
5.6	1.003	1.0169	-0.013855	1
5.8	0.981	0.9947	-0.013695	1
6	0.959	0.97302	-0.014018	1
6.2	0.94	0.95181	-0.011813	1
6.4	0.918	0.93107	-0.013071	1 1 1 1 1
6.6	0.899	0.91078	-0.01178	1
6.8	0.88	0.89093	-0.010932	1
7	0.861	0.87152	-0.010516	1
7.2	0.842	0.85252	-0.010523	1
7.4	0.827	0.83394	-0.0069441	1
7.6	0.808	0.81577	-0.0077702	1
7.8	0.792	0.79799	-0.0059923	1 1 1 1 1 1 1 1
8	0.773	0.7806	-0.0076019 -0.0065904	1
8.2	0.757	0.76359	-0.0065904	1
8.4	0.742	0.74695 0.73067	-0.0049496	1
8.6	0.726	0.71475	-0.0047482	1
8.8	0.71 0.698	0.71475	-0.0047482	1
9 9.2	0.682	0.68393	-0.0011715	1
9.2	0.669	0.66903	-3.016E-005	1
J.4	0.005	0.0000	2,	_

9.6	0.654	0.65445	-0.00045015	1
9.8	0.641	0.64019	0.00043013	1
10	0.625	0.62624	-0.0012364	1
11	0.565	0.56091	0.0040906	1
12	0.509	0.5024	0.006603	1
13	0.459	0.44999	0.0090115	1
14	0.418	0.40305	0.014953	1
15	0.377	0.361	0.015998	1
16	0.342	0.32334	0.018656	1
17	0.314	0.28961	0.024386	1
18	0.286	0.2594	0.026598	1
19	0.26	0.23234	0.027658	1
20	0.238	0.2081	0.029895	1
21	0.219	0.1864	0.032604	1
22	0.204	0.16695	0.037048	1
23	0.188	0.14954	0.038464	1
24	0.175	0.13394	0.041063	1 1 1 1 1
25	0.163	0.11996	0.043035	1
26	0.15	0.10745	0.04255	1
27	0.144	0.096242	0.047758	1
28	0.135	0.086202	0.048798	1
29	0.128	0.07721	0.05079	1
30	0.122	0.069155	0.052845	1
31	0.116	0.061941	0.054059	1
32	0.109	0.05548	0.05352	1 1 1 1 1
33	0.106	0.049692	0.056308	1
34	0.1	0.044509	0.055491	1
35	0.097	0.039866	0.057134	1
36	0.094	0.035707	0.058293	1
37	0.094	0.031982	0.062018	1
38	0.09	0.028646	0.061354	1
39	0.087	0.025658	0.061342	1
40	0.087	0.022981	0.064019	1
41	0.084	0.020584	0.063416	1 1 1 1
42	0.084	0.018436	0.065564	1
43 44	0.081 0.081	0.016513	0.064487	1
45	0.081	0.014791 0.013248	0.066209	1
46	0.081	0.013248	0.067752 0.069134	1
47	0.078	0.011668	0.067372	
48	0.078	0.0095193	0.068481	1
49	0.078	0.0095193	0.069474	1
50	0.081	0.0076368	0.003474	1
51	0.078	0.0078388	0.07116	1 1
52	0.078	0.0061266	0.071873	1
53	0.078	0.0054875	0.072512	1
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# RESULTS FROM VISUAL CURVE MATCHING

# VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 7.3374E-004y0 = 1.8845E+000

#### TYPE CURVE DATA

K = 7.33738E-004y0 = 1.88449E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	1.884E+000	5.300E+001	5.488E-003		

#### AOTESOLV

A Program for

Automatic Estimation of Aquifer Coefficients

From Aquifer Test Data

By:

Glenn M. Duffield and James O. Rumbaugh, III

Geraghty & Miller Modeling Group 1895 Preston White Drive, Suite 301 Reston, VA 22091

(703) 476 - 0335

A Q T E S O L V is a user-friendly program designed to analyze data from aquifer tests automatically. Aquifer coefficients for a variety of aquifer test conditions can be estimated by A Q T E S O L V, including the following:

- o confined aquifers, unconfined aquifers, and leaky aquifers
- pumping tests, injection tests, recovery tests, and slug tests

#### Features:

- o Interactive, menu-driven program design
- o Nonlinear least-squares estimation of aquifer coefficients
- o Statistical analysis of results
- o Complete graphical display of results

# AQTESOLV RESULTS Version 1.10

Version 1.10 02/07/96 19:36:11 \_\_\_\_\_\_\_ TEST DESCRIPTION Data set..... mw2510.dat Data set title..... Rising Head Slug Test for MW25-10 Knowns and Constants: No. of data points..... 45 Radius of well casing..... 0.086 Radius of well..... 0.33 Aguifer saturated thickness..... 2.84 Well screen length..... 2 Static height of water in well..... 2.84 Log(Re/Rw) ..... 1.483 A, B, C..... 0.000, 0.000, 0.988 \_\_\_\_\_\_\_ ANALYTICAL METHOD Pouwer-Rice (Unconfined Aquifer Slug Test) \_\_\_\_\_ RESULTS FROM STATISTICAL CURVE MATCHING STATISTICAL MATCH PARAMETER ESTIMATES Std. Error Estimate 2.3469E-004 +/- 2.1904E-005 y0 = 1.1034E + 000 + / - 3.6930E - 002ANALYSIS OF MODEL RESIDUALS residual = calculated - observed weighted residual = residual \* weight Weighted Residual Statistics: Number of residuals..... 45 Number of estimated parameters.... 2 Residual mean..... 0.004684 Residual standard deviation..... 0.142 Residual variance..... 0.02018

Jdel Residuals:

0.18	1.58	1.0865	0.49346	1
0.25	1.45	1.0801	0.36994	1
0.3	1.4	1.0754	0.32456	1
0.37	1.28	1.069	0.21098	1
0.43	1.23	1.0635	0.16645	1
0.53	1.1	1.0545	0.045512	1
0.6	1.06	1.0482	0.013312	1
0.7	1	1.0393	-0.039261	1
0.77	0.96	1.0333	-0.033201	
0.82	0.94	1.0286	-0.088645	1
0.87	0.92	1.0243	-0.10425	1
0.92	0.9	1.0199	-0.11988	1
1.02	0.88	1.0112	-0.13119	1
1.02	0.86	1.006	-0.14602	1
1.22	0.84	0.99404	-0.15404	1
1.38	0.82	0.98052		1
1.6			-0.16052 -0.16224	1
1.87	0.8	0.96224		1
	0.78	0.94026	-0.16026	1
2.03	0.76	0.92748	-0.16748	1
2.57	0.74	0.8856	-0.1456	1
3	0.72	0.85361	-0.13361	1
3.43	0.7	0.82278	-0.12278	1
4.07	0.68	0.77893	-0.098934	1
4.8	0.66	0.73177	-0.071771	1
5.7	0.64	0.67754	-0.037536	1
6.42	0.62	0.63706	-0.017057	1
7.32	0.6	0.58984	0.010158	1
8.42	0.58	0.53686	0.043139	1
9.05	0.54	0.50869	0.031312	1
9.73	0.52	0.47994	0.040063	1
10.1	0.5	0.46498	0.035019	1
10.67	0.48	0.44285	0.037152	1
11.23 11.87	0.46	0.42213	0.03787	1
	0.44 0.42	0.39964	0.040364	1
12.18 12.97	0.42	0.38918	0.030824	1
13.73	0.38	0.36374	0.03626	1
14.43	0.36	0.34084 0.32103	0.03916	1
15.22	0.34	0.30004	0.038975 0.039956	1
16.05	0.32	0.27947	0.040525	1
16.92	0.3	0.25943	0.040573	1
17.95	0.28	0.23754	0.042457	1
19.13	0.26	0.23734	0.045269	1 1
20.33	0.24	0.19378	0.045269	1
21.65	0.22	0.17308	0.046222	1
41.00	0.22	0.1/300	0.04071/	1

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# RESULTS FROM VISUAL CURVE MATCHING

# VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 2.3469E-004y0 = 1.1034E+000

#### TYPE CURVE DATA

K = 1.90836E-003y0 = 1.62109E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
~					
0.000E+000	1.621E+000	2.200E+001	3.651E-007		

# AQTESOLV

A Program for

Automatic Estimation of Aquifer Coefficients
From Aquifer Test Data

By:

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A Q T E S O L V is a user-friendly program designed to analyze data from aquifer tests automatically. Aquifer coefficients for a variety of aquifer test conditions can be estimated by A Q T E S O L V , including the following:

- confined aquifers, unconfined aquifers, and leaky aquifers
- o pumping tests, injection tests, recovery tests, and slug tests

#### Features:

- o Interactive, menu-driven program design
- o Nonlinear least-squares estimation of aquifer coefficients
- o Statistical analysis of results
- o Complete graphical display of results

# AQTESOLV RESULTS Version 1.10

02/07/96 19:37:10

## TEST DESCRIPTION

Data set..... mw2511.dat

Data set title.... Rising Head Slug Test for MW25-11

Knowns and Constants:

A, B, C..... 0.000, 0.000, 0.821

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# ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

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## RESULTS FROM STATISTICAL CURVE MATCHING

# STATISTICAL MATCH PARAMETER ESTIMATES

Estimate Std. Error
K = 1.2408E-003 +/- 9.0665E-006
y0 = 1.7677E+000 +/- 2.7486E-003

## ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual \* weight

Weighted Residual Statistics:

## Model Residuals:

0.0266	1.83	1.7535	0.076546	ĺ
0.03	1.818	1.7516	0.066363	1
0.0333	1.83	1.7499	0.080124	1
0.0366	1.815	1.7481	0.066883	1
0.04	1.808	1.7463	0.061694	1
0.0433	1.802	1.7445	0.05745	1
0.0466	1.799	1.7428	0.056204	1
0.05	1.793	1.741	0.05201	1
0.0533	1.79	1.7392	0.05076	1
0.0566	1.783	1.7375	0.045509	1
0.06	178	1.7357	0.044309	ī
0.0633	1.774	1.7339	0.040054	1
0.0666	1.771	1.7322	0.038798	1
0.07	1.768	1.7304	0.037592	1
0.0733			0.037332	
	1.761	1.7287		1
0.0766	1.758	1.7269	0.03107	1
0.08	1.755	1.7251	0.029859	1
0.0833	1.752	1.7234	0.028594	1
0.0866	1.749	1.7217	0.027327	1
0.09	1.746	1.7199	0.02611	1
0.0933	1.743	1.7182	0.024839	1
0.0966	1.736	1.7164	0.019567	1
0.1	1.733	1.7147	0.018345	1
0.1033	1.733	1.7129	0.020069	1
0.1066	1.727	1.7112	0.015792	1
0.11	1.724	1.7094	0.013732	1
0.1133				
	1.721	1.7077	0.013283	1
0.1166	1.717	1.706	0.011	1
0.12	1.714	1.7042	0.0097674	1
0.1233	1.711	1.7025	0.008481	1
0.1266	1.708	1.7008	0.0071929	1
0.13	1.708	1.699	0.0089548	1
0.1333	1.705	1.6973	0.0076632	1
0.1366	1.702	1.6956	0.0063698	1
0.14	1.699	1.6939	0.0051264	1
0.1433	1.696	1.6922	0.0038295	1
0.1466	1.692	1.6905	0.001531	1
0.15	1.692	1.6887	0.0032822	1
0.1533	1.689	1.687	0.0019802	1
0.1566	1.686	1.6853	0.00067646	1
0.16	1.683	1.6836	-0.00057766	1
0.1633	1.68	1.6819	-0.0018848	
				1
0.1666	1.677	1.6802	-0.0031937	1
0.17	1.677	1.6785	-0.0014532	1
0.1733	1.674	1.6768	-0.0027655	1
0.1766	1.674	1.6751	-0.0010795	1
0.18	1.67	1.6733	-0.0033443	1
0.1833	1.667	1.6717	-0.0046617	1
0.1866	1.664	1.67	-0.0059809	1
0.19	1.664	1.6683	-0.0042509	1
0.1933	1.661	1.6666	-0.0055735	1
0.1966	1.658	1.6649	-0.0068978	1
0.2	1.655	1.6632	-0.0081731	1
0.2033	1.655	1.6615	-0.0065008	ī
0.2066	1.652	1.6598	-0.0078302	1
	1.652	1.6581	-0.0061107	1
0.21		1.6564	-0.0001107	1
0.2133	1.649			
0.2166	1.645	1.6548	-0.009778	1
0.22	1.645	1.6531	-0.0080637	1

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0.2233 0.2266	1.642 1.639	1.6514 1.6497	-0.0094016 -0.010741	1
0.23	1.639	1.648	-0.0090321	1
0.2333	1.636	1.6464	-0.010375	ĺ
0.2366	1.636	1.6447	-0.0087196	1
0.24	1.633	1.643	-0.010016	1
0.2433	1.63	1.6414	-0.011364	1
0.2466	1.63	1.6397	-0.0097134	1
0.25	1.627	1.638	-0.011015	1 1
0.2533	1.623	1.6364	-0.013368	1
0.2566	1.623	1.6347	-0.011722	1
0.26	1.62	1.633	-0.013029	1
0.2633	1.617	1.6314	-0.014387	1
0.2666	1.617	1.6297	-0.012747	1
0.27	1.614	1.6281	-0.014058	1
0.2733	1.614	1.6264	-0.012421	1
0.2766	1.611	1.6248	-0.013786	1
0.28	1.611	1.6231	-0.012103	1
0.2833	1.608	1.6215	-0.013471	1
0.2866	1.605	1.6198	-0.01484	1
0.29 0.2933	1.605 1.601	1.6182 1.6165	-0.013162 -0.015535	1 1
0.2933	1.601	1.6149	-0.01333	1
0.2966	1.598	1.6132	-0.015237	1
0.3033	1.598	1.6116	-0.013615	1
0.3066	1.595	1.61	-0.014995	1 1
0.31	1.595	1.6083	-0.013327	1
0.3133	1.592	1.6067	-0.01471	1
0.3166	1.589	1.6051	-0.016094	1
0.32	1.589	1.6034	-0.014431	1
0.3233	1.586	1.6018	-0.015819	1
0.3266	1.586	1.6002	-0.014208 -0.015551	1 1
0.33 0.3333	1.583 1.583	1.5986 1.5969	-0.013943	1
0.333	1.573	1.5888	-0.015834	1
0.3666	1.564	1.5808	-0.016814	1
0.3833	1.554	1.5728	-0.018787	1
0.4	1.548	1.5648	-0.0168	1
0.4166	1.539	1.5569	-0.017902	1
0.4333	1.529	1.549	-0.019996	1
0.45	1.52	1.5411	-0.02113	1
0.4666	1.514	1.5334	-0.019351	1
0.4833	1.504	1.5256	-0.021565	1
0.5	1.498	1.5178	-0.019818	1
0.5166	1.489	1.5102 1.5025	-0.021156 -0.020488	1 1
0.5333 0.55	1.482 1.476	1.4949	-0.020488	ĺ
0.55	1.467	1.4873	-0.020313	1
0.5833	1.457	1.4798	-0.02276	1
0.5055	1.451	1.4722	-0.021246	1
0.6166	1.442	1.4648	-0.022815	1
0.6333	1.435	1.4574	-0.022376	1
0.65	1.429	1.45	-0.020976	1
0.6666	1.423	1.4427	-0.019657	1
0.6833	1.413	1.4353	-0.022331	1 1
0.7	1.407	1.428 1.4208	-0.021043 -0.019834	1
0.7166 0.7333	1.401 1.391	1.4206	-0.019834	1
0.7333	1.385	1.4064	-0.021441	1
0.7666	1.379	1.3993	-0.020342	1

0.7833	1.373	1.3922	-0.019236	1
0.8	1.366	1.3852	-0.019166	1
0.8166	1.36	1.3782	-0.018174	1
0.8333	1.351	1.3712	-0.020176	1
0.85	1.344	1.3642	-0.020213	1
0.8666	1.338	1.3573	-0.019327	1 1 1 1 1 1 1
0.8833	1.332	1.3504	-0.018435	1
0.9	1.322	1.3436	-0.021577	1
0.9166			-0.020795	1
	1.316	1.3368		1
0.9333	1.31	1.33	-0.020007	1
0.95	1.304	1.3233	-0.019253	1
0.9666	1.297	1.3166	-0.019574	1
0.9833	1.294	1.3099	-0.015888	1
1	1.288	1.3032	-0.015237	1
1.2	1.2	1.2262	-0.026153	1
1.4	1.131	1.1536	-0.022629	1
1.6	1.062	1.0854	-0.023395	1
1.8	1.003	1.0212	-0.018196	1
2	0.946	0.96079	-0.014795	1
2.2	0.893	0.90397	-0.010966	1
				1
2.4	0.843	0.8505	-0.0074988	1
2.6	0.793	0.80019	-0.0071938	1 1 1 1 1 1 1
2.8	0.755	0.75286	0.0021358	1
3	0.708	0.70833	-0.00033403	1
3.2	0.667	0.66644	0.00056226	1
3.4	0.627	0.62702	-1.9517E-005	1
3.6	0.592	0.58993	0.0020672	1 1 1 1 1 1
3.8	0.561	0.55504	0.0059603	1
4	0.529	0.52221	0.0067896	1
4.2	0.501	0.49132	0.0096772	1
4.4	0.473	0.46226	0.010738	1
4.6	0.445	0.43492	0.010079	1
4.8	0.423	0.4092	0.013804	1
5				1
	0.398	0.38499	0.013007	1
5.2	0.379	0.36222	0.016778	1
5.4	0.357	0.3408	0.016203	1 1
5.6	0.338	0.32064	0.01736	1
5.8	0.322	0.30167	0.020325	1
6	0.3	0.28383	0.016169	1
6.2	0.285	0.26704	0.017957	1
6.4	0.272	0.25125	0.020752	1 1
6.6	0.26	0.23639	0.023612	1
6.8	0.247	0.22241	0.024594	1
7	0.238	0.20925	0.028749	1
7.2	0.222	0.19687	0.025126	1
7.4	0.213	0.18523	0.02777	1
7.6	0.203	0.17427	0.028726	1
7.8	0.194	0.16397	0.030034	1
		0.15427	0.026732	1
8	0.181			1
8.2	0.175	0.14514	0.029857	1
8.4	0.166	0.13656	0.029442	1
8.6	0.159	0.12848	0.030519	1
8.8	0.153	0.12088	0.032118	1
9	0.147	0.11373	0.033268	1
9.2	0.137	0.107	0.029995	1
9.4	0.134	0.10068	0.033324	1
9.6	0.128	0.094721	0.033279	1
9.8	0.125	0.089119	0.035881	1
10	0.119	0.083847	0.035153	1
11	0.097	0.061815	0.035185	1
	0.037	0.001013	0.000100	_

12	0.084	0.045573	0.038427	1
13	0.072	0.033598	0.038402	1
14	0.062	0.02477	0.03723	1
15	0.056	0.018261	0.037739	1
16	0.05	0.013463	0.036537	1
17	0.043	0.0099252	0.033075	1
18	0.04	0.0073173	0.032683	1
19	0.04	0.0053946	0.034605	1
20	0.037	0.0039771	0.033023	1
21	0.034	0.002932	0.031068	1
22	0.034	0.0021616	0.031838	1
23	0.034	0.0015936	0.032406	1
24	0.031	0.0011749	0.029825	1
25	0.031	0.00086616	0.030134	1
26	0.031	0.00063857	0.030361	1
27	0.031	0.00047078	0.030529	1
28	0.031	0.00034707	0.030653	1
29	0.031	0.00025588	0.030744	1
30	0.031	0.00018864	0.030811	1
31	0.025	0.00013907	0.024861	1
32	0.021	0.00010253	0.020897	1
33	0.021	7.5589E-005	0.020924	1

## RESULTS FROM VISUAL CURVE MATCHING

# VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 1.2408E-003y0 = 1.7677E+000

# TYPE CURVE DATA

K = 1.24075E-003y0 = 1.76773E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	1.768E+000	3.300E+001	7.559E-005		

# AQTESOLV

# A Program for

Automatic Estimation of Aquifer Coefficients
From Aquifer Test Data

# AOTESOLV RESULTS Version 1.10

02/07/96 19:39:02 \_\_\_\_\_\_\_ TEST DESCRIPTION

Data set..... mw2512.dat Data set title..... Rising Head Slug Test for MW25-12D

Knowns and Constants:

No. of data points..... 211 Radius of well casing..... 0.086 Aguifer saturated thickness..... 420.7 Well screen length..... 9.5 Static height of water in well..... 22.85 

# ANALYTICAL METHOD

Pouwer-Rice (Unconfined Aquifer Slug Test)

## RESULTS FROM STATISTICAL CURVE MATCHING

## STATISTICAL MATCH PARAMETER ESTIMATES

Estimate Std. Error 1.4101E-003 +/- 3.1138E-005 y0 = 3.3484E + 000 + / - 2.4218E - 002

## ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed weighted residual = residual \* weight

Weighted Residual Statistics:

Number of residuals..... 211 Number of estimated parameters.... 2 Degrees of freedom..... 209 Residual mean..... 0.06321 Residual standard deviation..... 0.1456 Residual variance..... 0.02121

# del Residuals:

Observed Calculated Residual Weight Time

0.0033	3.715	3.3351	0.3799	1
	3.633	3.3219	0.31113	1
0.0066				
0.01	3.592	3.3083	0.28371	1
0.0133	3.526	3.2952	0.23083	1
0.0166	3.495	3.2821	0.2129	1
0.02	3.466	3.2687	0.19732	1
				1
0.0233	3.441	3.2557	0.18528	
0.0266	3.391	3.2428	0.1482	1
0.03	3.365	3.2296	0.13545	1
0.0333	3.381	3.2167	0.16426	1
0.0366	3.337	3.204	0.13302	1
		3.1909	0.13711	1
0.04	3.328			
0.0433	3.302	3.1782	0.12377	1
0.0466	3.277	3.1656	0.11138	1
0.05	3.246	3.1527	0.093314	1
0.0533	3.233	3.1402	0.09282	1
0.0566	3.199	3.1277	0.071276	1
		3.1149	0.059058	1
0.06	3.174			
0.0633	3.155	3.1026	0.052415	1
0.0666	3.139	3.0903	0.048722	1
0.07	3.12	3.0776	0.042351	1
0.0733	3.101	3.0654	0.035559	1
0.0766	3.082	3.0533	0.028719	1
			0.0257197	1
0.08	3.066	3.0408		
0.0833	3.051	3.0287	0.022259	1
0.0866	3.032	3.0167	0.015273	1
0.09	3.016	3.0044	0.011601	1
0.0933	3	2.9925	0.007519	1
0.0966	2.985	2.9806	0.0043893	1
			0.00057018	1
0.1	2.969	2.9684		
0.1033	2.953	2.9567	-0.0036548	1
0.1066	2.937	2.9449	-0.0079266	1
0.11	2.922	2.9329	-0.010892	1
0.1133	2.909	2.9213	-0.012258	1
0.1166	2.893	2.9097	-0.01667	1
		2.8978	-0.019779	ī
0.12	2.878			
0.1233	2.865	2.8863	-0.021284	1
0.1266	2.849	2.8748	-0.025835	1
0.13	2.837	2.8631	-0.026086	1
0.1333	2.824	2.8517	-0.027729	1 1
0.1366	2.808	2.8404	-0.032417	1
	2.796	2.8288	-0.032809	1
0.14			-0.034588	1
0.1433	2.783	2.8176		
0.1466	2.77	2.8064	-0.036412	1
0.15	2.758	2.7949	-0.036943	1
0.1533	2.745	2.7839	-0.038856	1
0.1566	2.726	2.7728	-0.046813	1
	2.72	2.7615	-0.041481	1
0.16		2.7505	-0.046527	1
0.1633	2.704			1
0.1666	2.692	2.7396	-0.047617	1
0.17	2.679	2.7284	-0.049421	1
0.1733	2.663	2.7176	-0.054598	1
0.1766	2.651	2.7068	-0.055818	1
	2.635	2.6958	-0.060756	1
0.18		2.6851	-0.075063	1
0.1833	2.61	2.0051		
0.1866	2.597	2.6744	-0.077412	1
0.19	2.585	2.6635	-0.078482	1
0.1933	2.572	2.6529	-0.080917	1
0.1966	2.563	2.6424	-0.079393	1
5.1500				

0.2	2.55	2.6316	-0.081595	1
0.2033	2.541	2.6212	-0.080156	1 1
				1
0.2066	2.528	2.6108	-0.082758	1
0.21	2.515	2.6001	-0.085089	1
0.2133	2.506	2.5898	-0.083775	1
0.2166	2.497	2.5795	-0.082502	1
0.22	2.484	2.569	-0.084961	1
0.2233	2.474	2.5588	-0.08477	1
0.2266	2.462	2.5486	-0.08662	1 1
0.23	2.453	2.5382	-0.085205	1
				1
0.2333	2.443	2.5281	-0.085136	1
0.2366	2.434	2.5181	-0.084108	1
0.24	2.421	2.5078	-0.086817	1
0.2433	2.411	2.4979	-0.086869	1
0.2466	2.402	2.488	-0.085961	1
0.25	2.393	2.4778	-0.084794	1
0.2533	2.383	2.468	-0.084965	1
0.2566	2.374	2.4582	-0.084175	1
0.26	2.361	2.4481	-0.087129	1
0.2633	2.352	2.4384	-0.086418	1
0.2666	2.342	2.4287	-0.086746	1
		2.4188	-0.08582	
0.27	2.333			1
0.2733	2.327	2.4092	-0.082225	1
0.2766	2.314	2.3997	-0.085669	1
0.28	2.304	2.3899	-0.085862	1
0.2833	2.295	2.3804	-0.085382	1
0.2866	2.286	2.3709	-0.08494	1
0.29	2.279	2.3613	-0.08225	1
0.2933	2.27	2.3519	-0.081884	1
0.2966	2.26	2.3426	-0.082554	1
0.3	2.251	2.333	-0.081981	1
0.3033	2.241	2.3237	-0.082727	1
0.3066	2.235	2.3145	-0.079509	1
0.31	2.226	2.3051	-0.079051	1
0.3133	2.216	2.2959	-0.079907	1
0.3166		2.2868		1
	2.207		-0.0798	
0.32	2.201	2.2775	-0.076454	1
0.3233	2.191	2.2684	-0.07742	1
0.3266	2.182	2.2594	-0.077422	1
0.33	2.175	2.2502	-0.075188	1
0.3333	2.166	2.2413	-0.075263	1
0.35	2.122	2.1966	-0.074632	1
0.3666	2.078	2.1531	-0.07515	1
0.3833	2.037	2.1103	-0.073274	1
0.4	1.996	2.0683	-0.072252	1
0.4166	1.958	2.0273	-0.069311	1
0.4333	1.92	1.9869	-0.066941	1
0.45	1.886	1.9474	-0.061375	1
0.4666	1.851	1.9088	-0.057827	1
		1.8708	-0.054816	1
0.4833	1.816			
0.5	1.782	1.8336	-0.051562	1
0.5166	1.75	1.7973	-0.047267	1
0.5333	1.719	1.7615	-0.042478	1
0.55	1.69	1.7264	-0.036401	1
0.5666	1.659	1.6922	-0.033227	1
0.5833	1.631	1.6585	-0.02753	1
0.6	1.606	1.6255	-0.019503	1
0.6166	1.577	1.5933	-0.016327	1
0.6333	1.552	1.5616	-0.0095986	1
0.65	1.527	1.5305	-0.0035024	1

0.6663 0.7166 0.7333 0.7663 0.7663 0.7833 0.8163 0.	1.476 1.476 1.476 1.432 1.386 1.328 1.328 1.2253 71.322 1.221 1.121 1.132 1.221 1.133 1.2223 1.223 1.223 1.223 1.223 1.223 1.233 1.2	1.5002 1.4703 1.4411 1.4125 1.3844 1.3568 1.33 1.3035 1.2775 1.2522 1.2273 1.2029 1.1791 1.1556 1.1326 1.1101 1.088 1.0664 1.0453 1.0245 1.0041 0.78912 0.62019 0.48743 0.38308 0.30108 0.23663 0.18597 0.14616 0.11487 0.090282 0.070955 0.055766 0.043828 0.034446 0.027072 0.021277 0.016722 0.013142 0.0039409 0.0030973 0.0045088 0.0039409 0.0039409 0.0039409 0.0039409 0.0039409 0.0039409 0.0039409 0.0039409 0.0039409 0.0039409 0.0039409 0.0039409 0.0015036 0.0011817 0.00092876 0.00072995 0.00057369 0.00015036 0.0011817 0.00092876 0.0002785 0.0002785 0.0002785	0.0017939 0.0056676 0.012946 0.019472 0.0256 0.031168 0.036026 0.04351 0.050466 0.053755 0.060691 0.069131 0.073941 0.08142 0.088431 0.09185 0.098957 0.10162 0.10673 0.11455 0.11995 0.14288 0.19781 0.24257 0.27492 0.29692 0.31737 0.32403 0.32884 0.33213 0.33072 0.332403 0.32823 0.32417 0.31755 0.30993 0.30272 0.29728 0.28886 0.28167 0.2479 0.24557 0.24009 0.2345 0.22782 0.22507 0.2479 0.24557 0.24009 0.2345 0.22782 0.22507 0.22227 0.21643 0.21355 0.20965 0.20078 0.20078 0.20078 0.20078	111111111111111111111111111111111111111
8.8	0.192	8.3512E-005	0.19192	1

9	0.188	6.5635E-005	0.18793	1
9.2	0.185	5.1584E-005	0.18495	1
9.4	0.182	4.0542E-005	0.18196	1
9.6	0.182	3.1863E-005	0.18197	
9.8	0.179	2.5042E-005	0.17897	1
10	0.176	1.9681E-005	0.17598	1 1 1
11	0.166	5.9017E-006	0.16599	1
12	0.157	1.7697E-006	0.157	1
13	0.148	5.3067E-007	0.148	1
14	0.144	1.5913E-007	0.144	1
15	0.138	4.7716E-008	0.138	1
16	0.132	1.4308E-008	0.132	1 1 1 1
17	0.129	4.2905E-009	0.129	1
18	0.122	1.2866E-009	0.122	1
19	0.119	3.858E-010	0.119	1
20	0.119	1.1569E-010	0.119	1 1 1 1
21	0.113	3.469E-011	0.113	1
22	0.113	1.0402E-011	0.113	1
23	0.11	3.1192E-012	0.11	1
24	0.107	9.3534E-013	0.107	1
25	0.103	2.8047E-013	0.103	1
26	0.103	8.4103E-014	0.103	1
27	0.1	2.5219E-014	0.1	1
28	0.097	7.5624E-015	0.097	1 1 1 1 1 1 1
29	0.097	2.2677E-015	0.097	1
30	0.094	6.7999E-016	0.094	1
31	0.094	2.039E-016	0.094	1
32	0.094	6.1143E-017	0.094	1
33	0.091	1.8334E-017	0.091	1
34	0.091	5.4978E-018	0.091	1 1 1
35	0.088	1.6486E-018	0.088	1
36	0.088	4.9435E-019	0.088	1

\_\_\_\_\_\_

#### RESULTS FROM VISUAL CURVE MATCHING

# VISUAL MATCH PARAMETER ESTIMATES

Estimate K = 1.4101E-003 y0 = 3.3484E+000

# TYPE CURVE DATA

K = 8.14066E-004y0 = 2.30754E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	2.308E+000	3.600E+001	3.104E-011		

# AQTESOLV RESULTS Version 1.10

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#### ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

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## RESULTS FROM STATISTICAL CURVE MATCHING

#### STATISTICAL MATCH PARAMETER ESTIMATES

Estimate Std. Error K = 1.6191E-003 +/- 2.7586E-005y0 = 1.6367E+000 +/- 1.6254E-002

#### ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual \* weight

# Weighted Residual Statistics:

## Model Residuals:

0.17	1.95	1.562	0 20700	1
			0.38798	1
0.27	1.54	1.5197	0.020318	1
0.45	1.45	1.4463	0.0036561	1
0.5	1.43	1.4266	0.0033923	1
0.62	1.37	1.3803	-0.010333	1
0.68	1.35	1.3578	-0.0077612	1
0.73	1.33	1.3392	-0.0092338	1
0.77	1.31	1.3246	-0.014594	1
0.82	1.29	1.3065	-0.016519	1
0.87	1.27	1.2887	-0.018691	1
0.93	1.25	1.2676	-0.017618	1
1	1.23	1.2435	-0.013468	1
1.03	1.21	1.2333	-0.013400	1
1.1	1.19	1.2098	-0.019764	1
1.15	1.17	1.1933	-0.023256	1
1.22	1.15	1.1705	-0.020523	1
1.3	1.13	1.1451	-0.015072	1
1.33	1.11	1.1357	-0.025671	1
1.4	1.09	1.114	-0.024035	1
1.43	1.07	1.1049	-0.034889	1
1.52	1.05	1.0779	-0.027899	1
1.58	1.03	1.0603	-0.030272	1
1.67	1.01	1.0344	-0.024372	1
1.72	0.99	1.0203	-0.030258	
1.82	0.97	0.9926	-0.022604	1
1.88	0.95	0.97637	-0.026372	1
1.95	0.93	0.95777	-0.027771	1
2.03	0.91	0.93695	-0.026946	1
2.12	0.89	0.91406	-0.026946	1
				1
2.18	0.87	0.89911	-0.029111	1
2.27	0.85	0.87715	-0.027148	1
2.38	0.83	0.85103	-0.021031	1
2.47	0.81	0.83024	-0.020243	1 1 1
2.55	0.79	0.81219	-0.02219	1
2.65	0.77	0.79018	-0.020176	
2.73	0.75	0.77299	-0.022995	1
2.85	0.73	0.74792	-0.017921	1
2.93	0.71	0.73166	-0.021659	1
3.07	0.69	0.70405	-0.014046	1
3.17	0.67	0.68496	-0.014963	1
3.27	0.65	0.6664	-0.016397	1
3.4	0.63	0.64301	-0.013012	1
3.5	0.61	0.62558	-0.015583	1
3.63	0.59	0.60363	-0.01363	1
3.77	0.57	0.58085	-0.010849	1
3.9	0.55	0.56047	-0.010466	1
4.07	0.53	0.53489	-0.0048859	1
4.23	0.51	0.51188	-0.0018784	1
	0.5	0.49937	0.00062571	1
4.32		0.49121	-0.0012084	1
4.38	0.49			
4.48	0.48	0.47789	0.0021058	1
4.55	0.47	0.46879	0.0012104	1
4.65	0.46	0.45608	0.0039169	1
4.75	0.45	0.44372	0.006279	1
4.85	0.44	0.43169	0.008306	1
4.93	0.43	0.42231	0.0076924	1
5.05	0.42	0.40861	0.011391	1
5.23	0.4	0.38889	0.01111	1
5.35	0.39	0.37628	0.013724	1

5.48	0.38	0.36307	0.016929	1
5.58	0.37	0.35323	0.01677	
5.68	0.36	0.34366	0.016344	1
5.82	0.35	0.33069	0.019314	1
5.98	0.34	0.31646	0.023538	1
6.22	0.32	0.29627	0.023735	1
6.37	0.31	0.2843	0.025698	1
6.55	0.3	0.27058	0.029418	1
6.7	0.29	0.25966	0.030345	1
6.85	0.28	0.24917	0.03083	1
6.98	0.27	0.24043	0.029574	1
7.15	0.26	0.22945	0.030547	1
7.27	0.25	0.22201	0.02799	1
7.53	0.24	0.2067	0.033298	1
7.68	0.23	0.19836	0.031645	1
7.95	0.22	0.18417	0.035829	1
8.15	0.21	0.17432	0.035677	1
8.52	0.2	0.15747	0.04253	1
8.7	0.19	0.14987	0.040129	1
8.95	0.18	0.13992	0.040079	1
9.3	0.17	0.12709	0.042909	1
9.52	0.16	0.11964	0.040365	1
9.78	0.15	0.11139	0.038614	1
10.63	0.13	0.088184	0.041816	1
11.15	0.12	0.076442	0.043558	1
11.7	0.11	0.06572	0.04428	1
12.42	0.09	0.053923	0.036077	1
14.5	0.07	0.030447	0.039553	1
16.98	0.05	0.015402	0.034598	1
18.53	0.04	0.01006	0.02994	1
20.93	0.03	0.0052022	0.024798	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
25.6	0.02	0.0014417	0.018558	1
27.97	0.01	0.00075169	0.0092483	1
41	0.01	2.0943E-005	0.0099791	1

## RESULTS FROM VISUAL CURVE MATCHING

# VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 1.6191E-003y0 = 1.6367E+000

# TYPE CURVE DATA

K = 1.61907E-003y0 = 1.63672E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	1.637E+000	4.100E+001	2.094E-005		

# AQTESOLV RESULTS Version 1.10

Version 1.10 02/07/96 19:53:18 \_\_\_\_\_\_ TEST DESCRIPTION Data set..... mw2514.dat Data set title.... Rising Head Slug Test for MW25-14D Knowns and Constants: No. of data points..... 198 Radius of well casing..... 0.086 Aguifer saturated thickness..... 421.3 Well screen length..... 9 Static height of water in well..... 22.53 A, B, C..... 3.265, 0.523, 0.000 \_\_\_\_\_\_ ANALYTICAL METHOD Pouwer-Rice (Unconfined Aquifer Slug Test) \_\_\_\_\_\_ RESULTS FROM STATISTICAL CURVE MATCHING STATISTICAL MATCH PARAMETER ESTIMATES Estimate Std. Error
K = 8.5451E-004 +/- 1.4422E-005 y0 = 3.5602E + 000 + / - 1.5168E - 002ANALYSIS OF MODEL RESIDUALS residual = calculated - observed weighted residual = residual \* weight Weighted Residual Statistics: Number of residuals..... 196 Number of estimated parameters.... 2 Residual mean..... 0.03867 Residual standard deviation..... 0.1059 Residual variance..... 0.01122

Jdel Residuals:

0.01	3.834	3.5354	0.2986	1
0.0133	3.775	3.5273	0.24774	1
		3.5191	0.23687	1
0.0166	3.756			
0.02	3.696	3.5108	0.18522	1
0.0233	3.649	3.5027	0.14631	1
0.0266	3.646	3.4946	0.15138	1
0.03	3.621	3.4863	0.13468	1
0.0333	3.608	3.4783	0.12971	1
				1
0.0366	3.615	3.4703	0.14473	
0.04	3.593	3.462	0.13096	1
0.0433	3.574	3.4541	0.11994	1
0.0466	3.555	3.4461	0.1089	1
0.05	3.596	3.4379	0.15808	1
0.0533	3.674	3.43	0.244	1
		3.4221	0.054905	1
0.0566	3.477			1
0.06	3.495	3.414	0.081028	
0.0633	3.521	3.4061	0.11489	1
0.0666	3.401	3.3983	0.0027426	1
0.07	3.442	3.3902	0.05181	1
0.0733	3.426	3.3824	0.043621	1
0.0766	3.401	3.3746	0.026414	1
		3.3666	0.022425	1
0.08	3.389			
0.0833	3.379	3.3588	0.020182	1
0.0866	3.367	3.3511	0.015921	1
0.09	3.357	3.3431	0.013876	1
0.0933	3.348	3.3354	0.012579	1
0.0966	3.335	3.3277	0.0072641	1
0.1	3.326	3.3198	0.0061636	1
0.1033	3.317	3.3122	0.0048129	1
				1
0.1066	3.307	3.3046	0.0024446	
0.11	3.295	3.2967	-0.0017109	1
0.1133	3.285	3.2891	-0.004115	1
0.1166	3.276	3.2815	-0.0055365	1
0.12	3.266	3.2737	-0.0077466	1
0.1233	3.257	3.2662	-0.0092036	1
0.1266	3.248	3.2587	-0.010678	1
		3.2509	-0.012942	ī
0.13	3.238			1
0.1333	3.229	3.2435	-0.014452	
0.1366	3.219	3.236	-0.016978	1
0.14	3.21	3.2283	-0.018297	1
0.1433	3.204	3.2209	-0.016858	1
0.1466	3.194	3.2134	-0.019437	1
0.15	3.185	3.2058	-0.020809	1
0.1533	3.175	3.1984	-0.023422	1
	3.166	3.1911	-0.025053	ī
0.1566			-0.023478	1
0.16	3.16	3.1835		1
0.1633	3.15	3.1761	-0.026143	1
0.1666	3.141	3.1688	-0.027825	1
0.17	3.131	3.1613	-0.030302	1 1
0.1733	3.125	3.154	-0.029018	1
0.1766	3.116	3.1468	-0.030751	1
	3.109	3.1393	-0.030281	1
0.18	3.103	3.132	-0.032048	ī
0.1833		3.1248	-0.032040	1
0.1866	3.094			1 1
0.19	3.084	3.1174	-0.033414	±
0.1933	3.075	3.1102	-0.035231	1
0.1966	3.069	3.1031	-0.034064	1
0.2	3.059	3.0957	-0.036698	1
0.2033	3.053	3.0886	-0.035565	1
0.2000				

0.2066 0.21 0.2133 0.2166 0.22 0.2233 0.2266 0.2333 0.2366 0.24 0.2433 0.2466 0.25 0.2533 0.2566 0.2633 0.2666 0.27 0.2733 0.2766 0.28 0.2833 0.2866 0.29 0.2933 0.2966 0.3033 0.3036 0.3133 0.3166 0.32 0.3233 0.3166 0.32 0.3233 0.3166 0.32 0.3333 0.3166 0.32 0.3333 0.3166 0.31 0.3133 0.3166 0.32 0.3233 0.345 0.4666 0.4333 0.4566 0.4533 0.4566 0.4833 0.4566 0.4833 0.4566 0.5333 0.5566 0.55333 0.5566 0.55333 0.5566 0.55333	3.044 3.028 3.012 3.012 3.012 3.096 3.096 2.9974 2.996 2.9914 2.9918 2.9918 2.886 2.886 2.882 2.883 2.882 2.882 2.883 2.882 2.883 2.882 2.883 2.882 2.883 2.882 2.883 2.883 2.882 2.883 2.	3.0814 3.0741 3.0671 3.0527 3.0387 3.03157 3.03155 3.01703 3.01034 2.99894 2.996817 2.996817 2.996817 2.99411 2.99411 2.99411 2.99412 2.99412 2.99412 2.887875 2.887854 2.88466 2.88466 2.88534 2.88534 2.8868 2.88754 2.88754 2.88754 2.887554 2.887554 2.8868 2.887554	-0.037449 -0.037134 -0.037984 -0.037984 -0.04072 -0.039686 -0.042669 -0.041455 -0.043502 -0.042339 -0.042483 -0.043461 -0.043706 -0.0458868 -0.0458868 -0.0458868 -0.0458868 -0.0458868 -0.045889 -0.045889 -0.046588 -0.045884 -0.046405 -0.046693 -0.047616 -0.046787 -0.046274 -0.046274 -0.046274 -0.046274 -0.046274 -0.046274 -0.046274 -0.046274 -0.046274 -0.046274 -0.046274 -0.053405 -0.053405 -0.055798 -0.056744 -0.058342 -0.058342 -0.058359 -0.056864 -0.058359 -0.057848 -0.058359 -0.057848	
0.5 0.5166 0.5333 0.55 0.5666	2.45 2.422 2.394 2.366 2.337	2.5101 2.4811 2.4523 2.4238 2.3959	-0.060062 -0.059104 -0.058309 -0.057848 -0.058885	1 1 1 1

0.7	2.133	2.1826	-0.049571	1
				ĺ
0.7166	2.112	2.1574	-0.045391	
0.7333	2.086	2.1324	-0.046353	1
0.75	2.064	2.1076	-0.043605	1
				1
0.7666	2.042	2.0833	-0.04129	
0.7833	2.021	2.0591	-0.038112	1
	1.999	2.0352	-0.036215	1
0.8				
0.8166	1.977	2.0117	-0.034735	1
0.8333	1.955	1.9884	-0.033387	1
		1.9653	-0.032311	1
0.85	1.933			
0.8666	1.914	1.9426	-0.028637	1
0.8833	1.892	1.9201	-0.028092	1
	1.873	1.8978	-0.024807	1
0.9				1
0.9166	1.851	1.8759	-0.024913	1
0.9333	1.832	1.8541	-0.022142	1
		1.8326	-0.019623	1
0.95	1.813			1
0.9666	1.795	1.8115	-0.016481	1
0.9833	1.776	1.7905	-0.014457	1
	1.757	1.7697	-0.012677	1
1				
1.2	1.496	1.5388	-0.042785	1
1.4	1.33	1.338	-0.0080176	1
	1.189	1.1634	0.025555	1
1.6				
1.8	1.07	1.0116	0.058352	1
2	0.96	0.87966	0.080343	1 1 1
	0.872	0.76489	0.10711	1
2.2				-
2.4	0.794	0.66509	0.12891	1
2.6	0.721	0.57832	0.14268	1
	0.665	0.50286	0.16214	1
2.8				
3	0.608	0.43725	0.17075	1
3.2	0.561	0.3802	0.1808	1
3.4	0.517	0.3306	0.1864	1
				1
3.6	0.483	0.28746	0.19554	1
3.8	0.451	0.24996	0.20104	1
4	0.423	0.21735	0.20565	1
				1
4.2	0.398	0.18899	0.20901	_
4.4	0.376	0.16433	0.21167	1
4.6	0.354	0.14289	0.21111	1
		0.12425	0.21075	1
4.8	0.335			
5	0.316	0.10804	0.20796	1
5.2	0.301	0.093941	0.20706	1
	0.288	0.081684	0.20632	1
5.4				1 1 1
5.6	0.276	0.071027	0.20497	
5.8	0.263	0.06176	0.20124	1
6	0.254	0.053702	0.2003	1
			0.1973	1 1 1
6.2	0.244	0.046695		
6.4	0.235	0.040603	0.1944	1
6.6	0.225	0.035306	0.18969	1
			0.1883	1
6.8	0.219	0.030699		
7	0.213	0.026694	0.18631	1
7.2	0.207	0.023211	0.18379	1
		0.020183	0.17982	1 1
7.4	0.2			1
7.6	0.194	0.017549	0.17645	1
7.8	0.194	0.01526	0.17874	1
		0.013269	0.17173	
8	0.185			1 1 1
8.2	0.182	0.011538	0.17046	1
8.4	0.175	0.010032	0.16497	1
	0.172	0.0087233	0.16328	1
8.6				1
8.8	0.172	0.0075852	0.16441	<u>_</u>
9	0.166	0.0065955	0.1594	1
	0.163	0.005735	0.15727	1
9.2	0.103	0.000/00		

9.4	0.16	0.0049867	0.15501	1
9.6	0.16	0.0043361	0.15566	ĺ
9.8	0.153	0.0037704	0.14923	1
10	0.153	0.0032784	0.14972	1
11	0.147	0.0016296	0.14537	1
12	0.134	0.00081004	0.13319	1
13	0.128	0.00040265	0.1276	1
14	0.122	0.00020015	0.1218	1
15	0.119	9.9487E-005	0.1189	1
16	0.113	4.9452E-005	0.11295	1
17	0.109	2.4581E-005	0.10898	1
18	0.106	1.2219E-005	0.10599	1
19	0.106	6.0735E-006	0.10599	1
20	0.103	3.019E-006	0.103	1
21	0.1	1.5007E-006	0.099998	1
22	0.1	7.4593E-007	0.099999	1
23	0.097	3.7078E-007	0.097	1

## RESULTS FROM VISUAL CURVE MATCHING

# VISUAL MATCH PARAMETER ESTIMATES

Estimate K = 8.5451E-004 y0 = 3.5602E+000

# TYPE CURVE DATA

K = 7.98074E-004y0 = 3.38162E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	3.382E+000	2.300E+001	1.018E-006		

# AQTESOLV

# A Program for

Automatic Estimation of Aquifer Coefficients

From Aquifer Test Data

By:

Glenn M. Duffield and

# AQTESOLV RESULTS Version 1.10

ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

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RESULTS FROM STATISTICAL CURVE MATCHING

STATISTICAL MATCH PARAMETER ESTIMATES

Estimate Std. Error K = 5.2336E-005 +/- 4.8857E-007v0 = 1.6337E+000 +/- 3.6225E-003

ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual \* weight

Weighted Residual Statistics:

Model Residuals:

0.0133	1.802	1.6335	0.16855	ì
0.0166	1.802	1.6334	0.16861	1
0.02	1.777	1.6333	0.14368	1
0.0233	1.777	1.6332	0.14375	1
0.0266	1.768	1.6332	0.13482	1
0.03	1.739	1.6331	0.10589	1
0.0333	1.755	1.633	0.12196	1
0.0366	1.755	1.633	0.12203	1
0.04	1.749	1.6329	0.1161	1
0.0433	1.746	1.6328	0.11317	
				1
0.0466	1.743	1.6328	0.11023	1
0.05	1.739	1.6327	0.10631	1
0.0533	1.733	1.6326	0.10037	1
0.0566	1.733	1.6326	0.10044	1
0.06	1.73	1.6325	0.097512	1
0.0633	1.727	1.6324	0.09458	1
0.0666	1.724	1.6324	0.091649	1
0.07	1.721	1.6323	0.088719	1
0.0733	1.718	1.6323	0.085787	1
0.0766				
	1.718	1.6321	0.085855	1
0.08	1.714	1.6321	0.081926	1
0.0833	1.711	1.632	0.078994	1
0.0866	1.708	1.6319	0.076062	1
0.09	1.708	1.6319	0.076133	1
0.0933	1.705	1.6318	0.073201	1
0.0966	1.702	1.6317	0.070269	1
0.1	1.702	1.6317	0.070339	1
0.1033	1.699	1.6316	0.067407	ī
0.1066	1.696	1.6315	0.064476	1
0.11	1.696	1.6315	0.064546	
0.1133	1.692			1
		1.6314	0.060614	1
0.1166	1.692	1.6313	0.060682	1
0.12	1.689	1.6312	0.057753	1
0.1233	1.689	1.6312	0.057821	1
0.1266	1.686	1.6311	0.054889	1
0.13	1.683	1.631	0.051959	1
0.1333	1.683	1.631	0.052027	1
0.1366	1.68	1.6309	0.049096	1
0.14	1.68	1.6308	0.049166	1
0.1433	1.677	1.6308	0.046234	1
0.1466	1.677	1.6307	0.046302	1
0.15	1.677	1.6306	0.046373	1
0.1533	1.674	1.6306	0.043441	
				1
0.1566	1.67	1.6305	0.039509	1
0.16	1.67	1.6304	0.039579	1
0.1633	1.667	1.6304	0.036647	1
0.1666	1.667	1.6303	0.036715	1
0.17	1.667	1.6302	0.036786	1
0.1733	1.664	1.6301	0.033854	1
0.1766	1.664	1.6301	0.033922	1
0.18	1.661	1.63	0.030992	1
0.1833	1.661	1.6299	0.03106	1
0.1866	1.658	1.6299	0.028129	ĺ
		1.6298	0.028129	1
0.19	1.658			
0.1933	1.658	1.6297	0.028267	1
0.1966	1.655	1.6297	0.025335	1
0.2	1.652	1.6296	0.022405	1
0.2033	1.652	1.6295	0.022473	1
0.2066	1.652	1.6295	0.022541	1

0.21	1.649	1.6294	0.019612	1
0.2133	1.649	1.6293	0.01968	1
		1.6293	0.019748	1
0.2166	1.649			
0.22	1.645	1.6292	0.015818	1
0.2233	1.645	1.6291	0.015886	1
0.2266	1.645	1.629	0.015954	1
				1
0.23	1.645	1.629	0.016024	
0.2333	1.642	1.6289	0.013093	1
0.2366	1.642	1.6288	0.013161	1
	1.642	1.6288	0.013231	1
0.24				
0.2433	1.639	1.6287	0.010299	1
0.2466	1.639	1.6286	0.010367	1
0.25	1.636	1.6286	0.0074372	1
		1.6285	0.0075053	1
0.2533	1.636			
0.2566	1.636	1.6284	0.0075734	1
0.26	1.636	1.6284	0.0076435	1
0.2633	1.633	1.6283	0.0047116	1
		1.6282	0.0047797	1
0.2666	1.633			<u> </u>
0.27	1.633	1.6282	0.0048498	1
0.2733	1.633	1.6281	0.0049179	1
0.2766	1.63	1.628	0.0019859	1
				1
0.28	1.63	1.6279	0.0020561	
0.2833	1.63	1.6279	0.0021241	1
0.2866	1.627	1.6278	-0.00080782	1
0.29	1.627	1.6277	-0.0007377	1
				1
0.2933	1.627	1.6277	-0.00066964	
0.2966	1.627	1.6276	-0.00060159	1
0.3	1.627	1.6275	-0.00053148	1
0.3033	1.623	1.6275	-0.0044634	1
0.3066	1.623	1.6274	-0.0043954	1
0.31	1.623	1.6273	-0.0043253	1
0.3133	1.62	1.6273	-0.0072573	1
0.3166	1.62	1.6272	-0.0071892	1
0.32	1.62	1.6271	-0.0071191	1
0.3233	1.62	1.6271	-0.0070511	1
0.3266	1.62	1.627	-0.0069831	1
	1.617	1.6269	-0.009913	1
0.33				1
0.3333	1.617	1.6268	-0.009845	
0.35	1.617	1.6265	-0.0095008	1
0.3666	1.614	1.6262	-0.012159	1
0.3833	1.611	1.6258	-0.014815	1
0.4	1.608	1.6255	-0.017471	1
0.4166	1.605	1.6251	-0.020129	1
0.4333	1.602	1.6248	-0.022785	1 1
0.45	1.598	1.6244	-0.026441	1
			-0.0261	1
0.4666	1.598	1.6241		
0.4833	1.595	1.6238	-0.028756	1
0.5	1.592	1.6234	-0.031413	1
0.5166	1.595	1.6231	-0.028071	1
				1
0.5333	1.589	1.6227	-0.033728	
0.55	1.589	1.6224	-0.033385	1
0.5666	1.586	1.622	-0.036043	1
0.5833	1.583	1.6217	-0.0387	1
			-0.038357	1
0.6	1.583	1.6214		<u>_</u>
0.6166	1.58	1.621	-0.041016	1
0.6333	1.58	1.6207	-0.040673	1
	1.58	1.6203	-0.04033	1
0.65		1.62	-0.04399	1
0.6666	1.576			
0.6833	1.576	1.6196	-0.043647	1
0.7	1.576	1.6193	-0.043304	1

0.7166 0.7333 0.75 0.7666 0.7833 0.8 0.8166 0.8333	1.573 1.576 1.573 1.57 1.57 1.573 1.57	1.619 1.6186 1.6183 1.6179 1.6176 1.6169 1.6166	-0.045964 -0.042621 -0.045279 -0.047938 -0.047596 -0.044254 -0.046914	1 1 1 1 1 1
0.85 0.8666 0.8833 0.9 0.9166 0.9333	1.567 1.567 1.564 1.564 1.57	1.6162 1.6159 1.6155 1.6152 1.6149 1.6145	-0.04923 -0.04889 -0.051548 -0.051206 -0.044867 -0.050525	1 1 1 1 1
0.95 0.9666 0.9833 1 1.2 1.4	1.564 1.561 1.561 1.561 1.554 1.548	1.6142 1.6138 1.6135 1.6132 1.6091 1.605	-0.050183 -0.052844 -0.052503 -0.052161 -0.055079 -0.057007	1 1 1 1 1 1
1.6 1.8 2 2.2 2.4 2.6	1.545 1.539 1.533 1.529 1.526 1.523 1.517	1.6009 1.5969 1.5929 1.5888 1.5848	-0.055945 -0.057893 -0.059852 -0.059821 -0.0588 -0.057789	1 1 1
2.8 3.2 3.4 3.6 3.8	1.514 1.507 1.504 1.504 1.498 1.492	1.5768 1.5728 1.5688 1.5648 1.5609 1.5569	-0.059789 -0.058798 -0.061818 -0.060848 -0.056888 -0.058938 -0.060997	1 1 1 1 1 1
4.2 4.4 4.6 4.8 5	1.489 1.482 1.479 1.476 1.473	1.5491 1.5451 1.5412 1.5373 1.5334 1.5296	-0.060067 -0.063147 -0.062237 -0.061336 -0.060446 -0.056565	1 1 1 1 1
5.4 5.8 5.8 6.2	1.467 1.46 1.457 1.457 1.451	1.5257 1.5218 1.518 1.5141 1.5103 1.5065	-0.058694 -0.061833 -0.060982 -0.05714 -0.059308 -0.058486	1 1 1 1 1
6.6 6.8 7 7.2 7.4 7.6 7.8	1.445 1.442 1.438 1.432 1.429 1.426 1.423	1.5027 1.4989 1.4951 1.4913 1.4875 1.4838	-0.057673 -0.056871 -0.057077 -0.059294 -0.05852 -0.057755 -0.057	1 1 1 1 1 1
8 8.2 8.4 8.6 8.8	1.42 1.417 1.413 1.407 1.407	1.4763 1.4725 1.4688 1.4651 1.4614 1.4577	-0.056255 -0.055519 -0.055792 -0.058075 -0.054368 -0.056669	1 1 1 1 1
9.2 9.4	1.398 1.395	1.454 1.4503	-0.05598 -0.055301	1 1

	1 201	1 1166	0 05563	1
9.6	1.391	1.4466	-0.05563	1
9.8	1.388	1.443	-0.054969	ĺ
				1
10	1.388	1.4393	-0.051318	
11	1.37	1.4212	-0.051197	1
				1
12	1.354	1.4033	-0.049305	
13	1.335	1.3856	-0.050637	1
14	1.319	1.3682	-0.049193	1
15	1.304	1.351	-0.046968	1
16	1.291	1.334	-0.042959	1
17	1.275	1.3172	-0.042165	1
18	1.26	1.3006	-0.040582	1
19	1.247	1.2842	-0.037208	1
				-
20	1.232	1.268	-0.036041	1
21	1.216	1.2521	-0.036076	1
				1
22	1.203	1.2363	-0.033313	1
23	1.191	1.2207	-0.029748	1
24	1.175	1.2054	-0.03038	1
25	1.163	1.1902	-0.027204	1
26	1.147	1.1752	-0.02822	1
27	1.134	1.1604	-0.026424	1
28	1.119	1.1458	-0.026815	1
29	1.109	1.1314	-0.022389	1
				_
30	1.097	1.1171	-0.020145	1
31	1.084	1.1031	-0.019081	1
				1
32	1.069	1.0892	-0.020194	
33	1.056	1.0755	-0.019481	1
				1
34	1.043	1.0619	-0.018941	1
35	1.031	1.0486	-0.017571	1
				1
36	1.018	1.0354	-0.01737	
37	1.009	1.0223	-0.013335	1
			-0.013464	1
38	0.996	1.0095		
39	0.987	0.99676	-0.0097555	1
		0.98421	-0.013207	1
40	0.971			
41	0.959	0.97182	-0.012816	1
	0.949	0.95958	-0.010581	1
42				
43	0.94	0.9475	-0.0075	1
44	0.927	0.93557	-0.0085713	1
45	0.915	0.92379	-0.0087927	1
46	0.906	0.91216	-0.0061625	1
47	0.893	0.90068	-0.0076786	1
48	0.884	0.88934	-0.0053394	1
49	0.871	0.87814	-0.0071428	1
50	0.865	0.86709	-0.0020873	1
			-0.0011709	1
51	0.855	0.85617		
52	0.843	0.84539	-0.002392	1
		0.83475	-0.0017488	1
53	0.833			
54	0.824	0.82424	-0.00023952	1
	0.815	0.81386	0.0011374	1
55				
56	0.805	0.80362	0.0013837	1
	0.796	0.7935	0.002501	1
57				
58	0.786	0.78351	0.0024909	1
59	0.777	0.77364	0.003355	1
				ī
60	0.768	0.76391	0.004095	
61	0.758	0.75429	0.0037123	1
				1
62	0.752	0.74479	0.0072086	1
63	0.743	0.73541	0.0075853	1
			0.0068439	1
64	0.733	0.72616		
65	0.724	0.71701	0.006986	1
		0.70799	0.006013	1
66	0.714			
67	0.708	0.69907	0.0089263	1
· ·				

68 69	0.699 0.689	0.69027 0.68158	0.0087275 0.0074178	1 1
70	0.683	0.673	0.0099987	1
71	0.674	0.66453	0.0094716	1
72	0.667	0.65616	0.010838	
<b>7</b> 3	0.658	0.6479	0.010099	1
74	0.655	0.63974	0.015256	1
75	0.645	0.63169	0.01331	1
76	0.639	0.62374	0.015263	1
77	0.633	0.61588	0.017115	1 1 1 1 1
78 79	0.623 0.617	0.60813 0.60047	0.014869 0.016525	
80	0.608	0.59292	0.015085	1
81	0.601	0.58545	0.015085	1 1
82	0.595	0.57808	0.01692	1
83	0.586	0.5708	0.015198	1
84	0.579	0.56362	0.015384	ī
85	0.57	0.55652	0.01348	1
86	0.567	0.54951	0.017486	1
87	0.561	0.5426	0.018405	1
88	0.554	0.53576	0.018236	1 1 1 1 1
89	0.548	0.52902	0.018981	1
90	0.542	0.52236	0.019641	1
91 92	0.536	0.51578	0.020217	1
93	0.529 0.523	0.50929 0.50288	0.019711 0.020123	1
94	0.523	0.30288	0.020123	1 1 1 1 1 1 1
95	0.517	0.49029	0.020434	1
96	0.504	0.48412	0.019878	1
97	0.501	0.47803	0.022973	ī
98	0.492	0.47201	0.019991	1
99	0.489	0.46607	0.022934	1
100	0.485	0.4602	0.024801	1
101	0.479	0.45441	0.024595	1
102	0.473	0.44868	0.024316	1
103	0.47	0.44304	0.026965	1 1 1
104 105	0.457 0.451	0.43746 0.43195	0.019542 0.01905	1
106	0.451	0.43195	0.01903	1
107	0.448	0.42114	0.024400	1
108	0.442	0.41584	0.02616	1
109	0.442	0.41061	0.031395	1 1
110	0.435	0.40544	0.029564	1
111	0.429	0.40033	0.028669	1
112	0.426	0.39529	0.030709	1
113	0.416	0.39031	0.025685	1 1
114	0.413	0.3854	0.027599	
115	0.41 0.404	0.38055 0.37576	0.029451 0.028242	1 1
116 117	0.401	0.37576	0.028242	1
117	0.395	0.36636	0.029973	1
110	0.373	0.0000	0.020044	_

# RESULTS FROM VISUAL CURVE MATCHING

# SUAL MATCH PARAMETER ESTIMATES

Estimate

K = 5.3512E-005y0 = 1.5857E+000

0

#### TYPE CURVE DATA

K = 5.35124E-005y0 = 1.58575E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	1.586E+000	1.180E+002	3.438E-001		

## AQTESOLV

# A Program for

Automatic Estimation of Aquifer Coefficients
From Aquifer Test Data

By:

Glenn M. Duffield and James O. Rumbaugh, III

Geraghty & Miller Modeling Group 1895 Preston White Drive, Suite 301 Reston, VA 22091

(703) 476 - 0335

A Q T E S O L V is a user-friendly program designed to analyze data from aquifer tests automatically. Aquifer coefficients for a variety of aquifer test conditions can be estimated by A Q T E S O L V , including the following:

- o confined aquifers, unconfined aquifers, and leaky aquifers
- o pumping tests, injection tests, recovery tests, and slug tests

#### Features:

- o Interactive, menu-driven program design
- o Nonlinear least-squares estimation of aquifer coefficients

# AQTESOLV RESULTS Version 1.10

02/07/96 20:00:42

## TEST DESCRIPTION

Data set..... mw2516.dat

Data set title.... Rising Head Slug Test for MW25-16D

Knowns and Constants:

A, B, C...... 3.265, 0.523, 0.000

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#### ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

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# RESULTS FROM STATISTICAL CURVE MATCHING

## STATISTICAL MATCH PARAMETER ESTIMATES

Estimate Std. Error K = 5.7713E-004 +/- 2.0290E-005 y0 = 3.2066E+000 +/- 2.5129E-002

## ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual \* weight

Weighted Residual Statistics:

#### del Residuals:

Time Observed Calculated Residual Weight

0.00	2 506	3.1763	0.4097	1
0.02	3.586			1 1
0.0233	3.494	3.1713	0.32267	
0.0266	3.476	3.1664	0.30962	1
0.03	3.453	3.1613	0.29172	1
0.0333	3.428	3.1563	0.27166	1
0.0366	3.409	3.1514	0.2576	1
0.04	3.397	3.1463	0.25067	1
0.0433	3.381	3.1414	0.23959	1
0.0466	3.365	3.1365	0.2285	1
	3.35	3.1314	0.21855	1
0.05			0.21033	
0.0533	3.337	3.1266		1
0.0566	3.324	3.1217	0.20233	1
0.06	3.312	3.1166	0.19536	1
0.0633	3.299	3.1118	0.18723	1
0.0666	3.287	3.1069	0.18009	1
0.07	3.274	3.1019	0.1721	1
0.0733	3.265	3.0971	0.16794	1
0.0766	3.252	3.0922	0.15979	1
0.08	3.236	3.0872	0.14876	1
0.0833	3.227	3.0824	0.14459	1
0.0866	3.214	3.0776	0.13641	1
0.09	3.205	3.0726	0.13236	1
0.0933	3.192	3.0678	0.12417	1
0.0966	3.183	3.063	0.11996	1
0.1	3.173	3.0581	0.11489	1
0.1033	3.167	3.0533	0.11367	1
0.1066	3.154	3.0486	0.10545	1
0.11	3.148	3.0436	0.10435	1
0.1133	3.136	3.0389	0.097112	1
0.1166	3.126	3.0341	0.091862	1
		3.0293	0.031002	. 1
0.12	3.117			1
0.1233	3.107	3.0245	0.082482	
0.1266	3.098	3.0198	0.07821	1
0.13	3.088	3.0149	0.073072	1
0.1333	3.079	3.0102	0.068785	1
0.1366	3.073	3.0055	0.06749	1
0.14	3.063	3.0007	0.062329	1
0.1433	3.054	2.996	0.058019	1
0.1466	3.044	2.9913	0.052702	1
0.15	3.035	2.9865	0.048519	1
0.1533	3.022	2.9818	0.040187	1
0.1566	3.016	2.9772	0.038847	1
0.16	3.006	2.9724	0.033641	1
	2.997	2.9677	0.029287	1
0.1633		2.9631	0.027926	1
0.1666	2.991			
0.17	2.981	2.9583	0.022697	1
0.1733	2.975	2.9537	0.021321	1
0.1766	2.966	2.9491	0.016937	1
0.18	2.959	2.9443	0.014686	1
0.1833	2.95	2.9397	0.010288	1
0.1866	2.94	2.9351	0.004883	1
0.19	2.934	2.9304	0.0036095	1
0.1933	2.925	2.9258	-0.00081039	1
	2.923	2.9212	-0.0032374	1
0.1966	2.918	2.9165	-0.0075333	1
0.2		2.9103	-0.0073333	1
0.2033	2.903		-0.014423	1
0.2066	2.893	2.9074		
0.21	2.887	2.9027	-0.015742	1
0.2133	2.88	2.8982	-0.018205	1

0.2166 2.871	2.8937	-0.022675	1
0.22 2.865	2.889	-0.024015	ì
0.2233 2.859	2.8845		1
		-0.0255	
0.2266 2.852	2.88	-0.027991	1
0.23 2.843	2.8754	-0.032353	1
0.2333 2.836	2.8709	-0.034859	1
0.2366 2.83	2.8664	-0.036372	1
0.24 2.824	2.8618	-0.037756	1
0.2433 2.818	2.8573	-0.039284	1
0.2466 2.811	2.8528	-0.041818	1
0.25 2.805	2.8482	-0.043224	1
0.2533 2.796	2.8438	-0.047772	1
0.2566 2.789	2.8393	-0.050327	1
0.26 2.783	2.8348	-0.051755	1
0.2633 2.777	2.8303	-0.053324	1
0.2666 2.77	2.8259	-0.055901	1
0.27 2.764	2.8214	-0.05735	ī
0.2733 2.758	2.8169	-0.05894	1
0.2766 2.752	2.8125	-0.060538	1
0.28 2.745	2.808	-0.063008	1
0.2833 2.739	2.8036	-0.06462	1
0.2866 2.729	2.7992	-0.070238	1
0.29 2.726	2.7947	-0.06873	1
0.2933 2.72	2.7904	-0.070362	1
0.2966 2.714	2.786	-0.072	1
0.3 2.707	2.7815	-0.074514	1
0.3033 2.701	2.7772	-0.076167	1
0.3066 2.695	2.7728	-0.077826	1
0.31 2.689	2.7684	-0.079361	1
0.3133 2.682	2.764	-0.082034	1
0.3166 2.676	2.7597	-0.083714	1
0.32 2.67	2.7553	-0.08527	1
0.3233 2.663	2.751	-0.087963	1
0.3266 2.657	2.7467	-0.089664	1
0.33 2.651	2.7422	-0.091241	1
0.3333 2.648	2.738	-0.089955	1
0.35 2.616	2.7164	-0.10037	1
0.3666 2.585	2.6951	-0.11008	1
0.3833 2.553	2.6738	-0.12083	1
0.4 2.525			
		-0 12775	1
	2.6527	-0.12775	1
0.4166 2.496	2.632	-0.13595	1
0.4166 2.496 0.4333 2.471	2.632 2.6112	-0.13595 -0.1402	1 1
0.4166 2.496	2.632	-0.13595	1
0.4166 2.496 0.4333 2.471 0.45 2.443	2.632 2.6112	-0.13595 -0.1402	1 1
0.4166 2.496 0.4333 2.471 0.45 2.443 0.4666 2.418	2.632 2.6112 2.5906 2.5703	-0.13595 -0.1402 -0.14761 -0.15231	1 1 1
0.4166       2.496         0.4333       2.471         0.45       2.443         0.4666       2.418         0.4833       2.393	2.632 2.6112 2.5906 2.5703 2.55	-0.13595 -0.1402 -0.14761 -0.15231 -0.15704	1 1 1 1
0.4166 2.496 0.4333 2.471 0.45 2.443 0.4666 2.418 0.4833 2.393 0.5 2.367	2.632 2.6112 2.5906 2.5703 2.55 2.5299	-0.13595 -0.1402 -0.14761 -0.15231 -0.15704 -0.16294	1 1 1 1 1
0.4166       2.496         0.4333       2.471         0.45       2.443         0.4666       2.418         0.4833       2.393         0.5       2.367         0.5166       2.345	2.632 2.6112 2.5906 2.5703 2.55 2.5299 2.5101	-0.13595 -0.1402 -0.14761 -0.15231 -0.15704 -0.16294 -0.16511	1 1 1 1 1
0.4166       2.496         0.4333       2.471         0.45       2.443         0.4666       2.418         0.4833       2.393         0.5       2.367         0.5166       2.345         0.5333       2.32	2.632 2.6112 2.5906 2.5703 2.55 2.5299 2.5101 2.4903	-0.13595 -0.1402 -0.14761 -0.15231 -0.15704 -0.16294 -0.16511 -0.17032	1 1 1 1 1 1
0.4166       2.496         0.4333       2.471         0.45       2.443         0.4666       2.418         0.4833       2.393         0.5       2.367         0.5166       2.345	2.632 2.6112 2.5906 2.5703 2.55 2.5299 2.5101	-0.13595 -0.1402 -0.14761 -0.15231 -0.15704 -0.16294 -0.16511 -0.17032 -0.17268	1 1 1 1 1 1 1
0.4166       2.496         0.4333       2.471         0.45       2.443         0.4666       2.418         0.4833       2.393         0.5       2.367         0.5166       2.345         0.5333       2.32         0.55       2.298	2.632 2.6112 2.5906 2.5703 2.55 2.5299 2.5101 2.4903	-0.13595 -0.1402 -0.14761 -0.15231 -0.15704 -0.16294 -0.16511 -0.17032	1 1 1 1 1 1
0.4166       2.496         0.4333       2.471         0.45       2.443         0.4666       2.418         0.4833       2.393         0.5       2.367         0.5166       2.345         0.5333       2.32         0.55       2.298         0.5666       2.273	2.632 2.6112 2.5906 2.5703 2.55 2.5299 2.5101 2.4903 2.4707 2.4513	-0.13595 -0.1402 -0.14761 -0.15231 -0.15704 -0.16294 -0.16511 -0.17032 -0.17268	1 1 1 1 1 1 1 1
0.4166       2.496         0.4333       2.471         0.45       2.443         0.4666       2.418         0.4833       2.393         0.5       2.367         0.5166       2.345         0.5333       2.32         0.5666       2.273         0.5833       2.251	2.632 2.6112 2.5906 2.5703 2.55 2.5299 2.5101 2.4903 2.4707 2.4513 2.432	-0.13595 -0.1402 -0.14761 -0.15231 -0.15704 -0.16294 -0.16511 -0.17032 -0.17268 -0.17832 -0.18099	1 1 1 1 1 1 1 1
0.4166       2.496         0.4333       2.471         0.45       2.443         0.4666       2.418         0.4833       2.393         0.5       2.367         0.5166       2.345         0.5333       2.32         0.5666       2.273         0.5833       2.251         0.6       2.229	2.632 2.6112 2.5906 2.5703 2.55 2.5299 2.5101 2.4903 2.4707 2.4513 2.432 2.4128	-0.13595 -0.1402 -0.14761 -0.15231 -0.15704 -0.16294 -0.16511 -0.17032 -0.17268 -0.17832 -0.18399 -0.18382	1 1 1 1 1 1 1 1 1
0.4166       2.496         0.4333       2.471         0.45       2.443         0.4666       2.418         0.4833       2.393         0.5       2.367         0.5166       2.345         0.5333       2.32         0.5666       2.273         0.5833       2.251         0.6       2.229         0.6166       2.21	2.632 2.6112 2.5906 2.5703 2.55 2.5299 2.5101 2.4903 2.4707 2.4513 2.432 2.4128 2.3939	-0.13595 -0.1402 -0.14761 -0.15231 -0.15704 -0.16511 -0.17032 -0.17268 -0.17268 -0.17832 -0.18099 -0.18382 -0.18391	1 1 1 1 1 1 1 1 1 1
0.4166       2.496         0.4333       2.471         0.45       2.443         0.4666       2.418         0.4833       2.393         0.5       2.367         0.5166       2.345         0.5333       2.32         0.5666       2.273         0.5833       2.251         0.6166       2.21         0.6333       2.188	2.632 2.6112 2.5906 2.5703 2.55 2.5299 2.5101 2.4903 2.4707 2.4513 2.432 2.4128 2.3939 2.375	-0.13595 -0.1402 -0.14761 -0.15231 -0.15704 -0.16511 -0.17032 -0.17268 -0.17832 -0.18099 -0.18382 -0.18391 -0.18703	1 1 1 1 1 1 1 1 1 1
0.4166       2.496         0.4333       2.471         0.45       2.443         0.4666       2.418         0.4833       2.393         0.5       2.367         0.5166       2.345         0.5333       2.32         0.5666       2.273         0.5833       2.251         0.6166       2.21         0.6333       2.188         0.65       2.169	2.632 2.6112 2.5906 2.5703 2.55 2.5299 2.5101 2.4903 2.4707 2.4513 2.432 2.4128 2.3939 2.375 2.3563	-0.13595 -0.1402 -0.14761 -0.15231 -0.15704 -0.16511 -0.17032 -0.17268 -0.17832 -0.18392 -0.18391 -0.18703 -0.1873	1 1 1 1 1 1 1 1 1 1 1
0.4166       2.496         0.4333       2.471         0.45       2.443         0.4666       2.418         0.4833       2.393         0.5       2.367         0.5166       2.345         0.5333       2.32         0.5666       2.273         0.5833       2.251         0.6166       2.21         0.6333       2.188	2.632 2.6112 2.5906 2.5703 2.55 2.5299 2.5101 2.4903 2.4707 2.4513 2.432 2.4128 2.3939 2.375 2.3563 2.3378	-0.13595 -0.1402 -0.14761 -0.15231 -0.15704 -0.16511 -0.17032 -0.17268 -0.17832 -0.18099 -0.18382 -0.18391 -0.18703 -0.1873	1 1 1 1 1 1 1 1 1 1 1
0.4166       2.496         0.4333       2.471         0.45       2.443         0.4666       2.418         0.4833       2.393         0.5       2.367         0.5166       2.345         0.5333       2.32         0.55       2.298         0.5666       2.273         0.5833       2.251         0.6166       2.21         0.6333       2.188         0.65       2.169         0.6666       2.147	2.632 2.6112 2.5906 2.5703 2.55 2.5299 2.5101 2.4903 2.4707 2.4513 2.432 2.4128 2.3939 2.375 2.3563	-0.13595 -0.1402 -0.14761 -0.15231 -0.15704 -0.16511 -0.17032 -0.17268 -0.17832 -0.18392 -0.18391 -0.18703 -0.1873	1 1 1 1 1 1 1 1 1 1 1
0.4166       2.496         0.4333       2.471         0.45       2.443         0.4666       2.418         0.4833       2.393         0.5       2.367         0.5166       2.345         0.55       2.298         0.5666       2.273         0.5833       2.251         0.6166       2.21         0.6333       2.188         0.65       2.169         0.6666       2.147         0.6833       2.128	2.632 2.6112 2.5906 2.5703 2.55 2.5299 2.5101 2.4903 2.4707 2.4513 2.432 2.4128 2.3939 2.375 2.3563 2.3378 2.3194	-0.13595 -0.1402 -0.14761 -0.15231 -0.15704 -0.16511 -0.17032 -0.17268 -0.17832 -0.18099 -0.18382 -0.18391 -0.18703 -0.1873	1 1 1 1 1 1 1 1 1 1 1
0.4166       2.496         0.4333       2.471         0.45       2.443         0.4666       2.418         0.4833       2.393         0.5       2.367         0.5166       2.345         0.55333       2.32         0.55       2.298         0.5666       2.273         0.5833       2.251         0.6166       2.21         0.6333       2.188         0.65       2.169         0.6666       2.147         0.6833       2.128         0.7       2.109	2.632 2.6112 2.5906 2.5703 2.55 2.5299 2.5101 2.4903 2.4707 2.4513 2.432 2.4128 2.3939 2.375 2.3563 2.375 2.3563 2.3194 2.3011	-0.13595 -0.1402 -0.14761 -0.15231 -0.15704 -0.16511 -0.17032 -0.17268 -0.17832 -0.18099 -0.18382 -0.18391 -0.18703 -0.1873 -0.1873 -0.19084 -0.1914	1 1 1 1 1 1 1 1 1 1 1 1
0.4166       2.496         0.4333       2.471         0.45       2.443         0.4666       2.418         0.4833       2.393         0.5       2.367         0.5166       2.345         0.55       2.298         0.5666       2.273         0.5833       2.251         0.6166       2.21         0.6333       2.188         0.65       2.169         0.6666       2.147         0.6833       2.128	2.632 2.6112 2.5906 2.5703 2.55 2.5299 2.5101 2.4903 2.4707 2.4513 2.432 2.4128 2.3939 2.375 2.3563 2.3378 2.3194	-0.13595 -0.1402 -0.14761 -0.15231 -0.15704 -0.16511 -0.17032 -0.17268 -0.17832 -0.18099 -0.18382 -0.18391 -0.18703 -0.1873 -0.19084 -0.1914	1 1 1 1 1 1 1 1 1 1 1 1

0.75 0.7666 0.7833	2.052 2.037 2.018	2.2472 2.2296 2.212	-0.19522 -0.19261 -0.19403	1 1 1
0.8 0.8166	2.002 1.983	2.1946 2.1774	-0.19259 -0.19439	1 1
0.8333	1.968	2.1602	-0.19222	1
0.85	1.952	2.1432	-0.19119	1
0.8666	1.936	2.1264	-0.19039	1
0.8833	1.92 1.905	2.1096 2.093	-0.18962 -0.18799	1 1
0.9 0.9166	1.889	2.0766	-0.18759	1
0.9333	1.873	2.0602	-0.18721	1
0.95	1.861	2.044	-0.18297	1
0.9666	1.845	2.028 2.012	-0.18295 -0.18296	1 1
0.9833 1	1.829 1.816	1.9961	-0.1801	1
1.2	1.621	1.8156	-0.19456	1
1.4	1.492	1.6513	-0.15935	1
1.6	1.385	1.502	-0.11699 -0.079144	1
1.8	1.287 1.206	1.3661 1.2426	-0.036582	1 1
2.2	1.133	1.1302	0.0028041	ī
2.4	1.07	1.028	0.042025	1
2.6	1.013	0.935	0.078001	1
2.8	0.963 0.916	0.85043 0.77351	0.11257 0.14249	1 1
3.2	0.875	0.70355	0.17145	1
3.4	0.84	0.63992	0.20008	1
3.6	0.803	0.58204	0.22096	1
3.8 4	0.771 0.746	0.5294 0.48152	0.2416 0.26448	1 1
4.2	0.721	0.43797	0.28303	1
4.4	0.696	0.39835	0.29765	1
4.6	0.673	0.36232	0.31068	1
4.8 5	0.651 0.633	0.32955 0.29975	0.32145 0.33325	1 1
5.2	0.617	0.27264	0.34436	1
5.4	0.601	0.24798	0.35302	1
5.6	0.588	0.22555	0.36245	1
5.8 6	0.573 0.56	0.20515 0.18659	0.36785 0.37341	1 1
6.2	0.541	0.16972	0.37128	1
6.4	0.529	0.15437	0.37463	1
6.6	0.519	0.14041	0.37859	1 1
6.8 7	0.507 0.497	0.12771 0.11616	0.37929 0.38084	1
7.2	0.488	0.10565	0.38235	1
7.4	0.475	0.096095	0.37891	1
7.6	0.469	0.087403	0.3816 0.3765	1 1
7.8 8	0.456 0.45	0.079498 0.072308	0.37769	1
8.2	0.44	0.065768	0.37423	1
8.4	0.431	0.059819	0.37118	1
8.6	0.425	0.054409 0.049488	0.37059 0.36551	1 1
8.8 9	0.415 0.409	0.045488	0.36399	1
9.2	0.403	0.040941	0.36206	1
9.4	0.393	0.037238	0.35576	1
9.6 9.8	0.39 0.384	0.03387 0.030807	0.35613 0.35319	1 1
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0.374	0.02802	0.34598	1
0.349	0.017443	0.33156	
0.321	0.010858	0.31014	1
0.302	0.0067593	0.29524	1
0.283	0.0042077	0.27879	1
0.267	0.0026193	0.26438	1 1 1 1
0.252	0.0016305	0.25037	1
0.242	0.001015	0.24098	1
0.229	0.00063186	0.22837	1
0.217	0.00039334	0.21661	1
0.207	0.00024485	0.20676	1
0.198	0.00015242	0.19785	1 1 1 1 1 1 1
0.192	9.4884E-005	0.19191	1
0.182	5.9066E-005	0.18194	1
0.176	3.6769E-005	0.17596	1
0.166	2.2889E-005	0.16598	1
0.16	1.4248E-005	0.15999	
0.154	8.8697E-006	0.15399	1 1 1
0.151	5.5215E-006	0.15099	1
0.144	3.4371E-006	0.144	1
0.141	2.1396E-006	0.141	1
0.135	1.3319E-006	0.135	1 1 1 1 1
0.135	8.2914E-007	0.135	1
0.129	5.1614E-007	0.129	1
0.126	3.213E-007	0.126	1
0.119	2.0001E-007	0.119	1
0.116	1.2451E-007	0.116	1 1
0.116	7.7508E-008	0.116	
0.11	4.8249E-008	0.11	1
0.11	3.0035E-008	0.11	1
0.107	1.8697E-008	0.107	1
	0.349 0.321 0.302 0.283 0.267 0.252 0.242 0.229 0.217 0.207 0.198 0.192 0.182 0.176 0.166 0.166 0.154 0.151 0.144 0.141 0.135 0.135 0.129 0.126 0.119 0.116	0.349       0.017443         0.321       0.010858         0.302       0.0067593         0.283       0.0042077         0.267       0.0026193         0.252       0.0016305         0.242       0.001015         0.229       0.00063186         0.217       0.00039334         0.207       0.00024485         0.198       0.00015242         0.192       9.4884E-005         0.182       5.9066E-005         0.166       2.2889E-005         0.16       1.4248E-005         0.151       5.5215E-006         0.144       3.4371E-006         0.141       2.1396E-006         0.135       1.3319E-006         0.135       8.2914E-007         0.129       5.1614E-007         0.129       5.1614E-007         0.116       7.7508E-008         0.11       4.8249E-008         0.11       3.0035E-008	0.349       0.017443       0.31014         0.321       0.010858       0.31014         0.302       0.0067593       0.29524         0.283       0.0042077       0.27879         0.267       0.0026193       0.26438         0.252       0.0016305       0.25037         0.242       0.001015       0.24098         0.229       0.00063186       0.22837         0.217       0.00039334       0.21661         0.207       0.00024485       0.20676         0.198       0.00015242       0.19785         0.192       9.4884E-005       0.19191         0.182       5.9066E-005       0.18194         0.176       3.6769E-005       0.17596         0.166       2.2889E-005       0.16598         0.16       1.4248E-005       0.15999         0.154       8.8697E-006       0.15399         0.151       5.5215E-006       0.144         0.135       8.2914E-007       0.135         0.129       5.1614E-007       0.129         0.126       3.213E-007       0.126         0.116       7.7508E-008       0.116         0.11       4.8249E-008       0.11

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## RESULTS FROM VISUAL CURVE MATCHING

# VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 5.7713E-004y0 = 3.2066E+000

# TYPE CURVE DATA

K = 4.48652E-004y0 = 2.66073E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	2.661E+000	4.000E+001	1.056E-006		

## AQTESOLV RESULTS Version 1.10

02/07/96 20:01:50

#### TEST DESCRIPTION

Data set..... mw2517.dat

Data set title..... Rising Head Slug Test for MW25-17

Knowns and Constants:

A, B, C..... 0.000, 0.000, 1.448

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#### ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

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## RESULTS FROM STATISTICAL CURVE MATCHING

## STATISTICAL MATCH PARAMETER ESTIMATES

Estimate Std. Error
K = 4.6123E-004 +/- 3.1207E-006
y0 = 1.6365E+000 +/- 2.5003E-003

## ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual \* weight

Weighted Residual Statistics:

## Model Residuals:

Time Observed Calculated Residual Weight

0.0733	1.657	1.6065	0.050471	1
0.0766	1.648	1.6052	0.042809	1
0.08	1.642	1.6038	0.038186	1
0.0833	1.642	1.6025	0.039521	1
0.0866	1.632	1.6011	0.030856	1
0.09	1.632	1.5998	0.032229	1
0.0933	1.629	1.5984	0.032229	1
0.0966	1.626	1.5971	0.030301	
0.0988	1.623	1.5957	0.023832	1
0.1033	1.62	1.5944	0.027263	1
0.1033	1.617	1.5931	0.023919	1
0.1088	1.617	1.5917	0.025286	1
0.1133		1.5917	0.025286	1
0.1133	1.61			1
	1.61	1.5891	0.020935	1
0.12	1.607	1.5877	0.019299	1
0.1233	1.607	1.5864	0.020621	1
0.1266	1.604	1.5851	0.018942	1
0.13	1.601	1.5837	0.017301	1
0.1333	1.598	1.5824	0.01562	1
0.1366	1.595	1.5811	0.013938	1
0.14	1.595	1.5797	0.015294	1
0.1433	1.591	1.5784	0.012609	1
0.1466	1.588	1.5771	0.010924	1
0.15	1.588	1.5757	0.012277	1
0.1533	1.585	1.5744	0.010589	1
0.1566	1.585	1.5731	0.0119	1
0.16	1.582	1.5718	0.010249	1
0.1633	1.582	1.5704	0.011558	1
0.1666	1.579	1.5691	0.0098658	1
0.17	1.579	1.5678	0.011212	1
0.1733	1.576	1.5665	0.0095174	1
0.1766	1.573	1.5652	0.0078218	1
0.18	1.573	1.5638	0.0091645	1
0.1833	1.569	1.5625	0.0064667	1
0.1866	1.569	1.5612	0.0077678	1
0.19	1.566	1.5599	0.0061072	1
0.1933	1.566	1.5586	0.0074061	1
0.1966	1.563	1.5573	0.0057039	1
0.2	1.56	1.556	0.0040399	1
0.2033	1.56	1.5547	0.0053355	1
0.2066	1.557	1.5534	0.00363	1
0.21	1.557	1.552	0.0049626	1
0.2133	1.557	1.5507	0.006255	1
0.2166	1.554	1.5495	0.0045463	1
0.22	1.55	1.5481	0.0018755	1
0.2233	1.55	1.5468	0.0031646	1
0.2266	1.547	1.5455	0.0014526	1
0.23	1.544	1.5442	-0.00022145	1
0.2333	1.544	1.5429	0.0010644	1
0.2366	1.544	1.5417	0.0023492	1
0.24	1.541	1.5403	0.00067174	1
0.2433	1.541	1.539	0.0019543	1
0.2466	1.538	1.5378	0.00023586	1
0.25	1.538	1.5364	0.0015551	1
0.2533	1.535	1.5352	-0.00016553	1 1
0.2566	1.535	1.5339	0.0011128 -0.00057132	1
0.26	1.532	1.5326	-0.00057132	1
0.2633	1.528	1.5313	-0.0032952	1
0.2666	1.528	1.53	-0.0020201	1

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0.2733	0.27	1.528	1.5287	-0.0007075	1
0.28         1.522         1.5236         -0.0028634         1           0.2866         1.519         1.5226         -0.0033151         1           0.293         1.519         1.5223         -0.0033151         1           0.2936         1.516         1.5197         -0.0024771         1           0.2966         1.516         1.5185         -0.0024771         1           0.3         1.516         1.5172         -0.001744         1           0.3033         1.513         1.51559         -0.0024771         1           0.3033         1.513         1.5166         -0.0016488         1           0.313         1.51         1.5133         -0.003494         1           0.3166         1.5506         1.5108         -0.0060893         1           0.322         1.506         1.5095         -0.0035341         1           0.323         1.506         1.5095         -0.0035341         1           0.324         1.506         1.5509         -0.0070212         1           0.33         1.503         1.5087         -0.0070212         1           0.3266         1.55         1.507         -0.0070222         1					1
0.2833					
0.2866         1.519         1.5223         -0.0033151         1           0.2933         1.516         1.5197         -0.0020091         1           0.2966         1.516         1.5185         -0.0024771         1           0.33         1.516         1.5185         -0.0024771         1           0.3033         1.513         1.5159         -0.0029111         1           0.3066         1.513         1.5169         -0.0029111         1           0.31         1.5151         1.5133         -0.0033494         1           0.3166         1.506         1.5102         -0.006893         1           0.3166         1.506         1.5108         -0.0048302         1           0.32         1.506         1.5095         -0.0033944         1           0.320         1.506         1.5095         -0.0033944         1           0.3233         1.503         1.5085         -0.0048302         1           0.320         1.506         1.5095         -0.0035341         1           0.321         1.506         1.5097         -0.0070212         1           0.332         1.5057         -0.0027283         1           0					
0.29         1.519         1.521         -0.002091         1           0.2966         1.516         1.5187         -0.0037426         1           0.3         1.516         1.5185         -0.0024771         1           0.3033         1.513         1.5157         -0.0011744         1           0.3066         1.513         1.5146         -0.0016488         1           0.31         1.515         1.5133         -0.003494         1           0.3133         1.506         1.5121         -0.0060893         1           0.3126         1.506         1.5121         -0.0068302         1           0.32         1.506         1.5108         -0.0048302         1           0.32         1.506         1.5108         -0.0027212         1           0.33         1.503         1.5083         -0.0027212         1           0.33         1.503         1.5085         -0.0070212         1           0.33         1.503         1.5057         -0.0070212         1           0.33         1.503         1.5045         -0.0044746         1           0.3666         1.484         1.4919         -0.0071456         1					1
0.2933         1.516         1.5187         -0.0037426         1           0.2966         1.516         1.5185         -0.0024771         1           0.3033         1.516         1.5172         -0.001744         1           0.3066         1.513         1.5169         -0.0029111         1           0.31         1.513         1.5146         -0.0016488         1           0.3166         1.506         1.5121         -0.006893         1           0.3166         1.506         1.5108         -0.0083771         1           0.322         1.506         1.5095         -0.0035341         1           0.3233         1.503         1.5083         -0.0052771         1           0.3266         1.5         1.507         -0.007222         1           0.333         1.503         1.5057         -0.0072223         1           0.335         1.491         1.4981         -0.0072223         1           0.356         1.491         1.4981         -0.0072283         1           0.357         1.491         1.4981         -0.007381         1           0.3666         1.484         1.4991         -0.007486         1					
0.2966					
0.3					
0.3033					
0.31         1.51         1.5133         -0.0033494         1           0.3166         1.506         1.5121         -0.0060893         1           0.32         1.506         1.5108         -0.0048302         1           0.323         1.506         1.5095         -0.0035241         1           0.3266         1.5         1.5037         -0.0072721         1           0.333         1.503         1.5057         -0.00727283         1           0.3333         1.5         1.5057         -0.0024746         1           0.355         1.491         1.4981         -0.0074466         1           0.3666         1.464         1.4919         -0.0074866         1           0.3633         1.475         1.4856         -0.010356         1           0.44         1.469         1.4732         -0.010356         1           0.4166         1.462         1.4732         -0.011169         1           0.4333         1.453         1.467         -0.013972         1           0.45         1.447         1.4608         -0.013972         1           0.4333         1.442         1.4534         -0.014693         1			1.5159	-0.0029111	1
0.3133					
0.3166					
0.32					
0.3233					
0.3266					
0.33					
0.3333         1.5         1.5045         -0.004746         1           0.3666         1.484         1.4981         -0.0071456         1           0.3833         1.475         1.4856         -0.010605         1           0.4         1.469         1.4794         -0.010356         1           0.4166         1.462         1.4732         -0.011169         1           0.4333         1.453         1.467         -0.013972         1           0.45         1.447         1.4608         -0.013972         1           0.45         1.447         1.4608         -0.013972         1           0.4566         1.444         1.4547         -0.014693         1           0.4833         1.434         1.4486         -0.014573         1           0.5         1.428         1.4425         -0.014479         1           0.5166         1.421         1.4364         -0.015447         1           0.55333         1.415         1.4304         -0.015447         1           0.5566         1.399         1.4184         -0.019431         1           0.5833         1.396         1.4184         -0.019431         1					
0.3666       1.484       1.4919       -0.007881       1         0.3833       1.475       1.4856       -0.010605       1         0.4       1.469       1.4794       -0.010356       1         0.4166       1.462       1.4732       -0.011169       1         0.4333       1.453       1.467       -0.013972       1         0.45       1.447       1.4608       -0.014593       1         0.4666       1.44       1.4547       -0.014693       1         0.4833       1.434       1.4486       -0.014573       1         0.5       1.428       1.425       -0.014479       1         0.5166       1.421       1.4364       -0.015447       1         0.55333       1.415       1.4304       -0.015447       1         0.555       1.406       1.4244       -0.018387       1         0.55333       1.396       1.4125       -0.016464       1         0.58033       1.396       1.4125       -0.016464       1         0.6666       1.393       1.4065       -0.013522       1         0.6166       1.387       1.3947       -0.017749       1         0.6333 </td <td></td> <td></td> <td>1.5045</td> <td>-0.0044746</td> <td>1</td>			1.5045	-0.0044746	1
0.3833       1.475       1.4856       -0.010605       1         0.4       1.469       1.4794       -0.010356       1         0.4166       1.462       1.4732       -0.011169       1         0.4333       1.453       1.467       -0.013801       1         0.4666       1.447       1.4608       -0.014693       1         0.4833       1.434       1.4486       -0.014573       1         0.5       1.428       1.4425       -0.014479       1         0.5166       1.421       1.4364       -0.015447       1         0.55333       1.415       1.4304       -0.015405       1         0.555       1.406       1.4244       -0.018387       1         0.5833       1.396       1.4125       -0.016464       1         0.6       1.399       1.4184       -0.019431       1         0.5833       1.396       1.4125       -0.016464       1         0.6       1.387       1.4006       -0.013522       1         0.6166       1.387       1.4006       -0.013641       1         0.6533       1.377       1.3889       -0.017749       1         0.6666					1
0.4       1.469       1.4794       -0.010356       1         0.4166       1.462       1.4732       -0.011169       1         0.4333       1.453       1.467       -0.013972       1         0.45       1.447       1.4608       -0.013801       1         0.4666       1.44       1.4547       -0.014693       1         0.4833       1.434       1.4486       -0.014573       1         0.5       1.428       1.4425       -0.014479       1         0.5166       1.421       1.4364       -0.015447       1         0.55333       1.415       1.4304       -0.015405       1         0.55       1.406       1.4244       -0.018387       1         0.555       1.406       1.4244       -0.018387       1         0.5833       1.396       1.4125       -0.016464       1         0.6       1.393       1.4065       -0.013522       1         0.6166       1.387       1.4006       -0.017749       1         0.6333       1.377       1.3947       -0.017749       1         0.6833       1.362       1.3715       -0.018074       1         0.7966					
0.4166       1.462       1.4732       -0.011169       1         0.4333       1.453       1.467       -0.013972       1         0.45       1.447       1.4608       -0.013801       1         0.4666       1.444       1.4547       -0.014693       1         0.4833       1.434       1.4486       -0.014573       1         0.5       1.428       1.4425       -0.014479       1         0.5166       1.421       1.4364       -0.015447       1         0.5333       1.415       1.4304       -0.015405       1         0.55       1.406       1.4244       -0.0198387       1         0.5666       1.399       1.4184       -0.019431       1         0.5833       1.396       1.4125       -0.016464       1         0.6166       1.387       1.4005       -0.013522       1         0.6166       1.387       1.4006       -0.013641       1         0.6333       1.377       1.3947       -0.017749       1         0.6666       1.365       1.3831       -0.018074       1         0.6833       1.362       1.3773       -0.018074       1         0.7366					1
0.4333       1.453       1.467       -0.013972       1         0.45       1.447       1.4608       -0.013801       1         0.4666       1.44       1.4547       -0.014693       1         0.4833       1.434       1.4486       -0.014573       1         0.5       1.428       1.4425       -0.014479       1         0.5166       1.421       1.4364       -0.015447       1         0.5333       1.415       1.4304       -0.015405       1         0.55       1.406       1.4244       -0.018387       1         0.5566       1.399       1.4184       -0.019431       1         0.5833       1.396       1.4125       -0.016464       1         0.6       1.393       1.4065       -0.013522       1         0.6333       1.377       1.3947       -0.017481       1         0.655       1.371       1.3889       -0.017881       1         0.6666       1.365       1.3831       -0.018074       1         0.6833       1.362       1.3773       -0.018074       1         0.7333       1.343       1.3657       -0.019462       1         0.7333					
0.45       1.447       1.4608       -0.013801       1         0.4666       1.44       1.4547       -0.014693       1         0.4833       1.434       1.4486       -0.014573       1         0.5       1.428       1.4425       -0.015479       1         0.5166       1.421       1.4364       -0.015447       1         0.5333       1.415       1.4304       -0.015405       1         0.555       1.406       1.4244       -0.018387       1         0.5666       1.399       1.4184       -0.019431       1         0.6       1.393       1.4065       -0.013644       1         0.6       1.393       1.4065       -0.013522       1         0.6166       1.387       1.4006       -0.013641       1         0.6333       1.377       1.3947       -0.017749       1         0.65       1.371       1.3889       -0.017881       1         0.6666       1.365       1.3831       -0.018074       1         0.6333       1.362       1.3773       -0.015255       1         0.7       1.352       1.3773       -0.015244       1         0.6803					
0.4666       1.44       1.4547       -0.014693       1         0.4833       1.434       1.4486       -0.014573       1         0.5       1.428       1.425       -0.014479       1         0.5166       1.421       1.4364       -0.015447       1         0.5333       1.415       1.4304       -0.015405       1         0.5666       1.399       1.4184       -0.019431       1         0.5833       1.396       1.4125       -0.016464       1         0.6       1.393       1.4065       -0.013522       1         0.6166       1.387       1.4006       -0.013522       1         0.6166       1.387       1.4006       -0.013522       1         0.6333       1.377       1.3947       -0.017749       1         0.655       1.371       1.3889       -0.017881       1         0.6833       1.365       1.3831       -0.018074       1         0.6833       1.362       1.3773       -0.015255       1         0.7       1.352       1.3715       -0.019462       1         0.7333       1.343       1.365       -0.019727       1         0.7366					
0.5         1.428         1.4425         -0.014479         1           0.5166         1.421         1.4364         -0.015447         1           0.5333         1.415         1.4304         -0.015405         1           0.55         1.406         1.4244         -0.018387         1           0.5666         1.399         1.4184         -0.019431         1           0.6         1.393         1.4065         -0.013522         1           0.6166         1.387         1.4006         -0.013522         1           0.6166         1.387         1.4006         -0.013641         1           0.6333         1.377         1.3947         -0.017749         1           0.6666         1.365         1.381         -0.018074         1           0.6833         1.362         1.3773         -0.018074         1           0.7166         1.346         1.3657         -0.019462         1           0.7333         1.343         1.36         -0.019727         1           0.755         1.333         1.3486         -0.019727         1           0.7666         1.331         1.3486         -0.018598         1	0.4666	1.44	1.4547		1
0.5166       1.421       1.4364       -0.015447       1         0.5333       1.415       1.4304       -0.015405       1         0.55       1.406       1.4244       -0.018387       1         0.5666       1.399       1.4184       -0.019431       1         0.5833       1.396       1.4125       -0.016464       1         0.6       1.393       1.4065       -0.013522       1         0.6166       1.387       1.4006       -0.013641       1         0.6333       1.377       1.3947       -0.017749       1         0.65       1.371       1.3889       -0.017881       1         0.6666       1.365       1.3831       -0.018074       1         0.6833       1.362       1.3773       -0.015255       1         0.7       1.352       1.3715       -0.019462       1         0.7166       1.346       1.3657       -0.019727       1         0.7333       1.343       1.36       -0.016982       1         0.7666       1.33       1.3486       -0.018598       1         0.7833       1.327       1.3429       -0.015924       1         0.8					
0.5333       1.415       1.4304       -0.015405       1         0.555       1.406       1.4244       -0.018387       1         0.5666       1.399       1.4184       -0.019431       1         0.5833       1.396       1.4125       -0.016464       1         0.6       1.393       1.4065       -0.013522       1         0.6166       1.387       1.4006       -0.013641       1         0.6333       1.377       1.3947       -0.017749       1         0.65       1.371       1.3889       -0.017881       1         0.6833       1.365       1.3831       -0.018074       1         0.6833       1.362       1.3773       -0.015255       1         0.7166       1.346       1.3657       -0.019462       1         0.75       1.333       1.3543       -0.016982       1         0.75       1.333       1.3543       -0.021261       1         0.7833       1.327       1.3429       -0.015924       1         0.8166       1.311       1.3373       -0.022275       1         0.8233       1.305       1.3261       -0.021081       1         0.8833 <td></td> <td></td> <td></td> <td></td> <td></td>					
0.55       1.406       1.4244       -0.018387       1         0.5666       1.399       1.4184       -0.019431       1         0.5833       1.396       1.4125       -0.016464       1         0.6       1.393       1.4065       -0.013522       1         0.6166       1.387       1.4006       -0.013641       1         0.6333       1.377       1.3947       -0.017749       1         0.65       1.371       1.3889       -0.017881       1         0.6666       1.365       1.3831       -0.018074       1         0.6833       1.362       1.3773       -0.015255       1         0.7       1.352       1.3715       -0.019462       1         0.7166       1.346       1.3657       -0.019727       1         0.7333       1.343       1.36       -0.016982       1         0.75       1.333       1.3543       -0.021261       1         0.7833       1.327       1.3429       -0.015924       1         0.7833       1.327       1.3429       -0.015924       1         0.8166       1.311       1.3377       -0.022275       1         0.8333					
0.5666       1.399       1.4184       -0.019431       1         0.5833       1.396       1.4125       -0.016464       1         0.6       1.393       1.4065       -0.013522       1         0.6166       1.387       1.4006       -0.013641       1         0.6333       1.377       1.3947       -0.017749       1         0.65       1.371       1.3889       -0.017881       1         0.6666       1.365       1.3831       -0.018074       1         0.6833       1.362       1.3773       -0.018074       1         0.6833       1.362       1.3773       -0.018074       1         0.70       1.352       1.3715       -0.018074       1         0.7166       1.346       1.3657       -0.019462       1         0.755       1.333       1.3543       -0.016982       1         0.7666       1.333       1.3426       -0.018598       1         0.7833       1.327       1.3429       -0.015924       1         0.8166       1.311       1.3373       -0.0220683       1         0.82333       1.305       1.3261       -0.021081       1         0.880					
0.5833       1.396       1.4125       -0.016464       1         0.6       1.393       1.4065       -0.013522       1         0.6166       1.387       1.4006       -0.013641       1         0.6333       1.377       1.3947       -0.017749       1         0.65       1.371       1.3889       -0.018074       1         0.6666       1.365       1.3831       -0.018074       1         0.6833       1.362       1.3773       -0.015255       1         0.7       1.352       1.3715       -0.019462       1         0.7166       1.346       1.3657       -0.019727       1         0.7333       1.343       1.36       -0.016982       1         0.75       1.333       1.3543       -0.021261       1         0.7666       1.33       1.3486       -0.018598       1         0.7833       1.327       1.3429       -0.015924       1         0.8       1.315       1.3373       -0.022275       1         0.8166       1.311       1.3317       -0.021081       1         0.85       1.302       1.3261       -0.021881       1         0.8833					
0.6166       1.387       1.4006       -0.013641       1         0.6333       1.377       1.3947       -0.017749       1         0.65       1.371       1.3889       -0.017881       1         0.6666       1.365       1.3831       -0.018074       1         0.6833       1.362       1.3773       -0.015255       1         0.7       1.352       1.3715       -0.019462       1         0.7166       1.346       1.3657       -0.019727       1         0.7333       1.343       1.36       -0.016982       1         0.75       1.333       1.3543       -0.021261       1         0.7666       1.33       1.3486       -0.018598       1         0.7833       1.327       1.3429       -0.015924       1         0.8       1.315       1.3373       -0.022275       1         0.8166       1.311       1.3317       -0.020683       1         0.85       1.302       1.3261       -0.021081       1         0.8666       1.293       1.315       -0.021981       1         0.9166       1.277       1.2876       -0.021488       1         0.955			1.4125		
0.6333       1.377       1.3947       -0.017749       1         0.65       1.371       1.3889       -0.017881       1         0.6666       1.365       1.3831       -0.018074       1         0.6833       1.362       1.3773       -0.015255       1         0.7       1.352       1.3715       -0.019462       1         0.7166       1.346       1.3657       -0.019727       1         0.7333       1.343       1.36       -0.016982       1         0.75       1.333       1.3543       -0.021261       1         0.7666       1.33       1.3486       -0.018598       1         0.7833       1.327       1.3429       -0.015924       1         0.8166       1.311       1.3317       -0.022275       1         0.8166       1.311       1.3317       -0.020683       1         0.85       1.302       1.3261       -0.021081       1         0.8666       1.293       1.315       -0.021981       1         0.9166       1.283       1.3039       -0.021948       1         0.9333       1.274       1.2985       -0.021488       1         0.9666					
0.65       1.371       1.3889       -0.017881       1         0.6666       1.365       1.3831       -0.018074       1         0.6833       1.362       1.3773       -0.015255       1         0.7       1.352       1.3715       -0.019462       1         0.7166       1.346       1.3657       -0.019727       1         0.7333       1.343       1.36       -0.016982       1         0.75       1.333       1.3543       -0.021261       1         0.7666       1.33       1.3486       -0.018598       1         0.7833       1.327       1.3429       -0.015924       1         0.8       1.315       1.3373       -0.022275       1         0.8166       1.311       1.3317       -0.020683       1         0.85       1.302       1.3261       -0.021081       1         0.85       1.302       1.3205       -0.018503       1         0.8833       1.286       1.3094       -0.021981       1         0.9166       1.277       1.2985       -0.021488       1         0.925       1.267       1.2876       -0.020586       1         0.9833					
0.66666       1.365       1.3831       -0.018074       1         0.6833       1.362       1.3773       -0.015255       1         0.7       1.352       1.3715       -0.019462       1         0.7166       1.346       1.3657       -0.019727       1         0.7333       1.343       1.36       -0.016982       1         0.75       1.333       1.3543       -0.021261       1         0.7666       1.33       1.3486       -0.021261       1         0.7833       1.327       1.3429       -0.015924       1         0.8       1.315       1.3373       -0.022275       1         0.8166       1.311       1.3317       -0.020683       1         0.8333       1.305       1.3261       -0.021081       1         0.85       1.302       1.3205       -0.018503       1         0.8666       1.293       1.315       -0.021981       1         0.9       1.283       1.3094       -0.021981       1         0.9166       1.277       1.2985       -0.021488       1         0.9333       1.267       1.2876       -0.020586       1         0.9833					
0.6833       1.362       1.3773       -0.015255       1         0.7       1.352       1.3715       -0.019462       1         0.7166       1.346       1.3657       -0.019727       1         0.7333       1.343       1.36       -0.016982       1         0.75       1.333       1.3543       -0.021261       1         0.7666       1.33       1.3486       -0.018598       1         0.7833       1.327       1.3429       -0.015924       1         0.8       1.315       1.3373       -0.022275       1         0.8166       1.311       1.3317       -0.020683       1         0.85       1.305       1.3261       -0.021081       1         0.85       1.302       1.3205       -0.018503       1         0.8666       1.293       1.315       -0.021981       1         0.9       1.283       1.3094       -0.021981       1         0.9166       1.277       1.2985       -0.021488       1         0.95       1.267       1.2876       -0.021808       1         0.9666       1.261       1.2822       -0.021808       1					
0.7       1.352       1.3715       -0.019462       1         0.7166       1.346       1.3657       -0.019727       1         0.7333       1.343       1.36       -0.016982       1         0.75       1.333       1.3543       -0.021261       1         0.7666       1.33       1.3486       -0.018598       1         0.7833       1.327       1.3429       -0.015924       1         0.8       1.315       1.3373       -0.022275       1         0.8166       1.311       1.3317       -0.020683       1         0.85       1.305       1.3261       -0.021081       1         0.85       1.302       1.3205       -0.018503       1         0.8666       1.293       1.315       -0.021981       1         0.8833       1.286       1.3094       -0.021981       1         0.9166       1.283       1.3039       -0.020941       1         0.9333       1.274       1.2985       -0.021488       1         0.9666       1.261       1.2822       -0.021202       1         0.9833       1.255       1.2768       -0.021808       1					
0.7166       1.346       1.3657       -0.019727       1         0.7333       1.343       1.36       -0.016982       1         0.75       1.333       1.3543       -0.021261       1         0.7666       1.33       1.3486       -0.018598       1         0.7833       1.327       1.3429       -0.015924       1         0.8       1.315       1.3373       -0.022275       1         0.8166       1.311       1.3317       -0.020683       1         0.8333       1.305       1.3261       -0.021081       1         0.85       1.302       1.3205       -0.018503       1         0.8666       1.293       1.315       -0.021981       1         0.8833       1.286       1.3094       -0.023449       1         0.9166       1.277       1.2985       -0.021488       1         0.9333       1.274       1.293       -0.019026       1         0.9666       1.261       1.2822       -0.021808       1         0.9833       1.255       1.2768       -0.021808       1					
0.75       1.333       1.3543       -0.021261       1         0.7666       1.33       1.3486       -0.018598       1         0.7833       1.327       1.3429       -0.015924       1         0.8       1.315       1.3373       -0.022275       1         0.8166       1.311       1.3317       -0.020683       1         0.8333       1.305       1.3261       -0.021081       1         0.85       1.302       1.3205       -0.018503       1         0.8666       1.293       1.315       -0.021981       1         0.8833       1.286       1.3094       -0.023449       1         0.9166       1.283       1.3039       -0.020941       1         0.9333       1.274       1.2985       -0.021488       1         0.95       1.267       1.2876       -0.020586       1         0.9666       1.261       1.2822       -0.021202       1         0.9833       1.255       1.2768       -0.021808       1			1.3657	-0.019727	
0.7666       1.33       1.3486       -0.018598       1         0.7833       1.327       1.3429       -0.015924       1         0.8       1.315       1.3373       -0.022275       1         0.8166       1.311       1.3317       -0.020683       1         0.8333       1.305       1.3261       -0.021081       1         0.85       1.302       1.3205       -0.018503       1         0.8666       1.293       1.315       -0.021981       1         0.8833       1.286       1.3094       -0.023449       1         0.9166       1.283       1.3039       -0.020941       1         0.9333       1.274       1.2985       -0.021488       1         0.95       1.267       1.2876       -0.020586       1         0.9666       1.261       1.2822       -0.021202       1         0.9833       1.255       1.2768       -0.021808       1					
0.7833       1.327       1.3429       -0.015924       1         0.8       1.315       1.3373       -0.022275       1         0.8166       1.311       1.3317       -0.020683       1         0.8333       1.305       1.3261       -0.021081       1         0.85       1.302       1.3205       -0.018503       1         0.8666       1.293       1.315       -0.021981       1         0.8833       1.286       1.3094       -0.023449       1         0.9       1.283       1.3039       -0.020941       1         0.9166       1.277       1.2985       -0.021488       1         0.9333       1.274       1.293       -0.019026       1         0.9666       1.261       1.2876       -0.020586       1         0.9833       1.255       1.2768       -0.021808       1					
0.8       1.315       1.3373       -0.022275       1         0.8166       1.311       1.3317       -0.020683       1         0.8333       1.305       1.3261       -0.021081       1         0.85       1.302       1.3205       -0.018503       1         0.8666       1.293       1.315       -0.021981       1         0.8833       1.286       1.3094       -0.023449       1         0.9       1.283       1.3039       -0.020941       1         0.9166       1.277       1.2985       -0.021488       1         0.9333       1.274       1.293       -0.019026       1         0.9666       1.267       1.2876       -0.021586       1         0.9833       1.255       1.2768       -0.021808       1					
0.8166       1.311       1.3317       -0.020683       1         0.8333       1.305       1.3261       -0.021081       1         0.85       1.302       1.3205       -0.018503       1         0.8666       1.293       1.315       -0.021981       1         0.8833       1.286       1.3094       -0.023449       1         0.9       1.283       1.3039       -0.020941       1         0.9166       1.277       1.2985       -0.021488       1         0.9333       1.274       1.293       -0.019026       1         0.9666       1.267       1.2876       -0.020586       1         0.9833       1.255       1.2768       -0.021808       1					
0.8333       1.305       1.3261       -0.021081       1         0.85       1.302       1.3205       -0.018503       1         0.8666       1.293       1.315       -0.021981       1         0.8833       1.286       1.3094       -0.023449       1         0.9       1.283       1.3039       -0.020941       1         0.9166       1.277       1.2985       -0.021488       1         0.9333       1.274       1.293       -0.019026       1         0.9666       1.267       1.2876       -0.020586       1         0.9833       1.255       1.2768       -0.021808       1					
0.8666       1.293       1.315       -0.021981       1         0.8833       1.286       1.3094       -0.023449       1         0.9       1.283       1.3039       -0.020941       1         0.9166       1.277       1.2985       -0.021488       1         0.9333       1.274       1.293       -0.019026       1         0.95       1.267       1.2876       -0.020586       1         0.9666       1.261       1.2822       -0.021202       1         0.9833       1.255       1.2768       -0.021808       1				-0.021081	
0.8833       1.286       1.3094       -0.023449       1         0.9       1.283       1.3039       -0.020941       1         0.9166       1.277       1.2985       -0.021488       1         0.9333       1.274       1.293       -0.019026       1         0.95       1.267       1.2876       -0.020586       1         0.9666       1.261       1.2822       -0.021202       1         0.9833       1.255       1.2768       -0.021808       1	0.85				
0.9       1.283       1.3039       -0.020941       1         0.9166       1.277       1.2985       -0.021488       1         0.9333       1.274       1.293       -0.019026       1         0.95       1.267       1.2876       -0.020586       1         0.9666       1.261       1.2822       -0.021202       1         0.9833       1.255       1.2768       -0.021808       1					
0.9166       1.277       1.2985       -0.021488       1         0.9333       1.274       1.293       -0.019026       1         0.95       1.267       1.2876       -0.020586       1         0.9666       1.261       1.2822       -0.021202       1         0.9833       1.255       1.2768       -0.021808       1					
0.9333       1.274       1.293       -0.019026       1         0.95       1.267       1.2876       -0.020586       1         0.9666       1.261       1.2822       -0.021202       1         0.9833       1.255       1.2768       -0.021808       1					
0.95       1.267       1.2876       -0.020586       1         0.9666       1.261       1.2822       -0.021202       1         0.9833       1.255       1.2768       -0.021808       1					
0.9833 1.255 1.2768 -0.021808 1	0.95	1.267	1.2876		
1 1.240 1.2/14 -0.02343/					
	1	1.240	1.2/14	0.02545,	_

1.2	1.176	1.2088	-0.03284	1
1.4	1.12	1.1493	-0.029325	1
1.6	1.063	1.0927	-0.029741	1
1.8	1.009	1.0389	-0.029942	1
2	0.959	0.98779	-0.028791	1
2.2	0.912	0.93916	-0.02716	1
2.4	0.868	0.89292	-0.024922	1
2.6	0.827	0.84896	-0.021961	1
2.8	0.792	0.80716	-0.015164	1
3	0.748	0.76742	-0.019425	1 1 1
3.2	0.714	0.72964	-0.015642	1
				1
3.4	0.679	0.69372	-0.01472	1
3.6	0.648	0.65957	-0.011566	1
3.8	0.616	0.62709	-0.011093	1
4	0.588	0.59622	-0.0082195	1
4.2	0.56	0.56687	-0.0068658	1
4.4	0.534	0.53896	-0.0049573	1
4.6	0.509	0.51242	-0.0034228	1
4.8	0.487	0.48719	-0.00019468	1
5	0.468	0.46321	0.0047914	1
5.2	0.443	0.4404	0.0025965	1
5.4	0.424	0.41872	0.0052789	1
5.6	0.405	0.39811	0.0068938	ī
5.8	0.386	0.37851	0.0074938	1
6	0.374	0.35987	0.014129	1
6.2	0.355	0.34215	0.012846	1
6.4	0.339	0.32531	0.013692	1
6.6	0.324	0.30929	0.013092	
6.8	0.311			1
7		0.29407	0.016935	1
	0.298	0.27959	0.018413	1
7.2	0.286	0.26582	0.020178	1
7.4	0.273	0.25274	0.020265	1
7.6	0.264	0.24029	0.023708	1
7.8	0.254	0.22846	0.025538	1
8	0.248	0.21721	0.030786	1
8.2	0.232	0.20652	0.02548	1
8.4	0.223	0.19635	0.026648	1
8.6	0.217	0.18669	0.030315	1
8.8	0.21	0.17749	0.032506	1
9	0.201	0.16876	0.032244	1
9.2	0.195	0.16045	0.034553	1
9.4	0.185	0.15255	0.032452	1
9.6	0.182	0.14504	0.036962	1
9.8	0.176	0.1379	0.038103	1
10	0.169	0.13111	0.037892	1
11	0.141	0.10186	0.039141	1
12	0.122	0.079135	0.042865	1
13	0.106	0.061481	0.044519	
	0.094	0.047765	0.046235	1
14				1
15	0.081	0.037109	0.043891	1
16	0.072	0.02883	0.04317	1
17	0.069	0.022399	0.046601	1
18	0.062	0.017402	0.044598	1
19	0.056	0.01352	0.04248	1
20	0.056	0.010503	0.045497	1
21	0.05	0.0081603	0.04184	1
22	0.047	0.0063398	0.04066	1
23	0.047	0.0049254	0.042075	1
24	0.04	0.0038266	0.036173	1
25	0.037	0.0029729	0.034027	1

26	0.037	0.0023097	0.03469	1
27	0.034	0.0017944	0.032206	1
28	0.034	0.0013941	0.032606	1
29	0.031	0.0010831	0.029917	1
30	0.031	0.00084147	0.030159	1

## RESULTS FROM VISUAL CURVE MATCHING

## VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 4.6123E-004y0 = 1.6365E+000

## TYPE CURVE DATA

K = 4.61227E-004y0 = 1.63653E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	1.637E+000	3.000E+001	8.415E-004		

# AQTESOLV

A Program for

Automatic Estimation of Aquifer Coefficients

From Aquifer Test Data

By:

Glenn M. Duffield and James O. Rumbaugh, III

Geraghty & Miller Modeling Group 1895 Preston White Drive, Suite 301 Reston, VA 22091

(703) 476 - 0335

A Q T E S O L V is a user-friendly program designed to analyze data from aquifer tests automatically. Aquifer coefficients for a variety of aquifer test conditions can

# AQTESOLV RESULTS Version 1.10

02/07/96 20:07:39 \_\_\_\_\_\_\_ TEST DESCRIPTION Data set..... mw2518.dat Data set title..... Rising Head Slug Test for MW25-18 Knowns and Constants: No. of data points........... 68 Radius of well casing..... 0.086 Radius of well................. 0.33 Aguifer saturated thickness..... 6.1 Well screen length..... 4.5 Static height of water in well..... 6.1 Log (Re/Rw) ..... 2.069 A, B, C..... 0.000, 0.000, 1.448 \_\_\_\_\_\_\_ ANALYTICAL METHOD Pouwer-Rice (Unconfined Aguifer Slug Test) \_\_\_\_\_\_\_ RESULTS FROM STATISTICAL CURVE MATCHING STATISTICAL MATCH PARAMETER ESTIMATES Estimate Std. Error Estimate Std. Error K = 4.9151E-005 +/- 2.0634E-006 y0 = 1.7970E+000 +/- 2.5654E-002 ANALYSIS OF MODEL RESIDUALS residual = calculated - observed weighted residual = residual \* weight Weighted Residual Statistics: Number of residuals..... 68 Number of estimated parameters.... 2 Degrees of freedom........... 66 Residual mean.....-0.003676 Residual standard deviation..... 0.125 Residual variance...... 0.01563

del Residuals:

Time Observed Calculated Residual Weight

0.33	2.26	1.7799	0.48007	1
0.38	2.15	1.7774	0.37264	1
		1.7748	0.28521	1
0.43	2.06			1
0.48	2	1.7722	0.22777	
0.52	1.91	1.7702	0.13982	1
0.57	1.88	1.7676	0.11237	1
0.62	1.85	1.7651	0.084928	1
0.67	1.8	1.7625	0.037477	1
0.77	1.75	1.7574	-0.0074353	1
0.83	1.73	1.7544	-0.02439	1
0.9	1.71	1.7508	-0.040843	1
		1.7473	-0.057304	ī
0.97	1.69	1.7418	-0.071757	1
1.08	1.67			1
1.18	1.65	1.7367	-0.086729	
1.32	1.63	1.7297	-0.099715	1
1.48	1.61	1.7217	-0.11173	1
1.72	1.59	1.7098	-0.11983	1
1.97	1.57	1.6975	-0.12752	1
2.28	1.55	1.6824	-0.13237	1
2.47	1.53	1.6732	-0.14316	1
2.93	1.51	1.6511	-0.14106	1
3.43	1.49	1.6274	-0.13737	1
	1.47	1.6091	-0.13912	ī
3.82	1.45	1.586	-0.13603	1
4.32		1.5606	-0.13056	1
4.88	1.43			1
5.52	1.41	1.532	-0.12196	
6.18	1.39	1.503	-0.11301	1
6.77	1.37	1.4776	-0.10759	1
7.43	1.35	1.4497	-0.099669	1
8.23	1.33	1.4165	-0.086529	1
9	1.31	1.3853	-0.075348	1
9.88	1.29	1.3506	-0.060551	1
10.67	1.27	1.3201	-0.050059	1
11.55	1.25	1.2869	-0.036903	1
12.48	1.23	1.2528	-0.022767	1
13.32	1.21	1.2227	-0.012714	1
14.28	1.19	1.1892	0.00075075	1
15.47	1.17	1.149	0.020964	1
	1.15	1.1211	0.028853	ī
16.32			0.020033	1
18	1.1	1.068	0.031999	1
20.38	1.07	0.99699		1
21.9	1.05	0.95414	0.095864	
23.15	1.03	0.92028	0.10972	1
24.25	1.01	0.89147	0.11853	1
25.68	0.99	0.85537	0.13463	1
26.77	0.97	0.82884	0.14116	1
28.67	0.93	0.78455	0.14545	1
30.45	0.86	0.7452	0.1148	1
31.63	0.81	0.72021	0.089791	1
32.3	0.79	0.70639	0.083606	1
32.7	0.77	0.69827	0.071726	1
33.3	0.75	0.68627	0.063733	1
	0.71	0.66287	0.04713	1
34.5		0.62437	0.025631	1
36.57	0.65	0.60291	0.0070927	ī
37.78	0.61	0.60291	-0.0066565	1
39.32	0.57		-0.025988	1
41.85	0.51	0.53599		1
43.63	0.47	0.50911	-0.039107	1
46.77	0.41	0.46493	-0.054931	1

49.43	0.36	0.43052	-0.070521	1
52.77	0.31	0.3909	-0.080898	1
57.37	0.25	0.34223	-0.092228	1
61.62	0.21	0.30266	-0.092663	1
65.95	0.17	0.26705	-0.097055	1
72.63	0.13	0.22016	-0.09016	1
76.78	0.11	0.19527	-0.085272	1
80.48	0.09	0.17546	-0.085464	1
85.97	0.07	0.14972	-0.079715	1

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## RESULTS FROM VISUAL CURVE MATCHING

## VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 4.6834E-005y0 = 1.6637E+000

## TYPE CURVE DATA

K = 6.14696E-005y0 = 1.71051E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0 000E±000	1 711E+000	8 600E+001	7.636E-002		

# AQTESOLV

A Program for

Automatic Estimation of Aquifer Coefficients

From Aquifer Test Data

By:

Glenn M. Duffield and James O. Rumbaugh, III

Geraghty & Miller Modeling Group 1895 Preston White Drive, Suite 301 Reston, VA 22091

(703) 476 - 0335

## AQTESOLV RESULTS Version 1.10

02/07/96 20:10:01

TEST DESCRIPTION

Data set..... mw2519.dat

Data set title.... Rising Head Slug Test for MW25-19

Knowns and Constants:

A, B, C..... 0.000, 0.000, 1.448

ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

RESULTS FROM STATISTICAL CURVE MATCHING

STATISTICAL MATCH PARAMETER ESTIMATES

Estimate Std. Error K = 1.0650E-003 +/- 6.9290E-006y0 = 1.6474E+000 +/- 2.6081E-003

ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual \* weight

Weighted Residual Statistics:

Model Residuals:

Time Observed Calculated Residual Weight

0.0266	1 714	1 6100	0.40440	
0.0366	1.714 1.704	1.6129	0.10113	1
0.04 0.0433	1.604	1.6097	0.0943	1
0.0433		1.6066	-0.0026277	1
	1.66	1.6036	0.056439	1
0.05	1.67	1.6004	0.069593	1
0.0533	1.616	1.5974	0.018648	1
0.0566	1.632	1.5943	0.037697	1
0.06	1.638	1.5912	0.046832	1
0.0633	1.61	1.5881	0.02187	1
0.0666	1.613	1.5851	0.027901	1
0.07	1.616	1.582	0.034019	1
0.0733	1.601	1.579	0.022038	1
0.0766	1.598	1.5759	0.022052	1
0.08	1.594	1.5728	0.021152	1
0.0833	1.588	1.5698	0.018154	1
0.0866	1.582	1.5668	0.015151	1
0.09	1.579	1.5638	0.015232	1
0.0933	1.575	1.5608	0.014217	1
0.0966	1.569	1.5578	0.011197	1
0.1	1.566	1.5547	0.01126	1
0.1033	1.563	1.5518	0.011228	1
0.1066	1.557	1.5488	0.0081901	1
0.11	1.553	1.5458	0.0072361	1
0.1133	1.55	1.5428	0.0071867	1
0.1166	1.544	1.5399	0.0071307	1
0.12	1.541	1.5368	0.0041318	
0.1233	1.535	1.5339	0.0010938	1
0.1266	1.535			1
0.13		1.531	2.1801E-005	1
0.13	1.528	1.528	3.2709E-005	1
	1.522	1.5251	-0.0030506	1
0.1366	1.522	1.5221	-0.00013948	1
0.14	1.519	1.5191	-0.00014596	1
0.1433	1.513	1.5162	-0.0032461	1
0.1466	1.509	1.5134	-0.0043518	1
0.15	1.506	1.5104	-0.0043755	1
0.1533	1.503	1.5075	-0.0044924	1
0.1566	1.5	1.5046	-0.0046148	1
0.16	1.494	1.5017	-0.0076558	1
0.1633	1.491	1.4988	-0.0077893	1
0.1666	1.487	1.4959	-0.0089283	1
0.17	1.484	1.493	-0.0089863	1
0.1733	1.481	1.4901	-0.0091364	1
0.1766	1.478	1.4873	-0.009292	1 1
0.18	1.475	1.4844	-0.009367	
0.1833	1.472	1.4815	-0.0095335	1
0.1866	1.469	1.4787	-0.0097054	1
0.19	1.465	1.4758	-0.010797	1
0.1933	1.462	1.473	-0.01098	1
0.1966	1.459	1.4702	-0.011169	1
0.2	1.456	1.4673	-0.011277	1
0.2033	1.453	1.4645	-0.011476	1
0.2066	1.45	1.4617	-0.011681	1
0.21	1.447	1.4588	-0.011806	1 1
0.2133	1.443	1.456	-0.013022	ĺ
0.2166	1.44	1.4532	-0.013242	ī
0.22	1.44	1.4504	-0.010384	1
0.2233	1.437	1.4476	-0.010616	1
0.2266	1.434	1.4449	-0.010852	ī
0.23	1.431	1.442	-0.011011	1
5.25				-

0.2333	1.425	1.4393	-0.014258	1
0.2366	1.425	1.4365	-0.011511	1
				1
0.24	1.421	1.4337	-0.012686	
0.2433	1.418	1.4309	-0.012949	1
0.2466	1.415	1.4282	-0.013217	1
	1.412	1.4254	-0.013409	1
0.25				
0.2533	1.409	1.4227	-0.013688	1
0.2566	1.406	1.42	-0.013972	1
	1.403	1.4172	-0.014179	1
0.26				
0.2633	1.403	1.4145	-0.011474	1
0.2666	1.399	1.4118	-0.012774	1
0.27	1.396	1.409	-0.012998	1
		1.4063	-0.013308	1
0.2733	1.393			_
0.2766	1.39	1.4036	-0.013624	1
0.28	1.387	1.4009	-0.013863	1
0.2833	1.384	1.3982	-0.014189	1
0.2866	1.384	1.3955	-0.01152	1
0.29	1.38	1.3928	-0.012776	1
0.2933	1.377	1.3901	-0.013117	1
		1.3875	-0.013463	1
0.2966	1.374			_
0.3	1.371	1.3847	-0.013735	1
0.3033	1.371	1.3821	-0.011092	1
0.3066	1.368	1.3795	-0.011453	1
		1.3767	-0.01174	1
0.31	1.365			_
0.3133	1.362	1.3741	-0.012112	1
0.3166	1.358	1.3715	-0.013489	1
0.32	1.355	1.3688	-0.013792	1
	1.355	1.3662	-0.011179	1
0.3233				
0.3266	1.352	1.3636	-0.011571	1
0.33	1.349	1.3609	-0.01189	1
0.3333	1.346	1.3583	-0.012292	1
0.35	1.333	1.3452	-0.012222	1
				1
0.3666	1.321	1.3324	-0.011354	_
0.3833	1.305	1.3195	-0.014533	1
0.4	1.292	1.3068	-0.014836	1
0.4166	1.283	1.2943	-0.011336	1
		1.2819	-0.011881	1
0.4333	1.27			
0.45	1.258	1.2695	-0.011546	1
0.4666	1.245	1.2574	-0.012402	1
0.4833	1.233	1.2453	-0.012302	1
	1.223	1.2333	-0.010319	1
0.5				1
0.5166	1.211	1.2215	-0.010522	1
0.5333	1.198	1.2098	-0.011768	1
0.55	1.189	1.1981	-0.0091266	1
0.5666	1.176	1.1867	-0.010666	1
			-0.0082473	1 1 1
0.5833	1.167	1.1752		
0.6	1.157	1.1639	-0.0069382	1
0.6166	1.148	1.1528	-0.0048048	1
0.6333	1.135	1.1417	-0.0067117	1
		1.1307	-0.0047254	1
0.65	1.126			1 1
0.6666	1.113	1.1199	-0.0069097	_
0.6833	1.104	1.1091	-0.0051332	1
0.7	1.094	1.0985	-0.0044603	1
	1.085	1.088	-0.0029532	1
0.7166			-0.0054842	1 1 1
0.7333	1.072	1.0775		1
0.75	1.066	1.0671	-0.0011159	
0.7666	1.053	1.0569	-0.0039086	1
0.7833	1.044	1.0467	-0.0027383	1
	1.034	1.0367	-0.0026659	1
0.8			0.0012501	1
0.8166	1.028	1.0267	0.0012301	_

0.32563 0.29003 7 0.25831 0.23007 0.20491 0.1825 0.16255 0.14477 0.12894 0.11484 0.10229 0.091101 0.08114 7 0.072268 1 0.072268 1 0.057327 0.051059 0.045476 0.040503 0.036074 0.03213 0.036074 0.03213 0.028616 0.025487 0.025487 0.0227 4 0.0227 4 0.016038 7 0.014285 4 0.012723 4 0.010092 1 0.0089888	0.0083894 0.010368 0.010974 0.011687 0.014933 0.01809 0.018496 0.019452 0.018226 0.022057 0.020156 0.022714 0.021899 0.02186 0.024732 0.026635 0.026673 0.026673 0.026941 0.023524 0.025497 0.022926 0.024384 0.024513 0.024513 0.024513 0.024513 0.024513 0.024513 0.024513 0.024513 0.022994	
7 0.014285 4 0.012723 4 0.011331 1 0.010092 1 0.089888 1 0.0080059 8 0.0071305 8 0.0063508 5 0.0056564 5 0.0050379 8 0.0028235 8 0.0015825 5 0.00088691	0.022715 0.021277 0.022669 0.020908 0.022011 0.022994 0.020869 0.021649 0.019344 0.019962 0.015176 0.016418	1 1 1
6 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 0.29003 7 0.25831 5 0.23007 0.20491 1 0.1825 2 0.16255 3 0.14477 1 0.12894 5 0.10229 3 0.091101 0.08114 7 0.08214 7 0.072268 1 0.064365 4 0.057327 8 0.051059 9 0.045476 6 0.040503 9 0.036074 9 0.03213 3 0.028616 5 0.025487 7 0.0227 4 0.02218 4 0.018007 4 0.016038 7 0.0227 4 0.016038 7 0.014285 4 0.012723 4 0.011331 1 0.010092 1 0.089888 1 0.0080059 8 0.0071305 8 0.0063508 5 0.0056564 5 0.0050379 8 0.0028235 8 0.0015825	6       0.32563       0.010368         1       0.29003       0.010974         7       0.25831       0.011687         5       0.23007       0.014933         3       0.20491       0.01809         1       0.1825       0.018496         2       0.16255       0.019452         3       0.14477       0.018226         1       0.12894       0.022057         1       0.12894       0.022057         1       0.12894       0.022057         1       0.12894       0.022057         1       0.12894       0.022057         0.01484       0.020156       0.022714         0       0.091101       0.021899         0.08114       0.02186       0.024732         0.026635       0.026673       0.026673         0       0.057327       0.026673         0       0.045476       0.023524         0       0.045476       0.024384         0       0.025487       0.024513         0       0.025487       0.024513         0       0.022715       0.024384         0       0.016038       0.022715

15	0.012	0.00027859	0.011721	1,
16	0.009	0.00015614	0.0088439	1
17	0.006	8.751E-005	0.0059125	1
18	0.006	4.9046E-005	0.005951	1
19	0.006	2.7488E-005	0.0059725	1
20	0.006	1.5406E-005	0.0059846	1
21	0.006	8.6345E-006	0.0059914	1
22	0.006	4.8393E-006	0.0059952	1
23	0.006	2.7122E-006	0.0059973	1
24	0.009	1.5201E-006	0.0089985	1
25	0.009	8.5195E-007	0.0089991	1
26	0.009	4.7748E-007	0.0089995	1
27	0.009	2.6761E-007	0.0089997	1 1 1 1 1
28	0.006	1.4998E-007	0.0059999	1
29	0.006	8.406E-008	0.0059999	1
30	0.009	4.7112E-008	0.009	1
31	0.006	2.6405E-008	0.006	1
32	0.009	1.4799E-008	0.009	1
33	0.006	8.2941E-009	0.006	1
34	0.006	4.6485E-009	0.006	1
35	0.003	2.6053E-009	0.003	1
36	0.003	1.4602E-009	0.003	1 1
37	0.003	8.1836E-010	0.003	1
41	0.003	8.0747E-011	0.003	1
44	0.003	1.4215E-011	0.003	1
45	0.003	7.9671E-012	0.003	1

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#### RESULTS FROM VISUAL CURVE MATCHING

## VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 1.0650E-003y0 = 1.6474E+000

## TYPE CURVE DATA

K = 9.40547E-004y0 = 1.51107E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.0000.000	1 5115.000	3 500F±001	2 550E-008		

AQTESOLV

A Program for

SEAD-26

# MW26-3 SE1000C Environmental Logger 12/05/95 12:54

# Unit# 00001 Test 2

Reference	0.000
Linearity	0.000
Scale factor	9.910
Offset	-0.140
Delay mSEC	50.000

VARIABLE

VARIABLE UNITS
Elapsed Time Minutes
INPUT 1 Drawdown from Static, feet UNITS

Step 0 12/05/95 10:35:53 am

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT I
0.0033	2.887	0.19	0.912	0.55	0.232	6.8	0.031
0.0066	1.903	0.1933	0.897	0.5666	0.226	7	0.028
0.01	1.84	0.1966	0.881	0.5833	0.22	7.2	0.028
0.0133	1.85	0.2	0.868	0.6	0.213	7.4	0.028
0.0166	1.831	0.2033	0.853	0.6166	0.21	7.6	0.028
0.02	1.822	0.2066	0.837	0.6333	0.207	7.8	0.028
0.0233	1.787	0.21	0.825	0.65	0.201	8	0.025
0.0266	1.759	0.2133	0.809	0.6666	0.198	8.2	0.025
0.03	1.771	0.2166	0.793	0.6833	0.194	8.4	0.025
0.0333	1.753	0.22	0.781	0.7	0.191	8.6	0.022
0.0366	1.718	0.2233	0.768	0.7166	0.185	8.8	0.022
0.04	1.671	0.2266	0.752	0.7333	0.182	9	0.022
0.0433	1.662	0.23	0.74	0.75	0.179	9.2	0.022
0.0466	1.646	0.2333	0.727	0.7666	0.179	9.4	0.022
0.05	1.624	0.2366	0.712	0.7833	0.172	9.6	0.022
0.0533	1.602	0.24	0.699	0.8	0.172	9.8	0.019
0.0566	1.58	0.2433	0.687	0.8166	0.169	10	0.019
0.06	1.561	0.2466	0.674	0.8333	0.166	11	0.016
0.0633	1.543	0.25	0.662	0.85	0.163	12	0.019
0.0666	1.517	0.2533	0.649	0.8666	0.163	13	0.016
0.07	1.505	0.2566	0.636	0.8833	0.16	14	0.013
0.0733	1.486	0.26	0.627	0.9	0.157	15	0.013
0.0766	1.47	0.2633	0.615	0.9166	0.157	16	0.009
0.08	1.452	0.2666	0.602	0.9333	0.154	17	0.009
0.0833	1.433	0.27	0.593	0.95	0.154	18	0.009
0.0866	1.417	0.2733	0.58	0.9666	0.151	19	0.006
0.09	1.398	0.2766	0.571	0.9833	0.147	20	0.006
0.0933	1.379	0.28	0.558	1	0.147	21	0.006
0.0966	1.364	0.2833	0.549	1.2	0.129	22	0.006
0.1	1.345	0.2866	0.539	1.4	0.113	23	0.003
0.1033	1.329	0.29	0.53	1.6	0.104	24	0.003
0.1066	1.31	0.2933	0.52	1.8	0.094	25	0.003
0.11	1.295	0.2966	0.511	2	0.088	26	0
0.1133	1.279	0.3	0.505	2.2	0.082	27	0.003
0.1166	1.26	0.3033	0.495	2.4	0.078	28	0.003
0.12	1.245	0.3066	0.486	2.6	0.072	29	0.003
0.1233	1.229	0.31	0.48	2.8	0.069	30	0.003
0.1266	1.21	0.3133	0.47	3	0.066	31	0
0.13	1.195	0.3166	0.464	3.2	0.063	32	0
0.1333	1.179	0.32	0.458	3.4	0.06	33	0
0.1366	1.163	0.3233	0.448	3.6	0.057	34	0
0.14	1.147	0.3266	0.442	3.8	0.053		
0.1433	1.129	0.33	0.436	4	0.05		
0.1466	1.113	0.3333	0.43	4.2	0.05		
0.15	1.097	0.35	0.398	4.4	0.047		
0.1533	1.082	0.3666	0.37	4.6	0.047		
0.1566	1.066	0.3833	0.348	4.8	0.044		
0.16	1.05	0.4	0.329	5	0.041		
0.1633	1.035	0.4166	0.314	5.2	0.041		
0.1666	1.019	0.4333	0.298	5.4	0.041		
0.17	1.003	0.45	0.285	5.6	0.038		
0.1733	0.988	0.4666	0.273	5.8	0.038		
0.1766	0.972	0.4833	0.263	6	0.035		
0.18	0.959	0.5	0.254	6.2	0.035		
0.1833	0.944	0.5166	0.248	6.4	0.031		
0.1866	0.928	0.5333	0.241	6.6	0.031		

# MW26-4 Hand-run Slug test with Stopwatch and Electronic Water Level Meter 12/06/95 10:08am

VARIABLE	UNITS
Elapsed Time	Minutes
INPUT 1	Drawdown from Static, feet

Elapsed Time	INPUT 1
0.2	1.14
0.28	1.04
0.37	0.73
0.45	0.55
0.48	0.5
0.58	0.37
0.67	0.33
0.73	0.29
0.83	0.26
0.95	0.24
1.03	0.22
1.22	0.2
1.42	0.18
1.72	0.16
2.1	0.14
2.57	0.12
3.2	0.1
4.32	0.08
5.97	0.06
7.88	0.04
11.5	0.02
15.65	0.01

## MW26-5 SE1000C Environmental Logger 12/05 09:10

Unit# 00001 Test 1

 Reference
 0.000

 Linearity
 0.000

 Scale factor
 9.910

 Offset
 -0.140

 Delay mSEC
 50.000

VARIABLE Elapsed Time INPUT 1 UNITS
Minutes
Drawdown from Static, feet

# Step 0 12/05/95 08:12:19 am

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	5.235	0.1833	1.069	0.5	0.576	6	0.297
0.0033	2.091	0.1866	1.059	0.5166	0.57	6.2	0.291
0.0066	1.523	0.19	1.05	0.5333	0.561	6.4	0.291
0.01	1.743	0.1933	1.04	0.55	0.551	6.6	0.288
0.0133	1.661	0.1966	1.031	0.5666	0.545	6.8	0.282
0.0166	1.649	0.2	1.021	0.5833	0.539	7	0.282
0.02	1.633	0.2033	1.015	0.6	0.532	7.2	0.282
0.0233	1.614	0.2066	1.006	0.6166	0.526	7.4	0.278
0.0266	1.608	0.21	0.996	0.6333	0.523	7.6	
0.03	1.605	0.2133	0.987	0.65	0.517	7.8	0.272
0.0333	1.58	0.2166	0.981	0.6666	0.517	7.6	0.269
0.0366	1.561	0.22	0.971	0.6833			0.266
0.04		0.2233			0.51	8.2	0.263
0.0433	1.536		0.962	0.7	0.504	8.4	0.26
	1.536	0.2266	0.956	0.7166	0.501	8.6	0.26
0.0466	1.526	0.23	0.946	0.7333	0.498	8.8	0.257
0.05	1.507	0.2333	0.94	0.75	0.495	9	0.253
0.0533	1.498	0.2366	0.934	0.7666	0.492	9.2	0.25
0.0566	1.47	0.24	0.924	0.7833	0.489	9.4	0.25
0.06	1.464	0.2433	0.915	0.8	0.485	9.6	0.247
0.0633	1.451	0.2466	0.909	0.8166	0.482	9.8	0.244
0.0666	1.442	0.25	0.902	0.8333	0.479	10	0.241
0.07	1.432	0.2533	0.893	0.85	0.476	11	0.231
0.0733	1.42	0.2566	0.887	0.8666	0.473	12	0.219
0.0766	1.407	0.26	0.877	0.8833	0.47	13	0.213
0.08	1.395	0.2633	0.874	0.9	0.47	14	0.206
0.0833	1.382	0.2666	0.865	0.9166	0.467	15	0.197
0.0866	1.369	0.27	0.858	0.9333	0.463	16	0.184
0.09	1.36	0.2733	0.852	0.95	0.46	17	0.181
0.0933	1.348	0.2766	0.846	0.9666	0.46	18	0.175
0.0966	1.335	0.28	0.84	0.9833	0.457	19	0.169
0.1	1.326	0.2833	0.833	1	0.454	20	0.159
0.1033	1.313	0.2866	0.827	1.2	0.432	21	0.153
0.1066	1.304	0.29	0.821	1.4	0.416	22	0.147
0.11	1.291	0.2933	0.815	1.6	0.407	23	0.144
0.1133	1.279	0.2966	0.808	1.8	0.398	24	0.134
0.1166	1.269	0.3	0.802	2	0.388	25	0.131
0.12	1.257	0.3033	0.796	2.2	0.379	26	0.125
0.1233	1.247	0.3066	0.79	2.4	0.376	27	0.122
0.1266	1.238	0.31	0.786	2.6	0.369	28	0.115
0.13	1.225	0.3133	0.78	2.8	0.363	29	0.109
0.1333	1.216	0.3166	0.774	3	0.357	30	0.106
0.1366	1.203	0.32	0.768	3.2	0.351	31	0.103
0.14	1.194	0.3233	0.761	3.4	0.344	32	0.1
0.1433	1.181	0.3266	0.758	3.6	0.341	33	0.097
0.1466	1.172	0.33	0.752	3.8	0.335	34	0.094
0.15	1.163	0.3333	0.746	4	0.332	35	0.09
0.1533	1.153	0.35	0.724	4.2	0.329	36	0.084
0.1566	1.144	0.3666	0.699	4.4	0.322	37	0.081
0.16	1.134	0.3833	0.677	4.6	0.319	38	0.078
0.1633	1.125	0.3833	0.658	4.8	0.316	39	0.075
0.1666	1.112	0.4166	0.642	5	0.313	40	0.075
0.100	1.103	0.4333	0.626	5.2	0.31	41	0.073
		0.45	0.611	5.4	0.307	42	0.072
0.1733	1.094	0.4666	0.598	5.6	0.307	43	0.065
0.1766 0.18	1.087 1.075	0.4833	0.589	5.8	0.297	4.3	0.063

## MW26-6 SE1000C Environmental Logger 12/05 12:57

## Unit# 00001 Test 3

 Reference
 0.000

 Linearity
 0.000

 Scale factor
 9.910

 Offset
 -0.140

 Delay mSEC
 50.000

VARIABLE Elapsed Time INPUT 1 UNITS
Minutes
Drawdown from Static, feet

# Step 0 12/05/95 11:42:46 am

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	0.021	0.1866	1.417	0.5333	0.686	6.6	0.169
0.0033	0.705	0.19	1.404	0.55	0.674	6.8	0.163
0.0066	5.846	0.1933	1.391	0.5666	0.664	7	0.156
0.01	-0.388	0.1966	1.379	0.5833	0.652	<b>7</b> .2	0.153
0.0133	2.175	0.2	1.37	0.6	0.639	7.4	0.147
0.0166	2.144	0.2033	1.357	0.6166	0.633	<b>7</b> .6	0.144
0.02	2.2	0.2066	1.344	0.6333	0.623	7.8	0.141
0.0233	2.163	0.21	1.332	0.65	0.617	8	0.134
0.0266	2.141	0.2133	1.319	0.6666	0.608	8.2	0.131
0.03	2.144	0.2166	1.31	0.6833	0.598	8.4	0.128
0.0333	2.109	0.22	1.297	0.7	0.592	8.6	0.125
0.0366	2.084	0.2233	1.285	0.7166	0.586	8.8 9	0.119
0.04	2.069	0.2266	1.275	0.7333	0.583	9.2	0.119 0.112
0.0433	2.069	0.23	1.263	0.75 0.7666	0. <b>57</b> 6 0.5 <b>7</b>	9.4	0.112
0.0466	2.044	0.2333	1.253	0.7833	0.564	9.6	0.106
0.05	2.006	0.2366	1.241	0.7833	0.561	9.8	0.103
0.0533	2	0.24	1.232 1.219	0.8166	0.554	10	0.103
0.0566	1.909	0.2433		0.8333	0.551	11	0.087
0.06	1.968	0.2466 0.25	1.21 1.197	0.85	0.545	12	0.081
0.0633	1.94 1.924	0.2533	1.188	0.8666	0.539	13	0.072
0.0666	1.924	0.2566	1.178	0.8833	0.536	14	0.062
0.07	1.893	0.26	1.169	0.8833	0.532	15	0.053
0.0733	1.874	0.2633	1.159	0.9166	0.529	16	0.047
0.0766 0.08	1.865	0.2666	1.147	0.9333	0.526	17	0.04
0.0833	1.849	0.27	1.138	0.95	0.52	18	0.037
0.0866	1.833	0.2733	1.128	0.9666	0.517	19	0.034
0.09	1.815	0.2766	1.119	0.9833	0.514	20	0.028
0.0933	1.802	0.28	1.109	1	0.51	21	0.028
0.0966	1.786	0.2833	1.1	1.2	0.47	22	0.025
0.1	1.771	0.2866	1.09	1.4	0.442	23	0.021
0.1033	1.755	0.29	1.084	1.6	0.416		
0.1066	1.743	0.2933	1.072	1.8	0.398		
0.11	1.727	0.2966	1.065	2	0.379		
0.1133	1.714	0.3	1.056	2.2	0.363		
0.1166	1.686	0.3033	1.047	2.4	0.344		
0.12	1.67	0.3066	1.04	2.6	0.332		
0.1233	1.68	0.31	1.034	2.8	0.316		
0.1266	1.655	0.3133	1.025	3	0.304		
0.13	1.645	0.3166	1.015	3.2	0.294		
0.1333	1.63	0.32	1.006	3.4	0.282		
0.1366	1.614	0.3233	0.993	3.6	0.272		
0.14	1.601	0.3266	0.99	3.8	0.263		
0.1433	1.589	0.33	0.981	4	0.253		
0.1466	1.573	0.3333	0.974	4.2	0.244		
0.15	1.561	0.35	0.934	4.4	0.238		
0.1533	1.548	0.3666	0.899	4.6	0.228		
0.1566	1.533	0.3833	0.868	4.8	0.222		
0.16	1.52	0.4	0.84	5	0.216		
0.1633	1.507	0.4166	0.811	5.2	0.21		
0.1666	1.495	0.4333	0.79	5.4	0.2		
0.17	1.482	0.45	0.768	5.6	0.197		
0.1733	1.47	0.4666	0.749	5.8	0.191		
0.1766	1.457	0.4833	0.73	6.2	0.184 0.178		
0.18	1.442	0.5	0.714	6.4	0.178		
0.1833	1.429	0.5166	0.699	0.4	0.172		

#### MW26-7 SE1000C Environmental Logger 12/05 09:07

## Unit# 00001 Test 0

 Reference
 0.000

 Linearity
 0.010

 Scale factor
 9.940

 Offset
 -0.020

 Delay mSEC
 50.000

VARIABLE

VARIABLE UNITS
Elapsed Time Minutes
INPUT 1 Drawdown from Static, feet UNITS

Step 0 12/05/95 07:40:13 am

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	8.164	0.1866	2.201	0.5333	0.883	6.6	0.016
0.0033	0.169	0.19	2.179	0.55	0.842	6.8	0.016
0.0066	3.368	0.1933	2.154	0.5666	0.801	7	0.016
0.01	3.397	0.1966	2.148	0.5833	0.764	7.2	0.016
0.0133	3.337	0.2	2.129	0.6	0.729	7.4	0.013
0.0166	3.305	0.2033	2.113	0.6166	0.694	7.6	0.016
0.02	3.255	0.2066	2.097	0.6333	0.663	7.8	0.013
0.0233	3.217	0.21	2.085	0.65	0.631	8	0.013
0.0266	3.195	0.2133	2.069	0.6666	0.603	8.2	0.013
0.03	3.167	0.2166	2.06	0.6833	0.575	8.4	0.013
0.0333	3.142	0.22	2.041	0.7	0.55	8.6	0.009
0.0366	3.12	0.2233	2.031	0.7166	0.524	8.8	0.009
0.04	3.088	0.2266	2.013	0.7333	0.499	9	0.009
0.0433	3.066	0.23	1.987	0.75	0.477	9.2	0.009
0.0466	3.041	0.2333	1.969	0.7666	0.455	9.4	0.009
0.05	3.013	0.2366	1.959	0.7833	0.436	9.6	0.009
0.0533	2.991	0.24	1.946	0.8	0.417	9.8	0.009
0.0566	2.972	0.2433	1.924	0.8166	0.399	10	0.009
0.06	2.941	0.2466	1.915	0.8333	0.383	11	0.006
0.0633	2.919	0.25	1.902	0.85	0.367	12	0.003
0.0666	2.9	0.2533	1.884	0.8666	0.351	13	0.003
0.07	2.878	0.2566	1.887	0.8833	0.339	14	0
0.0733	2.808	0.26	1.865	0.9	0.326	15	0
0.0766	2.812	0.2633	1.906	0.9166	0.314		
0.08	2.808	0.2666	1.906	0.9333	0.301		
0.0833	2.812	0.27	1.843	0.95	0.289		
0.0866	2.758	0.2733	1.736	_ 0.9666	0.279		
0.09	2.746	0.2766	1.77	0.9833	0.27		
0.0933	2.724	0.28 0.2833	1.755	1 1.2	0.26		
0.0966 0.1	2.698 2.683	0.2866	1.745 1.729	1.4	0.1 <b>7</b> 2 0.131		
0.1033	2.654	0.29	1.72	1.6	0.131		
0.1066	2.648	0.2933	1.695	1.8	0.09		
0.11	2.613	0.2966	1.685	2	0.078		
0.1133	2.598	0.2900	1.673	2.2	0.068		
0.1166	2.585	0.3033	1.66	2.4	0.059		
0.12	2.56	0.3066	1.648	2.6	0.053		
0.1233	2.547	0.31	1.635	2.8	0.049		
0.1266	2.513	0.3133	1.622	3	0.046		
0.13	2.51	0.3166	1.61	3.2	0.043		
0.1333	2.494	0.32	1.594	3.4	0.04		
0.1366	2.475	0.3233	1.582	3.6	0.034		
0.14	2.431	0.3266	1.572	3.8	0.034		
0.1433	2.428	0.33	1.556	4	0.031		
0.1466	2.415	0.3333	1.544	4.2	0.031		
0.15	2.393	0.35	- 1.478	4.4	0.028		
0.1533	2.377	0.3666	1.412	4.6	0.028		
0.1566	2.349	0.3833	1.349	4.8	0.025		
0.16	2.34	0.4	1.289	5	0.025		
0.1633	2.318	0.4166	1.232	5.2	0.025		
0.1666	2.302	0.4333	1.176	5.4	0.022		
0.17	2.286	0.45	1.122	5.6	0.025		
0.1733	2.267	0.4666	1.072	5.8	0.022		
0.1766	2.252	0.4833	1.018	6	0.022		
0.18	2.27	0.5	0.971	6.2	0.019		
0.1833	2.208	0.5166	0.927	6.4	0.019		

# MW26-8 Hand-run Slug test with Stopwatch and Electronic Water Level Meter 12/05/95 3:35pm

VARIABLE UNITS
Elapsed Time Minutes
INPUT 1 Drawdown from Static, feet

Elapsed Time	INPUT 1
0.23	1.31
0.32	1.03
0.45	0.73
0.5	0.65
0.55	0.61
0.58	0.58
0.62	0.57
0.65	0.56
0.73	0.55
0.82	0.52
0.95	0.5
1.02	0.49
1.12	0.48
1.22	0.47
1.37	0.46
1.53	0.45
1.7	0.44
1.85	0.43
2.15	0.42
2.45	0.41
2.83	0.4
3.18	0.39
3.67	0.38
3.95	0.37
4.47	0.36
5.08	0.35
5.8	0.34
6.35	0.33
7.27	0.32
7.77	0.31
9.53	0.29
10.98	0.27
13.15	0.25
15.12	0.23
17.95	0.21
20.37	0.19
23.2	0.17
29.83	0.13
33.43	0.11
37.73	0.09
42.88	0.07

#### MW26-9 SE1000C Environmental Logger 12/05 17:28

## Unit# 00001 Test 4

Reference 0.000 Linearity 0.010 | Scale factor | 9.940 |
| Offset | -0.020 |
| Delay mSEC | 50.000

VARIABLE Elapsed Time

UNITS Minutes INPUT 1 Drawdown from Static, feet

Step 0 12/05/95 1:27:42 pm

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	5.632	0.1866	1.056	0.5333	0.515	6.6	0.188
0.0033	0.399	0.19	1.044	0.55	0.509	6.8	0.185
0.0066	1.774	0.1933	1.034	0.5666	0.503	7	0.182
0.01	1.748	0.1966	1.025	0.5833	0.497	7.2	0.179
0.0133	1.711	0.2	1.016	0.6	0.49	7.4	0.179
0.0166	1.755	0.2033	1.006	0.6166	0.487	7.6	0.169
0.02	1.708	0.2066	0.997	0.6333	0.484	7.8	0.166
0.0233	1.711	0.21	0.987	0.65	0.475	8	0.166
0.0266	1.695	0.2133	0.978	0.6666	0.471	8.2	0.163
0.03	1.648	0.2166	0.968	0.6833	0.465	8.4	0.16
0.0333	1.645	0.22	0.959	0.7	0.462	8.6	0.157
0.0366	1.635	0.2233	0.949	0.7166	0.456	8.8	0.154
0.04	1.623	0.2266	0.943	0.7333	0.456	9	0.147
0.0433	1.597	0.23	0.931	0.75	0.449	9.2	0.147
0.0466 0.05	1.512 1.56	0.2333 0.2366	0.921	0.7666	0.443	9.4	0.147
0.0533	1.541	0.2300	0.915 0.902	0.7833 0.8	0.44	9.6	0.144
0.0566	1.557	0.2433	0.893	0.8166	0.44 0.437	9.8	0.138
0.06	1.522	0.2466	0.89	0.8333	0.43	10 11	0.135
0.0633	1.5	0.25	0.88	0.85	0.43	12	0.122 0.116
0.0666	1.484	0.2533	0.871	0.8666	0.427	13	0.106
0.07	1.472	0.2566	0.865	0.8833	0.424	14	0.094
0.0733	1.456	0.26	0.852	0.9	0.421	15	0.088
0.0766	1.446	0.2633	0.846	0.9166	0.418	16	0.078
0.08	1.431	0.2666	0.839	0.9333	0.418	17	0.072
0.0833	1.418	0.27	0.833	0.95	0.415	18	0.066
0.0866	1.406	0.2733	0.824	0.9666	0.412	19	0.059
0.09	1.393	0.2766	0.821	0.9833	0.408	20	0.056
0.0933	1.38	0.28	0.811	1	0.408	21	0.05
0.0966	1.368	0.2833	0.802	1.2	0.38	22	0.047
0.1	1.352	0.2866	0.795	1.4	0.371	23	0.04
0.1033	1.343	0.29	0.789	1.6	0.352	24	0.04
0.1066	1.33	0.2933	0.783	1.8	0.342	25	0.037
0.11	1.317	0.2966	0.776	2	0.33	26	0.031
0.1133	1.305	0.3	0.77	2.2	0.317	27	0.028
0.1166	1.292	0.3033	0.761	2.4	0.308	28	0.025
0.12	1.28	0.3066	0.758	2.6	0.298	29	0.022
0.1233 0.1266	1.267 1.258	0.31 0.3133	0.748 0.745	2.8	0.292 0.286	30	0.028
0.1200	1.245	0.3166	0.736	3.2	0.276	31 32	0.022 0.018
0.1333	1.233	0.32	0.729	3.4	0.27	33	0.015
0.1366	1.22	0.3233	0.723	3.6	0.264	34	0.015
0.14	1.211	0.3266	0.72	3.8	0.261	35	0.013
0.1433	1.201	0.33	0.71	4	0.251	36	0.012
0.1466	1.189	0.3333	0.704	4.2	0.245	37	0.012
0.15	1.176	0.35	0.676	4.4	0.239	38	0.012
0.1533	1.167	0.3666	0.654	4.6	0.235	39	0.009
0.1566	1.154	0.3833	0.632	4.8	0.229	40	0.012
0.16	1.138	0.4	0.613	5	0.226		
0.1633	1.129	0.4166	0.594	5.2	0.223		
0.1666	1.119	0.4333	0.578	5.4	0.217		
0.17	1.107	0.45	0.566	5.6	0.21		
0.1733	1.097	0.4666	0.553	5.8	0.207		
0.1766	1.085	0.4833	0.541	6	0.204		
0.18	1.075	0.5	0.534	6.2	0.198		
0.1833	1.066	0.5166	0.525	6.4	0.195		

MW26-10 SE1000C Environmental Logger 12/05 17:31

Unit# 00001 Test 5

 Reference
 0.000

 Linearity
 0.000

 Scale factor
 9.910

 Offset
 -0.140

 Delay mSEC
 50.000

VARIABLE Elapsed Time INPUT 1 UNITS
Minutes
Drawdown from Static, feet

Step 0 12/05/95 4:07:58 pm

Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1	Elapsed Time	INPUT 1
0	3.467	0.1866	1.46	0.5333	0.858	6.6	0.564	49	0.395
0.0033	6.734	0.19	1.451	0.55	0.846	6.8	0.561	50	0.391
0.0066	2,426	0.1933	1.445	0.5666	0.837	7	0.561	51	0.391
0.01	1.554	0.1966	1.435	0.5833	0.824	7.2	0.558	52	0.391
0.0133	2.112	0.2	1.426	0.6	0.815	7.4	0.554	53	0.388
0.0166	2.018	0.2033	1.417	0.6166	0.808	7.6	0.551	54	0.385
0.02	1.959	0.2066	1.41	0.6333	0.799	7.8	0.551	55	0.382
0.0233	1.949	0.21	1.401	0.65	0.793	8	0.548	56	0.379
0.0266	1.943	0.2133	1.391	0.6666	0.786	8.2	0.551	57	0.379
0.03	1.949	0.2166	1.385	0.6833	0.78	8.4	0.548	58	0.376
0.0333	1.921	0.22	1.376	0.7	0.774	8.6	0.545	59	0.373
0.0366	1.899	0.2233	1.366	0.7166	0.768	8.8 9	0.545	60	0.373 0.369
0.04	1.893	0.2266	1.36	0.7333	0.764	9.2	0.542 0.542	61 62	0.369
0.0433	1.871	0.23	1.351	0.75	0.758 0.755	9.4	0.539	63	0.369
0.0466	1.871	0.2333	1.344 1.335	0.7666 0.7833	0.752	9.6	0.539	64	0.363
0.05	1.862	0.2366 0.24	1.329	0.7833	0.732	9.8	0.539	65	0.36
0.0533	1.849	0.2433	1.319	0.8166	0.743	10	0.536	05	0.50
0.0 <b>5</b> 66 0.06	1.837 1.827	0.2466	1.313	0.8333	0.739	11	0.529		
0.0633	1.812	0.25	1.307	0.85	0.736	12	0.526		
0.0666	1.805	0.2533	1.297	0.8666	0.733	13	0.52		
0.07	1.793	0.2566	1.291	0.8833	0.73	14	0.514		
0.0733	1.78	0.26	1.282	0.9	0.727	15	0.51		
0.0766	1.771	0.2633	1.275	0.9166	0.724	16	0.504		
0.08	1.755	0.2666	1.266	0.9333	0.721	17	0.501		
0.0833	1.749	0.27	1.26	0.95	0.721	18	0.495		
0.0866	1.739	0.2733	1.254	0.9666	0.717	19	0.492		
0.09	1.727	0.2766	1.247	0.9833	0.714	20	0.489		
0.0933	1.717	0.28	1.238	1	0.711	21	0.482		
0.0966	1.708	0.2833	1.232	1.2	0.683	22	0.476		
0.1	1.699	0.2866	1.225	1.4	0.667	23	0.473		
0.1033	1.686	0.29	1.216	1.6	0.655	24	0.467		
0.1066	1.677	0.2933	1.21	1.8	0.645	25	0.467		
0.11	1.667	0.2966	1.203	2	0.636	26 27	0.463 0.46		
0.1133	1.658	0.3	1.2	2.2	0.626	28	0.457		
0.1166	1.652	0.3033	1.191	2.4 2.6	0.623 0.617	29	0.451		
0.12	1.639	0.3066	1.185 1.178	2.8	0.611	30	0.448		
0.1233	1.63	0.31 0.3133	1.172	3	0.608	31	0.445		
0.1266	1.62	0.3166	1.163	3.2	0.605	32	0.445		
0.13 0.1333	1.614 1.601	0.31	1.159	3.4	0.598	33	0.438		
0.1366	1.592	0.3233	1.153	3.6	0.598	34	0.438		
0.14	1.586	0.3266	1.144	3.8	0.595	35	0.435		
0.1433	1.576	0.33	1.137	4	0.589	36	0.429		
0.1466	1.567	0.3333	1.131	4.2	0.586	37	0.429		
0.15	1.558	0.35	1.1	4.4	0.586	38	0.423		
0.1533	1.548	0.3666	1.072	4.6	0.583	39	0.42		
0.1566	1.539	0.3833	1.04	4.8	0.579	40	0.416		
0.16	1.529	0.4	1.015	5	0.576	41	0.416		
0.1633	1.52	0.4166	0.99	5.2	0.573	42	0.413		
0.1666	1.514	0.4333	0.965	5.4	0.573	43	0.413		
0.17	1.504	0.45	0.943	5.6	0.573	44	0.41		
0.1733	1.495	0.4666	0.924	5.8	0.57	45 46	0.407 0.404		
0.1766	1.486	0.4833	0.906	6	0.567	46 47	0.404		
0.18	1.479	0.5	0.887	6.2 6.4	0.564 0.564	48	0.398		
0.1833	1.47	0.5166	0.874	0.4	0.364	40	0.370		

## AOTESOLV RESULTS Version 1.10

12/21/95 18:14:22 \_\_\_\_\_\_\_ TEST DESCRIPTION Data set..... mw263.dat Data set title..... Rising Head Slug Test for MW26-3 Knowns and Constants: No. of data points..... 204 Radius of well casing..... 0.086 Radius of well................. 0.33 Aguifer saturated thickness..... 4.49 Well screen length..... 3.79 Static height of water in well..... 4.49 Log (Re/Rw) ..... 1.853 A, B, C...... 0.000, 0.000, 1.358 \_\_\_\_\_ ANALYTICAL METHOD Bouwer-Rice (Unconfined Aguifer Slug Test) RESULTS FROM STATISTICAL CURVE MATCHING STATISTICAL MATCH PARAMETER ESTIMATES Estimate Std. Error 7.7755E-003 +/- 1.0524E-004 y0 = 2.0315E+000 +/- 1.7912E-002ANALYSIS OF MODEL RESIDUALS residual = calculated - observed weighted residual = residual \* weight Weighted Residual Statistics: Number of residuals..... 196 Number of estimated parameters.... 2 Residual mean..... 0.02056 Residual standard deviation..... 0.05114 Residual variance..... 0.002616

\_del Residuals:

Observed Calculated Residual Weight Time

0.03	1.771	1.7856	-0.014639	1
0.0333	1.753	1.7605	-0.0074806	1
0.0366	1.718	1.7357	-0.017676	ī
0.03	1.671	1.7105	-0.039486	1
0.0433	1.662	1.6864	-0.024386	1
	1.646	1.6626	-0.016626	ī
0.0466		1.6385	-0.010020	1
0.05	1.624	1.6154	-0.01341	1
0.0533	1.602	1.5926	-0.01341	1
0.0566	1.58	1.5695	-0.0085346	1
0.06	1.561	1.5474	-0.0083346	1
0.0633	1.543	1.5256	-0.0044200	1
0.0666	1.517	1.5035	0.0015236	1
0.07	1.505		0.0013230	1
0.0733	1.486	1.4823	0.0037009	1
0.0766	1.47	1.4614	0.011802	1
0.08	1.452	1.4402	0.011802	1
0.0833	1.433	1.4199	0.013099	1
0.0866	1.417	1.3999		1
0.09	1.398	1.3796	0.018416 0.018854	1
0.0933	1.379	1.3601		1
0.0966	1.364	1.341	0.023018	1
0.1	1.345	1.3215	0.02348	1
0.1033	1.329	1.3029	0.0261	1
0.1066	1.31	1.2845	0.025457	
0.11	1.295	1.2659	0.0291	1
0.1133	1.279	1.2481	0.030936	1
0.1166	1.26	1.2305	0.02952	1
0.12	1.245	1.2126	0.032379	1
0.1233	1.229	1.1955	0.033464	1
0.1266	1.21	1.1787	0.031309	1
0.13	1.195	1.1616	0.033415	1
0.1333	1.179	1.1452	0.033782	1
0.1366	1.163	1.1291	0.033917	1
0.14	1.147	1.1127	0.034304	1
0.1433	1.129	1.097	0.031981	1
0.1466	1.113	1.0816	0.031438	1 1
0.15	1.097	1.0659	0.031135	
0.1533	1.082	1.0508	0.031152	1
0.1566	1.066	1.036	0.029958	1
0.16	1.05	1.021	0.028995	1
0.1633	1.035	1.0066	0.02838 0.026563	1 1
0.1666	1.019	0.99244		1
0.17	1.003	0.97803	0.024967 0.023747	1 1
0.1733	0.988	0.96425	0.023747	1
0.1766	0.972	0.95067	0.021332	1
0.18	0.959	0.93687	0.02213	1
0.1833	0.944	0.92367 0.91066	0.02033	i
0.1866	0.928		0.017344	1
0.19	0.912	0.89744	0.012301	1
0.1933	0.897	0.88 <b>47</b> 9 0.87233	0.012203	1
0.1966	0.881	0.85967	0.0083714	1 1
0.2	0.868	0.85967	0.0053319	1
0.2033	0.853	0.84756	0.0034442	1
0.2066	0.837	0.83361	0.0013838	1
0.21	0.825	0.81188	-0.0013134	1 1 1 1
0.2133	0.809	0.80045	-0.0023341	1
0.2166	0.793	0.78883	-0.0078279	1
0.22	0.781 0.768	0.78883	-0.0078279	1
0.2233	0.766	0.77771	0.005/15/	-

0.2266	0.752	0.76676	-0.014756	1
0.23	0.74	0.75563	-0.015628	1 1 1 1
0.2333 0.2366	0.727 0.712	0.74498 0.73448	-0.017981 -0.022485	1
0.24	0.699	0.72383	-0.022485	. 1
0.2433	0.687	0.71363	-0.026627	1
0.2466	0.674	0.70357	-0.029572	1
0.25	0.662	0.69336	-0.031361	1
0.2533	0.649	0.68359	-0.034592	1
0.2566	0.636	0.67396	-0.03796	1
0.26	0.627	0.66418	-0.037179	1
0.2633	0.615	0.65482	-0.039821	1
0.2666	0.602 0.593	0.64559	-0.043595	1
0.27 0.2733	0.58	0.63623 0.62726	-0.043225 -0.047261	1
0.2766	0.571	0.61842	-0.047423	1 1 1 1 1 1
0.28	0.558	0.60945	-0.051448	1
0.2833	0.549	0.60086	-0.051861	1
0.2866	0.539	0.5924	-0.053395	1
0.29	0.53	0.5838	-0.053797	1
0.2933	0.52	0.57557	-0.055572	1
0.2966	0.511	0.56746	-0.056463	1
0.3 0.3033	0.505 0.495	0.55923 0.55135	-0.054227 -0.056348	1
0.3066	0.486	0.54358	-0.057579	1
0.31	0.48	0.53569	-0.05569	1
0.3133	0.47	0.52814	-0.058143	1
0.3166	0.464	0.5207	-0.056701	1 1 1 1 1 1
0.32	0.458	0.51314	-0.055144	
0.3233	0.448	0.50591	-0.057914	1
0.3266 0.33	0.442 0.436	0.49879	-0.056786	1
0.3333	0.43	0.49155 0.48462	-0.055547 -0.054621	1
0.35	0.398	0.45104	-0.053041	1 1 1 1
0.3666	0.37	0.41997	-0.049969	1
0.3833	0.348	0.39087	-0.042869	1
0.4	0.329	0.36379	-0.034785	
0.4166	0.314	0.33872	-0.024724	1
0.4333	0.298	0.31525	-0.017253	1
0.45 0.4666	0.285 0.273	0.29341 0.2732	-0.0084091 -0.00019595	1 1
0.4833	0.263	0.25427	0.0087341	1
0.5	0.254	0.23665	0.017352	1
0.5166	0.248	0.22034	0.027655	1
0.5333	0.241	0.20508	0.035923	1
0.55	0.232	0.19087	0.041133	1
0.5666	0.226	0.17772	0.048282	1
0.5833 0.6	0.22 0.213	0.1654 0.15394	0.054596 0.059057	1 1
0.6166	0.21	0.13334	0.066662	1
0.6333	0.207	0.13341	0.073594	1
0.65	0.201	0.12416	0.076838	1
0.6666	0.198	0.11561	0.082392	1
0.6833	0.194	0.1076	0.086402	1
0.7	0.191	0.10014	0.090858	1
0.7166 0.7333	0.185 0.182	0.093243 0.086782	0.09 <b>1</b> 757 0.095218	1 1
0.7333	0.182	0.080769	0.098231	1
0.7666	0.179	0.075205	0.1038	1
0.7833	0.172	0.069994	0.10201	1

9.6       0.022       2.4016E-018       0.022       1         9.8       0.019       1.0163E-018       0.019       1         10       0.019       4.3006E-019       0.019       1         11       0.016       5.8358E-021       0.016       1	0.8 816335633966312468324683966390.9881.2 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	0.172 0.169 0.166 0.163 0.163 0.157 0.154 0.157 0.154 0.151 0.147 0.129 0.104 0.094 0.098 0.072 0.069 0.063 0.057 0.055 0.057 0.047 0.041 0.041 0.041 0.041 0.038 0.035 0.035 0.035 0.035 0.035 0.031 0.038	0.065144 0.060656 0.056453 0.052541 0.048922 0.045532 0.042377 0.039458 0.036724 0.034179 0.031824 0.029619 0.027567 0.011665 0.0049365 0.002089 0.0088398 0.00037407 0.0001583 6.6986E-005 2.8347E-006 2.148E-006 9.0899E-007 3.8466E-007 1.6277E-009 2.148E-008 2.148E-008 2.148E-008 2.148E-008 3.8466E-010 1.6277E-009 2.2088E-009 9.347E-010 3.9554E-010 1.6738E-010 1.6738E-010 1.2684E-011 5.3673E-012 2.2713E-012 9.6114E-013 4.0672E-013 1.7211E-013 7.2833E-014 3.0821E-014 1.3042E-014 1.3042E-014 1.3042E-014 1.3042E-015 2.3355E-015 9.8832E-016 4.1823E-016 1.7698E-016 7.4893E-017 3.1692E-017 1.3411E-017 5.6752E-018	0.10686 0.10834 0.10955 0.11046 0.11408 0.11447 0.11462 0.11754 0.11728 0.11982 0.11918 0.11733 0.10806 0.10191 0.093116 0.087626 0.081842 0.077933 0.071972 0.068988 0.065995 0.062998 0.059999 0.057 0.053 0.055 0.057 0.053 0.055 0.047 0.041 0.041 0.041 0.041 0.041 0.041 0.041 0.038 0.035 0.035 0.035 0.035 0.031 0.031 0.031 0.031 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.025 0.025 0.025 0.025 0.025 0.022 0.022 0.022	
	8.6 8.8 9 9.2 9.4 9.6 9.8	0.022 0.022 0.022 0.022 0.022 0.022 0.019 0.019	7.4893E-017 3.1692E-017 1.3411E-017 5.6752E-018 2.4016E-018 1.0163E-018 4.3006E-019	0.022 0.022 0.022 0.022 0.022 0.019 0.019	1 1 1 1 1

13	0.016	1.0746E-024	0.016	1
14	0.013	1.4582E-026	0.013	1
15	0.013	1.9787E-028	0.013	1
16	0.009	2.685E-030	0.009	1
17	0.009	3.6435E-032	0.009	1
18	0.009	4.9442E-034	0.009	1
19	0.006	6.7091E-036	0.006	1
20	0.006	9.1041E-038	0.006	1
21	0.006	1.2354E-039	0.006	1
22	0.006	1.6764E-041	0.006	1
23	0.003	2.2748E-043	0.003	1
24	0.003	3.0869E-045	0.003	1
25	0.003	4.1888E-047	0.003	1
27	0.003	7.7132E-051	0.003	1
28	0.003	1.0467E-052	0.003	1
29	0.003	1.4203E-054	0.003	1
30	0.003	1.9273E-056	0.003	1

#### RESULTS FROM VISUAL CURVE MATCHING

## VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 7.7755E-003y0 = 2.0315E+000

## TYPE CURVE DATA

K = 7.77549E-003y0 = 2.03150E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0 000E+000	2 031E+000	3 000E+001	1.927E-056		

## TYPE CURVE DATA

K = 7.77549E-003y0 = 2.03150E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	2.031E+000	3.000E+001	1.927E-056		

# TYPE CURVE DATA

K = 7.77549E-003y0 = 2.03150E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown

#### TYPE CURVE DATA

K = 7.77549E-003y0 = 2.03150E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
<b></b>					
0.000E+000	2.031E+000	3.000E+001	1.927E-056		

#### TYPE CURVE DATA

K = 7.77549E-003y0 = 2.03150E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	2.031E+000	3.000E+001	1.927E-056		

#### AQTESOLV

A Program for

Automatic Estimation of Aquifer Coefficients

From Aguifer Test Data

By:

Glenn M. Duffield and James O. Rumbaugh, III

Geraghty & Miller Modeling Group 1895 Preston White Drive, Suite 301 Reston, VA 22091

(703) 476 - 0335

A Q T E S O L V is a user-friendly program designed to analyze data from aquifer tests automatically. Aquifer coefficients for a variety of aquifer test conditions can be estimated by A Q T E S O L V , including the following:

- confined aquifers, unconfined aquifers, and leaky aquifers
- o pumping tests, injection tests, recovery tests, and slug tests

## AQTESOLV RESULTS Version 1.10

Version 1.10
12/21/95 17:27:06
TEST DESCRIPTION
Data set title Rising Head Slug Test for MW26-4
Knowns and Constants:       22         No. of data points
ANALYTICAL METHOD
Pouwer-Rice (Unconfined Aquifer Slug Test)
RESULTS FROM STATISTICAL CURVE MATCHING
STATISTICAL MATCH PARAMETER ESTIMATES
Estimate Std. Error  K = 7.0507E-003 +/- 6.7001E-004  y0 = 1.7935E+000 +/- 1.6316E-001
ANALYSIS OF MODEL RESIDUALS
residual = calculated - observed weighted residual = residual * weight
Weighted Residual Statistics:  Number of residuals
dol Pagiduals.

del Residuals:

0.2	1.14	1.1199	0.020142	1
0.28	1.04	0.92758	0.11242	1
0.37	0.73	0.75044	-0.020437	1
0.45	0.55	0.62159	~0.071589	1
0.48	0.5	0.57919	-0.079194	1
0.58	0.37	0.45768	-0.087678	1
0.67	0.33	0.37027	-0.040273	1
0.73	0.29	0.32149	-0.031487	1
0.83	0.26	0.25404	0.0059614	1
0.95	0.24	0.19151	0.048494	1
1.03	0.22	0.15863	0.061375	1
1.22	0.2	0.10141	0.098592	1
1.42	0.18	0.06332	0.11668	1
1.72	0.16	0.031243	0.12876	1
2.1	0.14	0.012769	0.12723	1
2.57	0.12	0.0042219	0.11578	1
3.2	0.1	0.00095773	0.099042	1
4.32	0.08	6.8531E-005	0.079931	1
5.97	0.06	1.4078E-006	0.059999	1
7.88	0.04	1.5678E-008	0.04	1
11.5	0.02	3.1141E-012	0.02	1
15.65	0.01	1.7757E-016	0.01	1

## RESULTS FROM VISUAL CURVE MATCHING

## VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 7.0507E-003y0 = 1.7935E+000

## TYPE CURVE DATA

K = 7.05072E-003y0 = 1.79346E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0 000E+000	1.793E+000	1.600E+001	7.788E-017		

# TYPE CURVE DATA

K = 7.05072E-003y0 = 1.79346E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	1.793E+000	1.600E+001	7.788E-017		

# AQTESOLV RESULTS Version 1.10

Version 1.10 12/21/95 17:33:34 \_\_\_\_\_\_ TEST DESCRIPTION Data set..... mw265.dat Data set title..... Rising Head Slug Test for MW26-5 Knowns and Constants: No. of data points..... 218 Radius of well casing..... 0.086 Radius of well................. 0.33 Aguifer saturated thickness..... 5.13 Well screen length..... 4.03 Static height of water in well..... 5.13 A, B, C...... 0.000, 0.000, 1.390 \_\_\_\_\_ ANALYTICAL METHOD Pouwer-Rice (Unconfined Aguifer Slug Test) RESULTS FROM STATISTICAL CURVE MATCHING STATISTICAL MATCH PARAMETER ESTIMATES Std. Error Estimate K = 3.2830E-003 +/- 1.6764E-004 y0 = 1.5606E+000 +/- 3.2716E-002 ANALYSIS OF MODEL RESIDUALS residual = calculated - observed weighted residual = residual \* weight Weighted Residual Statistics: Number of residuals..... 216 Number of estimated parameters.... 2 Degrees of freedom..... 214 Residual mean..... 0.08446 Residual standard deviation..... 0.1648 Residual variance..... 0.02715

odel Residuals:

0.01	1.743	1.5321	0.21085	1
0.0133	1.661	1.5229	0.13814	1
0.0166	1.649	1.5136	0.13537	1
0.02	1.633	1.5042	0.12881	1
0.0233	1.614	1.4951	0.11893	1
0.0266	1.608	1.486	0.12199	1
0.03	1.605	1.4767	0.12826	1
0.0333	1.58	1.4678	0.11221	1
0.0366	1.561	1.4589	0.1021	1
0.04	1.536	1.4498	0.08621	1
0.0433	1.536	1.441	0.094994	1
0.0466	1.526	1.4323	0.093725	1
0.05	1.507	1.4233	0.083666	1
0.0533	1.498	1.4147	0.08329	1
0.0566	1.47	1.4061	0.063862	1
0.06	1.464	1.3974	0.066639	1
0.0633	1.451	1.3889	0.062106	1
0.0666	1.442	1.3805	0.061521	1
0.07	1.432	1.3719	0.060138	1
0.0733	1.42	1.3635	0.05645 0.051712	1 1
0.0766	1.407 1.395	1.3553 1.3468	0.031712	1
0.08 0.0833	1.382	1.3387	0.043332	1
0.0866	1.369	1.3306	0.038443	1
0.09	1.36	1.3223	0.037749	
0.0933	1.348	1.3142	0.033761	1 1
0.0966	1.335	1.3063	0.028724	1
0.0500	1.326	1.2981	0.027878	ī
0.1033	1.313	1.2903	0.022743	ı
0.1066	1.304	1.2824	0.021561	1
0.11	1.291	1.2744	0.016566	1
0.1133	1.279	1.2667	0.012288	1
0.1166	1.269	1.259	0.0099628	1
0.12	1.257	1.2512	0.0058218	1
0.1233	1.247	1.2436	0.0034028	1
0.1266	1.238	1.2361	0.0019378	1
0.13	1.225	1.2283	-0.0033466	1
0.1333	1.216	1.2209	-0.004904	1
0.1366	1.203	1.2135	-0.010506	1
0.14	1.194	1.2059	-0.011932	1 1
0.1433	1.181	1.1986	-0.017625	1
0.1466	1.172	1.1914	-0.019362 -0.020926	1
0.15	1.163	1.1839	-0.020926	1 1 1 1
0.1533	1.153	1.1768 1.1696	-0.025622	1
0.1566	1.144 1.134	1.1623	-0.028321	1
0.16 0.1633	1.125	1.1553	-0.030279	ĺ
0.1666	1.112	1.1483	-0.036279	1
0.17	1.103	1.1411	-0.038111	1
0.1733	1.094	1.1342	-0.040197	1
0.1766	1.087	1.1273	-0.040325	1
0.18	1.075	1.1203	-0.045288	1 1 1 1 1
0.1833	1.069	1.1135	-0.0445	1
0.1866	1.059	1.1068	-0.047753	1
0.19	1.05	1.0998	-0.049845	1
0.1933	1.04	1.0932	-0.053181	1
0.1966	1.031	1.0866	-0.055557	1
0.2	1.021	1.0798	-0.058775	1
0.2033	1.015	1.0732	-0.058232	1

0.2066	1.006	1.0667	-0.06073	1
0.21	0.996	1.0601	-0.064071	- 1
				1
0.2133	0.987	1.0536	-0.066648	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
0.2166	0.981	1.0473	-0.066264	1
				_
0.22	0.971	1.0407	-0.069727	1
0.2233	0.962	1.0344	-0.072421	1
				_
0.2266	0.956	1.0282	-0.072153	1
0.23	0.946	1.0217	-0.075735	1
				_
0.2333	0.94	1.0155	-0.075545	1
0.2366	0.934	1.0094	-0.075391	1
				<u> </u>
0.24	0.924	1.0031	-0.079091	1
0.2433	0.915	0.99701	-0.082013	1
				_
0.2466	0.909	0.99097	-0.081972	1
0.25	0.902	0.98479	-0.082786	1
0.2533				_
	0.893	0.97882	-0.085819	Τ.
0.2566	0.887	0.97289	-0.085889	1
0.26	0.877	0.96682	-0.089816	_
0 <del>.2</del> 633	0.874	0.96096	-0.086958	1
0.2666	0.865	0.95514	-0.090135	1
0.27	0.858	0.94917	-0.091173	1
0.2733	0.852	0.94342	-0.091422	1
				_
0.2766	0.846	0.93771	-0.091706	1
0.28	0.84	0.93185	-0.091853	1
				_
0.2833	0.833	0.92621	-0.093206	1
0.2866	0.827	0.92059	-0.093594	1
0.29				
	0.821	0.91485	-0.093848	1
0.2933	0.815	0.9093	-0.094305	1
0.2966	0.808	0.9038	-0.095795	-
				_
0.3	0.802	0.89815	-0.096154	1
0.3033	0.796	0.89271	-0.096712	1
				_
0.3066	0.79	0.8873	-0.097303	1 1 1 1 1 1 1
0.31	0.786	0.88176	-0.095764	1
				_
0.3133	0.78	0.87642	-0.096421	1
0.3166	0.774	0.87111	-0.097111	1
0.32				_
	0.768	0.86567	-0.097674	1
0.3233	0.761	0.86043	-0.099428	1
0.3266	0.758	0.85522	-0.097215	-
				1 1
0.33	0.752	0.84988	-0.097877	1
0.3333	0.746	0.84473	-0.098727	1
0.35	0.724	0.81914	-0.095142	1
0.3666	0.699	0.79448	-0.095479	1
0.3833	0.677			
		0.77042	-0.093416	1 1
0.4	0.658	0.74708	-0.089082	1
0.4166	0.642	0.72459	-0.082588	1
				_
0.4333	0.626	0.70264	-0.076642	1
0.45	0.611	0.68136	-0.07036	1
				1 1 1 1
0.4666	0.598	0.66085	-0.062845	1
0.4833	0.589	0.64083	-0.05183	1
0.5	0.576		-0.045421	-
		0.62142		_
0.5166	0.57	0.60271	-0.03271	1
0.5333	0.561	0.58446	-0.023456	1
0.55	0.551	0.56675	-0.015754	1
0.5666	0.545	0.54969	-0.0046894	1
				-
0.5833	0.539	0.53304	0.0059594	1
0.6	0.532	0.5169	0.015104	1
0.6166	0.526	0.50133	0.024667	1
				1
0.6333	0.523	0.48615	0.036851	1
0.65	0.517	0.47142	0.045576	1
				1 1 1
0.6666	0.514	0.45723	0.05677	
0.6833	0.51	0.44338	0.066618	1

0.7 0.7166	0.504 0.501	0.42995 0.41701	0.074047 0.083993	1 1
0.7333	0.498 0.495	0.40438 0.39213	0.093623 0.10287	1 1
0.75 0.7666	0.495	0.38032	0.10287	1
0.7833	0.489	0.3688	0.1202	1
0.8	0.485	0.35763	0.12737	1
0.8166	0.482 0.479	0.34687 0.33636	0.13513 0.14264	1 1
0.8333 0.85	0.476	0.32617	0.14204	1
0.8666	0.473	0.31635	0.15665	1
0.8833	0.47	0.30677	0.16323	1 1
0.9 0.9166	0.47 0.467	0.29748 0.28852	0.17252 0.17848	1
0.9333	0.463	0.27978	0.18322	1
0.95	0.46	0.27131	0.18869	1
0.9666	0.46 0.457	0.26314 0.25517	0.19686 0.20183	1 1
0.9833 1	0.454	0.24744	0.20656	1
1.2	0.432	0.1712	0.2608	1
1.4	0.416	0.11845	0.29755	1 1
1.6 1.8	0.407 0.398	0.081956 0.056704	0.32504 0.3413	1
2	0.388	0.039233	0.34877	1
2.2	0.379	0.027145	0.35186	1
2.4 2.6	0.376 0.369	0.018781 0.012994	0.35722 0.35601	1 1
2.8	0.363	0.0089906	0.35401	1
3	0.357	0.0062205	0.35078	1
3.2	0.351	0.0043039 0.0029778	0.3467 0.34102	1 1
3.4 3.6	0.344 0.341	0.0029778	0.34102	1
3.8	0.335	0.0014255	0.33357	1
4	0.332	0.00098628	0.33101	1
4.2 4.4	0.329 0.322	0.00068239 0.00047214	0.32832 0.32153	1
4.6	0.319	0.00032667	0.31867	1
4.8	0.316	0.00022602	0.31577	1
5 5.2	0.313 0.31	0.00015638 0.0001082	0.31284 0.30989	1 1
5.4	0.307	7.4859E-005	0.30693	1
5.6	0.3	5.1794E-005	0.29995	1
5.8	0.297	3.5836E-005 2.4794E-005	0.29696 0.29698	1 1
6 6.2	0.297 0.291	1.7155E-005	0.29098	1
6.4	0.291	1.1869E-005	0.29099	1 1
6.6	0.288	8.2121E-006	0.28799	1 1
6.8 7	0.282 0.282	5.6818E-006 3.9312E-006	0.28199 0.282	1
7.2	0.278	2.7199E-006	0.278	1
7.4	0.275	1.8819E-006	0.275	1
7.6 7.8	0.272 0.269	1.3021E-006 9.0087E-007	0.272 0.269	1 1
8	0.266	6.233E-007	0.266	1
8.2	0.263	4.3125E-007	0.263	1 1
8.4	0.26 0.26	2.9838E-007 2.0644E-007	0.26 0.26	1
8.6 8.8	0.257	1.4284E-007	0.257	1
9	0.253	9.8827E-008	0.253	1
9.2	0.25	6.8377E-008	0.25	1

9.4	0.25	4.7309E-008	0.25	1
9.6	0.247	3.2732E-008	0.247	1
9.8	0.244	2.2647E-008	0.244	1
10	0.241	1.5669E-008	0.241	1
11	0.231	2.4844E-009	0.231	1 1
12	0.219	3.9391E-010	0.219	1
13	0.213	6.2456E-011	0.213	1 1 1
14	0.206	9.9026E-012	0.206	1
15	0.197	1.5701E-012	0.197	1
16	0.184	2.4894E-013	0.184	1
17	0.181	3.9471E-014	0.181	1
18	0.175	6.2582E-015	0.175	1
19	0.169	9.9226E-016	0.169	1
20	0.159	1.5733E-016	0.159	1
21	0.153	2.4945E-017	0.153	1
22	0.147	3.955E-018	0.147	1
23	0.144	6.2708E-019	0.144	1
24	0.134	9.9426E-020	0.134	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
25	0.131	1.5764E-020	0.131	1
26	0.125	2.4995E-021	0.125	1
27	0.122	3.963E-022	0.122	1
28	0.115	6.2835E-023	0.115	1
29	0.109	9.9627E-024	0.109	1
30	0.106	1.5796E-024	0.106	1
31	0.103	2.5045E-025	0.103	1
32	0.1	3.971E-026	0.1	1
33	0.097	6.2962E-027	0.097	1
34	0.094	9.9828E-028	0.094	1
35	0.09	1.5828E-028	0.09	1
36	0.084	2.5096E-029	0.084	1
37	0.081	3.979E-030	0.081	1
38	0.078	6.3089E-031	0.078	1
39	0.075	1.0003E-031	0.075	1
40	0.075	1.586E-032	0.075	1
41	0.072	2.5146E-033	0.072	1
42	0.068	3.987E-034	0.068	1
43	0.065	6.3216E-035	0.065	1

## RESULTS FROM VISUAL CURVE MATCHING

# VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 4.2697E-003y0 = 1.6644E+000

## TYPE CURVE DATA

K = 4.26967E-003y0 = 1.66437E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown

TYPE CURVE DATA

K = 4.26967E-003y0 = 1.66437E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.00 <b>0E+000</b>	1.664E+000	4.400E+001	2.838E-046		

#### AQTESOLV

A Program for

Automatic Estimation of Aquifer Coefficients
From Aquifer Test Data

By:

Glenn M. Duffield and James O. Rumbaugh, III

Geraghty & Miller Modeling Group 1895 Preston White Drive, Suite 301 Reston, VA 22091

(703) 476 - 0335

A Q T E S O L V is a user-friendly program designed to analyze data from aquifer tests automatically. Aquifer coefficients for a variety of aquifer test conditions can be estimated by A Q T E S O L V , including the following:

- o confined aquifers, unconfined aquifers, and leaky aquifers
- o pumping tests, injection tests, recovery tests, and slug tests

# Features:

- o Interactive, menu-driven program design
- o Nonlinear least-squares estimation of aquifer coefficients
- o Statistical analysis of results
- o Complete graphical display of results

# AQTESOLV RESULTS Version 1.10

02/07/96 20:12:34 \_\_\_\_\_\_\_ TEST DESCRIPTION Data set..... mw266.dat Data set title..... Rising Head Slug Test for MW26-6 Knowns and Constants: No. of data points..... 197 Radius of well casing..... 0.086 Radius of well............ 0.33 Aguifer saturated thickness..... 4.49 Well screen length........... 3.39 Static height of water in well..... 4.49 Log (Re/Rw) ..... 1.826 A, B, C...... 0.000, 0.000, 1.297 \_\_\_\_\_\_ ANALYTICAL METHOD Rouwer-Rice (Unconfined Aguifer Slug Test) \_\_\_\_\_\_ RESULTS FROM STATISTICAL CURVE MATCHING STATISTICAL MATCH PARAMETER ESTIMATES Std. Error Estimate Std. Error 4.0854E-003 +/- 1.2752E-004 Estimate y0 = 2.1331E + 000 + / - 2.9525E - 002ANALYSIS OF MODEL RESIDUALS residual = calculated - observed weighted residual = residual \* weight Weighted Residual Statistics: Number of residuals..... 193 Number of estimated parameters.... 2 Residual mean..... 0.05662 Residual standard deviation..... 0.1344 Residual variance..... 0.01807

del Residuals:

0.02	2.2	2.0474	0.15262	i
0.0233	2.163	2.0336	0.12943	1
0.0266	2.141	2.0198	0.12115	1
0.03	2.144	2.0058	0.13819	1
0.0333	2.109	1.9923	0.11672	1
0.0366	2.084	1.9788	0.10516	1
0.0300	2.069	1.9651	0.10391	ī
0.0433	2.069	1.9518	0.11717	1
0.0455	2.044	1.9387	0.10533	1
	2.044	1.9252	0.080807	1
0.05	2.006	1.9122	0.087793	1
0.0533		1.8993	0.0096926	1
0.0566	1.909	1.8861	0.081892	1
0.06	1.968		0.061692	1
0.0633	1.94	1.8734	0.063252	1
0.0666	1.924	1.8607		1
0.07	1.924	1.8478	0.076183	
0.0733	1.893	1.8354	0.057648	1
0.0766	1.874	1.823	0.051029	1
0.08	1.865	1.8103	0.054698	1
0.0833	1.849	1.7981	0.050909	1
0.0866	1.833	1.786	0.047039	1
0.09	1.815	1.7735	0.04145	1
0.0933	1.802	1.7616	0.040414	1
0.0966	1.786	1.7497	0.036297	1
0.1	1.771	1.7375	0.033457	1
0.1033	1.755	1.7258	0.029178	1
0.1066	1.743	1.7142	0.02882	1
0.11	1.727	1.7023	0.024732	1
0.1133	1.714	1.6908	0.023215	1
0.1166	1.686	1.6794	0.0066208	1
0.12	1.67	1.6677	0.0022915	1
0.1233	1.68	1.6565	0.023541	1 1
0.1266	1.655	1.6453	0.0097154	
0.13	1.645	1.6339	0.011149	1
0.1333	1.63	1.6228	0.0071707	1
0.1366	1.614	1.6119	0.0021179	1
0.14	1.601	1.6007	0.00031957	1
0.1433	1.589	1.5899	-0.00088268	1
0.1466	1.573	1.5792	-0.0061578	1
0.15	1.561	1.5682	-0.0071835	1
0.1533	1.548	1.5576	-0.009605	1
0.1566	1.533	1.5471	-0.014098	1 1
0.16	1.52	1.5363	-0.016346	
0.1633	1.507	1.526	-0.018983	1
0.1666	1.495	1.5157	-0.020689	1
0.17	1.482	1.5052	-0.023156	1
0.1733	1.47	1.495	-0.025002	1 1
0.1766	1.457	1.4849	-0.027917	1
0.18	1.442	1.4746	-0.032598	1
0.1833	1.429	1.4647	-0.035651	1
0.1866	1.417	1.4548	-0.037771	1 1 1
0.19	1.404	1.4447	-0.040661	1
0.1933	1.391	1.4349	-0.043915	
0.1966	1.379	1.4252	-0.046236	1
0.2	1.37	1.4153	-0.045331	1 1 1
0.2033	1.357	1.4058	-0.048784	1
0.2066	1.344	1.3963	-0.052301	
0.21	1.332	1.3866	-0.054597	1
0.2133	1.319	1.3772	-0.058244	1

0.2166	1.31	1.368	-0.057953	1
				1
0.22	1.297	1.3584	-0.061447	1
0.2233	1.285	1.3493	-0.064283	1
0.2266	1.275	1.3402	-0.065181	
				1
0.23	1.263	1.3309	-0.067868	1
0.2333	1.253	1.3219	-0.06889	1
0.2366	1.241	1.313	-0.071973	1
0.24	1.232	1.3038	-0.071849	1
0.2433	1.219	1.2951	-0.076053	1
0.2466	1.21	1.2863	-0.076317	1
0.25	1.197	1.2774	-0.080378	1
0.2533	1.188	1.2688	-0.080761	1
0.2566	1.178	1.2602	-0.082202	1
0.26	1.169	1.2514	-0.082445	1
0.2633	1.159	1.243	-0.084003	1
0.2666	1.147	1.2346	-0.087618	1
0.27	1.138	1.226	-0.088038	1
0.2733	1.128	1.2178	-0.089767	1
0.2766	1.119	1.2096	-0.090553	1
0.28	1.109	1.2011	-0.092147	1
0.2833	1.1	1.193	-0.093044	1
0.2866	1.09	1.185	-0.094996	1
0.29	1.084	1.1768	-0.092761	1
0.2933	1.072	1.1688	-0.096823	1
0.2966	1.065	1.1609	-0.095939	1
0.3	1.056	1.1529	-0.096871	1
0.3033	1.047	1.1451	-0.098094	1
0.3066	1.04	1.1374	-0.097369	1
0.31	1.034	1.1295	-0.095465	1
0.3133	1.025	1.1218	-0.096846	1
0.3166	1.015	1.1143	-0.099279	1
0.32	1.006	1.1065	-0.10053	1
0.3233	0.993	1.0991	-0.10607	1
0.3266	0.99	1.0917	-0.10166	1
0.33	0.981	1.0841	-0.10307	1
0.3333	0.974	1.0768	-0.10276	1
0.35	0.934	1.0405	-0.1065	1
0.3666	0.899	1.0057	-0.10667	1
0.3833	0.868	0.9718	-0.1038	1
0.4	0.84	0.93908	-0.099081	1
0.4166	0.811	0.90765	-0.096646	1
0.4333	0.79	0.87708	-0.087082	1
	0.768	0.84755		
0.45			-0.079548	1
0.4666	0.749	0.81918	-0.070177	1
0.4833	0.73	0.79159	-0.061592	1
0.5	0.714	0.76494	-0.050937	1
0.5166	0.699	0.73933	-0.040331	1
0.5333	0.686	0.71444	-0.028435	1
0.55	0.674	0.69038	-0.016378	1
0.5666	0.664	0.66727	-0.0032676	1
0.5833	0.652	0.6448	0.0072014	1
0.6	0.639	0.62309	0.015914	1
0.6166	0.633	0.60223	0.030772	1
0.6333	0.623	0.58195	0.04105	1
0.65	0.617	0.56235	0.054647	1
0.6666	0.608	0.54353	0.064471	1
0.6833	0.598	0.52523	0.072774	1
0.7	0.592	0.50754	0.08446	1
			0.095449	
0.7166	0.586	0.49055		1
0.7333	0.583	0.47403	0.10897	1

5.6 0.197 2.1912E-005 0.19698 1 5.8 0.191 1.4538E-005 0.19099 1 6 0.184 9.6464E-006 0.18399 1 6.2 0.178 6.4004E-006 0.17799 1 6.4 0.172 4.2467E-006 0.172 1 6.6 0.169 2.8177E-006 0.169 1	6 6.2 6.4	0.184 0.178 0.172	9.6464E-006 6.4004E-006 4.2467E-006	0.18399 0.17799 0.172	1 1 1
E C 0 107 2 1012F=005 0 19698 1	5 5.2 5.4	0.21	4.9772E-005 3.3024E-005	0.20995 0.19997	1 1
	7.2 7.4 7.6 7.8 8	0.153 0.147 0.144 0.141 0.134	8.2306E-007 5.4611E-007 3.6235E-007 2.4042E-007 1.5952E-007	0.153 0.147 0.144 0.141 0.134	1 1 1 1
7.4 0.147 5.4611E-007 0.147 1 7.6 0.144 3.6235E-007 0.144 1 7.8 0.141 2.4042E-007 0.141 1 8 0.134 1.5952E-007 0.134 1 8 2 0.131 1.0584E-007 0.131	8.4 8.6 8.8 9 9.2 9.4	0.128 0.125 0.119 0.119 0.112 0.109	7.0227E-008 4.6596E-008 3.0917E-008 2.0513E-008 1.3611E-008 9.0308E-009 5.992E-009	0.128 0.125 0.119 0.119 0.112 0.109 0.106	1 1 1 1 1
7.2	9.6 9.8	0.106 0.103	3.9757E-009	0.103	ī

10	0.1	2.6379E-009	0.1	1
11	0.087	3.3923E-010	0.087	1
12	0.081	4.3623E-011	0.081	1
13	0.072	5.6097E-012	0.072	1
14	0.062	7.2138E-013	0.062	1
15	0.053	9.2766E-014	0.053	1
16	0.047	1.1929E-014	0.047	1
17	0.04	1.534E-015	0.04	1
18	0.037	1.9727E-016	0.037	1
19	0.034	2.5368E-017	0.034	1
20	0.028	3.2622E-018	0.028	1
21	0.028	4.1951E-019	0.028	1
22	0.025	5.3946E-020	0.025	1
23	0.021	6.9373E-021	0.021	1

#### RESULTS FROM VISUAL CURVE MATCHING

## VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 4.0854E-003y0 = 2.1331E+000

## PE CURVE DATA

K = 4.16439E-003y0 = 1.80613E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown	
0.000E+000	1.806E+000	2.300E+001	2.360E-021			

## AQTESOLV

A Program for

Automatic Estimation of Aquifer Coefficients
From Aquifer Test Data

By:

Glenn M. Duffield and James O. Rumbaugh, III

Geraghty & Miller Modeling Group

## AOTESOLV RESULTS Version 1.10

17:37:26 12/21/95

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#### TEST DESCRIPTION

Data set..... mw267.dat

Data set title.... Rising Head Slug Test for MW26-7

Knowns and Constants:

No. of data points..... 188 Radius of well casing..... 0.086 Radius of well................. 0.33 Aguifer saturated thickness..... 6.69 Well screen length..... 5.47 Static height of water in well..... 6.69 

A, B, C..... 0.000, 0.000, 1.552

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#### ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

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# RESULTS FROM STATISTICAL CURVE MATCHING

#### STATISTICAL MATCH PARAMETER ESTIMATES

Std. Error Estimate 3.6302E-003 +/-1.7686E-005 3.4484E+000 +/- 7.8199E-003 y0 =

#### ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed weighted residual = residual \* weight

Weighted Residual Statistics:

Degrees of freedom................. 185

Residual mean..... 0.002047 Residual standard deviation..... 0.03578 Residual variance...... 0.00128

## Model Residuals:

Weight Observed Calculated Residual Time

		<b>_</b>		
0.0066	3.368	3.3927	-0.02474	
				1
0.01	3.397	3.3644	0.032584	1
0.0133	3.337	3.3372	-0.00015244	1
0 0166	2 205			
0.0166	3.305	3.3101	-0.0051094	1
0.02	3.255	3.2825	0 027476	
0.02	3.255	3.2025	-0.027476	1
0.0233	3.217	3.2559	-0.038876	1
0.0266	3.195	3.2295	-0.034492	1
				_
0.03	3.167	3.2025	-0.035531	1
0.0333	3.142	3.1766	-0.034579	1
		2 1 5 0 0	0 02002	
0.0366	3.12	3.1508	-0.030837	1
0.04	3.088	3.1245	-0.036533	-
			-0.036533	1
0.0433	3.066	3.0992	-0.033213	1
0.0466	3.041	3.0741	-0.033098	1
				-
0.05	3.013	3.0484	-0.035435	1
0.0533	2.991	3.0237	-0.032732	1
0.0566	2.972	2.9992	-0.027229	
			-0.02/229	1
0.06	2.941	2.9742	-0.033191	1
0.0633	2.919	2.9501	-0.031089	1
				<del>-</del>
0.0666	2.9	2.9262	-0.026182	1
0 07				
0.07	2.878	2.9018	-0.023754	1
0.0733	2.808	2.8782	-0.070239	
			-0.070239	1
0.0766	2.812	2.8549	-0.042915	1
0.08	2.808	2.8311	-0.023082	1
0.0833	2.812	2.8081	0.0038604	1
0.0866				
0.0866	2.758	2.7854	-0.027383	1
0.09	2.746	2.7621	-0.016131	1
0.0933	2.724	2.7397	-0.015747	1
0.0966	2.698	2.7175	-0.019545	1
0.1	2.683	2.6949	-0.011859	1
0.1033	2 654	2 (72		4
	2.654	2.673	-0.019021	1
0.1066	2.648	2.6514	-0.0033594	1
0.11	2.613	2.6292	-0.016225	1
0.1133	2.598	2.6079	-0.0099191	1
0.1166	2.585	2.5868	-0.0017854	1
0.12	2.56	2.5652	-0.0051905	
			-0.0051905	1
0.1233	2.547	2.5444	0.0025969	1
0.1266	2.513	2.5238	-0.010784	1
0.13	2.51	2.5027	0.0072848	1
0.1333	2.494	2.4824	0.011566	1
0.1366	2.475	2.4623	0.012683	
				1
0.14	2.431	2.4418	-0.010761	1
0.1433	2.428	2.422	0.0060257	1
0.1466	2.415	2.4023	0.012652	1
0.15	2.393	2.3823	0.010708	1
0.1533	2.377	2.363	0.014013	1
0.1566	2.349	2.3438	0.0051618	1
0.16	2.34	2.3243	0.015729	1
0.1633	2.318	2.3054	0.012564	1
0.1666	2.302	2.2868	0.015246	1
0.17	2.286	2.2677	0.018336	1
0.1733	2.267	2.2493	0.017713	1
0.1766	2.252	2.2311	0.02094	1
0.18	2.27	2.2124	0.057565	1
0.1833	2.208	2.1945	0.013494	1
0.1866	2.201	2.1767	0.024278	1
0.19	2.179	2.1586	0.020449	1
0.1933	2.154	2.1411	0.012941	1
0.1966	2.148	2.1237	0.024292	1
0.2	2.129	2.106	0.023021	1

0 0000	0 110	2 0000	0.024087	. 1
0.2033	2.113	2.0889		1
0.2066	2.097	2.072	0.025015	1
				1
0.21	2.085	2.0547	0.030312	
0.2133	2.069	2.038	0.030962	1
0.2166	2.06	2.0215	0.038478	1
0.22	2.041	2.0046	0.036354	1
0.2233	2.031	1.9884	0.042599	1
	2.013	1.9723	0.040712	1
0.2266				
0.23	1.98 <b>7</b>	1.9558	0.031177	1
		1.94	0.029027	1
0.2333	1.969			
0.2366	1.959	1.9243	0.034747	1
			0.037811	1
0.24	1.946	1.9082		
0.2433	1.924	1.8927	0.031275	1
0.2466	1.915	1.8774	0.037613	1
0.25	1.902	1.8617	0.040285	1
0.2533	1.884	1.8466	0.037372	1
0.2566	1.887	1.8317	0.055336	1
				_
<del>0</del> .26	1.865	1.8164	0.048628	1
0.2633	1.906	1.8017	0.10435	1
				_
0.2666	1.906	1.7871	0.11895	1
0.27	1.843	1.7721	0.070865	1
				-
0.2733	1.736	1.7578	-0.021774	1
0.2766	1.77	1.7435	0.02647	1
0.28	1.755	1.729	0.026026	1
0.2833	1.745	1.715	0.030037	1
0.2866	1.729	1.7011	0.027934	1
0.29	1.72	1.6869	0.033135	1
		1.6732	0.021805	1
0.2933	1.695			_
0.2966	1.685	1.6596	0.025364	1
	1.673	1.6458	0.027219	1
0.3				
0.3033	1.66	1.6324	0.027555	1
0.3066	1.648	1.6192	0.028784	1
				_
0.31	1.635	1.6057	0.029302	1
0.3133	1.622	1.5927	0.029314	1
				1
0.3166	1.61	1.5798	0.03022	
0.32	1.594	1.5666	0.027409	1
	1 500	1.5539	0.028104	1
0.3233	1.582			
0.3266	1.572	1.5413	0.030696	1
	1.556	1.5284	0.027563	1
0.33				
0.3333	1.544	1.5161	0.027949	1
0.35	1.478	1.4549	0.023107	1
0.3666	1.412	1.3965	0.015453	1
0.3833	1.349	1.3402	0.0087899	1
				1
0.4	1.289	1.2861	0.0028542	
0.4166	1.232	1.2346	-0.0025668	1
				1
0.4333	1.176	1.1848	-0.0087642	
0.45	1.122	1.137	-0.014971	1
		1.0914	-0.019374	1
0.4666	1.072			
0.4833	1.018	1.0473	-0.029348	1
	0.971	1.0051	-0.034098	1
0.5				
0.5166	0.927	0.96479	-0.03779	1
0.5333	0.883	0.92587	-0.04287	1
				1
0.55	0.842	0.88852	-0.04652	
0.5666	0.801	0.85289	-0.051887	1
0.5000			-0.054482	1
0 5000		0.81848		
0.5833	0.764			
	0.764	0.78546	-0.056464	1
0.6	0.729			
0.6 0.6166	0.729 0.694	0.75396	-0.059964	1
0.6	0.729	0.75396 0.72355	-0.059964 -0.0605 <b>4</b> 9	1 1
0.6 0.6166 0.6333	0.729 0.694 0.663	0.75396 0.72355	-0.059964	1
0.6 0.6166 0.6333 0.65	0.729 0.694 0.663 0.631	0.75396 0.72355 0.69436	-0.059964 -0.060549 -0.063361	1 1 1
0.6 0.6166 0.6333	0.729 0.694 0.663	0.75396 0.72355	-0.059964 -0.0605 <b>4</b> 9	1 1

0.6833 0.7 0.7166 0.7333 0.7666 0.7833 0.8166 0.8333 0.85 0.8666 0.8333 0.9166 0.9333 0.95 0.9666 0.9833 1.2 1.4 1.6 1.8 2 2.2 2.4 2.6 2.8 3.4 3.6 3.8 4.2 4.4 4.6 4.8 5.2 5.6 5.8 6.2 6.4 6.6 6.8	0.575 0.524 0.499 0.477 0.455 0.436 0.417 0.399 0.367 0.331 0.326 0.314 0.301 0.289 0.279 0.172 0.131 0.098 0.078 0.059 0.068 0.059 0.049 0.040 0.034 0.034 0.034 0.031 0.034 0.031 0.032 0.	0.63963 0.61382 0.58921 0.56544 0.54263 0.52087 0.49986 0.47969 0.46045 0.42405 0.39063 0.37487 0.35984 0.34532 0.33139 0.3181 0.30527 0.29295 0.17891 0.10926 0.066728 0.040751 0.024887 0.015199 0.0092822 0.0056688 0.003462 0.0012912 0.00078856 0.00012912 0.00078856 0.00012912 0.00078856 0.00012912 0.00078856 0.00012912 0.00078856 0.00012912 0.0001969 6.99E-005 4.0912E-005 2.4985E-005 1.5259E-006 3.4756E-006 3.4756E-006 3.4756E-006 1.226E-007 4.8348E-007 2.9526E-007 1.8032E-007	-0.064627 -0.063825 -0.065208 -0.065208 -0.06563 -0.065868 -0.063856 -0.062692 -0.061455 -0.05888 -0.057054 -0.056048 -0.051628 -0.04239 -0.0391 -0.035268 -0.032953 -0.0069101 0.021738 0.032953 -0.0069101 0.021738 0.039272 0.049249 0.053113 0.052801 0.049718 0.047331 0.045538 0.043886 0.041709 0.039211 0.033518 0.033706 0.03082 0.03089 0.027933 0.027959 0.024975 0.024985 0.024997 0.021998 0.021999 0.016 0.016	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
5.4 5.6 5.8 6.2 6.4 6.6	0.022 0.025 0.022 0.022 0.019 0.019 0.016	5.6911E-006 3.4756E-006 2.1226E-006 1.2963E-006 7.9166E-007 4.8348E-007 2.9526E-007	0.021994 0.024997 0.021998 0.021999 0.018999 0.019 0.016	1 1 1 1 1
7 7.2 7.4 7.6 7.8 8 8.2 8.4 8.6 8.8	0.016 0.016 0.013 0.016 0.013 0.013 0.013 0.013 0.009 0.009	1.1012E-007 6.7254E-008 4.1073E-008 2.5084E-008 1.5319E-008 9.3554E-009 5.7135E-009 3.4893E-009 2.1309E-009 1.3014E-009 7.9477E-010	0.016 0.016 0.013 0.016 0.013 0.013 0.013 0.013 0.009 0.009	1 1 1 1 1 1 1 1

9.2	0.009	4.8538E-010	0.009	1
9.4	0.009	2.9643E-010	0.009	1
9.6	0.009	1.8103E-010	0.009	1
9.8	0.009	1.1056E-010	0.009	1
10	0.009	6.7519E-011	0.009	1
11	0.006	5.7359E-012	0.006	1
12	0.003	4.8729E-013	0.003	1
13	0.003	4.1397E-014	0.003	1

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## RESULTS FROM VISUAL CURVE MATCHING

## VISUAL MATCH PARAMETER ESTIMATES

Estimate K = 3.6302E-003 y0 = 3.4484E+000

## TYPE CURVE DATA

K = 3.63021E-003y0 = 3.44840E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	3.448E+000	1.600E+001	2.538E-017		

#### TYPE CURVE DATA

K = 3.63021E-003y0 = 3.44840E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	3.448E+000	1.600E+001	2.538E-017		

#### TYPE CURVE DATA

K = 3.63021E-003y0 = 3.44840E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.0000.000	3 4485+000	1 600F±001	2 538E-017		

## AQTESOLV RESULTS Version 1.10

12/21/95 17:41:18 \_\_\_\_\_\_ TEST DESCRIPTION Data set..... mw268.dat Data set title.... Rising Head Slug Test for MW26-8 Knowns and Constants: No. of data points..... 41 Radius of well casing..... 0.086 Radius of well................. 0.33 Aguifer saturated thickness...... 3.57 Well screen length..... 2.37 Static height of water in well..... 3.57 Log(Re/Rw) ..... 1.629 A, B, C..... 0.000, 0.000, 1.091 \_\_\_\_\_\_ ANALYTICAL METHOD Bouwer-Rice (Unconfined Aquifer Slug Test) \_\_\_\_\_\_ RESULTS FROM STATISTICAL CURVE MATCHING STATISTICAL MATCH PARAMETER ESTIMATES Estimate Std. Error K = 2.5316E-004 +/- 5.5339E-005y0 = 6.4375E-001 +/- 4.1918E-002ANALYSIS OF MODEL RESIDUALS residual = calculated - observed weighted residual = residual \* weight Weighted Residual Statistics: Number of residuals..... 41 Number of estimated parameters.... 2 Residual mean..... 0.0128 Residual standard deviation..... 0.1481 Residual variance..... 0.02194

del Residuals:

0.23	1.31	0.62917	0.68083	1
0.32	1.03	0.62356	0.40644	1
0.45	0.73	0.61554	0.11446	1
0.5	0.65	0.61248	0.037519	1
0.55	0.61	0.60944	0.00056159	1
0.58	0.58	0.60762	-0.02762	1
0.62	0.57	0.6052	-0.035204	1
0.65	0.56	0.6034	-0.043399	1
0.73	0.55	0.59861	-0.048611	1 .
0.82	0.52	0.59327	-0.073269	1
0.95	0.5	0.58564	-0.085637	1
1.02	0.49	0.58157	-0.091569	1
1.12	0.48	0.57581	-0.095806	1
1.22	0.47	0.5701	-0.1001	1
1.37	0.46	0.56165	-0.10165	1
1.53	0.45	0.55277	-0.10277	1
1.7	0.44	0.54349	-0.10349	1
1.85	0.43	0.53543	-0.10543	1
2.15	0.42	0.51967	-0.099668	1
2.45	0.41	0.50437	-0.094371	1
2.83	0.4	0.48564	-0.08564	1
3.18	0.39	0.469	-0.079003	1
3.67	0.38	0.44667	-0.066665	1
3.95	0.37	0.43438	-0.064382	1
4.47	0.36	0.41246	-0.052458	1
5.08	0.35	0.38815	-0.038147	1 1
5.8	0.34	0.36129	-0.021289	1
6.35	0.33	0.34203	-0.012031	1
7.27	0.32	0.31209	0.0079148	1
7.77	0.31	0.29693	0.013075	1
9.53	0.29	0.24919	0.040815	1
10.98	0.27	0.21568	0.054322	1
13.15	0.25	0.17376	0.07624	1
15.12	0.23	0.1428	0.087196	1
17.95	0.21	0.10773	0.10227	1 1
20.37	0.19	0.084658	0.10534	1
23.2	0.17	0.063865	0.10614	1
29.83	0.13	0.032999	0.097001	1
33.43	0.11	0.023056	0.086944	1
37.73	0.09	0.015025	0.074975	1
42.88	0.07	0.0089961	0.061004	1

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## RESULTS FROM VISUAL CURVE MATCHING

## VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 6.4981E-003y0 = 2.3671E+000

TYPE CURVE DATA

K = 6.49811E-003y0 = 2.36711E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
J.000E+000	2.367E+000	4.300E+001	4.321E-048		

TYPE CURVE DATA

K = 6.49811E-003y0 = 2.36711E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	2.367E+000	4.300E+001	4.321E-048		

TYPE CURVE DATA

K = 6.49811E-003y0 = 2.36711E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.0 <b>00E+000</b>	2.367E+000	4.300E+001	4.321E-048		

## AQTESOLV

A Program for

Automatic Estimation of Aquifer Coefficients
From Aquifer Test Data

By:

Glenn M. Duffield and James O. Rumbaugh, III

Geraghty & Miller Modeling Group 1895 Preston White Drive, Suite 301 Reston, VA 22091

(703) 476 - 0335

A Q T E S O L V is a user-friendly program designed to analyze data from aquifer tests automatically. Aquifer coefficients for a variety of aquifer test conditions can be estimated by A Q T E S O L V , including the following:

o confined aquifers, unconfined aquifers,

## AQTESOLV RESULTS Version 1.10

01/29/96 18:14:02

## TEST DESCRIPTION

Data set..... MW269.DAT

Data set title.... Rising Head Slugh Test for MW26-9

Knowns and Constants:

A, B, C..... 0.000, 0.000, 1.255

#### ANALYTICAL METHOD

Bouwer-Rice (Unconfined Aquifer Slug Test)

#### RESULTS FROM STATISTICAL CURVE MATCHING

#### STATISTICAL MATCH PARAMETER ESTIMATES

Estimate Std. Error K = 4.5708E-003 +/- 1.7417E-004 y0 = 1.6518E+000 +/- 2.8458E-002

#### ANALYSIS OF MODEL RESIDUALS

residual = calculated - observed
weighted residual = residual \* weight

Weighted Residual Statistics:

#### Model Residuals:

0.0166	1.755	1.5932	0.16179	1
0.02	1.708	1.5815	0.12653	1
0.0233	1.711	1.5701		
			0.14085	1
0.0266	1.695	1.5589	0.13609	1
0.03	1.648	1.5474	0.10058	1
0.0333	1.645	1.5363	0.10865	1
0.0366	1.635	1.5254	0.10965	1
0.04	1.623	1.5141	0.10889	1
0.0433	1.597	1.5033	0.093726	1
0.0466	1.512	1.4925	0.019484	
				1
0.05	1.56	1.4815	0.078486	1
0.0533	1.541	1.4709	0.070088	1
0:0566	1.557	1.4604	0.096614	1
0.06	1.522	1.4496	0.07238	1
0.0633	1.5	1.4392	0.060753	1
0.0666	1.484	1.4289	0.055053	1
0.07	1.472	1.4184	0.053587	1
0.0733	1.456	1.4083	0.047737	ī
0.0766	1.446	1.3982	0.047815	
0.08	1.431	1.3879	0.047013	1
0.0833	1.418			1
		1.3779	0.040054	1
0.0866	1.406	1.3681	0.037914	1
0.09	1.393	1.358	0.035	1
0.0933	1.38	1.3483	0.031718	1
0.0966	1.368	1.3386	0.029366	1
0.1	1.352	1.3288	0.023234	1
0.1033	1.343	1.3193	0.023743	1
0.1066	1.33	1.3098	0.020184	1
0.11	1.317	1.3002	0.01684	1
0.1133	1.305	1.2909	0.014144	1 1
0.1166	1.292	1.2816	0.014144	1
0.12	1.28			1
0.1233		1.2722	0.007829	1
	1.267	1.2631	0.0039326	1
0.1266	1.258	1.254	0.0039711	1
0.13	1.245	1.2448	0.00021588	1
0.1333	1.233	1.2359	-0.0028765	1
0.1366	1.22	1.227	-0.0070325	1
0.14	1.211	1.218	-0.0069868	1
0.1433	1.201	1.2093	-0.0082709	1
0.1466	1.189	1.2006	-0.011617	1
0.15	1.176	1.1918	-0.015766	1
0.1533	1.167	1.1832	-0.016238	1
0.1566	1.154	1.1748	-0.020771	1
0.16	1.134	1.1661	-0.02811	
				1
0.1633	1.129	1.1578	-0.028766	1
0.1666	1.119	1.1495	-0.030481	1
0.17	1.107	1.141	-0.034007	1
0.1733	1.097	1.1328	-0.035842	1
0.1766	1.085	1.1247	-0.039735	1
0.18	1.075	1.1164	-0.041444	1
0.1833	1.066	1.1085	-0.042454	1
0.1866	1.056	1.1005	-0.044522	1
0.19	1.044	1.0924	-0.048409	ī
0.1933	1.034	1.0846	-0.050592	1
0.1966	1.025	1.0768	-0.051831	1
0.1900	1.016	1.0689	-0.052892	1
		1.0612		
0.2033	1.006		-0.055243	1
0.2066	0.997	1.0536	-0.056649	1
0.21	0.987	1.0459	-0.058881	1

0.2133	0.978	1.0384	-0.060397	1
				ī
0.2166	0.968	1.031	-0.062966	
0.22	0.959	1.0234	-0.064366	1
0.2233	0.949	1.016	-0.067043	
				1 1
0.2266	0.943	1.0088	-0.065772	1
0.23	0.931	1.0013	-0.070335	1
		0.99417	-0.07317	1
0.2333	0.921			
0.2366	0.915	0.98706	-0.072056	1
0.24	0.902	0.97978	-0.077779	1
			-0.079768	1 1 1 1
0.2433	0.893	0.97277		_
0.2466	0.89	0.96581	-0.075807	1
0.25	0.88	0.95869	-0.078687	1
				ī
0.2533	0.871	0.95183	-0.080826	_
0.2566	0.865	0.94502	-0.080015	1
0.26	0.852	0.93805	-0.086048	1
				1
0.2633	0.846	0.93134	-0.085336	1
0.2666	0.839	0.92467	-0.085671	1 1
0.27	0.833	0.91785	-0.084854	1
0.2733	0.824	0.91129	-0.087286	1
0.2766	0.821	0.90477	~0.083765	1
	0.811	0.8981	-0.087095	1
0.28				_
0.2833	0.802	0.89167	-0.089668	1 1
0.2866	0.795	0.88529	-0.090288	1
	0.789	0.87876	-0.089761	1
0.29				_
0.2933	0.783	0.87247	-0.089473	1
0.2966	0.776	0.86623	-0.090229	1
	0.77	0.85984	-0.089844	1
0.3				_
0.3033	0.761	0.85369	-0.09269	1
0.3066	0.758	0.84758	-0.089581	1
		0.84133	-0.093333	1
0.31	0.748			
0.3133	0.745	0.83531	-0.090313	1 1 1 1 1
0.3166	0.736	0.82934	-0.093335	1
		0.82322	-0.094221	1
0.32	0.729			_
0.3233	0.723	0.81733	-0.09433	1
0.3266	0.72	0.81148	-0.091481	1
	0.71	0.8055	-0.095499	1
0.33				-
0.3333	0.704	0.79973	-0.095735	1
0.35	0.676	0.77119	-0.095191	1
	0.654	0.74383	-0.089828	1
0.3666				
0.3833	0.632	0.71728	-0.08528	1
0.4	0.613	0.69168	-0.07868	1
	0.594	0.66714	-0.073138	1
0.4166				1
0.4333	0.578	0.64333	-0.065327	
0.45	0.566	0.62037	-0.054366	1
	0.553	0.59835	-0.045354	1
0.4666				
0.4833	0.541	0.577	-0.035998	1
0.5	0.534	0.5564	-0.022404	1
	0.525	0.53666	-0.011662	1
0.5166				
0.5333	0.515	0.51751	-0.0025081	1
0.55	0.509	0.49904	0.0099625	1
	0.503	0.48133	0.021669	1
0.5666				
0.5833	0.497	0.46415	0.032848	1
0.6	0.49	0.44759	0.042415	1
	0.487	0.4317	0.055296	1
0.6166				1
0.6333	0.484	0.4163	0.067704	
0.65	0.475	0.40144	0.073562	1
	0.471	0.38719	0.083805	1
0.6666			0.091625	ī
0.6833	0.465	0.37338		
0.7	0.462	0.36005	0.10195	1
0.7166	0.456	0.34727	0.10873	1
0.7100	0.450			<del>-</del>

0.7335 0.766388.8 0.76633.8 0.81663.9 0.8335.6 0.88335.6 0.883.9 0.913.9 0.998.3 1.468.2 2.468.3 3.468.5 4.44.6 4.85.3 5.468.7 7.468.8 7.468.8 8.868.8 8 8 8	0.456 0.449 0.443 0.443 0.443 0.427 0.421	0.33488 0.32293 0.31147 0.30035 0.28963 0.27936 0.26997 0.25055 0.24161 0.23299 0.22472 0.2167 0.20897 0.20155 0.19436 0.18742 0.12128 0.07848 0.050784 0.032863 0.021265 0.013761 0.0089046 0.0057622 0.0037287 0.0024128 0.0015613 0.0010103 0.00065379 0.00042307 0.00027377 0.00017716 0.0011464 7.4182E-005 4.8003E-005 3.1063E-005 3.1063E-005 3.1063E-005 3.1063E-005 3.1063E-005 3.1063E-005 3.1063E-005 3.1063E-007 0.00017716 0.0011464 7.4182E-006 5.4466E-006 3.5245E-006 5.4466E-006 3.5245E-006 5.4758E-007 1.0836E-007 7.0119E-008 4.5374E-008 4.5374E-008	0.12112 0.12607 0.13153 0.13965 0.15037 0.15764 0.16061 0.17023 0.17645 0.18239 0.18801 0.2013 0.20603 0.21045 0.21364 0.22058 0.25872 0.29252 0.30122 0.30914 0.30873 0.30873 0.29224 0.28827 0.28827 0.28827 0.288359 0.27444 0.26899 0.26335 0.26058 0.25073 0.24482 0.23889 0.224482 0.23889 0.22597 0.22298 0.21699 0.204999 0.20699 0.198 0.195 0.195 0.185 0.185 0.185 0.185 0.166 0.1663 0.1663	
7.6 7.8 8	0.169 0.166 0.166	1.0836E-007 7.0119E-008 4.5374E-008	0.169 0.166 0.166	1 1 1
			<b>-</b>	_

	0 100	0 0000 010		
9.8	0.138	9.027E-010	0.138	1
10	0.135	5.8414E-010	0.135	1
11	0.122	6.6278E-011	0.122	1
12	0.116	7.5201E-012	0.116	1
13	0.106	8.5326E-013	0.106	1
14	0.094	9.6813E-014	0.094	1
15	0.088	1.0985E-014	0.088	1
16	0.078	1.2464E-015	0.078	1
17	0.072	1.4142E-016	0.072	1
18	0.066	1.6046E-017	0.066	1 1 1 1 1 1 1
19	0.059	1.8206E-018	0.059	1
20	0.056	2.0657E-019	0.056	1
21	0.05	2.3438E-020	0.05	1
22	0.047	2.6594E-021	0.047	1
23	0.04	3.0174E-022	0.04	1 1 1
24	0.04	3.4236E-023	0.04	1
25	0.037	3.8846E-024	0.037	1
26	0.031	4.4076E-025	0.031	1
27	0.028	5.0009E-026	0.028	1 1 1 1 1
28	0.025	5.6742E-027	0.025	1
29	0.022	6.4382E-028	0.022	1
30	0.028	7.305E-029	0.028	1
31	0.022	8.2884E-030	0.022	1
32	0.018	9.4043E-031	0.018	1
33	0.015	1.067E-031	0.015	1
34	0.015	1.2107E-032	0.015	1
35	0.012	1.3737E-033	0.012	1 1 1
36	0.012	1.5587E-034	0.012	
37	0.012	1.7685E-035	0.012	1
38	0.012	2.0066E-036	0.012	1 1 1
39	0.009	2.2767E-037	0.009	1
40	0.012	2.5833E-038	0.012	1

# RESULTS FROM VISUAL CURVE MATCHING

#### VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 5.6642E-003y0 = 1.7320E+000

# TYPE CURVE DATA

K = 5.66416E-003y0 = 1.73201E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	1.732E+000	4.000E+001	2.452E-047		

## AQTESOLV RESULTS Version 1.10

12/21/95 19:32:04 \_\_\_\_\_\_ TEST DESCRIPTION Data set..... mw2610.dat Data set title..... Rising Head Slug Test for MW26-10 Knowns and Constants: No. of data points..... 240 Radius of well casing...... 0.086 Radius of well............... 0.33 Aguifer saturated thickness..... 5.25 Well screen length..... 4.45 Static height of water in well..... 5.25 Log (Re/Rw) ..... 1.982 A, B, C..... 0.000, 0.000, 1.442 ANALYTICAL METHOD Pouwer-Rice (Unconfined Aguifer Slug Test) \_\_\_\_\_ RESULTS FROM STATISTICAL CURVE MATCHING STATISTICAL MATCH PARAMETER ESTIMATES Std. Error Estimate K = 3.0135E-004 +/- 3.3634E-005 y0 = 1.3820E+000 +/- 3.2601E-002 ANALYSIS OF MODEL RESIDUALS residual = calculated - observed weighted residual = residual \* weight Weighted Residual Statistics: Number of residuals..... 234 Number of estimated parameters.... 2 Degrees of freedom..... 232 Residual mean..... 0.09889 Residual standard deviation..... 0.3288 Residual variance..... 0.1081

#### del Residuals:

0.0233	1.949	1.3761	0.5729	1
0.0255	1.943	1.3753	0.56773	1
0.0266	1.949	1.3744	0.57459	1
0.0333	1.921	1.3736	0.54742	1
0.0366	1.899	1.3728	0.52625	1
	1.893	1.3719	0.5211	1
0.04	1.871	1.3711	0.49993	1
0.0433		1.3711	0.50076	1
0.0466	1.871	1.3694	0.49261	1
0.05	1.862	1.3686	0.48044	1
0.0533	1.849	1.3677	0.46926	1
0.0566	1.837		0.46928	1
0.06	1.827	1.3669	0.44594	1
0.0633	1.812	1.3661	0.43976	1
0.0666	1.805	1.3652	0.43976	1
0.07	1.793	1.3644	0.42881	
0.0733	1.78	1.3636		1 1
0.0766	1.771	1.3627	0.40826	1
0.08	1.755	1.3619	0.3931	1
0.0833	1.749	1.3611	0.38793	1
0.0866	1.739	1.3603	0.37875	
0.09	1.727	1.3594	0.36759	1
0.0933	1.717	1.3586	0.35841	1
0.0966	1.708	1.3578	0.35023	1
0.1	1.699	1.3569	0.34208	1
0.1033	1.686	1.3561	0.3299	1
0.1066	1.677	1.3553	0.32172	1
0.11	1.667	1.3544	0.31256	1
0.1133	1.658	1.3536	0.30438	1
0.1166	1.652	1.3528	0.29919	1
0.12	1.639	1.352	0.28703	1
0.1233	1.63	1.3511	0.27885	1
0.1266	1.62	1.3503	0.26967	1
0.13	1.614	1.3495	0.26451	1
0.1333	1.601	1.3487	0.25232	1
0.1366	1.592	1.3479	0.24413	1
0.14	1.586	1.347	0.23897	1
0.1433	1.576	1.3462	0.22979	1
0.1466	1.567	1.3454	0.2216	1
0.15	1.558	1.3446	0.21343	1
0.1533	1.548	1.3438	0.20425	1
0.1566	1.539	1.3429	0.19606	1
0.16	1.529	1.3421	0.18689	1
0.1633	1.52	1.3413	0.1787	1
0.1666	1.514	1.3405	0.17351	1
0.17	1.504	1.3397	0.16435	1
0.1733	1.495	1.3388	0.15615	1
0.1766	1.486	1.338	0.14796	1
0.18	1.479	1.3372	0.14179	1
0.1833	1.47	1.3364	0.1336	1
0.1866	1.46	1.3356	0.12441	1
0.19	1.451	1.3348	0.11624	1
0.1933	1.445	1.334	0.11104	1
0.1966	1.435	1.3332	0.10185	1
0.2	1.426	1.3323	0.093678	1
0.2033	1.417	1.3315	0.085482	1 1
0.2066	1.41	1.3307	0.079286	1
0.21	1.401	1.3299	0.071114	1
0.2133	1.391	1.3291	0.061916	1
0.2166	1.385	1.3283	0.056719	_

0 00				
0.22	1.376	1.3275	0.048545	1
0.2233	1.366	1.3267	0.039346	1
0.2266	1.36	1.3259	0.034146	
0.23	1.351	1.325	0.025971	1
0.2333	1.344	1.3242	0.019771	1
				1
0.2366	1.335	1.3234	0.01157	1
0.24	1.329	1.3226	0.0063929	1
0.2433	1.319	1.3218	-0.0028088	1
0.2466	1.313	1.321	-0.008011	1
				_
0.25	1.307	1.3202	-0.01319	Ţ
0.2533	1.297	1.3194	-0.022393	1
0.2566	1.291	1.3186	-0.027596	1
0.26	1.282	1.3178	-0.035776	1
0.2633	1.275	1.317	-0.041981	1
0.2666	1.266	1.3162	-0.050186	1
0.27		1.3154	-0.055368	1
	1.26			1
0.2733	1.254	1.3146	-0.060574	1
0.2766	1.247	1.3138	-0.06678	1
0.28	1.238	1.313	-0.074963	1
0.2833	1.232	1.3122	-0.080171	1
0.2866	1.225	1.3114	-0.086379	1
0.29		1.3106	-0.094563	1
	1.216			1 1 1 1 1 1 1 1 1 1 1 1
0.2933	1.21	1.3098	-0.099772	1
0.2966	1.203	1.309	-0.10598	1
0.3	1.2	1.3082	-0.10817	1
0.3033	1.191	1.3074	-0.11638	1
0.3066	1.185	1.3066	-0.12159	1
0.31	1.178	1.3058	-0.12778	1
0.3133				1
	1.172	1.305	-0.13299	1
0.3166	1.163	1.3042	-0.1412	1
0.32	1.159	1.3034	-0.14439	1 1 1 1 1
0.3233	1.153	1.3026	-0.1496	1
0.3266	1.144	1.3018	-0.15782	1
0.33	1.137	1.301	-0.16401	1
0.3333	1.131	1.3002		
			-0.16922	1
0.35	1.1	1.2963	-0.19626	1
0.3666	1.072	1.2923	-0.22032	1
0.3833	1.04	1.2884	-0.24838	1
0.4	1.015	1.2845	-0.26945	1
0.4166	0.99	1.2806	-0.29056	1
0.4333	0.965	1.2767	-0.31165	1
				1
0.45	0.943	1.2728	-0.32976	1
0.4666	0.924	1.2689	-0.3449	1
0.4833	0.906	1.265	-0.35903	1
0.5	0.887	1.2612	-0.37417	1
0.5166	0.874	1.2573	-0.38334	1
0.5333	0.858	1.2535	-0.39551	ī
0.55	0.846	1.2497	-0.40368	1
0.5666	0.837	1.2459	-0.40889	1
				1
0.5833	0.824	1.2421	-0.41809	1
0.6	0.815	1.2383	-0.4233	1
0.6166	0.808	1.2345	-0.42655	1
0.6333	0.799	1.2308	-0.43178	1
0.65	0.793	1.227	-0.43403	1
0.6666	0.786	1.2233	-0.43731	1
	0.78	1.2196	-0.43957	
0.6833				1
0.7	0.774	1.2159	-0.44185	1
0.7166	0.768	1.2122	-0.44417	1
0.7333	0.764	1.2085	-0.44447	1
0.75	0.758	1.2048	-0.44678	1

				_
0.7666	0.755	1.2011	-0.44613	1
0.7833	0.752	1.1975	-0.44546	ĺ
0.8	0.746	1.1938	-0.44781	1
0.8166	0.743	1.1902	-0.44719	1
0.8333	0.739	1.1866	-0.44756	1
0.85	0.736	1.1829	-0.44694	1
		1.1794	-0.44635	1
0.8666	0.733			
0.8833	0.73	1.1758	-0.44575	1
0.9	0.727	1.1722	-0.44517	1
0.9166	0.724	1.1686	-0.44461	1 1
0.9333	0.721	1.165	-0.44405	1
0.95	0.721	1.1615	-0.44049	1
0.9666	0.717	1.158	-0.44097	1
0.9833	0.714	1.1544	-0.44044	1
1	0.711	1.1509	-0.43992	1
1.2	0.683	1.1096	-0.42657	1
1.4	0.667	1.0697	-0.4027	1
	0.655	1.0313	-0.37627	ī
1.6		0.99421	-0.34921	1
1.8	0.645			1
2	0.636	0.95849	-0.32249	
2.2	0.626	0.92405	-0.29805	1
2.4	0.623	0.89085	-0.26785	1
2.6	0.617	0.85884	-0.24184	1
2.8	0.611	0.82799	-0.21699	1
3	0.608	0.79824	-0.19024	1
3.2	0.605	0.76956	-0.16456	1
3.4	0.598	0.74191	-0.14391	1
3.6	0.598	0.71525	-0.11725	1
3.8	0.595	0.68955	-0.094552	1
4	0.589	0.66478	-0.075776	1
4.2	0.586	0.64089	-0.054891	ī
		0.61786	-0.031864	1
4.4	0.586	0.59566	-0.012665	1
4.6	0.583			1
4.8	0.579	0.57426	0.0047373	
5	0.576	0.55363	0.02237	1
5.2	0.573	0.53374	0.039262	1
5.4	0.573	0.51456	0.058439	1
5.6	0.573	0.49607	0.076927	1
5.8	0.57	0.47825	0.091751	1
6	0.567	0.46107	0.10593	1
6.2	0.564	0.4445	0.1195	1
6.4	0.564	0.42853	0.13547	1
6.6	0.564	0.41313	0.15087	1
6.8	0.561	0.39829	0.16271	1
7	0.561	0.38398	0.17702	1
7.2	0.558	0.37018	0.18782	1
	0.554	0.35688	0.19712	ī
7.4		0.34406	0.20694	ī
7.6	0.551	0.3317	0.2193	1
7.8	0.551		0.2193	1
8	0.548	0.31978		1
8.2	0.551	0.30829	0.24271	
8.4	0.548	0.29721	0.25079	1
8.6	0.545	0.28653	0.25847	1
8.8	0.545	0.27624	0.26876	1
9	0.542	0.26631	0.27569	1
9.2	0.542	0.25675	0.28525	1
9.4	0.539	0.24752	0.29148	1
9.6	0.539	0.23863	0.30037	1
9.8	0.539	0.23005	0.30895	1
10	0.536	0.22179	0.31421	1

11	0.529	0.18471	0.34429	1
12	0.526	0.15382	0.37218	1
13	0.52	0.12811	0.39189	1
14	0.514	0.10669	0.40731	1
15	0.51	0.08885	0.42115	1
16	0.504	0.073995	0.43001	1
17	0.501	0.061623	0.43938	1
18	0.495	0.05132	0.44368	
19	0.493	0.03132	0.44926	1
20	0.492	0.04274	0.45341	1
21	0.482	0.033394	0.45236	1
22	0.476	0.024687	0.45131	1 1
23	0.473	0.024007	0.45244	
24	0.467	0.020333	0.44988	1
25	0.467	0.017122	0.45274	1
26	0.463	0.014239	0.45112	
27	0.46	0.0098897	0.45011	1 1
28	0.457	0.0098397	0.44876	1
29	0.451	0.0062562	0.44414	1
30	0.431	0.0057123	0.44229	1
31	0.445	0.0037123	0.44024	1
32	0.445	0.0047575	0.44104	1
33	0.438	0.0032995	0.4347	1
34	0.438	0.0032333	0.43525	1
35	0.435	0.0027478	0.43271	1
36	0.429	0.0022004	0.42709	1
37	0.429	0.0015030	0.42741	1
38	0.423	0.0013072	0.42168	1
39	0.42	0.0013210	0.4189	1
40	0.416	0.00091675	0.41508	1
41	0.416	0.00076348	0.41524	1
42	0.413	0.00063583	0.41236	1
43	0.413	0.00052952	0.41247	1
44	0.41	0.00044099	0.40956	1
45	0.407	0.00036726	0.40663	1
46	0.404	0.00030585	0.40369	1
47	0.401	0.00025472	0.40075	1
48	0.398	0.00021213	0.39779	ī
49	0.395	0.00017666	0.39482	1
50	0.391	0.00014713	0.39085	1
51	0.391	0.00012253	0.39088	1
52	0.391	0.00010204	0.3909	1
53	0.388	8.4981E-005	0.38792	1
54	0.385	7.0773E-005	0.38493	1
55	0.382	5.89 <b>4E-0</b> 05	0.38194	1
56	0.379	4.9086E-005	0.37895	1
57	0.379	4.0879E-005	0.37896	1
58	0.376	3.40 <b>44</b> E-005	0.37597	1
59	0.373	2.8352E-005	0.37297	1
60	0.373	2.3612E-005	0.37298	1
61	0.369	1.9664E-005	0.36898	1
62	0.369	1.6376E-005	0.36898	1
63	0.366	1.3638E-005	0.36599	1
64	0.363	1.1358E-005	0.36299	1
65	0.36	9.4591E-006	0.35999	1

# VISUAL MATCH PARAMETER ESTIMATES

Estimate

K = 2.8830E-003

y0 = 2.0039E + 000

<<<<<<<<<<<<<<<<>>>>>>>>>>>>>>>>>>>>>>	>>>>>>
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## TYPE CURVE DATA

K = 2.88295E-003y0 = 2.00390E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0 000E+000	2 0045+000	6 500F±001	7 816F-050		

## TYPE CURVE DATA

K = 2.88295E-003y0 = 2.00390E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0 000E+000	2 004E+000	6.500E+001	7 816E-050		

## TYPE CURVE DATA

K = 2.88295E-003y0 = 2.00390E+000

Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	2.004E+000	6.500E+001	7.816E-050		

## TYPE CURVE DATA

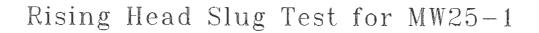
K = 2.88295E-003y0 = 2.00390E+000

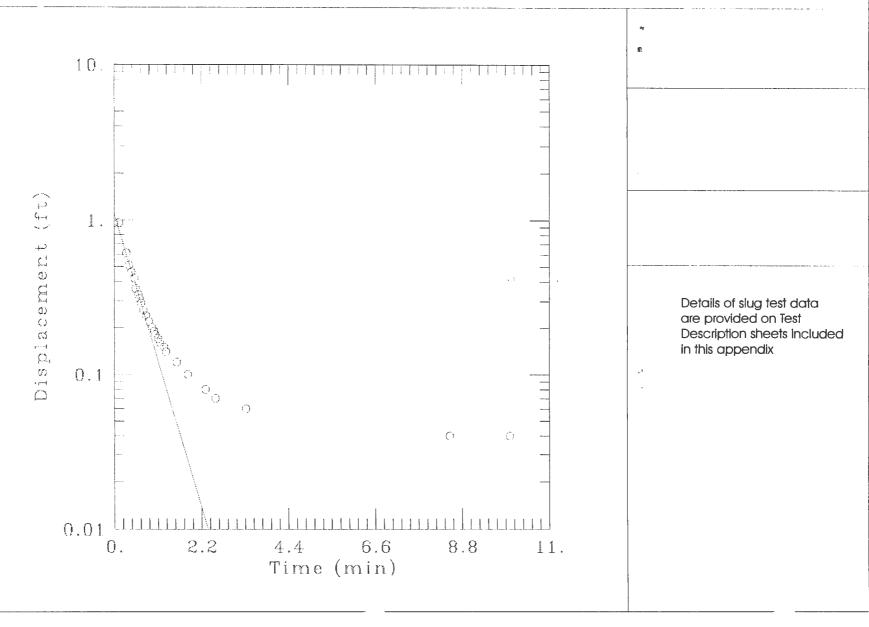
Time	Drawdown	Time	Drawdown	Time	Drawdown
0.000E+000	2.004E+000	6.500E+001	7.816E-050		

## TYPE CURVE DATA

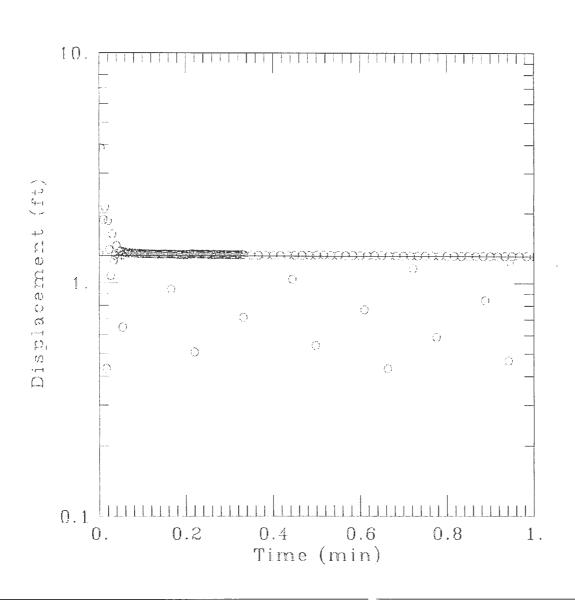
K = 2.88295E-003y0 = 2.00390E+000

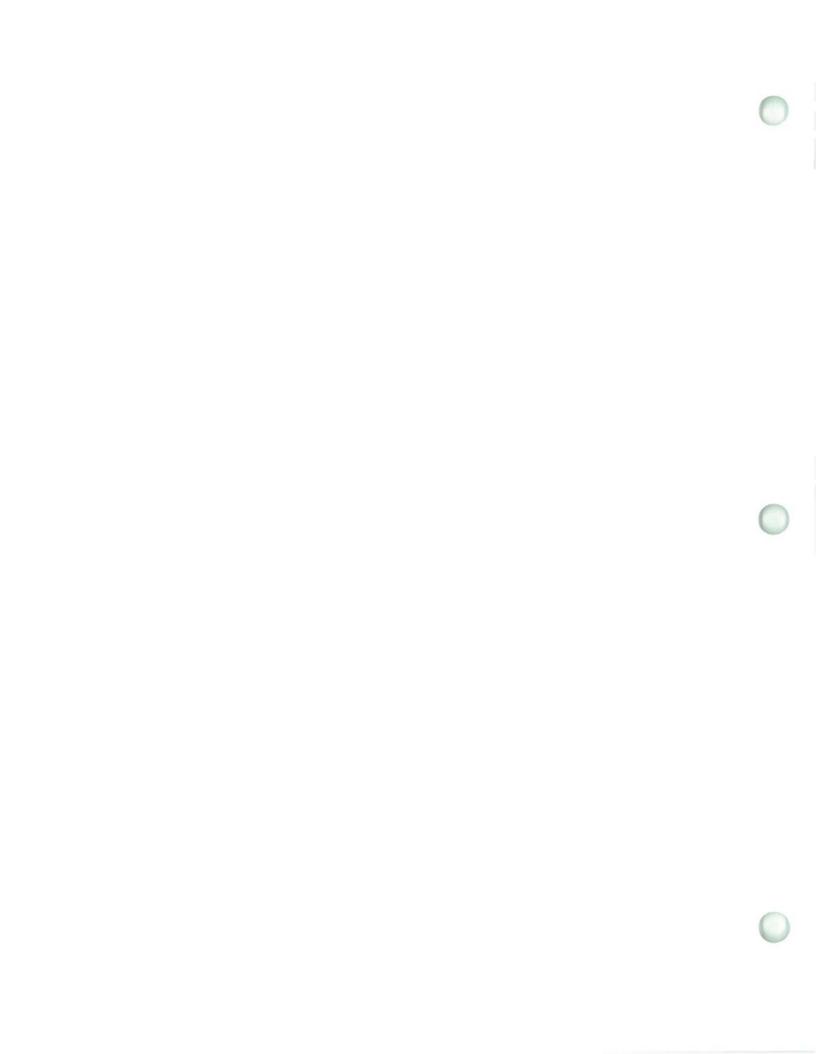
Time	Drawdown	Time	Drawdown	Time	Drawdown
0 0005+000	2 004E+000	6 500F+001	7 816E-050		

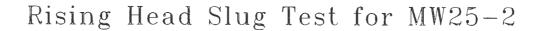


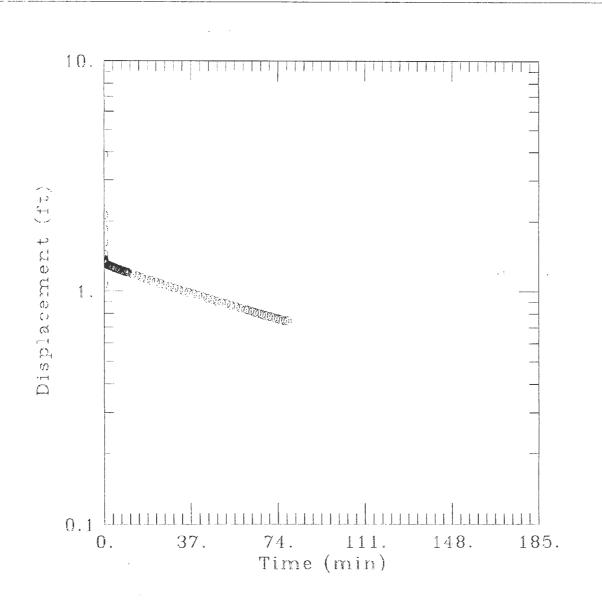


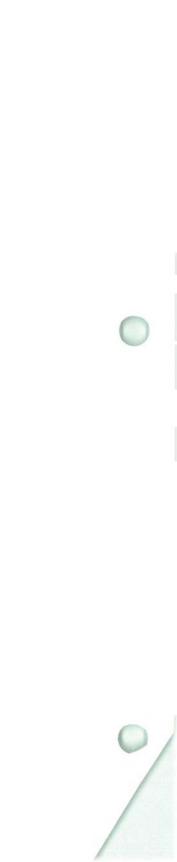




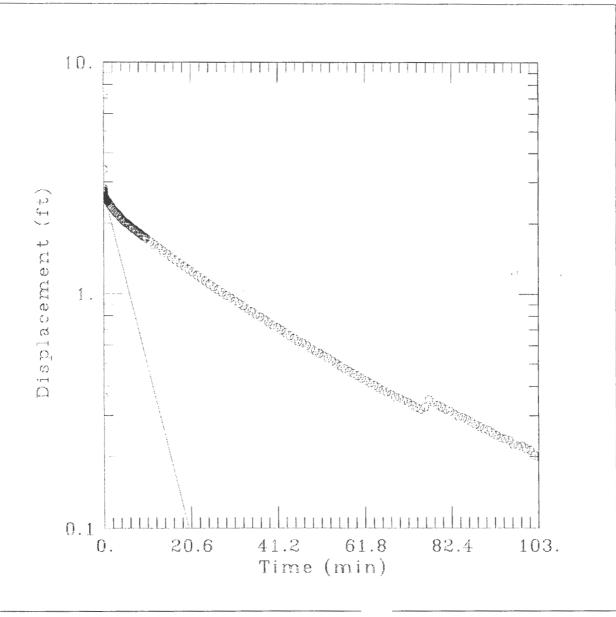


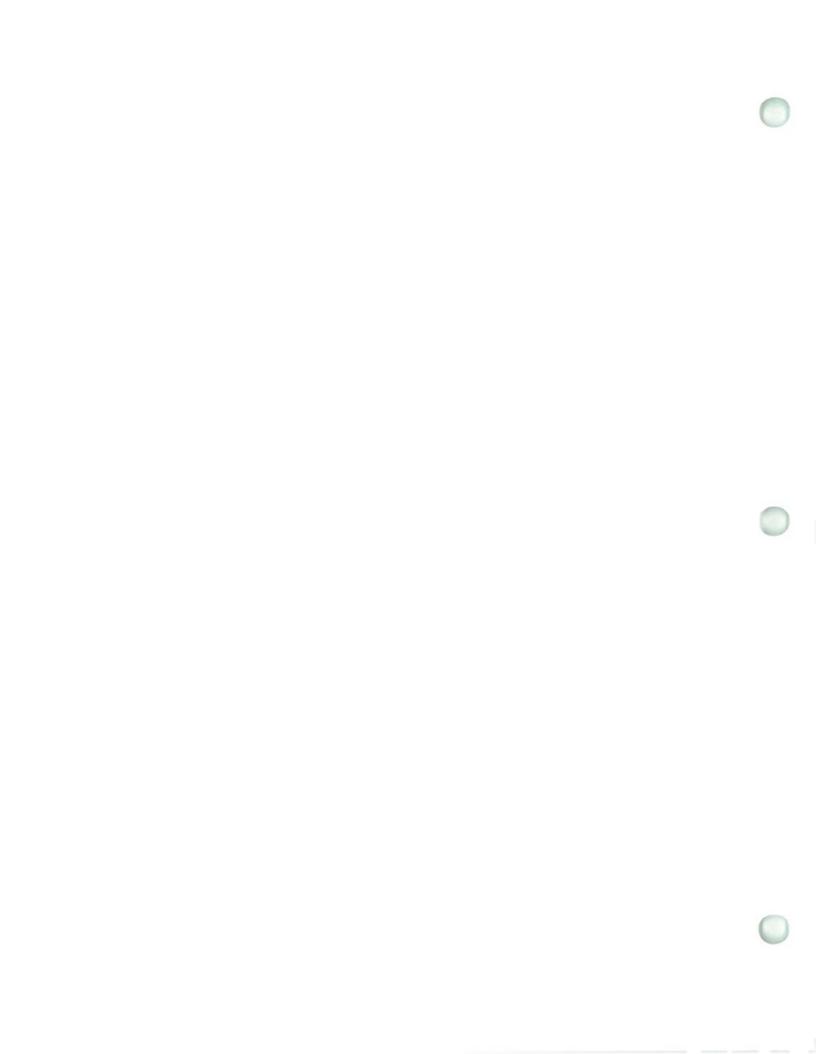




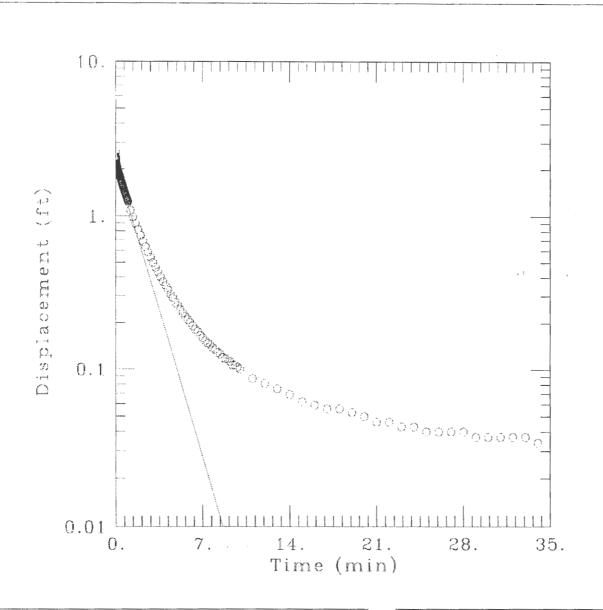


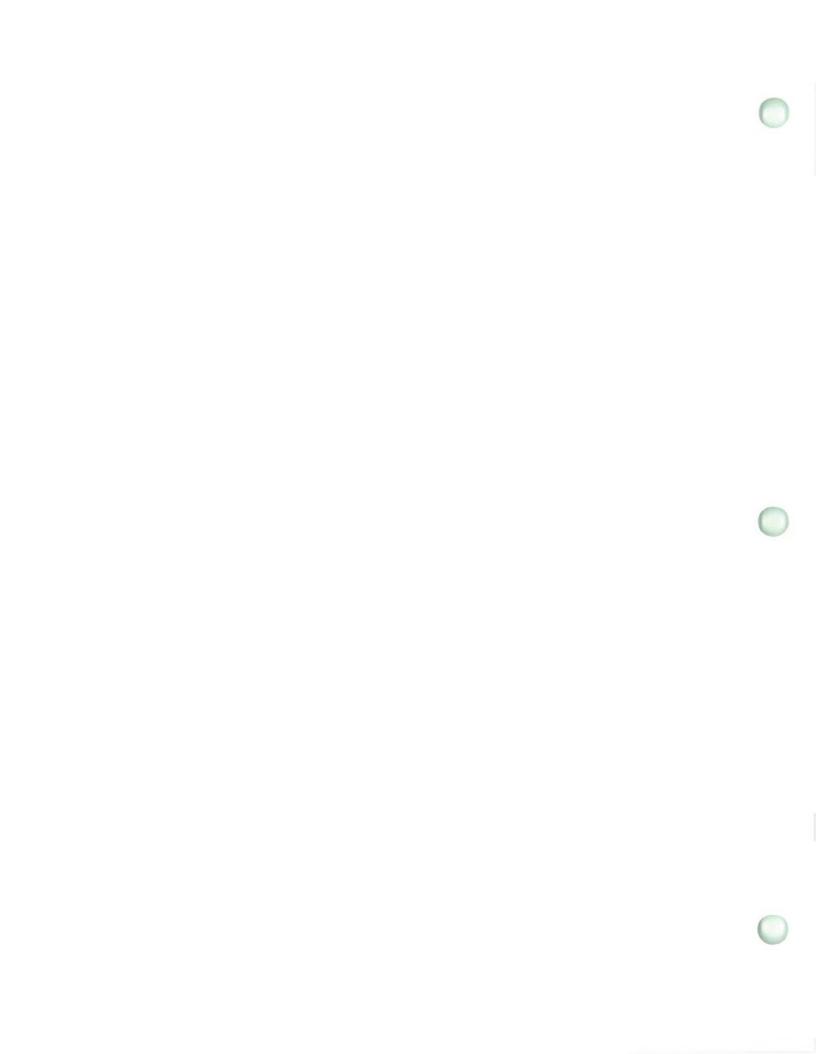




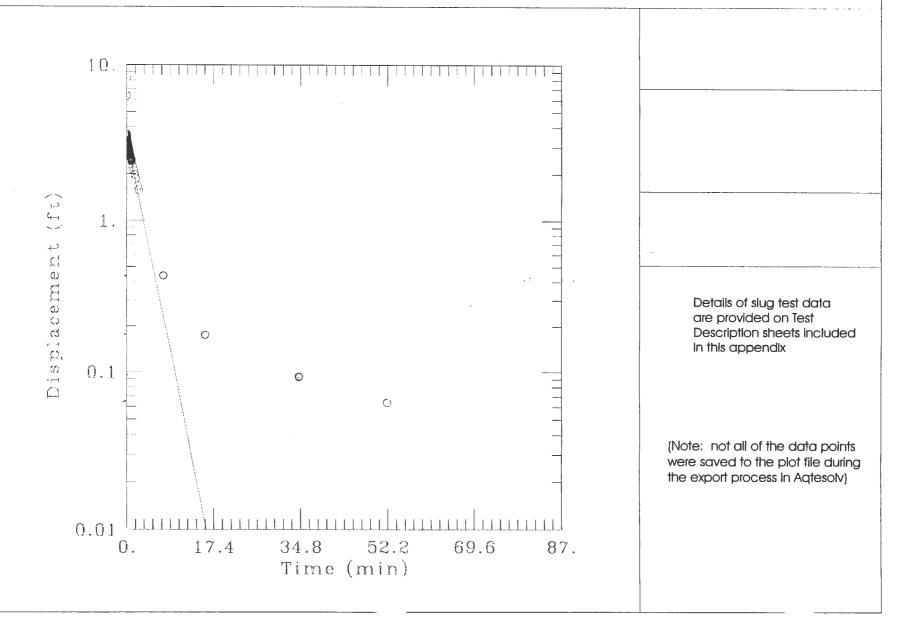


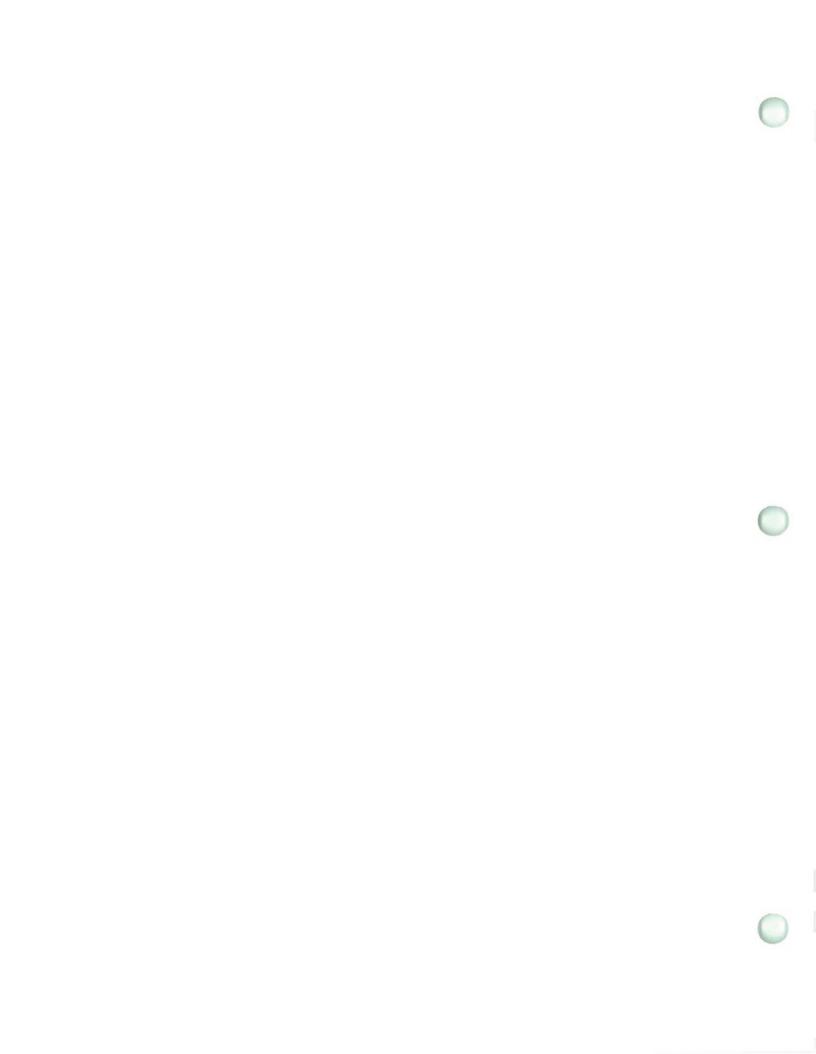




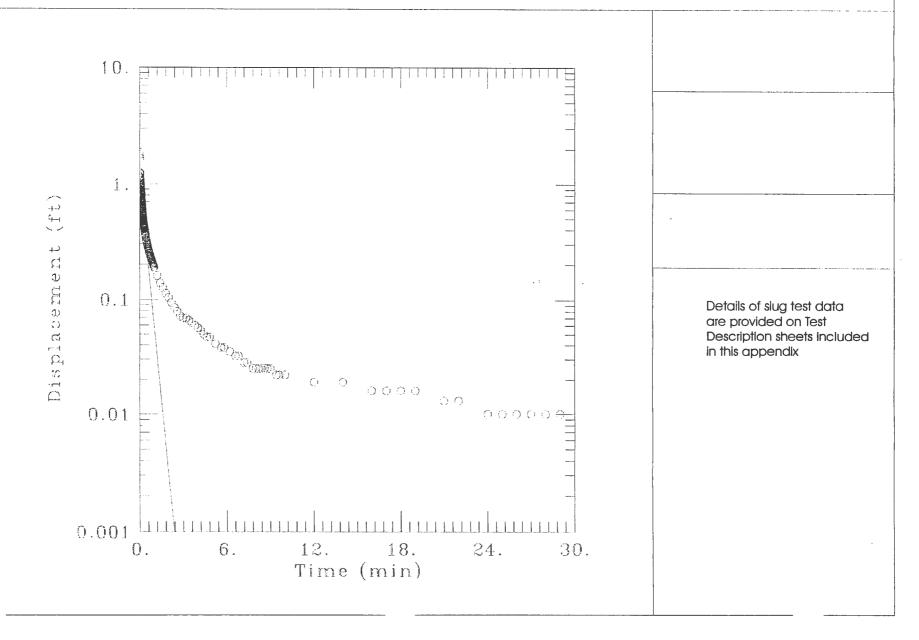




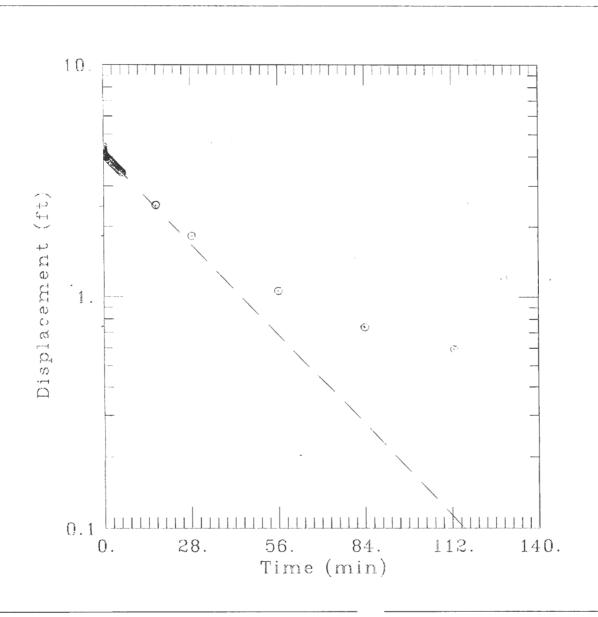




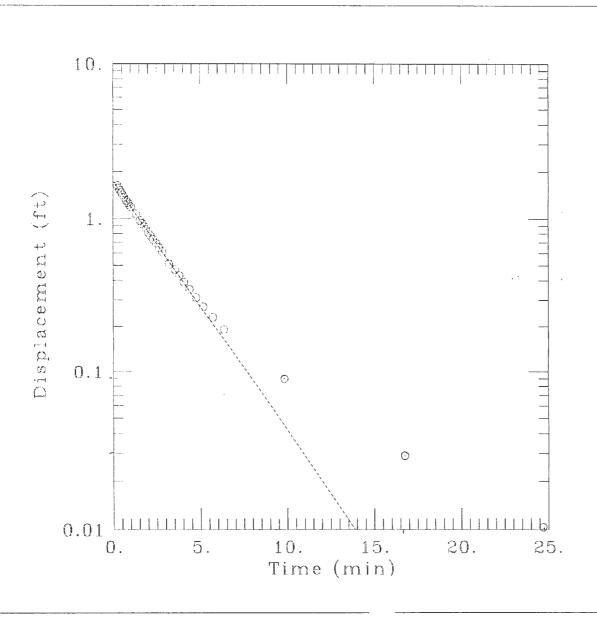


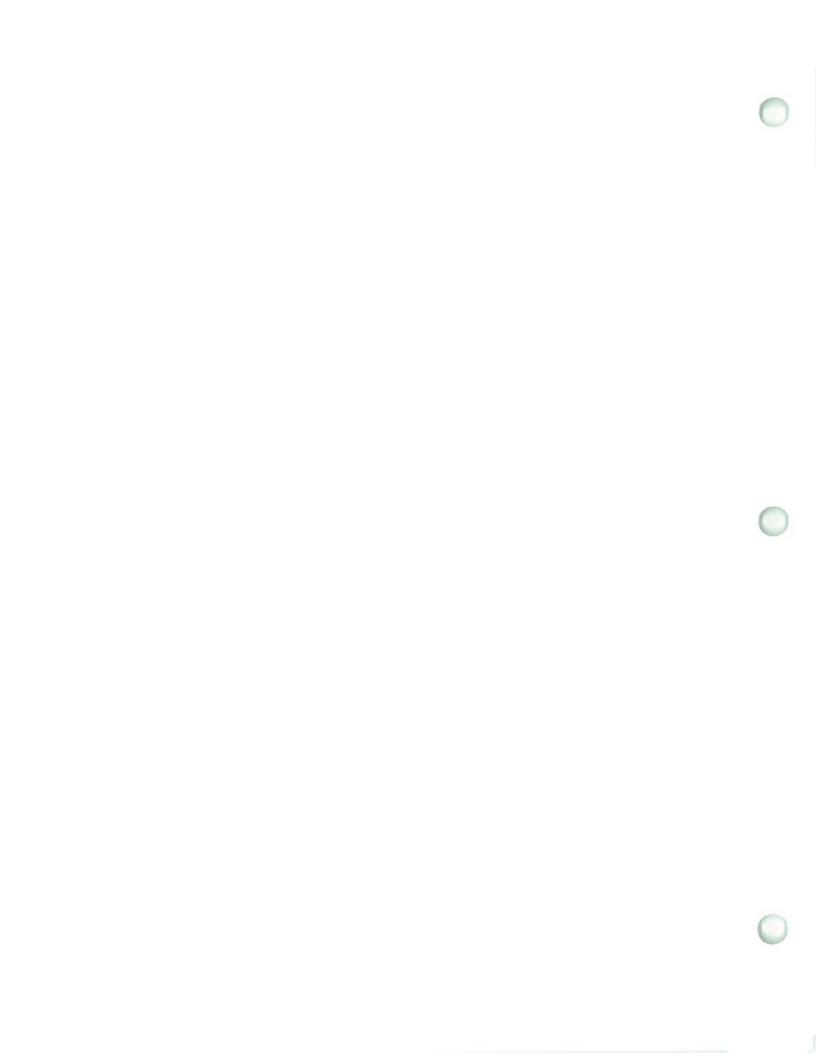


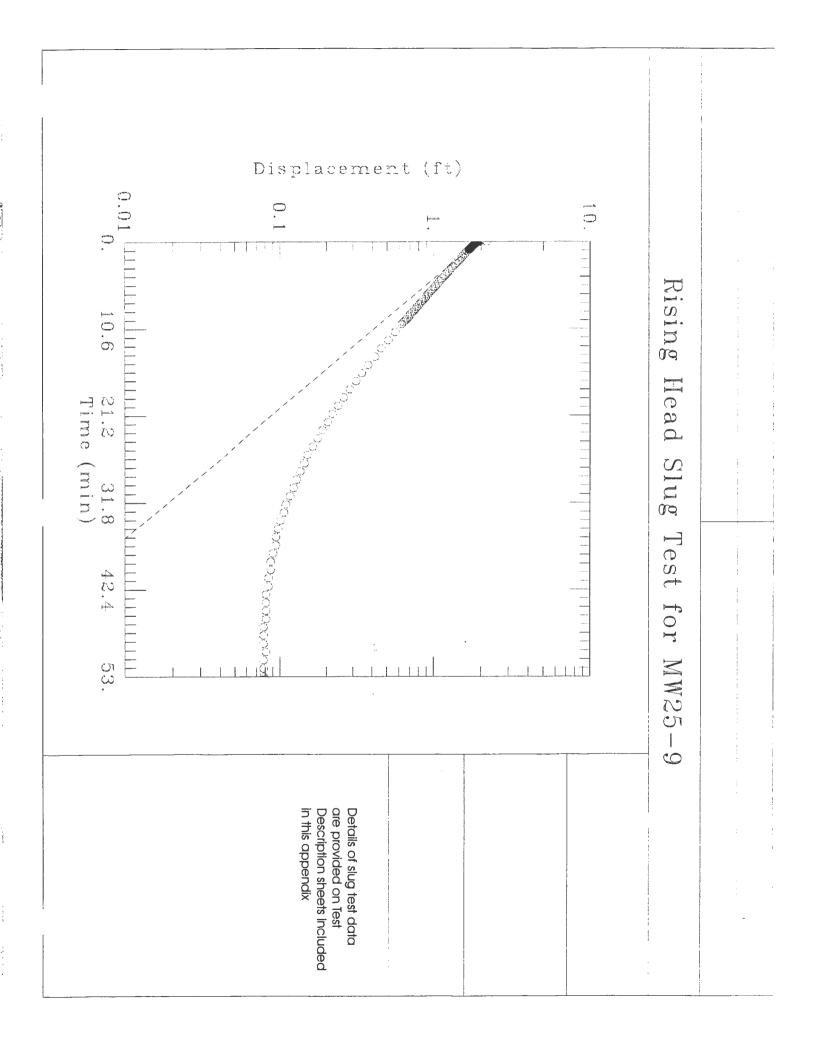




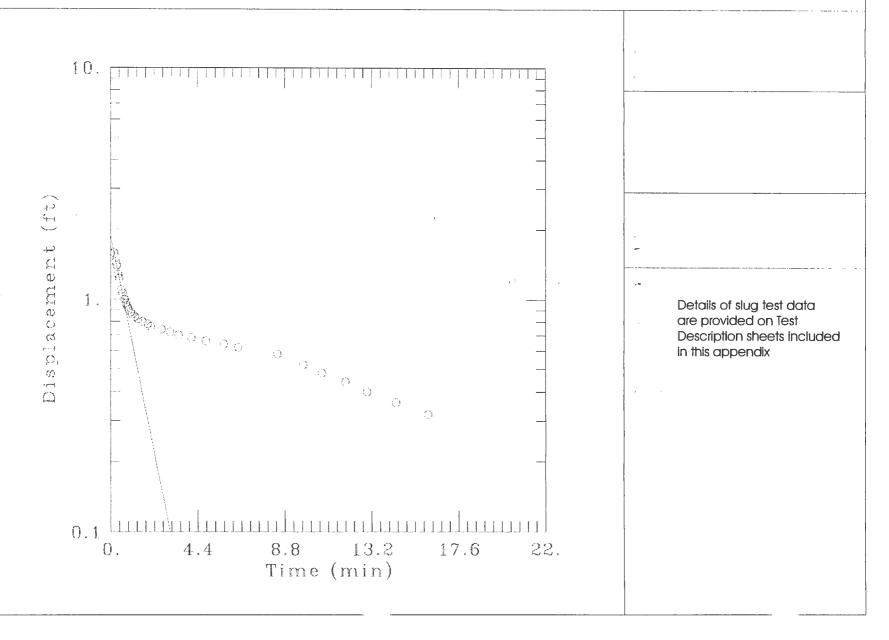


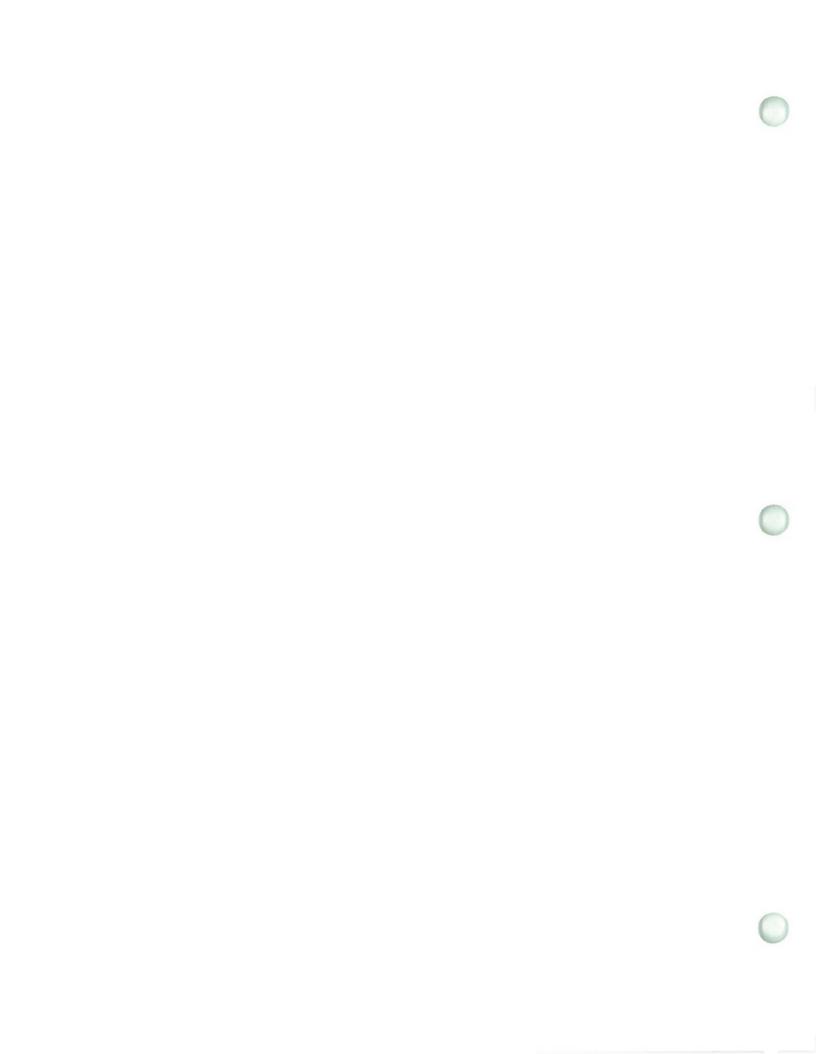




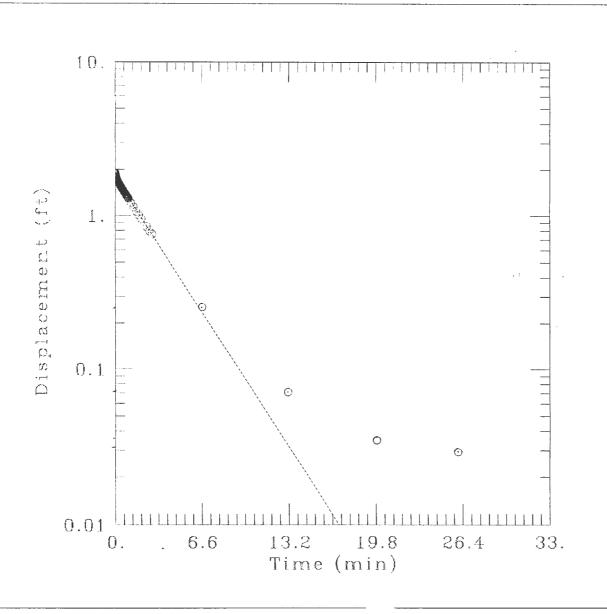




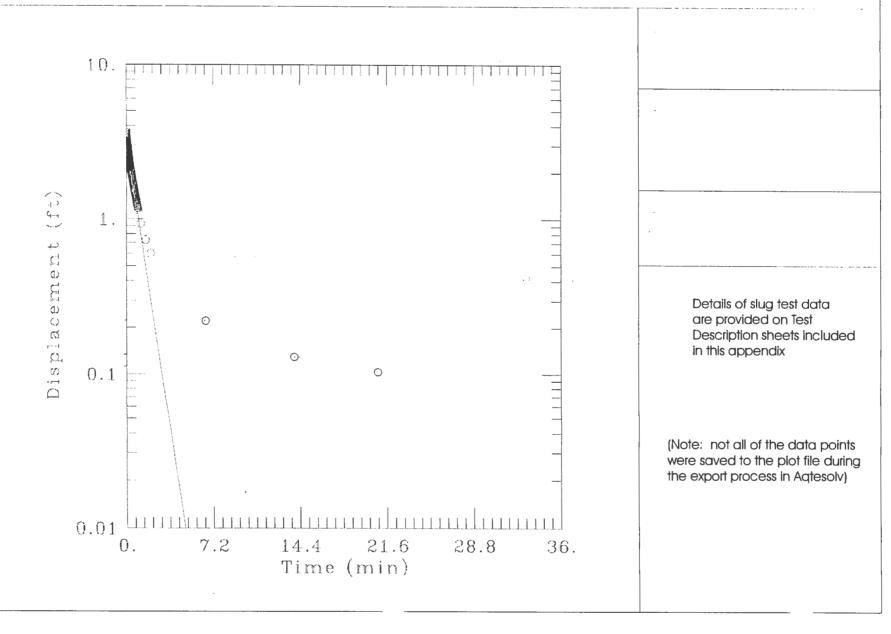


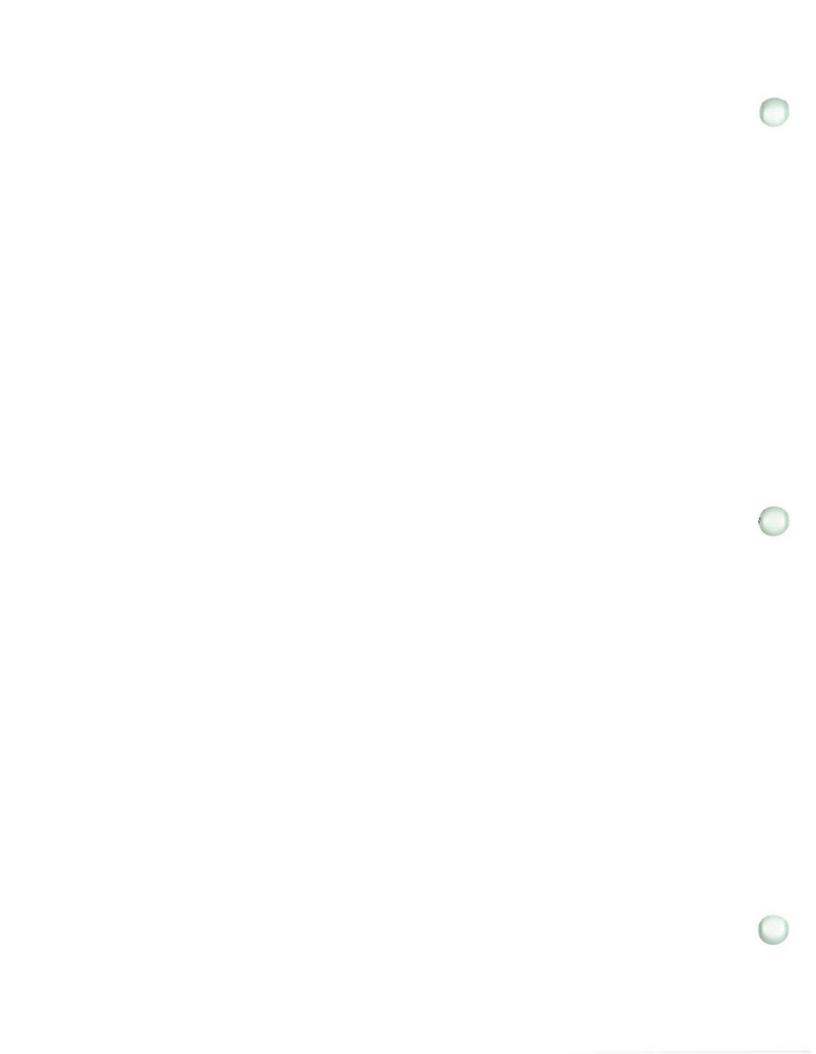




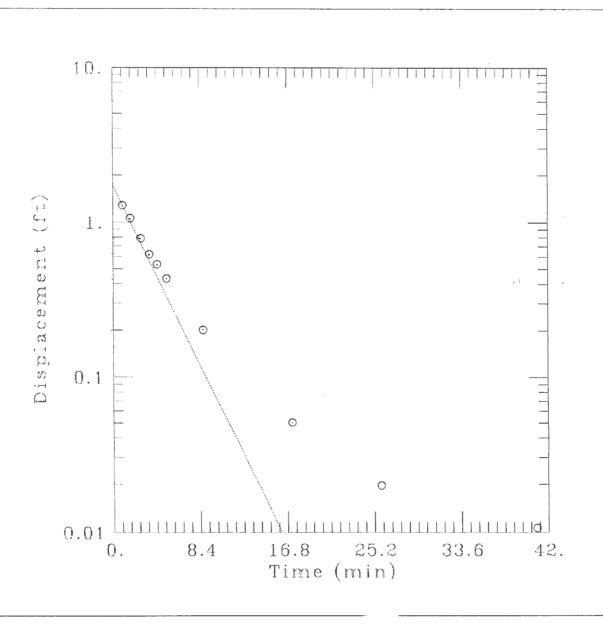


## Rising Head Slug Test for MW25-12D

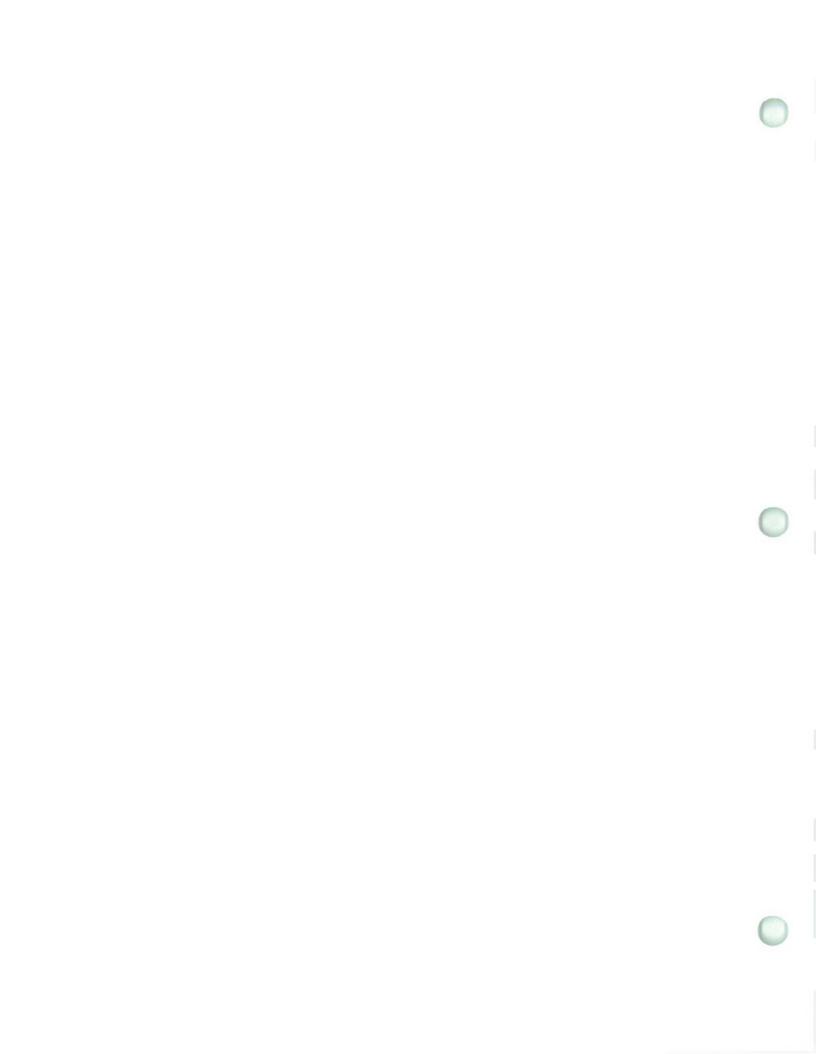




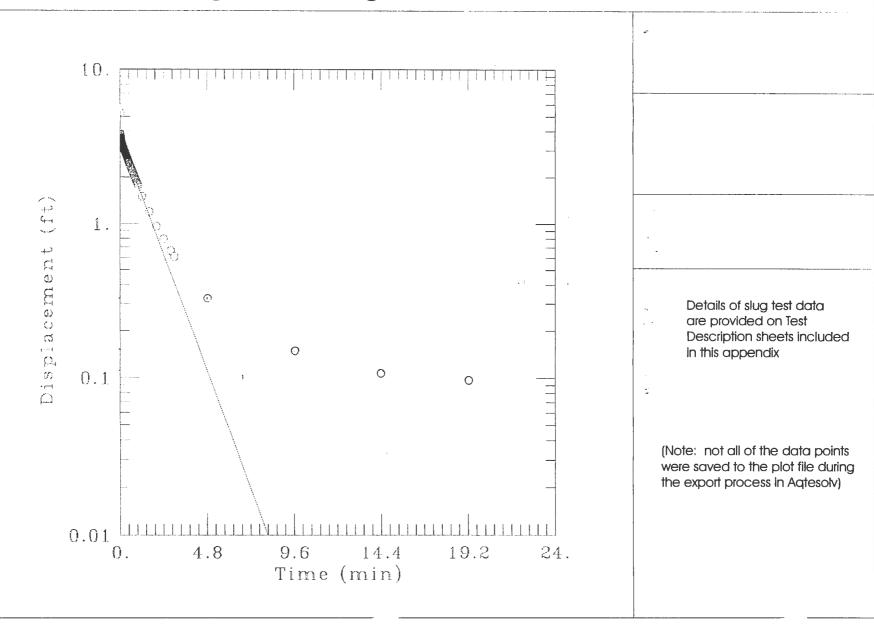
## Rising Head Slug Test for MW25-13

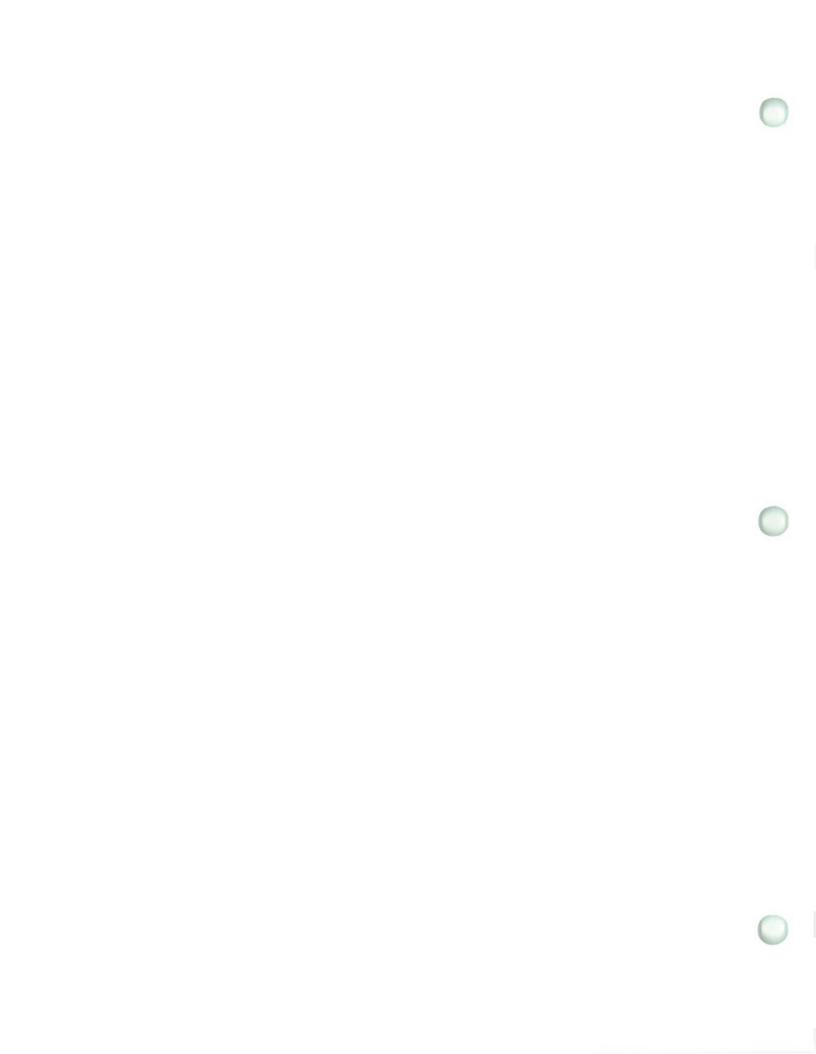


Details of slug test data are provided on Test Description sheets included In this appendix

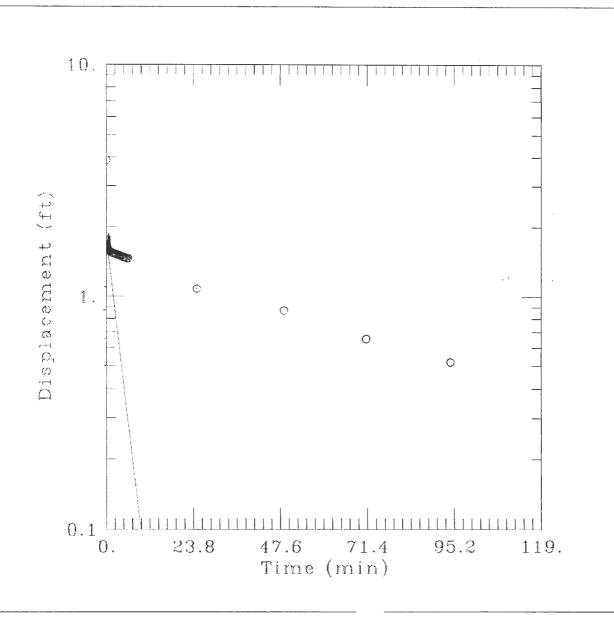


## Rising Head Slug Test for MW25-14D







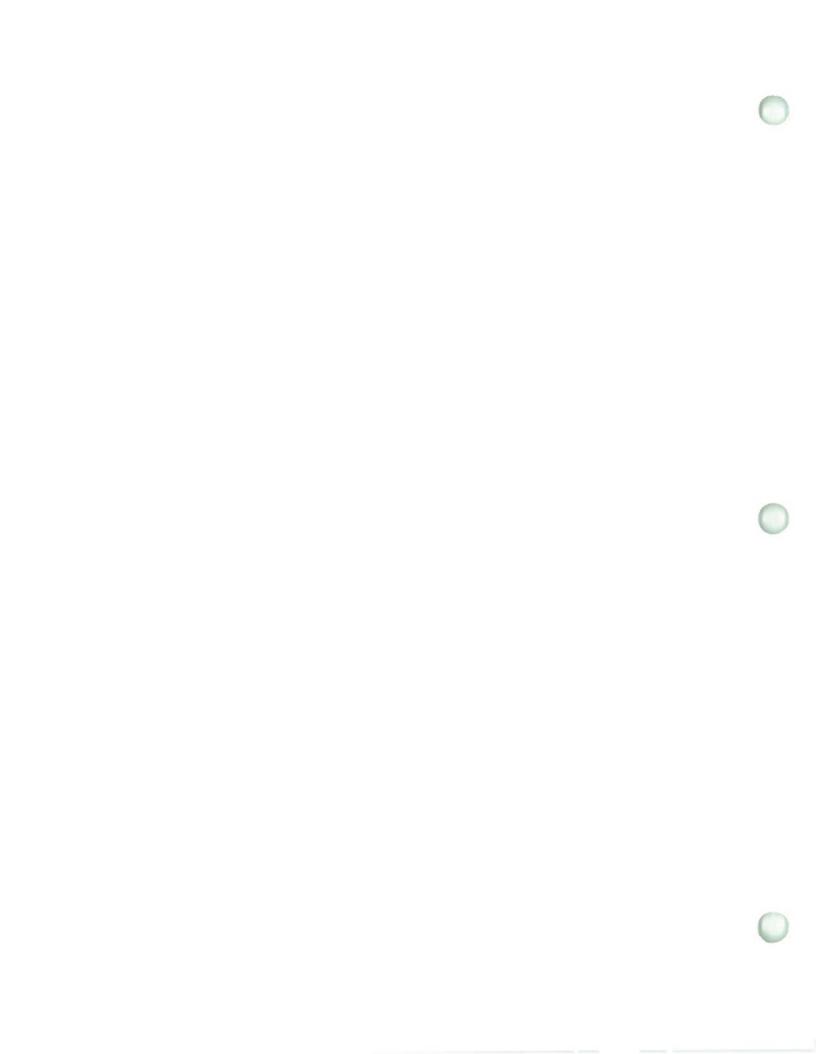


.

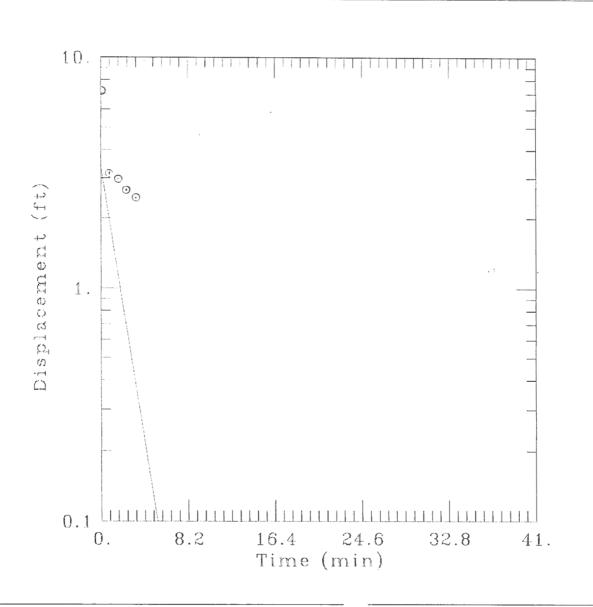
Details of slug test data are provided on Test

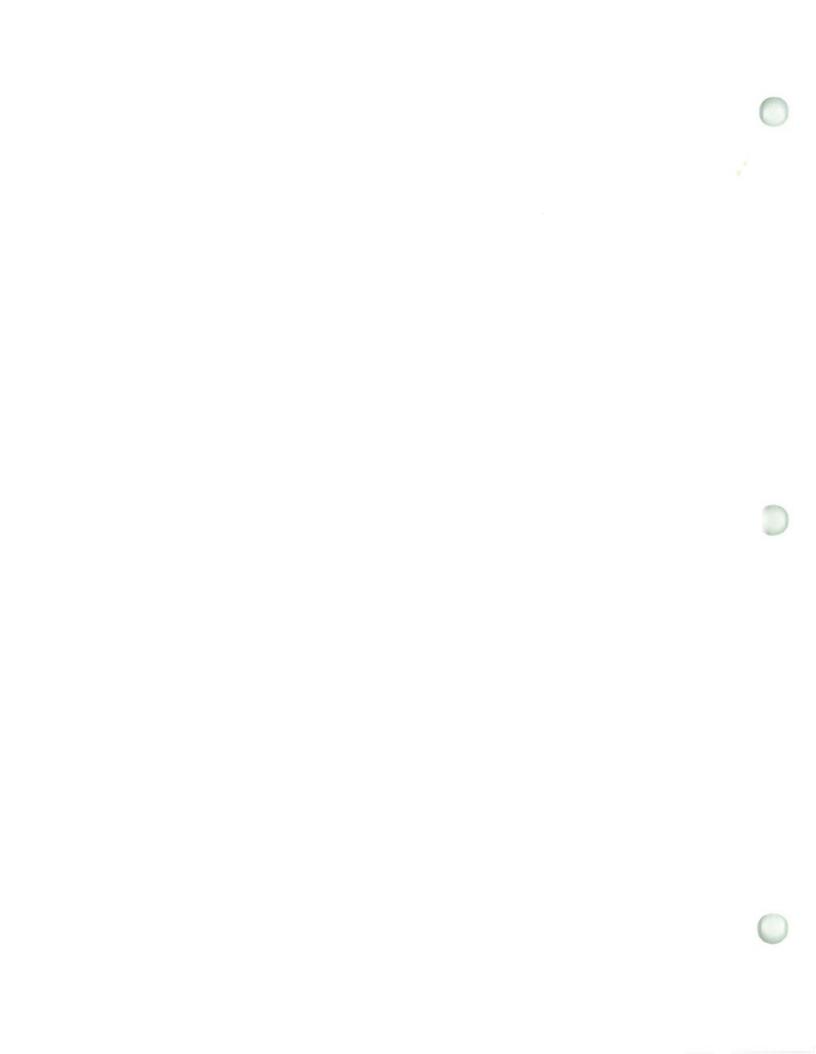
Description sheets included

in this appendix

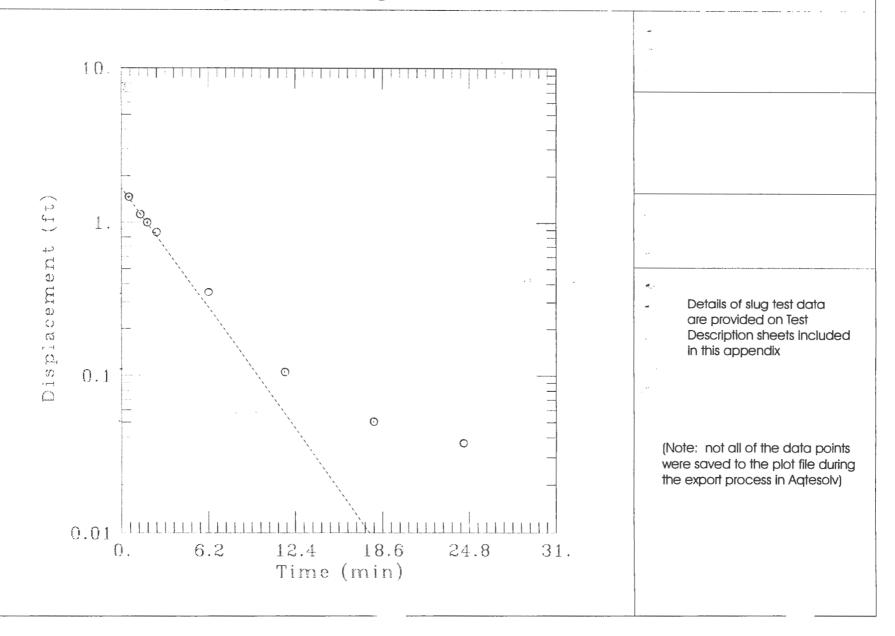




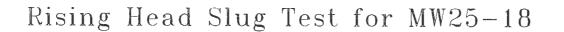


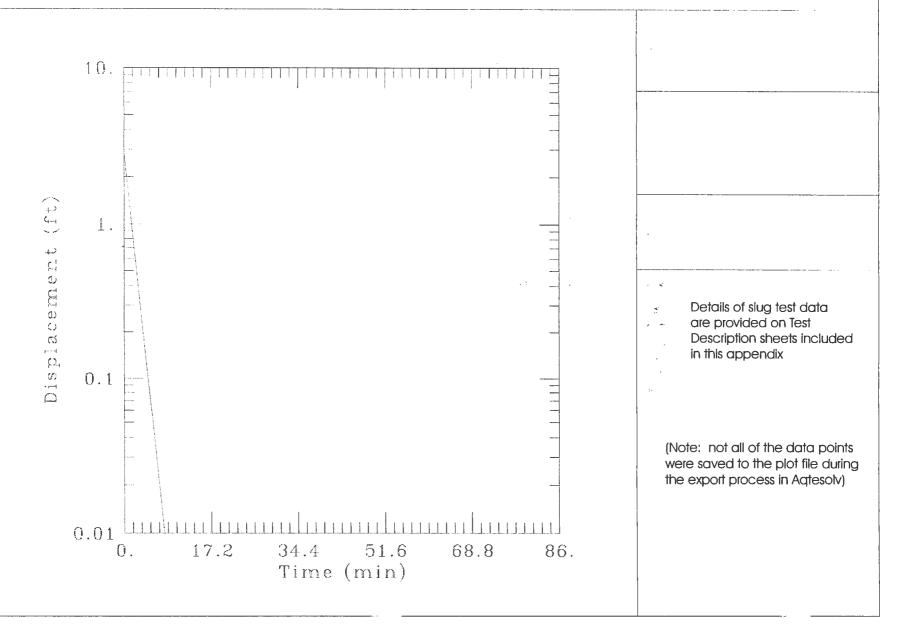


## Rising Head Slug Test for MW25-17

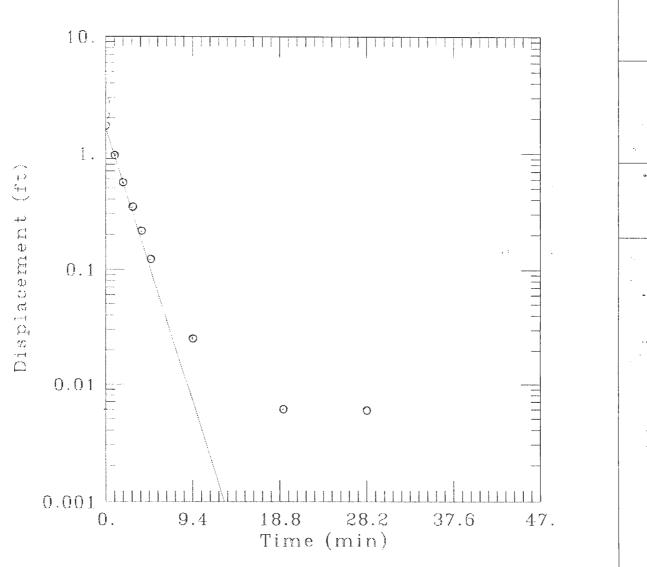






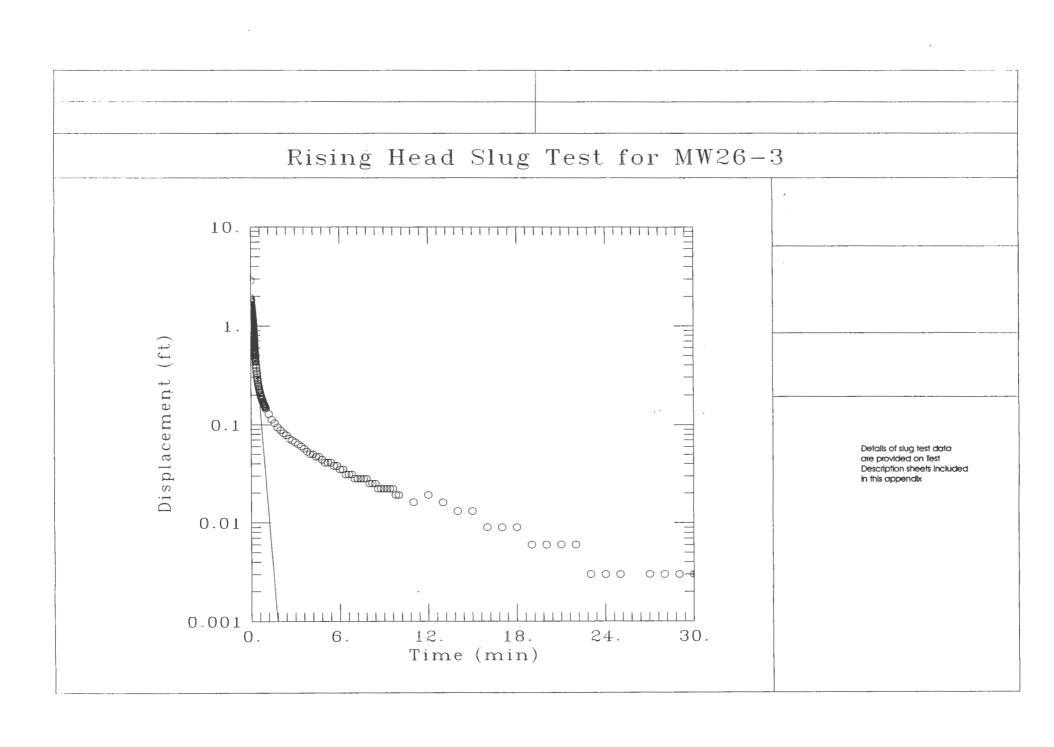


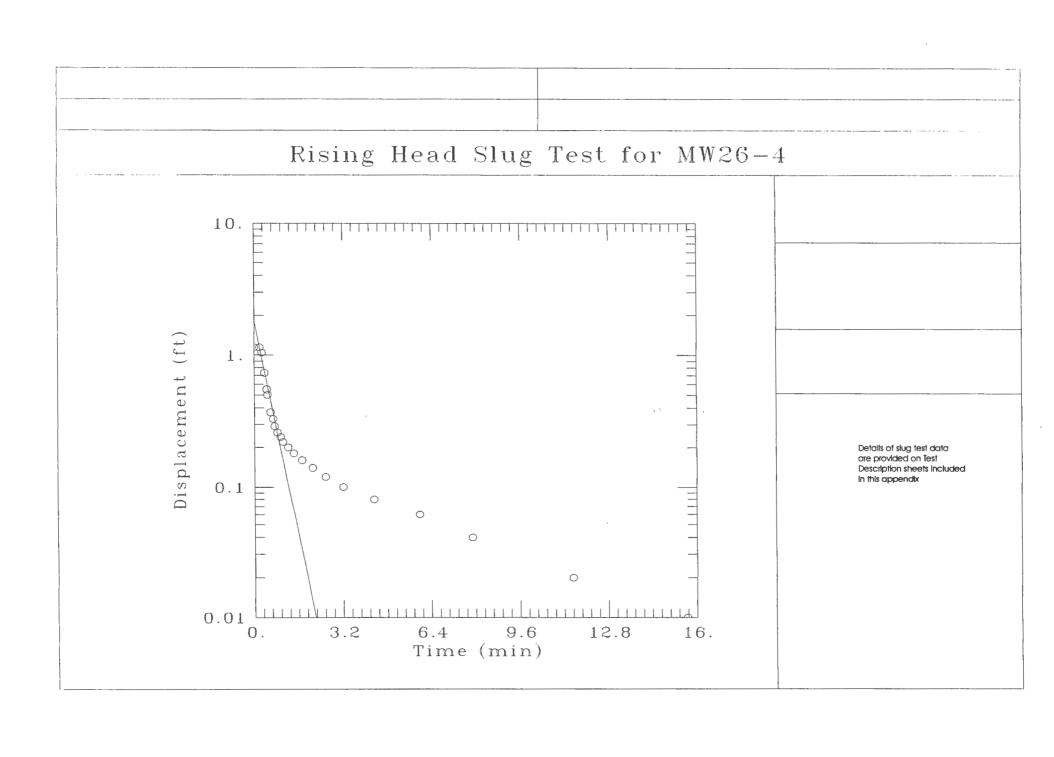
# Rising Head Slug Test for MW25-19

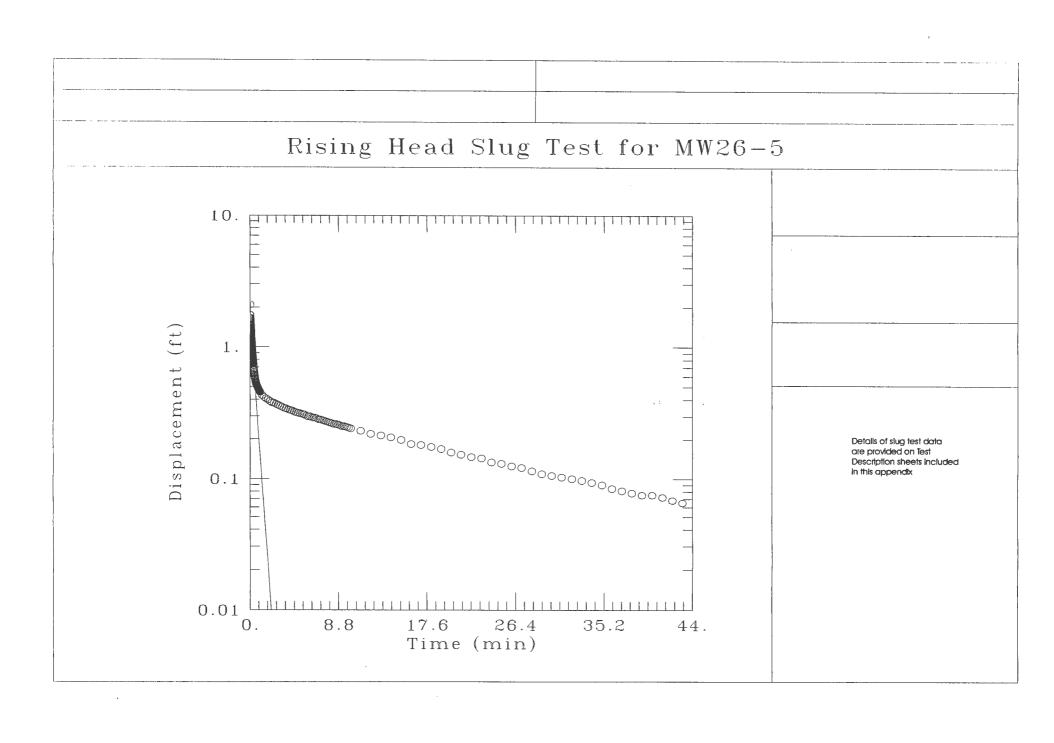


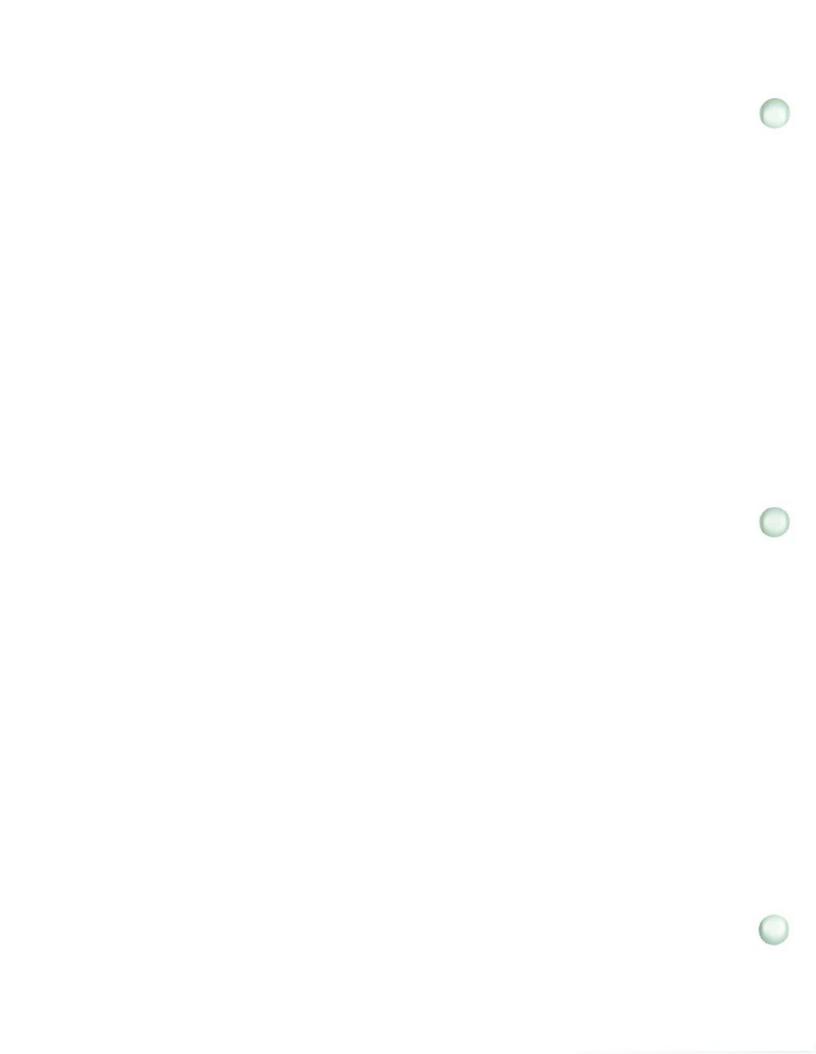
Details of slug test data are provided on Test Description sheets included in this appendix

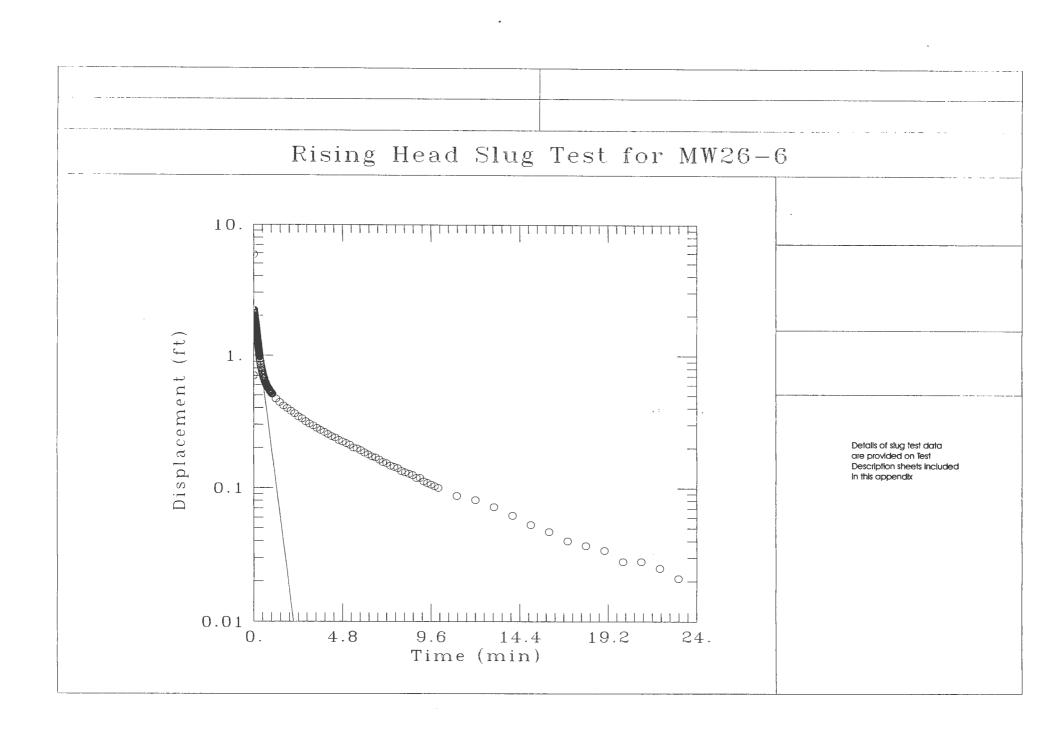
(Note: not all of the data points were saved to the plot file during the export process in Aqtesolv)

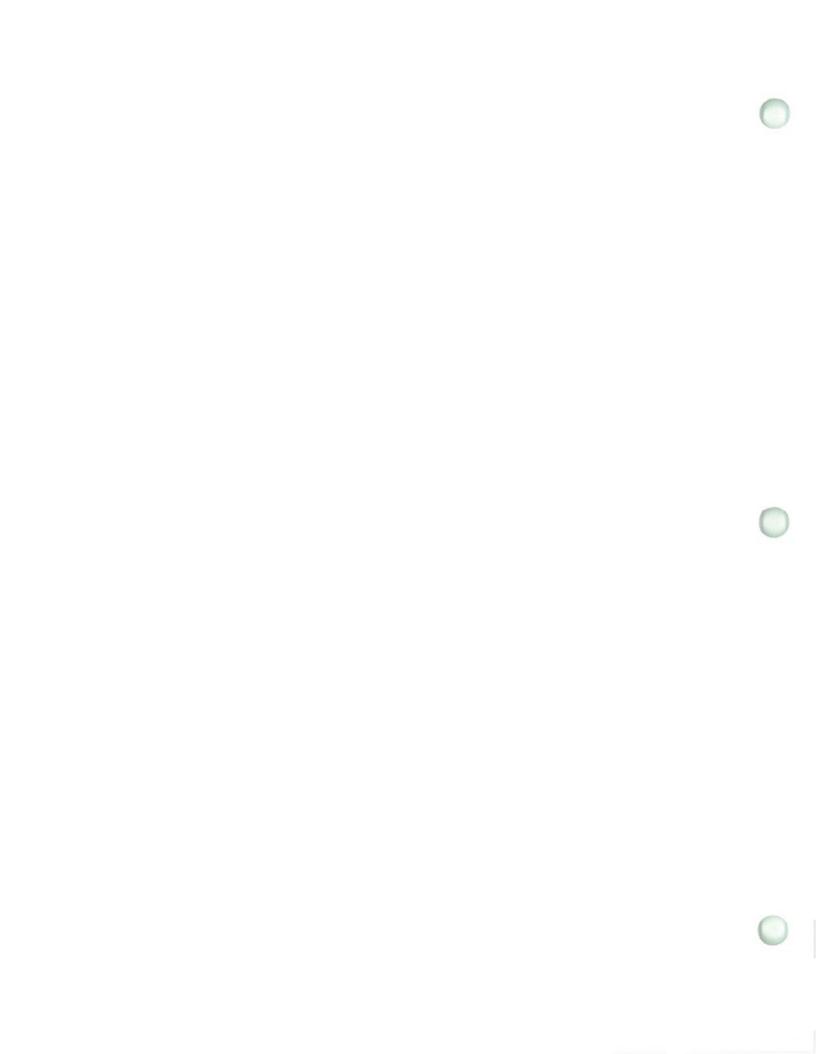


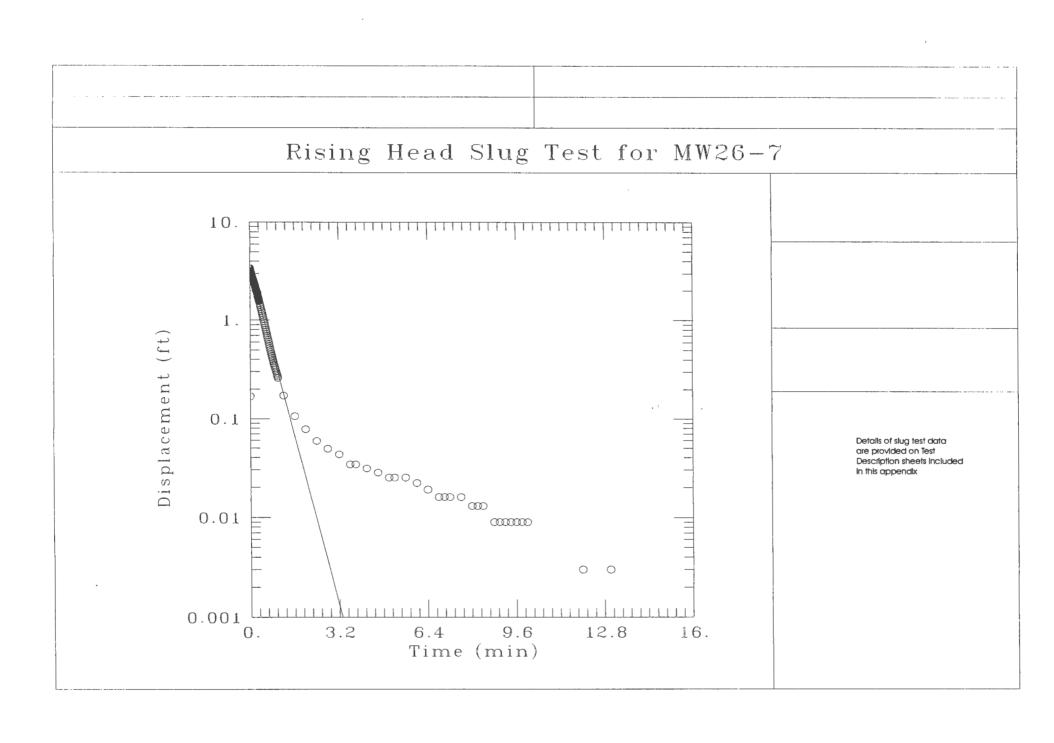


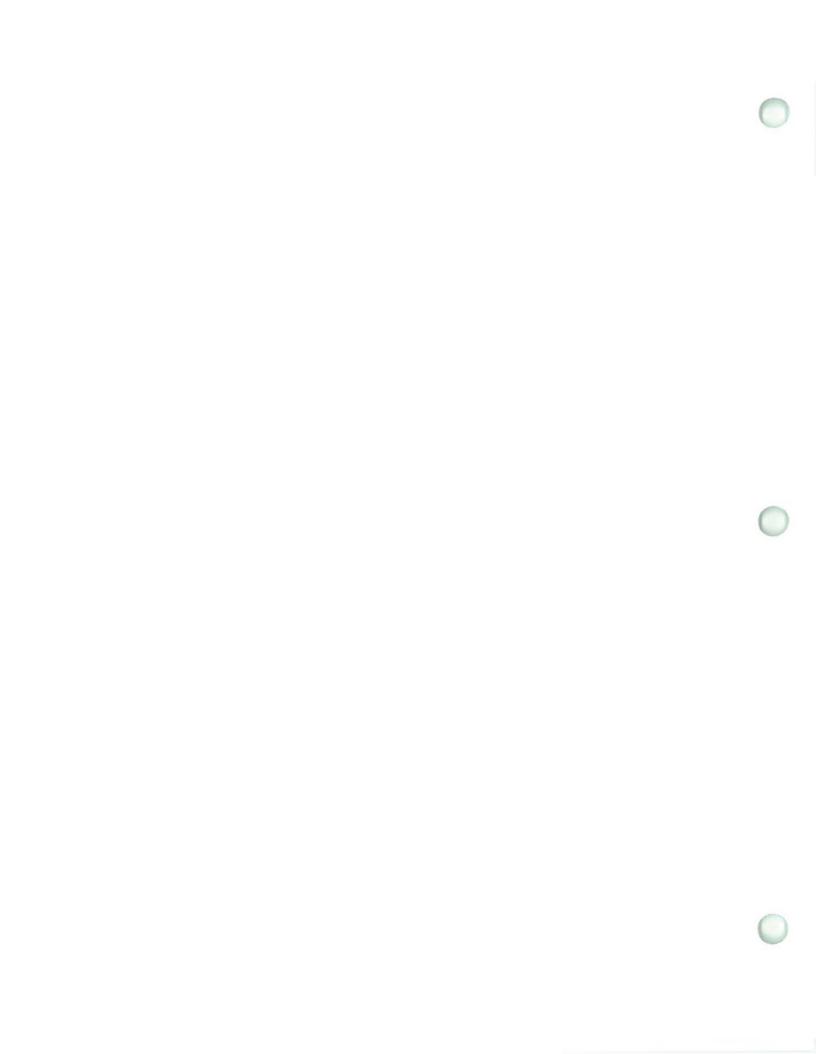


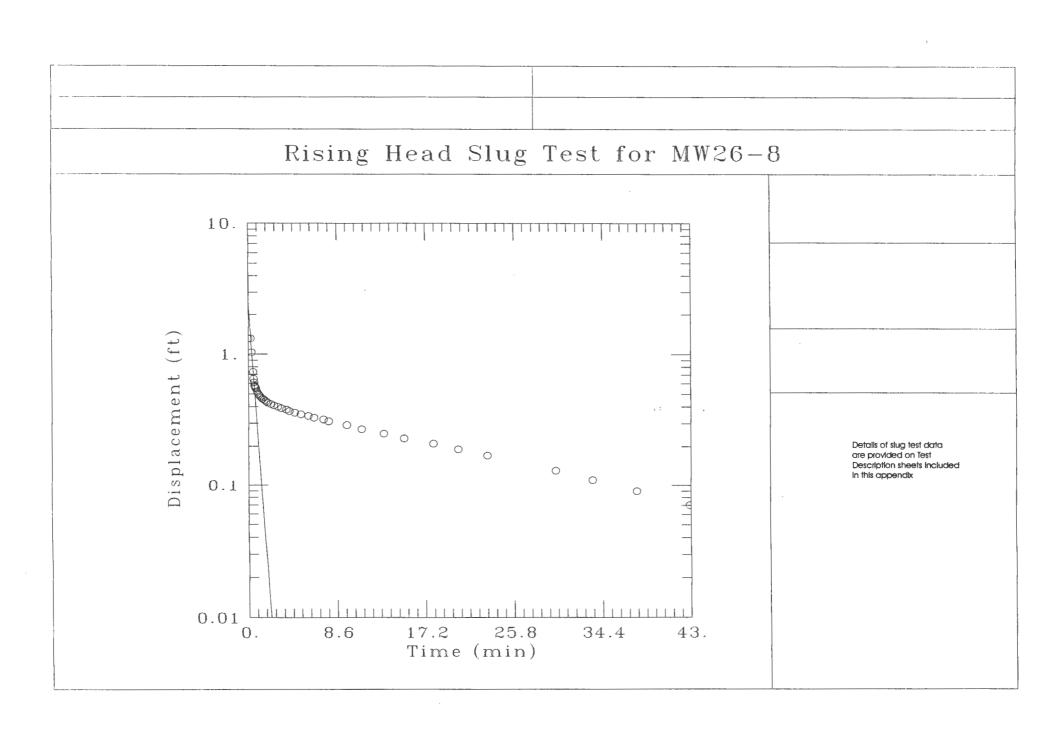


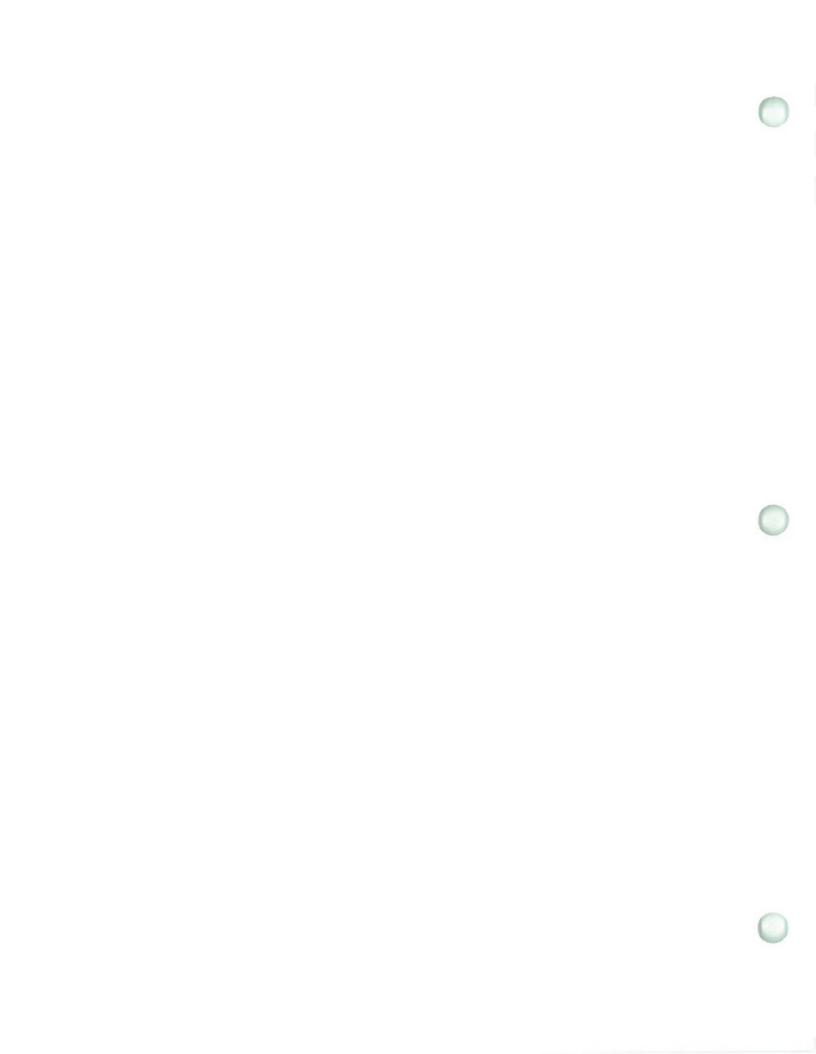


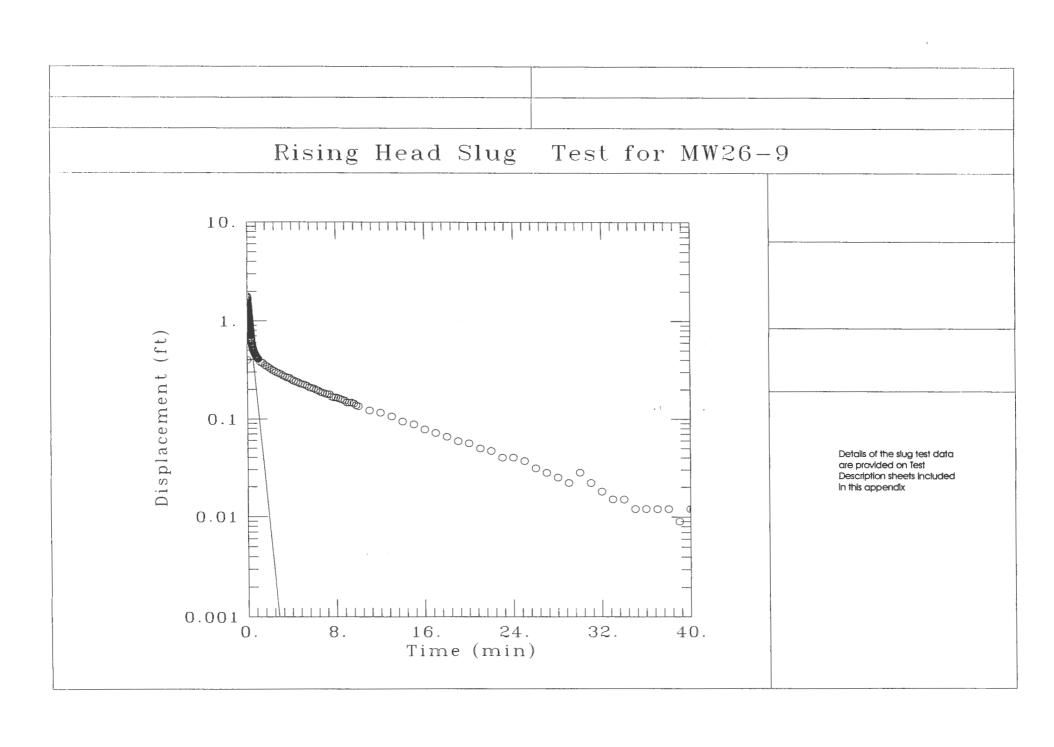


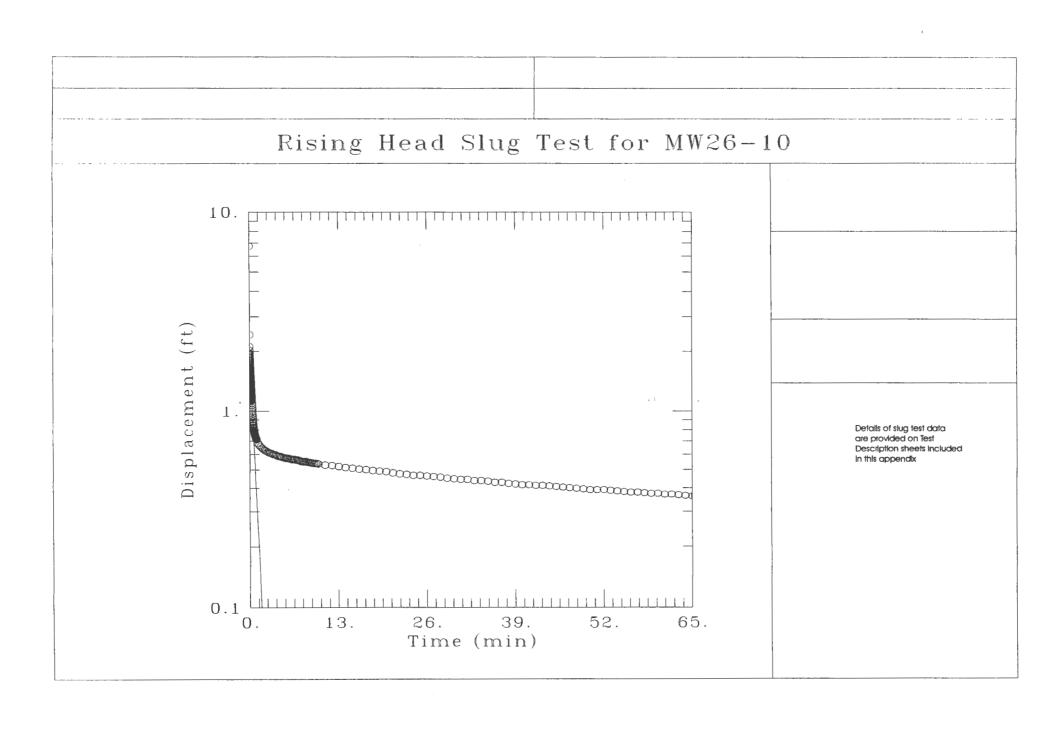


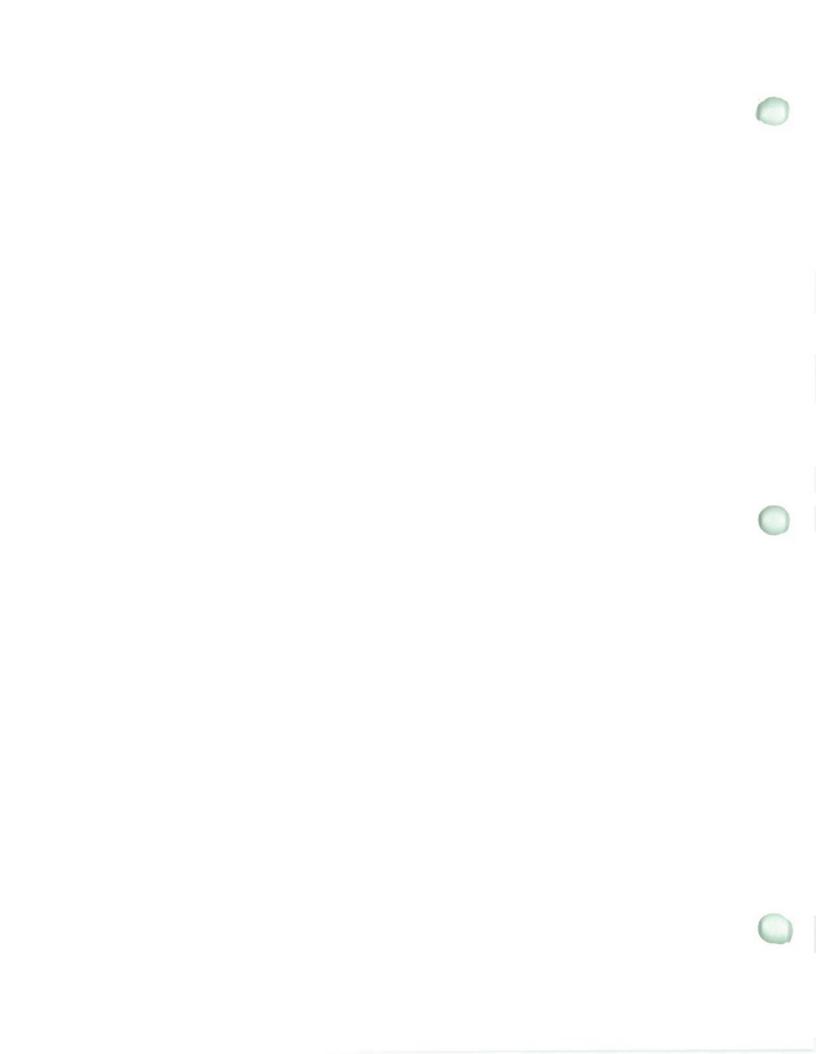












Depth to Water	Depth to Water in Deep Well	Comments
		Pump on
l	17.00	
4.45		
4.45	77.7	
4.45	17.40	
4.45		
4.45	18.00	
4.44		
4.44		
4.44		
4.44		
4.44		
4.44		
4.44		
4.44		
		Pump stopped - restarted
4.45		
4.45		
	in Shallow Well MW25-2 4.45 4.45 4.45 4.45 4.45 4.45 4.45 4.4	in Shallow Well  MW25-2  4.45  4.45  4.45  4.45  4.45  4.45  4.45  4.45  4.45  4.44  4.45  4.45  4.45  4.45  4.45  4.45  4.45  4.45  4.45

Time	Depth to Water in Shallow Well	Depth to Water in Deep Well	Comments
(minutes)	MW25-2	MW25-4D	
31	4.45		
32	4.45		
33	4.44		
34	4.44		
35	4.44		
36	4.44		
37	4.44		
38	4.44		
39	4.44		
40	4.44		
41	4.44		
42	4.44		
43	4.44		
44	4.44		
45	4.44		
46	4.44		
47	4.44		
48	4.44		
49	4.44		
50	4.44		
51	4.44		
52	4.44		
53	4.44		
54	4.44		
. 55	4.44		
56	4.44		
57	4.44		
58	4.44		
59	4.44		
60	4.44	17.83	Pump off

Time	Depth to Water in Shallow Well	Depth to Water in Deep Well	Comments
(minutes)	MW25-2	MW25-4D	
61	4.44	16.10	
62	4.44	14.62	
63	4.44	13.25	
64	4.44	12.12	
65	4.44	11.24	
66	4.44		
67	4.44	10.00	
68	4.44	9.58	
69	4.44	9.25	
70	4.44		
71	4.44	8.73	
72	4,44		
73	4.44		
74	4.44	8.25	
75	4.44	8.13	
76	4.44	8.05	
77	4.44	7.97	
· 78	4.44		
79	4.44	7.82	
80	4.44	7.77	1100000
81	4.44	7.70	
82	4.44	7.65	
83	4.44	7.61	
84	4.44	7.57	
85	4.44	7.54	
86	4.44	7.51	
87	4.44	7.47	
88	4.44	7.43	
89	4.44	7.40	
90	4.44	7.37	

Time	Depth to Water	Depth to Water	Comments
	in Shallow Well	in Deep Well	
(minutes)	MW25-2	MW25-4D	
91	4.44		
92	4.44	7.33	
93	4.44		
94	4.44	7.28	
95	4.44	7.26	
96	4.44		
97	4.44		
98	4.44		
99	4.44	7.19	
100	4.44		
· 101	4.44	7.14	
102	4.44		
103	4.44		
104	4.44	7.10	
105	4.44		
106	4.44		
107	4.44	7.06	
108	4.45		
109	4.45		
110	4.45	7.01	
111	4.45		
112	4.45	6.99	
113	4.45	6.98	
114	4.45		
115	4.45		
116	4.45		
117	4.45	6.94	
118	4.45	6.93	
119	4.45		
120	4.45	6.91	

Time	Depth to Water	Depth to Water	Comments
	in Shallow Well	in Deep Well	
(minutes)	MW25-3	MW25-5D	
0	3.96		Pump on
1	3.96		
2	3.96	19.00	
3	3.96	18.50	
4	3.96		
5	3.96		
6	3.96		
7	3.96	18.30	
8	3.96		
9	3.96	17.60	
10	3.96		
11	3.96		
12	3.96		
13	3.96	17.50	
14	3.96		
15	3.96	17.40	
16	3.96		
17	3.96		
18	3.96		
19	3.96		
20	3.96	17.90	
21	3.96		
22	3.96		
23	3.96		
24	3.96		
25	3.96	17.70	
26	3.96		
27	3.96		
28	3.96	17.70	
29	3.96		
30	3.96		

Time	Depth to Water in Shallow Well	Depth to Water in Deep Well	Comments
(minutes)	MW25-3	MW25-5D	
31	3.96		
32	3.96		
33	3.96		
34	3.96		
35	3.96		
36	3.96		
37	3.96		
38	3.96		
39	3.96		
40	3.96		
41	3.96		
42	3.96		
43	3.96		
44	3.96		
45	3.96		
46	3.96		
47	3.96		
48	3.96		
49	3.96		
50	3.96		
51	3.96		
52	3.96		
53	3.96		
54	3.96		
55	3.96		
56	3.96		Pump stops - restarted
57	3.96		
58	3.96		
59	3.96		
60	3.96	17.80	Pump off

Time	Depth to Water	Depth to Water	Comments
	in Shallow Well	in Deep Well	
(minutes)	MW25-3	MW25-5D	
61	3.96	18.01	
62	3.96	14.73	
63	3.96	13.50	
64	3.96	12.41	
65	3.96	11.51	
66	3.96	10.73	
67	3.96	10.12	
68	3.96	9.55	
69	3.96		
70	3.96	8.73	
71	3.96	8.43	
72	3.96		
73	3.96		
74	3.96	7.70	
75	3.96	7.55	
76	3.96	7.40	
77	3.96	7.26	
78	3.96	7.16	
79	3.96	7.06	
80	3.96	6.95	
81	3.97	6.87	
82	3.97	6.79	
83	3.97	6.72	
84	3.97	6.67	
85	3.97	6.61	
86	3.97	6.55	
87	3.97		
88	3.97	6.46	
89	3.97	6.42	
90	3.97	6.38	

Time	Depth to Water	Depth to Water	Comments
	in Shallow Well	in Deep Well	
(minutes)	MW25-3	MW25-5D	
91	3.97		
92	3.97	6.30	
93	3.97		
94	3.97	6.25	
95	3.97	6.21	
96	3.97		
97	3.97	6.16	
98	3.97	6.13	
99	3.97	6.11	
100	3.97		
101	3.97	6.05	
102	3.97	6.04	
103	3.97	6.02	
104	3.97	6.00	
105	3.97	5.98	
106	3.97	5.96	
107	3.97		
108	3.97		
109	3.97	5.90	
110	3.97	5.89	
111	3.97	5.88	
112	3.97	5.86	
113	3.97	5.84	
114	3.97	5.83	
115	3.97	5.81	
116	3.97	5.80	
117	3.97	5.78	
118	3.97	5.77	
119	3.97	5.76	
120	3.97	5.75	

Time	Depth to Water in Shallow Well	Depth to Water in Deep Well	Comments
(minutes)	MW25-6	MW25-7D	
0	4.07		Pump on
1	4.07		
2	4.07		
3	4.07		
4	4.07		
5	4.08		
6	4.09	14.80	
7	4.09		
8	4.10		
9	4.10	17.20	
10	4.10		
11	4.10	18.00	
12	4.11		
13	4.11		
14	4.11		
15	4.11	18.20	
16	4.11	18.20	
17	4.12		
18	4.13		
19	4.13		
20	4.13		
21	4.13		
22	4.13	18.20	
23	4.13		
24	4.14		
25	4.14		
26	4.14		
27	4.14		
28	4.15		
29	4.15		
30	4.15		

Time	Depth to Water	Depth to Water	Comments
	in Shallow Well	in Deep Well	
(minutes)	MW25-6	MW25-7D	
31	4.15	18.10	
32	4.15		
33	4.15	17.80	Pump stops
34	4.15		
35	NA		
36	4.16		Switch to back-up pump
37	4.16		
38	4.16		
39	4.16		
40	NA		
41	4.16		
42	NA		
43	4.16	17.40	
44	4.16		
45	4.17		
46	4.17	18.00	•
47	4.17		
48	4.17		
49	4.17		
50	4.17		
51	4.17		
52	4.17		
53	4.17		
54	4.17		
55	4.17		
56	NA NA		
57	4.17		
58	4.17		
59	4.17		
60	4.17		

Time	Depth to Water in Shallow Well	Depth to Water in Deep Well	Comments
(minutes)	MW25-6	MW25-7D	
61	4.18		
62	4.18		
63	4.18	23.00	
64	4.18		
65	4.19		
66	4.19	24.80	
67	4.19		
68	4.19	26.00	
69	4.19		
70	4.20		
71	4.20		
72	4.20		
73	4.20		
74	4.20	26.00	
75	4.20		
76	4.20		
77	4.20		
78	4.20		
79	4.20		
80	4.20		
81	NA		
82	4.20		
83	NA		
84	4.20	26.10	
85	NA		·
86	NA		
87	4.21		
88	NA		
89	NA		
90	4.21		Pump off

(minutes)	in Shallow Well MW25-6 4.21 4.21	in Deep Well MW25-7D 25.65	
91	4.21		
		25.65	
	4 21	20,00	
92	T. 2	25.34	
93	4.21	24.90	
94	4.21	24.48	
95	4.21	24.05	
96	4.21	23.60	
97	4.21	23.18	
98	4.21	22.74	
99	4.22	22.31	
100	4.22	21.80	
101	4.22	21.25	
102	4.22	20.15	
103	4.22	20.26	
104	4.22	19.78	
105	4.22	19.30	
106	4.22	18.84	
107	4.22	18.38	
108	4.22	17.95	
109	4.22	17.50	
110	4.21	17.10	
111	4.21	16.71	
112	4.21	16.30	7.00
113	4.21	15.90	
114	4.21	15.53	197
115	4.21	15.17	
116	4.21	14.80	
117	4.21	14.42	
118	4.21	14.11	
119	4.21	14.79	
120	4.21	14.48	

Time	Depth to Water	Depth to Water	Comments
	in Shallow Well	in Deep Well	
(minutes)	MW25-6	MW25-7D	
121	4.21	13.71	
122	4.20	12.86	
123	4.20	12.57	
124	4.20	12.29	
125	4.20	12.00	
126	4.20	11.75	
127	4.20	11.49	
128	4.20	11.23	
129	4.20	11.00	
130	4.19	10.75	
131	4.19	10.52	
132	4.18	10.30	
133	4.18	10.08	
134	4.18	9.86	
135	4.18	9.66	
136	4.18	9.46	
137	4.18	9.27	
138	4.18	9.10	
139	4.18	8.92	
140	4.18	8.74	
141	4.17	8.55	
142	4.17	8.40	
143	4.17	8.26	
144	4.17	8.10	
145	4.17	7.96	
146	4.17	7.82	
147	4.17	7.68	
148	4.17	7.55	
149	4.17	7.43	
150	4.17	7.30	

Time	Depth to Water in Shallow Well	Depth to Water in Deep Well	Comments
(minutes)	MW25-11	MW25-12D	
0	2.73		Pump on
1	2.73		•
2	2.73		
3	2.73		
4	2.73		
5	2.73		
6	2.73		
7	2.72		
8	2.72		
9	2.72		
10	2.72	10.50	
11	2.72		
12	2.72	12.50	
13	2.72		
14	2.72	14.00	
15	2.72		
16	2.72		
17	2.72		
18	2.72		
19	2.71		
20	2.71	15.00	
21	2.71	15.54	
22	2.71		
23	2.71		
24	2.71	16.00	
25	2.71		
26	2.71	16.40	
27	2.71	16.65	
28	2.71		
29	2.71		
30	2.71		

Time	Depth to Water in Shallow Well	Depth to Water in Deep Well	Comments
(minutes)	MW25-11	MW25-12D	
31	2.71		
32	2.70		
33	2.70		
34	2.70		
35	2.70		
36	2.70		
37	2.70		
38	2.70		
39	2.70	17.00	
40	2.70		
41	2.70		
42	2,70		
43	2.70	17.30	
44	2.70		
45	2.70		
46	2.70		
47	2.70		
48	2.70		
49	2.70		
50	2.70		
51	2.70	17.60	
52	2.70		
53	2.70		
54	2.70		
55	2.70	17.80	
. 56	2.70		
57	2.70		
58	2.70		
59	2.70		
60	2.70	17.90	Pump off

Time	Depth to Water	Depth to Water	Comments
	in Shallow Well	in Deep Well	
(minutes)	MW25-11	MW25-12D	
61	2.70	14.50	
62	2.70	12.01	
63	2.70	10.75	
64	2.70	9.85	
65	2.70	9.19	
66	2.70	8.70	
67	2.70	8.37	
68	2.70	8.03	
69	2.69	7.80	
70	2.69	7.50	
71	2.69	7.32	
72	2.69	7.10	
73	2.69	6.92	
74	2.69	6.77	
75	2.69	6.62	
76	2.69	6.49	
77	2.69	6.37	
78	2.69	6.24	
79	2.69		
80	2.69	6.02	
81	2.69	5.43	
82	2.69		
83	2.69	5.76	
84	2.69	5.69	
85	2.69	5.61	
86	2.69	5.54	
87	2.69	5.46	
88	2.69	5.37	
89	2.69	5.34	
90	2.69	5.27	

(minutes)         in Shallow Well MW25-12D         In Deep Well MW25-12D           91         2.69         5.22           92         2.69         5.17           93         2.69         5.11           94         2.69         5.06           95         2.69         96           96         2.69         4.96           97         2.69         4.92           98         2.69         4.88           99         2.69         4.83           100         2.69         4.79           101         2.69         4.75           102         2.69         4.68           104         2.69         4.68           104         2.69         4.64           105         2.69         4.55           106         2.69         4.58           107         2.69         4.55           108         2.68         4.52           109         2.68         4.48           110         2.68         4.43           111         2.68         4.37           114         2.68         4.35           115         2.68         4.35 </th <th>Time</th> <th>Depth to Water</th> <th>Depth to Water</th> <th>Comments</th>	Time	Depth to Water	Depth to Water	Comments
91         2.69         5.22           92         2.69         5.17           93         2.69         5.11           94         2.69         5.06           95         2.69         4.96           96         2.69         4.92           98         2.69         4.88           99         2.69         4.83           100         2.69         4.79           101         2.69         4.72           103         2.69         4.68           104         2.69         4.68           105         2.69         4.62           106         2.69         4.55           108         2.69         4.55           109         2.68         4.48           110         2.68         4.48           110         2.68         4.48           111         2.68         4.43           112         2.68         4.37           114         2.68         4.35           115         2.68         4.35           116         2.67         4.29           117         2.67         4.27           118		in Shallow Well	in Deep Well	
92       2.69       5.17         93       2.69       5.11         94       2.69       5.06         95       2.69       96         96       2.69       4.96         97       2.69       4.92         98       2.69       4.88         99       2.69       4.83         100       2.69       4.79         101       2.69       4.75         102       2.69       4.72         103       2.69       4.68         104       2.69       4.64         105       2.69       4.58         107       2.69       4.55         108       2.69       4.55         108       2.68       4.52         109       2.68       4.48         110       2.68       4.48         111       2.68       4.33         112       2.68       4.37         114       2.68       4.35         115       2.68       4.35         116       2.67       4.29         117       2.67       4.29         119       2.67       4.21 <td>(minutes)</td> <td></td> <td></td> <td></td>	(minutes)			
93       2.69       5.11         94       2.69       5.06         95       2.69       4.96         96       2.69       4.92         98       2.69       4.88         99       2.69       4.83         100       2.69       4.79         101       2.69       4.75         102       2.69       4.72         103       2.69       4.68         104       2.69       4.64         105       2.69       4.58         107       2.69       4.55         108       2.69       4.55         109       2.68       4.45         110       2.68       4.48         110       2.68       4.48         111       2.68       4.33         112       2.68       4.37         114       2.68       4.35         115       2.68       4.35         116       2.67       4.29         117       2.67       4.27         118       2.67       4.21	91	2.69		
94       2.69       5.06         95       2.69         96       2.69       4.96         97       2.69       4.92         98       2.69       4.88         99       2.69       4.83         100       2.69       4.79         101       2.69       4.75         102       2.69       4.72         103       2.69       4.68         104       2.69       4.64         105       2.69       4.62         106       2.69       4.58         107       2.69       4.55         108       2.68       4.52         109       2.68       4.48         110       2.68       4.46         111       2.68       4.43         112       2.68       4.37         114       2.68       4.35         115       2.68       4.35         116       2.67       4.29         117       2.67       4.27         118       2.67       4.24         119       2.67       4.21	92	2.69	5.17	
95       2.69       4.96         97       2.69       4.92         98       2.69       4.88         99       2.69       4.83         100       2.69       4.79         101       2.69       4.75         102       2.69       4.72         103       2.69       4.68         104       2.69       4.64         105       2.69       4.62         106       2.69       4.58         107       2.69       4.55         108       2.68       4.52         109       2.68       4.48         110       2.68       4.46         111       2.68       4.43         112       2.68         113       2.68       4.37         114       2.68       4.35         115       2.68       4.32         116       2.67       4.29         117       2.67       4.24         119       2.67       4.21	93			
96       2.69       4.92         97       2.69       4.92         98       2.69       4.88         99       2.69       4.83         100       2.69       4.79         101       2.69       4.75         102       2.69       4.72         103       2.69       4.68         104       2.69       4.64         105       2.69       4.58         107       2.69       4.58         107       2.69       4.55         108       2.68       4.52         109       2.68       4.48         110       2.68       4.43         111       2.68       4.43         112       2.68       4.37         114       2.68       4.35         115       2.68       4.32         116       2.67       4.29         117       2.67       4.27         118       2.67       4.21	94	2.69	5.06	
97       2.69       4.92         98       2.69       4.88         99       2.69       4.83         100       2.69       4.79         101       2.69       4.75         102       2.69       4.68         104       2.69       4.64         105       2.69       4.62         106       2.69       4.58         107       2.69       4.55         108       2.68       4.52         109       2.68       4.48         110       2.68       4.46         111       2.68       4.43         112       2.68       4.37         114       2.68       4.35         115       2.68       4.32         116       2.67       4.29         117       2.67       4.27         118       2.67       4.21	95	2.69		
98       2.69       4.88         99       2.69       4.83         100       2.69       4.79         101       2.69       4.75         102       2.69       4.72         103       2.69       4.68         104       2.69       4.64         105       2.69       4.58         107       2.69       4.55         108       2.68       4.52         109       2.68       4.48         110       2.68       4.46         111       2.68       4.43         112       2.68         113       2.68       4.37         114       2.68       4.35         115       2.68       4.32         116       2.67       4.29         117       2.67       4.27         118       2.67       4.21	96	2.69	4.96	
99       2.69       4.83         100       2.69       4.79         101       2.69       4.75         102       2.69       4.68         103       2.69       4.68         104       2.69       4.64         105       2.69       4.62         106       2.69       4.58         107       2.69       4.55         108       2.68       4.52         109       2.68       4.48         110       2.68       4.46         111       2.68       4.43         112       2.68       4.37         114       2.68       4.35         115       2.68       4.32         116       2.67       4.29         117       2.67       4.27         118       2.67       4.24         119       2.67       4.21	97	2.69	4.92	
100       2.69       4.79         101       2.69       4.75         102       2.69       4.68         103       2.69       4.68         104       2.69       4.64         105       2.69       4.58         106       2.69       4.55         107       2.69       4.55         108       2.68       4.52         109       2.68       4.48         110       2.68       4.46         111       2.68       4.43         112       2.68       4.37         113       2.68       4.37         114       2.68       4.35         115       2.68       4.32         116       2.67       4.29         117       2.67       4.27         118       2.67       4.24         119       2.67       4.21	98	2.69	4.88	
101       2.69       4.75         102       2.69       4.72         103       2.69       4.68         104       2.69       4.64         105       2.69       4.62         106       2.69       4.58         107       2.69       4.55         108       2.68       4.52         109       2.68       4.48         110       2.68       4.46         111       2.68       4.43         112       2.68       4.37         113       2.68       4.37         114       2.68       4.35         115       2.68       4.32         116       2.67       4.29         117       2.67       4.27         118       2.67       4.24         119       2.67       4.21	99	2.69	4.83	
102       2.69       4.72         103       2.69       4.68         104       2.69       4.64         105       2.69       4.62         106       2.69       4.58         107       2.69       4.55         108       2.68       4.52         109       2.68       4.48         110       2.68       4.46         111       2.68       4.43         112       2.68       4.37         113       2.68       4.37         114       2.68       4.35         115       2.68       4.32         116       2.67       4.29         117       2.67       4.27         118       2.67       4.24         119       2.67       4.21	100	2.69		
103       2.69       4.68         104       2.69       4.64         105       2.69       4.62         106       2.69       4.58         107       2.69       4.55         108       2.68       4.52         109       2.68       4.48         110       2.68       4.46         111       2.68       4.43         112       2.68       4.37         113       2.68       4.35         114       2.68       4.35         115       2.68       4.32         116       2.67       4.29         117       2.67       4.27         118       2.67       4.24         119       2.67       4.21	101	2.69	4.75	
104       2.69       4.64         105       2.69       4.58         106       2.69       4.58         107       2.69       4.55         108       2.68       4.52         109       2.68       4.48         110       2.68       4.46         111       2.68       4.43         112       2.68       4.37         114       2.68       4.35         115       2.68       4.32         116       2.67       4.29         117       2.67       4.27         118       2.67       4.24         119       2.67       4.21	102	2,69	4.72	
105       2.69       4.58         107       2.69       4.55         108       2.68       4.52         109       2.68       4.48         110       2.68       4.46         111       2.68       4.43         112       2.68       4.37         113       2.68       4.37         114       2.68       4.35         115       2.68       4.32         116       2.67       4.29         117       2.67       4.27         118       2.67       4.24         119       2.67       4.21	103	2.69	4.68	
106       2.69       4.58         107       2.69       4.55         108       2.68       4.52         109       2.68       4.48         110       2.68       4.46         111       2.68       4.43         112       2.68       4.37         113       2.68       4.37         114       2.68       4.35         115       2.68       4.32         116       2.67       4.29         117       2.67       4.27         118       2.67       4.24         119       2.67       4.21	104	2.69	4.64	
107     2.69     4.55       108     2.68     4.52       109     2.68     4.48       110     2.68     4.46       111     2.68     4.43       112     2.68     4.37       113     2.68     4.37       114     2.68     4.35       115     2.68     4.32       116     2.67     4.29       117     2.67     4.27       118     2.67     4.24       119     2.67     4.21	105	2.69	4.62	
108     2.68     4.52       109     2.68     4.48       110     2.68     4.46       111     2.68     4.43       112     2.68     4.37       113     2.68     4.37       114     2.68     4.35       115     2.68     4.32       116     2.67     4.29       117     2.67     4.27       118     2.67     4.24       119     2.67     4.21	106	2.69	4.58	
109       2.68       4.48         110       2.68       4.46         111       2.68       4.43         112       2.68       4.37         113       2.68       4.37         114       2.68       4.35         115       2.68       4.32         116       2.67       4.29         117       2.67       4.27         118       2.67       4.24         119       2.67       4.21	107	2.69	4.55	
110     2.68     4.46       111     2.68     4.43       112     2.68     4.37       113     2.68     4.37       114     2.68     4.35       115     2.68     4.32       116     2.67     4.29       117     2.67     4.27       118     2.67     4.24       119     2.67     4.21	108	2.68	4.52	
111     2.68     4.43       112     2.68     4.37       113     2.68     4.37       114     2.68     4.35       115     2.68     4.32       116     2.67     4.29       117     2.67     4.27       118     2.67     4.24       119     2.67     4.21	109	2.68	4.48	1772
112     2.68       113     2.68     4.37       114     2.68     4.35       115     2.68     4.32       116     2.67     4.29       117     2.67     4.27       118     2.67     4.24       119     2.67     4.21	110	2.68	4.46	
113     2.68     4.37       114     2.68     4.35       115     2.68     4.32       116     2.67     4.29       117     2.67     4.27       118     2.67     4.24       119     2.67     4.21	111	2.68	4.43	
114     2.68     4.35       115     2.68     4.32       116     2.67     4.29       117     2.67     4.27       118     2.67     4.24       119     2.67     4.21	112	2.68		
115     2.68     4.32       116     2.67     4.29       117     2.67     4.27       118     2.67     4.24       119     2.67     4.21	113	2.68	4.37	
115     2.68     4.32       116     2.67     4.29       117     2.67     4.27       118     2.67     4.24       119     2.67     4.21	114	2.68	4.35	
117     2.67     4.27       118     2.67     4.24       119     2.67     4.21	115	2.68		
118     2.67     4.24       119     2.67     4.21	116	2.67	4.29	
119 2.67 4.21	117	2.67	4.27	
119 2.67 4.21	118	2.67	4.24	
		2.67	4.21	
		2.67		

Time	Depth to Water in Shallow Well	Depth to Water in Deep Well	Comments
(minutes)	MW25-13	MW25-14D	
0	2.71	1010025-145	Pump on
1	2.71		1 dilip on
2	2.71		
3	2.71		
4	2.71		
5	2.71	9.50	
6	2.72	10.00	
7	2.72	10.30	
8	2.72		
9	2.72	10.55	
10	2.72		
11	2.72		
12	2.72		
13	2.73		
14	2.73	10.90	
15	2.73		
16	2.73		
17	2.73		
18	2.73		
19	2.73		
20	2.73	11.24	
21	2.73		
22	2.73		
23	2.73		
24	2.74		
25	2.74		
26	2.74		
27	2.74		
28	2.74		
29	2.74		Change pumps
30	NA		

Time	Depth to Water in Shallow Well	Depth to Water in Deep Well	Comments
(minutes)	MW25-13	MW25-14D	
31	NA		
32	NA		
33	2.74		
34	2.74		
35	2.74	12.50	
36	2.74		
37	2.74	15.50	
38	2.74	16.30	
39	2.74		
40	2.74		
41	2.74		
42	2.74		
43	2.74	19.00	
. 44	2.74		
45	2.74		
46	2.75		
47	2.75		
48	2.75		
49	2.75		
50	2.75	19.50	
51	2.75		
52	2.75		
53	2.75		
54	2.75	19.50	
55	2.76		
56	2.76		
57	2.76		
58	2.76		
59	2.76		
60	2.76	19.68	Pump off

Time	Depth to Water	Depth to Water	Comments
	in Shallow Well	in Deep Well	
(minutes)	MW25-13	MW25-14D	
61	2.76	15.95	
62	2.76	12.61	
63	2.76	10.38	
64	2.76	9.17	
65	2.76	8.26	
66	2.76	7.68	
67	2.76	7.24	
68	2.76	6.88	
69	NA		
70	2.77	6.43	
71	NA		
72	2.77	6.08	
73	NA		
74	2.77	5.83	
75	2.77	5.72	
76	2.77	5.63	
77	2.77	5.53	
78	2.77	5.45	
79	2.77	5.37	
80	2.77	5.31	
81	2.77	5.23	
82	2.78	5.16	
83	2.78	5.11	
84	2.78	5.05	
85	2.78	4.99	
- 86	2.78	4.95	
87	2.78		
88	2.78	4.85	
89	2.78	4.80	
90	2.78	4.76	

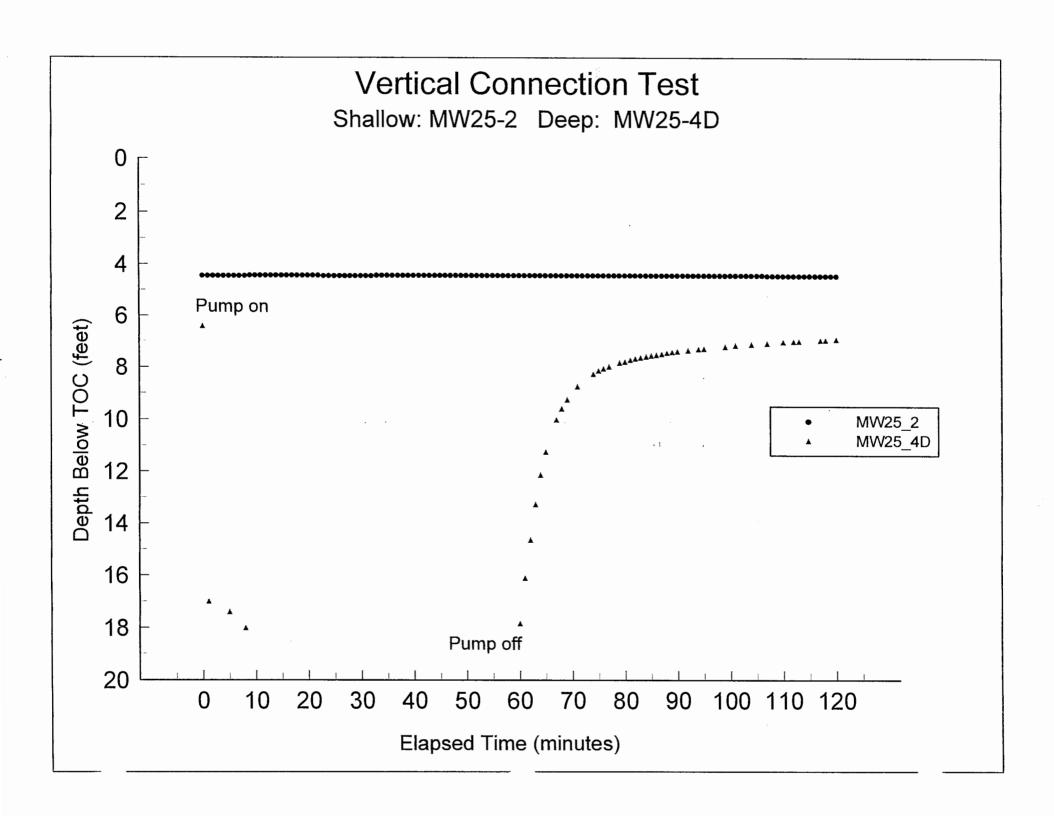
Time	Depth to Water in Shallow Well	Depth to Water in Deep Well	Comments
(mainsutan)	1	MW25-14D	
(minutes)	MW25-13		
91	2.78	4.71	
92	2.78	4.68	
93	2.78	4.64	44.
94	2.78	4.60	
95	2.78	4.57	
96	2.78	4.54	
97	2.78	4.50	
98	2.78	4.47	
99	2.78	4.43	
100	2.79	4.41	
101	2.79	4.38	
102	2.79	4.35	
103	2.79	4.32	
104	2.79		
105	2.79	4.27	
106	2.79		
107	2.79	4.23	
108	2.79		
109	2.79	4.18	
110	2.79	4.15	
111	2.79	4.13	7,1
112	2.79		
113	2.79	4.09	
114	2.79		
115	2.79	4.04	
116	2.79		
117	2.79	4.01	7777.4
118	2.79	4.00	
119	2.79	3.98	
120	2.79	3.97	

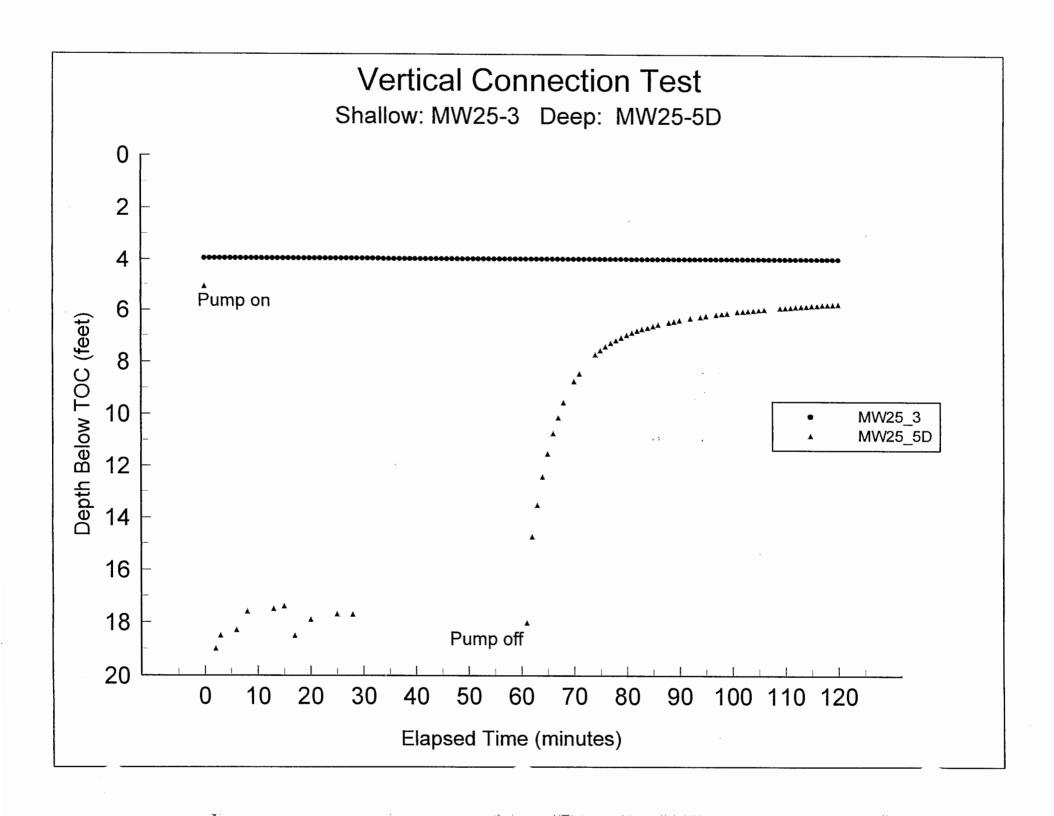
Time	Depth to Water in Shallow Well	Depth to Water in Deep Well	Comments
(minutes)	MW25-15	MW25-16D	
0	3.08		Pump on
1	3.07		
2	3.07		
3	3.07		
4	3.07		
5	3.08		
6	3.08		
7	3.08		
8	3.08	20.00	
9	3.08		
10	3.08		
11	3.08		
12	3.08		
13	3.08		
14	3.08		
15	3.08		
16	3.08		
17	3.08		
18	3.08		
19	3.08		
20	3.08		
21	3.08		
22	3.08		
23	3.08		
. 24	3.08		
25	3.08		
26	3.08		
27	3.08		
28	3.08		
29	3.08		
30	3.08		

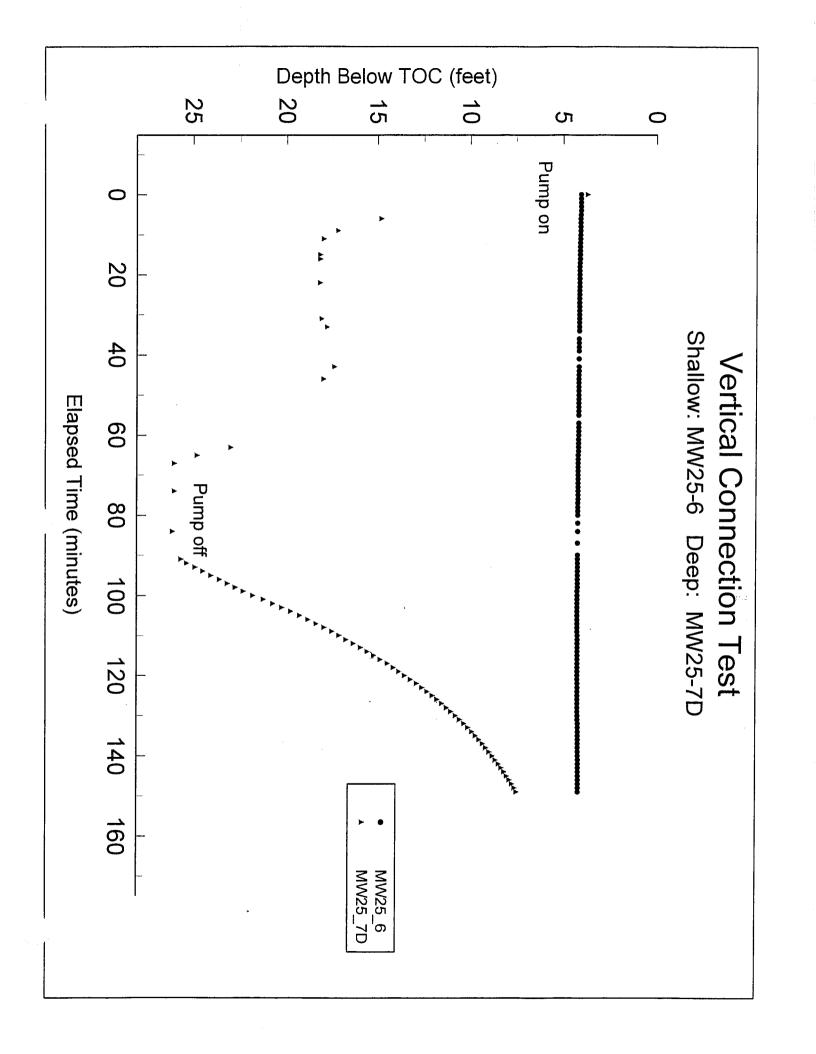
Time	Depth to Water in Shallow Well	Depth to Water in Deep Well	Comments
(minutes)	MW25-15	MW25-16D	
31	3.08		
32	3.08		
33	3.08		
34	3.08		
35	3.08		
36	3.08		
37	3.08		
38	3.08		
39	3.08		
40	3.08		
41	3.08		
42	3.08		
43	3.08		
44	3.08		
45	3.08		
46	3.08		
47	3.08		
48	3.08		
49	3.08		
50	3.08		
51	3.08		
52	3.08		
53	3.08		
54	3.08		
55	3.08		
56	3.08		
57	3.08		
58	3.08		
59	3.08		
60	3.08	20.30	Pump off

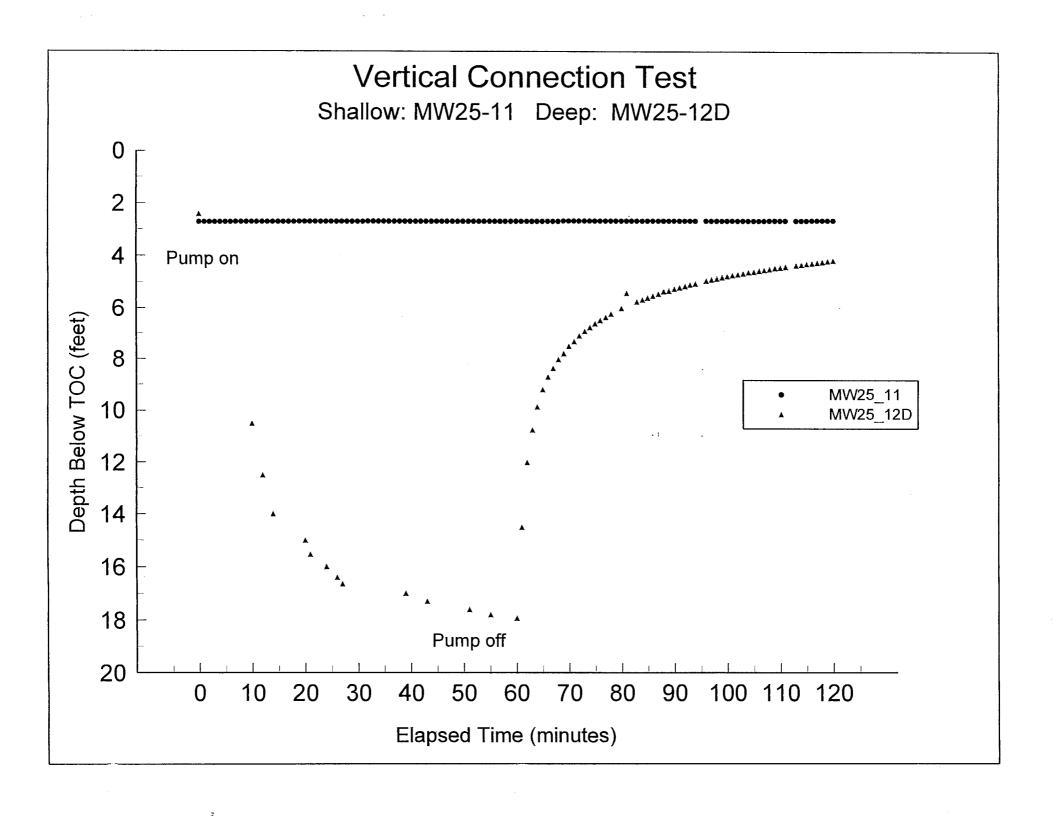
Time	Depth to Water	Depth to Water	Comments
	in Shallow Well	in Deep Well	
(minutes)	MW25-15	MW25-16D	
61	3.08	17.90	
62	3.08	16.59	
63	3.08	15.14	
64	3.08	14.02	
65	3.08	13.15	
66	3.08	12.44	
67	3.08	13.88	
68	3.08	11.37	
69	3.08	10.99	
70	3.08	10.63	
71	3.08		
72	3.08	10.00	
73	3.08	9.73	
74	3.08		
75	3.08		
76	3.08	9.11	
77	3.08	8.91	
78	3.08		
79	3.08	5.58	
80	3.08		
81	3.08	8.30	
82	3.08	8.17	
83	3.08	8.06	
84	3.08		
85	3.08	7.84	
86	3.08		
87	3.08	7.65	
88	3.08	7.54	
89	3.08	7.48	
90	3.08	7.40	

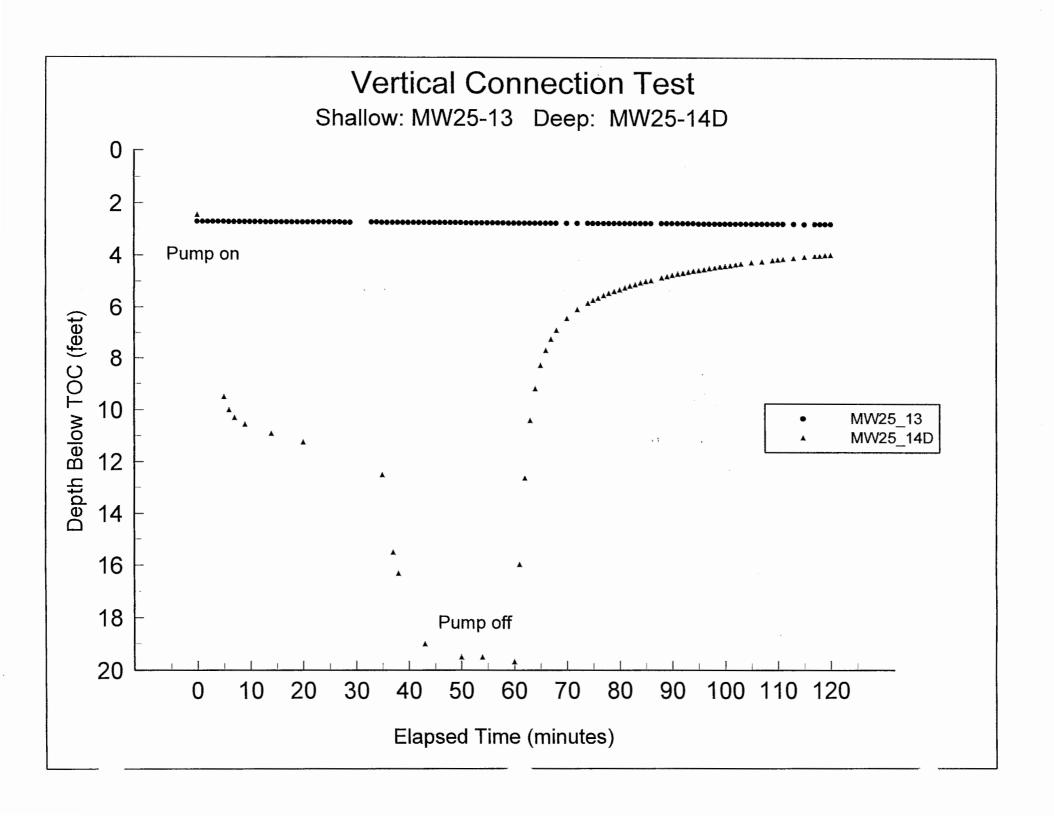
Time	Depth to Water	Depth to Water	Comments
	in Shallow Well	in Deep Well	
(minutes)	MW25-15	MW25-16D	
91	3.08	7.33	
92	3.08		
93	3.08	7.19	
94	3.08		
95	3.08		
96	3.08	7.00	
97	3.08		
98	3.08		
99	3.08		
100	3.08		
101	3.08	6.73	
102	3,08		
103	3.08	6.64	
104	3.08		
105	3.08	6.55	
106	3.08		
107	3.08		
108	3.08		
109	3.08		
110	3.08	6.37	
111	3.08		
112	3.08	6.31	
113	3.08	6.28	
114	3.08	6.23	
115	3.08	6.21	
116	3.08	6.18	
117	3.08	6.15	
118	3.08	6.12	
119	3.08	6.10	
120	3.08	6.08	

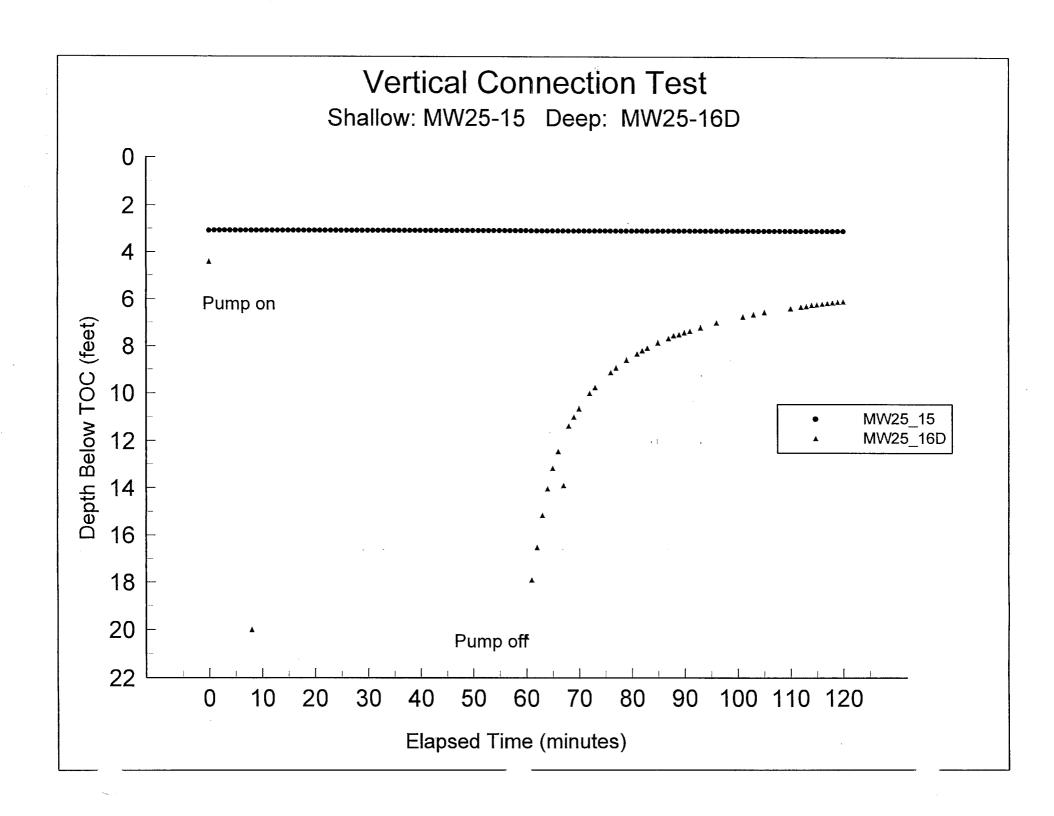














## United States Department of the Interior



FISH AND WILDLIFE SERVICE 3817 Luker Road Cortland, New York 13045

June 21, 1994

Mr. Michael Duchesneau Project Manager Engineering-Science, Inc. Prudential Center Boston, MA 02199

Dear Mr. Duchesneau:

This responds to your letter of May 12, 1994, requesting information on the presence of endangered or threatened species in the vicinity of the Seneca Army Depot located at Romulus, Seneca County, New York.

Except for occasional transient individuals, no Federally listed or proposed endangered or threatened species under our jurisdiction are known to exist in the project impact area. Therefore, no Biological Assessment or further Section 7 consultation under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) is required with the U.S. Fish and Wildlife Service (Service). Should project plans change, or if additional information on listed or proposed species becomes available, this determination may be reconsidered. A compilation of Federally listed and proposed endangered and threatened species in New York is enclosed for your information.

The above comments pertaining to endangered species under our jurisdiction are provided pursuant to the Endangered Species Act. This response does not preclude additional Service comments under the Fish and Wildlife Coordination Act or other legislation.

For additional information on fish and wildlife resources or State-listed species, we suggest you contact:

New York State Department of Environmental Conservation Region 8 6274 East Avon-Lima Road Avon, NY 14414 (716) 226-2466 New York State Department of Environmental Conservation Wildlife Resources Center - Information Serv. New York Natural Heritage Program 700 Troy-Schenectady Road Latham, NY 12110-2400 (518) 783-3932

The National Wetlands Inventory (NWI) maps of the Dresden, Geneva South, Ovid, and Romulus Quadrangles are now available in draft that and there may be wetlands in the project vicinity. Copies of NWI maps may be obtained through:

CLEARS Cornell University 464 Hollister Hall Ithaca, NY 14853 (607) 255-6520

An order form listing the topographic quadrangles that have been mapped in New York State is enclosed for your information. However, while the NWI maps are reasonably accurate, they should not be used in lieu of field surveys for determining the presence of wetlands or delineating wetland boundaries for Federal regulatory purposes.

Work in certain waters and wetlands of the United States may require a permit from the U.S. Army Corps of Engineers (Corps). If a permit is required, in reviewing the application pursuant to the Fish and Wildlife Coordination Act, the Service may concur, with or without stipulations, or recommend denial of the permit depending upon the potential adverse impacts on fish and wildlife resources associated with project implementation. The need for a Corps permit may be determined by contacting Mr. Paul Leuchner, Chief, Regulatory Branch, U.S. Army Corps of Engineers, 1776 Niagara Street, Buffalo, NY 14207 (telephone: (716) 879-4321).

If you have any questions regarding this letter, contact Tom McCartney at (607) 753-9334.

Sincerely,

ACTING FOR

David A. Stilwell Acting Field Supervisor

#### **Enclosures**

cc: NYSDEC, Avon, NY (Regulatory Affairs)

NYSDEC, Latham, NY COE, Buffalo, NY

EPA, Chief, Marine & Wetlands Protection Branch, New York, NY

# FEDERALLY LISTED AND PROPOSED ENDANGERED AND THREATENED SPECIES IN NEW YORK

Common Name	Scientific Name	Status	Distribution
FISHES Sturgeon, shortnose*	Acipenser brevirostrum	E	Hudson River & other Atlantic coastal rivers
REPTILES Turtle, green*	Chelonia mydas	T	Oceanic summer visitor coastal waters
Turtle, hawksbill*	Eretmochelys imbricata	E	Oceanic summer visitor coastal waters
Turtle, leatherback*	Dermochelys coriacea	E	Oceanic summer resident coastal waters
Turtle, loggerhead*	Caretta caretta	T	Oceanic summer resident coastal waters
Turtle, Atlantic ridley*	Lepidochelys kempii	Е	Oceanic summer resident coastal waters
BIRDS			
Eagle, bald Falcon, peregrine	Haliaeetus leucocephalus Falco peregrinus	E E	Entire state Entire state - re- establishment to former breeding range in
Plover, piping	Charadrius melodus	E T	progress Great Lakes Watershed Remainder of coastal New York
Tern, roseate	Sterna dougallii dougallii	E	Southeastern coastal portions of state
MAMMALS			
Bat, Indiana Cougar, eastern	Myotis sodalis Felis concolor couguar	E E	Entire state Entire state - probably extinct
Whale, blue*	Balaenoptera musculus	E	Oceanic
Whale, finback*	Balaenoptera physalus	E	Oceanic ·
Whale, humpback*	Megaptera novaeangliae	E E E	Oceanic
Whale, right*	Eubalaena glacialis	E	Oceanic
Whale, sei* Whale, sperm*	Balaenoptera borealis Physeter catodon	E E	Oceanic Oceanic
MOLLUSKS Snail, Chittenango	Succinea chittenangoensis	T	Madison County
ovate amber Mussel, dwarf wedge	Alasmidonta heterodon	· E	Orange County - lower Neversink River
	_		

<sup>\*</sup> Except for sea turtle nesting habitat, principal responsibility for these species is vested with the National Marine Fisheries Service.

# FEDERALLY LISTED AND PROPOSED ENDANGERED AND THREATENED SPECIES IN NEW YORK (Cont'd)

Common Name	Scientific Name	Status	Distribution
BUTTERFLIES Butterfly, Kamer blue	Lycaeides melissa samuelis	Е	Albany, Saratoga, Warren, and Schenectady Counties
PLANTS Monkshood, northern wild	Aconitum noveboracense	Т	Ulster, Sullivan, and Delaware Counties
Pogonia, small whorled	Isotria medeoloides	Е	Entire state
Swamp pink	Helonias bullata	T	Staten Island - presumed extirpated
Gerardia, sandplain	Agalinis acuta	E	Nassau and Suffolk Counties
Fern, American hart's-tongue	Phyllitis scolopendrium var. americana	Т	Onondaga and Madison Counties
Orchid, eastern prairie fringed	Platanthera leucophea	T	Not relocated in New York
Bulrush, northeastern	Scirpus ancistrochaetus	E	Not relocated in New York
Roseroot, Leedy's	Sedum integrifolium ssp. Leedyi	T	West shore of Seneca Lake
Amaranth, seabeach	Amaranthus pumilus	T	Atlantic coastal plain beaches

E=endangered T=threatened P=proposed

SD STUDY I ARE MATRI ANALYSIS METHO SAMPLE I QC COD	D: A: X: D: D:	53883 PHASE 1 25/26_QC WATER 524.2 SENLAK SA	53883 PHASE 1 25/26_QC WATER 524.2 TB91995 TB
PARAMETER	UNIT	VALUE O	VALUE O
1 1,1,1,2-Tetrachloroethane	UG/L	1 U	1 U
2 1,1,1-Trichloroethane	UG/L	1 U	1 U
3 1,1,2,2-Tetrachloroethane	UG/L	1 U	1 U
4 1.1.2-Trichloroethane	UG/L	1 U	1 U
5 1,1-Dichloroethane	UG/L	1 U	1 U
6 1,1-Dichloroethene	UG/L	1 U	1 U
7 1,1-Dichloropropene	UG/L	1 U	1 U
8 1,2,3-Trichlorobenzene	UG/L	1 U	1 U
9 1,2,3-Trichloropropane	UG/L	1 U	1 U
10 1,2,4-Trichlorobenzene	UG/L	1 U	1 U
11 1,2,4-Trimethylbenzene	UG/L	1 U	1 U
12 1,2-Dibromo-3-Chloropropane	UG/L	1 U	1 U
13 1,2-Dibromoethane	UG/L	1 U	1 U
14 1,2-Dichlorobenzene	ÚG/L	1 U	1 U
15 1,2-Dichloroethane	ΰG/L	1 U	1 U
16 1,2-Dichloropropane	UG/L	1 U	1 U
17 1,3,5-Trimethylbenzene	UG/L	1 U	1 U
18 1,3-Dichlorobenzene	UG/L	1 U	1 U
19 1,3-Dichloropropane	UG/L	1 U	1 U
20 1,4-Dichlorobenzene	UG/L	1 U	1 U
21 2,2-Dichloropropane	UG/L	1 U	1 U
22 2-Butanone	UG/L	5 U	5 U
23 2-Chlorotoluene	UG/L	1 U	1 U
24 2-Hexanone	UG/L	5 U	5 U
25 4-Chlorotoluene	UG/L	1 U	1 U
26 4-Methyl-2-Pentanone	UG/L	5 U	5 U
27 Acetone	UG/L	5 U	5 U
28 Benzene	UG/L	1 U	1 U
29 Bromobenzene	UG/L	1 U	1 U
30 Bromochloromethane	UG/L	1 U	1 U
31 Bromodichloromethane	UG/L	1 U	1 U
32 Bromoform	UG/L	1 U	1 U
33 Bromomethane	UG/L	1 U	1 U

STUD	REA: RIX: HOD: E ID:	53883 PHASE 1 25/26_QC WATER 524.2 SENLAK SA	53883 PHASE 1 25/26_QC WATER 524.2 TB91995 TB
PARAMETER	UNIT	VALUE Q	VALUE Q
34 Carbon Disulfide	UG/L	1 U	1 U
35 Carbon Tetrachloride	UG/L	1 U	1 U
36 Chlorobenzene	UG/L	1 U	1 U
37 Chloroethane	UG/L	1 U	1 U
38 Chloroform	UG/L	1 U	1 U
39 Chloromethane	UG/L	1 U	1 U
40 Dibromochloromethane	UG/L	1 U	1 U
41 Dibromomethane	UG/L	iÜ	1 U
42 Dichlorodifluromethane	UG/L	1 U	1 U
43 Ethylbenzene	UG/L	1 U	1 U
44 Hexachlorobutadiene	UG/L	1 U	1 U
45 Isopropylbenzene	UG/L	1 U	1 U
46 Methylene Chloride	UG/L	1 U	1 U
47 Naphthalene	UG/L	1 U	1 U
48 Styrene	UG/L	1 U	1 U
49 Tetrachloroethene	UG/L	1 U	1 U
50 Toluene	UG/L	1 U	1 U
51 Trichloroethene	UG/L	1 U	1 U
52 Trichlorofluoromethane	UG/L	1 U	1 U
53 Vinyl Chloride	UG/L	1 U	1 U
54 Xylene (total)	UG/L	1 U	1 U
55 cis-1,2-Dichloroethane	UG/L	1 U	1 U
56 cis-1,3-Dichloropropene	UG/L	ıŭ	1 U
57 n-Butylbenzene	UG/L	1 U	1 U
58 n-Propylbenzene	UG/L	1 U	1 U
59 p-Isopropyltoluene	UG/L	1 U	1 U
60 sec-Butylbenzene	UG/L	1 U	1 U
61 tert-Butylbenzene	UG/L	1 U	1 U
62 trans-1,2-Dichloroethene	UG/L	1 U	1 U
63 trans-1,3-Dichloropropene	UG/L	i Ü	1 U
SVOCs			
	SDG:	53883	
STUD		PHASE 1	
AREA:		25/26 QC	
MATRIX:		WATER	
ANALYSIS METHOD:		NYSDEC-CLP	
SAMPLE ID:		SENLAK	
QC C		SA	
PARAMI	TER UNIT	VALUE Q	
1 1,2,4-Trichlorobenzene	UG/L	11 U	
2 1,2-Dichlorobenzene	UG/L	11 U	
,,	00.0	11 0	

	SDG:	53883	53883
STUD		PHASE 1	PHASE 1
AF	REA:	25/26_QC	25/26_QC
MATRIX:		WATER	WATER
ANALYSIS METH	IOD:	524,2	524.2
SAMPLI	E ID:	SENLAK	TB91995
QC CC	DDE:	SA	TB
PARAMETER	UNIT	VALUE Q	VALUE Q
3 1,3-Dichlorobenzene	UG/L	11 U	
4 1,4-Dichlorobenzene	UG/L	11 U	
5 2,4,5-Trichlorophenol	UG/L	26 U	
6 2,4,6-Trichlorophenol	UG/L	11 U	
7 2,4-Dichlorophenol	UG/L	11 U	
8 2,4-Dimethylphenol	UG/L	11 U	
9 2,4-Dinitrophenol	UG/L	26 U	
10 2,4-Dinitrotoluene	UG/L	11 U	
11 2,6-Dinitrotoluene	UG/L	11 U	
12 2-Chloronaphthalene	UG/L	11 U	
13 2-Chlorophenol	UG/L	11 U	
14 2-Methylnaphthalene	UG/L	11 U	
15 2-Methylphenol	UG/L	11 U	
16 2-Nitroaniline	UG/L	26 U	
17 2-Nitrophenol	UG/L	11 U	
18 3,3'-Dichlorobenzidine	UG/L	11 U	
19 3-Nitroaniline	UG/L	26 U	
20 4,6-Dinitro-2-methylphenol	UG/L	26 U	
21 4-Bromophenyl-phenylether	UG/L	11 U	
22 4-Chloro-3-methylphenol	UG/L	11 U	
23 4-Chloroaniline	UG/L	11 U	
24 4-Chlorophenyl-phenylether	UG/L	11 U	
25 4-Methylphenol	UG/L	11 U	
26 4-Nitroaniline	UG/L	26 U	
27 4-Nitrophenol	UG/L	26 U	
28 Acenaphthene	UG/L	11 U	
29 Acenaphthylene	UG/L	11 U	
30 Anthracene	UG/L	11 U	
31 Benzo(a)anthracene	UG/L	11 U	
32 Benzo(a)pyrene	UG/L	11 U	
33 Benzo(b)fluoranthene	UG/L	11 U	
34 Benzo(g,h,i)perylene	UG/L	11 U	
35 Benzo(k)fluoranthene	UG/L	11 U	
36 Butylbenzylphthalate	UG/L	11 U	
37 Carbazole	UG/L	11 U	
38 Chrysene	UG/L	11 U	
39 Di-n-butylphthalate	UG/L	2 BJ	
40 Di-n-octylphthalate	UG/L	11 U	
41 Dibenz(a,h)anthracene	UG/L	11 U	
42 Dibenzofuran	UG/L	11 U	
43 Diethylphthalate	UG/L	11 U	
44 Dimethylphthalate	UG/L	11 U	
45 Fluoranthene	UG/L	11 U	

SI	DG:	53883	53883
STUDY	ID:	PHASE 1	PHASE 1
AR		25/26 QC	25/26 QC
MATE		WATER	WATER
ANALYSIS METHO		524.2	524.2
SAMPLE		SENLAK	TB91995
QC CO			
QC CO.	DE:	SA	TB
PARAMETER	UNIT	VALUE O	VALUE O
46 Fluorene		VALUE Q	VALUE Q
47 Hexachlorobenzene	UG/L UG/L	11 U	
		11 U	
48 Hexachlorobutadiene	UG/L	11 U	
49 Hexachlorocyclopentadiene	UG/L	11 U	
50 Hexachloroethane	UG/L	11 U	
51 Indeno(1,2,3-cd)pyrene	UG/L	11 U	
52 Isophorone	UG/L	11 U	
53 N-Nitroso-di-n-propylamine	UG/L	11 U	
54 N-Nitrosodiphenylamine (1)	UG/L	11 U	
55 Naphthalene	UG/L	11 U	
56 Nitrobenzene	UG/L	11 U	
57 Pentachlorophenol	UG/L	26 U	
58 Phenanthrene	UG/L	11 U	
59 Phenol	ÚG/L	11 U	
60 Pyrene	ÚG/L	11 U	
PESTICIDES			
S	DG:	53883	
STUDY	ID:	PHASE 1	
AR	EA:	25/26 QC	
MATE	XIX:	WATER	
ANALYSIS METH	OD:	NYSDEC-CLP	
SAMPLE	ID:	SENLAK	
QC CO	DE:	SA	
PARAMETER	UNIT	VALUE Q	
1 4,4'-DDD	UG/L	0.1 U	
2 4,4'-DDE	UG/L	0.1 U	
3 4,4'-DDT	UG/L	0.1 U	
4 Aldrin	UG/L	0.052 U	
5 Aroclor-1016	UG/L	1 U	
6 Arocior-1221	UG/L	2.1 U	
7 Aroclor-1232	UG/L	1 U	
8 Aroclor-1242	UG/L	1 U	
9 Aroclor-1248	UG/L	1 U	
10 Aroclor-1254	UG/L	1 U	
11 Aroclor-1260	UG/L	i U	
12 Dieldrin	UG/L	0.1 U	
13 Endosulfan I	UG/L	0.052 U	
14 Endosulfan II	UG/L	0.1 U	
15 Endosulfan sulfate	UG/L	0.1 U	
16 Endrin	UG/L		
17 Endrin aldehyde	UG/L	0.1 U	
17 Endrin aidenyde	UG/L	0.1 U	

		CDC.	52002	£2002
	COTT T	SDG:	53883	53883
		DY ID:	PHASE 1	PHASE 1
		AREA:	25/26_QC	25/26_QC
		ATRIX:	WATER	WATER
	ANALYSIS ME		524.2	524.2
		LE ID:	SENLAK	TB91995
	QC	CODE:	SA	ТВ
	PARAMETER	UNIT	VALUE O	VALUE Q
18	Endrin ketone	UG/L	0.1 U	
19	Heptachlor	UG/L	0.052 U	
	Heptachlor epoxide	UG/L	0.052 U	
	Methoxychlor	UG/L	0.52 U	
	Toxaphene	UG/L	5.2 U	
	alpha-BHC	UG/L	0.052 U	
	alpha-Chlordane	UG/L	0.052 U	
	beta-BHC	UG/L	0.052 U	
	delta-BHC	UG/L	0.052 U	
	gamma-BHC (Lindane)	UG/L	0.052 U	
	gamma-Chlordane	UG/L	0.052 U	
	8	0.0.0	2	
MET	CALS			
		SDG:	53883	
	STUDY ID:		PHASE 1	
		AREA:	25/26_QC	
		ATRIX:	WATER	
	ANALYSIS METHOD: SAMPLE ID:		NYSDEC-CLP	
			SENLAK	
	QC	CODE:	SA	
	PARAMETER	UNIT	VALUE O	
1	Aluminum	UG/L	12.2 U	
2	Antimony	UG/L	2.4 U	
3	Arsenic	UG/L	2.1 U	
4	Barium	UG/L	28.6 B	
5	Beryllium	UG/L	0.14 B	
6	Cadmium	UG/L	0.2 U	
7	Calcium	UG/L	40700	
8	Chromium	UG/L	1.3 U	
9	CobaIt	UG/L	0.8 U	
	Соррег	UG/L	1.1 U	
11	Cyanide	UG/L	6.9 U	
12	Iron	UG/L	<b>24.2</b> U	
13	Lead	UG/L	1.7 U	
14	Magnesium	UG/L	10400	
15	Manganese	UG/L	1.6 B	
16	Mercury	UG/L	0.02 U	
17	Nickel	UG/L	1.6 U	
18	Potassium	UG/L	3040 B	
19	Selenium .	UG/L	3 U	
20	Silver	UG/L	1.5 U	
21	Sodium	UG/L	89300	

SDC	<del>}</del> :	53883	53883
STUDY II	):	PHASE 1	PHASE 1
AREA	<b>\</b> :	25/26_QC	25/26_QC
MATRIX	ζ:	WATER	WATER
ANALYSIS METHOI	):	524.2	524.2
SAMPLE II	):	SENLAK	TB91995
QC CODI	E:	SA	TB
PARAMETER	UNIT	VALUE Q	VALUE Q
22 Thallium	UG/L	3.5 U	
23 Vanadium	UG/L	1.1 U	
24 Zinc	UG/L	1.6 B	

VOC	S				
	SDO STUDY IE MATRIX LAB SAMP. IE EPA SAMP. IE QC CODE % MOISTURE % SOLIDS	): (: (): (): (): (): ():	53906 PHASE 1 WATER 271804 TB92095 TB	53906 PHASE 1 WATER 272084 TB92195 TB	53906 PHASE 1 WATER 272146 TB92395 TB 0
	PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q
	1,1,1,2-Tetrachloroethane	ug/L	0.5 U	0.5 U	
	1,1,1-Trichloroethane	ug/L	0.5 U	0.5 U	10 U
	1,1,2,2-Tetrachloroethane	ug/L	0.5 U	0.5 U	10 U
	1,1,2-Trichloroethene	ug/L			10 U
	1,1-Dichloroethane	ug/L	0.5 U	0.5 U	10 U
	1,1-Dichloroethene	ug/L	0.5 U	0.5 U	10 U
	1,1-Dichloropropene	ug/L	0.5 U	0.5 U	
	1,2,3-Trichlorobenzene	ug/L	0.5 U	0.5 U	
	1,2,3-Trichloropropane	ug/L	0.5 U	0.5 U	
	1,2,4-Trichlorobenzene	ug/L	0.5 U	0.5 U	
	1,2,4-Trimethylbenzene	ug/L	0.5 U	0.5 U	
12	1,2-Dibromo-3-Chloropropane	ug/L	0.5 U	0.5 U	
13	1,2-Dibromoethane	ug/L	0.5 U	0.5 U	
14	1,2-Dichlorobenzene	ug/L	0.5 U	0.5 U	
15	1,2-Dichloroctopane	ug/L	0.5 U	0.5 U	10 U
16	1,2-Dichloroethane	ug/L	0.5 U	0.5 U	10 U
17	1,2-Dichloroethene (total)	ug/L			10 U
18	1,3,5-Trimethylbenzene	ug/L	0.5 U	0.5 U	
19	1,3,5-Trimethylbenzene	ug/L	0.5 U	0.5 U	
20	1,3-Dichlorobenzene	ug/L	0.5 U	0.5 U	
21	1,4-Dichlorobenzene	ug/L	0.5 U	0.5 U	
22	2,2-Dichloropropane	ug/L	0.5 U	0.5 U	
23	2-Butanone	ug/L	5 U	5 U	10 U
24	2-Chlorotoluene	ug/L	0.5 U	0.5 U	
25	2-Hexanone	ug/L			10 U
26	4-Chlorotoluene	ug/L	0.5 U	0.5 U	
27	4-Methyl-2-Pentanone	ug/L	5 U	5 U	10 U
28	Acetone	ug/L	· 5 U	5 U	10 U
29	Benzene	ug/L	0.5 U	0.5 U	10 U
30	Bromochloromethane	ug/L	0.5 U	0.5 U	
31	Bromodichloromethane	ug/L	0.5 U	0.5 U	10 U
32	Bromoform	ug/L	0.5 U	0.5 U	10 U
33	Bromomethane	ug/L	0.5 U	0.5 U	10 U

	SDG:	53906	53906	53906
STUD	Y ID:	PHASE 1	PHASE 1	PHASE 1
MAT	TRIX:	WATER	WATER	WATER
LAB SAM	P. ID:	271804	272084	272146
EPA SAM	P. ID:	TB92095	TB92195	TB92395
QCC	ODE:	TB	TB	ТВ
% MOIST	URE:			0
% SO	LIDS:			
				1,1
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q
Carbon Disulfide	ug/L	0.5 U	0.5 U	10 U
Carbon Tetrachloride	ug/L	0.5 U	0.5 U	10 U
Chlorobenzene	ug/L	0.5 U	0.5 U	10 U
Chloroethane	ug/L	0.5 U	0.5 U	,10 U
Chloroform	ug/L	0.5 U	0.5 U	10 U
Chloromethane	ug/L	0.5 U	0.5 U	10 U
Dibromochloromethane	ug/L	0.5 U	0.5 U	10 U
Dibromomethane	ug/L	0.5 U	0.5 U	
Dichlorodifluromethane	ug/L	0.5 U	0.5 U	
Ethylbenzene	ug/L	0.5 U	0.5 U	10 U
Hexachlorobutadiene	ug/L	0.5 U	0.5 U	
Isopropylbenzene	ug/L	0.5 U	0.5 U	
Methylene Chloride	ug/L	0.5 U	0.5 U	10 U
Naphthalene	ug/L	0.5 U	0.5 U	
Styrene	ug/L	0.5 U	0.5 U	10 U
Tetrachloroethene	ug/L	0.5 U	0.5 U	10 U
Toluene	ug/L	0.5 U	0.5 U	10 U
Trichloroethene	ug/L	0.5 U	. 0.5 U	10 U
Trichlorofluoromethane	ug/L	0.5 U	0.5 U	
Vinyl Chloride	ug/L	0.5 U	0.5 U	10 U
Xylene (total)	ug/L	0.5 U	0.5 U	10 U
cis-1,2-Dichloroethane	ug/L	0.5 U	0.5 U	
cis-1,3-Dichloroctopene	ug/L	0.5 U	0.5 U	10 U
n-Butylbenzene	ug/L	0.5 U	0.5 U	
n-Propylbenzene	ug/L	0.5 U	0.5 U	
p-Isopropyltoluene	ug/L	0.5 U	0.5 U	
sec-Butylbenzene	ug/L	0.5 U	0.5 U	
tert-Butylbenzene	ug/L	0.5 U	0.5 U	
trans-1,2-Dichloroethene	ug/L	0.5 U	0.5 U	
trans-1,3-Dichloroctopene	ug/L	0.5 U	0.5 U	10 U

VOCS					
	SDG:	53906	53906	53906	53906
STUD	Y ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MA	TRIX:	SOIL	SOIL	SOIL	SOIL
LAB SAM		272293	272293	271801	271802
EPA SAM		SB26-5-05MS	SB26-5-05MSD	SB26-10-00	SB26-10-03
	CODE:	MS	MSD	SA	SA
% MOIST		13	13	8	24
	LIDS:	15	13	8	24
70 SO	LIDS.				
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	ug/Kg	11 U	11 U	11 U	13 U
2 1,1,2,2-Tetrachloroethane	ug/Kg	11 U	11 U	11 U	.13 U
3 1,1,2-Trichloroethene	ug/Kg	11 U	11 U	11 U	13 U
4 1,1-Dichloroethane	ug/Kg	11 U	11 U	11 U	13 U
5 1,1-Dichloroethene	ug/Kg	64	67	11 U	13 U
6 1,2-Dichloroctopane	ug/Kg	11 U	11 U	11 U	13 U
7 1,2-Dichloroethane	ug/Kg	11 U	11 U	11 U	13 U
8 1,2-Dichloroethene (total)	ug/Kg	11 U	11 U	11 U	13 U
9 2-Butanone	ug/Kg	11 U	11 U	11 U	13 U
10 2-Hexanone	ug/Kg	11 U	11 U	11 U	13 U
11 4-Methyl-2-Pentanone	ug/Kg	11 U	11 U	11 U	13 U
12 Acetone	ug/Kg	11 U	11 U	20	13 U
13 Benzene	ug/Kg	67	58	11 U	13 U
14 Bromodichloromethane	ug/Kg	11 U	11 U	11 U	13 U
15 Bromoform	ug/Kg	11 U	11 U	11 U	13 U
16 Bromomethane	ug/Kg	11 U	11 U	11 U	13 U
17 Carbon Disulfide	ug/Kg	11 U	11 U	11 U	13 U
18 Carbon Tetrachloride	ug/Kg	11 U	11 U	11 U	13 U
19 Chlorobenzene	ug/Kg	60	. 60	11 U	13 U
20 Chloroethane	ug/Kg	11 U	11 U	11 U	13 U
21 Chloroform	ug/Kg	11 U	11 U	11 U	13 U
22 Chloromethane	ug/Kg	11 U	11 U	11 U	13 U
23 Dibromochloromethane	ug/Kg	11 U	11 U	11 U	13 U
24 Ethylbenzene	ug/Kg	11 U	11 U	11 U	13 U
25 Methylene Chloride	ug/Kg	11 U	11 U	11 U	13 U
26 Styrene	ug/Kg	11 U	11 U	11 U	13 U
27 Tetrachloroethene	ug/Kg	11 U	11 U	11 U	13 U
28 Toluene	ug/Kg	62	62	11 U	13 U
29 Trichloroethene	ug/Kg	56	52	11 U	13 U
30 Vinyl Chloride	ug/Kg	11 U	11 U	11 U	13 U
31 Xylene (total)	ug/Kg	11 U	11 U	11 U	13 U
32 cis-1,3-Dichloroctopene	ug/Kg	11 U	11 U	11 U	13 U
33 trans-1,3-Dichloroctopene	ug/Kg	11 U	11 U	11 U	13 U
33 trans-1,3-Dienioroctopene	nR v.R	11 0	11 0	11 0	13 U

STUD		53906 PHASE 1	53906 PHASE 1	53906 PHASE 1	53906 PHASE 1	53906 PHASE 1
MAT		SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAME		271803	272291	272292	272293	272141
EPA SAMI		SB26-10-04	SB26-5-00	SB26-5-03	SB26-5-05	SB26-6-00
QC CC		SA	SA	SA	SA	SA
% MOIST		15	7	15	13	12
% SOL	LIDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	ug/Kg	12 U	11 U	12 U	11 U	11 U
2 1,1,2,2-Tetrachloroethane	ug/Kg	12 U	11 U	12 U	11 U	11 U
3 1,1,2-Trichloroethene	ug/Kg	12 U	11 U	12 U	11 U	11 U
4 1,1-Dichloroethane	ug/Kg	12 U	11 U	12 U	11 U	11 U
5 1,1-Dichloroethene	ug/Kg	12 U	11 U	12 U	11 U	11 U
6 1,2-Dichloroctopane	ug/Kg	12 U	11 U	12 U	11 U	11 U
7 1,2-Dichloroethane	ug/Kg	12 U	11 U	12 U	11 U	11 U
8 1,2-Dichloroethene (total)	ug/Kg	12 U	11 U	12 U	11 U	11 U
9 2-Butanone	ug/Kg	12 U	11 U	12 U	11 U	11 U
10 2-Hexanone	ug/Kg	12 U	11 U	12 U	11 U	11 U
11 4-Methyl-2-Pentanone	ug/Kg	12 U	11 U	12 U	11 U	11 U
12 Acetone	ug/Kg	<b>12</b> U	11 U	12 U	' 11 U	11 U
13 Benzene	ug/Kg	12 U	11 U	12 U	11 U	11 U
14 Bromodichloromethane	ug/Kg	12 U	11 U	12 U	11 U	11 U
15 Bromoform	ug/Kg	12 U	11 U	12 U	11 U	11 U
16 Bromomethane	ug/Kg	12 U	11 U	<b>12</b> U	11 U	11 U
17 Carbon Disulfide	ug/Kg	12 U	11 U	12 U	11 U	11 U
18 Carbon Tetrachloride	ug/Kg	<b>12</b> U	11 U	12 U	11 U	11 U
19 Chlorobenzene	ug/Kg	12 U	11 U	12 U	11 U	11 U
20 Chloroethane	ug/Kg	12 U	11 U	12 U	11 U	11 U
21 Chloroform	ug/Kg	12 U	11 U	12 U	11 U	11 U
22 Chloromethane	ug/Kg	12 U	11 U	12 U	11 U	11 U
23 Dibromochloromethane	ug/Kg	12 U	11 U	12 U	11 U	11 U
24 Ethylbenzene	ug/Kg	12 U	11 U	12 U	11 U	11 U
25 Methylene Chloride	ug/Kg	12 U	11 U	12 U	11 U	10 Ј
26 Styrene	ug/Kg	12 U	11 U	12 U	11 U	11 U
27 Tetrachloroethene	ug/Kg	12 U	11 U	12 U	11 U	11 U
28 Toluene	ug/Kg	12 U	11 U	12 U	11 U	11 U
29 Trichloroethene	ug/Kg	12 U	11 U	12 U	11 U	11 U
30 Vinyl Chloride	ug/Kg	12 U	11 U	12 U	11 U	11 U
31 Xylene (total)	ug/Kg	12 U	II U	12 U	11 U	11 U
32 cis-1,3-Dichloroctopene	ug/Kg	12 U	11 U	12 U	11 U	11 U
33 trans-1,3-Dichloroctopene	ug/Kg	12 U	11 U	12 U	11 U	11 U

VOCS						
5	SDG:	53906	53906	53906	53906	53906
STUDY	Y ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MAT	RIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP	P. ID:	272142	272143	272144	272145	272294
EPA SAMF		SB26-6-04	SB26-6-06	SB26-7-00	SB26-7-03	SB26-7-07
QC CC		SA	SA	SA	SA	SA
% MOIST		20	13	5	17	15
% SOL			25	-		
74 661	indo.					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	ug/Kg	10.11	11 U	10 U	1400 U	1400 U
2 1,1,2,2-Tetrachloroethane	ug/Kg	12 U	1I U	10 U	1400 U	1400 U
3 1,1,2-Trichloroethene	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
4 1,1-Dichloroethane	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
5 1,1-Dichloroethene	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
6 1,2-Dichloroctopane	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
7 1.2-Dichloroethane	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
8 1,2-Dichloroethene (total)	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
9 2-Butanone	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
10 2-Hexanone	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
11 4-Methyl-2-Pentanone	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
12 Acetone	ug/Kg	12 U	11 Ü	10 U	1400 U	1400 U
13 Benzene	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
14 Bromodichloromethane	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
15 Bromoform	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
16 Bromomethane	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
17 Carbon Disulfide	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
18 Carbon Tetrachloride	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
19 Chlorobenzene	ug/Kg	<b>12</b> U	11 U	10 U	1400 U	1400 U
20 Chloroethane	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
21 Chloroform	ug/Kg	12 Ú	11 U	10 U	1400 U	1400 U
22 Chloromethane	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
23 Dibromochloromethane	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
24 Ethylbenzene	ug/Kg	12 U	11 U	10 U	360 J	1400 U
25 Methylene Chloride	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
26 Styrene	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
27 Tetrachloroethene	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
28 Toluene	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
29 Trichloroethene	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
30 Vinyl Chloride	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
31 Xylene (total)	ug/Kg	12 U	11 U	10 U	310 J	1400 U
32 cis-1,3-Dichloroctopene	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
33 trans-1,3-Dichloroctopene	ug/Kg	12 U	11 U	10 U	1400 U	1400 U
		<del>-</del> _				1100 0

STUD	TRIX: P. ID: P. ID: ODE: URE:	53906 PHASE 1 SOIL 272079 SB26-8-00 SA 8	53906 PHASE 1 SOIL 272082 SB26-8-04 SA	53906 PHASE 1 SOIL 272083 SB26-8-05 SA 8	53906 PHASE 1 SOIL 272296 SB26-9-00 SA 7
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	ug/Kg	11 U	11 U	11 U	11 U
2 1,1,2,2-Tetrachloroethane	ug/Kg	11 U	11 U	11 U	. 11 U
3 1,1,2-Trichloroethene	ug/Kg	11 U	11 U	11 U	11 U
4 1,1-Dichloroethane	ug/Kg	11 U	11 U	11 U	11 U
5 1,1-Dichloroethene	ug/Kg	11 U	11 U	11 U	11 U
6 1,2-Dichloroctopane	ug/Kg	11 U	11 U	11 U	11 U
7 1,2-Dichloroethane	ug/Kg	11 U	11 U	11 U	11 U
8 1,2-Dichloroethene (total)	ug/Kg	11 U	11 U	11 U	11 U
9 2-Butanone	ug/Kg	11 U	11 U	11 U	11 U
10 2-Hexanone	ug/Kg	11 U	11 U	11 U	11 U
11 4-Methyl-2-Pentanone	ug/Kg	11 U	11 U	11 U	11 U
12 Acetone	ug/Kg	11 U	6 JB	11 U	11 U
13 Benzene	ug/Kg	11 U	11 U	11 U	11 U
14 Bromodichloromethane	ug/Kg	11 U	11 U	11 U	11 U
15 Bromoform	ug/Kg	11 U	11 U	11 U	11 U
16 Bromomethane	ug/Kg	11 U	11 U	11 U	11 U
17 Carbon Disulfide	ug/Kg	11 U	11 U	11 U	11 U
18 Carbon Tetrachloride	ug/Kg	11 U	11 U	11 U	11 U
19 Chlorobenzene	ug/Kg	11 U	11 U	11 U	11 U
20 Chloroethane 21 Chloroform	ug/Kg	11 U	11 U	11 U	11 U
21 Chlorotorm 22 Chloromethane	ug/Kg	2 J	11 U	11 U	11 U
23 Dibromochloromethane	ug/Kg	11 U 11 U	11 U	11 U	11 U
	ug/Kg	11 U	11 U 11 U	11 U	11 U
<ul><li>24 Ethylbenzene</li><li>25 Methylene Chloride</li></ul>	ug/Kg	11 U	11 U	11 U	11 U
26 Styrene	ug/Kg ug/Kg	11 U	11 U	11 U 11 U	11 U
27 Tetrachloroethene	ug/Kg ug/Kg	11 U	11 U	11 U	11 U
28 Toluene	ug/Kg	11 U	11 U	11 U	11 U
29 Trichloroethene	ug/Kg	11 U	11 U	11 U	11 U
30 Vinyl Chloride	ug/Kg	11 U	11 U	11 U	11 U
31 Xylene (total)	ug/Kg	11 U	11 U	2 J	11 U
32 cis-1,3-Dichloroctopene	ug/Kg	11 U	11 U	2 J 11 U	11 U
33 trans-1,3-Dichloroctopene	ug/Kg	11 U	11 U	11 U	11 U
55 Laus-1,5-Diemorootopene	ng izg	11 0	11 0	11 0	11 U

SVOCS								
SD	OG:	53906		53906		53906		53906
STUDY	ID:	PHASE 1		PHASE 1	!	PHASE 1		PHASE 1
MATR	IX:	SOIL		SOIL		SOIL		SOIL
LAB SAMP.	ID:	272293		272293		271801		271802
EPA SAMP.	ID:	SB26-5-05MS		SB26-5-05MSD	)	SB26-10-00		SB26-10-03
OC COL	DE:	MS		MSD	)	SA		SA
% MOISTUR	RE:	16		16		5		16
% SOLII								
PARAMET	ER UNIT	VALUE	Q	VALUE	E Q	VALUE	Q	VALUE Q
1 2,4-Dinitrophenol	UG/KG	950	U	950	U	840	U	930 U
1 2,4-Dinitrophenol	UG/KG	950	U	950	U	840	U	930 U
2 2.4-Dinitrotoluene	UG/KG	1500		1600		350	U	380 U
3 3,3'-Dichlorobenzidine	UG/KG	390	U	390	U	350	U	380 U
4 4,6-Dinitro-2-methylphenol	UG/KG	950	U	950	U	840	U	930 U
5 4-Bromophenyl-phenylether	UG/KG	390	U	390	U	350	U	380 U
6 4-Chlorophenyl-phenylether	UG/KG	390	U	390	U	350	U	380 U
7 4-Nitroaniline	UG/KG	950	U	950	U	840	U	930 U
8 4-Nitrophenol	UG/KG	2700		2600		840	U	930 U
9 Anthracene	UG/KG	390	U	390	U	200	J	46 J
10 Benzo(a)anthracene	UG/KG	71	J	69	J	810		180 J
11 Benzo(a)pyrene	UG/KG	95	J	79	J	650		210 J
12 Benzo(b)fluoranthene	UG/KG	110	GJ	120	GJ	690		200 J
13 Benzo(g,h,i)perylene	UG/KG	76	J	48	J	540		420
14 Butylbenzylphthalate	UG/KG	390	U	390	U	350	U	380 U
15 Carbazole	UG/KG	390	U	390	U	290	J	41 J
16 Chrysene	UG/KG	79	J	80	J	690		190 J
17 Di-n-butylphthalate	UG/KG	390	U	390	U	350	U	380 U
18 Di-n-oprylphthalate	UG/KG	390	U	. 390	U	350	U	380 U
19 Dibenz(a,h)anthracene	UG/KG	390	U	390	U	310	J	100 J
20 Dibenzofuran	UG/KG	390	U	390	U	37	J	380 U
21 Diethylphthalate	UG/KG	390	U	. 390	U	350	U	380 U
22 Fluoranthene	UG/KG	170	J	140	J	1900		330 J
23 Fluorene	UG/KG	390	U	390	U	91	J	380 U
24 Hexachlorobenzene	UG/KG	390	U	390	U	350	U	380 U
25 Indeno(1,2,3-cd)pyrene	UG/KG	390	U	390	U	490		350 J
26 N-Nitrosodiphenylamine (1)	UG/KG	390	U	390	U	350	U	380 U
27 Pentachlorophenol	UG/KG	2100		2300		840	U	930 U
28 Phenanthrene	UG/KG	110	J	100	J	860		170 J
29 Pyrene	UG/KG	2000		2000		1200		250 J
30 benzo(k)fluoranthene	UG/KG	390	U	390	U	460		220 J
31 bis(2-Ethylhexyl)phthalate	UG/KG	260		220		400		1300
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S	DG:	53906	53906	53906	53906	53906
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATE	RIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP.	. ID:	271803	272291	272292	272293	272141
EPA SAMP.		SB26-10-04	SB26-5-00	SB26-5-03	SB26-5-05	SB26-6-00
QC CO		SA	SA	SA	SA	SA
% MOISTU		17	7	15	16	9
% SOL			·			ŕ
PARAME <sup>*</sup>	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 2,4-Dinitrophenol	UG/KG	950 U	1100 U	940 U	950 U	1800 U
1 2,4-Dinitrophenol	UG/KG	950 U	1100 U	940 U	950 U	1800 U
2 2,4-Dinitrotoluene	UG/KG	390 U	440 U	390 U	390 U	730 U
3 3,3'-Dichlorobenzidine	UG/KG	390 U	440 U	390 U	390 U	730 U
4 4,6-Dinitro-2-methylphenol	UG/KG	950 U	1100 U	940 U	950 U	1800 U
5 4-Bromophenyl-phenylether	UG/KG	390 U	440 U	390 U	390 U	730 U
6 4-Chlorophenyl-phenylether	UG/KG	390 U	440 U	390 U	390 U	730 U
7 4-Nitroaniline	UG/KG	950 U	1100 U	940 U	950 U	1800 U
8 4-Nitrophenol	UG/KG	950 U	1100 U	940 U	950 U	1800 U
9 Anthracene	UG/KG	79 J	290 J	390 U	390 U	730 U
10 Benzo(a)anthracene	UG/KG	190 J	1200	390 U	49 J	180 J
11 Benzo(a)pyrene	UG/KG	360 J	1200	42 J	50 J	190 J
12 Benzo(b)fluoranthene	UG/KG	320 J	2400 G	78 GJ	94 GJ	310 GJ
13 Benzo(g,h,i)perylene	UG/KG	1100	1200	390 U	43 J	250 J
14 Butylbenzylphthalate	UG/KG	390 U	440 U	390 U	390 U	730 U
15 Carbazole	UG/KG	58 J	210 J	390 U	390 U	730 U
16 Chrysene	UG/KG	210 J	1200	41 J	55 J	150 J
17 Di-n-butylphthalate	UG/KG	390 U	440 U	390 U	390 U	730 U
18 Di-n-oprylphthalate	UG/KG	390 U	· 440 U	390 U	390 U	730 U
19 Dibenz(a,h)anthracene	UG/KG	230 J	410 J	390 U	390 U	76 J
20 Dibenzofuran	UG/KG	390 U	440 U	390 U	390 U	730 U
21 Diethylphthalate	UG/KG	390 U	440 U	390 U	390 U	730 U
22 Fluoranthene	UG/KG	310 J	2500	39 J	96 J	310 J
23 Fluorene	UG/KG	390 U	120 J	390 U	390 U	730 U
24 Hexachlorobenzene	UG/KG	390 U	440 U	390 U	390 U	730 U
25 Indeno(1,2,3-cd)pyrene	UG/KG	810	910	390 U	390 U	190 J
26 N-Nitrosodiphenylamine (1)	UG/KG	390 U	440 U	390 U	390 U	730 U
27 Pentachlorophenol	UG/KG	950 U	1100 U	940 U	950 U	1800 U
28 Phenanthrene	UG/KG	240 J	1300	390 U	70 J	180 J
29 Pyrene	UG/KG	260 J	2700	390 U	85 J	390 J
30 benzo(k)fluoranthene	UG/KG	200 J	440 U	390 U	390 U	730 U
31 bis(2-Ethylhexyl)phthalate	UG/KG	200 J	440 U	390 U	150 J	730 U
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S	DG:	53906	53906	53906	53906	53906
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATI	RIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP.	. ID:	272142	272143	272144	272145	272294
EPA SAMP	. ID:	SB26-6-04	SB26-6-06	SB26-7-00	SB26-7-03	SB26-7-07
QC CO	DE:	SA	SA	SA	SA	SA
% MOISTU	JRE:	14	12	5	17	12
% SOL	IDS:					
PARAME <sup>*</sup>		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 2,4-Dinitrophenol	UG/KG	930 U	910 U	840 U	; 4800 U	4500 U
1 2,4-Dinitrophenol	UG/KG	930 U	910 U	840 U	4800 U	4500 U
2 2,4-Dinitrotoluene	UG/KG	380 U	370 U	350 U	2000 U	1900 U
3 3,3'-Dichlorobenzidine	UG/KG	380 U	<b>370</b> U	350 U	2000 U	1900 U
4 4,6-Dinitro-2-methylphenol	UG/KG	930 U	910 U	840 U	4800 U	4500 U
5 4-Bromophenyl-phenylether	UG/KG	380 U	370 U	350 U	2000 U	1900 U
6 4-Chlorophenyl-phenylether	UG/KG	380 U	370 U	350 U	2000 U	1900 U
7 4-Nitroaniline	UG/KG	930 U	910 U	840 U	4800 U	4500 U
8 4-Nitrophenol	UG/KG	930 U	910 U	840 U	4800 U	4500 U
9 Anthracene	UG/KG	380 U	370 U	58 J	2000 U	1900 U
10 Benzo(a)anthracene	UG/KG	380 U	370 U	440	2000 U	1900 U
11 Benzo(a)pyrene	UG/KG	380 U	370 U	340 J	2000 U	1900 U
12 Benzo(b)fluoranthene	UG/KG	62 GJ	370 U	440	2000 U	1900 U
13 Benzo(g,h,i)perylene	UG/KG	380 U	370 U	320 J	2000 U	1900 U
14 Butylbenzylphthalate	UG/KG	380 U	370 U	350 U	2000 U	1900 U
15 Carbazole	UG/KG	380 U	370 U	350 U	2000 U	1900 U
16 Chrysene	UG/KG	45 J	370 U	380	2000 U	1900 U
17 Di-n-butylphthalate	UG/KG	380 U	43 BJ	350 U	2000 U	1900 U
18 Di-n-oprylphthalate	UG/KG	380 U	370 U	350 U	2000 U	1900 U
19 Dibenz(a,h)anthracene	UG/KG	380 U	370 U	120 J	2000 U	1900 U
20 Dibenzofuran	UG/KG	380 U	370 U	350 U	520 J	1900 U
21 Diethylphthalate	UG/KG	380 U	370 U	350 U	2000 U	1900 U
22 Fluoranthene	UG/KG	68 J	370 U	700	270 J	1900 U
23 Fluorene	UG/KG	380 U	370 U	350 U	1200 J	870 J
24 Hexachlorobenzene	UG/KG	380 U	370 U	350 U	2000 U	1900 U
25 Indeno(1,2,3-cd)pyrene	UG/KG	380 U	370 U	270 J	2000 U	1900 U
26 N-Nitrosodiphenylamine (1)	UG/KG	380 U	370 U	350 U	2000 U	1900 U
27 Pentachlorophenol	UG/KG	930 U	910 U	840 U	4800 U	4500 U
28 Phenanthrene	UG/KG	53 J	370 U	250 Ј	1900 Ј	1700 J
29 Pyrene	UG/KG	73 J	370 U	710	300 J	240 J
30 benzo(k)fluoranthene	UG/KG	380 U	370 U	430	2000 U	1900 U
31 bis(2-Ethylhexyl)phthalate	UG/KG	89 BJ	170 BJ	62 BJ	2000 U	200 J
				_		200 5

51003	_	53906			
	SDG:		53906	53906	53906
STUDY ID:		PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRIX:		SOIL	SOIL	SOIL	SOIL
LAB SAMP. ID:		272079	272082	272083	272296
EPA SAMP.	EPA SAMP. ID:		SB26-8-04	SB26-8-05	SB26-9-00
QC COI	DE:	SA	SA	SA	SA
% MOISTUI	RE:	6	14	6	9
% SOLII	DS:				
PARAMET	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 2,4-Dinitrophenol	UG/KG	850 U	930 U	850 U	2900 U
1 2,4-Dinitrophenol	UG/KG	850 U	930 U	850 U	2900 U
2 2,4-Dinitrotoluene	UG/KG	350 U	380 U	350 U	1200 U
3 3,3'-Dichlorobenzidine	UG/KG	350 U	380 U	350 U	1200 U
4 4,6-Dinitro-2-methylphenol	UG/KG	850 U	930 U	850 U	2900 U
5 4-Bromophenyl-phenylether	UG/KG	350 U	380 U	350 U	1200 U
6 4-Chlorophenyl-phenylether	UG/KG	350 U	380 U	350 U	1200 U
7 4-Nitroaniline	UG/KG	850 U	930 U	850 U	2900 U
8 4-Nitrophenol	UG/KG	850 U	930 U	850 U	2900 U
9 Anthracene	UG/KG	350 U	380 U	350 U	840 J
10 Benzo(a)anthracene	UG/KG	36 J	380 U	350 U	2000
11 Benzo(a)pyrene	UG/KG	37 Ј	380 U	350 U	2200
12 Benzo(b)fluoranthene	UG/KG	66 <b>G</b> J	380 U	350 U	4300 G
13 Benzo(g,h,i)perylene	UG/KG	42 J	380 U	350 U	1900
14 Butylbenzylphthalate	UG/KG	350 U	380 U	350 U	1200 U
15 Carbazole	UG/KG	350 U	380 U	350 U	610 J
16 Chrysene	UG/KG	39 J	380 U	350 U	2400
17 Di-n-butylphthalate	UG/KG	350 U	380 U	350 U	1200 U
18 Di-n-oprylphthalate	UG/KG	350 U	380 U	350 U	1200 U
19 Dibenz(a,h)anthracene	UG/KG	350 U	380 U	350 U	720 J
20 Dibenzofuran	UG/KG	350 U	380 U	350 U	190 J
21 Diethylphthalate	UG/KG	350 U	380 U	350 U	1200 U
22 Fluoranthene	UG/KG	64 J	380 U	350 U	5500
23 Fluorene	UG/KG	350 U	380 U	350 U	440 J
24 Hexachlorobenzene	UG/KG	350 U	380 U	350 U	1200 U
25 Indeno(1,2,3-cd)pyrene	UG/KG	350 U	380 U	350 U	1400
26 N-Nitrosodiphenylamine (1)	UG/KG	350 U	380 U	350 U	1200 U
27 Pentachlorophenol	UG/KG	850 U	930 U	850 U	2900 U
28 Phenanthrene	UG/KG	38 J	380 U	350 U	4000
29 Pyrene	UG/KG	62 J	380 U	350 U	5100
30 benzo(k)fluoranthene	UG/KG	350 U	380 U	350 U	1200 U
31 bis(2-Ethylhexyl)phthalate	UG/KG	62 BJ	110 BJ	68 BJ	1200 U

SI	DG:	53906	53906	53906	53906
STUDY ID:		PHASE 1	PHASE 1	PHASE 1	PHASE 1
AREA:		SEAD-26	SEAD-26	SEAD-26	SEAD-26
MATR		SOIL	SOIL	SOIL	SOIL
ANALYSIS METHO		NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP
SAMP		SB26-10-00	SB26-10-03	SB26-10-04	SB26-5-00
QC CO		SA	SA	SA	SA
(0.00)					
PARAMET	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	350 U	380 U	390 U	440 U
2 1,2-Dichlorobenzene	UG/KG	350 U	380 U	390 U	440 U
3 1,3-Dichlorobenzene	UG/KG	350 U	380 U	390 U	440 U
4 1,4-Dichlorobenzene	UG/KG	350 U	380 U	390 U	440 U
5 2,4,5-Trichlorophenol	UG/KG	840 U	930 U	950 U	1100 U
6 2,4,6-Trichlorophenol	UG/KG	350 U	380 U	390 U	440 U
7 2,4-Dichlorophenol	UG/KG	350 U	380 U	390 U	440 U
8 2,4-Dimethylphenol	UG/KG	350 U	380 U	390 U	440 U
9 2,4-Dinitrophenol	UG/KG	840 U	930 U	950 U	1100 U
10 2,4-Dinitrotoluene	UG/KG	350 U	380 U	390 U	440 U
11 2,6-Dinitrotoluene	UG/KG	350 U	380 U	390 U	440 U
12 2-Chloronaphthalene	UG/KG	350 U	380 U	390 U	440 U
13 2-Chlorophenol	UG/KG	350 U	380 U	390 U	440 U
14 2-Methylnaphthalene	UG/KG	55 J	380 U	390 U	440 U
15 2-Methylphenol	UG/KG	350 U	380 U	390 U	440 U
16 2-Nitroaniline	UG/KG	840 U	930 U	950 U	1100 U
17 2-Nitrophenol	UG/KG	350 U	380 U	390 U	440 U
18 3,3'-Dichlorobenzidine	UG/KG	350 U	380 U	390 U	440 U
19 3-Nitroaniline	UG/KG	840 U	. 930 U	950 U	1100 U
20 4,6-Dinitro-2-methylphenol	UG/KG	840 U	930 U	950 U	1100 U
21 4-Bromophenyl-phenylether	UG/KG	350 U	380 U	390 U	440 U
22 4-Chloro-3-methylphenol	UG/KG	350 U	380 U	390 U	440 U
23 4-Chloroaniline	UG/KG	350 U	. 380 U	390 U	440 U
24 4-Chlorophenyl-phenylether	UG/KG	350 U	380 U	390 U	440 U
25 4-Methylphenol	UG/KG	350 U	380 U	390 U	440 U
26 4-Nitroaniline	UG/KG	840 U	930 U	950 U	1100 U
27 4-Nitrophenol	UG/KG	840 U	930 U	950 U	1100 U
28 Acenaphthene	UG/KG	85 J	380 U	390 U	150 J
29 Acenaphthylene	UG/KG	350 U	380 U	390 U	440 U
30 Anthracene	UG/KG	200 J	46 J	79 J	290 J
31 Benzo(a)anthracene	UG/KG	810	180 J	190 J	1200
32 Benzo(a)pyrene	UG/KG	650	210 J	360 J	1200
33 Benzo(b)fluoranthene	UG/KG	690	200 J	320 J	2400 G
34 Benzo(g,h,i)perylene	UG/KG	540	420	1100	1200

SDG:		53906	53906	53906	53906
STUDY ID:		PHASE 1	PHASE 1	PHASE 1	PHASE 1
AREA:		SEAD-26	SEAD-26	SEAD-26	SEAD-26
MATR	IX:	SOIL	SOIL	SOIL	SOIL
ANALYSIS METHO	DD:	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP
SAMP	ID:	SB26-10-00	SB26-10-03	SB26-10-04	SB26-5-00
QC CO	DE:	SA	SA	SA	SA
_					
PARAMET	TER UNIT	VALUE Q	VALUE	Q VALUE	Q VALUE Q
35 Benzo(k)fluoranthene	UG/KG	460	220		
36 Butylbenzylphthalate	UG/KG	350 U	380	U 390	U 440 U
37 Carbazole	UG/KG	290 J	41 .	J 58	J 210 J
38 Chrysene	UG/KG	690	190	J 210	J 1200
39 Di-n-butylphthalate	UG/KG	350 U	380	U 390	U 440 U
40 Di-n-octylphthalate	UG/KG	350 U	380	U 390	U 440 U
41 Dibenz(a,h)anthracene	UG/KG	310 J	100 .	J 230	J 410 J
42 Dibenzofuran	UG/KG	37 J	380	U 390	U 440 U
43 Diethylphthalate	UG/KG	350 U	380	U 390	U 440 U
44 Dimethylphthalate	UG/KG	350 U	380	U 390	U 440 U
45 Fluoranthene	UG/KG	1900	330	J 310	J 2500
46 Fluorene	UG/KG	91 J	380	U 390	U 120 J
47 Hexachlorobenzene	UG/KG	350 U	380	U 390	U 440 U
48 Hexachlorobutadiene	UG/KG	350 U	380	U 390	U 440 U
49 Hexachlorocyclopentadiene	UG/KG	350 U	380	U 390	U 440 U
50 Hexachloroethane	UG/KG	350 U	380	U 390	U 440 U
51 Indeno(1,2,3-cd)pyrene	UG/KG	490	350	J 810	910
52 Isophorone	UG/KG	350 U	380	U 390	U 440 U
53 N-Nitroso-di-n-propylamine	UG/KG	350 U	. 380	U 390	U 440 U
54 N-Nitrosodiphenylamine (1)	UG/KG	350 U	380	U 390	U 440 U
55 Naphthalene	UG/KG	36 J	380	U 390	U 440 U
56 Nitrobenzene	UG/KG	350 U	380	U 390	U 440 U
57 Pentachlorophenol	UG/KG	840 U	930	U 950	U 1100 U
58 Phenanthrene	UG/KG	860	170	J 240	J 1300
59 Phenol	UG/KG	350 U	380	U 390	U 440 U
60 Pyrene	UG/KG	1200	250	J 260	J 2700
61 bis(2-Chloroethoxy) methane	UG/KG	350 U	380	U 390	U 440 U
62 bis(2-Chloroethyl) ether	UG/KG	350 U	380	U 390	U 440 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	350 U	380	U 390	U 440 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	400	1300	200	J 440 U

;	SDG:	53906	53906	53906	53906	53906
STUD	Y ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE I
	REA:	SEAD-26	SEAD-26	SEAD-26	SEAD-26	SEAD-26
MAT		SOIL	SOIL	NO MATRIX	NO MATRIX	SOIL
ANALYSIS METH		NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP
	P ID:	SB26-5-03	SB26-5-05	SB26-5-05MS	SB26-5-05MSD	SB26-6-00
OC C		SA	SA	NO_QC	NO QC	SA
Q. J						
PARAMI		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	390 U	390 U	1600	1600	730 U
2 1,2-Dichlorobenzene	UG/KG	390 U	390 U	390 U	390 U	730 U
3 1,3-Dichlorobenzene	UG/KG	390 U	390 U	390 U	390 U	730 U
4 1,4-Dichlorobenzene	UG/KG	390 U	390 U	1300	1200	730 U
5 2,4,5-Trichlorophenol	UG/KG	940 U	950 U	950 U	. 950 U	1800 U
6 2,4,6-Trichlorophenol	UG/KG	390 U	390 U	390 U	390 U	730 U
7 2,4-Dichlorophenol	UG/KG	390 U	390 U	390 U	390 U	730 U
8 2,4-Dimethylphenol	UG/KG	390 U	390 U	390 U	390 U	<b>730</b> U
9 2,4-Dinitrophenol	UG/KG	940 U	950 U	950 U	950 U	1800 U
10 2,4-Dinitrotoluene	UG/KG	390 U	390 U	1500	1600	730 U
11 2,6-Dinitrotoluene	UG/KG	390 U	390 U	390 U	390 U	<b>730</b> U
12 2-Chloronaphthalene	UG/KG	390 U	390 U	390 U	390 U	730 U
13 2-Chlorophenol	UG/KG	390 U	390 U	2100	2100	<b>730</b> U
14 2-Methylnaphthalene	UG/KG	390 U	390 U	390 U	390 U	730 U
15 2-Methylphenol	UG/KG	390 U	390 U	390 U	390 U	730 U
16 2-Nitroaniline	UG/KG	940 U	950 U	950 U	950 U	1800 U
17 2-Nitrophenol	UG/KG	390 U	390 U	390 U	390 U	730 U
18 3,3'-Dichlorobenzidine	UG/KG	390 U	390 U	390 U	390 U	730 U
19 3-Nitroaniline	UG/KG	940 U	. 950 U	950 U	950 U	1800 U
20 4,6-Dinitro-2-methylphenol	UG/KG	940 U	950 U	950 U	950 U	1800 U
21 4-Bromophenyl-phenylether	UG/KG	390 U	390 U	390 U	390 U	<b>73</b> 0 U
22 4-Chloro-3-methylphenol	UG/KG	390 U	390 U	2600	2500	730 U
23 4-Chloroaniline	UG/KG	390 U	390 U	390 U	390 U	<b>73</b> 0 U
24 4-Chlorophenyl-phenylether	UG/KG	390 U	390 U	390 U	390 U	<b>730</b> U
25 4-Methylphenol	UG/KG	390 U	390 U	390 U	390 U	730 U
26 4-Nitroaniline	UG/KG	940 U	950 U	950 U	950 U	1800 U
27 4-Nitrophenol	UG/KG	940 U	950 U	2700	2600	1800 U
28 Acenaphthene	UG/KG	390 U	390 U	1600	1500	730 U
29 Acenaphthylene	UG/KG	390 U	390 U	390 U	390 U	730 U
30 Anthracene	UG/KG	390 U	390 U	390 U	390 U	<b>73</b> 0 U
31 Benzo(a)anthracene	UG/KG	390 U	49 J	71 J	69 J	180 J
32 Benzo(a)pyrene	UG/KG	<b>42</b> J	50 J	95 Ј	79 J	190 J
33 Benzo(b)fluoranthene	UG/KG	78 GJ	94 GJ	110 GJ	120 GJ	310 GJ
34 Benzo(g,h,i)perylene	UG/KG	390 U	43 J	76 Ј	48 J	250 J

	OG:	53906	53906	53906	53906	53906
STUDY		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
ARE		SEAD-26	SEAD-26	SEAD-26	SEAD-26	SEAD-26
MATRI		SOIL	SOIL	NO_MATRIX	NO_MATRIX	SOIL
ANALYSIS METHO		NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP
SAMP	ID:	SB26-5-03	SB26-5-05	SB26-5-05MS	SB26-5-05MSD	SB26-6-00
ÓC COI	DE:	SA	SA	NO_QC	NO_QC	SA
PARAMET	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
35 Benzo(k)fluoranthene	UG/KG	390 U	390 U	390 U	390 U	730 U
36 Butylbenzylphthalate	UG/KG	390 U	390 U	390 U	390 U	730 U
37 Carbazole	UG/KG	390 U	390 U	390 U	390 U	730 U
38 Chrysene	UG/KG	41 J	55 J	79 J	80 J	150 J
39 Di-n-butylphthalate	UG/KG	390 U	390 U	390 U	390 U	730 U
40 Di-n-octylphthalate	UG/KG	390 U	390 U	390 U	390 U	730 U
41 Dibenz(a,h)anthracene	UG/KG	390 U	390 U	390 U	390 U	76 Ј
42 Dibenzofuran	UG/KG	390 U	390 U	390 U	390 U	730 U
43 Diethylphthalate	UG/KG	390 U	390 U	390 U	390 U	730 U
44 Dimethylphthalate	UG/KG	390 U	390 U	390 U	390 U	730 U
45 Fluoranthene	UG/KG	39 J	96 J	170 J	140 J	310 J
46 Fluorene	UG/KG	390 U	390 U	390 U	390 U	730 U
47 Hexachlorobenzene	UG/KG	390 U	390 U	390 U	390 U	730 U
48 Hexachlorobutadiene	UG/KG	390 U	390 U	390 U	390 U	730 U
49 Hexachlorocyclopentadiene	UG/KG	390 U	390 U	390 U	390 U	730 U
50 Hexachloroethane	UG/KG	390 U	390 U	390 U	390 U	730 U
51 Indeno(1,2,3-cd)pyrene	UG/KG	390 U	390 U	390 U	390 U	190 J
52 Isophorone	UG/KG	390 U	390 U	390 U	390 U	730 U
53 N-Nitroso-di-n-propylamine	UG/KG	390 U	· 390 U	1600	1400	730 U
54 N-Nitrosodiphenylamine (1)	UG/KG	390 U	390 U	390 U	390 U	730 U
55 Naphthalene	UG/KG	390 U	390 U	390 U	390 U	730 U
56 Nitrobenzene	UG/KG	390 U	390 U	390 U	390 U	730 U
57 Pentachlorophenol	UG/KG	940 U	950 U	2100	2300	1800 U
58 Phenanthrene	UG/KG	390 U	70 J	110 J	100 Ј	180 Ј
59 Phenol	UG/KG	390 U	390 U	2100	1900	730 U
60 Pyrene	UG/KG	390 U	85 J	2000	2000	390 J
61 bis(2-Chloroethoxy) methane	UG/KG	390 U	390 U	390 U	390 U	730 U
62 bis(2-Chloroethyl) ether	UG/KG	. 390 U	390 U	390 U	390 U	730 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	390 U	390 U	390 U	390 U	730 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	390 U	150 J	260 Ј	220 J	730 U

S	DG:	53906	53906	53906	53906	53906
STUDY		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	EA:	SEAD-26	SEAD-26	SEAD-26	SEAD-26	SEAD-26
MATE		SOIL	SOIL	SOIL	SOIL	SOIL
ANALYSIS METHO		NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP
SAME		SB26-6-04	SB26-6-06	SB26-7-00	SB26-7-03	SB26-7-07
OC CO		SA	SA	SA	SA	SA
<b>Q</b> 0 33						
PARAME		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	380 U	370 U	350 U	2000 U	1900 U
2 1,2-Dichlorobenzene	UG/KG	380 U	370 U	350 U	2000 U	1900 U
3 1,3-Dichlorobenzene	UG/KG	380 U	370 U	350 U	2000 U	1900 U
4 1,4-Dichlorobenzene	UG/KG	380 U	370 U	350 U	2000 U	1900 U
5 2,4,5-Trichlorophenol	UG/KG	930 U	910 U	840 U	4800 U	4500 U
6 2,4,6-Trichlorophenol	UG/KG	380 U	370 U	350 U	2000 U	1900 U
7 2,4-Dichlorophenol	UG/KG	380 U	370 U	350 U	2000 U	1900 U
8 2,4-Dimethylphenol	UG/KG	380 U	370 U	350 U	2000 U	1900 U
9 2,4-Dinitrophenol	UG/KG	930 U	910 U	840 U	4800 U	4500 U
10 2,4-Dinitrotoluene	UG/KG	380 U	370 U	350 U	2000 U	1900 U
11 2,6-Dinitrotoluene	UG/KG	380 U	370 U	350 U	2000 U	1900 U
12 2-Chloronaphthalene	UG/KG	380 U	370 U	350 U	2000 U	1900 U
13 2-Chlorophenol	UG/KG	380 U	370 U	350 U	2000 U	1900 U
14 2-Methylnaphthalene	UG/KG	380 U	370 U	350 U	5300	4200
15 2-Methylphenol	UG/KG	380 U	370 U	350 U	2000 U	1900 U
16 2-Nitroaniline	UG/KG	930 U	910 U	840 U	4800 U	4500 U
17 2-Nitrophenol	UG/KG	380 U	370 U	350 U	2000 U	1900 U
18 3,3'-Dichlorobenzidine	UG/KG	380 U	370 U	350 U	<b>2</b> 000 U	1900 U
19 3-Nitroaniline	UG/KG	930 U	910 U	840 U	4800 U	4500 U
20 4,6-Dinitro-2-methylphenol	UG/KG	930 U	910 U	840 U	4800 U	4500 U
21 4-Bromophenyl-phenylether	UG/KG	380 U	370 U	350 U	2000 U	1900 U
22 4-Chloro-3-methylphenol	UG/KG	380 U	370 U	350 U	2000 U	1900 U
23 4-Chloroaniline	UG/KG	380 U	370 U	350 U	2000 U	1900 U
24 4-Chlorophenyl-phenylether	UG/KG	380 U	370 U	350 U	2000 U	1900 U
25 4-Methylphenol	UG/KG	380 U	370 U	350 U	2000 U	1900 U
26 4-Nitroaniline	UG/KG	930 U	910 U	840 U	4800 U	4500 U
27 4-Nitrophenol	UG/KG	930 U	910 U	840 U	4800 U	4500 U
28 Acenaphthene	UG/KG	380 U	370 U	350 U	530 J	380 J
29 Acenaphthylene	UG/KG	380 U	370 U	350 U	2000 U	1900 U
30 Anthracene	UG/KG	380 U	370 U	58 J	2000 U	1900 U
31 Benzo(a)anthracene	UG/KG	380 U	370 U	440	2000 U	1900 U
32 Benzo(a)pyrene	UG/KG	380 U	370 U	340 J	2000 U	1900 U
33 Benzo(b)fluoranthene	UG/KG	62 GJ	370 U	440	2000 U	1900 U
34 Benzo(g,h,i)perylene	UG/KG	380 U	370 U	<b>320</b> J	2000 U	1900 U

SD	OG:	53906	53906	53906	53906	53906
STUDY	ID:	PHASE 1	PHASE I	PHASE 1	PHASE 1	PHASE 1
ARE	A:	SEAD-26	SEAD-26	SEAD-26	SEAD-26	SEAD-26
MATRI	X:	SOIL	SOIL	SOIL	SOIL	SOIL
ANALYSIS METHO	D:	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP
SAMP	ID:	SB26-6-04	SB26-6-06	SB26-7-00	SB26-7-03	SB26-7-07
QC COI	DE:	SA	SA	SA	SA	SA
•				,1		
PARAMET	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
35 Benzo(k)fluoranthene	UG/KG	380 U	370 U	430	2000 U	1900 U
36 Butylbenzylphthalate	UG/KG	380 U	370 U	350 U	2000 U	1900 U
37 Carbazole	UG/KG	380 U	370 U	350 U	2000 U	1900 U
38 Chrysene	UG/KG	45 J	370 U	380	2000 U	1900 U
39 Di-n-butylphthalate	UG/KG	380 U	43 BJ	350 U	· 2000 U	1900 U
40 Di-n-octylphthalate	UG/KG	380 U	370 U	350 U	2000 U	1900 U
41 Dibenz(a,h)anthracene	UG/KG	380 U	370 U	120 J	2000 U	1900 U
42 Dibenzofuran	UG/KG	380 U	370 U	350 U	520 J	1900 U
43 Diethylphthalate	UG/KG	380 U	370 U	350 U	2000 U	1900 U
44 Dimethylphthalate	UG/KG	380 U	370 U	350 U	2000 U	1900 U
45 Fluoranthene	UG/KG	68 J	370 U	700	270 Ј	1900 U
46 Fluorene	UG/KG	380 U	370 U	350 Ü	1200 J	870 J
47 Hexachlorobenzene	UG/KG	380 U	370 U	350 U	2000 U	1900 U
48 Hexachlorobutadiene	UG/KG	380 U	370 U	350 U	2000 U	1900 U
49 Hexachlorocyclopentadiene	UG/KG	380 U	370 U	350 U	2000 U	1900 U
50 Hexachloroethane	UG/KG	380 U	370 U	350 U	2000 U	1900 U
51 Indeno(1,2,3-cd)pyrene	UG/KG	380 U	370 U	270 Ј	2000 U	1900 U
52 Isophorone	UG/KG	380 U	370 U	350 U	2000 U	1900 U
53 N-Nitroso-di-n-propylamine	UG/KG	380 U	370 U	350 U	2000 U	1900 U
54 N-Nitrosodiphenylamine (1)	UG/KG	380 U	370 U	350 U	2000 U	1900 U
55 Naphthalene	UG/KG	380 U	370 U	350 U	850 J	350 J
56 Nitrobenzene	UG/KG	380 U	370 U	350 U	2000 U	1900 U
57 Pentachlorophenol	UG/KG	930 U	910 Ü	840 U	4800 U	4500 U
58 Phenanthrene	UG/KG	53 J	370 U	250 J	1900 J	1700 J
59 Phenol	UG/KG	380 U	370 U	350 U	2000 U	1900 U
60 Pyrene	UG/KG	. 73 Ј	370 U	710	300 J	240 J
61 bis(2-Chloroethoxy) methane	UG/KG	380 U 380 U	370 U	350 U	2000 U	1900 U
62 bis(2-Chloroethyl) ether	UG/KG	§ 380 U	370 U	350 U	2000 U	1900 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	380 U	370 U	350 U	2000 U	1900 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	* 89 BJ	170 BJ	62 BJ	2000 U	200 J
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	SDG		53906		53906		53906		53906
	STUDY ID		PHASE 1		PHASE 1		PHASE 1		PHASE 1
	AREA		SEAD-26		SEAD-26		SEAD-26		SEAD-26
	MATRIX		SOIL SOIL		SOIL		SOIL		SOIL
	ANALYSIS METHOD		NYSDEC-CLP		NYSDEC-CLP		NYSDEC-CLP		NYSDEC-CLP
	SAMP ID		SB26-8-00		SB26-8-04		SB26-8-05		SB26-9-00
	QC CODE		SA		SD20-0-04 SA		SA		SB20-5-00 SA
	QC CODE	•	bA.		5A		5A		bri .
	PARAMETER	R UNIT	VALUE	Q	VALUE	Q	VALUE	Q	VALUE Q
1	1,2,4-Trichlorobenzene	UG/KG	350	U	380	U	350	U	1200 U
2	1,2-Dichlorobenzene	UG/KG	350	U	380	U	350	U	1200 U
3	1,3-Dichlorobenzene	UG/KG	350	U	380	U	350	_	1200 U
4	1,4-Dichlorobenzene	UG/KG	350	U	380	U	350		1200 U
5	2,4,5-Trichlorophenol	UG/KG	850	U	930	_	850		2900 U
6	2,4,6-Trichlorophenol	UG/KG	350	U	380		350	U	1200 U
7	2,4-Dichlorophenol	UG/KG	350	U	380		350	_	1200 U
8	2,4-Dimethylphenol	UG/KG	350		380		350		1200 U
9	2,4-Dinitrophenol	UG/KG	850		930		850		2900 U
10	2,4-Dinitrotoluene	UG/KG	350		380		350		1200 U
11	2,6-Dinitrotoluene	UG/KG	350		380		350		1200 U
12	2-Chloronaphthalene	UG/KG	350	U	380		350		1200 U
13	2-Chlorophenol	UG/KG	350		380		350		1200 U
14	2-Methylnaphthalene	UG/KG	350		380		350		1200 U
	2-Methylphenol	UG/KG	350		380		350		1200 U
	2-Nitroaniline	UG/KG	850		930		850		2900 U
	2-Nitrophenol	UG/KG	350		380	_	350		1200 U
	3,3'-Dichlorobenzidine	UG/KG	350		380		350		1200 U
	3-Nitroaniline	UG/KG	850		. 930		850		2900 U
	4,6-Dinitro-2-methylphenol	UG/KG	850		930		850		2900 U
	4-Bromophenyl-phenylether	UG/KG	350		380		350		1200 U
	4-Chloro-3-methylphenol	UG/KG	350		380	_	350		1200 U
	4-Chloroaniline	UG/KG	350		380		350	_	1200 U
	4-Chlorophenyl-phenylether	UG/KG	350		380		350		1200 U
	4-Methylphenol	UG/KG	350		380	_	350		1200 U
	4-Nitroaniline	UG/KG	850		930		850		2900 U
	4-Nitrophenol	UG/KG	850		930		850		2900 U
	Acenaphthene	UG/KG	350		380		350		540 J
	Acenaphthylene	UG/KG	350		380		350		1200 U
_	Anthracene	UG/KG	350		380	_	350		840 J
	Benzo(a)anthracene	UG/KG	36		380		350		2000
	Benzo(a)pyrene	UG/KG	37		380		350		2200
	Benzo(b)fluoranthene	UG/KG		GJ	380		350		4300 G
34	Benzo(g,h,i)perylene	UG/KG	42	J	380	Ű	350	U	1900

	SDG:		53906		53906		53906		53906
	STUDY ID:		PHASE 1		PHASE 1		PHASE 1		PHASE 1
	AREA:		SEAD-26		SEAD-26		SEAD-26		SEAD-26
	MATRIX:		SOIL		SOIL		SOIL		SOIL
	ANALYSIS METHOD:		NYSDEC-CLP		NYSDEC-CLP		NYSDEC-CLP		NYSDEC-CLP
	SAMP ID:		SB26-8-00	)	SB26-8-04		SB26-8-05		SB26-9-00
	QC CODE:		SA		SA		SA		SA
	PARAMETER	UNIT	VALUE		VALUE	0	VALUE	0	VALUE Q
35	Benzo(k)fluoranthene	UG/KG	350		380		350		1200 U
	Butylbenzylphthalate	UG/KG	350		380		350		1200 U
	Carbazole	UG/KG	350		380		350		610 J
-	Chrysene	UG/KG	39		380	-	350	-	2400
39		UG/KG	350		380		350		1200 U
-	Di-n-octylphthalate	UG/KG	350		380		350		1200 U
41		UG/KG	350		380		350		720 J
42		UG/KG	350		380		350		190 J
	Diethylphthalate	UG/KG	350		380	-	350		1200 U
	Dimethylphthalate	UG/KG	350		380		350		1200 U
	Fluoranthene	UG/KG	64		380		350	-	5500
46	Fluorene	UG/KG	350		380.		350	_	440 J
47	Hexachlorobenzene	UG/KG	350		380		350		1200 U
48	Hexachlorobutadiene	UG/KG	350		380		350		1200 U
49	Hexachlorocyclopentadiene	UG/KG	350	U	380	U	350		1200 U
50	Hexachloroethane	UG/KG	350	U	380	U	350		1200 U
51	Indeno(1,2,3-cd)pyrene	UG/KG	350	U	380	U	350	U	1400
52	Isophorone	UG/KG	350	U	380	U	350	U	1200 U
53	N-Nitroso-di-n-propylamine	UG/KG	350	U	. 380	U	350	U	1200 U
54	N-Nitrosodiphenylamine (1)	UG/KG	350	U	380	U	350	U	1200 U
55	Naphthalene	UG/KG	350	U	380	U	350	U	1200 U
56	Nitrobenzene	UG/KG	350	U	380	U	350	U	1200 U
57	Pentachlorophenol	UG/KG	850	U	930	U	850	U	2900 U
58	Phenanthrene	UG/KG	38	J	380	U	350	U	4000
59	Phenol	UG/KG	350	U	380	U	350	U	1200 U
60	Pyrene	UG/KG	62	J	380	U	350	U	5100
	bis(2-Chloroethoxy) methane	UG/KG	350		380	U	350	U	1200 U
	bis(2-Chloroethyl) ether	UG/KG	350	U	380	U	350	U	1200 U
	bis(2-Chloroisoctopyl) ether	UG/KG	350	_	380	U	350	U	1200 U
64	bis(2-Ethylhexyl)phthalate	UG/KG	62	BJ	110	BJ	68	BJ	1200 U

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LAB S EPA S ( % M	SDG: TUDY ID: MATRIX: SAMP. ID: SAMP. ID: QC CODE: OISTURE: 6 SOLIDS:	53906 PHASE 1 SOIL 272293 SB26-5-05MS MS 16	53906 PHASE 1 SOIL 272293 SB26-5-05MSD MSD 16	53906 PHASE 1 SOIL 271801 SB26-10-00 SA 5	53906 PHASE 1 SOIL 271802 SB26-10-03 SA 16	53906 PHASE 1 SOIL 271803 SB26-10-04 SA 17	53906 PHASE 1 SOIL 272291 SB26-5-00 SA 7
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	3.9 U	3.9 U	5.4 P	3.8 U	4 U	3.5 U
2 4,4'-DDE	UG/KG	′ 3.9 U	3.9 U	4.8 P	3.8 U	4 U	3.5 U
3 4,4'-DDT	UG/KG	, 36	34	7 P	3.8 U	4 U	2.1 ЛР
4 Aldrin	UG/KG	. 17	17	1.8 U	2 U	2 U	1.8 U
5 Aroclor-1016	UG/KG	39 U	39 U	34 U	38 U	40 U	35 U
6 Aroclor-1221	UG/KG	80 U	80 U	69 U	<b>77</b> U	80 U	<b>72</b> U
7 Aroclor-1232	UG/KG	39 U	39 U	34 U	38 U	40 U	35 U
8 Aroclor-1242	UG/KG	39 U	39 U	34 U	38 U	40 U	35 U
9 Aroclor-1248	UG/KG	39 U	39 U	34 U	38 U	40 U	35 U
10 Aroclor-1254	UG/KG	39 U	39 U	34 U	38 U	40 U	35 U
11 Aroclor-1260	UG/KG	39 U	39 U	34 U	38 U	40 U	35 U
12 Dieldrin	UG/KG	34	33	3.4 U	3.8 U	4 U	3.5 U
13 Endosulfan I	UG/KG	2 U	2 U	1.8 U	2 U	2 U	1.8 U
14 Endosulfan II	UG/KG	3.9 U	3.9 U	5.7 P	3.8 U	4 U	3.5 J
15 Endosulfan sulfate	UG/KG	3.9 U	3.9 U	5.4 P	3.8 U	4 U	3.8 P
16 Endrin	UG/KG	38	35	3.4 U	3.8 U	4 U	3.5 U
17 Endrin aldehyde	UG/KG	3.9 U	3.9 U	3.4 U	2.2 JP	2.2 JP	2.1 JP
18 Endrin ketone	UG/KG	3.9 U	3.9 U	3.4 U	3.8 U	4 U	3.5 U
19 Heptachlor	UG/KG	17	17	1.8 U	2 U	2 U	1.8 U
20 Heptachlor epoxide	UG/KG	2 U	2 U	1.4 JP	2 U	2 U	1.8 U
21 Methoxychlor	UG/KG	20 U	20 U	18 U	20 U	20 U	18 U
22 Toxaphene	UG/KG	200 U	200 U	180 U	200 U	200 U	180 U
23 alpha-BHC	UG/KG	2 U	2 U	1.8 U	2 U	2 U	1.8 U
24 alpha-Chlordane	UG/KG	2 U	2 U	1.8 U	2 U	2 U	1.8 U
25 beta-BHC	UG/KG	2 U	2 U	1.8 U	2 U	2 U	1.8 U
26 delta-BHC	UG/KG	2 U	2 U	1.8 U	2 U	2 U	1.8 U
27 gamma-BHC (Lindane)	UG/KG	17	16	1.8 U	2 U	2 U	1.8 U
28 gamma-Chlordane	UG/KG	2 U	2 U	1.8 U	2 U	2 U	1.8 U

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LESII	CI.	DES

LEGITCHDED							
	SDG:	53906	53906	53906	53906	53906	53906
S	TUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
LABS	SAMP. ID:	272292	272293	272141	272142	272143	272144
EPA S	SAMP. ID:	SB26-5-03	SB26-5-05	SB26-6-00	SB26-6-04	SB26-6-06	SB26-7-00
(	QC CODE:	SA	SA	SA	SA	SA	SA
% M	OISTURE:	15	16	9	14	12	5
9	6 SOLIDS:						
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE O	VALUE Q
1 4,4'-DDD	UG/KG	3.9 U	3.9 U	2 ЛР	3.8 U	3.7 U	3.5 U
2 4,4'-DDE	UG/KG	3.9 U	3.9 U	3.6 U	3.8 U	3.7 U	3.5 U
3 4,4'-DDT	UG/KG	3.9 U	3.9 U	3.6 U	3.8 U	3.7 U	5.8 P
4 Aldrin	UG/KG	2 U	2 U	1.9 U	2 U	1.9 U	1.8 U
5 Aroclor-1016	UG/KG	39 U	39 U	36 U	38 U	37 U	35 U
6 Aroclor-1221	UG/KG	79 U	80 U	73 U	78 U	76 U	71 U
7 Aroclor-1232	UG/KG	39 U	39 U	36 U	38 U	37 U	35 U
8 Aroclor-1242	UG/KG	39 U	39 U	36 U	38 U	37 U	35 U
9 Aroclor-1248	UG/KG	39 U	39 U	36 U	38 U	37 U	35 U
10 Aroclor-1254	UG/KG	39 U	39 U	36 U	38 U	37 U	35 U
11 Aroclor-1260	UG/KG	39 U	39 U	36 U	38 U	37 U	35 U
12 Dieldrin	UG/KG	3.9 U	3.9 U	3.6 U	3.8 U	3.7 U	3.5 U
13 Endosulfan I	UG/KG	2 U	2 U	1.2 ЛР	2 U	1.9 U	1.8 U
14 Endosulfan II	UG/KG	3.9 U	3.9 U	0.59 JP	3.8 U	3.7 U	2.8 ЛР
15 Endosulfan sulfate	UG/KG	3.9 U	3.9 U	4.8	3.8 U	3.7 U	7 P
16 Endrin	UG/KG	3.9 U	3.9 U	3.6 U	3.8 U	3.7 U	8
17 Endrin aldehyde	UG/KG	10 P	3.9 U	5.3 BP	3.8 U	3.7 U	9.7 BP
18 Endrin ketone	UG/KG	3.9 U	3.9 U	3.6 U	3.8 U	3.7 U	13
19 Heptachlor	UG/KG	2 U	2 U	1.9 U	2 U	1.9 U	1.8 U
20 Heptachlor epoxide	UG/KG	2 U	2 U	1.2 JP	2 U	1.9 U	1.8 U
21 Methoxychlor	UG/KG	<b>20</b> U	<b>20</b> U	19 U	20 U	19 U	18 U
22 Toxaphene	UG/KG	200 U	200 U	190 U	200 U	190 U	180 U
23 alpha-BHC	UG/KG	2 U	2 .U	1.9 U	2 U	1.9 U	1.8 U
24 alpha-Chlordane	UG/KG	2 U	<b>2</b> U	1.9 U	2 U	1.9 U	1.8 U
25 beta-BHC	UG/KG	2 U	2 U	1.9 U	2 U	1.9 U	1.8 U
26 delta-BHC	UG/KG	2 U	2 U	1.9 U	2 U	1.9 U	1.8 U
27 gamma-BHC (Lindane)	UG/KG	2 U	2 U	1.9 U	2 U	1.9 U	1.8 U
28 gamma-Chlordane	UG/KG	2 U	2 U	1.9 U	2 U	1.9 U	1.8 U

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TESTICIDES							
	SDG:	53906	53906	53906	53906	53906	53906
	UDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
N	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SA	AMP. ID:	272145	272294	272079	272082	272083	272296
EPA SA	AMP. ID:	SB26-7-03	SB26-7-07	SB26-8-00	SB26-8-04	SB26-8-05	SB26-9-00
Q	C CODE:	SA	SA	SA	SA	SA	SA
% MO	ISTURE:	17	12	6	14	6	9
%	SOLIDS:			-		-	_
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	4 U	3.7 U	3.5 U	3.8 U	3.5 U	3.3 J
2 4,4'-DDE	UG/KG	4 U	3.7 U	2.8 J	3.8 U	3.5 U	8.3 P
3 4,4'-DDT	UG/KG	4 U	3.7 U	1.8 ЈР	3.8 U	3.5 U	5
4 Aldrin	UG/KG	2 U	1.9 U	1.8 U	2 U	1.8 U	1.9 U
5 Aroclor-I016	UG/KG	40 U	37 U	35 U	38 U	35 U	36 U
6 Aroclor-1221	UG/KG	81 U	<b>7</b> 6 U	<b>71</b> U	78 U	<b>71</b> U	<b>74</b> U
7 Aroclor-1232	UG/KG	<b>40</b> U	37 U	35 U	38 U	35 U	36 U
8 Aroclor-1242	UG/KG	40 U	37 U	35 U	38 U	35 U	36 U
9 Aroclor-1248	UG/KG	<b>40</b> U	37 U	35 U	38 U	35 U	36 U
10 Aroclor-1254	UG/KG	40 U	37 U	35 U	38 U	35 U	36 U
11 Aroclor-1260	UG/KG	<b>40</b> U	37 U	35 U	38 U	35 U	36 U
12 Dieldrin	UG/KG	4 U	3.7 U	3.5 U	3.8 U	3.5 U	3.6 U
13 Endosulfan I	UG/KG	2 U	1.9 U	0.22 ЛР	2 U	1.8 U	1.9 U
14 Endosulfan II	UG/KG	4 U	3.7 U	3.5 U	3.8 U	3.5 U	3.6 U
15 Endosulfan sulfate	UG/KG	4 U	2.6 ЛР	3.5 U	3.8 U	3.5 U	5.9 P
16 Endrin	UG/KG	4 U	3.7 U	3.5 U	3.8 U	3.5 U	3.6 U
17 Endrin aldehyde	UG/KG	5 PB	3.7 U	3.5 U	3.8 U	3.5 U	8.7 P
18 Endrin ketone	UG/KG	4 U	3.7 U	3.5 U	3.8 U	3.5 U	3.6 U
19 Heptachlor	UG/KG	2 U	1.9 U	1.8 U	2 U	1.8 U	1.9 U
20 Heptachlor epoxide	UG/KG	2 U	1.9 U	1.8 U	2 U	1.8 U	1.9 U
21 Methoxychlor	UG/KG	20 U	19 U	18 U	20 U	18 U	19 U
22 Toxaphene	UG/KG	200 U	190 U	180 U	200 U	180 U	190 U
23 alpha-BHC	UG/KG	2 U	1.9 U	1.8 U	2 U	1.8 U	1.9 U
24 alpha-Chlordane	UG/KG	2 U	1.9 Ù	1.8 U	2 U	1.8 U	1.9 U
25 beta-BHC	UG/KG	2 U	1.9 U	1.8 U	2 U	1.8 U	1.9 U
26 delta-BHC	UG/KG	2 U	1.9 U	1.8 U	2 U	1.8 U	1.9 U
27 gamma-BHC (Lindane)	UG/KG	2 U	1.9 U	1.8 U	2 U	1.8 U	1.9 U
28 gamma-Chlordane	UG/KG	2 U	1.9 U	1.8 U	2 U	1.8 U	1.9 U

53906PS.WK4

## **METALS**

MILIALS							
	SDG:		53906	53906	53906	53906	53906
	STUDY ID:		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:		SOIL	SOIL	SOIL	SOIL	SOIL
	LAB SAMP. ID:		271801	271802	271803	272291	272292
	EPA SAMP. ID:		SB26-10-00	SB26-10-03	SB26-10-04	SB26-5-00	SB26-5-03
	QC CODE:		SA	SA	SA	SA	SA
	% MOISTURE:						
	% SOLIDS:		95.3	83.9	82.9	93.5	84.9
PARAMETER	UNIT	,	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
PARAMETER	UNIT	,	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	MG/K		6380	11400	15300	10300	13700
2 Antimony	MG/K		0.51 B	0.7 B	0.49 B	0.76 B	0.62 B
3 Arsenic	MG/K		4.2	7.8	5.9	6.8	6
4 Barium	MG/K		49.6	144	64.8	54.5	67.7
5 Beryllium	MG/K		0.45 B	0.73 B	0.67 B	0.51 B	0.72 B
6 Cadmium	MG/K		0.05 U	0.49 B	0.04 U	0.05 U	0.06 U
7 Calcium	MG/K		58000 *	29900 *	10400 *	52800 *	9780 *
8 Chromium	MG/K		13.8	23.7	21.9	18.5	20.4
9 Cobalt	MG/K		8.2	11.9	11.3	11.5	12.5
10 Copper	MG/K		17.2	20.3	26	20.5	28.4
11 Cyanide	MG/K		0.52 U	0.59 U	0.57 U	0.53 U	0.48 U
12 Iron	MG/K		18700	28400	29500	24700	26300
13 Lead	MG/K		14.7	516	276	22.4	14.6
14 Magnesium	MG/K		7210	8470	5220	7530	5960
15 Manganese	MG/K		430	653	391	577	494
16 Mercury	MG/K		0.03 B	0.09 B	0.05 B	0.04 B	0.05 B
17 Nickel	MG/K		23.9	30.5	34.7	31	30.8
18 Potasium	MG/K		1010	2230	1690	1240	1390
19 Selenium	MG/K		0.66 U	0.78 B	1.1 N	0.68 B	0.73 U
20 Silver	MG/K		0.14 U	0.15 U	0.11 U	0.12 U	0.16 U
21 Sodium	MG/K		41.2 B	62.3 B	48.7 B	64.6 B	39.6 U
22 Thallium	MG/K		0.77 B	1 B	0.85 B	0.46 U	0.59 U
23 Vanadium	MG/K		14.2	25.1	21	15.8	22.2
24 Zinc	MG/K		77.7 N	379 N	127 N	88.5 N	105 N

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D/I	$\mathbf{E}$	ΙА		

MILIALS						52006
	SDG:	53906	53906	<b>53</b> 906	53906	53906
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
I	LAB SAMP. ID:	272293	272141	272142	272143	272144
1	EPA SAMP. ID:	SB26-5-05	SB26-6-00	SB26-6-04	SB26-6-06	SB26-7-00
	QC CODE:	SA	SA	SA	SA	SA
	% MOISTURE:					
	% SOLIDS:	84.1	90.9	86	88.1	94.6
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	MG/K	16900	8670	14100	13100	6820
2 Antimony	MG/K	0.7 B	0.61 B	0.76 B	0.57 B	0.79 B
3 Arsenic	MG/K	6.7	4.8	5.7	5.2	7.6
4 Barium	MG/K	56.5	52.8	68	57.7	54.9
5 Beryllium	MG/K	0.64 B	0.42 B	0.64 B	0.59 B	0.57 B
6 Cadmium	MG/K	0.06 U	0.1 B	0.06 U	0.05 U	0.05 U
7 Calcium	MG/K	18700 *	161000 *	34600 *	4740 *	86000 *
8 Chromium	MG/K	22.9	14.6	20.9	19.4	19
9 Cobalt	MG/K	13.5	8.6	10.9	10.3	12.8
10 Copper	MG/K	16.4	23.9	21.2	18.9	24.1
11 Cyanide	MG/K	0.55 U	0.51 U	0.56 U	0.56 U	0.48 U
12 Iron	MG/K	30500	20200	25900	25200	24800
13 Lead	MG/K	12	46.3	10.6	10	101
14 Magnesium	MG/K	6190	9890	8500	4660	10600
15 Manganese	MG/K	606	489	506	448	473
16 Mercury	MG/K	0.05 B	0.02 B	0.03 B	0.07 B	0.02 B
17 Nickel	MG/K	33.2	24.9	31.2	29.8	35.2
18 Potasium	MG/K	1310	1190	1770	1270	1580
19 Selenium	MG/K	0.78 B	0.66 U	0.77 U	0.63 U	0.63 U
20 Silver	MG/K	0.16 U	0.14 U	0.17 U	0.14 U	0.14 U
21 Sodium	MG/K	39.7 U	115 B	46.5 B	33.9 U	114 B
22 Thallium	MG/K	1.4 B	0. <b>53</b> U	0.77 B	0.7 B	0.79 B
23 Vanadium	MG/K	20.5	13.2	22	19.3	19.1
24 Zinc	MG/K	115 N	89.7 N	85.2 N	95.3 N	109 N

. METALS

MULTILO						
	SDG:	53906	53906	53906	53906	53906
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LA	AB SAMP. ID:	272145	272294	272079	272082	272083
EP	PA SAMP. ID:	SB26-7-03	SB26-7-07	SB26-8-00	SB26-8-04	SB26-8-05
	QC CODE:	SA	SA	SA	SA	SA
%	MOISTURE:					
	% SOLIDS:	83.2	88.1	94	86.4	93.7
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	MG/K	14400	15700	9360	15.600	. 14800
2 Antimony	MG/K	0.69 B	0.54 B	0.44 B	0.5 B	0.45 B
3 Arsenic	MG/K	4.7	10.8	5.6	7.5	5.3
4 Barium	MG/K	48.8	42.9	65.5	112	46.5
5 Beryllium	MG/K	0.58 B	0.51 B	0.45 B	0.86	0.59 B
6 Cadmium	MG/K	0.06 U	0.04 U	0.06 U	0.05 U	0.04 U
7 Calcium	MG/K	5600 *	6320 *	49100 *	4470 *	3290 *
8 Chromium	MG/K	17.4	18.5	16	25	22.1
9 Cobalt	MG/K	12.1	11.4	9.6	17.2	15.9
10 Copper	MG/K	13.6	15.8	11.9	21.8	13.2
11 Cyanide	MG/K	0.56 U	0.56 U	0.52 U	0.5 U	0.53 U
12 Iron	MG/K	24600	25500	22600	33400	31100
13 Lead	MG/K	14.7	8.6	25.8	14.9	9.5
14 Magnesium	MG/K	4420	4630	10500	5380	5530
15 Manganese	MG/K	500	383	529	1260	493
16 Mercury	MG/K	0.03 B	0.01 B	0.06 B	0.05 B	0.03 B
17 Nickel	MG/K	<b>2</b> 6	28.3	25.3	41.8	35.1
18 Potasium	MG/K	940 B	925	1090	1720	1120
19 Selenium	MG/K	0.73 U	0.61 B	0.69 U	1.1 N	0.55 U
20 Silver	MG/K	0.16 U	0.1 U	0.15 U	0.13 U	0.12 U
21 Sodium	MG/K	39.4 U	30.7 B	87.3 B	33.1 U	29.9 U
22 Thallium	MG/K	0.59 U	0.75 B	0.56 U	0.85 B	0.89 B
23 Vanadium	MG/K	16.3	15.5	14.4	25.8	16.8
24 Zinc	MG/K	66.6 N	68.5 N	63.7 N	66.7 N	60.8 N

## **METALS**

IVLE 1	ALS				
		SDG:		53906	
		STUDY ID:		PHASE 1	
		MATRIX:		SOIL	
		LAB SAMP. ID:		272296	
		EPA SAMP. ID:		SB26-9-00	
		QC CODE:		SA	
		% MOISTURE:			
		% SOLIDS:		90.7	
	PARAMETER	UNIT		VALUE	_
	PARAMETER	UNIT		VALUE	Q
1	Aluminimum	MG/K		10100	
2	Antimony	MG/K		0.45	$\mathbf{B}$
3	Arsenic	MG/K		5.1	
4	Barium	MG/K		56.3	
5	Beryllium	MG/K		0.49	$\mathbf{B}$
6	Cadmium	MG/K		0.05	U
7	Calcium	MG/K		66100	*
8	Chromium	MG/K		17.8	
9	Cobalt	MG/K	•	11.6	
10	Copper	MG/K	•	24.8	
11	Cyanide	MG/K		0.52	U
12	Iron	MG/K	,	22700	
13	Lead	MG/K	,	21.3	
14	Magnesium	MG/K		7820	
	Manganese	MG/K		483	
16	Mercury	MG/K		0.03	В
17	Nickel	MG/K		33.3	
18	Potasium	MG/K		930	
19	Selenium	MG/K		0.64	В
20	Silver	MG/K		0.13	U
21	Sodium	MG/K		55.1	В
22	Thallium	MG/K		0.48	U
23	Vanadium	MG/K		14.6	
24	Zinc	MG/K		95.1	N

VOCs					
	SDG:	54003	54003	54003	54003
STUD	OY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MA	TRIX:	WATER	WATER	WATER	WATER
LAB SAM		273736	272278	272568	272569
EPA SAM		SD25-6R	SB25-7-00RNS	TB92695	TB92795
	CODE:	FB	SA	ТВ	TB
% MOIST		0	0	0	0
% SO		v	v	· ·	
76 30	LIDS.			."	
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	UG/L	10 U	10 U	10 U	10 U
2 1,1,2,2-Tetrachloroethane	UG/L	10 U	10 U	10 U	10 U
3 1,1,2-Trichloroethene	UG/L	10 U	10 U	10 U	10 U
4 1,1-Dichloroethane	UG/L	10 U	10 U	<sub>-</sub> 10 U	10 U
5 1,1-Dichloroethene	UG/L	10 U	10 U	10 U	10 U
6 1,2-Dichloroctopane	UG/L	10 U	10 U	10 U	10 U
7 1,2-Dichloroethane	UG/L	10 U	10 U	10 U	10 U
8 1,2-Dichloroethene (total)	UG/L	10 U	10 U	10 U	10 U
9 2-Butanone	UG/L	10 U	10 U	10 U	10 U
10 2-Hexanone	UG/L	10 U	10 U	10 U	10 U
11 4-Methyl-2-Pentanone	UG/L	10 U	10 U	10 U	10 U
12 Acetone	UG/L	10 U	10 U	10 U	10 U
13 Benzene	UG/L	10 U	10 U	10 U	10 U
14 Bromodichloromethane	UG/L	10 U	10 U	10 U	10 U
15 Bromoform	UG/L	10 U	10 U	10 U	10 U
16 Bromomethane	UG/L	10 U	10 U	10 U	10 U
17 Carbon Disulfide	UG/L	10 U	10 U	10 U	10 U
18 Carbon Tetrachloride	UG/L	10 U	. 10 U	10 U	10 U
19 Chlorobenzene	UG/L	10 U	10 U	10 U	10 U
20 Chloroethane	UG/L	10 U	10 U	10 U	10 U
21 Chloroform	UG/L	10 U	10 U	10 U	10 U
22 Chloromethane	UG/L	10 U	10 U	10 U	10 U
23 Dibromochloromethane	UG/L	10 U	10 U	10 U	10 U
24 Ethylbenzene	UG/L	10 U	10 U	10 U	10 U
25 Methylene Chloride	UG/L	10 U	10 U	10 U	10 U
26 Styrene	UG/L	10 U	10 U	10 U	10 U
27 Tetrachloroethene	UG/L	10 U	10 U	10 U	10 U
28 Toluene	UG/L	10 U	10 U	10 U	10 U
29 Trichloroethene	UG/L	10 U	10 U	10 U	10 U
30 Vinyl Chloride	UG/L	10 U	10 U	10 U	10 U
31 Xylene (total)	UG/L	10 U	10 U	10 U	10 U
32 cis-1,3-Dichloroctopene	UG/L	10 U	10 U	10 U	10 U
33 trans-1,3-Dichloroctopene	UG/L	10 U	10 U	10 U	10 U
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STUDY		54003 PHASE 1	54003 PHASE 1	54003 PHASE 1	54003 PHASE 1	54003 PHASE 1
MATI		SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP		272281	272281	272281	273734	272565
EPA SAMP		SB25-7-10	SB25-7-10MS	SB25-7-10MSD	SD25-6RE	SB25-10-00
QC CC		DU	MS	MSD	RE	SA
% MOISTU		13	13	13	20	16
% SOL	IDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	UG/KG	11 U	11 U	11 U	12 U	12 U
2 1,1,2,2-Tetrachloroethane	UG/KG	11 U	11 U	11 U	. 12 U	I2 U
3 1,1,2-Trichloroethene	UG/KG	11 U	11 U	11 U	<b>12</b> U	12 U
4 1,1-Dichloroethane	UG/KG	11 U	11 U	11 U	12 U	12 U
5 1,1-Dichloroethene	UG/KG	11 U	59	62	12 U	12 U
6 1,2-Dichloroctopane	UG/KG	11 U	11 U	11 U	12 U	12 U
7 1,2-Dichloroethane	UG/KG	11 U	11 U	11 U	12 U	12 U
8 1,2-Dichloroethene (total)	UG/KG	11 U	11 U	11 U	12 U	12 U
9 2-Butanone	UG/KG	11 U	11 U	11 U	2 J	12 U
10 2-Hexanone	UG/KG	11 U	11 U	11 U	12 U	12 U
11 4-Methyl-2-Pentanone	UG/KG	11. U	11 U	11 U	12 U	12 U
12 Acetone	UG/KG	11 U	11 U	11 U	5 J	12 U
13 Benzene	UG/KG	11 U	60	60	12 U	12 U
14 Bromodichloromethane	UG/KG	11 U	11 U	11 U	12 U	12 U
15 Bromoform	UG/KG	11 U	11 U	11 U	12 U	12 U
16 Bromomethane	UG/KG	11 U	11 U	11 U	12 U	12 U
17 Carbon Disulfide	UG/KG	11 U	11 U	11 U	12 U	12 U
18 Carbon Tetrachloride	UG/KG	11 U	11 U	11 U	12 U	12 U
<ul><li>19 Chlorobenzene</li><li>20 Chloroethane</li></ul>	UG/KG	11 U	60	61	12 U	12 U
21 Chloroform	UG/KG UG/KG	11 U 11 U	11 U	11 U	12 U	12 U
22 Chloromethane	UG/KG	11 U	11 U	11 U	12 U	12 U
23 Dibromochloromethane	UG/KG	11 U	11 U 11 U	11 U	12 U	12 U
24 Ethylbenzene	UG/KG	11 U	11 U	11 U	12 U	12 U
25 Methylene Chloride	UG/KG	11 U	11 U	11 U 11 U	12 U	12 U
26 Styrene	UG/KG	11 U	11 U		12 U	12 U
27 Tetrachloroethene	UG/KG	11 U	11 U	11 U	12 U	12 U
28 Toluene	UG/KG	· 11 U	61	11 U	12 U	12 U
29 Trichloroethene	UG/KG	11 U	59	62 59	12 U	12 U
30 Vinyl Chloride	UG/KG	11 U	11 U	11 U	12 U	12 U
31 Xylene (total)	UG/KG	11 U	11 U	11 U	12 U	12 U
32 cis-1,3-Dichloroctopene	UG/KG	11 U	11 U	11 U	12 U	12 U
33 trans-1,3-Dichloroctopene	UG/KG	11 U	11 U		12 U	12 U
33 Haus-1,3-Diemolociopene	UG/KG	11 0	11 0	11 U	12 U	12 U

54003VS.WK4

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STUDY		54003 PHASE 1	54003 PHASE 1	54003 PHASE 1	54003 PHASE 1	54003 PHASE 1
MAT LAB SAMP		SOIL 272566	SOIL 272567	SO1L 272277	SOIL 272279	SOIL 272280
EPA SAMP		SB25-10-01	SB25-10-02	SB25-7-00	SB25-7-03	SB25-7-04
QC CC		SA	SA	SA	SA	SA
% MOISTU		11	11	13	7	8
% SOL	IDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	UG/KG	11 U	11 U	11 U	11 U	11 U
2 1,1,2,2-Tetrachloroethane	UG/KG	11 U	11 U	11 U	11 U	11 U
3 1,1,2-Trichloroethene	UG/KG	11 U	11 U	11 U	11 U	11 U
4 1,1-Dichloroethane	UG/KG	11 U	11 U	11 U	11 U	11 U
5 1,1-Dichloroethene	UG/KG	11 U	11 U	11 U	11 U	11 Ŭ
6 1,2-Dichloroctopane	UG/KG	11 U	11 U	11 U	11 U	11 U
7 1,2-Dichloroethane	UG/KG	11 U	11 U	11 U	11 U	11 U
8 1,2-Dichloroethene (total)	UG/KG	11 U	11 U	11 U 11 U	11 U 11 U	11 U 11 U
9 2-Butanone	UG/KG	11 U	11 U 11 U	11 U	11 U	11 U
10 2-Hexanone	UG/KG UG/KG	11 U 11 U	11 U	11 U	11 U	11 U
11 4-Methyl-2-Pentanone	UG/KG UG/KG	3 J	11 U	11 U 5 J	4 J	11 U
12 Acetone 13 Benzene	UG/KG	11 U	11 U	11 U	11 U	11 U
13 Benzene 14 Bromodichloromethane	UG/KG	11 U	11 U	11 U	11 U	11 U
15 Bromoform	UG/KG	11 U	11 U	11 U	11 U	11 U
16 Bromomethane	UG/KG	11 U	11 U	11 U	11 U	11 U
17 Carbon Disulfide	UG/KG	11 U	11 U	11 U	11 U	11 U
18 Carbon Tetrachloride	UG/KG	11 U	11 U	11 U	11 U	11 U
19 Chlorobenzene	UG/KG	11 U	11 U	11 U	11 U	11 U
20 Chloroethane	UG/KG	11 U	11 U	11 U	11 U	11 U
21 Chloroform	UG/KG	11 U	11 U	11 U	11 U	11 U
22 Chloromethane	UG/KG	11 U	11 U	11 U	11 U	11 U
23 Dibromochloromethane	UG/KG	11 U	11 U	11 U	11 U	11 U
24 Ethylbenzene	UG/KG	11 U	11 U	11 U	11 U	11 U
25 Methylene Chloride	UG/KG	11 U	11 U	11 U	11 U	11 U
26 Styrene	UG/KG	11 U	11 U	11 U	11 U	11 U
27 Tetrachloroethene	UG/KG	11 U	11 U	11 U	11 U	11 U
28 Toluene	UG/KG	. 11 U	11 U	11 U	11 U	11 U
29 Trichloroethene	UG/KG	11 U	11 U	11 U	11 U	11 U
30 Vinyl Chloride	UG/KG	11 U	11 U	11 U	11 U	11 U
31 Xylene (total)	UG/KG	2 Ј	11 U	11 U	11 U	11 U
32 cis-1,3-Dichloroctopene	UG/KG	11 U	11 U	11 U	11 U	11 U
33 trans-1,3-Dichloroctopene	UG/KG	11 U	11 U	11 U	11 U	11 U

54003VS.WK4

VOCs

STUD MAT LAB SAM EPA SAM QC C	TRIX: P. ID: P. ID: ODE:	54003 PHASE 1 SOIL 272559 SB25-8-00 SA	54003 PHASE 1 SOIL 272560 SB25-8-01 SA	54003 PHASE 1 SOIL 272561 SB25-8-02 SA	54003 PHASE 1 SOIL 272562 SB25-9-00 SA	54003 PHASE 1 SOIL 272563 SB25-9-01 SA
% MOIST % SOI		18	12	8	14	11
PARAMETER	UNIT	VALUE Q				
1 1,1,1-Trichloroethane	UG/KG	12 U	11 U	11 U	12 U	11 U
2 1,1,2,2-Tetrachloroethane	UG/KG	12 U	11 U	11 U	12 U	11 U
3 1,1,2-Trichloroethene	UG/KG	12 U	11 U	11 U	12 U	11 U
4 1,1-Dichloroethane	UG/KG	12 U	11 U	11 U	12 U	11 U
5 1,1-Dichloroethene	UG/KG	12 U	11 U	11 U	12 U	11 U
6 1,2-Dichloroctopane	UG/KG	12 U	11 U	11 U	12 U	11 U
7 1,2-Dichloroethane	UG/KG	12 U	11 U	11 U	<b>12</b> U	11 U
8 1,2-Dichloroethene (total)	UG/KG	<b>12</b> U	11 U	11 U	12 U	11 U
9 2-Butanone	UG/KG	12 U	11 U	11 U	12 U	11 U
10 2-Hexanone	UG/KG	<b>12</b> U	11 U	11 U	12 U	11 U
11 4-Methyl-2-Pentanone	UG/KG	12 U	11 U	11 U	12 U	11 U
12 Acetone	UG/KG	5 J	6 J	4 J	3 J	11 U
13 Benzene	UG/KG	<b>12</b> U	11 U	11 U	<b>12</b> U	11 U
14 Bromodichloromethane	UG/KG	<b>12</b> U	11 U	11 U	12 U	11 U
15 Bromoform	UG/KG	12 U	11 U	11 U	12 U	11 U
16 Bromomethane	UG/KG	12 U	11 U	11 U	12 U	11 U
17 Carbon Disulfide	UG/KG	12 U	11 U	11 U	12 U	11 U
18 Carbon Tetrachloride	UG/KG	12 U	11 U	11 U	12 U	11 U
19 Chlorobenzene	UG/KG	<b>12</b> U	. 11 U	11 U	12 U	11 U
20 Chloroethane	UG/KG	<b>12</b> U	11 U	11 U	12 U	11 U
21 Chloroform	UG/KG	12 U	11 U	11 U	12 U	11 U
22 Chloromethane	UG/KG	<b>12</b> U	11 U	11 U	12 U	11 U
23 Dibromochloromethane	UG/KG	12 U	11 U	11 U	12 U	11 U
24 Ethylbenzene	UG/KG	<b>12</b> U	11 U	11 U	<b>12</b> U	11 U
25 Methylene Chloride	UG/KG	12 U	11 U	11 U	12 U	11 U
26 Styrene	UG/KG	12 U	11 U	11 U	<b>12</b> U	11 U
27 Tetrachloroethene	UG/KG	<b>12</b> U	11 U	11 U	<b>12</b> U	11 U
28 Toluene	UG/KG	12 U	11 U	11 U	12 U	11 U
29 Trichloroethene	UG/KG	<b>12</b> U	11 U	11 U	12 U	11 U
30 Vinyl Chloride	UG/KG	<b>12</b> U	11 U	11 U	<b>12</b> U	11 U
31 Xylene (total)	UG/KG	12 U	11 U	11 U	12 U	11 U
32 cis-1,3-Dichloroctopene	UG/KG	<b>12</b> U	11 U	11 U	12 U	11 U
33 trans-1,3-Dichloroctopene	UG/KG	12 U	11 U	11 U	12 U	11 U

54003VS.WK4

. . VOCs

VOCS				;		
	SDG:	54003	54003	54003	54003	54003
STUDY		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MAT	RIX:	SOIL	SOIL	SOIL	SOIL	SÓIL
LAB SAMP	P. ID:	272564	273484	273488	273735	273485
EPA SAMP	P. ID:	SB25-9-02	SD25-1	SD25-10	SD25-15	SD25-2
QC CC		SA	SA	SA	SA	SA
% MOISTU	JRE:	8	27	20	25	29
% SOL	LIDS:					
DAD ALKETED	LDEF	VALUE Q	MALLET O	TALLE O	MALLEE O	VALUE Q
PARAMETER	UNIT	VALUE Q 11 U	VALUE Q	VALUE Q	VALUE Q 13 U	VALUE Q 14 U
1 1,1,1-Trichloroethane	UG/KG		14 U	12 U	. 13 U	14 U
2 1,1,2,2-Tetrachloroethane	UG/KG	11 U	14 U	12 U	. 13 U	14 U
3 1,1,2-Trichloroethene	UG/KG	11 U	14 U	12 U	13 U	14 U
4 1,1-Dichloroethane	UG/KG	11 U 11 U	14 U 14 U	12 U 12 U	13 U	14 U 14 U
5 1,1-Dichloroethene	UG/KG				13 U	14 U
6 1,2-Dichloroctopane	UG/KG	11 U	14 U	12 U		14 U
7 1,2-Dichloroethane	UG/KG	11 U	14 U 14 U	12 U	13 U 13 U	14 U
8 1,2-Dichloroethene (total)	UG/KG	11 U		12 U	13 U	14 U
9 2-Butanone	UG/KG	11 U	14 U	12 U		
10 2-Hexanone	UG/KG	11 U	14 U	12 U	13 U	14 U
11 4-Methyl-2-Pentanone	UG/KG	11 U	14 U	12 U	13 U 13 U	14 U 8 J
12 Acetone	UG/KG	11 U	7 J	12 U	13 U	8 J 14 U
13 Benzene	UG/KG	11 U	14 U	12 U		
14 Bromodichloromethane	UG/KG	11 U	14 U	12 U	13 U	14 U
15 Bromoform	UG/KG	11 U	14 U	12 U	13 U	14 U
16 Bromomethane	UG/KG	11 U	14 U	12 U	13 U	14 U
17 Carbon Disulfide	UG/KG	11 U	14 U	12 U	13 U	14 U
18 Carbon Tetrachloride	UG/KG	11 U	14 U	12 U	13 U	14 U
19 Chlorobenzene	UG/KG	11 U	14 U	12 U	13 U	14 U
20 Chloroethane	UG/KG	11 U	14 U	12 U	13 U	14 U
21 Chloroform	UG/KG	11 U	14 U	12 U	13 U	14 U
22 Chloromethane	UG/KG	11 U	14 U	12 U	13 U	14 U
23 Dibromochloromethane	UG/KG	11 U	14 U	12 U	13 U	14 U
24 Ethylbenzene	UG/KG	11 U	14 U	12 U	13 U	14 U
25 Methylene Chloride	UG/KG	11 U	14 U	12 U	13 U	14 U
26 Styrene	UG/KG	11 U	14 U	12 U	13 U	14 U
27 Tetrachloroethene	UG/KG	11 U	14 U	12 U	13 U	14 U
28 Toluene	UG/KG	11 U	14 U	12 U	13 U	14 U
29 Trichloroethene	UG/KG	11 U	14 U	12 U	13 U	14 U
30 Vinyl Chloride	UG/KG	11 U	14 U	12 U	13 U	14 U
31 Xylene (total)	UG/KG	11 U	14 U	12 U	13 U	14 U
32 cis-1,3-Dichloroctopene	UG/KG	11 U	14 U	12 U	13 U	14 U
33 trans-1,3-Dichloroctopene	UG/KG	11 U	14 U	12 U	13 U	14 U

VOC	S				
SDG:			54003	54003	54003
	STUD	Y ID:	PHASE 1	PHASE 1	PHASE 1
	MAT	TRIX:	SOIL	SOIL	SOIL
	LAB SAM	P. ID:	273486	273487	273734
	EPA SAM	P. ID:	SD25-4	SD25-5	SD25-6
	QC C	ODE:	SA	SA	SA
	% MOIST	URE:	32	35	20
	% SOI				
	PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q
1	1,1,1-Trichloroethane	UG/KG	15 U	15 U	12 U
2	1,1,2,2-Tetrachloroethane	UG/KG	15 U	15 U	12 U
	1,1,2-Trichloroethene	UG/KG	15 U	15 U	12 U
4	1,1-Dichloroethane	UG/KG	15 U	15 U	12 U
	1,1-Dichloroethene	UG/KG	15 U	15 U	12 U
	1,2-Dichloroctopane	UG/KG	15 U	15 U	12 U
	1,2-Dichloroethane	UG/KG	15 U	15 U	12 U
	1,2-Dichloroethene (total)	UG/KG	15 U	15 U	12 U
9	2-Butanone	UG/KG	15 U	15 U	2 J
	2-Hexanone	UG/KG	15 U	15 U	12 U
11	4-Methyl-2-Pentanone	UG/KG	15 U	15 U	12 U
	Acetone	UG/KG	5 J	15 U	12 U
	Benzene	UG/KG	15 U	15 U	12 U
14	Bromodichloromethane	UG/KG	15 U	15 U	12 U
15	Bromoform	UG/KG	15 U	15 U	12 U
16	Bromomethane	UG/KG	15 U	15 U	12 U
17	Carbon Disulfide	UG/KG	15 U	15 U	12 U
18	Carbon Tetrachloride	UG/KG	15 U	15 U	12 U
19	Chlorobenzene	UG/KG	15 U	. 15 U	12 U
20	Chloroethane	UG/KG	15 U	15 U	12 U
21	Chloroform	UG/KG	15 U	15 U	12 U
22	Chloromethane	UG/KG	15 U	15 U	12 U
23	Dibromochloromethane	UG/KG	15 U	15 U	12 U
24	Ethylbenzene	UG/KG	15 U	15 U	12 U
25	Methylene Chloride	UG/KG	15 U	15 U	12 U
	Styrene	UG/KG	15 U	15 U	12 U
27	Tetrachloroethene	UG/KG	15 U	15 U	12 U
28	Toluene	UG/KG	15 U	15 U	12 U
29	Trichloroethene	UG/KG	15 U	15 U	12 U
30	Vinyl Chloride	UG/KG	15 U	15 U	12 U
	Xylene (total)	UG/KG	15 U	15 U	12 U
	cis-1,3-Dichloroctopene	UG/KG	15 U	15 U	12 U
	trans-1,3-Dichloroctopene	UG/KG	15 U	15 U	12 U
					.= 3

	SDO STUDY II MATRD LAB SAMP. II EPA SAMP. II OC CODI	D: K: D: D:	54003 PHASE 1 WATER 273736 SD25-6R FB	54003 PHASE 1 WATER 272278 SB25-7-00RNS SA
	% MOISTURI			
	% SOLID	S:		
	PARAMETE	R UNIT	VALUE Q	VALUE Q
1	1,2,4-Trichlorobenzene	UG/L	′ 13 U	11 U
2	1,2-Dichlorobenzene	UG/L	13 U	11 U
3	1,3-Dichlorobenzene	UG/L	13 U	11 U
	1,4-Dichlorobenzene	UG/L	13 U	11 U
5	2,4,5-Trichlorophenol	UG/L	33 U	<b>2</b> 6 U
6	2,4,6-Trichlorophenol	UG/L	13 U	11 U
7	2,4-Dichlorophenol	UG/L	13 U	11 U
8	2,4-Dimethylphenol	UG/L	13 U	11 U
9	2,4-Dinitrophenol	UG/L	33 U	<b>2</b> 6 U
10	2,4-Dinitrotoluene	UG/L	13 U	11 U
11	2,6-Dinitrotoluene	UG/L	13 U	11 U
12	2-Chloronaphthalene	UG/L	13 U	11 U
13	2-Chlorophenol	UG/L	13 U	11 U
14	2-Methylnaphthalene	UG/L	13 U	11 U
15	2-Methylphenol	UG/L	13 U	11 U
16	2-Nitroaniline	UG/L	33 U	<b>2</b> 6 U
17	2-Nitrophenol	UG/L	13 U	11 U
18	3,3'-Dichlorobenzidine	UG/L	13 U	11 U
	3-Nitroaniline	UG/L	33 U	26 U
20	4,6-Dinitro-2-methylphenol	UG/L	33 U	26 U
21	4-Bromophenyl-phenylether	UG/L	13 U	11 U
22	4-Chloro-3-methylphenol	UG/L	13 U	11 U
23	4-Chloroaniline	UG/L	13 U	11 U
24	4-Chlorophenyl-phenylether	UG/L	13 U	11 U
25	4-Methylphenol	UG/L	13 U	11 U
<b>2</b> 6	4-Nitroaniline	UG/L	33 U	<b>2</b> 6 U
27	4-Nitrophenol	UG/L	33 U	26 U
28	Acenaphthene	UG/L	13 U	11 U
29	Acenaphthylene	UG/L	13 U	11 U
	Anthracene	UG/L	13 U	11 U
	Benzo(a)anthracene	UG/L	13 U	11 U
	Benzo(a)pyrene	UG/L	13 U	11 U
	Benzo(b)fluoranthene	UG/L	13 U	11 U
34	Benzo(g,h,i)perylene	UG/L	13 U	11 U

	SDG:		54003	54003
	STUDY ID:		PHASE 1	PHASE 1
	MATRIX		WATER	WATER
	LAB SAMP. ID:		273736	272278
	EPA SAMP. ID:		SD25-6R	SB25-7-00RNS
	QC CODE:		FB	SA
	% MOISTURE			5.1
	% SOLIDS			
	700000			
	PARAMETER		VALUE Q	VALUE Q
35	Butylbenzylphthalate	UG/L	13 U	11 U
36	Carbazole	UG/L	13 U	11 U
37	Chrysene	UG/L	13 U	11 U
38	Di-n-butylphthalate	UG/L	13 U	11 U
39	Di-n-oprylphthalate	UG/L	13 U	11 U
40	Dibenz(a,h)anthracene	UG/L	13 U	11 U
41	Dibenzofuran	UG/L	13 U	11 U
42	Diethylphthalate	UG/L	13 U	11 U
43	Dimethylphthalate	UG/L	13 U	11 U
44	Fluoranthene	UG/L	13 U	11 U
45	Fluorene	UG/L	13 U	11 U
46	Hexachlorobenzene	UG/L	13 U	11 U
47	Hexachlorobutadiene	UG/L	13 U	11 U
48	Hexachlorocyclopentadiene	UG/L	13 U	11 U
49	Hexachloroethane	UG/L	13 U	11 U
50	Indeno(1,2,3-cd)pyrene	UG/L	13 U	11 U
51	Isophorone	UG/L	13 U	11 U
52	N-Nitroso-di-n-ctopylamine	UG/L	13 U	11 U
53	N-Nitrosodiphenylamine (1)	UG/L	13 U	11 U
54	Naphthalene	UG/L	13 U	. 11 U
55	Nitrobenzene	UG/L	13 U	11 U
56	Pentachlorophenol	UG/L	33 U	26 U
57	Phenanthrene	UG/L	13 U	11 U
58	Phenol	UG/L	13 U	11 U
59	Pyrene	UG/L	13 U	11 U
60	benzo(k)fluoranthene	UG/L	13 U	11 U
61	bis(2-Chloroethoxy) methane	UG/L	13 U	11 U
62	bis(2-Chloroethyl) ether	UG/L	13 U	11 U
	bis(2-Chloroisoctopyl) ether	UG/L	13 U	11 U
64	bis(2-Ethylhexyl)phthalate	UG/L	16 B	2 J

	and.		54002		54003		54003		54003
	SDG:		54003 PHASE 1		54003 PHASE 1		54003 PHASE 1	1	54003 PHASE 1
	STUDY ID:		SOIL		SOIL				SOIL
	MATRIX:		272281	•	272281		SOIL 272281		272565
	LAB SAMP. ID:								
	EPA SAMP. ID:		SB25-7-10 DU		SB25-7-10MS		SB25-7-10MSD		SB25-10-00
	QC CODE:		13		MS		MSD		SA 19
	% MOISTURE:		13		13		13		19
	% SOLIDS:								
	PARAMETER	UNIT	VALUE	Q	VALUE	Q	VALUE	Q	VALUE Q
1	1,2,4-Trichlorobenzene	UG/KG	380	U	1600		1400		400 U
2	1,2-Dichlorobenzene	UG/KG	380	U	380	U	380	U	400 U
3	1,3-Dichlorobenzene	UG/KG	380	U	380	U	380	U	400 U
4	1,4-Dichlorobenzene	UG/KG	380	U	1400		1200		400 U
5	2,4,5-Trichlorophenol	UG/KG	920	U	920	U	920	U	980 U
6	2,4,6-Trichlorophenol	UG/KG	380	U	380	U	380	U	400 U
7	2,4-Dichlorophenol	UG/KG	380	U	380	U	380	U	400 U
8	2,4-Dimethylphenol	UG/KG	380	U	380	U	380	U	400 U
9	2,4-Dinitrophenol	UG/KG	920	U	920	U	920	U	980 U
10	2,4-Dinitrotoluene	UG/KG	380	U	1600		1300		400 U
11	2,6-Dinitrotoluene	UG/KG	380	U	380	U	380	U	400 U
12	2-Chloronaphthalene	UG/KG	380	U	380	U	380	U	400 U
13	2-Chlorophenol	UG/KG	380	U	2200		2000		400 U
14	2-Methylnaphthalene	UG/KG	380	U	380	U	380	U	400 U
15	2-Methylphenol	UG/KG	380	U	380	U	380	U	400 U
16	2-Nitroaniline	UG/KG	920	U	920	U	920	U	980 U
17	2-Nitrophenol	UG/KG	380	U	380	U	380		400 U
18	3,3'-Dichlorobenzidine	UG/KG	380	U	380	U	380	U	400 U
	3-Nitroaniline	UG/KG	920		920	U	920		980 U
20	4,6-Dinitro-2-methylphenol	UG/KG	920	U	920	U	920	U	980 U
21	4-Bromophenyl-phenylether	UG/KG	380		380	U	380	U	400 U
	4-Chloro-3-methylphenol	UG/KG	380		2700		2300		400 U
4	4-Chloroaniline	UG/KG	380		380	_	380	-	400 U
	4-Chlorophenyl-phenylether	UG/KG	380		380		380		400 U
25	4-Methylphenol	UG/KG	380		380		380		400 U
26	4-Nitroaniline	UG/KG	920		920	U	920	U	980 U
27	4-Nitrophenol	UG/KG	920		2300		1900		980 U
28	Acenaphthene	UG/KG	380		1500		1300		400 U
	Acenaphthylene	UG/KG	380		380	_	380		400 U
30	Anthracene	UG/KG	380		380		380		400 U
31	Benzo(a)anthracene	UG/KG	380		380		380		58 J
32	Benzo(a)pyrene	UG/KG	380		380		380		65 J
	Benzo(b)fluoranthene	UG/KG	380		380		380		69 J
34	Benzo(g,h,i)perylene	UG/KG	380	U	380	U	380	U	400 U

	SDG:		54003	3	54003		54003		54003	
	STUDY ID:		PHASE		IASE 1		PHASE 1		PHASE 1	
	MATRIX		SOI		SOIL		SOIL		SOIL	
	LAB SAMP, ID:		27228		272281		272281		272565	
	EPA SAMP. ID:		SB25-7-1		7-10MS		SB25-7-10MSD		SB25-10-00	
	QC CODE:		Di		MS		MSD		SA	
	% MOISTURE:		13		13		13		19	
	% SOLIDS						15			
	PARAMETER		VALU	•	VALUE		VALUE	Q	VALUE	Q
	Butylbenzylphthalate	UG/KG		0 U	380	U	380	U	400	U
36	Carbazole	UG/KG	v.	0 U	380	U	380	U	400	U
37	Chrysene	UG/KG	. 380	0 U	380	U	380	U	82	J
	Di-n-butylphthalate	UG/KG		O U	380		380	U	45	BJ
39	Di-n-oprylphthalate	UG/KG		U	380		380		400	
40	(,- /	UG/KG		0 U	380		380		400	U
	Dibenzofuran	UG/KG		0 U	380		380		400	
	Diethylphthalate	UG/KG		0 U	380		380		400	
	Dimethylphthalate	UG/KG	,	0 U	380		380		400	U
	Fluoranthene	UG/KG		O U	380		380		160	J
	Fluorene	UG/KG		υ	380	_	380		400	_
	Hexachlorobenzene	UG/KG		0 U	380		380		400	U
	Hexachlorobutadiene	UG/KG		0 U	380		380		400	U
	Hexachlorocyclopentadiene	UG/KG		0 U	380	_	380	-	400	U
	Hexachloroethane	UG/KG		0 U	380		380		400	U
	Indeno(1,2,3-cd)pyrene	UG/KG		0 U	380		380		400	U
	Isophorone	UG/KG		0 U	380	U	380	U	400	U
	N-Nitroso-di-n-ctopylamine	UG/KG		0 U	1500		1400		400	U
	N-Nitrosodiphenylamine (1)	UG/KG		0 U	380		380		400	-
	Naphthalene	UG/KG		0 U .	380	-	380		400	
	Nitrobenzene	UG/KG		O U	380	U	380	U	400	
	Pentachlorophenol	UG/KG		υ	<b>2</b> 600		2300		980	
	Phenanthrene	UG/KG		0 U	380	U	380	U	110	
	Phenol	UG/KG		υ	2000		1900		400	
	Pyrene	UG/KG		O U	2000		1800		150	
	benzo(k)fluoranthene	UG/KG		0 U	380	-	380		74	
	bis(2-Chloroethoxy) methane	UG/KG		0 U	380		380		400	
	bis(2-Chloroethyl) ether	UG/KG		O U	380		380		400	
	bis(2-Chloroisoctopyl) ether	UG/KG		0 U	380		380		400	
64	bis(2-Ethylhexyl)phthalate	UG/KG	110	0 J	91	J	100	J	73	BJ

SDO	3.	54003	54003	54003	54003	54003
STUDY II		PHASE 1	PHASE 1	PHASE I	PHASE I	PHASE 1
MATRI		SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP. II		272566	276567	272277	272279	272280
EPA SAMP. II		SB25-10-01	SB25-10-02	SB25-7-00	SB25-7-03	SB25-7-04
QC CODI		SA	SA	SA SA	SA SA	SA
% MOISTURI		12	9	13	6	8
% SOLID		12	,	13	ŭ	· ·
76 3OLID	3.					
PARAMETE		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	370 U	360 U	380 U	350 U	360 U
2 1,2-Dichlorobenzene	UG/KG	370 U	360 U	380 U	350 U	360 U
3 1,3-Dichlorobenzene	UG/KG	370 U	360 U	380 U	350 U	360 U
4 1,4-Dichlorobenzene	UG/KG	370 U	360 U	380 U	350 U	360 U
5 2,4,5-Trichlorophenol	UG/KG	910 U	880 U	9 <b>2</b> 0 U	850 U	870 U
6 2,4,6-Trichlorophenol	UG/KG	370 U	360 U	380 U	350 U	360 U
7 2,4-Dichlorophenol	UG/KG	370 U	360 U	380 U	350 U	360 U
8 2,4-Dimethylphenol	UG/KG	370 U	360 U	380 U	350 U	360 U
9 2,4-Dinitrophenol	UG/KG	910 U	880 U	9 <b>2</b> 0 U	850 U	870 U
10 2,4-Dinitrotoluene	UG/KG	370 U	360 U	380 U	350 U	360 U
11 2,6-Dinitrotoluene	UG/KG	370 U	360 U	380 U	350 U	360 U
12 2-Chloronaphthalene	UG/KG	370 U	360 U	380 U	350 U	360 U
13 2-Chlorophenol	UG/KG	370 U	360 U	380 U	350 U	360 U
14 2-Methylnaphthalene	UG/KG	370 U	360 U	380 U	350 U	360 U
15 2-Methylphenol	UG/KG	370 U	360 U	380 U	350 U	360 U
16 2-Nitroaniline	UG/KG	910 U	880 U	9 <b>2</b> 0 U	850 U	870 U
17 2-Nitrophenol	UG/KG	370 U	360 U	380 U	350 U	360 U
18 3,3'-Dichlorobenzidine	UG/KG	370 U	360 U	380 U	350 U	360 U
19 3-Nitroaniline	UG/KG	910 U	880 U	9 <b>2</b> 0 U	850 U	<b>87</b> 0 U
20 4,6-Dinitro-2-methylphenol	UG/KG	910 U	880 U	920 U	850 U	870 U
21 4-Bromophenyl-phenylether	UG/KG	370 U	360 U	380 U	350 U	360 U
22 4-Chloro-3-methylphenol	UG/KG	370 U	360 U	380 U	350 U	360 U
23 4-Chloroaniline	UG/KG	370 U	360 U	380 U	350 U	360 U
24 4-Chlorophenyl-phenylether	UG/KG	370 U	360 U	380 U	350 U	360 U
25 4-Methylphenol	UG/KG	370 U	360 U	380 U	350 U	360 U
26 4-Nitroaniline	UG/KG	910 U	880 U	9 <b>2</b> 0 U	850 U	870 U
27 4-Nitrophenol	UG/KG	910 U	880 U	9 <b>2</b> 0 U	850 U	870 U
28 Acenaphthene	UG/KG	370 U	360 U	380 U	350 U	360 U
29 Acenaphthylene	UG/KG	370 U	360 U	380 U	350 U	360 U
30 Anthracene	UG/KG	370 U	360 U	380 U	350 U	<b>36</b> 0 U
31 Benzo(a)anthracene	UG/KG	370 U	360 U	380 U	350 U	360 U
32 Benzo(a)pyrene	UG/KG	370 U	360 U	380 U	350 U	360 U
33 Benzo(b)fluoranthene	UG/KG	370 U	360 U	380 U	350 U	360 U
34 Benzo(g,h,i)perylene	UG/KG	370 U	360 U	380 U	350 U	360 U

SI STUDY MATR LAB SAMP. EPA SAMP. QC COI % MOISTUI % SOLII	IX: ID: ID: DE: RE:	54003 PHASE 1 SOIL 272566 SB25-10-01 SA 12	54003 PHASE 1 SOIL 276567 SB25-10-02 SA 9	54003 PHASE 1 SOIL 272277 SB25-7-00 SA 13	54003 PHASE 1 SOIL 272279 SB25-7-03 SA 6	54003 PHASE 1 SOIL 272280 SB25-7-04 SA 8
70 SOL1	<i>D</i> 3.					
PARAMET	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
35 Butylbenzylphthalate	UG/KG	370 U	360 U	380 U	350 U	360 U
36 Carbazole	UG/KG	370 U	360 U	380 U	350 U	360 U
37 Chrysene	UG/KG	370 U	360 U	380 U	350 U	360 U
38 Di-n-butylphthalate	UG/KG	370 U	63 BJ	380 U	350 U	360 U
39 Di-n-oprylphthalate	UG/KG	370 U	360 U	380 U	350 U	360 U
40 Dibenz(a,h)anthracene	UG/KG	370 U	360 U	380 U	350 U	360 U
41 Dibenzofuran	UG/KG	370 U	360 U	380 U	350 U	360 U
42 Diethylphthalate	UG/KG	370 U	360 U	380 U	350 U	360 U
43 Dimethylphthalate	UG/KG	370 U	360 U	380 U	350 U	360 U
44 Fluoranthene	UG/KG	370 U	360 U	380 U	350 U	360 U
45 Fluorene	UG/KG	370 U	360 U	380 U	350 U	360 U
46 Hexachlorobenzene	UG/KG	370 U	360 U	380 U	350 U	360 U
47 Hexachlorobutadiene	UG/KG	370 U	360 U	380 U	350 U	360 U
48 Hexachlorocyclopentadiene	UG/KG	370 U	360 U	380 U	350 U	360 U
49 Hexachloroethane	UG/KG	370 U	360 U	380 U	350 U	360 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	370 U	360 U	380 U	350 U	360 U
51 Isophorone	UG/KG	370 U	360 U	380 U	350 U	360 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	370 U	360 U	380 U	350 U	360 U
53 N-Nitrosodiphenylamine (1)	UG/KG	370 U	360 U	380 U	350 U	360 U
54 Naphthalene	UG/KG	370 U	360 U	380 U	350 U	360 U
55 Nitrobenzene	UG/KG	370 U	360 U	380 U	350 U	360 U
56 Pentachlorophenol	UG/KG	910 U	880 U	920 U	850 U	870 U
57 Phenanthrene	UG/KG	370 U	360 U	380 U	350 U	360 U
58 Phenol	UG/KG	370 U	360 U	380 U	350 U	360 U
59 Pyrene	UG/KG	370 U	360 U	380 U	350 U	360 U
60 benzo(k)fluoranthene	UG/KG	370 U	360 U	380 U	350 U	360 U
61 bis(2-Chloroethoxy) methane	UG/KG	370 U	360 U	380 U	350 U	360 U
62 bis(2-Chloroethyl) ether	UG/KG	370 U	360 U	380 U	350 U	360 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	370 U	360 U	380 U	350 U	360 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	750 B	170 BJ	85 J	100 Ј	94 J

	SDG:	54003	54003	54003	54003	54003
STUD		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	TRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAM		272559	272560	272561	272562	272563
EPA SAM		SB25-8-00	\$B25-8-01	SB25-8-02	SB25-9-00	SB25-9-01
QC C		SA	SA	SA	SA	SA
% MOIST		19	12	8	18	12
% SO		17	12	· ·	•	
70 30	LIDS.					
PARAM		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	400 U	370 U	360 U	400 U	370 U
2 1,2-Dichlorobenzene	UG/KG	400 U	370 U	360 U	400 U	370 U
3 1,3-Dichlorobenzene	UG/KG	400 U	370 U	360 U	400 U	370 U
4 1,4-Dichlorobenzene	UG/KG	400 U	370 U	360 U	400 U	370 U
5 2,4,5-Trichlorophenol	UG/KG	980 U	910 U	870 U	970 U	910 U
6 2,4,6-Trichlorophenol	UG/KG	400 U	370 U	360 U	400 U	370 U
7 2,4-Dichlorophenol	UG/KG	400 U	370 U	360 U	400 U	370 U
8 2,4-Dimethylphenol	UG/KG	400 U	370 U	360 U	400 U	370 U
9 2,4-Dinitrophenol	UG/KG	980 U	910 U	870 U	970 U	910 U
10 2,4-Dinitrotoluene	UG/KG	400 U	370 U	360 U	400 U	370 U
11 2,6-Dinitrotoluene	UG/KG	400 U	370 U	360 U	400 U	370 U
12 2-Chloronaphthalene	UG/KG	400 U	370 U	360 U	400 U	370 U
13 2-Chlorophenol	UG/KG	400 U	370 U	360 U	400 U	370 U
14 2-Methylnaphthalene	UG/KG	400 U	370 U	360 U	400 U	370 U
15 2-Methylphenol	UG/KG	400 U	370 U	360 U	400 U	370 U
16 2-Nitroaniline	UG/KG	980 U	910 U	870 U	970 U	910 U
17 2-Nitrophenol	UG/KG	400 U	370 U	360 U	400 U	370 U
18 3,3'-Dichlorobenzidine	UG/KG	400 U	370 U	360 U	400 U	370 U
19 3-Nitroaniline	UG/KG	980 U	910 U	870 U	970 U	910 U
20 4,6-Dinitro-2-methylphenol	UG/KG	980 U	910 U	870 U	970 U	910 U
21 4-Bromophenyl-phenylether	UG/KG	400 U	370 U	360 U	400 U	370 U
22 4-Chloro-3-methylphenol	UG/KG	400 U	370 U	360 U	400 U	370 U
23 4-Chloroaniline	UG/KG	400 U	370 U	360 U	400 U	370 U
24 4-Chlorophenyl-phenylether	UG/KG	400 U	370 U	360 U	400 U	370 U
25 4-Methylphenol	UG/KG	400 U	370 U	360 U	400 U	370 U
26 4-Nitroaniline	UG/KG	980 U	910 U	870 U	970 U	910 U
27 4-Nitrophenol	UG/KG	980 U	910 U	870 U	970 U	910 U
28 Acenaphthene	UG/KG	400 U	370 U	360 U	400 U	370 U
29 Acenaphthylene	UG/KG	400 U	370 U	360 U	400 U	370 U
30 Anthracene	UG/KG	400 U	370 U	360 U	400 U	370 U
31 Benzo(a)anthracene	UG/KG	400 U	370 U	360 U	400 U	370 U
32 Benzo(a)pyrene	UG/KG	48 J	370 U	360 U	400 U	370 U
33 Benzo(b)fluoranthene	UG/KG	57 J	370 U	360 U	400 U	370 U
34 Benzo(g,h,i)perylene	UG/KG	82 J	370 U	360 U	400 U	370 U
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54003SS.WK4

SI STUDY MATR LAB SAMP. EPA SAMP. QC COI % MOISTUI	IX: ID: ID: OE:	54003 PHASE 1 SOIL 272559 SB25-8-00 SA 19	54003 PHASE 1 SOIL 272560 SB25-8-01 SA 12	54003 PHASE 1 SOIL 272561 SB25-8-02 SA 8	54003 PHASE 1 SOIL 272562 SB25-9-00 SA 18	54003 PHASE 1 SOIL 272563 SB25-9-01 SA 12
% SOLI	DS:			v		
PARAMET		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
35 Butylbenzylphthalate	UG/KG	400 U	370 U	360 U	400 U	370 U
36 Carbazole	UG/KG	400 U	370 U	360 U	400 U	370 U
37 Chrysene	UG/KG	43 J	370 U	360 U	400 U	370 U
38 Di-n-butylphthalate	UG/KG	59 BJ	49 BJ	39 BJ	60 BJ	55 BJ
39 Di-n-oprylphthalate	UG/KG	400 U	370 U	360 U	400 U	370 U
40 Dibenz(a,h)anthracene	UG/KG	42 J	370 U	360 U	400 U	370 U
41 Dibenzofuran	UG/KG	400 U	370 U	360 U	400 U	370 U
42 Diethylphthalate	UG/KG	400 U	370 U	360 U	400 U	370 U
43 Dimethylphthalate	UG/KG	400 U	370 U	360 U	400 U	370 U
44 Fluoranthene	UG/KG	52 J	370 U	360 U	51 J	370 U
45 Fluorene	UG/KG	400 U	370 U	360 U	400 U	370 U
46 Hexachlorobenzene	UG/KG	400 U	370 U	360 U	400 U	370 U
47 Hexachlorobutadiene	UG/KG	400 U	370 U	360 U	400 U	370 U
48 Hexachlorocyclopentadiene	UG/KG	400 U	370 U	360 U	400 U	370 U
49 Hexachloroethane	UG/KG	400 U	370 U	360 U	400 U	370 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	55 J	370 U	360 U	400 U	370 U
51 Isophorone	UG/KG	400 U	370 U	360 U	400 U	370 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	400 U	370 U	360 U	400 U	370 U
53 N-Nitrosodiphenylamine (1)	UG/KG	400 U	370 U	360 U	400 U	370 U
54 Naphthalene	UG/KG	400 U	370 U	360 U	400 U	370 U
55 Nitrobenzene	UG/KG	400 U	370 U	360 U	400 U	370 U
56 Pentachlorophenol	UG/KG	980 U	910 U	870 U	970 U	910 U
57 Phenanthrene	UG/KG	400 U	370 U	360 U	400 U	370 U
58 Phenol	UG/KG	400 U	370 U	360 U	400 U	370 U
59 Pyrene	UG/KG	58 J	370 U	360 U	53 J	370 U
60 benzo(k)fluoranthene	UG/KG	400 U	370 U	360 U	400 U	370 U
61 bis(2-Chloroethoxy) methane	UG/KG	400 U	370 U	360 U	400 U	370 U
62 bis(2-Chloroethyl) ether	UG/KG	400 U	370 U	360 U	400 U	370 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	400 U	370 U	360 U	400 U	370 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	51 BJ	140 BJ	220 BJ	400 U	300 BJ

SI	OG:	54003	54003	54003	54003	54003
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATR	IX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP.	ID:	272564	273484	273488	273735	273485
EPA SAMP.	ID:	SB25-9-02	SD25-1	SD25-10	SD25-15	SD25-2
QC COI	DE:	SA	SA	SA	SA	SA
% MOISTUI	RE:	12	36	26	19	29
% SOLI	DS:					
PARAMET	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	370 U	1700 U	450 U	8100 U	460 U
2 1,2-Dichlorobenzene	UG/KG	370 U	1700 U	450 U	8100 U	460 U
3 1,3-Dichlorobenzene	UG/KG	370 U	1700 U	450 U	8100 U	460 U
4 1,4-Dichlorobenzene	UG/KG	370 U	1700 U	450 U	8100 U	460 U
5 2,4,5-Trichlorophenol	UG/KG	910 U	4200 U	1100 U	20000 U	1100 U
6 2,4,6-Trichlorophenol	UG/KG	370 U	1700 U	450 U	8100 U	460 U
7 2,4-Dichlorophenol	UG/KG	370 U	1700 U	450 U	8100 U	460 U
8 2,4-Dimethylphenol	UG/KG	370 U	1700 U	450 U	8100 U	460 U
9 2,4-Dinitrophenol	UG/KG	910 U	4200 U	1100 U	20000 U	1100 U
10 2,4-Dinitrotoluene	UG/KG	370 U	1700 U	450 U	8100 U	460 U
11 2,6-Dinitrotoluene	UG/KG	370 U	1700 U	450 U	8100 U	460 U
12 2-Chloronaphthalene	UG/KG	370 U	1700 U	450 U	8100 U	460 U
13 2-Chlorophenol	UG/KG	370 U	1700 U	450 U	8100 U	460 U
14 2-Methylnaphthalene	UG/KG	<b>370</b> U	1700 U	450 U	8100 U	460 U
15 2-Methylphenol	UG/KG	370 U	1700 U	450 U	8100 U	460 U
16 2-Nitroaniline	UG/KG	910 U	4200 U	1100 U	20000 U	1100 U
17 2-Nitrophenol	UG/KG	370 U	1700 U	450 U	8100 U	460 U
18 3,3'-Dichlorobenzidine	UG/KG	370 U	1700 U	450 U	8100 U	460 U
19 3-Nitroaniline	UG/KG	910 U	4200 U	1100 U	20000 U	1100 U
20 4,6-Dinitro-2-methylphenol	UG/KG	910 U	4200 U	1100 U	20000 U	1100 U
21 4-Bromophenyl-phenylether	UG/KG	370 U	1700 U	450 U	8100 U	460 U
22 4-Chloro-3-methylphenol	UG/KG	370 U	1700 U	450 U	8100 U	460 U
23 4-Chloroaniline	UG/KG	370 U	1700 U	450 U	8100 U	460 U
24 4-Chlorophenyl-phenylether	UG/KG	370 U	1700 U	450 U	8100 U	460 U
25 4-Methylphenol	UG/KG	370 U	1 <b>7</b> 00 U	450 U	8100 U	460 U
26 4-Nitroaniline	UG/KG	910 U	4200 U	1100 U	20000 U	1100 U
27 4-Nitrophenol	UG/KG	910 U	<b>4200</b> U	1100 U	20000 U	1100 U
28 Acenaphthene	UG/KG	370 U	130 J	450 U	8100 U	460 U
29 Acenaphthylene	UG/KG	370 U	610 J	450 U	8100 U	90 J
30 Anthracene	UG/KG	370 U	840 J	450 U	830 J	180 J
31 Benzo(a)anthracene	UG/KG	370 U	3500	450 U	2200 J	600
32 Benzo(a)pyrene	UG/KG	370 U	3600	450 U	2300 Ј	770
33 Benzo(b)fluoranthene	UG/KG	370 U	1700 U	450 U	1800 J	1200 Z
34 Benzo(g,h,i)perylene	UG/KG	<b>370</b> U	1500 J	450 U	1600 J	550

SI	OG:	54003	54003	54003	54003	54003
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATR	IX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP.	ID:	272564	273484	273488	273735	273485
EPA SAMP.	ID:	SB25-9-02	SD25-1	SD25-10	SD25-15	SD25-2
QC COI	DE:	SA	SA	SA	SA	SA
% MOISTU	RE:	12	36	26	19	29
% SOLI	DS:					
PARAMET		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
35 Butylbenzylphthalate	UG/KG	370 U	1700 U	450 U	8100 U	460 U
36 Carbazole	UG/KG	370 U	270 J	450 U	8100 U	230 J
37 Chrysene	UG/KG	, 370 U	4900	450 U	2400 J	970
38 Di-n-butylphthalate	UG/KG	42 BJ	1700 U	66 BJ	2900 BJ	76 BJ
39 Di-n-oprylphthalate	UG/KG	370 U	1700 U	450 U	8100 U	460 U
40 Dibenz(a,h)anthracene	UG/KG	370 U	1200 J	450 U	8100 U	400 J
41 Dibenzofuran	UG/KG	370 U	1700 U	450 U	8100 U	460 U
42 Diethylphthalate	UG/KG	370 U	1700 U	450 U	8100 U	460 U
43 Dimethylphthalate	UG/KG	370 U	1700 U	450 U	8100 U	460 U
44 Fluoranthene	UG/KG	370 U	7300	450 U	3700 J	1700
45 Fluorene	UG/KG	370 U	340 Ј	450 U	8100 U	87 J
46 Hexachlorobenzene	UG/KG	370 U	1700 U	450 U	8100 U	460 U
47 Hexachlorobutadiene	UG/KG	370 U	1700 U	450 U	8100 U	460 U
48 Hexachlorocyclopentadiene	UG/KG	370 U	1700 U	450 U	8100 U	460 U
49 Hexachloroethane	UG/KG	370 U	1700 U	450 U	8100 U	460 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	370 U	2500	450 U	1600 Ј	570
51 Isophorone	UG/KG	370 U	1700 U	450 U	8100 U	460 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	370 U	1700 U	450 U	8100 U	460 U
53 N-Nitrosodiphenylamine (1)	UG/KG	370 U	1700 U	450 U	8100 U	460 U
54 Naphthalene	UG/KG	370 U	1700 U	450 U	8100 U	460 U
55 Nitrobenzene	UG/KG	370 U	1700 U	450 U	8100 U	460 U
56 Pentachlorophenol	UG/KG	910 U	4200 U	1100 U	20000 U	1100 U
57 Phenanthrene	UG/KG	370 U	3800	450 U	1600 J	950
58 Phenol	UG/KG	370 U	1700 U	450 U	8100 U	460 U
59 Pyrene	UG/KG	370 U	9000	450 U	4000 J	1500
60 benzo(k)fluoranthene	UG/KG	370 U	6300 Z	450 U	2500 J	460 U
61 bis(2-Chloroethoxy) methane	UG/KG	370 U	1700 U	450 U	8100 U	460 U
62 bis(2-Chloroethyl) ether	UG/KG	370 U	1700 U	450 U	8100 U	460 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	370 U	1700 U	450 U	8100 U	460 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	160 BJ	1700 U	57 J	8100 U	58 J

	S	DG:	54003		54003		54003
	STUDY		PHASE 1		PHASE 1		PHASE 1
	MATI		SOIL		SOIL		SOIL
	LAB SAMP		273486		273487		273734
	EPA SAMP		SD25-4		SD25-5		SD25-6
	QC CO		SA		SA		SA
	% MOISTU		34		39		18
	% SOL						
	PARAME*	TER UNIT	VALUE	Q	VALUE	Q	VALUE Q
1	1,2,4-Trichlorobenzene	UG/KG	500	U	540	U	2200 U
2	1,2-Dichlorobenzene	UG/KG	500	U	540	U	2200 U
3	1,3-Dichlorobenzene	UG/KG	500		540		2200 U
	1,4-Dichlorobenzene	UG/KG	500		540		2200 U
	2,4,5-Trichlorophenol	UG/KG	1200		1300		5400 U
6	2,4,6-Trichlorophenol	UG/KG	500	U	540		2200 U
7	2,4-Dichlorophenol	UG/KG	500		540		2200 U
	2,4-Dimethylphenol	UG/KG	500		540		2200 U
	2,4-Dinitrophenol	UG/KG	1200		1300		5400 U
10	2,4-Dinitrotoluene	UG/KG	500		540		2200 U
11	2,6-Dinitrotoluene	UG/KG	500		540		2200 U
	2-Chloronaphthalene	UG/KG	500		540		2200 U
13	2-Chlorophenol	UG/KG	500		540		2200 U
14	2-Methylnaphthalene	UG/KG	500		540		230 J
15	2-Methylphenol	UG/KG	500	_	540		<b>22</b> 00 U
16	2-Nitroaniline	UG/KG	1200		1300		5400 U
	2-Nitrophenol	UG/KG	500		540		2200 U
18	3,3'-Dichlorobenzidine	UG/KG	500		540		2200 U
19	3-Nitroaniline	UG/KG	1200		1300		5400 U
20	4,6-Dinitro-2-methylphenol	UG/KG	1200		1300		5400 U
	4-Bromophenyl-phenylether	UG/KG	500		540		2200 U
	4-Chloro-3-methylphenol	UG/KG	500		540		2200 U
	4-Chloroaniline	UG/KG	500		540		2200 U
	4-Chlorophenyl-phenylether	UG/KG	500		540	_	2200 U
	4-Methylphenol	UG/KG	500	-	540		2200 U
	4-Nitroaniline	UG/KG	1200		1300		5400 U
	4-Nitrophenol	UG/KG	1200		1300		5400 U
	Acenaphthene	UG/KG	500		540		520 J
	Acenaphthylene	UG/KG	500		540		770 J
30		UG/KG	500		540		3100
31	Benzo(a)anthracene	UG/KG	500		540		5800
	Benzo(a)pyrene	UG/KG	500		540		5100
	Benzo(b)fluoranthene	UG/KG	500		64		8000 Z
34	Benzo(g,h,i)perylene	UG/KG	500	U	540	Ŭ	2700

	SDG		54003		54003		54002
	STUDY ID		PHASE 1		PHASE 1		54003 PHASE 1
	MATRIX		SOIL		SOIL		SOIL
	LAB SAMP. ID	-	273486		273487		273734
	EPA SAMP. ID		SD25-4		SD25-5		273734 SD25-6
	OC CODE		SA SA		SD23-3 SA		
	% MOISTURE		34		39		SA 18
	% SOLIDS		34		39		18
	76 SOLIDS	•					
	PARAMETER	R UNIT	VALUE	Q	VALUE	Q	VALUE Q
35	Butylbenzylphthalate	UG/KG	500	U	540		2200 U
36	Carbazole	UG/KG	500	U	540	U	1400 J
37	Chrysene	UG/KG	500	U	65	J	6800
38	Di-n-butylphthalate	UG/KG	72	BJ	92	BJ	2200 U
39	Di-n-oprylphthalate	UG/KG	500	U	540	U	2200 U
40	Dibenz(a,h)anthracene	UG/KG	500	U	540	U	1600 J
41	Dibenzofuran	UG/KG	500	U	540	U	440 J
42	Diethylphthalate	UG/KG	500	U	540	U	2200 U
43	Dimethylphthalate	UG/KG	500	U	540	U	2200 U
44	Fluoranthene	UG/KG	56	J	110	J	13000
45	Fluorene	UG/KG	500	U	540	U	1300 J
46	Hexachlorobenzene	UG/KG	500	U	540	U	2200 U
47	Hexachlorobutadiene	UG/KG	500	U	540	U	2200 U
48	Hexachlorocyclopentadiene	UG/KG	500	U	540	U	2200 U
49	Hexachloroethane	UG/KG	500	U	540	U	2200 U
50	Indeno(1,2,3-cd)pyrene	UG/KG	500	U	540	U	2400
51	Isophorone	UG/KG	500	U	540	U	2200 U
52	N-Nitroso-di-n-ctopylamine	UG/KG	500	U	540	U	2200 U
53	N-Nitrosodiphenylamine (1)	UG/KG	500	U	540	U	2200 U
54	Naphthalene	UG/KG	500	U	540	U	320 J
55	Nitrobenzene	UG/KG	500	U	540	U	2200 U
56	Pentachlorophenol	UG/KG	1200	U	1300	U	5400 U
57	Phenanthrene	UG/KG	500	U	540	U	9500
58	Phenol	UG/KG	500	U	540	U	2200 U
59	Pyrene	UG/KG	74	J	110	J	13000
60		UG/KG	500	U	540	U	2200 U
61	bis(2-Chloroethoxy) methane	UG/KG	500	U	540	U	2200 U
62	bis(2-Chloroethyl) ether	UG/KG	500	U	540	U	2200 U
63	bis(2-Chloroisoctopyl) ether	UG/KG	500	U	540	U	2200 U
64	bis(2-Ethylhexyl)phthalate	UG/KG	500	U	110	J	2200 U

## . PESTICIDES

PESTICIDES			
LAB EPA % M	SDG: STUDY ID: MATRIX: SAMP. ID: SAMP. ID: QC CODE: IOISTURE: % SOLIDS:	54003 PHASE 1 WATER 273736 SD25-6R FB	54003 PHASE 1 WATER 272278 SB25-7-00RNS SA
PARAMETER	UNIT	VALUE Q	VALUE Q
1 4,4'-DDD	UG/L	0.11 U	0.11 U
2 4,4'-DDE	UG/L	0.11 U	0.11 U
3 4,4'-DDT	UG/L	0.11 U	0.11 U
4 Aldrin	UG/L	0.053 U	0.054 U
5 Aroclor-1016	UG/L	1.1 U	1.1 U
6 Aroclor-1221	UG/L	2.1 U	2.1 U
7 Aroclor-1232	UG/L	1.1 U	1.1 U
8 Aroclor-1242	UG/L	1.1 U	1.1 U
9 Aroclor-1248	UG/L	1.1 U	1.1 U
10 Aroclor-1254	UG/L	1.1 U	1.1 U
11 Aroclor-1260	UG/L	1.1 U	1.1 U
12 Dieldrin	UG/L	0.11 U	0.11 U
13 Endosulfan I	UG/L	0.053 U	0.054 U
14 Endosulfan II	UG/L	0.11 U	0.11 U
15 Endosulfan sulfate	UG/L	0.11 U	0.11 U
16 Endrin	UG/L	0.11 U	0.11 U
17 Endrin aldehyde	UG/L	0.11 U	0.11 U
18 Endrin ketone	UG/L	0.11 U	0.11 U
19 Heptachlor	UG/L	0.053 U	0.054 U
20 Heptachlor epoxide	UG/L	0.053 U	0.054 U
21 Methoxychlor	UG/L	0.53 U	0.54 U
22 Toxaphene	UG/L	5.3 U	5.4 U
23 alpha-BHC	UG/L	0.053 U	0.054 U
24 alpha-Chlordane	UG/L	0.053 U	0.054 U
25 beta-BHC	UG/L	0.053 U	0.054 U
26 delta-BHC	UG/L	0.053 U	0.054 U
27 gamma-BHC (Lindane)		0.053 U	0.054 U
28 gamma-Chlordane	UG/L	0.053 U	0.054 U

## PESTICIDES

	SDO STUDY II MATRIX LAB SAMP. II EPA SAMP. II QC CODE % MOISTURI % SOLIDS	0: C: O: O: S:	54003 PHASE 1 SOIL 272281 SB25-7-10 DU 13	54003 PHASE 1 SOIL 272281 SB25-7-10MS MS 13	54003 PHASE 1 SOIL 272281 SB25-7-10MSD MSD 13	54003 PHASE 1 SOIL 272565 SB25-10-00 SA 19
	PARAMETER	UNIT	VALUE	Q VALUE	Q VALUE	Q VALUE Q
1	4,4'-DDD	UG/KG	3.8 L	3.8		
2	4,4'-DDE	UG/KG	3.8 U	3.8		
3	4,4'-DDT	UG/KG	3.8 L	J 37	37	4.1 U
4	Aldrin	UG/KG	2 U	19	19	2.1 U
5	Aroclor-1016	UG/KG	38 L	38 1	U 38	U 41 U
6	Aroclor-1221	UG/KG	77 L	<b>77</b> 1	U 77	U 83 U
	Aroclor-1232	UG/KG	38 U	J 38 1	U 38	U 41 U
	Aroclor-1242	UG/KG	38 L		U 38	U 41 U
	Aroclor-1248	UG/KG	38 U	38 1	U 38	U 41 U
	Aroclor-1254	UG/KG	38 U	J 38 1	U 38	U 41 U
	Aroclor-1260	UG/KG	38 L		U 38	U , 41 U
	Dieldrin	UG/KG	3.8 U		35	4.1 U
	Endosulfan I	UG/KG	2 U	_	U 2	U 2.1 P
	Endosulfan II	UG/KG	3.8 L			U 4.1 U
	Endosulfan sulfate	UG/KG	3.8 U			U 4.1 U
	Endrin	UG/KG	3.8 U		35	4.1 U
	Endrin aldehyde	UG/KG	3.8 U			
	Endrin ketone	UG/KG	3.8 U			U 4.1 U
	Heptachlor	UG/KG	2 U		17	2.1 U
	Heptachlor epoxide	UG/KG	2 U		-	
	Methoxychlor	UG/KG	20 U			U 21 U
	Toxaphene	UG/KG	200 L			
	alpha-BHC	UG/KG	2 U		-	2.1 0
	alpha-Chlordane	UG/KG	2 U		<del>-</del>	
	beta-BHC	UG/KG	2 U		_	
	delta-BHC	UG/KG	2 U		-	U 2.1 U
	gamma-BHC (Lindane)	UG/KG	2 U		17	2.1 U
28	gamma-Chlordane	UG/KG	2 U	2 1	U 2	U 2.1 U

PEST		

12011012	SDG:	54003	54003	54003	54003	54003
STU	DY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	ATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SA		272566	272567	272277	272279	272280
EPA SA		SB25-10-01	SB25-10-02	SB25-7-00	SB25-7-03	SB25-7-04
	CODE:	SA	SA	SA	SA	SA
% MOIS		12	9	13	6	8
	OLIDS:					
						******
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	3.7 U	3.6 U	3.8 U	3.5 U	3.6 U
2 4,4'-DDE	UG/KG	3.7 U	3.6 U	3.8 U	3.5 U	3.6 U
3 4,4'-DDT	UG/KG	3.7 U	3.6 U	3.8 U	3.5 U	3.6 U
4 Aldrin	UG/KG	1.9 U	1.9 U	2 U	1.8 U	1.8 U
5 Aroclor-1016	UG/KG	37 U	36 U	38 U	35 U	36 U
6 Aroclor-1221	UG/KG	76 U	74 U	77 U	71 U	73 U
7 Aroclor-1232	UG/KG	37 U	36 U	38 U	35 U	36 U
8 Aroclor-1242	UG/KG	37 U	36 U	38 U	35 U	36 U
9 Aroclor-1248	UG/KG	37 U	36 U	38 U	35 U	36 U
10 Aroclor-1254	UG/KG	37 U	36 U	38 U	35 U	36 U
11 Aroclor-1260	UG/KG	37 U	36 U	38 U	35 U	36 U
12 Dieldrin	UG/KG	3.7 U	3.6 U	3.8 U	3.5 U	3.6 U
13 Endosulfan I	UG/KG	1.9 U	1.9 U	2 U	1.8 U	1.8 U
14 Endosulfan II	UG/KG	3.7 U	3.6 U	3.8 U	3.5 U	3.6 U
15 Endosulfan sulfate	UG/KG	3.7 U	3.6 U	3.8 U	3.5 U	3.6 U
16 Endrin	UG/KG	3.7 U	3.6 U	3.8 U	3.5 U	3.6 U
17 Endrin aldehyde	UG/KG	3.7 U	3.6 U	3.8 U	3.5 U	3.6 U
18 Endrin ketone	UG/KG	3.7 U	3.6 U	3.8 U	3.5 U	3.6 U
19 Heptachlor	UG/KG	1.9 U	· 1.9 U	2 U	1.8 U	1.8 U
20 Heptachlor epoxide	UG/KG	1.9 U	1.9 U	2 U	1.8 U	1.8 U
21 Methoxychlor	UG/KG	19 U	19 U	20 U	18 U	18 U
22 Toxaphene	UG/KG	190 U	190 U	200 U	180 U	180 U
23 alpha-BHC	UG/KG	1.9 U	1.9 U	2 U	- 1.8 U	1.8 U
24 alpha-Chlordane	UG/KG	1.9 U	1.9 U	2 U	1.8 U	1.8 U
25 beta-BHC	UG/KG	1.9 U	1.9 U	2 U	1.8 U	1.8 U
26 delta-BHC	UG/KG	1.9 U	1.9 U	2 U	1.8 U	1.8 U
27 gamma-BHC (Lindane)	UG/KG	1.9 U	1.9 U	2 U	1.8 U	1.8 U
28 gamma-Chlordane	UG/KG	1.9 U	1.9 U	2 U	1.8 U	1.8 U

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LAB S EPA S ( % M	SDG: TUDY ID: MATRIX: SAMP. ID: SAMP. ID: QC CODE: OISTURE: 6 SOLIDS:	54003 PHASE 1 SOIL 272559 SB25-8-00 SA 19	54003 PHASE 1 SOIL 272560 SB25-8-01 SA 12	54003 PHASE 1 SOIL 272561 SB25-8-02 SA 8	54003 PHASE 1 SOIL 272562 SB25-9-00 SA 18	54003 PHASE 1 SOIL 272563 SB25-9-01 SA 12
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	4.1 U	3.7 U	3.6 U	4 U	3.7 U
2 4,4'-DDE	UG/KG	4.1 U	3.7 U	3.6 U	. 4 U	3.7 U
3 4,4'-DDT	UG/KG	4.1 U	3.7 U	3.6 U	. 4 U	3.7 U
4 Aldrin	UG/KG	2.1 U	1.9 U	1.8 U	2.1 U	1.9 U
5 Aroclor-1016	UG/KG	41 U	37 U	36 U	40 U	37 U
6 Aroclor-1221	UG/KG	83 U	76 U	73 U	82 U	76 U
7 Aroclor-1232	UG/KG	41 U	37 U	36 U	40 U	37 U
8 Aroclor-1242	UG/KG	41 U	37 U	36 U	40 U	37 U
9 Aroclor-1248	UG/KG	41 U	37 U	36 U	40 U	37 U
10 Aroclor-1254	UG/KG	41 U	37 U	36 U	40 U	37 U
11 Aroclor-1260	UG/KG	41 U	37 U	36 U	40 U	37 U
12 Dieldrin	UG/KG	4.1 U	3.7 U	3.6 U	4 U	3.7 U
13 Endosulfan I	UG/KG	2.1 U	1.9 U	1.8 U	1.2 JP	1.9 U
14 Endosulfan II	UG/KG	4.1 U	3.7 U	3.6 U	4 U	3.7 U
15 Endosulfan sulfate	UG/KG	4.1 U	3.7 U	3.6 U	4 U	3.7 U
16 Endrin	UG/KG	4.1 U	3.7 U	3.6 U	4 U	3.7 U
17 Endrin aldehyde	UG/KG	4.1 U	3.7 U	3.6 U	4 U	3.7 U
18 Endrin ketone	UG/KG	4.1 U	3.7 U	3.6 U	4 U	3.7 U
19 Heptachlor	UG/KG	2.1 U	1.9 U	1.8 U	<b>2.1</b> U	1.9 U
20 Heptachlor epoxide	UG/KG	2.1 U	1.9 U	1.8 U	2.1 U	1.9 U
21 Methoxychlor	UG/KG	21 U	19 U	18 U	<b>21</b> U	19 U
22 Toxaphene	UG/KG	210 U	190 U	180 U	210 U	190 U
23 alpha-BHC	UG/KG	2.1 U	1.9 U	1.8 U	2.1 U	1.9 U
24 alpha-Chlordane	UG/KG	2.1 U	1.9 U	1.8 U	2.1 U	1.9 U
25 beta-BHC	UG/KG	2.1 U	1.9 U	1.8 U	2.1 U	1.9 U
26 delta-BHC	UG/KG	2.1 U	1.9 U	1.8 U	<b>2</b> .1 U	1.9 U
27 gamma-BHC (Lindane)	UG/KG	2.1 U	1.9 U	1.8 U	<b>2</b> .1 U	1.9 U
28 gamma-Chlordane	UG/KG	2.1 U	1.9 U	1.8 U	2.1 U	1.9 U

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PESTICIDES						
	SDG:	54003	54003	54003	54003	54003
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB	S SAMP. ID:	272564	273484	273488	273735	273485
EPA	SAMP. ID:	SB25-9-02	SD25-1	SD25-10	SD25-15	SD25-2
	QC CODE:	SA	SA	SA	SA	SA
% N	MOISTURE:	12	36	26	19	29
	% SOLIDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	3.7 U	16 P	4.5 U	32 P	4.6 U
2 4,4'-DDE	UG/KG	3.7 U	19 P	4.5 U	11 P	14 P
3 4,4'-DDT	UG/KG	3.7 U	34	4.5 U	16 P	18
4 Aldrin	UG/KG	1.9 U	6 P	2.3 U	2.4 P	2.1 JP
5 Aroclor-1016	UG/KG	37 U	<b>52</b> U	45 U	40 U	46 U
6 Aroclor-1221	UG/KG	<b>7</b> 6 U	100 U	91 U	<b>82</b> U	93 U
7 Aroclor-1232	UG/KG	37 U	52 U	45 U	40 U	46 U
8 Aroclor-1242	UG/KG	37 U	52 U	45 U	40 U	46 U
9 Aroclor-I248	UG/KG	37 U	52 U	45 U	40 U	46 U
10 Aroclor-1254	UG/KG	37 U	52 U	45 U	40 U	46 U
11 Aroclor-1260	UG/KG	37 U	<b>52</b> U	45 U	40 U	46 U
12 Dieldrin	UG/KG	3.7 U	5.2 U	4.5 U	4 U	4.6 U
13 Endosulfan I	UG/KG	1.9 U	2.7 U	2.3 U	2.1 U	2.4 U
14 Endosulfan II	UG/KG	3.7 U	5.2 U	4.5 U	4 U	4.6 U
15 Endosulfan sulfate	UG/KG	3.7 U	3.6 JP	4.5 U	4 U	4.6 U
16 Endrin	UG/KG	3.7 U	5.2 U	4.5 U	4 U	4.6 U
17 Endrin aldehyde	UG/KG	3.7 U	5.2 U	4.5 U	4 U	4.6 U
18 Endrin ketone	UG/KG	3.7 U	14 P	4.5 U	12 P	4.2 JP
19 Heptachlor	UG/KG	1.9 U	2.7 U	2.3 U	2.1 U	2.4 U
20 Heptachlor epoxide	UG/KG	1.9 U	1.9 JP	2.3 U	2.4 P	2.4 U
21 Methoxychlor	UG/KG	19 U	27 U	23 U	21 U	24 U
22 Toxaphene	UG/KG	190 U	270 U	230 U	210 U	240 U
23 alpha-BHC	UG/KG	1.9 U	2.7 U	2.3 U	2.1 U	2.4 U
24 alpha-Chlordane	UG/KG	1.9 U	2 J	2.3 U	6.2	2.4 U
25 beta-BHC	UG/KG	1.9 U	1.7 J	2.3 U	2.1 U	2.4 U
26 delta-BHC	UG/KG	1.9 U	2.7 U	2.3 U	2.1 U	2.4 U
27 gamma-BHC (Lindane)		1.9 U	2.7 U	2.3 U	2.1 U	2.4 U
28 gamma-Chlordane	UG/KG	1.9 U	1.9 JP	2.3 U	7.1 P	2.4 U

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## PESTICIDES

	SDG:	54003	54003	54003
	STUDY ID:	PHASE 1	PHASE 1	
	MATRIX:	SOIL	SOIL	1111001
LA	B SAMP. ID:	273486	273487	273734
EP.	A SAMP. ID:	SD25-4	SD25-5	
	QC CODE:	SA	SA	
%	MOISTURE:	34	39	
	% SOLIDS:			
DADAA COORD	7 B 770	,		
PARAMETER	UNIT	VALUE		-
1 4,4'-DDD	UG/KG	5		
2 4,4'-DDE	UG/KG	5		-
3 4,4'-DDT	UG/KG	5	-	
4 Aldrin	UG/KG	2.6		
5 Aroclor-1016	UG/KG	50		U 40 U
6 Aroclor-1221	UG/KG	100	_	
7 Aroclor-1232	UG/KG	50		U 40 U
8 Aroclor-1242	UG/KG	50		U 40 U
9 Aroclor-1248	UG/KG	50		U 40 U
10 Aroclor-1254	UG/KG	50		U 40 U
11 Aroclor-1260	UG/KG	50		U 40 U
12 Dieldrin 13 Endosulfan I	UG/KG	5 2.6	-	_ , +
	UG/KG			
14 Endosulfan II 15 Endosulfan sulfate	UG/KG	5	_	-
16 Endrin	UG/KG UG/KG	5		-
17 Endrin aldehyde	UG/KG	5		-
18 Endrin ketone	UG/KG	5	_	-
19 Heptachlor	UG/KG	2.6		
20 Heptachlor epoxide	UG/KG	2.6		
21 Methoxychlor	UG/KG	26		
22 Toxaphene	UG/KG	260		
23 alpha-BHC	UG/KG	2.6		
24 alpha-Chlordane	UG/KG	2.6		
25 beta-BHC	UG/KG	2.6		
26 delta-BHC	UG/KG	2.6		
27 gamma-BHC (Lindan		2.6		
28 gamma-Chlordane	UG/KG	2.6		
		2.0	2.0	7.7 1

# **METALS**

	SDG:	54003	54003
	STUDY ID:	PHASE 1	PHASE 1
	MATRIX:	WATER	WATER
	LAB SAMP. ID:	273736	272278
	EPA SAMP. ID:	SD25-6R	SB25-7-00RNS
	QC CODE:	FB	SA
	% MOISTURE:		
	% SOLIDS:	0	0
PARAMETER	UNIT	VALUE Q	VALUE Q
1 Aluminimum	UG/L	9.8 U	15.5 B
2 Antimony	UG/L	2.2 U	2.2 U
3 Arsenic	UG/L	2.1 U	2.1 U
4 Barium	UG/L	3.4 U	3.4 U
5 Beryllium	UG/L	0.27 U	0.27 U
6 Cadmium	UG/L	0.3 U	0.3 U
7 Calcium	\UG/L	86.2 U	86.6 U
8 Chromium	UG/L	0.5 U	0.6 B
9 Cobalt	UG/L	0.99 U	1 U
10 Copper	UG/L	1.2 B	1.3 B
11 Cyanide	UG/L	5 U	5 U
12 Iron	UG/L	18.3 U	137
13 Lead	UG/L	1.5 U	1.5 U
14 Magnesium	UG/L	91.7 U	9 <b>2</b> .1 U
15 Manganese	UG/L	0.4 U	
16 Mercury	UG/L	0.05 B	0.04 B
17 Nickel	UG/L	0.99 U	1.1 B
18 Potasium	UG/L	1190 U	1200 U
19 Selenium	UG/L	3.7 U	3.7 U
20 Silver	UG/L	5.2 U	5.2 U
21 Sodium	UG/L	243 B	337 B
22 Thallium	UG/L	3 U	3 U
23 Vanadium	UG/L	1.1 U	1.1 U
24 Zinc	UG/L	5.4 B	2.3 B

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	SDG:	54003	54003	54003	54003	54003
:	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB	SAMP. ID:	272281	272565	272566	272567	272277
EPA	SAMP. ID:	SB25-7-10	SB25-10-00	SB25-10-01	SB25-10-02	SB25-7-00
	QC CODE:	DU	SA	SA	SA	SA
	OISTURE:					
•	% SOLIDS:	86.6	81.2	88.5	90.7	87
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	MG/KG	14000 *	11400 *	17500 *	12100 *	12500 *
2 Antimony	MG/KG	0.39 U	0.7 B	0.56 B	0.52 B	0.4 B
3 Arsenic	MG/KG	4.7	4.4	4.4	4.9	4.3
4 Barium	MG/KG	76.4	70.5	73.8	62.1	71.3
5 Beryllium	MG/KG	0.62 B	0.52 B	0.62 B	0.61 B	0.56 B
6 Cadmium	MG/KG	0.05 U	0.06 U	0.06 U	0.05 U	0.05 U
7 Calcium	MG/KG	23900 *	3490 *	2000 *	44000 *	47400 *
8 Chromium	MG/KG	18.1	15	21	19.2	16.9
9 Cobalt	MG/KG	9.1	8 B	8.4 B	11.3	8 B
10 Copper	MG/KG	14.8	15.2	12.9	24.7	15.7
11 Cyanide	MG/KG	0.42 U	0.68 U	0.54 U	0.58 U	0.44 U
12 Iron	MG/KG	22900	18400	22100	24700	20500
13 Lead	MG/KG	14.5 *	34.2 *	12.9 *	12.3 *	11.1 *
14 Magnesium	MG/KG	7180 *	3100 *	3970 *	12700 *	11700 *
15 Manganese	MG/KG	421 *	441 *	248 *	524 *	452 *
16 Mercury	MG/KG	0.03 B	0.06 B	0.02 B	0.02 B	0.03 B
17 Nickel	MG/KG	21.5	17.4	20.8	33.6	22.3
18 Potasium	MG/KG	1110	1130	1900	1390	1110
19 Selenium	MG/KG	0.66 U	1.2 N	1 N	0.57 U	0.63 U
20 Silver	MG/KG	0.92 U	1.1 U	0.97 U	0.8 U	0.89 U
21 Sodium	MG/KG	57.5 B	42.5 U	41.4 B	45.4 B	59.9 B
22 Thallium	MG/KG	0.92 B	1.1 B	0.82 B	1.1 B	1.2 B
23 Vanadium	MG/KG	24	19.9	29.6	20.1	21
24 Zinc	MG/KG	61.2	55.6	55.6	84.2	54.1

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	SDG:	54003	54003	54003	54003	54003
S	TUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL ·	SOIL	SOIL
LAB S	SAMP. ID:	272279	272280	272559	272560	272561
EPA S	SAMP. ID:	SB25-7-03	SB25-7-04	SB25-8-00	SB25-8-01	SB25-8-02
	C CODE:	SA	SA	SA	SA	SA
% M	OISTURE:					
9/	SOLIDS:	93.7	91.7	81.4	87.9	91.9
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	MG/KG	8020 *	7550 *	16000 *	15600 *	10100 *
2 Antimony	MG/KG	0.42 U	0.44 U	0.49 U	0.55 B	0.55 B
3 Arsenic	MG/KG	4.1	3.4	5	5.7	9.3
4 Barium	MG/KG	58	52	88.5	85.2	60.7
5 Beryllium	MG/KG	0.43 B	0.39 B	0.72 B	0.78 B	0.56 B
6 Cadmium	MG/KG	0.06 U	0.06 U	0.07 U	0.06 U	0.05 U
7 Calcium	MG/KG	120000 *	133000 *	40300 *	7490 *	74200 *
8 Chromium	MG/KG	13.7	12.4	20.7	22.1	16.4
9 Cobalt	MG/KG	8.2 B	6.9 B	8.5 B	14.6	9.5
10 Copper	MG/KG	17.7	16.4	20.4	21.7	32.7
11 Cyanide	MG/KG	0.57 U	0.51 Ŭ	0.65 U	0.53 U	0.52 U
12 Iron	MG/KG	18900	15400	21300	28100	24000
13 Lead	MG/KG	7 *	6.5 *	35.4 *	17.2 *	14.8 *
14 Magnesium	MG/KG	17400 *	20700 *	5080 *	5790 *	18300 *
15 Manganese	MG/KG	735 *	402 *	548 *	759 *	483 *
16 Mercury	MG/KG	0.02 B	0.01 B	0.05 B	0.04 B	0.02 B
17 Nickel	MG/KG	26.4	22.4	23	30.5	29.8
18 Potasium	MG/KG	1280	1430	1930	1420	1590
19 Selenium	MG/KG	0.7 U	0.74 U	1.3 N	0.75 U	0.65 U
20 Silver	MG/KG	0.98 U	1 U	1.2 U	1.1 U	0.92 U
21 Sodium	MG/KG	89.1 B	110 B	44.3 U	40.7 U	99.4 B
22 Thallium	MG/KG	1.1 B	0.6 U	0.98 B	0.96 B	0.73 B
23 Vanadium	MG/KG	13.4	13.7	27.7	27.3	20.9
24 Zinc	MG/KG	64.9	65.1	90.5	68.4	69.7

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	SDG:	54003	54003	54003	54003	54003
SI	TUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
]	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB S	AMP. ID:	272562	272563	272564	273484	273488
EPA S	AMP. ID:	SB25-9-00	SB25-9-01	SB25-9-02	SD25-1	SD25-10
Q	C CODE:	SA	SA	SA	SA	SA
% MC	DISTURE:					
%	SOLIDS:	82	88	88.3	64.3	73.7
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	MG/KG	14900 *	16400 *	13400 *	10000 *	10400 *
2 Antimony	MG/KG	0.76 B	0.58 B	0.44 B	0.87 B	0.54 B
3 Arsenic	MG/KG	5	5.3	6.8	5.7	7.3
4 Barium	MG/KG	101	79.9	89.1	58.5	65.4
5 Beryllium	MG/KG	0.74 B	0.73 B	0.76 B	0.55 B	0.54 B
6 Cadmium	MG/KG	0.06 U	0.06 U	0.06 U	0.06 U	0.07 U
7 Calcium	MG/KG	6060 *	2640 *	38700 *	89100 *	9940 *
8 Chromium	MG/KG	19.5	23.5	21.8	17.9	18.2
9 Cobalt	\ MG/KG	9 B	8.8 B	18.1	8.4 B	9 B
10 Copper	MG/KG	15.9	20.7	30.9	28.1	18.4
11 Cyanide	MG/KG	0.59 U	0.61 U	0.53 U	0.85 U	0.62 U
12 Iron	MG/KG	22800	29000	30100	17200	20800
13 Lead	MG/KG	37.4 *	13.6 *	18.6 *	94.8 *	11.2 *
14 Magnesium	MG/KG	3640 *	4530 *	9630 *	11500 *	4260 *
15 Manganese	MG/KG	779 *	355 *	1700 *	389 *	452 *
16 Mercury	MG/KG	0.06 B	0.04 B	0.03 B	0.04 B	0.02 B
17 Nickel	MG/KG	21.3	26.5	53.3	24.3	31.5
18 Potasium	MG/KG	1330	1490	1300	1920	1630
19 Selenium	MG/KG	0.83 B	0.83 B	0.91 B	0.73 B	0.89 U
20 Silver	MG/KG	1.1 U	1 U	0.97 U	0.97 U	1.2 U
21 Sodium	MG/KG	41 U	39.2 U	58.6 B	587 B	85.3 B
22 Thallium	MG/KG	1.8 B	1.3 B	1.6 B	0.98 B	0.8 B
23 Vanadium	MG/KG	26.2	29.3	23.5	28	18.7
24 Zinc	MG/KG	66.6	57.8	103	101	71

METALS						A
	SDG:	54003	54003	54003	54003	54003
S	TUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB S	SAMP. ID:	273735	273485	273486	273487	273734
EPA S	SAMP. ID:	SD25-15	SD25-2	SD25-4	SD25-5	SD25-6
C	C CODE:	SA	SA	SA	SA	SA
	DISTURE:					
%	SOLIDS:	81.2	71	66.2	61.2	82.3
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	MG/KG	1720 *	9560 *	10900 *	14300 *	2330 *
2 Antimony	MG/KG	0.54 U	0.55 B	0.4 U	0.7 U	0.4 U
3 Arsenic	MG/KG	1.9 B	4.4	4	4.9	2.3
4 Barium	MG/KG	22 B	51.8	73.7	86.1	21.3 B
5 Beryllium	MG/KG	0.16 B	0.47 B	0.6 B	0.68 B	0.21 B
6 Cadmium	MG/KG	0.16 B	0.04 U	0.05 U	0.1 U	0.18 B
7 Calcium	MG/KG	139000 *	51300 *	8170 *	37100 *	169000 *
8 Chromium	MG/KG	7.5	15.1	16.2	21.9	76.6
9 Cobalt	MG/KG	2.3 B	7.4 B	7.7 B	9.9 B	2.9 B
10 Copper	MG/KG	10.8	20.8	17.7	22.5	18.4
11 Cyanide	MG/KG	0.58 U	0.82 U	0.65 U	0.87 U	0.7 U
12 Iron	MG/KG	6590	17100	18900	24800	7390
13 Lead	MG/KG	92.2 *	47.7 *	34.1 *	19 *	327 *
14 Magnesium	MG/KG	13000 *	12300 *	3830 *	8520 <b>*</b>	13200 *
15 Manganese	MG/KG	227 *	394 *	370 *	364 *	277 *
16 Mercury	MG/KG	0.01 B	0.05 B	0.05	0.05	0.01 U
17 Nickel	MG/KG	6.9 B	22.2	22	32.2	8.2
18 Potasium	MG/KG	609 B	1430	1270	2630	739 B
19 Selenium	MG/KG	0.9 U	0.61 B	0.77 B	1.3 B	0.67 U
20 Silver	MG/KG	1.3 U	0.78 U	0.94 U	1.6 U	0.94 U
21 Sodium	MG/KG	197 B	254 B	183 B	174 B	205 B
22 Thallium	MG/KG	0.73 U	0.45 U	0.87 B	1.1 B	0.54 U
23 Vanadium	MG/KG	6.1 B	19.2	18.7	25.4	7.7 B
24 Zinc	MG/KG	55.8	80.8	66.8	82.5	60.3

	SI	DG:	54011	54011	54011
	STUDY	ID:	PHASE 1	PHASE 1	PHASE 1
	MATR	IX:	WATER	WATER	WATER
	LAB SAMP.	ID:	273271	273265	272305
	EPA SAMP.	ID:	SS26-10RN	TB10495	TB92495
	QC CO	DE:	FB	TB	TB
	% MOISTU	RE:	0		
	% SOLI	DS:			
	PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q
	1,1,1-Trichloroethane	ug/L	10 U	10 U	10 U
	1,1,2,2-Tetrachloroethane	ug/L	10 U	10 U	10 U
	1,1,2-Trichloroethene	ug/L	10 U	10 U	10 U
	1,1-Dichloroethane	ug/L	10 U	10 U	10 U
	1,1-Dichloroethene	ug/L	10 U	10 U	10 U
	1,2-Dichloroctopane	ug/L	10 U	10 U	10 U
	1,2-Dichloroethane	ug/L	10 U	10 U	10 U
8	1,2-Dichloroethene (total)	ug/L	10 U	10 U	10 U
9	2-Butanone	ug/L	10 U	10 U	10 U
	2-Hexanone	ug/L	10 U	10 U	10 U
11	4-Methyl-2-Pentanone	ug/L	10 U	10 U	10 U
12	Acetone	ug/L	10 U	10 U	10 U
	Benzene	ug/L	10 U	10 U	10 U
14	Bromodichloromethane	ug/L	10 U	10 U	10 U
15	Bromoform	ug/L	10 U	10 U	10 U
16	Bromomethane	ug/L	10 U	10 U	10 U
	Carbon Disulfide	ug/L	10 U	10 U	10 U
18	Carbon Tetrachloride	ug/L	10 U	10 U	10 U
19		ug/L	10 U	10 U	10 U
20	Chloroethane	ug/L	10 U	10 U	10 U
21	Chloroform	ug/L	3 Ј	10 U	10 U
22	Chloromethane	ug/L	10 U	10 U	10 U
23	Dibromochloromethane	ug/L	10 U	10 U	10 U
	Ethylbenzene	ug/L	10 U	10 U	10 U
25	Methylene Chloride	ug/L	10 U	10 U	10 U
<b>2</b> 6	,	ug/L	10 U	10 U	10 U
27	Tetrachloroethene	ug/L	10 U	10 U	10 U
28	Toluene	ug/L	10 U	10 U	10 U
29	Trichloroethene	ug/L	10 U	10 U	10 U
30	Vinyl Chloride	ug/L	10 U	10 U	10 U
31	Xylene (total)	ug/L	10 U	10 U	10 U
32	cis-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U
33	trans-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U

OC	S		
	S	54011	
	STUDY	ID:	PHASE 1
	MAT	RIX:	WATER
	LAB SAMP	. ID:	272306
	EPA SAMP	. ID:	TB92595
	QC CC	DDE:	TB
	% MOISTU	JRE:	
	% SOL	IDS:	
	PARAMETER	UNIT	VALUE Q
1	1,1,1-Trichloroethane	ug/L	10 U
2	1,1,2,2-Tetrachloroethane	ug/L	10 U
3	1,1,2-Trichloroethene	ug/L	10 U
4	1,1-Dichloroethane	ug/L	10 U
5	1,1-Dichloroethene	ug/L	10 U
6	1,2-Dichloroctopane	ug/L	10 U
7	1,2-Dichloroethane	ug/L	10 U
8	1,2-Dichloroethene (total)	ug/L	10 U
9	2-Butanone	ug/L	10 U
10	2-Hexanone	ug/L	10 U
11	4-Methyl-2-Pentanone	ug/L	10 U
12	Acetone	ug/L	10 U
13	Benzene	ug/L	10 U
14	Bromodichloromethane	ug/L	10 U
15	Bromoform	ug/L	10 U
16	Bromomethane	ug/L	10 U
17	Carbon Disulfide	ug/L	10 U
	Carbon Tetrachloride	ug/L	10 U
19	Chlorobenzene	ug/L	10 U
20	Chloroethane	ug/L	10 U
21	Chloroform	ug/L	10 U
	Chloromethane	ug/L	10 U
	Dibromochloromethane	ug/L	10 U
	Ethylbenzene	ug/L	10 U
	Methylene Chloride	ug/L	10 U
	Styrene	ug/L	10 U
27	Tetrachloroethene	ug/L	10 U
	Toluene	ug/L	10 U
	Trichloroethene	ug/L	10 U
	Vinyl Chloride	ug/L	10 U
	Xylene (total)	ug/L	10 U
	cis-1,3-Dichloroctopene	ug/L	10 U
33	trans-1,3-Dichloroctopene	ug/L	10 U

VOCs

LAB S EPA S C % MG	SDG: TUDY ID: MATRIX: SAMP. ID: SAMP. ID: QC CODE: DISTURE: SOLIDS:	54011 PHASE 1 SOIL 272303 SB26-9-04DL DL 12	54011 PHASE 1 SOIL 273264 SS26-50 DU 13	54011 PHASE 1 SOIL 273260 SS26-11MS MS 14	54011 PHASE 1 SOIL 273260 SS26-11MSD MSD 14	54011 PHASE 1 SOIL 272303 SB26-9-04 SA 12
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	ug/Kg	57 U	11 U	12 U	12 U	11 U
2 1,1,2,2-Tetrachloroethane		57 U	11 U	12 U	12 U	11 U
3 1,1,2-Trichloroethene	ug/Kg	57 U	11 U	12 U	12 U	11 U
4 1,1-Dichloroethane	ug/Kg	57 U	11 U	12 U	12 U	11 U
5 1,1-Dichloroethene	ug/Kg	57 U	11 U	61	62	11 U
6 1,2-Dichloroctopane	ug/Kg	57 U	11 U	12 U	12 U	11 U
7 1,2-Dichloroethane	ug/Kg	57 U	11 U	12 U	12 U	11 U
8 1,2-Dichloroethene (total		57 U	11 U	12 U	12 U	11 U
9 2-Butanone	ug/Kg	57 U	11 U	12 U	12 U	11 U
10 2-Hexanone	ug/Kg	57 U	11 U	12 U	12 U	11 U
11 4-Methyl-2-Pentanone	ug/Kg	57 U	11 U	12 U	12 U	11 U
12 Acetone	ug/Kg	37 Ј	11 U	12 U	12 U	120
13 Benzene	ug/Kg	<b>57</b> U	11 U	66	68	11 U
14 Bromodichloromethane	ug/Kg	<b>57</b> U	11 U	12 U	12 U	11 U
15 Bromoform	ug/Kg	<b>57</b> U	11 U	12 U	12 U	11 U
16 Bromomethane	ug/Kg	57 U	11 U	12 U	12 U	11 U
17 Carbon Disulfide	ug/Kg	57 U	11 U	12 U	12 U	11 U
18 Carbon Tetrachloride	ug/Kg	57 U	11 U	12 U	<b>12</b> U	11 U
19 Chlorobenzene	ug/Kg	57 U	. 11 U	65	68	11 U
20 Chloroethane	ug/Kg	57 U	11 U	<b>12</b> U	<b>12</b> U	11 U
21 Chloroform	ug/Kg	57 U	11 U	12 U	12 U	11 U
22 Chloromethane	ug/Kg	57 U	11 U	12 U	12 U	11 U
23 Dibromochloromethane	ug/Kg	57 U	11 U	12 U	12 U	11 U
24 Ethylbenzene	ug/Kg	57 U	11 U	1 <b>2</b> U	12 U	11 U
25 Methylene Chloride	ug/Kg	57 U	11 U	12 U	12 U	730 E
26 Styrene	ug/Kg	57 U	11 U	12 U	12 U	11 U
27 Tetrachloroethene	ug/Kg	57 U	11 U	12 U	12 U	11 U
28 Toluene	ug/Kg	57 U	11 U	71	72	11 U
29 Trichloroethene	ug/Kg	57 U	11 U	61	62	11 U
30 Vinyl Chloride	ug/Kg	57 U	11 U	12 U	12 U	11 U
31 Xylene (total)	ug/Kg	57 U	11 U	12 U	12 U	11 U
32 cis-1,3-Dichloroctopene	ug/Kg	57 U	11 U	12 U	12 U	11 U
33 trans-1,3-Dichloroctopen	e ug/Kg	57 U	11 U	12 U	12 U	11 U

54011VS.WK4

VOCs						
S	SDG:	54011	54011	54011	54011	54011
STUDY	STUDY ID:		PHASE 1	PHASE 1	PHASE 1	PHASE I
MAT	RIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP		272304	273489	273578	273490	273491
EPA SAMP		SB26-9-05	SD26-2	SD26-3	SD26-4	SD26-5
QC CC		SA	SA	SA	SA	SA
% MOISTU		12	24	36	31	49
% SOL			2.	30		
70 GOL	1100.					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	ug/Kg	11 U	13 U	16 U	14 U	20 U
2 1,1,2,2-Tetrachloroethane	ug/Kg	11 U	13 U	16 U	14 U	20 U
3 1.1.2-Trichloroethene	ug/Kg	11 U	13 U	16 U	"14 U	20 U
4 1,1-Dichloroethane	ug/Kg	11 U	13 U	16 U	14 U	20 U
5 1,1-Dichloroethene	ug/Kg	11 U	13 U	16 U	14 U	20 U
6 1,2-Dichloroctopane	ug/Kg	11 U	13 U	16 U	14 U	20 U
7 1.2-Dichloroethane	ug/Kg	11 U	13 U	16 U	14 U	20 U
8 1,2-Dichloroethene (total)	ug/Kg	11 U	13 U	16 U	14 U	20 U
9 2-Butanone	ug/Kg	11 U	13 U	16 U	14 U	<b>2</b> 0 U
10 2-Hexanone	ug/Kg	11 U	13 U	16 U	14 U	20 U
11 4-Methyl-2-Pentanone	ug/Kg	11 U	13 U	16 U	14 U	20 U
12 Acetone	ug/Kg	5 J	13 U	9 JB	3 ЛВ	20 U
13 Benzene	ug/Kg	11 U	13 U	16 U	14 U	20 U
14 Bromodichloromethane	ug/Kg	11 U	13 U	16 U	14 U	20 U
15 Bromoform	ug/Kg	11 U	13 U	16 U	14 U	20 U
16 Bromomethane	ug/Kg	11 U	13 U	16 U	14 U	<b>2</b> 0 U
17 Carbon Disulfide	ug/Kg	11 U	13 U	16 U	14 U	20 U
18 Carbon Tetrachloride	ug/Kg	11 U	13 U	16 U	14 U	20 U
19 Chlorobenzene	ug/Kg	11 U	13 U	16 U	14 U	20 U
20 Chloroethane	ug/Kg	11 U	13 U	16 U	14 U	20 U
21 Chloroform	ug/Kg	11 U	13 U	16 U	14 U	20 U
22 Chloromethane	ug/Kg	11 U	13 U	16 U	14 U	20 U
23 Dibromochloromethane	ug/Kg	11 U	13 U	16 U	14 U	20 U
24 Ethylbenzene	ug/Kg	11 U	13 U	16 U	14 U	20 U
25 Methylene Chloride	ug/Kg	11 U	13 U	16 U	14 U	20 U
26 Styrene	ug/Kg	11 U	13 U	16 U	14 U	20 U
27 Tetrachloroethene	ug/Kg	11 U	13 U	16 U	14 U	20 U
28 Toluene	ug/Kg	11 U	13 U	16 U	14 U	20 U
29 Trichloroethene	ug/Kg	11 U	13 U	16 U	14 U	20 U
30 Vinyl Chloride	ug/Kg	11 U	13 U	16 U	14 U	20 U
31 Xylene (total)	ug/Kg	11 U	13 U	16 U	14 U	20 U
32 cis-1,3-Dichloroctopene	ug/Kg	11 U	13 U	<b>1</b> 6 U	14 U	20 U
33 trans-1,3-Dichloroctopene	ug/Kg	11 U	13 U	16 U	14 U	20 U

STUDY MAT LAB SAMF EPA SAMF QC CC % MOISTU	RIX: P. ID: P. ID: DDE:	54011 PHASE 1 SOIL 273492 SD26-6 SA 20	54011 PHASE 1 SOIL 273493 SD26-7 SA 34	54011 PHASE 1 SOIL 273494 SD26-9 SA 24	54011 PHASE 1 SOIL 273259 SS26-10 SA 14	54011 PHASE 1 SOIL 273260 SS26-11 SA 14
% SOL	.IDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	WALLE O	TALLE O	1111T 0
1 1,1,1-Trichloroethane	ug/Kg	12 U	VALUE Q 15 U	VALUE Q 13 U	VALUE Q	VALUE Q
2 1,1,2,2-Tetrachloroethane	ug/Kg ug/Kg	12 U	15 U	13 U	12 U	12 U
3 1,1,2-Trichloroethene	ug/Kg ug/Kg	12 U	15 U	13 U	12 U 12 U	12 U 12 U
4 1,1-Dichloroethane	ug/Kg ug/Kg	12 U	15 U	13 U	12 U	12 U
5 1,1-Dichloroethene	ug/Kg	12 U	15 U	13 U	12 U	12 U
6 1,2-Dichloroctopane	ug/Kg	12 U	15 Ü	13 U	12 U	12 U
7 1,2-Dichloroethane	ug/Kg	12 U	15 U	13 U	12 U	12 U
8 1,2-Dichloroethene (total)	ug/Kg	12 U	15 U	13 U	12 U	12 U
9 2-Butanone	ug/Kg	12 U	15 U	13 U	12 U	12 U
10 2-Hexanone	ug/Kg	12 U	15 U	13 U	12 U	12 U
11 4-Methyl-2-Pentanone	ug/Kg	12 U	15 U	13 U	12 U	12 U
12 Acetone	ug/Kg	12 U	15 U	13 U	12 U	12 U
13 Benzene	ug/Kg	12 U	15 U	13 U	12 U	12 U
14 Bromodichloromethane	ug/Kg	12 U	15 U	13 U	12 U	12 U
15 Bromoform	ug/Kg	12 U	15 U	13 U	12 U	12 U
16 Bromomethane	ug/Kg	12 U	15 U	13 U	12 U	12 U
17 Carbon Disulfide	ug/Kg	12 U	15 U	13 U	12 U	12 U
18 Carbon Tetrachloride	ug/Kg	12 U	15 U	13 U	12 U	12 U
19 Chlorobenzene	ug/Kg	12 U	15 U	13 U	12 U	12 U
20 Chloroethane	ug/Kg	12 U	15 U	13 U	12 U	12 U
21 Chloroform	ug/Kg	1 J	3 Ј	13 U	12 U	12 U
22 Chloromethane	ug/Kg	12 U	15 U	13 U	12 U	12 U
23 Dibromochloromethane	ug/Kg	12 U	15 U	13 U	<b>12</b> U	12 U
24 Ethylbenzene	ug/Kg	12 U	15 U	13 U	12 U	12 U
25 Methylene Chloride	ug/Kg	12 U	15 U	13 U	<b>12</b> U	12 U
26 Styrene	ug/Kg	12 U	15 U	13 U	12 U	12 U
27 Tetrachloroethene	ug/Kg	<b>12</b> U	15 U	13 U	12 U	12 U
28 Toluene	ug/Kg	12 U	15 U	13 U	12 U	12 U
29 Trichloroethene	ug/Kg	12 U	15 U	13 U	12 U	12 U
30 Vinyl Chloride	ug/Kg	12 U	15 U	13 U	<b>12</b> U	12 U
31 Xylene (total)	ug/Kg	12 U	15 U	13 U	12 U	12 U
32 cis-1,3-Dichloroctopene	ug/Kg	12 U	15 U	13 U	12 U	12 U
33 trans-1,3-Dichloroctopene	ug/Kg	12 U	15 U	13 U	12 U	12 U

54011VS.WK4

	S	DG:	54011	54011	54011
	STUDY	ID:	PHASE 1	PHASE 1	PHASE 1
	MATE	XIX:	SOIL	SOIL	SOIL
	LAB SAMP	ID:	273261	273262	273263
	EPA SAMP	. ID:	SS26-12	SS26-13	SS26-14
	QC CO	DE:	SA	SA	SA
	% MOISTU		8	5	11
	% SOL				
	PARAMETER	UNIT ,	VALUE Q	VALUE Q	VALUE Q
1	1,1,1-Trichloroethane	ug/Kg	11 U	10 U	11 U
2	1,1,2,2-Tetrachloroethane	ug/Kg	11 U	10 U	11 U
3	1,1,2-Trichloroethene	ug/Kg	11 U	10 U	11 U
4	1,1-Dichloroethane	ug/Kg	11 U	10 U	11 U
5	1,1-Dichloroethene	ug/Kg	11 U	2 Ј	11 U
6	1,2-Dichloroctopane	ug/Kg	11 U	10 U	11 U
7	1,2-Dichloroethane	ug/Kg	11 U	10 U	11 U
8	1,2-Dichloroethene (total)	ug/Kg	11 U	10 U	11 U
9	2-Butanone	ug/Kg	11 U	10 U	11 U
10	2-Hexanone	ug/Kg	11 U	10 U	11 U
11	4-Methyl-2-Pentanone	ug/Kg	11 U	10 U	11 U
12	Acetone	ug/Kg	11 U	10 U	4 JB
13	Benzene	ug/Kg	11 U	3 J	11 U
14	Bromodichloromethane	ug/Kg	11 U	10 U	11 U
15	Bromoform	ug/Kg	11 U	10 U	11 U
16	Bromomethane	ug/Kg	11 U	10 U	11 U
17	Carbon Disulfide	ug/Kg	11 U	10 U	11 U
18	Carbon Tetrachloride	ug/Kg	11 U	10 U	11 U
19	Chlorobenzene	ug/Kg	11 U	. 4 J	11 U
20	Chloroethane	ug/Kg	11 U	10 U	11 U
21	Chloroform	ug/Kg	11 U	10 U	11 U
	Chloromethane	ug/Kg	11 U	10 U	11 U
	Dibromochloromethane	ug/Kg	11 U	10 U	11 U
	Ethylbenzene	ug/Kg	11 U	10 U	11 U
	Methylene Chloride	ug/Kg	11 U	10 U	11 U
	Styrene	ug/Kg	11 U	10 U	11 U
27	Tetrachloroethene	ug/Kg	11 U	10 U	11 U
28		ug/Kg	11 U	4 J	11 U
29		ug/Kg	11 U	4 J	11 U
	Vinyl Chloride	ug/Kg	11 U	10 U	11 U
	Xylene (total)	ug/Kg	11 U	10 U	11 U
	cis-I,3-Dichloroctopene	ug/Kg	11 U	10 U	11 U
33	trans-1,3-Dichloroctopene	ug/Kg	11 U	10 U	11 U

OTTEN		DUAGE
STUDY II		PHASE 1
MATRIX		WATER
LAB SAMP. II		273271
EPA SAMP. II		SS26-10RN
QC CODE		FB
% MOISTURI	€:	
% SOLIDS	S:	
PARAMETE	R UNIT	VALUE Q
1 1,2,4-Trichlorobenzene	UG/L	10 U
1 1,2,4-Trichlorobenzene	UG/L	10 U
2 1,2-Dichlorobenzene	UG/L	10 U
3 1,3-Dichlorobenzene	UG/L	10 U
4 1,4-Dichlorobenzene	UG/L	10 U
5 2,4,5-Trichlorophenol	UG/L	25 U
6 2,4,6-Trichlorophenol	UG/L	10 U
7 2,4-Dichlorophenol	UG/L	10 U
8 2,4-Dimethylphenol	UG/L	10 U
9 2,4-Dinitrophenol	UG/L	25 U
10 2,4-Dinitrotoluene	UG/L	10 U
11 2,6-Dinitrotoluene	UG/L	10 U
12 2-Chloronaphthalene	UG/L	10 U
13 2-Chlorophenol	UG/L	10 U
14 2-Methylnaphthalene	UG/L	10 U
15 2-Methylphenol	UG/L	10 U
16 2-Nitroaniline	UG/L	25 U
17 2-Nitrophenol	UG/L	10 U
18 3,3'-Dichlorobenzidine	UG/L	10 U
19 3-Nitroaniline	UG/L	25 U
20 4,6-Dinitro-2-methylphenol	UG/L	25 U
21 4-Bromophenyl-phenylether	UG/L	10 U
22 4-Chloro-3-methylphenol	UG/L	10 U
23 4-Chloroaniline	UG/L	10 U
24 4-Chlorophenyl-phenylether	UG/L	10 U
25 4-Methylphenol	UG/L	10 U
26 4-Nitroaniline	UG/L	25 U
27 4-Nitrophenol	UG/L	25 U
28 Acenaphthene	UG/L	10 U
29 Acenaphthylene	UG/L	10 U
30 Anthracene	UG/L UG/L	10 U
	UG/L UG/L	
31 Benzo(a)anthracene		10 U
32 Benzo(a)pyrene	UG/L	10 U
33 Benzo(b)fluoranthene	UG/L	10 U
34 Benzo(g,h,i)perylene	UG/L	10 U

SDG:

54011

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STUDY II		PHASE 1
MATRD		WATER
LAB SAMP. II		273271
EPA SAMP. II		SS26-10RN
QC CODI		FB
% MOISTUR	E:	
% SOLID:	S:	
PARAMETE	R UNIT	VALUE Q
1 1,2,4-Trichlorobenzene	UG/L	10 U
35 Butylbenzylphthalate	UG/L	10 U
36 Carbazole	UG/L	10 U
37 Chrysene	UG/L	10 U
38 Di-n-butylphthalate	UG/L	10 U
39 Di-n-oprylphthalate	UG/L	10 U
40 Dibenz(a,h)anthracene	UG/L	10 U
41 Dibenzofuran	UG/L	10 U
42 Diethylphthalate	UG/L	10 U
43 Dimethylphthalate	UG/L	10 U
44 Fluoranthene	UG/L	10 U
45 Fluorene	UG/L	10 U
46 Hexachlorobenzene	UG/L	10 U
47 Hexachlorobutadiene	UG/L	10 U
48 Hexachlorocyclopentadiene	UG/L	10 U
49 Hexachloroethane	UG/L	10 U
50 Indeno(1,2,3-cd)pyrene	UG/L	10 U
51 Isophorone	UG/L	10 U
52 N-Nitroso-di-n-ctopylamine	UG/L	10 U
53 N-Nitrosodiphenylamine (1)	UG/L	10 U
54 Naphthalene	UG/L	10 U
55 Nitrobenzene	UG/L	10 U
56 Pentachlorophenol	UG/L	25 U
57 Phenanthrene	UG/L	10 U
58 Phenol	UG/L	10 U
59 Pyrene	UG/L	10 U
60 benzo(k)fluoranthene	UG/L	10 U
61 bis(2-Chloroethoxy) methane	UG/L	10 U
62 bis(2-Chloroethyl) ether	UG/L	10 U
63 bis(2-Chloroisoctopyl) ether	UG/L	10 U
64 bis(2-Ethylhexyl)phthalate	UG/L	9 BJ

SDG:

54011

**SVOCs** 

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	SDG:	54011	54011	54011	54011	54011	54011
STUD	Y ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MAT	TRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAM		273264	273260	273260	272303	272304	273489
EPA SAM		SS26-50	SS26-11MS	SS26-11MSD	SB26-9-04	SB26-9-05	SD26-2
OC C		DU	MS	MSD	SA	SA	SA
% MOIST		12	11	11	9	11	38
% SO		12	11	11	,	11	
70 50.	LUG.						
PARAM	ETER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	370 U	1400	1500	360 U	370 U	530 U
1 1,2,4-Trichlorobenzene	UG/KG	, 370 U	1400	1500	360 U	370 U	
2 1,2-Dichlorobenzene	UG/KG		370 U	370 U			530 U
					360 U	370 U	530 U
3 1,3-Dichlorobenzene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
4 1,4-Dichlorobenzene	UG/KG	370 U	1200	1200	360 U	370 U	530 U
5 2,4,5-Trichlorophenol	UG/KG	910 U	900 U	900 U	880 U	900 U	1300 U
6 2,4,6-Trichlorophenol	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
7 2,4-Dichlorophenoi	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
8 2,4-Dimethylphenol	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
9 2,4-Dinitrophenol	UG/KG	910 U	900 U	900 U	880 U	900 U	1300 U
10 2,4-Dinitrotoluene	UG/KG	370 U	1200	1300	360 U	370 U	530 U
11 2,6-Dinitrotoluene	UG/KG	370 U	370 U	370 U	360 U	3 <b>70</b> U	530 U
12 2-Chloronaphthalene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
13 2-Chlorophenol	UG/KG	370 U	2500	2200	360 U	370 U	530 U
14 2-Methylnaphthalene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
15 2-Methylphenol	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
16 2-Nitroaniline	UG/KG	910 U	900 Ü	900 U	880 U	900 U	1300 U
17 2-Nitrophenol	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
18 3,3'-Dichlorobenzidine	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
19 3-Nitroaniline	UG/KG	910 U	900 U	900 U	880 U	900 U	1300 U
20 4,6-Dinitro-2-methylphenol	UG/KG	910 U	900 U	900 U	880 U	900 U	1300 U
21 4-Bromophenyl-phenylether	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
22 4-Chloro-3-methylphenol	UG/KG	370 U	1900	2000	360 U	370 U	530 U
23 4-Chloroaniline	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
24 4-Chlorophenyl-phenylether	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
25 4-Methylphenol	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
26 4-Nitroaniline	UG/KG	910 U	900 U	900 U	880 U	900 U	1300 U
27 4-Nitrophenol	UG/KG	910 U	1700	1800	880 U	900 U	1300 U
28 Acenaphthene	UG/KG	370 U	1400	1300	360 U	370 U	530 U
29 Acenaphthylene	UG/KG	370 U	370 U	370 U	360 U	370 U	69 J
30 Anthracene	UG/KG	370 U	370 U	370 U	360 U	370 U	
31 Benzo(a)anthracene	UG/KG	58 J	76 J	370 U	360 U		180 J
32 Benzo(a)pyrene	UG/KG	84 J	73 J	370 U	38 J	370 U	440 J
33 Benzo(b)fluoranthene	UG/KG	71 J	83 J	47 J	360 U	370 U	370 J
34 Benzo(g,h,i)perylene	UG/KG	95 J	62 J	370 U		370 U	650
34 Denzo(Ruth)ber Alene	OG/RG	<i>33 3</i>	02 J	370 0	360 U	3 <b>70</b> U	520 J

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SDG		54011	54011	54011	54011	54011	54011
STUDY ID		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRIX		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP. ID		273264	273260	273260	272303	272304	273489
EPA SAMP. ID		SS26-50	SS26-11MS	SS26-11MSD	SB26-9-04	SB26-9-05	SD26-2
QC CODE		DU	MS	MSD	SA	SA	SA
% MOISTURE		12	11	11	9	11	38
% SOLIDS	5:						
PARAMETE		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	370 U	1400	1500	360 U	370 U	530 U
35 Butylbenzylphthalate	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
36 Carbazole	UG/KG	370 U	370 U	370 U	360 U	370 U	90 J
37 Chrysene	UG/KG	65 J	81 J	38 J	360 U	370 U	980
38 Di-n-butylphthalate	UG/KG	370 U	63 J	50 J	360 U	3 <b>7</b> 0 U	80 BJ
39 Di-n-oprylphthalate	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
40 Dibenz(a,h)anthracene	UG/KG	370 U	370 U	370 U	360 U	370 U	130 J
41 Dibenzofuran	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
42 Diethylphthalate	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
43 Dimethylphthalate	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
44 Fluoranthene	UG/KG	140 J	190 J	75 J	48 J	370 U	2800
45 Fluorene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
46 Hexachlorobenzene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
47 Hexachlorobutadiene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
48 Hexachlorocyclopentadiene	UG/KG	370 U	370 U	370 U	360 U	3 <b>70</b> U	530 U
49 Hexachloroethane	UG/KG	370 U	370 U	370 U	360 U	3 <b>70</b> U	530 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	54 J	49 J	3 <b>70</b> U	360 U	370 U	320 J
51 Isophorone	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	370 U	1300	1200	360 U	370 U	530 U
53 N-Nitrosodiphenylamine (1)	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
54 Naphthalene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
55 Nitrobenzene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
56 Pentachlorophenol	UG/KG	910 U	1900	1900	880 U	900 U	1300 U
57 Phenanthrene	UG/KG	80 J	100 J	370 U	360 U	370 U	370 J
58 Phenol	UG/KG	370 U	1900	1800	360 U	370 U	530 U
59 Pyrene	UG/KG	120 J	1500	1400	360 U	370 U	2000
60 benzo(k)fluoranthene	UG/KG	88 J	64 J	370 U	41 J	370 U	800
61 bis(2-Chloroethoxy) methane	UG/KG	370 U	<b>370</b> U	370 U	360 U	370 U	530 U
62 bis(2-Chloroethyl) ether	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	200 J	230 J	140 Ј	130 J	120 J	530 U

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SVOCS						
S	DG:	54011	54011	54011	54011	54011
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATI	RIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP	. ID:	273578	273490	273491	273492	273493
EPA SAMP	. ID:	SD26-3	SD26-4	SD26-5	SD26-6	SD26-7
QC CC	DE:	SA	SA	SA	SA	SA
% MOISTU		32	29	36	25	32
% SOL				20	23	32
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PARAME	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	480 U	460 U	520 U	440 U	480 U
1 1,2,4-Trichlorobenzene	UG/KG	480 U	460 U	520 U	440 U	480 U
2 1,2-Dichlorobenzene	UG/KG	480 U	460 U	520 U	440 U	480 U
3 1,3-Dichlorobenzene	UG/KG	480 U	460 U	520 U	440 U	480 U
4 1,4-Dichlorobenzene	UG/KG	480 U	460 U	520 U	440 U	480 U
5 2,4,5-Trichlorophenol	UG/KG	1200 U	1100 U	1200 U	1100 U	1200 U
6 2,4,6-Trichlorophenol	UG/KG	480 U	460 U	520 U	440 U	480 U
7 2,4-Dichlorophenol	UG/KG	480 U	460 U	520 U	440 U	480 U
8 2,4-Dimethylphenol	UG/KG	480 U	460 U	520 U	440 U	480 U
9 2,4-Dinitrophenol	UG/KG	1200 U	1100 U	1200 U	1100 U	1200 U
10 2,4-Dinitrotoluene	UG/KG	480 U	460 U	520 U	440 U	480 U
11 2,6-Dinitrotoluene	UG/KG	480 U	460 U	520 U	440 U	480 U
12 2-Chloronaphthalene	UG/KG	480 U	460 U	520 U	440 U	480 U
13 2-Chlorophenol	UG/KG	480 U	460 U	520 U	440 U	
14 2-Methylnaphthalene	UG/KG	480 U	460 U	520 U	440 U	480 U
15 2-Methylphenoi	UG/KG	480 U	460 U	520 U	440 U	480 U
16 2-Nitroaniline	UG/KG	1200 U	1100 U	1200 U		480 U
17 2-Nitrophenol	UG/KG	480 U	460 U	520 U	1100 U	1200 U
18 3,3'-Dichlorobenzidine	UG/KG	480 U	460 U	520 U	440 U	480 U
19 3-Nitroaniline	UG/KG	1200 U	1100 U	1200 U	440 U	480 U
20 4,6-Dinitro-2-methylphenol	UG/KG	1200 U	1100 U	1200 U	1100 U	1200 U
21 4-Bromophenyl-phenylether	UG/KG	480 U	460 U		1100 U	1200 U
22 4-Chloro-3-methylphenol	UG/KG	480 U	460 U	520 U	440 U	480 U
23 4-Chloroaniline	UG/KG	480 U	460 U	520 U	440 U	480 U
24 4-Chlorophenyl-phenylether	UG/KG	480 U	460 U	520 U	440 U	480 U
25 4-Methylphenol	UG/KG	480 U	460 U	520 U	440 U	480 U
26 4-Nitroaniline	UG/KG			520 U	440 U	480 U
27 4-Nitrophenol	UG/KG	1200 U 1200 U	1100 U	1200 U	1100 U	1200 U
	UG/KG		1100 U	1200 U	1100 U	1200 U
28 Acenaphthene 29 Acenaphthylene	UG/KG UG/KG	480 U 480 U	460 U	520 U	440 U	480 U
30 Anthracene			460 U	89 J	440 U	480 U
	UG/KG	58 J	460 U	170 J	46 J	480 U
31 Benzo(a)anthracene	UG/KG	140 J	460 U	450 J	190 Ј	480 U
32 Benzo(a)pyrene	UG/KG	140 J	460 U	610	200 J	53 J
33 Benzo(b)fluoranthene	UG/KG	140 J	460 U	1200	370 J	96 J
34 Benzo(g,h,i)perylene	UG/KG	100 Ј	55 J	750	180 Ј	480 U

SVOCS						
SI	OG:	54011	54011	54011	54011	54011
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATR	IX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP.	ID:	273578	273490	273491	273492	273493
EPA SAMP.	ID:	SD26-3	SD26-4	SD26-5	SD26-6	SD26-7
QC COI	DE:	SA	SA	SA	SA	SA
% MOISTU	RE:	32	29	36	25	32
% SOLI	DS:					
PARAMET	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	480 U	460 U	520 U	440 U	480 U
35 Butylbenzylphthalate	UG/KG	480 U	460 U	520 U	440 U	480 U
36 Carbazole	UG/KG	480 U	460 U	52 J	440 U	480 U
37 Chrysene	UG/KG	170 J	460 U	1000	340 J	67 J
38 Di-n-butylphthalate	UG/KG	140 BJ	78 BJ	76 BJ	67 BJ	67 BJ
39 Di-n-oprylphthalate	UG/KG	480 U	460 U	520 U	440 U	480 U
40 Dibenz(a,h)anthracene	UG/KG	480 U	460 U	220 J	440 U	480 U
41 Dibenzofuran	UG/KG	480 U	460 U	520 U	440 U	480 U
42 Diethylphthalate	UG/KG	480 U	460 U	520 U	440 U	480 U
43 Dimethylphthalate	UG/KG	480 U	460 U	520 U	440 U	480 U
44 Fluoranthene	UG/KG	370 J	51 J	750	330 J	75 J
45 Fluorene	UG/KG	480 U	460 U	520 U	440 U	480 U
46 Hexachlorobenzene	UG/KG	480 U	460 U	520 U	440 U	480 U
47 Hexachlorobutadiene	UG/KG	480 U	460 U	520 U	440 U	480 U
48 Hexachlorocyclopentadiene	UG/KG	480 U	460 U	<b>520</b> U	440 U	480 U
49 Hexachloroethane	UG/KG	480 U	460 U	<b>520</b> U	440 U	480 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	98 J	460 U	500 J	150 J	480 U
51 Isophorone	UG/KG	480 U	460 U	520 U	440 U	480 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	480 U	460 U	<b>520</b> U	<b>440</b> U	480 U
53 N-Nitrosodiphenylamine (1)	UG/KG	480 U	460 U	520 U	440 U	480 U
54 Naphthalene	UG/KG	480 U	460 U	520 U	440 U	480 U
55 Nitrobenzene	UG/KG	480 U	<b>460</b> U	520 U	440 U	480 U
56 Pentachlorophenol	UG/KG	1200 U	1100 U	1200 U	1100 U	1200 U
57 Phenanthrene	UG/KG	210 J	460 U	100 J	<b>7</b> 5 J	480 U
58 Phenol	UG/KG	480 U	<b>460</b> U	520 U	440 U	480 U
59 Pyrene	UG/KG	280 J	460 U	810	350 J	71 J
60 benzo(k)fluoranthene	UG/KG	170 J	460 U	750	280 J	59 J
61 bis(2-Chloroethoxy) methane	UG/KG	480 U	<b>460</b> U	520 U	440 U	480 U
62 bis(2-Chloroethyl) ether	UG/KG	480 U	460 U	520 U	440 U	480 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	480 U	460 U	520 U	440 U	480 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	480 U	290 J	55 J	440 U	480 U

SVOCS						
S	DG:	54011	54011	54011	54011	54011
STUDY		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATI	RIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP.	.ID:	273494	273259	273260	273261	273262
EPA SAMP.	. ID:	SD26-9	SS26-10	SS26-11	SS26-12	SS26-13
QC CO	DE:	SA	SA	SA	SA	SA
% MOISTU	RE:	27	14	11	9	5
% SOLI	IDS:					
PARAME		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	450 U	380 U	370 U	360 U	340 U
1 1,2,4-Trichlorobenzene	UG/KG	450 U	380 U	370 U	. 360 U	340 U
2 1,2-Dichlorobenzene	UG/KG	450 U	380 U	370 U	360 U	340 U
3 1,3-Dichlorobenzene	UG/KG	450 U	380 U	370 U	360 U	340 U
4 1,4-Dichlorobenzene	UG/KG	450 U	380 U	370 U	360 U	340 U
5 2,4,5-Trichlorophenol	UG/KG	1100 U	920 U	890 U	870 U	830 U
6 2,4,6-Trichlorophenol	UG/KG	450 U	380 U	370 U	360 U	340 U
7 2,4-Dichlorophenol	UG/KG	450 U	380 U	370 U	360 U	340 U
8 2,4-Dimethylphenol	UG/KG	450 U	380 U	370 U	360 U	340 U
9 2,4-Dinitrophenol	UG/KG	1100 U	920 U	890 U	870 U	830 U
10 2,4-Dinitrotoluene	UG/KG	450 U	380 U	370 U	360 U	340 U
11 2,6-Dinitrotoluene	UG/KG	450 U	380 U	370 U	360 U	340 U
12 2-Chloronaphthalene	ÚG/KG	450 U	380 U	370 U	360 U	340 U
13 2-Chlorophenol	UG/KG	450 U	380 U	370 U	360 U	340 U
14 2-Methylnaphthalene	UG/KG	450 U	380 U	370 U	360 U	340 U
15 2-Methylphenol	UG/KG	450 U	380 U	370 U	360 U	340 U
16 2-Nitroaniline	UG/KG	1100 U	920 U	890 U	870 U	830 U
17 2-Nitrophenol	UG/KG	450 U	380 U	370 U	360 U	340 U
18 3,3'-Dichlorobenzidine	UG/KG	450 U	380 U	370 U	360 U	340 U
19 3-Nitroaniline	UG/KG	1100 U	920 U	890 U	870 Ú	830 U
20 4,6-Dinitro-2-methylphenol	UG/KG	1100 U	920 U	890 U	870 U	830 U
21 4-Bromophenyl-phenylether	UG/KG	450 U	380 U	370 U	360 U	340 U
22 4-Chloro-3-methylphenol	UG/KG	450 U	380 U	370 U	360 U	340 U
23 4-Chloroaniline	UG/KG	450 U	380 U	370 U	360 U	340 U
24 4-Chlorophenyl-phenylether	UG/KG	450 U	380 U	370 U	360 U	340 U
25 4-Methylphenol	UG/KG	450 U	380 U	370 U	360 U	340 U
26 4-Nitroaniline	UG/KG	1100 U	920 U	890 U	870 U	830 U
27 4-Nitrophenol	UG/KG	1100 U	920 U	890 U	870 U	830 U
28 Acenaphthene	UG/KG	450 U	380 U	370 U	360 U	340 U
29 Acenaphthylene	UG/KG	450 U	380 U	370 U	360 U	340 U
30 Anthracene	UG/KG	450 U	380 U	370 U	360 U	340 U
31 Benzo(a)anthracene	UG/KG	59 J	66 J	66 J	76 J	340 U
32 Benzo(a)pyrene	UG/KG	110 J	59 J	64 J	72 J	340 U
33 Benzo(b)fluoranthene	UG/KG	230 Ј	58 J	73 J	84 J	340 U
34 Benzo(g,h,i)perylene	UG/KG	450 U	55 J	57 J	74 J	340 U

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SD	G:	54011	54011	54011	54011	54011
STUDY I		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRI		SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP. I		273494	273259	273260	273261	273262
EPA SAMP. I		SD26-9	SS26-10	SS26-11	SS26-12	SS26-13
QC COD		SA	SA	SA	SA	SA
% MOISTUR		27	14	11	9	5
% SOLIE					_	
PARAMETI		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	450 U	380 U	370 U	360 U	340 U
35 Butylbenzylphthalate	UG/KG	450 U	380 U	370 U	360 U	340 U
36 Carbazole	UG/KG	450 U	380 U	370 U	360 U	340 U
37 Chrysene	UG/KG	170 J	70 J	71 J	84 J	340 U
38 Di-n-butylphthalate	UG/KG	65 <b>B</b> J	380 U	60 J	360 U	340 U
39 Di-n-oprylphthalate	UG/KG	450 U	380 U	370 U	360 U	340 U
40 Dibenz(a,h)anthracene	UG/KG	450 U	380 U	370 U	360 U	340 U
41 Dibenzofuran	UG/KG	450 U	380 U	370 U	360 U	340 U
42 Diethylphthalate	UG/KG	450 U	380 U	370 U	360 U	340 U
43 Dimethylphthalate	UG/KG	450 U	380 U	370 U	360 U	<b>340</b> U
44 Fluoranthene	UG/KG	130 J	130 J	170 J	190 J	340 U
45 Fluorene	UG/KG	450 U	380 U	370 U	360 U	340 U
46 Hexachlorobenzene	UG/KG	450 U	380 U	370 U	360 U	340 U
47 Hexachlorobutadiene	UG/KG	450 U	380 U	370 U	360 U	340 U
48 Hexachlorocyclopentadiene	UG/KG	450 U	380 U	370 U	360 U	340 U
49 Hexachloroethane	UG/KG	450 U	380 U	370 U	360 U	340 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	72 J	44 J	48 J	51 J	<b>340</b> U
51 Isophorone	UG/KG	450 U	380 U	370 U	360 U	340 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	450 U	380 U	370 U	360 U	340 U
53 N-Nitrosodiphenylamine (1)	UG/KG	450 U	380 U	370 U	360 U	340 U
54 Naphthalene	UG/KG	450 U	380 U	370 U	360 U	340 U
55 Nitrobenzene	UG/KG	450 U	380 U	370 U	360 U	340 U
56 Pentachlorophenol	UG/KG	1100 U	920 U	890 U	870 U	830 U
57 Phenanthrene	UG/KG	450 U	49 J	99 J	83 J	340 U
58 Phenol	UG/KG	450 U	380 U	370 U	360 U	340 U
59 Pyrene	UG/KG	130 J	120 J	120 J	160 J	39 J
60 benzo(k)fluoranthene	UG/KG	140 J	60 J	59 J	61 J	340 U
61 bis(2-Chloroethoxy) methane	UG/KG	450 U	380 U	370 U	360 U	340 U
62 bis(2-Chloroethyl) ether	UG/KG	450 U	380 U	370 U	360 U	340 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	450 U	' 380 U	370 U	360 U	340 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	450 U	250 J	120 J	97 J	57 J

SVOCS			
S	DG:	54011	54011
STUDY	ID:	PHASE 1	PHASE 1
MATE	UX:	SOIL	SOIL
LAB SAMP.	ID:	273263	273258
EPA SAMP.	ID:	SS26-14	SS26-9
oc co	DE:	SA	SA
% MOISTU		11	11
% SOLI			
PARAMET	TER UNIT	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	2400 U	370 U
1 1,2,4-Trichlorobenzene	UG/KG	2400 U	370 U
2 1,2-Dichlorobenzene	UG/KG	2400 U	370 U
3 1,3-Dichlorobenzene	UG/KG	2400 U	370 U
4 1,4-Dichlorobenzene	UG/KG	2400 U	370 U
5 2,4,5-Trichlorophenol	UG/KG	5900 U	900 U
6 2,4,6-Trichlorophenol	UG/KG	2400 U	370 U
7 2,4-Dichlorophenol	UG/KG	2400 U	370 U
8 2,4-Dimethylphenol	UG/KG	2400 U	370 U
9 2,4-Dinitrophenol	UG/KG	5900 U	900 U
10 2,4-Dinitrotoluene	UG/KG	2400 U	370 U
11 2,6-Dinitrotoluene	UG/KG	2400 U	370 U
12 2-Chloronaphthalene	UG/KG	2400 U	370 U
13 2-Chlorophenol	UG/KG	2400 U	370 U
14 2-Methylnaphthalene	UG/KG	2400 U	370 U
15 2-Methylphenol	UG/KG	2400 U	370 U
16 2-Nitroaniline	UG/KG	5900 U	900 U
17 2-Nitrophenol	UG/KG	2400 U	370 U
18 3,3'-Dichlorobenzidine	UG/KG	2400 U	370 U
19 3-Nitroaniline	UG/KG	5900 U	900 U
20 4,6-Dinitro-2-methylphenol	UG/KG	5900 U	900 U
21 4-Bromophenyl-phenylether	UG/KG	2400 U	370 U
22 4-Chloro-3-methylphenol	UG/KG	2400 U	370 U
23 4-Chloroaniline	UG/KG	2400 U	370 U
24 4-Chlorophenyl-phenylether	UG/KG	2400 U	370 U
25 4-Methylphenol	UG/KG	2400 U	370 U
26 4-Nitroaniline	UG/KG	5900 U	900 U
27 4-Nitrophenol	UG/KG	5900 U	900 U
28 Acenaphthene	UG/KG	990 J	370 U
29 Acenaphthylene	UG/KG	2400 U	370 U
30 Anthracene	UG/KG	1400 J	370 U
31 Benzo(a)anthracene	UG/KG	3000	44 J
32 Benzo(a)pyrene	UG/KG	2500	47 J
33 Benzo(b)fluoranthene	UG/KG	3100	44 J
34 Benzo(g,h,i)perylene	UG/KG	1400 Ј	40 J

SVOCS			
SI	OG:	54011	54011
STUDY	ID:	PHASE 1	PHASE 1
MATR	IX:	SOIL	SOIL
LAB SAMP.	ID:	273263	273258
EPA SAMP.	ID:	SS26-14	SS26-9
OC COI	DE:	SA	SA
% MOISTUI	RE:	11	11
% SOLI	DS:		
PARAMET	ER UNIT	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	2400 U	370 U
35 Butylbenzylphthalate	UG/KG	2400 U	370 U
36 Carbazole	UG/KG	1400 J	370 U
37 Chrysene	UG/KG	3300	54 J
38 Di-n-butylphthalate	UG/KG	2400 U	370 U
39 Di-n-oprylphthalate	UG/KG	2400 U	370 U
40 Dibenz(a,h)anthracene	UG/KG	580 J	370 U
41 Dibenzofuran	UG/KG	340 J	370 U
42 Diethylphthalate	UG/KG	2400 U	370 U
43 Dimethylphthalate	UG/KG	2400 U	370 U
44 Fluoranthene	UG/KG	11000	94 J
45 Fluorene	UG/KG	600 J	370 U
46 Hexachlorobenzene	UG/KG	2400 U	370 U
47 Hexachlorobutadiene	UG/KG	2400 U	370 U
48 Hexachlorocyclopentadiene	UG/KG	2400 U	370 U
49 Hexachloroethane	UG/KG	2400 U	370 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	1300 Ј	370 U
51 Isophorone	UG/KG	2400 U	370 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	2400 U	370 U
53 N-Nitrosodiphenylamine (1)	UG/KG	2400 U	370 U
54 Naphthalene	UG/KG	2400 U	370 U
55 Nitrobenzene	UG/KG	2400 U	370 U
56 Pentachlorophenol	UG/KG	5900 U	900 U
57 Phenanthrene	UG/KG	7800	58 J
58 Phenol	UG/KG	2400 U	370 U
59 Pyrene	UG/KG	7600	110 J
60 benzo(k)fluoranthene	UG/KG	1900 J	51 J
61 bis(2-Chloroethoxy) methane	UG/KG	2400 U	370 U
62 bis(2-Chloroethyl) ether	UG/KG	2400 U	370 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	2400 U	370 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	2400 U	100 J
(yy)-P			

# PESTICIDES

resticides		
	SDG:	54011
STUD		PHASE 1
	TRIX:	WATER
LAB SAM		273271
EPA SAM		SS26-10RN
QC C		FB
% MOIST		
% SO	LIDS:	
PARAMETER	UNIT	VALUE Q
1 4,4'-DDD	UG/L	0.1 U
2 4,4'-DDE	UG/L	0.1 U
3 4,4'-DDT	UG/L	0.1 U
4 Aldrin	UG/L	0.052 U
5 Aroclor-1016	UG/L	1 U
6 Aroclor-1221	UG/L	2.1 U
7 Aroclor-1232	UG/L	1 Ú
8 Aroclor-1242	UG/L	1 U
9 Aroclor-1248	UG/L	1 U
10 Aroclor-1254	UG/L	1 U
11 Aroclor-1260	UG/L	1 U
12 Dieldrin	UG/L	. 0.1 U
13 Endosulfan I	UG/L	0.052 U
14 Endosulfan II	UG/L	0.1 U
15 Endosulfan sulfate	UG/L	0.1 U .
16 Endrin	UG/L	0.1 U
17 Endrin aldehyde	UG/L	0.1 U
18 Endrin ketone	UG/L	0.1 U
19 Heptachlor	· UG/L	0.052 U
20 Heptachlor epoxide	UG/L	0.052 U
21 Methoxychlor	UG/L	0.52 U
22 Toxaphene	UG/L	5.2 U
23 alpha-BHC	UG/L	0.052 U
24 alpha-Chlordane	UG/L	0.052 U
25 beta-BHC	UG/L	0.052 U
26 delta-BHC	UG/L	0.052 U
27 gamma-BHC (Lindane)	UG/L	0.052 U
28 gamma-Chlordane	UG/L	0.052 U

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PEST	ЖΉ	13	- 8

resticines							
•	SDG:	54011	54011	54011	54011	54011	54011
S	TUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
1	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
LAB S	SAMP. ID:	273264	273260	273260	272303	272304	273489
EPA S	SAMP. ID:	SS26-50	SS26-11MS	SS26-11MSD	SB26-9-04	SB26-9-05	SD26-2
C	C CODE:	DU	MS	MSD	SA	SA	SA
	DISTURE:	12	11	11	9	11	38
%	SOLIDS:				-	- <del>-</del>	
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	3.7 U	3.7 U	3.7 U	3.6 U	3.7 U	5.3 U
2 4,4'-DDE	UG/KG	3.7 U	3.7 U	3.7 U	3.6 U	3.7 U	5.3 U
3 4,4'-DDT	UG/KG	3.7 U	30	31	3.6 U	3.7 U	5.3 U
4 Aldrin	UG/KG	1.9 U	15	15	1.9 U	1.9 U	2.7 U
5 Aroclor-1016	UG/KG	37 U	37 U	37 U	36 U	· 37 U	53 U
6 Aroclor-1221	UG/KG	75 U	<b>74</b> U	75 U	<b>74</b> U	<b>75</b> U	110 U
7 Aroclor-1232	UG/KG	37 U	37 U	3 <b>7 U</b>	36 U	37 U	53 U
8 Aroclor-1242	UG/KG	37 U	37 U	37 U	36 U	37 U	53 U
9 Aroclor-1248	UG/KG	37 U	37 U	37 U	36 U	37 U	53 U
10 Aroclor-1254	UG/KG	37 U	37 U	37 U	36 U	37 U	53 U
11 Aroclor-1260	UG/KG	37 U	37 U	37 U	36 U	<b>37</b> U	53 U
12 Dieldrin	UG/KG	3.7 U	28	29	3.6 U	3.7 U	5.3 U
13 Endosulfan I	UG/KG	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.7 U
14 Endosulfan II	UG/KG	3.7 U	3.7 U	3.7 U	3.6 U	3.7 U	5.3 U
15 Endosulfan sulfate	UG/KG	3.7 U	3.7 U	3.7 U	3.6 U	3.7 U	5.3 U
16 Endrin	UG/KG	3.7 U	30	31	3.6 U	3,7 U	5.3 U
17 Endrin aldehyde	UG/KG	3.7 U	3.7 U	3.7 U	3.6 U	3.7 U	5.3 U
18 Endrin ketone	UG/KG	3.7 U	3.7 U	3.7 U	3.6 U	3.7 U	4.2 JP
19 Heptachlor	UG/KG	1.9 U	13	14	1.9 U	1.9 U	2.7 U
20 Heptachlor epoxide	UG/KG	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.7 U
21 Methoxychlor	UG/KG	19 U	19 U	19 U	19 U	19 U	27 U
22 Toxaphene	UG/KG	190 U	190 U	190 U	190 U	190 U	270 U
23 alpha-BHC	UG/KG	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.7 U
24 alpha-Chlordane	UG/KG	1.9 U	1,9 U	1.9 U	· 1.9 U	1.9 U	2.7 U
25 beta-BHC	UG/KG	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.7 U
26 delta-BHC	UG/KG	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.7 U
27 gamma-BHC (Lindane)	UG/KG	1.9 U	11	11	1.9 U	1.9 U	2.7 U
28 gamma-Chlordane	UG/KG	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	2.7 U

PEST		

PESTICIDES						
	SDG:	54011	54011	54011	54011	54011
STU	DY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
M/	ATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAM	MP. ID:	273578	273490	273491	273492	273493
EPA SAM	MP. ID:	SD26-3	SD26-4	SD26-5	SD26-6	SD26-7
QC	CODE:	SA	SA	SA	SA	SA
% MOIS	TURE:	32	29	36	25	32
% S	OLIDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE O	VALUE Q
1 4,4'-DDD	UG/KG	4.8 U	4.6 U	7.3 P	4.4 U	4.9 U
2 4,4'-DDE	UG/KG	4.8 U	4.6 U	4.8 JP	4.4 U	2.6 JP
3 4,4'-DDT	UG/KG	4.8 U	4.6 U	8.9 P	4.4 U	4.9 U
4 Aldrin	UG/KG	2.5 U	2.4 U	2.6 U	2.3 U	2.5 U
5 Aroclor-1016	UG/KG	48 U	46 U	51 U	44 U	49 U
6 Aroclor-1221	UG/KG	98 U	94 U	100 U	<b>8</b> 9 U	99 U
7 Aroclor-1232	UG/KG	48 U	46 U	51 U	. 44 U	49 U
8 Aroclor-1242	UG/KG	48 U	46 U	51 U	44 U	49 U
9 Aroclor-1248	UG/KG	48 U	46 U	51 U	44 U	49 U
10 Aroclor-1254	UG/KG	48 U	46 U	51 U	44 U	49 U
11 Aroclor-1260	UG/KG	48 U	46 U	51 U	44 U	49 U
12 Dieldrin	UG/KG	4.8 U	4.6 U	5.1 U	4.4 U	4.9 U
13 Endosulfan I	UG/KG	2.5 U	2.4 U	2.6 U	2.3 U	2.5 U
14 Endosulfan II	UG/KG	4.8 U	4.6 U	6.1 P	4.4 U	4.9 U
15 Endosulfan sulfate	UG/KG	4.8 U	4.6 U	5.1 U	4.4 U	4.9 U
16 Endrin	UG/KG	4.8 U	4.6 U	5.1 U	4.4 U	4.9 U
17 Endrin aldehyde	UG/KG	4.8 U	4.6 U	5.1 U	4.4 U	4.9 U
18 Endrin ketone	UG/KG	4.8 U	4.6 U	26 P	3.8 JP	4.9 U
19 Heptachlor	UG/KG	2.5 U	2.4 U	2.6 U	2.3 U	2.5 U
20 Heptachlor epoxide	UG/KG	2.5 U	2.4 U	2.6 U	2.3 U	2.5 U
21 Methoxychlor	UG/KG	25 U	24 U	26 U	23 U	25 U
22 Toxaphene	UG/KG	250 U	240 U	260 U	230 U	250 U
23 alpha-BHC	UG/KG	2.5 U	2.4 U	2.6 U	2.3 U	2.5 U
24 alpha-Chlordane	UG/KG	2.5 U	2.4 U	2.6 U	2.3 U	2.5 U
25 beta-BHC	UG/KG	2.5 U	2.4 U	1.9 JP	2.3 U	2.5 U
26 delta-BHC	UG/KG	<b>2.5</b> U	2.4 U	2.6 U	2.3 U	2.5 U
27 gamma-BHC (Lindane)	UG/KG	2.5 U	2.4 U	2.6 U	2.3 U	2.5 U
28 gamma-Chlordane	UG/KG	2.5 U	2.4 U	1.3 ЛР	2.3 U	2.5 U

PESTICIDES						
	SDG:	54011	54011	54011	54011	54011
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LA	AB SAMP. ID:	273494	273259	273260	273261	273262
EF	PA SAMP. ID:	SD26-9	SS26-10	SS26-11	SS26-12	SS26-13
	QC CODE:	SA	SA	SA	SA	SA
%	MOISTURE:	27	14	11	9	5
	% SOLIDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	4.5 U	3.8 U	3.7 U	3.6 U	3.4 U
2 4,4'-DDE	UG/KG	15	3.8 U	3.7 U	3.6 U	4.3
3 4,4'-DDT	UG/KG	, 4.2 JP	3.8 U	3.7 U	3.6 U	3.4 U
4 Aldrin	UG/KG	2.3 U	2 U	1.9 U	1.9 U	1.8 U
5 Aroclor-1016	UG/KG	45 U	38 U	37 U	36 U	34 U
6 Aroclor-1221	UG/KG	92 U	78 U	75 U	<b>73</b> U	70 U
7 Aroclor-1232	UG/KG	<b>45</b> U	38 U	37 U	36 U	34 U
8 Aroclor-1242	UG/KG	<b>45</b> U	38 U	37 U	36 U	34 U
9 Aroclor-1248	UG/KG	45 U	38 U	37 U	36 U	34 U
10 Aroclor-1254	UG/KG	45 U	38 U	37 U	36 U	<b>34</b> U
11 Aroclor-1260	UG/KG	45 U	38 U	37 U	36 U	34 U
12 Dieldrin	UG/KG	4.5 U	3.8 U	3.7 U	3.6 U	3.4 U
13 Endosulfan I	UG/KG	2.3 U	2 U	1.9 U	1.9 U	1.8 U
14 Endosulfan II	UG/KG	4.5 U	3.8 U	3.7 U	3.6 U	3.4 U
15 Endosulfan sulfate	UG/KG	4.5 U	3.8 U	3.7 U	3.6 U	3.4 U
16 Endrin	UG/KG	4.5 U	3.8 U	3.7 U	3.6 U	3.4 U

3.8 U

3.8 U

2 U

2 U

20 U

200 U

2 U

2 U

2 U

2 U

2 U

2 U

3.7 U

3.7 U

1.9 U

1.9 U

19 U

190 U

1.9 U

1.9 U

1.9 U

1.9 U

1.9 U

1.9 U

3.6 U

3.6 U

1.9 U

1.9 U

19 U

190 U

1.9 U

1.9 U

1.9 U

1.9 U

1.9 U

1.9 U

4.5 U

4.5 U

2.3 U

2.3 U

23 U

230 U

2.3 U

2.3 U

2.3 U

2.3 U

2.3 U

2.3 U

17 Endrin aldehyde

20 Heptachlor epoxide

18 Endrin ketone

21 Methoxychlor

24 alpha-Chlordane

27 gamma-BHC (Lindane)

28 gamma-Chlordane

19 Heptachlor

22 Toxaphene

23 alpha-BHC

25 beta-BHC

26 delta-BHC

UG/KG

UG/KG

UG/KG

UG/KG

UG/KG

UG/KG

UG/KG

UG/KG

UG/KG

UG/KG

UG/KG

UG/KG

3.4 U

3.4 U

1.8 U

1.8 U

18 U

180 U

1.8 U

1.8 U

1.8 U

1.8 U

1.8 U

1.8 U

#### PESTICIDES

PESTICIDES			
	SDG:	54011	54011
STU	DY ID:	PHASE 1	PHASE 1
MA	ATRIX:	SOIL	SOIL
LAB SAN	AP. ID:	273263	273258
EPA SAN	MP. ID:	SS26-14	SS26-9
QC	CODE:	SA	SA
% MOIS	TURE:	11	11
% S0	OLIDS:		
PARAMETER	UNIT	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	3.6 U	3.7 U
2 4,4'-DDE	UG/KG	13	3.7 U
3 4,4'-DDT	UG/KG	15	3.7 U
4 Aldrin	UG/KG	1.9 U	1.9 U
5 Aroclor-1016	UG/KG	36 U	37 U
6 Aroclor-1221	UG/KG	<b>74</b> U	75 U
7 Aroclor-1232	UG/KG	36 U	37 U
8 Aroclor-1242	UG/KG	36 U	37 U
9 Aroclor-1248	UG/KG	36 U	37 U
10 Aroclor-1254	UG/KG	36 U	37 U
11 Aroclor-1260	UG/KG	36 U	37 U
12 Dieldrin	UG/KG	3.6 U	3.7 U
13 Endosulfan I	UG/KG	1.9 U	1.9 U
14 Endosulfan II	UG/KG	3.6 U	3.7 U
15 Endosulfan sulfate	UG/KG	3.6 U	3.7 U
16 Endrin	UG/KG	3.6 U	3.7 U
17 Endrin aldehyde	UG/KG	3.6 U	3.7 U
18 Endrin ketone	UG/KG	3.6 U	3.7 U
19 Heptachlor	UG/KG	1.9 U	1.9 U
20 Heptachlor epoxide	UG/KG	1.9 U	1.9 U
21 Methoxychlor	UG/KG	19 U	19 U
22 Toxaphene	UG/KG	190 U	190 U
23 alpha-BHC	UG/KG	1.9 U	1.9 U
24 alpha-Chlordane	UG/KG	1.9 U	1.9 U
25 beta-BHC	UG/KG	1.9 U	1.9 U
26 delta-BHC	UG/KG	1.9 U	1.9 U
27 gamma-BHC (Lindane)	UG/KG	1.9 U	1.9 U
28 gamma-Chlordane	UG/KG	1.9 U	1.9 U

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METALS						
	SDG:	54011	54011	54011	54011	54011
5	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB	SAMP. ID:	273264	272303	272304	273489	273578
EPA	SAMP. ID:	SS26-50	SB26-9-04	SB26-9-05	SD26-2	SD26-3
	QC CODE:	DU	SA	SA	SA	SA
	OISTURE:				•	
q	% SOLIDS:	88.1	90.9	88.9	61.7	67.6
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	MG/K	15500	16200	15800	12600	11100
2 Antimony	MG/K	0.76 B	0.62 B	0.48 B	0.57 U	0.33 U
3 Arsenic	MG/K	6.6	8.3	8.1	3.9	3.8
4 Barium	MG/K	79.8	80.7	63	43 B	61.3
5 Beryllium	MG/K	0.68 B	0.77 B	0.7 B	0.49 B	0.49 B
6 Cadmium	MG/K	0.07 U	0.06 U	0.06 U	0.08 U	0.04 U
7 Calcium	MG/K	8820 *	3780 *	2150 *	27100 *	56500 *
8 Chromium	MG/K	22.5	26.2	26	20.4	16.7
9 Cobalt	MG/K	12.2	14.9	17.7	10.6 B	7.2 B
10 Copper	MG/K	20.8	26.8	22.7	13.3	15.6
11 Cyanide	MG/K	0.54 U	0.57 U	0.58 U	0.6 U	0.81 U
12 Iron	MG/K	27200	32900	36700	23700	17300
13 Lead	MG/K	17.2	14.4	12.9	6	14.7
14 Magnesium	MG/K	5620	5660	5950	5700	4600
15 Manganese	MG/K	652	746	667	247	269
16 Mercury	MG/K	0.06 B	0.03 B	0.02 B	0.05 B	0.01 U
17 Nickel	MG/K	32.1	40	39.8	27.6	22.1
18 Potasium	MG/K	2380	2450	1850	1300	1680
19 Selenium	MG/K	0.83 U	0.73 U	0.76 U	0.96 U	0.55 U
20 Silver	MG/K	0.18 U	0.16 U	0.18 B	0.21 U	0.I2 U
21 Sodium	MG/K	45 U	39.7 U	41.8 B	51.9 U	29.8 U
22 Thallium	MG/K	0.67 U	0.76 B	0.68 B	0.78 U	0.49 B
23 Vanadium	MG/K	25.1	26.9	22.7	17.3	17
24 Zinc	MG/K	105	94.7	81.6	94.4	79.2

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M		ΑI	.5

	SDG:	54011	54011	54011	54011	54011
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
	LAB SAMP. ID:	273490	273491	273492	273493	273494
	EPA SAMP. ID:	SD26-4	SD26-5	SD26-6	SD26-7	SD26-9
	QC CODE:	SA	SA	SA	SA	SA
	% MOISTURE:					
	% SOLIDS:	70.7	63.7	75	67.8	72.6
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	MG/K	14400	10200	11600	6410	10800
2 Antimony	MG/K	0.49 U	0.47 U	0.39 B	0.61 U	0.5 U
3 Arsenic	MG/K	5.1	7	11	3.7	4.5
4 Barium	MG/K	74.2	59.2	53	38.7 B	49.6
5 Beryllium	MG/K	0.64 B	0.46 B	0.52 B	0.23 B	0.46 B
6 Cadmium	MG/K	0.07 U	0.06 U	0.05 U	0.08 B	0.07 U
7 Calcium	MG/K	8840 *	34000 *	28700 *	26500 *	10200 *
8 Chromium	MG/K	20.2	65.7	101	32.3	18
9 Cobalt	MG/K	9.9 B	10.5 B	12.1	4 B	8.9 B
10 Copper	MG/K	19	16.2	16.5	9.2	20.1
11 Cyanide	MG/K	0.58 U	0.83 U	0. <b>72</b> U	0.74 U	0.57 U
12 Iron	MG/K	23000	16000	23600	8780	22900
13 Lead	MG/K	12.8	18.1	18.6	10	27.3
14 Magnesium	MG/K	4790	5550	5610	2410	4440
15 Manganese	MG/K	329	263	333	137	230
16 Mercury	MG/K	0.19	0.01 B	0.04	0.07 B	0.02 B
17 Nickel	MG/K	27	66.6	108	31.9	25.4
18 Potasium	MG/K	2040	2190	1760	1640	1730
19 Selenium	MG/K	0.9 B	· 0.8 U	0.61 B	1 U	0.84 U
20 Silver	MG/K	0.18 U	0.17 U	0.13 U	0.23 B	0.18 U
21 Sodium	MG/K	44.2 U	43.1 U	<b>44</b> .4 B	64.2 B	45.2 U
22 Thallium	MG/K	0.78 B	0.81 B	0.56 B	0.83 U	0.68 U
23 Vanadium	MG/K	24.5	20.3	21.1	11.2 B	16.9
24 Zinc	MG/K	73.7	505	426	182	352

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MILIALS						
	SDG:	54011	54011	54011	54011	54011
S	TUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB S	SAMP. ID:	273259	273260	273261	273262	273263
EPA S	SAMP. ID:	SS26-10	SS26-11	SS26-12	SS26-13	SS26-14
	QC CODE:	SA	SA	SA	SA	SA
% M	OISTURE:					
9/	6 SOLIDS:	86.1	89.4	90.6	94.9	89.4
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	MG/K	16700	16000	15800	14800	16600
2 Antimony	MG/K	0.51 B	0.49 U	0.4 U	0.62 B	0.93 B
3 Arsenic	MG/K	8.5	6.3	7.1	5.7	7.7
4 Barium	MG/K	76.5	77.1	80.2	51.1	82
5 Beryllium	MG/K	0.7 B	0.73 B	0.7 B	0.77 B	0.84 B
6 Cadmium	MG/K	0.07 U	0.07 U	0.06 U	0.05 U	0.06 B
7 Calcium	MG/K	12600 *	11800 *	11700 *	33200 *	45300 *
8 Chromium	MG/K	24.7	23.7	22.8	26.5	25.7
9 Cobalt	MG/K	10.7 B	11.7	12.6	16	13.9
10 Copper	\ MG/K	22	24.9	24.4	32.4	22.2
11 Cyanide	MG/K	0.59 U	0.59 U	0.56 U	0.54 U	0.53 U
12 Iron	MG/K	29600	28400	29800	31100	26900
13 Lead	MG/K	15.9	20	18.7	34.1	33.2
14 Magnesium	MG/K	6130	6100	6340	7950	8440
15 Manganese	MG/K	562	624	619	445	605
16 Mercury	MG/K	0.05 B	0.05 B	0.05 B	0.02 B	0.04 B
17 Nickel	MG/K	34.3	32.9	33.3	48.8	35.9
18 Potasium	MG/K	2510	2440	2200	1550	2750
19 Selenium	MG/K	0.81 U	0.82 U	0.7 B	0.65 U	0.77 B
20 Silver	MG/K	0.18 U	0.18 U	0.15 U	0.26 B	0.16 B
21 Sodium	MG/K	43.9 U	44.3 U	36.8 U	45.4 B	54.3 B
22 Thallium	MG/K	1.3 B	0.7 B	1 B	0.53 U	0.97 B
23 Vanadium	MG/K	26.3	26.2	26.2	21.9	<b>2</b> 9
24 Zinc	MG/K	114	114	103	97.2	172

## **METALS**

		SDG:	54011
		STUDY ID:	PHASE 1
		MATRIX:	SOIL
		LAB SAMP. ID:	273258
		EPA SAMP. ID:	SS26-9
		QC CODE:	SA
		% MOISTURE:	
		% SOLIDS:	88.9
	PARAMETER	UNIT	VALUE Q
1	Aluminimum	MG/K	13600
2	Antimony	MG/K	0.53 B
3	Arsenic	MG/K	6.7
4	Barium	MG/K	76.3
5	Beryllium	MG/K	0.68 B
6	Cadmium	MG/K	0.04 U
7	Calcium	MG/K	41300 *
8	Chromium	MG/K	20
9	Cobalt	MG/K	10.7
10	Copper	MG/K	24.6
11	Cyanide	MG/K	0.57 U
12	Iron	MG/K	26800
13	Lead	MG/K	24.8
14	Magnesium	MG/K	5760
15	Manganese	MG/K	566
16	Mercury	MG/K	0.04 B
17	Nickel	MG/K	30
18	Potasium	MG/K	2080
19	Selenium	MG/K	0.61 B
20	Silver	MG/K	0.11 U
21	Sodium	MG/K	32.8 B
22	Thallium	MG/K	0.49 B
23	Vanadium	MG/K	23.5
24	Zinc	MG/K	101

SVOCs							
S	DG:	54011	54011	54011	54011	54011	54011
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATE	XIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP.	.ID:	273264	273260	273260	272303	272304	273489
EPA SAMP.		SS26-50	SS26-11MS	SS26-11MSD	SB26-9-04	SB26-9-05	SD26-2
OC CO		DU	MS	MSD	SA	SA	SA
% MOISTU		12	11	11	9	11	38
% SOLI				11	,		
70 0021							
PARAMET	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1.2.4-Trichlorobenzene	UG/KG	370 U	1400	1500	360 U	370 U	530 U
1 1,2,4-Trichlorobenzene	UG/KG	370 U	1400	1500	360 U	370 U	530 U
2 1,2-Dichlorobenzene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
3 1,3-Dichlorobenzene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
4 1,4-Dichlorobenzene	UG/KG	370 U	1200	1200	360 U	370 U	530 U
5 2,4,5-Trichlorophenol	UG/KG	910 U	900 U	900 U	880 U	900 U	1300 U
6 2,4,6-Trichlorophenol	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
7 2,4-Dichlorophenol	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
8 2,4-Dimethylphenol	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
9 <b>2,4-Dinitrophenol</b>	UG/KG	910 U	900 U	900 U	880 U	900 U	1300 U
10 2,4-Dinitrotoluene	UG/KG	370 U	1200	1300	360 U	370 U	530 U
11 2,6-Dinitrotoluene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
12 2-Chloronaphthalene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
13 2-Chlorophenol	UG/KG	370 U	2500	2200	360 U	370 U	530 U
14 2-Methylnaphthalene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
14 2-Methylphenol	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
16 2-Nitroaniline	UG/KG	910 U	900 U	900 U	880 U	900 U	1300 U
17 2-Nitrophenol	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
18 3,3'-Dichlorobenzidine	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
19 3-Nitroaniline	UG/KG	910 U	900 U	900 U	880 U	900 U	1300 U
20 4,6-Dinitro-2-methylphenol	UG/KG	910 U	900 U	900 U	880 U	900 U	1300 U
21 4-Bromophenyl-phenylether	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
22 4-Chloro-3-methylphenol	UG/KG	370 U	1900	2000	360 U	370 U	530 U
23 4-Chloroaniline	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
24 4-Chlorophenyl-phenylether	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
25 4-Methylphenol	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
26 4-Nitroaniline	UG/KG	910 U	900 U	900 U	880 U	900 U	1300 U
27 4-Nitrophenol	UG/KG	910 U	1700	1800	880 U	900 U	1300 U
28 Acenaphthene	UG/KG	370 U	1400	1300	360 U	370 U	530 U
29 Acenaphthylene	UG/KG	370 U	370 U	370 U	360 U	370 U	69 J
30 Anthracene	UG/KG	370 U	370 U	370 U	360 U	370 U	180 J
31 Benzo(a)anthracene	UG/KG	58 J	76 J	370 U	360 U	370 U	440 J
32 Benzo(a)pyrene	UG/KG	84 J	73 J	370 U	38 J	370 U	370 J
33 Benzo(b)fluoranthene	UG/KG	71 J	83 J	47 J	360 U	370 U	650
34 Benzo(g,h,i)perylene	UG/KG	95 J	62 J	370 U	360 U	370 U	520 J
24 Denzo(Ruit)berAtene	JUNEO	)	V2 3	3.0 0	300 0	370 0	320 J

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3 V O C S							
SI	DG:	54011	54011	54011	54011	54011	54011
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATR	XIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP.	ID:	273264	273260	273260	272303	272304	273489
EPA SAMP.	ID:	SS26-50	SS26-11MS	SS26-11MSD	SB26-9-04	SB26-9-05	SD26-2
QC CO	DE:	DU	MS	MSD	SA	SA	SA
% MOISTU		12	11	11	9	11	38
% SOLI	DS:					**	50
PARAMET	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	370 U	1400	1500	360 U	370 U	530 U
35 Butylbenzylphthalate	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
36 Carbazole	UG/KG	370 U	370 U	370 U	360 U	370 U	90 J
37 Chrysene	UG/KG	65 J	81 J	38 J	360 U	370 U	980
38 Di-n-butylphthalate	UG/KG	370 U	63 J	50 J	360 U	370 U	80 BJ
39 Di-n-oprylphthalate	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
40 Dibenz(a,h)anthracene	UG/KG	370 U	370 U	370 U	360 U	370 U	130 J
41 Dibenzofuran	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
42 Diethylphthalate	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
43 Dimethylphthalate	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
44 Fluoranthene	UG/KG	140 J	190 Ј	75 J	48 J	370 U	2800
45 Fluorene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
46 Hexachlorobenzene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
47 Hexachlorobutadiene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
48 Hexachlorocyclopentadiene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
49 Hexachloroethane	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	54 J	. 49 Ј	370 U	360 U	370 U	320 J
51 Isophorone	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	370 U	1300	1200	360 U	370 U	530 U
53 N-Nitrosodiphenylamine (1)	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
54 Naphthalene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
55 Nitrobenzene	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
56 Pentachlorophenol	UG/KG	910 U	1900 .	1900	880 U	900 U	1300 U
57 Phenanthrene	UG/KG	80 J	100 J	370 U	360 U	370 U	370 J
58 Phenol	UG/KG	370 U	1900	1800	360 U	370 U	530 U
59 Pyrene	UG/KG	120 J	1500	1400	360 U	370 U	2000
60 benzo(k)fluoranthene	UG/KG	88 J	64 J	370 U	41 J	370 U	800
61 bis(2-Chloroethoxy) methane	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
62 bis(2-Chloroethyl) ether	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	370 U	370 U	370 U	360 U	370 U	530 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	200 J	230 J	140 J	130 Ј	120 J	530 U

SVOCs						
SI	DG:	54011	54011	54011	54011	54011
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATR	IX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP.	ID:	273578	273490	273491	273492	273493
EPA SAMP.		SD26-3	SD26-4	SD26-5	SD26-6	SD26-7
QC COI		SA	SA	SA	SA	SA
% MOISTU		32	29	36	25	32
% SOLI						
70 5021	D0.					
PARAMET	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	480 U	460 U	520 U	440 U	480 U
1 1,2,4-Trichlorobenzene	UG/KG	480 U	460 U	520 U	440 U	480 U
2 1,2-Dichlorobenzene	UG/KG	480 U	460 U	520 U	440 U	480 U
3 1.3-Dichlorobenzene	UG/KG	480 U	460 U	520 U	440 U	480 U
4 1,4-Dichlorobenzene	UG/KG	480 U	460 U	520 U	440 U	480 U
5 2,4,5-Trichlorophenol	UG/KG	1200 U	1100 U	1200 U	1100 U	1200 U
	UG/KG	480 U	460 U	520 U	440 U	480 U
6 2,4,6-Trichlorophenol	UG/KG	480 U	460 U	520 U	440 U	480 U
7 2,4-Dichlorophenol		480 U	460 U	520 U	440 U	480 U
8 2,4-Dimethylphenol	UG/KG		1100 U	1200 U	1100 U	1200 U
9 2,4-Dinitrophenol	UG/KG	1200 U 480 U	460 U	520 U	440 U	480 U
10 2,4-Dinitrotoluene	UG/KG			520 U	440 U	480 U
11 2,6-Dinitrotoluene	UG/KG	480 U	460 U		440 U	480 U
12 2-Chloronaphthalene	UG/KG	480 U	460 U	520 U	440 U	480 U
13 2-Chlorophenol	UG/KG	480 U	460 U	520 U		480 U
14 2-Methylnaphthalene	UG/KG	480 U	460 U	520 U	440 U	
15 2-Methylphenol	UG/KG	480 U	460 U	520 U	440 U	480 U
16 2-Nitroaniline	UG/KG	1200 U	1100 U	1200 U	1100 U	1200 U
17 2-Nitrophenol	UG/KG	480 U	460 U	520 U	440 U	480 U
18 3,3'-Dichlorobenzidine	UG/KG	480 U	460 U	520 U	440 U	480 U
19 3-Nitroaniline	UG/KG	1200 U	1100 U	1200 U	1100 U	1200 U
20 4,6-Dinitro-2-methylphenol	UG/KG	1200 U	1100 U	1200 U	1100 U	1200 U
21 4-Bromophenyl-phenylether	UG/KG	480 U	460 U	520 U	440 U	480 U
22 4-Chloro-3-methylphenol	UG/KG	480 U	460 U	520 U	440 U	480 U
23 4-Chloroaniline	UG/KG	480 U	460 U	520 U	440 U	480 U
24 4-Chlorophenyl-phenylether	UG/KG	480 U	460 U	520 U	440 U	480 U
25 4-Methylphenol	UG/KG	480 U	460 U	520 U	440 U	480 U
26 4-Nitroaniline	UG/KG	1200 U	1100 U	1200 U	1100 U	1200 U
27 4-Nitrophenol	UG/KG	1200 U	1100 U	1200 U	1100 U	1200 U
28 Acenaphthene	UG/KG	480 U	460 U	520 U	440 U	480 U
29 Acenaphthylene	UG/KG	480 U	460 U	89 J	440 U	480 U
30 Anthracene	UG/KG	58 J	460 U	170 J	46 J	480 U
31 Benzo(a)anthracene	UG/KG	140 J	460 U	450 J	190 J	480 U
32 Benzo(a)pyrene	UG/KG	140 J	460 U	610	200 J	53 J
33 Benzo(b)fluoranthene	UG/KG	140 J	460 U	1200	370 J	96 J
34 Benzo(g,h,i)perylene	UG/KG	100 J	55 J	750	180 J	480 U

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B 1 C C 3						
SD	G:	54011	54011	54011	54011	54011
STUDY I	D:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRI	X:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP. ID:		273578	273490	273491	273492	273493
EPA SAMP. ID:		SD26-3	SD26-4	SD26-5	SD26-6	SD26-7
QC CODE:		SA	SA	SA	SA	SA
% MOISTURE:		32	29	36	25	32
% SOLID	S:					
PARAMETI	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	480 U	460 U	520 U	440 U	480 U
35 Butylbenzylphthalate	UG/KG	480 U	460 U	520 U	440 U	480 U
36 Carbazole	UG/KG	480 U	460 U	52 J	440 U	480 U
37 Chrysene	UG/KG	170 J	460 U	1000	340 J	· 67 J
38 Di-n-butylphthalate	UG/KG	140 BJ	78 BJ	76 BJ	67 BJ	67 BJ
39 Di-n-oprylphthalate	UG/KG	480 U	460 U	520 U	440 U	480 U
40 Dibenz(a,h)anthracene	UG/KG	480 U	460 U	220 J	440 U	480 U
41 Dibenzofuran	UG/KG	480 U	460 U	520 U	440 U	480 U
42 Diethylphthalate	UG/KG	480 U	460 U	520 U	440 U	480 U
43 Dimethylphthalate	UG/KG	480 U	460 U	520 U	440 U	480 U
44 Fluoranthene	UG/KG	370 J	51 J	750	330 J	75 J
45 Fluorene	UG/KG	480 U	460 U	520 U	440 U	480 U
46 Hexachlorobenzene	UG/KG	480 U	460 U	520 U	440 U	480 U
47 Hexachlorobutadiene	UG/KG	480 U	460 U	520 U	440 U	480 U
48 Hexachlorocyclopentadiene	UG/KG	480 U	460 U	520 U	440 U	480 U
49 Hexachloroethane	UG/KG	480 U	460 U	520 U	440 U	480 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	98 J	460 U	500 J	150 J	480 U
51 Isophorone	UG/KG	480 U	460 U	520 U	440 U	480 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	480 U	460 U	520 U	440 U	480 U
53 N-Nitrosodiphenylamine (1)	UG/KG	480 U	460 U	520 U	440 U	480 U
54 Naphthalene	UG/KG	480 U	460 U	520 U	440 U	480 U
55 Nitrobenzene	UG/KG	480 U	460 U	520 U	440 U	480 U
56 Pentachlorophenol	UG/KG	1200 U	1100 .U	1200 U	1100 U	1200 U
57 Phenanthrene	UG/KG	210 J	460 U	100 J	75 J	480 U
58 Phenol	UG/KG	480 U	460 U	520 U	440 U	480 U
59 Pyrene	UG/KG	280 J	460 U	810	350 J	71 J
60 benzo(k)fluoranthene	UG/KG	170 J	460 U	750	280 Ј	59 J
61 bis(2-Chloroethoxy) methane	UG/KG	480 U	460 U	520 U	440 U	480 U
62 bis(2-Chloroethyl) ether	UG/KG	480 U	460 U	520 U	440 U	480 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	480 U	460 U	520 U	440 U	480 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	480 U	290 J	55 J	440 U	480 U

SVOCS						
	OG:	54011	54011	54011	54011	54011
STUDY ID:		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRIX:		SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP. ID:		273494	273259	273260	273261	273262
EPA SAMP. ID:		SD26-9	SS26-10	SS26-11	SS26-12	SS26-13
QC CODE:		SA	SA	SA	SA	SA
% MOISTURE:		27	14	11	9	5
% SOLIDS:						
PARAMETER UNIT		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1.2.4-Trichlorobenzene	UG/KG	450 U	380 U	370 U	360 U	340 U
1 1,2,4-Trichlorobenzene	UG/KG	450 U	380 U	370 U	360 U	340 U
2 1.2-Dichlorobenzene	UG/KG	450 U	380 U	370 U	360 U	340 U
3 1.3-Dichlorobenzene	UG/KG	450 U	380 U	370 U	360 U	340 U
4 1,4-Dichlorobenzene	UG/KG	450 U	380 U	370 U	360 U	340 U
5 2,4,5-Trichlorophenol	UG/KG	1100 U	920 U	890 U	870 U	830 U
6 2,4,6-Trichlorophenol	UG/KG	450 U	380 U	370 U	360 U	340 U
7 2,4-Dichlorophenol	UG/KG	450 U	380 U	370 U	360 U	340 U
8 2,4-Dimethylphenol	UG/KG	450 U	380 U	370 U	360 U	340 U
9 2,4-Dinitrophenol	UG/KG	1100 U	920 U	890 U	870 U	830 U
10 2,4-Dinitrotoluene	UG/KG	450 U	380 U	370 U	360 U	340 U
11 2,6-Dinitrotoluene	UG/KG	450 U	380 U	370 U	360 U	340 U
12 2-Chloronaphthalene	UG/KG	450 U	380 U	370 U	360 U	340 U
13 2-Chlorophenol	UG/KG	450 U	380 U	370 U	360 U	340 U
14 2-Methylnaphthalene	UG/KG	450 U	380 U	370 U	360 U	340 U
15 2-Methylphenol	UG/KG	450 U	380 U	370 U	360 U	340 U
16 2-Nitroaniline	UG/KG	1100 U	920 U	890 U	870 U	830 U
17 2-Nitrophenol	UG/KG	450 U	380 U	370 U	360 U	340 U
18 3,3'-Dichlorobenzidine	UG/KG	450 U	380 U	370 U	360 U	340 U
19 3-Nitroaniline	UG/KG	1100 U	920 U	890 U	870 U	830 U
20 4,6-Dinitro-2-methylphenol	UG/KG	1100 U	920 U	890 U	870 U	830 U
21 4-Bromophenyl-phenylether	UG/KG	450 U	380 U	370 U	360 U	340 U
22 4-Chloro-3-methylphenol	UG/KG	450 U	380 U	370 U	360 U	340 U
23 4-Chloroaniline	UG/KG	450 U	380 Ü	370 U	360 U	340 U
24 4-Chlorophenyl-phenylether	UG/KG	450 U	380 U	370 U	360 U	340 U
25 4-Methylphenol	UG/KG	450 U	380 U	370 U	360 U	340 U
26 4-Nitroaniline	UG/KG	1100 U	920 U	890 U	870 U	830 U
27 4-Nitrophenol	UG/KG	1100 U	920 U	890 U	870 U	830 U
28 Acenaphthene	UG/KG	450 U	380 U	370 U	360 U	340 U
29 Acenaphthylene	UG/KG	450 U	380 U	370 U	360 U	340 U
30 Anthracene	UG/KG	450 U	380 U	370 U	360 U	340 U
31 Benzo(a)anthracene	UG/KG	59 J	66 J	66 J	76 J	340 U
32 Benzo(a)pyrene	UG/KG	110 J	59 J	64 J	72 J	340 U
33 Benzo(b)fluoranthene	UG/KG	230 J	58 J	73 J	84 J	340 U
34 Benzo(g,h,i)perylene	UG/KG	450 U	55 J	57 J	74 J	340 U
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SVOCS						
SD	G:	54011	54011	54011	54011	54011
STUDY I	D:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRI	X:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP. I	D:	273494	273259	273260	273261	273262
EPA SAMP. I	D:	SD26-9	SS26-10	SS26-11	SS26-12	SS26-13
QC COD	E:	SA	SA	SA	SA	SA
% MOISTUR	Œ:	27	14	11	9	5
% SOLIC	DS:					
PARAMET	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	450 U	380 U	370 U	360 U	340 U
35 Butylbenzylphthalate	UG/KG	450 U	380 U	370 U	. 360 U	340 U
36 Carbazole	UG/KG	450 U	380 U	370 U	360 U	340 U
37 Chrysene	UG/KG	170 J	70 J	71 J	84 J	340 U
38 Di-n-butylphthalate	UG/KG	65 BJ	380 U	60 J	360 U	340 U
39 Di-n-oprylphthalate	UG/KG	450 U	380 U	370 U	360 U	340 U
40 Dibenz(a,h)anthracene	UG/KG	450 U	380 U	370 U	360 U	340 U
41 Dibenzofuran	UG/KG	450 U	380 U	370 U	360 U	340 U
42 Diethylphthalate	UG/KG	450 U	380 U	370 U	360 U	340 U
43 Dimethylphthalate	UG/KG	450 U	380 U	370 U	360 U	340 U
44 Fluoranthene	UG/KG	130 J	130 J	170 J	190 J	340 U
45 Fluorene	UG/KG	450 U	380 U	370 U	360 U	340 U
46 Hexachlorobenzene	UG/KG	450 U	380 U	370 U	360 U	340 U
47 Hexachlorobutadiene	UG/KG	450 U	380 U	370 U	360 U	340 U
48 Hexachlorocyclopentadiene	UG/KG	450 U	380 U	370 U	360 U	340 U
49 Hexachloroethane	UG/KG	450 U	380 U	370 U	360 U	340 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	72 J	44 J	48 J	51 J	340 U
51 Isophorone	UG/KG	450 U	380 U	370 U	360 U	340 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	450 U	380 U	370 U	360 U	340 U
53 N-Nitrosodiphenylamine (1)	UG/KG	450 U	380 U	370 U	360 U	340 U
54 Naphthalene	UG/KG	450 U	380 U	370 U	360 U	340 U
55 Nitrobenzene	UG/KG	450 U	380 U	370 U	360 U	340 U
56 Pentachlorophenol	UG/KG	1100 U	920 U	890 U	870 U	830 U
57 Phenanthrene	UG/KG	450 U	49 Ĵ	99 J	83 J	340 U
58 Phenol	UG/KG	450 U	380 U	370 U	360 U	340 U
59 Pyrene	UG/KG	130 J	120 J	120 Ј	160 J	39 J
60 benzo(k)fluoranthene	UG/KG	140 J	60 J	59 J	61 J	340 U
61 bis(2-Chloroethoxy) methane	UG/KG	450 U	380 U	370 U	360 U	340 U
62 bis(2-Chloroethyl) ether	UG/KG	450 U	380 U	370 U	360 U	340 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	450 U	380 U	370 U	360 U	340 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	450 U	250 J	120 J	97 J	57 J

01003			
SDG:		54011	54011
STUDY ID:		PHASE 1	PHASE 1
MATRIX:		SOIL	SOIL
LAB SAMP. ID:		273263	273258
EPA SAMP. ID:	:	SS26-14	SS26-9
OC CODE:	:	SA	SA
% MOISTURE:	:	11	11
% SOLIDS:			
PARAMETER	UNIT	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	2400 U	370 U
1 1,2,4-Trichlorobenzene	UG/KG	2400 U	370 U
2 1,2-Dichlorobenzene	UG/KG	2400 U	370 U
3 1,3-Dichlorobenzene	UG/KG	2400 U	370 U
4 1,4-Dichlorobenzene	UG/KG	2400 U	370 U
5 2,4,5-Trichlorophenol	UG/KG	5900 U	900 U
6 2,4,6-Trichlorophenol	UG/KG	2400 U	370 U
7 2,4-Dichlorophenol	UG/KG	2400 U	370 U
8 2,4-Dimethylphenol	UG/KG	2400 U	370 U
9 2,4-Dinitrophenol	UG/KG	5900 U	900 U
10 2,4-Dinitrotoluene	UG/KG	2400 U	370 U
11 2,6-Dinitrotoluene	UG/KG	2400 U	370 U
12 2-Chloronaphthalene	UG/KG	2400 U	370 U
13 2-Chlorophenol	UG/KG	2400 U	370 U
14 2-Methylnaphthalene	UG/KG	2400 U	370 U
15 2-Methylphenol	UG/KG	2400 U	370 U
16 2-Nitroaniline	UG/KG	5900 U	900 U
17 2-Nitrophenol	UG/KG	2400 U	370 U
18 3,3'-Dichlorobenzidine	UG/KG	2400 U	370 U
19 3-Nitroaniline	UG/KG	5900 U	900 U
20 4,6-Dinitro-2-methylphenol	UG/KG	5900 U	900 U
21 4-Bromophenyl-phenylether	UG/KG	2400 U	370 U
22 4-Chloro-3-methylphenol	UG/KG	2400 U	370 U
23 4-Chloroaniline	UG/KG	2400 U	370 U
24 4-Chlorophenyl-phenylether	UG/KG	2400 U	370 U
25 4-Methylphenol	UG/KG	2400 U	370 U
26 4-Nitroaniline	UG/KG	5900 U	900 U
27 4-Nitrophenol	UG/KG	5900 U	900 U
28 Acenaphthene	UG/KG	990 J	370 U
29 Acenaphthylene	UG/KG	2400 U	370 U
30 Anthracene	UG/KG	1400 J	370 U
31 Benzo(a)anthracene	UG/KG	3000	44 J
32 Benzo(a)pyrene	UG/KG	2500	47 J
33 Benzo(b)fluoranthene	UG/KG	3100	44 J
34 Benzo(g,h,i)perylene	UG/KG	1400 J	40 J

SDG	<del>i</del> :	54011	54011
STUDY II	):	PHASE 1	PHASE 1
MATRIX	ζ:	SOIL	SOIL
LAB SAMP. II	):	273263	273258
EPA SAMP. II	):	SS26-14	SS26-9
QC CODE	E:	SA	SA
% MOISTURE		11	11
% SOLIDS	3:		
PARAMETE		VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	2400 U	370 U
35 Butylbenzylphthalate	UG/KG	2400 U	370 U
36 Carbazole	UG/KG	1400 Ј	370 U
37 Chrysene	UG/KG	3300	54 J
38 Di-n-butylphthalate	UG/KG	2400 U	370 U
39 Di-n-oprylphthalate	UG/KG	2400 U	370 U
40 Dibenz(a,h)anthracene	UG/KG	580 J	370 U
41 Dibenzofuran	UG/KG	340 J	370 U
42 Diethylphthalate	UG/KG	2400 U	370 U
43 Dimethylphthalate	UG/KG	2400 U	370 U
44 Fluoranthene	UG/KG	11000	94 J
45 Fluorene	UG/KG	600 J	370 U
46 Hexachlorobenzene	UG/KG	2400 U	370 U
47 Hexachlorobutadiene	UG/KG	2400 U	370 U
48 Hexachlorocyclopentadiene	UG/KG	2400 U	370 U
49 Hexachloroethane	UG/KG	2400 Ü	370 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	1300 J	370 U
51 Isophorone	UG/KG	2400 U	370 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	2400 U	370 U
53 N-Nitrosodiphenylamine (1)	UG/KG	2400 U	370 U
54 Naphthalene	UG/KG	2400 U	370 U
55 Nitrobenzene	UG/KG	2400 U	370 U
56 Pentachlorophenol	UG/KG	5900 U	900 U
57 Phenanthrene	UG/KG	7800	58 J
58 Phenol	UG/KG	2400 U	370 U
59 Pyrene	UG/KG	7600	110 J
60 benzo(k)fluoranthene	UG/KG	1900 Ј	51 J
61 bis(2-Chloroethoxy) methane	UG/KG	2400 U	370 U
62 bis(2-Chloroethyl) ether	UG/KG	2400 U	370 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	2400 U	370 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	2400 U	100 J

VOC	S			
	SDG	ì:	54206	54206
	STUDY ID	):	PHASE 1	PHASE 1
	MATRIX	Č:	WATER	WATER
	LAB SAMP. ID	<b>)</b> :	273097	273098
	EPA SAMP. ID	<b>)</b> :	DIWAT	TB10395
	QC CODE	<u>:</u> :	SA	TB
	% MOISTURE			
	% SOLIDS			
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
	PARAMETER	UNIT	VALUE Q	VALUE Q
1	1,1,1,2-Tetrachloroethane	ug/L	0.5 U	0.5 U
	1,1,1-Trichloroethane	ug/L	0.5 U	0.5 U
	1,1,2,2-Tetrachloroethane	ug/L	0.5 U	0.5 U
	1,1-Dichloroethane	ug/L	0.5 U	0.5 U
	1,1-Dichloroethene	ug/L	0.5 U	0.5 U
	1,1-Dichloropropene	ug/L	0.5 U	0.5 U
	1,2,3-Trichlorobenzene	ug/L	0.5 U	0.5 U
	1,2,3-Trichloropropane	ug/L	0.5 U	0.5 U
	1,2,4-Trichlorobenzene	ug/L	0.5 U	0.5 U
10	1,2,4-Trimethylbenzene	ug/L	0.5 U	0.5 U
11	1,2-Dibromo-3-Chloropropane	ug/L	0.5 U	0.5 U
	1,2-Dibromoethane	ug/L	0.5 U	0.5 U
	1,2-Dichlorobenzene	ug/L	0.5 U	0.5 U
14	1,2-Dichloroctopane	ug/L	0.5 U	0.5 U
15	1,2-Dichloroethane	ug/L	0.5 U	0.5 U
16	1,3,5-Trimethylbenzene	ug/L	0.5 U	0.5 U
17	1,3,5-Trimethylbenzene	ug/L	0.5 U	0.5 U
18	1,3-Dichlorobenzene	ug/L	0.5 U	0.5 U
19	1,4-Dichlorobenzene	ug/L	0.5 U	0.5 U
20	2,2-Dichloropropane	ug/L	0.5 U	0.5 U
21	2-Butanone	ug/L	0.5 U	0.5 U
22	2-Chlorotoluene	ug/L	0.5 U	0.5 U
	4-Chlorotoluene	ug/L	0.5 U	0.5 U
24	4-Methyl-2-Pentanone	ug/L	0.5 U	0.5 U
25	Acetone	ug/L	5 U	5 U
26	Benzene	ug/L	0.5 U	0.5 U
27	Bromochloromethane	ug/L	0.5 U	0.5 U
	Bromodichloromethane	ug/L	0.5 U	0.5 U
29	Bromoform	ug/L	0.5 U	0.5 U
	Bromomethane	ug/L	0.5 U	0.5 U
	Carbon Tetrachloride	ug/L	0.5 U	0.5 U
	Chlorobenzene	ug/L	0.5 U	0.5 U
33	Chloroethane	ug/L	0.5 U	0.5 U

S	DG:	54206	54206
STUDY	ID:	PHASE 1	PHASE 1
MAT	RIX:	WATER	WATER
LAB SAMP	. ID:	273097	273098
EPA SAMP	. ID:	DIWAT	TB10395
QC CC	DDE:	SA	TB
% MOISTU	JRE:		
% SOL	IDS:		
PARAMETER	UNIT	VALUE Q	VALUE Q
Chloroform	ug/L	3	0.6
Chloromethane	ug/L	0.5 U	0.5 U
Dibromochloromethane	ug/L	0.5 U	0.5 U
Dibromomethane	ug/L	0.5 U	0.5 U
Dichlorodifluromethane	ug/L	0.5 U	0.5 U
Ethylbenzene	ug/L	0.5 U	0.5 U
Hexachlorobutadiene	ug/L	0.5 U	0.5 U
Isopropylbenzene	ug/L	0.5 U	0.5 U
Methylene Chloride	ug/L	0.5 U	0.5 U
Naphthalene	ug/L	0.5 U	0.5 U
Styrene	ug/L	0.5 U	0.5 U
Toluene	ug/L	0.5 U	0.5 U
Trichloroethene	ug/L	0.5 U	0.5 U
Trichlorofluoromethane	ug/L	0.5 U	0.5 U
Vinyl Chloride	ug/L	0.5 U	0.5 U
Xylene (total)	ug/L	0.5 U	0.5 U
cis-1,2-Dichloroethane	ug/L	0.5 U	0.5 U
cis-1,3-Dichloroctopene	ug/L	0.5 U	. 0.5 U
n-Butylbenzene	ug/L	0.5 U	0.5 U
n-Propylbenzene	ug/L	0.5 U	0.5 U
p-Isopropyltoluene	ug/L	0.5 U	0.5 U
sec-Butylbenzene	ug/L	0.5 U	0.5 U
tert-Butylbenzene	ug/L	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	0.5 U	0.5 U
trans-1,3-Dichloroctopene	ug/L	0.5 U	0.5 U

SDC	<b>3</b> :	54206
STUDY II	D:	PHASE 1
MATRI	X:	WATER
LAB SAMP. II	D:	273097
EPA SAMP, II	D:	DIWAT
QC COD	E:	SA
% MOISTUR		
% SOLID		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
PARAMETE	R UNIT	VALUE Q
1 1,2,4-Trichlorobenzene	UG/L	11 U
1 1,2,4-Trichlorobenzene	UG/L	11 U
2 1,2-Dichlorobenzene	UG/L	11 U
3 1,3-Dichlorobenzene	UG/L	11 U
4 1,4-Dichlorobenzene	UG/L	11 U
5 2,4,5-Trichlorophenol	UG/L	27 U
6 2,4,6-Trichlorophenol	UG/L	11 U
7 2,4-Dichlorophenol	UG/L	11 U
8 2,4-Dimethylphenol	UG/L	11 U
9 2,4-Dinitrophenol	UG/L	27 U
10 2,4-Dinitrotoluene	UG/L	11 U
11 2,6-Dinitrotoluene	UG/L	11 U
12 2-Chloronaphthalene	UG/L	11 U
13 2-Chlorophenol	UG/L	11 U
14 2-Methylnaphthalene	UG/L	11 U
15 2-Methylphenol	UG/L	11 U
16 2-Nitroaniline	UG/L	27 U
17 2-Nitrophenol	UG/L	11 U
18 3,3'-Dichlorobenzidine	UG/L	11 U
19 3-Nitroaniline	UG/L	<b>27</b> U
20 4,6-Dinitro-2-methylphenol	UG/L	<b>27</b> U
21 4-Bromophenyl-phenylether	UG/L	11 U
22 4-Chloro-3-methylphenol	UG/L	11 U
23 4-Chloroaniline	UG/L	11 U
24 4-Chlorophenyl-phenylether	UG/L	11 U
25 4-Methylphenol	UG/L	11 U
26 4-Nitroaniline	UG/L	27 U
27 4-Nitrophenol	UG/L	27 U
28 Acenaphthene	UG/L	11 U
29 Acenaphthylene	UG/L	11 U
30 Anthracene	UG/L	11 U
31 Benzo(a)anthracene	UG/L	11 U
32 Benzo(a)pyrene	UG/L	11 U
33 Benzo(b)fluoranthene	UG/L	11 U
34 Benzo(g,h,i)perylene	UG/L	11 U

340	Cs		
	SDG STUDY ID	•	54206 PHASE 1
	MATRIX	:	WATER
	LAB SAMP. ID	:	273097
	EPA SAMP. ID	:	DIWAT
	QC CODE	:	SA
	% MOISTURE	:	
	% SOLIDS	:	
	PARAMETER		VALUE Q
	1,2,4-Trichlorobenzene	UG/L	11 U
	Butylbenzylphthalate	UG/L	11 U
	Carbazole	UG/L	11 U
	Chrysene	UG/L	11 U
	Di-n-butylphthalate	UG/L	11 U
	Di-n-oprylphthalate	UG/L	11 U
	Dibenz(a,h)anthracene	UG/L	11 U
	Dibenzofuran	UG/L	11 U
	Diethylphthalate	UG/L	11 U
	Dimethylphthalate	UG/L	11 U
	Fluoranthene	UG/L	11 U
	Fluorene	UG/L	11 U
	Hexachlorobenzene	UG/L	11 U
	Hexachlorobutadiene	UG/L	11 U
	Hexachlorocyclopentadiene	UG/L	11 U
	Hexachloroethane	UG/L	11 U
	Indeno(1,2,3-cd)pyrene	UG/L	11 U
	Isophorone	UG/L	11 U
	N-Nitroso-di-n-ctopylamine	UG/L	11 U
	N-Nitrosodiphenylamine (1)	UG/L	11 U
	Naphthalene	UG/L	11 U
	Nitrobenzene	UG/L	11 U
	Pentachlorophenol	UG/L	27 U
	Phenanthrene	UG/L	11 U
	Phenol	UG/L	11 U
	Pyrene	UG/L	11 U
	benzo(k)fluoranthene	UG/L	11 U
	bis(2-Chloroethoxy) methane	UG/L	11 U
	bis(2-Chloroethyl) ether	UG/L	11 U
	bis(2-Chloroisoctopyl) ether	UG/L	11 U
64	bis(2-Ethylhexyl)phthalate	UG/L	2 BJ

## PESTICIDES

PESTICIDES		
	SDG:	54206
_	TUDY ID:	PHASE 1
	MATRIX:	WATER
LAB S	SAMP. ID:	273097
	SAMP. ID:	DIWAT
	QC CODE:	SA
% M0	OISTURE:	
%	6 SOLIDS:	
PARAMETER	UNIT	VALUE Q
1 4,4'-DDD	UG/L	0.1 U
2 4,4'-DDE	UG/L	0.1 U
3 4,4'-DDT	UG/L	0.1 U
4 Aldrin	UG/L	0.051 U
5 Aroclor-1016	UG/L	1 U
6 Aroclor-1221	UG/L	2 U
7 Aroclor-1232	UG/L	1 U
8 Aroclor-1242	UG/L	1 U
9 Aroclor-1248	UG/L	1 U
10 Aroclor-1254	UG/L	1 U
11 Aroclor-1260	UG/L	1 U
12 Dieldrin	UG/L	0.1 U
13 Endosulfan I	UG/L	0.051 U
14 Endosulfan II	UG/L	0.1 U
15 Endosulfan sulfate	UG/L	0.1 U
16 Endrin	UG/L	0.1 Ü
17 Endrin aldehyde	UG/L	0.1 U
18 Endrin ketone	UG/L	0.1 U
19 Heptachlor	UG/L	0.051 U
20 Heptachlor epoxide	UG/L	0.051 U
21 Methoxychlor	UG/L	0.51 U
22 Toxaphene	UG/L	5.1 U
23 alpha-BHC	UG/L	0.051 U
24 alpha-Chlordane	UG/L	0.051 U
25 beta-BHC	UG/L	0.051 U
26 delta-BHC	UG/L	0.051 U
27 gamma-BHC (Lindane)	UG/L	0.051 U
28 gamma-Chlordane	UG/L	0.051 U

## **METALS**

	SDG:	54206	
	STUDY ID:	PHASE 1	
	MATRIX:	WATER	
	LAB SAMP. ID:	273097	
	EPA SAMP. ID:	DIWAT	
	QC CODE:	SA	
	% MOISTURE:		
	% SOLIDS:	0	
DADANGTED	UNIT	VALUE (	^
PARAMETER 1 Aluminimum	UG/L	9.9 U	
	UG/L	2.2 U	
2 Antimony 3 Arsenic	UG/L	2.1 U	
4 Barium	UG/L	3.4 U	
5 Beryllium	UG/L	0.2 U	
6 Cadmium	UG/L	0.2 C	
7 Calcium	UG/L	86.9 U	
8 Chromium	UG/L	0.5 U	
9 Cobalt	UG/L	1 U	
10 Copper	UG/L	1.7 E	
11 Cyanide	UG/L	5 U	
12 Iron	UG/L	18.5 U	J
13 Lead	UG/L	1.5 U	J
14 Magnesium	UG/L	92.4 U	J
15 Manganese	UG/L	0.4 U	J.
16 Mercury	UG/L	0.02 U	J
17 Nickel	UG/L	1 U	J
18 Potasium	· UG/L	105 U	J
19 Selenium	UG/L	3.7 U	
20 Silver	UG/L	0.8 U	
21 Sodium	UG/L	203 B	
22 Thallium	UG/L	3 U	
23 Vanadium	UG/L	1.1 U	
24 Zinc	UG/L	1.9 B	}

VOC	,S			
		SDG:	54284	54284
	STUD	YID:	PHASE 1	PHASE 1
	MAT	RIX:	WATER	WATER
	LAB SAMI	P. ID:	273648	273621
	EPA SAMI	P. ID:	SW25-15	SW25-9MS
	QC CC	ODE:	DU	MS
	% MOIST			
	% SOL	.IDS:		
	PARAMETER	UNIT	VALUE Q	VALUE Q
	1,1,1-Trichloroethane	ug/L	10 U	10 U
2	1,1,2,2-Tetrachloroethane	ug/L	10 U	10 U
3	1,1,2-Trichloroethene	ug/L	10 U	10 U
4	1,1-Dichloroethane	ug/L	10 U	10 U
5	1,1-Dichloroethene	ug/L	10 U	48
6	1,2-Dichloroctopane	ug/L	10 U	10 U
7	1,2-Dichloroethane	ug/L	10 U	10 U
8	1,2-Dichloroethene (total)	ug/L	10 U	10 U
9	2-Butanone	ug/L	10 U	10 U
	2-Hexanone	ug/L	10 U	10 U
11	4-Methyl-2-Pentanone	ug/L	10 U	10 U
12	Acetone	ug/L	10 U	10 U
13	Benzene	ug/L	10 U	50
14	Bromodichloromethane	ug/L	10 U	10 U
15	Bromoform	ug/L	10 U	10 U
16	Bromomethane	ug/L	10 U	10 U
17	Carbon Disulfide	ug/L	10 U	10 U
18	Carbon Tetrachloride	ug/L	10 U	10 U
19	Chlorobenzene	ug/L	10 U	. 50
20	Chloroethane	ug/L	10 U	10 U
21	Chloroform	ug/L	10 U	10 U
22	Chloromethane	ug/L	10 U	10 U
23	Dibromochloromethane	ug/L	10 U	10 U
24	Ethylbenzene	ug/L	10 U	10 U
25	Methylene Chloride	ug/L	10 U	10 U
<b>2</b> 6	Styrene	ug/L	10 U	10 U
27	Tetrachloroethene	ug/L	10 U	10 U
28	Toluene	ug/L	10 U	50
29	Trichloroethene	ug/L	10 U	50
30	Vinyl Chloride	ug/L	10 U	10 U
31	Xylene (total)	ug/L	10 U	10 U
32	cis-1,3-Dichloroctopene	ug/L	10 U	10 U
33	trans-1,3-Dichloroctopene	ug/L	10 U	10 U
	-	-		

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	DG:	54284	54284	54284	54284	54284
STUDY ID:		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATI		WATER	WATER	WATER	WATER	WATER
LAB SAMP		273621	273452	273456	273453	273454
EPA SAMP		SW25-9MSD	SW25-1	SW25-10	SW25-2	SW25-4
QC CC		MSD	SA	SA	SA	SA
% MOISTU						
% SOL	IDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
2 1,1,2,2-Tetrachloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
3 1,1,2-Trichloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
4 1,1-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
5 1,1-Dichloroethene	ug/L	46	10 U	10 U	10 U	10 U
6 1,2-Dichloroctopane	ug/L	10 U	10 U	10 U	10 U	10 U
7 1,2-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
8 1,2-Dichloroethene (total)	ug/L	( 10 U	10 U	10 U	10 U	10 U
9 2-Butanone	ug/L	10 U	10 U	10 U	10 U	10 U
10 2-Hexanone	ug/L	10 U	10 U	10 U	10 U	10 U
11 4-Methyl-2-Pentanone	ug/L	10 U	10 U	10 U	10 U	10 U
12 Acetone	ug/L	10 U	24	10 U	10 U	10 U
13 Benzene	ug/L	51	10 U	10 U	10 U	10 U
14 Bromodichloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
15 Bromoform	ug/L	10 U	10 U	10 U	10 U	10 U
16 Bromomethane	ug/L	10 U	10 U	10 U	10 U	10 U
17 Carbon Disulfide	ug/L	10 U	10 U	10 U	10 U	10 U
18 Carbon Tetrachloride	ug/L	10 U	10 U	10 U	10 U	10 U
19 Chlorobenzene	ug/L	51	10 U	10 U	10 U	10 U
20 Chloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
21 Chloroform	ug/L	10 U	10 U	10 U	10 U	10 U
22 Chloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
23 Dibromochloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
24 Ethylbenzene	ug/L	10 U	10 U	10 U	10 U	10 U
25 Methylene Chloride	ug/L	10 U	10 U	10 U	10 U	10 U
26 Styrene	ug/L	10 U	10 U	10 U	10 U	10 U
27 Tetrachloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
28 Toluene	ug/L	50	10 U	10 U	10 U	10 U
29 Trichloroethene	ug/L	50	10 U	10 U	10 U	10 U
30 Vinyl Chloride	ug/L	10 U	10 U	10 U	10 U	10 U
31 Xylene (total)	ug/L	10 U	10 U	10 U	10 U	10 U
32 cis-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U	10 U
33 trans-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U	10 U
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S STUDY MATH LAB SAMP EPA SAMP QC CO % MOISTU % SOLI	RIX: . ID: . ID: DDE: IRE:	54284 PHASE 1 WATER 273455 SW25-5 SA	54284 PHASE 1 WATER 273647 SW25-6 SA	54284 PHASE 1 WATER 273619 SW25-7 SA	54284 PHASE 1 WATER 273620 SW25-8 SA	54284 PHASE 1 WATER 273621 SW25-9 SA
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
2 1,1,2,2-Tetrachloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
3 1,1,2-Trichloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
4 1,1-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
5 1,1-Dichloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
6 1,2-Dichloroctopane	ug/L	10 U	10 U	10 U	10 U	10 U
7 1,2-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
8 1,2-Dichloroethene (total)	ug/L	10 U	10 U	10 U	10 U	10 U
9 2-Butanone	ug/L	10 U	10 U	10 U	10 U	10 U
10 2-Hexanone	ug/L	10 U	10 U	10 U	10 U	10 U
11 4-Methyl-2-Pentanone	ug/L	10 U	10 U	10 U	10 U	10 U
12 Acetone	ug/L	10 U	10 U	10 U	10 U	10 U
13 Benzene	ug/L	10 U	10 U	10 U	10 U	10 U
14 Bromodichloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
15 Bromoform	ug/L	10 U	10 U	10 U	10 U	10 U
16 Bromomethane	ug/L	10 U	10 U	10 U	10 U	10 U
17 Carbon Disulfide	ug/L	10 U	10 U	10 U	10 U	10 U
18 Carbon Tetrachloride	ug/L	10 U	10 U	10 U	10 U	10 U
19 Chlorobenzene	ug/L	10 U	· 10 U	10 U	10 U	10 U
20 Chloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
21 Chloroform	ug/L	10 U	10 U	10 U	10 U	10 U
22 Chloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
23 Dibromochloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
24 Ethylbenzene	ug/L	10 U	10 U	10 U	10 U	10 U
25 Methylene Chloride	ug/L	10 U	10 U	10 U	10 U	10 U
26 Styrene	ug/L	10 U	10 U	10 U	10 U	10 U
27 Tetrachloroethene 28 Toluene	ug/L	10 U	10 U	10 U	10 U	10 U
29 Trichloroethene	ug/L	. 10 U	10 U	10 U	10 U	10 U
	ug/L	10 U	10 U	10 U	10 U	10 U
30 Vinyl Chloride	ug/L	10 U	10 U	10 U	10 U	10 U
31 Xylene (total) 32 cis-1,3-Dichloroctopene	ug/L	10 U 10 U	10 U	10 U	10 U	10 U
33 trans-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U	10 U
33 trans-1,3-Dictioroctopene	ug/L	10 0	10 U	10 U	10 U	10 U

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		SDG:	54284	54284
	STUDY	Y ID:	PHASE 1	PHASE 1
	MAT		WATER	WATER
	LAB SAME		273463	273649
	EPA SAME		TB10695	TB10995
	OC CO		ТВ	TB
	% MOIST			
	% SOL			
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
	PARAMETER	UNIT	VALUE Q	VALUE Q
1	1,1,1-Trichloroethane	ug/L	10 U	10 U
	1,1,2,2-Tetrachloroethane	ug/L	10 U	10 U
3	1,1,2-Trichloroethene	ug/L	10 U	10 U
4	1,1-Dichloroethane	ug/L	10 U	10 U
	1,1-Dichloroethene	ug/L	10 U	10 U
6	1,2-Dichloroctopane	ug/L	10 U	10 U
	1,2-Dichloroethane	ug/L	10 U	10 U
8	1,2-Dichloroethene (total)	ug/L	10 U	10 U
	2-Butanone	ug/L	10 U	10 U
10	2-Hexanone	ug/L	10 U	10 U
11	4-Methyl-2-Pentanone	ug/L	10 U	10 U
	Acetone	ug/L	10 U	10 U
13	Benzene	ug/L	10 U	10 U
14	Bromodichloromethane	ug/L	10 U	10 U
15	Bromoform	ug/L	10 U	10 U
16	Bromomethane	ug/L	10 U	10 U
17	Carbon Disulfide	ug/L	10 U	10 U
18	Carbon Tetrachloride	ug/L	10 U	10 U
19	Chlorobenzene	ug/L	10 U	10 U
20	Chloroethane	ug/L	10 U	10 U
21	Chloroform	ug/L	10 U	10 U
22	Chloromethane	ug/L	10 U	10 U
23	Dibromochloromethane	ug/L	10 U	10 U
24	Ethylbenzene	ug/L	10 U	10 U
	Methylene Chloride	ug/L	10 U	10 U
26	Styrene	ug/L	10 U	10 U
27	Tetrachloroethene	ug/L	10 U	10 U
	Toluene	ug/L	10 U	10 U
29	Trichloroethene	ug/L	10 U	10 U
	Vinyl Chloride	ug/L	10 U	10 U
	Xylene (total)	ug/L	10 U	10 U
	cis-1,3-Dichloroctopene	ug/L	10 U	10 U
33	trans-1,3-Dichloroctopene	ug/L	10 U	10 U

	SDG: STUDY ID:		54284 PHASE 1	54284	54284
				PHASE 1	PHASE 1
	MATRIX:		WATER	WATER	WATER
	LAB SAMP. ID:		273648	273621	273621
	EPA SAMP. ID:		SW25-15	SW25-9MS	SW25-9MSD
	QC CODE:		DU	MS	MSD
	% MOISTURE:				
	% SOLIDS:				
	PARAMETER		VALUE Q	VALUE	
	1,2,4-Trichlorobenzene	ug/L	10 U	59	59
	1,2,4-Trichlorobenzene	ug/L	10 U	59	59
	1,2-Dichlorobenzene	ug/L	10 U	10 U	
	1,3-Dichlorobenzene	ug/L	10 U	10 T	
	1,4-Dichlorobenzene	ug/L	10 U	49	50
	2,4,5-Trichlorophenol	ug/L	26 U	25 U	
	2,4,6-Trichlorophenol	ug/L	10 U	10 U	- <del>-</del> -
	2,4-Dichlorophenol	ug/L	10 U	10 T	
	2,4-Dimethylphenol	ug/L	10 U	10 U	<del>-</del>
	2,4-Dinitrophenol	ug/L	26 U	25 U	
	2,4-Dinitrotoluene	ug/L	10 U	46	48
	2,6-Dinitrotoluene	ug/L	10 U	10 T	
	2-Chloronaphthalene	ug/L	10 Ü	10 T	
	2-Chlorophenol	ug/L	10 U	73	78
	2-Methylnaphthalene	ug/L	10 U	10 T	
	2-Methylphenol	ug/L	10 U	10 t	
	2-Nitroaniline	ug/L	26 U	25 U	
	2-Nitrophenol	ug/L	10 U	10 T	
	3,3'-Dichlorobenzidine	ug/L	10 U	. 10 U	
	3-Nitroaniline	ug/L	26 U	25 T	
	4,6-Dinitro-2-methylphenol	ug/L	26 U	25 U	
	4-Bromophenyl-phenylether	ug/L	10 U	10 T	
	4-Chloro-3-methylphenol	ug/L	10 U	76	78
	4-Chloroaniline	ug/L	10 U	10 U	
	4-Chlorophenyl-phenylether	ug/L	10 U	10 U	
	4-Methylphenol	ug/L	10 U	10 U	
_	4-Nitroaniline	ug/L	26 U	25 t	
	4-Nitrophenol	ug/L	26 U	70	70
	Acenaphthene	ug/L	10 U	54	58
	Acenaphthylene	ug/L	10 U	10 t	- <del>-</del> -
	Anthracene	ug/L	10 U	10 T	- <del>-</del> -
	Benzo(a)anthracene	ug/L	10 U	10 T	
	Benzo(a)pyrene	ug/L	10 U	10 t	
	Benzo(b)fluoranthene	ug/L	10 U	10 T	
34	Benzo(g,h,i)perylene	ug/L	10 U	10 t	J 12 U

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	SDG:		54284	54284	54284
	STUDY ID:		PHASE 1	PHASE 1	PHASE 1
	MATRIX:		WATER	WATER	WATER
	LAB SAMP. ID:	:	273648	273621	273621
	EPA SAMP. ID:		SW25-15	SW25-9MS	SW25-9MSD
	QC CODE:	:	DU	MS	MSD
	% MOISTURE:	:			
	% SOLIDS:	:			
	PARAMETER		VALUE Q	VALUE	
	1,2,4-Trichlorobenzene	ug/L	10 U	59	59
35	Butylbenzylphthalate	ug/L	10 U	10 1	
36	Carbazole	ug/L	10 U	10 1	
37	Chrysene	ug/L	10 U	10 1	
38	Di-n-butylphthalate	ug/L	10 U	10 1	
39	Di-n-oprylphthalate	ug/L	10 U	10 1	
40	Dibenz(a,h)anthracene	ug/L	10 U	10 1	
41	Dibenzofuran	ug/L	10 U	10 1	
42	Diethylphthalate	ug/L	10 U	10 1	
43	Dimethylphthalate	ug/L	10 U	10 1	U 12 U
44	Fluoranthene	ug/L	10 U	10 1	J 12 U
45	Fluorene	ug/L	10 U	10 1	
46	Hexachlorobenzene	ug/L	10 U	10 1	J 12 U
47	Hexachlorobutadiene	ug/L	10 U	10 1	J 12 U
48	Hexachlorocyclopentadiene	ug/L	10 U	10 1	J 12 U
49	Hexachloroethane	ug/L	10 U	10 1	
50	Indeno(1,2,3-cd)pyrene	ug/L	10 U	10 1	J 12 U
51	Isophorone	ug/L	10 U	10 1	J 12 U
52	N-Nitroso-di-n-ctopylamine	ug/L	10 U	48	54
53	N-Nitrosodiphenylamine (1)	ug/L	10 U	10 1	J 12 U
54	Naphthalene	ug/L	10 U	10 1	J 12 U
	Nitrobenzene	ug/L	10 U	10 1	J 12 U
56	Pentachlorophenol	ug/L	26 U	120 1	E 120 E
57	Phenanthrene	ug/L	10 U	10	J 12 U
58	Phenol	ug/L	10 U	64	68
59	Pyrene	ug/L	10 U	68	72
60	benzo(k)fluoranthene	ug/L	10 U	10 1	J 12 U
61	bis(2-Chloroethoxy) methane	ug/L	10 U	10 1	J 12 U
62	bis(2-Chloroethyl) ether	ug/L	10 U	10 1	J 12 U
63	bis(2-Chloroisoctopyl) ether	ug/L	10 U	10 (	J 12 U
	bis(2-Ethylhexyl)phthalate	ug/L	4 JB	70 ]	31 B
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SI	DG:	54284	54284	54284	54284	54284
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATR		WATER	WATER	WATER	WATER	WATER
LAB SAMP.		273452	273456	273453	273454	273455
EPA SAMP.		SW25-1	SW25-10	SW25-2	SW25-4	SW25-5
QC CO		SA SA	SW25-10 SA			SW 23-3 SA
% MOISTU		SA	SA	SA	SA	SA
% SOLI	D9:					
PARAMET	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	ug/L	11 U	10 U	11 Ū	10 U	10 U
1 1,2,4-Trichlorobenzene	ug/L	11 U	10 U	11 U	10, U	10 U
2 1,2-Dichlorobenzene	ug/L	11 U	10 U	11 U	10 U	10 U
3 1,3-Dichlorobenzene	ug/L	11 U	10 U	11 U	10 U	10 U
4 1,4-Dichlorobenzene	ug/L	11 U	10 U	11 U	10 U	10 U
5 2,4,5-Trichlorophenol	ug/L	27 U	26 U	27 U	26 U	26 U
6 2,4,6-Trichlorophenol	ug/L	11 U	10 U	11 U	10 U	10 U
7 2,4-Dichlorophenol	ug/L	11 U	10 U	11 U	10 U	10 U
8 2,4-Dimethylphenol	ug/L	11 U	10 U	11 U	10 U	10 U
9 2,4-Dinitrophenol	ug/L	27 U	26 U	27 U	26 U	26 U
10 2,4-Dinitrotoluene	ug/L	11 U	10 U	11 U	10 U	10 U
11 2,6-Dinitrotoluene	ug/L	11 U	10 U	11 U	10 U	10 U
12 2-Chloronaphthalene	ug/L ug/L	11 U	10 U	11 U	10 U	10 U
13 2-Chlorophenol	ug/L ug/L	11 U	10 U	11 U	10 U	10 U
14 2-Methylnaphthalene	ug/L ug/L	11 U	10 U	11 U		
15 2-Methylphenol		11 U	10 U	11 U	10 U	10 U
16 2-Nitroaniline	ug/L	27 U	26 U	27 U	10 U	10 U
17 2-Nitrophenol	ug/L	27 U	10 U	27 U 11 U	26 U	26 U
18 3,3'-Dichlorobenzidine	ug/L	11 U	10 U		10 Ü	10 U
19 3-Nitroaniline	ug/L	27 U		11 U	10 U	10 U
	ug/L		26 U	27 U	26 U	<b>2</b> 6 U
20 4,6-Dinitro-2-methylphenol	ug/L	27 U	26 U	27 U	26 U	<b>2</b> 6 U
21 4-Bromophenyl-phenylether	ug/L	11 U	10 U	11 U	10 U	10 U
22 4-Chloro-3-methylphenol	ug/L	11 U	10 U	11 U	10 U	10 U
23 4-Chloroaniline	ug/L	11 U	10 U	11 U	10 U	10 U
24 4-Chlorophenyl-phenylether	ug/L	11 U	10 U	11 U	10 U	10 U
25 4-Methylphenol	ug/L	11 U	10 U	11 U	10 U	10 U
26 4-Nitroaniline	ug/L	27 U	26 U	<b>27</b> U	<b>2</b> 6 U	26 U
27 4-Nitrophenol	ug/L	27 U	26 U	<b>27</b> U	<b>2</b> 6 U	<b>2</b> 6 U
28 Acenaphthene	ug/L	11 U	10 U	11 U	10 U	10 U
29 Acenaphthylene	ug/L	11 U	10 U	11 U	10 U	10 U
30 Anthracene	ug/L	11 U	10 U	11 U	10 U	10 U
31 Benzo(a)anthracene	ug/L	11 U	10 U	11 U	10 U	10 U
32 Benzo(a)pyrene	ug/L	11 U	10 U	11 U	10 U	10 U
33 Benzo(b)fluoranthene	ug/L	11 U	10 U	11 U	10 U	10 U
34 Benzo(g,h,i)perylene	ug/L	11 U	10 U	11 U	10 U	10 U
	_		_		10 0	10 0

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SVOCS						
S	DG:	54284	54284	54284	54284	54284
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATE	RIX:	WATER	WATER	WATER	WATER	WATER
LAB SAMP.	. ID:	273452	273456	273453	273454	273455
EPA SAMP.	. ID:	SW25-1	SW25-10	SW25-2	SW25-4	SW25-5
QC CO	DE:	SA	SA	SA	SA	SA
% MOISTU						
% SOLI						
PARAME*		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	ug/L	11 U	10 U	11 U	10 U	10 U
35 Butylbenzylphthalate	ug/L	11 U	10 U	11 U	10 U	10 U
36 Carbazole	ug/L	11 U	10 U	11 U	10 U	10 U
37 Chrysene	ug/L	11 U	10 U	11 U	10 U	10 U
38 Di-n-butylphthalate	ug/L	1 J	10 U	11 U	10 U	10 U
39 Di-n-oprylphthalate	ug/L	11 U	10 U	11 U	10 U	10 U
40 Dibenz(a,h)anthracene	ug/L	11 U	10 U	11 U	10 U	10 U
41 Dibenzofuran	ug/L	11 U	10 U	11 U	10 U	10 U
42 Diethylphthalate	ug/L	11 U	10 U	1 <b>1</b> U	J	10 U
43 Dimethylphthalate	ug/L	11 U	10 U	11 U	10 U	10 U
44 Fluoranthene	ug/L	11 U	10 U	11 U	10 U	10 U
45 Fluorene	ug/L	11 U	10 U	11 U	10 U	10 U
46 Hexachlorobenzene	ug/L	11 U	10 U	11 U	10 U	10 U
47 Hexachlorobutadiene	ug/L	11 U	10 U	11 U	10 U	10 U
48 Hexachlorocyclopentadiene	ug/L	11 U	10 U	11 U	10 U	10 U
49 Hexachloroethane	ug/L	11 U	10 U	11 U	10 U	10 U
50 Indeno(1,2,3-cd)pyrene	ug/L	11 U	10 U	11 U	10 U	10 U
51 Isophorone	ug/L	11 U	10 U	11 U	10 U	10 U
52 N-Nitroso-di-n-ctopylamine	ug/L	11 U	10 U	11 U	10 U	10 U
53 N-Nitrosodiphenylamine (1)	ug/L	11 U	· 10 U	1 <b>1</b> U	10 U	10 U
54 Naphthalene	ug/L	11 U	10 U	11 U	10 U	10 U
55 Nitrobenzene	ug/L	11 U	10 U	11 U	10 U	10 U
56 Pentachlorophenol	ug/L	<b>27</b> U	26 U	27 U	<b>2</b> 6 U	26 U
57 Phenanthrene	ug/L	11 U	10 U	1 <b>1</b> U	10 U	10 U
58 Phenol	ug/L	11 U	10 U	11 U	10 U	10 U
59 Pyrene	ug/L	11 U	10 U	1 J	10 U	10 U
60 benzo(k)fluoranthene	ug/L	11 U	10 U	11 U :	10 U	10 U
61 bis(2-Chloroethoxy) methane	ug/L	11 U	10 U	11 U	10 U	10 U
62 bis(2-Chloroethyl) ether	ug/L	11 U	10 U	11 U	10 U	10 U
63 bis(2-Chloroisoctopyl) ether	ug/L	11 U	10 U	11 U	10 U	10 U
64 bis(2-Ethylhexyl)phthalate	ug/L	35 B	36 B	<b>2</b> 0 B	18 B	52 B

SDG STUDY ID MATRIX LAB SAMP. ID EPA SAMP. ID QC CODE % MOISTURE % SOLIDS		54284 PHASE 1 WATER 273647 SW25-6 SA	54284 PHASE 1 WATER 273619 SW25-7 SA	54284 PHASE 1 WATER 273620 SW25-8 SA	54284 PHASE 1 WATER 273621 SW25-9 SA
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	ug/L	10 U	10 ບົ	10 U	10 U
1 1,2,4-Trichlorobenzene	ug/L	10 U	10 U	10 U	10 U
2 1,2-Dichlorobenzene	ug/L	10 U	10 U	10 U	10 · U
3 1,3-Dichlorobenzene	ug/L	10 U	10 U	10 U	10 U
4 1,4-Dichlorobenzene	ug/L	10 U	10 U	10 U	10 U
5 2,4,5-Trichlorophenol	ug/L	26 U	25 U	26 U	26 U
6 2,4,6-Trichlorophenol	ug/L	10 U	10 U	10 U	10 U
7 2,4-Dichlorophenol	ug/L	10 U	10 U	10 U	10 U
8 2,4-Dimethylphenol	ug/L	10 U	10 U	10 U	10 U
9 2,4-Dinitrophenol	ug/L	26 U	25 U	26 U	<b>26</b> U
10 2,4-Dinitrotoluene	ug/L	10 U	10 U	10 U	10 U
11 2,6-Dinitrotoluene	ug/L	10 U	10 U	10 U	10 U
12 2-Chloronaphthalene	ug/L	10 U	10 U	10 U	10 U
13 2-Chlorophenol	ug/L	10 U	10 U	10 U	10 U
14 2-Methylnaphthalene	ug/L	10 U	10 U	10 U	10 U
15 2-Methylphenol	ug/L	10 U	10 U	10 U	10 U
16 2-Nitroaniline	ug/L	26 U	25 U	26 U	26 U
17 2-Nitrophenol	ug/L	10 U	10 U	10 U	10 U
18 3,3'-Dichlorobenzidine	ug/L	10 U	. 10 U	10 U	10 U
19 3-Nitroaniline	ug/L	26 U	25 U	26 U	<b>26</b> U
20 4,6-Dinitro-2-methylphenol	ug/L	26 U	25 U	26 U	26 U
21 4-Bromophenyl-phenylether	ug/L	10 U	10 U	10 U	10 U
22 4-Chloro-3-methylphenol	ug/L	10 U	10 U	10 U	10 U
23 4-Chloroaniline	ug/L	10 U	10 U	10 U	10 U
24 4-Chlorophenyl-phenylether	ug/L	10 U	10 U	10 U	10 U
25 4-Methylphenol	ug/L	10 U	10 U	10 U	10 U
26 4-Nitroaniline	ug/L	26 U	25 U	26 U	26 U
27 4-Nitrophenol	ug/L	26 U	25 U	<b>26</b> U	26 U
28 Acenaphthene	ug/L	10 U	10 U	10 U	10 U
29 Acenaphthylene	ug/L	10 U	10 U	10 U	10 U
30 Anthracene	ug/L	10 U	10 U	10 U	10 U
31 Benzo(a)anthracene	ug/L	10 U	10 U	10 U	10 U
32 Benzo(a)pyrene	ug/L	10 U	10 U	10 U	10 U
33 Benzo(b)fluoranthene	ug/L	10 U	10 U	10 U	10 U
34 Benzo(g,h,i)perylene	ug/L	10 U	10 U	10 U	10 U

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	SDG	i:	54284	54284	54284	54284
	STUDY ID	<b>)</b> ;	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX	:	WATER	WATER	WATER	WATER
	LAB SAMP. ID	<b>)</b> :	273647	273619	273620	273621
	EPA SAMP. ID	<b>)</b> :	SW25-6	SW25-7	SW25-8	SW25-9
	QC CODE	):	SA	SA	SA	SA
	% MOISTURE					
	% SOLIDS	<b>3</b> :				
	PARAMETE		VALUE Q	VALUE Q	VALUE Q	VALUE Q
	1,2,4-Trichlorobenzene	ug/L	10 U	10 U	10 U	10 U
35	Butylbenzylphthalate	ug/L	10 U	10 U	10 U	10. U
36	Carbazole	ug/L	10 U	10 U	10 U	10 U
37	Chrysene	ug/L	10 U	10 U	10 U	10 U
38	Di-n-butylphthalate	ug/L	10 U	1	10 U	10 U
39	Di-n-oprylphthalate	ug/L	10 U	10 U	10 U	10 U
40	Dibenz(a,h)anthracene	ug/L	10 U	10 U	10 U	10 U
41	Dibenzofuran	ug/L	1 J	10 U	10 U	10 U
42	Diethylphthalate	ug/L	10 U	10 U	10 U	10 U
43	Dimethylphthalate	ug/L	10 U	10 U	10 U	10 U
44	Fluoranthene	ug/L	10 U	10 U	10 U	10 U
45	Fluorene	ug/L	10 U	10 U	10 U	10 U
46	Hexachlorobenzene	ug/L	10 U	10 U	10 U	10 U
	Hexachlorobutadiene	ug/L	10 U	10 U	10 U	10 U
48	Hexachlorocyclopentadiene	ug/L	10 U	10 U	10 U	10 U
49	Hexachloroethane	ug/L	10 U	10 U	10 U	10 U
50	Indeno(1,2,3-cd)pyrene	ug/L	10 U	10 U	10 U	10 U
51	Isophorone	ug/L	10 U	10 U	10 U	10 U
52	N-Nitroso-di-n-ctopylamine	ug/L	10 U	10 U	10 U	10 U
53	N-Nitrosodiphenylamine (1)	ug/L	10 U	10 U	10 U	10 U
54	Naphthalene	ug/L	10 U	10 U	10 U	10 U
55	Nitrobenzene	ug/L	10 U	10 U	10 U	10 U
56	Pentachlorophenol	ug/L	26 U	25 U	26 U	<b>26</b> U
	Phenanthrene	ug/L	10 U	10 U	10 U	10 U
58	Phenol	ug/L	10 U	10 U	10 U	10 U
	Pyrene	ug/L	10 U	10 U	10 U	10 U
	benzo(k)fluoranthene	ug/L	10 U	10 U	10 U	10 U
	bis(2-Chloroethoxy) methane	ug/L	10 U	10 U	10 U	10 U
	bis(2-Chloroethyl) ether	ug/L	10 U	10 U	10 U	10 U
	bis(2-Chloroisoctopyl) ether	ug/L	10 U	10 U	10 U	10 U
64	bis(2-Ethylhexyl)phthalate	ug/L	10 ЈВ	9 JB	15 B	13 B

SDG: STUDY ID: MATRIX: LAB SAMP. ID: EPA SAMP. ID: QC CODE: % MOISTURE: % SOLIDS:		54284 PHASE 1 WATER 273648 SW25-15 DU	54284 PHASE 1 WATER 273621 SW25-9MS MS	54284 PHASE 1 WATER 273621 SW25-9MSD MSD
DADAMETED	IBIT	XIAI I IIC	0 374115	
PARAMETER		VALUE 10	•	
1 1,2,4-Trichlorobenzene 1 1,2,4-Trichlorobenzene	ug/L ug/L			59 · 59
2 1,2-Dichlorobenzene	ug/L	10		
3 1,3-Dichlorobenzene	ug/L ug/L	10		
4 1.4-Dichlorobenzene	ug/L ug/L	10		50
5 2,4,5-Trichlorophenol	ug/L	26		
6 2,4,6-Trichlorophenol	ug/L ug/L	10		
7 2,4-Dichlorophenol	ug/L	10		
8 2,4-Dimethylphenol	ug/L	10		
9 2,4-Dinitrophenol	ug/L	26		
10 2,4-Dinitrotoluene	ug/L	10		48
11 2,6-Dinitrotoluene	ug/L	10		
12 2-Chloronaphthalene	ug/L	10		_
13 2-Chlorophenol	ug/L	10		78
14 2-Methylnaphthalene	ug/L	10		
15 2-Methylphenol	ug/L	10	_	
16 2-Nitroaniline	ug/L	26		
17 2-Nitrophenol	ug/L	10	U 10	
18 3,3'-Dichlorobenzidine	ug/L	10	U 10	
19 3-Nitroaniline	ug/L	26	U 25	
20 4,6-Dinitro-2-methylphenol	ug/L	26	U 25	U 29 U
21 4-Bromophenyl-phenylether	ug/L	10	U 10	U 12 U
22 4-Chloro-3-methylphenol	ug/L	10	U 76	78
23 4-Chloroaniline	ug/L	10	U 10	U 12 U
24 4-Chlorophenyl-phenylether	ug/L	10	U 10	U 12 U
25 4-Methylphenol	ug/L	10	U 10	U 12 U
26 4-Nitroaniline	ug/L	26	U 25	U 29 U
27 4-Nitropheuol	ug/L	26	U 70	70
28 Acenaphthene	ug/L	10	U 54	58
29 Acenaphthylene	ug/L	10	U 10	U 12 U
30 Anthracene	ug/L	10	• •	
31 Benzo(a)anthracene	ug/L	10		U 12 U
32 Benzo(a)pyrene	ug/L	10	U 10	U 12 U
33 Benzo(b)fluoranthene	ug/L	10	_	U 12 U
34 Benzo(g,h,i)perylene	ug/L	10	U 10	U 12 U

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340	SDG: STUDY ID: MATRIX: LAB SAMP. ID: EPA SAMP. ID: QC CODE: % MOISTURE:		54284 PHASE 1 WATER 273648 SW25-15 DU	54284 PHASE 1 WATER 273621 SW25-9MS MS	54284 PHASE 1 WATER 273621 SW25-9MSD MSD
	% SOLIDS:				
	D.A.D. 4.1 (F)	* D 1777	TALLET O	WHITE O	*****************************
	PARAMETER		VALUE Q	VALUE Q	VALUE Q
	1,2,4-Trichlorobenzene	ug/L	10 U	59	59
	Butylbenzylphthalate	ug/L	10 U	10 U	12 U
	Carbazole	ug/L	10 U 10 U	10 U 10 U	12 U
	Chrysene	ug/L	10 U 10 U	10 U 10 U	12 U 12 U
	Di-n-butylphthalate	ug/L	10 U 10 U	10 U 10 U	12 U 12 U
39	1 3 1	ug/L	10 U	10 U	12 U 12 U
40	Dibenz(a,h)anthracene Dibenzofuran	ug/L	10 U	10 U	12 U 12 U
		ug/L	10 U	10 U	12 U 12 U
	Diethylphthalate	ug/L	10 U	10 U	12 U
43	Dimethylphthalate Fluoranthene	ug/L ug/L	10 U	10 U	12 U
	Fluorene	ug/L ug/L	10 U	10 U	12 U
	Hexachlorobenzene		10 U	10 U	12 U
	Hexachlorobutadiene	ug/L	10 U	10 U	12 U
	Hexachlorocyclopentadiene	ug/L	10 U	10 U	12 U
	Hexachloroethane	ug/L	10 U	10 U	12 U
		ug/L	10 U	10 U	12 U
	Indeno(1,2,3-cd)pyrene Isophorone	ug/L ug/L	10 U	10 U	12 U
	N-Nitroso-di-n-ctopylamine	ug/L ug/L	10 U	48	54
	N-Nitrosodiphenylamine (1)	ug/L ug/L	10 U	10 U	12 U
	Naphthalene	ug/L ug/L	10 U	10 U	12 U
	Nitrobenzene	ug/L ug/L	10 U	10 U	12 U
	Pentachlorophenol	ug/L	26 U	120 E	120 E
	Phenanthrene	ug/L	10 U	10 U	12 U
	Phenol	ug/L	10 U	64	68
	Pyrene	ug/L	10 U	68	72
	benzo(k)fluoranthene	ug/L	10 U	10 U	12 U
61	bis(2-Chloroethoxy) methane	ug/L	10 U	10 U	12 U
	bis(2-Chloroethyl) ether	ug/L	10 U	10 U	12 U
	bis(2-Chloroisoctopyl) ether	ug/L	10 U	10 U	12 U
	bis(2-Ethylhexyl)phthalate	ug/L	4 JB	70 B	31 B
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	OG:	54284	54284	5 <b>42</b> 84	54284	54284
STUDY		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATR		WATER	WATER	WATER	WATER	WATER
LAB SAMP.		273452	273456	273453	273454	273455
EPA SAMP.		SW25-1	SW25-10	SW25-2	SW25-4	SW25-5
QC COI		SA	SA	SA	SA	SA
% MOISTUI						
% SOLI	DS:					
PARAMET		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	ug/L	11 U	10 U	11 U	10 U	10 U
1 1,2,4-Trichlorobenzene	ug/L	11 U	10 U	11 U	10 U	10 U
2 1,2-Dichlorobenzene	ug/L	11 U	10 U	11 U	10 U	10 U
3 1,3-Dichlorobenzene	ug/L	11 U	10 U	11 U	10 U	10 U
4 1,4-Dichlorobenzene	ug/L	11 U	10 U	11 U	10 U	10 U
5 2,4,5-Trichlorophenol	ug/L	27 U	26 U	27 U	26 U	26 U
6 2,4,6-Trichlorophenol	ug/L	11 U	10 U	11 U	10 U	10 U
7 2,4-Dichlorophenol	ug/L	11 U	10 U	11 U	10 U	10 U
8 2,4-Dimethylphenol	ug/L	11 U	10 U	11 U	10 U	10 U
9 2,4-Dinitrophenol	ug/L	27 U	26 U	27 U	26 U	26 U
10 2,4-Dinitrotoluene	ug/L	11 U	10 U	11 U	10 U	10 U
11 2,6-Dinitrotoluene	ug/L	11 U	10 U	11 U	10 U	10 U
12 2-Chloronaphthalene	ug/L	11 U	10 U	11 U	10 U	10 U
13 2-Chlorophenol	ug/L	11 U	10 U	11 U	10 U	10 U
14 2-Methylnaphthalene	ug/L	11 U	10 U	11 U	10 U	10 U
15 2-Methylphenol	ug/L	11 U	10 U	11 U	10 U	10 U
16 2-Nitroaniline	ug/L	27 U	26 U	27 U	<b>2</b> 6 U	26 U
17 2-Nitrophenol	ug/L	11 U	10 U	11 U	10 U	10 U
18 3,3'-Dichlorobenzidine	ug/L	11 U	10 U	11 U	10 U	10 U
19 3-Nitroaniline	ug/L	27 U	26 U	27 U	<b>2</b> 6 U	26 U
20 4,6-Dinitro-2-methylphenol	ug/L	27 U	26 U	27 U	26 U	26 U
21 4-Bromophenyl-phenylether	ug/L	11 U	10 U	11 U	10 U	10 U
22 4-Chloro-3-methylphenol	ug/L	11 U	10 U	11 U	10 U	10 U
23 4-Chloroaniline	ug/L	11 U	10 U	11 U	10 U	10 U
24 4-Chlorophenyl-phenylether	ug/L	11 U	10 U	11 U	10 U	10 U
25 4-Methylphenol	ug/L	11 U	10 U	11 U	10 U	10 U
26 4-Nitroaniline	ug/L	27 U	26 U	<b>27</b> U	<b>2</b> 6 U	26 U
27 4-Nitrophenol	ug/L	27 U	<b>2</b> 6 U	<b>27</b> U	<b>2</b> 6 U	<b>2</b> 6 U
28 Acenaphthene	ug/L	11 U	10 U	11 U	10 U	10 U
29 Acenaphthylene	ug/L	11 U	10 U	11 U	10 U	10 U
30 Anthracene	ug/L	11 U	10 U	11 U	10 U	10 U
31 Benzo(a)anthracene	ug/L	11 U	10 U	11 U	10 U	10 U
32 Benzo(a)pyrene	ug/L	11 U	10 U	11 U	10 U	10 U
33 Benzo(b)fluoranthene	ug/L	11 U	10 U	11 U	10 U	10 U
34 Benzo(g,h,i)perylene	ug/L	11 U	10 U	11 U	10 U	10 U

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SI	OG:	54284	54284	54284	54284	54284
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATR	IX:	WATER	WATER	WATER	WATER	WATER
LAB SAMP.		273452	273456	273453	273454	273455
EPA SAMP.		SW25-1	SW25-10	SW25-2	SW25-4	SW25-5
QC COI		SA	SA	SA	SA	SA
% MOISTU						
% SOLI						
PARAMET	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1.2.4-Trichlorobenzene	ug/L	11 U	10 U	11 U	10 U	10 U
35 Butylbenzylphthalate	ug/L ug/L	11 Ü	10 U	11 Ŭ	10 U	10 U
36 Carbazole	ug/L	11 U	10 U	11 U	10 U	10 U
37 Chrysene	ug/L ug/L	11 U	10 U	11 U	10 U	10 U
38 Di-n-butylphthalate	ug/L ug/L	1 1	10 U	11 U	10 U	10 U
39 Di-n-oprylphthalate	ug/L	11 U	10 U	11 U	10 U	10 U
40 Dibenz(a,h)anthracene	ug/L	11 U	10 U	11 U	10 U	10 U
41 Dibenzofuran	ug/L	11 U	10 U	11 U	10 U	10 U
42 Diethylphthalate	ug/L	11 U	10 U	11 U	J	10 U
43 Dimethylphthalate	ug/L	11 U	10 U	11 U	10 U	10 U
44 Fluoranthene	ug/L	11 U	10 U	11 U	10 U	10 U
45 Fluorene	ug/L	11 U	10 U	11 U	10 U	10 U
46 Hexachlorobenzene	ug/L	11 U	10 U	11 U	10 U	10 U
47 Hexachlorobutadiene	ug/L	11 U	10 U	11 U	10 U	10 U
48 Hexachlorocyclopentadiene	ug/L	11 U	10 U	11 U	10 U	10 U
49 Hexachloroethane	ug/L	11 U	10 U	11 U	10 U	10 U
50 Indeno(1,2,3-cd)pyrene	ug/L	11 U	10 U	11 U	10 U	10 U
51 Isophorone	ug/L	11 U	10 U	11 U	10 U	10 U
52 N-Nitroso-di-n-ctopylamine	ug/L	11 U	10 U	11 U	10 U	10 U
53 N-Nitrosodiphenylamine (1)	ug/L	11 U	10 U	11 U	10 U	10 U
54 Naphthalene	ug/L	11 U	10 U	11 U	10 U	10 U
55 Nitrobenzene	ug/L	11 U	10 U	11 U	10 U	10 U
56 Pentachlorophenol	ug/L	27 U	26 U	<b>27</b> U	26 U	<b>26</b> U
57 Phenanthrene	ug/L	11 U	10 U	11 U	10 U	10 U
58 Phenol	ug/L	11 U	10 U	11 U	10 U	10 U
59 Pyrene	ug/L	11 U	10 U	1 J	10 U	10 U
60 benzo(k)fluoranthene	ug/L	11 U	10 U	11 U	10 U	10 U
61 bis(2-Chloroethoxy) methane	ug/L	11 U	10 U	11 U	10 U	10 U
62 bis(2-Chloroethyl) ether	ug/L	11 U	10 U	11 U	10 U	10 U
63 bis(2-Chloroisoctopyl) ether	ug/L	11 U	10 U	11 U	10 U	10 U
64 bis(2-Ethylhexyl)phthalate	ug/L	35 B	36 B	20 B	18 B	52 B

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SDG	::	54284	54284	54284	54284
STUDY ID	<b>)</b> :	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRIX		WATER	WATER	WATER	WATER
LAB SAMP. ID	):	273647	273619	273620	273621
EPA SAMP. ID		SW25-6	SW25-7	SW25-8	SW25-9
QC CODE		SA	SA SA	SA SA	SW 23-9 SA
% MOISTURE		5A	SA	SA	SA
% MOISTORE % SOLIDS					
% SOLIDS	) <b>.</b>				
PARAMETEI	R UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	ug/L	10 U	10 U	10 Ü	10 U
1 1,2,4-Trichlorobenzene	ug/L	10 U	10 U	10 U	10 U
2 1,2-Dichlorobenzene	ug/L	10 U	10 U	10 U	10 U
3 1,3-Dichlorobenzene	ug/L	10 U	10 U	10 U	10 U
4 1,4-Dichlorobenzene	ug/L	10 U	10 U	10 U	10 U
5 2,4,5-Trichlorophenol	ug/L	26 U	25 U	26 U	26 U
6 2,4,6-Trichlorophenol	ug/L	10 U	10 U	10 U	10 U
7 2,4-Dichlorophenol	ug/L	10 U	10 U	10 U	10 U
8 2,4-Dimethylphenol	ug/L	10 U	10 U	10 U	
9 2,4-Dinitrophenol		26 U	25 U		10 U
10 2,4-Dinitrotoluene	ug/L	10 U		26 U	26 U
-	ug/L		10 U	10 U	10 U
11 2,6-Dinitrotoluene	ug/L	10 U	10 U	10 U	10 U
12 2-Chloronaphthalene	ug/L	10 U	10 U	10 U	10 U
13 2-Chlorophenol	ug/L	10 U	10 U	10 U	10 U
14 2-Methylnaphthalene	ug/L	10 U	10 U	10 U	10 U
15 2-Methylphenol	ug/L	10 U	10 U	10 U	10 U
16 2-Nitroaniline	ug/L	26 U	25 U	26 U	26 U
17 2-Nitrophenol	ug/L	10 U	10 U	10 U	10 U
18 3,3'-Dichlorobenzidine	ug/L	10 U	. 10 U	10 U	10 U
19 3-Nitroaniline	ug/L	<b>2</b> 6 U	25 U	<b>26</b> U	26 U
20 4,6-Dinitro-2-methylphenol	ug/L	26 U	25 U	26 U	26 U
21 4-Bromophenyl-phenylether	ug/L	10 U	10 U	10 U	10 U
22 4-Chloro-3-methylphenol	ug/L	10 U	10 U	10 U	10 U
23 4-Chloroaniline	ug/L	10 U	10 U	10 U	10 U
24 4-Chlorophenyl-phenylether	ug/L	10 U	10 U	10 U	10 U
25 4-Methylphenol	ug/L	10 U	10 U	10 U	10 U
26 4-Nitroaniline	ug/L	26 U	25 U	26 U	26 U
27 4-Nitrophenol	ug/L	<b>2</b> 6 U	25 U	26 U	26 U
28 Acenaphthene	ug/L	10 U	10 U	10 U	10 U
29 Acenaphthylene	ug/L	10 U	10 U	10 U	10 U
30 Anthracene	ug/L	10 U	10 U	10 U	10 U
31 Benzo(a)anthracene	ug/L	10 U	10 U	10 U	10 U
32 Benzo(a)pyrene	ug/L	10 U	10 U	10 U	
33 Benzo(b)fluoranthene	ug/L	10 U	10 U	10 U	10 U
34 Benzo(g,h,i)perylene	ug/L	10 U	10 U		10 U
5. Dollad (g,ii,i)per yrene	ug/L	10 0	10 0	10 U	10 U

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3 4003	SDG	<b>}-</b>	54284	54284	54284	54284
	STUDY ID		PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX		WATER	WATER	WATER	WATER
	LAB SAMP. ID		273647	273619	273620	273621
	EPA SAMP. ID		SW25-6	SW25-7	SW25-8	SW25-9
	OC CODE		SA SA	SA SA	SA SA	SA
	% MOISTURE		SA	SA	5A	571
	% MOISTORE % SOLIDS					
	% SOLIDS	).				
	PARAMETE	R UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
ΙI	,2,4-Trichlorobenzene	ug/L	10 U	10 U	10 U	10 U
35 B	utylbenzylphthalate	ug/L	10 U	10 U	10 U	10 U
36 C	Carbazole	ug/L	10 U	10 U	10 U	10 U
37 C	Chrysene	ug/L	10 U	10 U	10 U	10 U
38 D	Di-n-butylphthalate	ug/L	10 U	J	10 U	10 U
39 D	Di-n-oprylphthalate	ug/L	10 U	10 U	10 U	10 U
	Dibenz(a,h)anthracene	ug/L	10 U	10 U	10 U	10 U
41 D	Dibenzofuran	ug/L	1 J	10 U	10 U	10 U
42 D	Diethylphthalate	ug/L	10 U	10 U	10 U	10 U
43 D	Dimethylphthalate	ug/L	10 U	10 U	10 U	10 U
44 F	luoranthene	ug/L	10 U	10 U	10 U	10 U
45 F	luorene	ug/L	10 U	10 U	10 U	10 U
46 H	Iexachlorobenzene	ug/L	10 U	10 U	10 U	10 U
47 F	lexachlorobutadiene	ug/L	10 U	10 U	10 U	10 U
48 F	Iexachlorocyclopentadiene	ug/L	10 U	10 U	10 U	10 U
49 F	Iexachloroethane	ug/L	10 U	10 U	10 U	10 U
50 I	ndeno(1,2,3-cd)pyrene	ug/L	10 U	10 U	10 U	10 U
51 I	sophorone	ug/L	10 U	10 U	10 U	10 U
	N-Nitroso-di-n-ctopylamine	ug/L	10 U	10 U	10 U	10 U
53 N	V-Nitrosodiphenylamine (I)	ug/L	10 U	10 U	10 U	10 U
54 N	Naphthalene	ug/L	10 U	10 U	10 U	10 U
55 N	Vitrobenzene	ug/L	10 U	10 U	10 U	10 U
56 P	Pentachlorophenol	ug/L	<b>2</b> 6 U	25 U	26 U	26 U
57 P	henanthrene	ug/L	10 U	10 U	10 U	10 U
58 P	Phenol	ug/L	10 U	10 U	10 U	10 U
59 P	Pyrene	ug/L	10 U	10 U	10 U	10 U
	enzo(k)fluoranthene	ug/L	10 U	10 U	10 U	10 U
61 b	ois(2-Chloroethoxy) methane	ug/L	10 U	10 U	10 U	10 U
62 b	ois(2-Chloroethyl) ether	ug/L	10 U	10 U	10 U	10 U
63 b	ois(2-Chloroisoctopyl) ether	ug/L	10 U	10 U	10 U	10 U
64 b	ois(2-Ethylhexyl)phthalate	ug/L	10 JB	9 JB	15 B	13 B

## **METALS**

		SDG:	54284	54204	54004
				54284	54284
		STUDY ID:	PHASE 1	PHASE 1	PHASE 1
		MATRIX:	WATER	WATER	WATER
		B SAMP. ID:	273648	273621	273621
	EP	A SAMP. ID:	SW25-15	SW25-9MS	SW25-9MSD
		QC CODE:	DU	MS	MSD
	%	MOISTURE:			
		% SOLIDS:			
	PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q
1	4,4'-DDD	UG/L	0.11 U	0.11 U	0.11 U
2	4,4'-DDE	UG/L	0.11 U	0.11 U	0.11 U
3	4,4'-DDT	UG/L	0.11 U	1	1
4	Aldrin	UG/L	0.053 U	0.48	0.47
5	Aroclor-1016	UG/L	1.1 U	1.1 U	1.1 U
6	Aroclor-1221	UG/L	2.1 U	2.2 U	2.2 U
7	Aroclor-1232	UG/L	1.1 U	1.1 U	1.1 U
8	Aroclor-1242	UG/L	1.1 U	1.1 U	1.1 U
9	Aroclor-1248	UG/L	1.1 U	1.1 U	1.1 U
10	Aroclor-1254	UG/L	1.1 U	1.1 U	1.1 U
11	Aroclor-1260	UG/L	1.1 U	1.1 U	1.1 U
12	Dieldrin	UG/L	0.11 U	1	0.99
13	Endosulfan I	UG/L	0.053 U	0.056 U	0.055 U
14	Endosulfan II	UG/L	0.11 U	0.11 U	0.11 U
15	Endosulfan sulfate	UG/L	0.11 U	0.11 U	0.11 U
16	Endrin	UG/L	0.11 U	1.1	1
17	Endrin aldehyde	UG/L	0.11 U	0.11 U	0.11 U
18	Endrin ketone	UG/L	0.11 U	0.11 U	0.11 U
19	Heptachlor	UG/L	0.053 U	0.49	0.48
20	Heptachlor epoxide	UG/L	0.053 U	0.056 U	0.055 U
21	Methoxychlor	UG/L	0.53 U	0.56 U	0.55 U
22	Toxaphene	UG/L	5.3 U	5.6 U	5.5 U
23	alpha-BHC	UG/L	0.053 U	0.056 U	0.055 U
24	alpha-Chlordane	UG/L	0.053 U	0.056 U	0.055 U
	beta-BHC	UG/L	0.053 U	0.056 U	0.055 U
	delta-BHC	UG/L	0.053 U	0.056 U	0.055 U
	gamma-BHC (Lindane	e) UG/L	0.053 U	0.45	0.46
	gamma-Chlordane	UG/L	0.053 U	0.056 U	0.055 U

MET	ΑI	`.S
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METALS						
	SDG:	54284	54284	54284	54284	54284
ST	UDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
N	IATRIX:	WATER	WATER	WATER	WATER	WATER
LAB SA	AMP. ID:	273452	273456	273453	273454	273455
EPA SA	AMP. ID:	SW25-1	SW25-10	SW25-2	SW25-4	SW25-5
Q	C CODE:	SA	SA	SA	SA	SA
	ISTURE:					
	SOLIDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/L	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U
2 4.4'-DDE	UG/L	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U
3 4,4'-DDT	UG/L	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U
4 Aldrin	UG/L	0.054 U	0.058 U	0.051 U	0.052 U	0.051 U
5 Aroclor-1016	UG/L	1.1 U	1.2 U	1 U	ı U	1 U
6 Aroclor-1221	UG/L	2.2 U	2.3 U	2 U	2.1 U	2 U
7 Aroclor-1232	UG/L	1.1 U	1.2 U	1 U	1 U	1 U
8 Aroclor-1242	UG/L	1.1 U	1.2 U	1 U	i Ū	1 U
9 Aroclor-1248	UG/L	1.1 U	1.2 U	1 U	1 U	1 U
10 Aroclor-1254	UG/L	1.1 U	1.2 U	1 U	i U	1 U
11 Aroclor-1260	UG/L	1.1 U	1.2 U	1 U	1 U	1 U
12 Dieldrin	UG/L	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U
13 Endosulfan I	UG/L	0.054 U	0.058 U	0.051 U	0.052 U	0.051 U
14 Endosulfan II	UG/L	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U
15 Endosulfan sulfate	UG/L	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U
16 Endrin	UG/L	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U
17 Endrin aldehyde	UG/L	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U
18 Endrin ketone	UG/L	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U
19 Heptachlor	UG/L	0.054 U	0.058 U	0.051 U	0.052 U	0.051 U
20 Heptachlor epoxide	UG/L	0.054 U	0.058 U	0.051 U	0.052 U	0.051 U
21 Methoxychior	UG/L	0.54 U	0.58 U	0.51 U	0.52 U	0.51 U
22 Toxaphene	UG/L	5.4 U	5.8 U	5.1 U	5.2 U	5.1 U
23 alpha-BHC	UG/L	0.054 U	0.058 U	0.051 U	0.052 U	0.051 U
24 alpha-Chlordane	UG/L	0.054 U	0.058 U	0.051 U	0.052 U	0.051 U
beta-BHC	UG/L	0.054 U	0.058 U	0.051 U	0.052 U	0.051 U
delta-BHC	UG/L	0.054 U	0.058 U	0.051 U	0.052 U	0.051 U
gamma-BHC (Lindane)	UG/L	0.054 U	0.058 U	0.051 U	0.052 U	0.051 U
gamma-Chlordane	UG/L	0.054 U	0.058 U	0.051 U	0.052 U	0.051 U
O	:- <del>-</del>		*			0.051 0

METALS
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MILIALS					
	SDG:	54284	54284	54284	54284
ST	UDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1
N	MATRIX:	WATER	WATER	WATER	WATER
LAB SA	AMP. ID:	273647	273619	273620	273621
EPA SA	AMP. ID:	SW25-6	SW25-7	SW25-8	SW25-9
	C CODE:	SA	SA	SA	SA
•	ISTURE:			571	521
	SOLIDS:				
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/L	0.1 U	0.1 U	0.11 U	0.1 U
2 4,4'-DDE	UG/L	0.1 U	0.1 U	0.11 U	0.1 U
3 4,4'-DDT	UG/L	0.1 U	0.1 U	0.11 U	0.1 U
4 Aldrin	UG/L	0.052 U	0.05 U	0.055 U	0.052 U
5 Aroclor-1016	UG/L	1 U	1 U	1.1 U	1 U
6 Aroclor-1221	UG/L	2.1 U	2 U	2.2 U	2.1 U
7 Aroclor-1232	UG/L	1 U	1 U	1.1 U	1 U
8 Aroclor-1242	UG/L	1 U	1 U	1.1 U	1 U
9 Aroclor-1248	UG/L	1 U	1 U	1.1 U	1 U
10 Aroclor-1254	UG/L	1 U	1 U	1.1 U	1 U
11 Aroclor-1260	UG/L	1 U	1 U	1.1 U	1 U
12 Dieldrin	UG/L	0.1 U	0.1 U	0.11 U	0.1 U
13 Endosulfan I	UG/L	0.052 U	0.05 U	0.055 U	0.052 U
14 Endosulfan II	UG/L	0.1 U	0.1 U	0.11 U	0.1 U
15 Endosulfan sulfate	UG/L	0.1 U	0.1 U	0.11 U	0.1 U
16 Endrin	UG/L	0.1 U	0.1 U	0.11 U	0.1 U
17 Endrin aldehyde	UG/L	0.1 U	0.1 U	0.11 U	0.1 U
18 Endrin ketone	UG/L	0.1 U	0.1 U	0.11 U	0.1 U
19 Heptachlor	UG/L	0.052 U	0.05 U	0.055 U	0.052 U
20 Heptachlor epoxide	UG/L	0.052 U	0.05 U	0.055 U	0.052 U
21 Methoxychlor	UG/L	0.52 U	0.5 U	0.55 U	0.52 U
22 Toxaphene	UG/L	5.2 U	5 U	5.5 U	5.2 U
23 alpha-BHC	UG/L	0.052 U	0.05 U	0.055 U	0.052 U
24 alpha-Chlordane	UG/L	0.052 U	0.05 U	0.055 U	0.052 U
beta-BHC	UG/L	0.052 U	0.05 U	0.055 U	0.052 U
delta-BHC	UG/L	0.052 U	0.05 U	0.055 U	0.052 U
gamma-BHC (Lindane)	UG/L	0.052 U	0.05 U	0.055 U	0.052 U
gamma-Chlordane	UG/L	0.052 U	0.05 U	0.055 U	0.052 U

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METALS	ana	54284	54284	54284	54284	54284
	SDG:				PHASE 1	PHASE 1
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	WATER	WATER
	MATRIX:	WATER	WATER	WATER	273453	273454
	LAB SAMP. ID:	273648	273452	273456	SW25-2	SW25-4
	EPA SAMP. ID:	SW25-15	SW25-1	SW25-10		SW254
	QC CODE:	DU	SA	SA	SA	SA
	% MOISTURE:			•	•	0
	% SOLIDS:	0	0	0	0	O
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	UG/L	19.5 B	1110	129 B	1330	1500
2 Antimony	UG/L	2.2 U	2.2 U	2.2 U	.2.2 U	2.2 U
3 Arsenic	UG/L	2.1 U	3.5 B	2.1 U	2.1 U	2.1 U
4 Barium	UG/L	75.6 B	18.9 B	35 B	22.4 B	39.7 B
5 Beryllium	UG/L	0.27 U	0. <b>27</b> U	0.27 U	0. <b>27</b> U	0.27 U
6 Cadmium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
7 Calcium	UG/L	106000	22600	55700	31400	52800
8 Chromium	UG/L	0.61 B	3.3 B	0.5 U	3.3 B	2.2 B
9 Cobalt	UG/L	0.99 U	1.6 B	1 U	1.1 B	1 U
10 Copper	UG/L	2 B	13.2 B	1.6 B	9.1 B	3.4 B
11 Cyanide	UG/L	5 U	5 U	5 U	5 U	5 U
12 Iron	UG/L	22 B	1300	191	1450	1500
13 Lead	UG/L	1.5 U	7	1.5 U	5.5	3.3
14 Magnesium	UG/L	13500	1900 B	7540	3680 B	7040
15 Manganese	UG/L	42.3	38.6	1.9 B	22.3	18.8
16 Mercury	UG/L	0.03 B	0.03 B	0.04 B	0.05 B	0.03 B
17 Nickel	UG/L	0.99 U	4 B	1 U	3.9 B	2.3 B
18 Potasium	UG/L	3100 B	12900	2870 B	9290	3230 B
19 Selenium	UG/L	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
20 Silver	UG/L	0.8 U	0. <b>79</b> U	0.8 U	0.8 U	0.8 U
21 Sodium	UG/L	213000	108000	57000	67900	74400
22 Thallium	UG/L	3 U	3 U	3 U	3 U	3 U
23 Vanadium	UG/L	1.1 U	4.7 B	1.1 U	3.9 B	2.9 B
24 Zinc	UG/L	3 B	22.9	2 B	70.3	10 B

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	SDG:	54284	54284	54284	54284	54284
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	WATER	WATER	WATER	WATER	WATER
	LAB SAMP. ID:	273455	273647	273619	273620	273621
	EPA SAMP. ID:	SW25-5	SW25-6	SW25-7	SW25-8	SW25-9
	QC CODE:	SA	SA	SA	SA	SA
	% MOISTURE:					
	% SOLIDS:	0	0	0	0	0
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	UG/L	1200	25.4 B	41.9 B	39.9 B	29.5 B
2 Antimony	UG/L	2.2 U	2.2 U	2.2 U	.2.2 U	2.2 U
3 Arsenic	UG/L	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
4 Barium	UG/L	39.7 B	75.1 B	66.1 B	66.9 B	66.3 B
5 Beryllium	UG/L	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
6 Cadmium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
7 Calcium	UG/L	53500	105000	94600	95300	95800
8 Chromium	UG/L	1.6 B	0.5 U	0.5 U	1.1 B	0.5 U
9 Cobalt	UG/L	0.99 U	0.99 U	0.99 U	0.99 U	0.99 U
10 Copper	UG/L	2.6 B	1.8 B	2.7 B	2.7 B	1.5 B
11 Cyanide	UG/L	5 U	5 U	5 U	. 5 U	5 U
12 Iron	UG/L	837	22.4 B	51.7 B	72.1 B	29.2 B
13 Lead	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
14 Magnesium	UG/L	6900	13300	11800	11900	11900
15 Manganese	UG/L	10.4 B	42.5	15.7	22.6	15.4
16 Mercury	UG/L	0.02 B	0.02 U	0.02 B	0.02 B	0.03 B
17 Nickel	UG/L	2.1 B	0.99 U	1.4 B	1.8 B	0.99 U
18 Potasium	UG/L	3910 B	3090 B	2880 B	2820 B	2820 B
19 Selenium	UG/L	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
20 Silver	UG/L	0.79 U	0. <b>7</b> 9 U	0.8 U	0.82 B	0.8 U
21 Sodium	UG/L	69800	213000	192000	187000	187000
22 Thallium	UG/L	3 U	3 U	3 U	3 U	3 U
23 Vanadium	UG/L	2.8 B	1.1 U	1.1 U	1.8 B	1.1 U
24 Zinc	UG/L	6.3 B	5.5 B	4.2 B	3.6 B	3.3 B

VOCS							
S. STUDY MATH LAB SAMP. EPA SAMP. QC CO % MOISTU % SOL	RIX: . ID: . ID: .DE: .TE:	54287 PHASE 1 WATER 275067 SW26-11 DU	54287 PHASE 1 WATER 275066 SD26-10R FB	54287 PHASE 1 WATER 275065 SW26-10MS MS	54287 PHASE 1 WATER 275065 SW26-10MSD MSD	54287 PHASE 1 WATER 275065 SW26-10 SA	54287 PHASE 1 WATER 275442 SW26-12 SA
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1.1.1-Trichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
2 1.1.2.2-Tetrachloroethane	ug/L	, 10 U	10 U	10 U	10 U	10 U	10 U
3 1.1.2-Trichloroethene	ug/L	10.77	10 U	10 U	10 U	10 U	10 U
4 1,1-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
5 1,1-Dichloroethene	ug/L	10 U	10 U	53	54	10 U	10 U
6 1,2-Dichloroctopane	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
7 1,2-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
8 1,2-Dichloroethene (total)	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
9 2-Butanone	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
10 2-Hexanone	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
11 4-Methyl-2-Pentanone	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
12 Acetone	ug/L	10 U	10 U	10	9 J	12	10 U
13 Benzene	ug/L	10 U	10 U	50	52	10 U	10 U
14 Bromodichloromethane	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
15 Bromoform	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
16 Bromomethane	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
17 Carbon Disulfide	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
18 Carbon Tetrachloride	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
19 Chlorobenzene	ug/L	10 U	10 U	51	52	10 U	10 U
20 Chloroethane	ug/L	10 U	10 U	10 U	10 U	<b>10</b> U	10 U
21 Chloroform	ug/L	10 Ú	10 U	10 U	10 U	10 U	10 U
22 Chloromethane	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
23 Dibromochloromethane	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
24 Ethylbenzene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
25 Methylene Chloride	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
26 Styrene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
27 Tetrachloroethene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
28 Toluene	ug/L	10 U	10 U	51	51	10 U	10 U
29 Trichloroethene	ug/L	10 U	10 U	51	51	10 U	10 U
30 Vinyl Chloride	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
31 Xylene (total)	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
32 cis-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U
33 trans-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U	10 U	10 U

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\$	BDG:	54287	54287	54287	54287	54287
STUD	Y ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MAT	RIX:	WATER	WATER	WATER	WATER	WATER
LAB SAME	P. ID:	273457	273623	273458	273459	273460
EPA SAMI	P. ID:	SW26-2	SW26-3	SW26-4	SW26-5	SW26-6
QC CC	DDE:	SA	SA	SA	SA	SA
% MOIST				511	571	571
% SOL	IDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	ug/L	10 Ü	10 U	10 U	10 U	10 U
2 1,1,2,2-Tetrachloroethane	ug/L	10 U	10 U	10 U	. 10 U	10 U
3 1,1,2-Trichloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
4 1,1-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
5 1,1-Dichloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
6 1,2-Dichloroctopane	ug/L	10 U	10 U	10 U	10 U	10 U
7 1,2-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
8 1,2-Dichloroethene (total)	ug/L	10 U	10 U	10 U	10 U	10 U
9 2-Butanone	ug/L	10 U	10 U	10 U	10 U	10 U
10 2-Hexanone	ug/L	10 U	10 U	10 U	10 U	10 U
11 4-Methyl-2-Pentanone	ug/L	10 U	10 U	10 U	10 U	10 U
12 Acetone	ug/L	10 U	10 U	10 U	10 U	10 U
13 Benzene	ug/L	10 U	10 U	10 U	10 U	10 U
14 Bromodichloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
15 Bromoform	ug/L	10 U	10 U	10 U	10 U	10 U
16 Bromomethane	ug/L	10 U	10 U	10 U	10 U	10 U
17 Carbon Disulfide	ug/L	10 U	10 U	10 U	10 U	10 U
18 Carbon Tetrachloride	ug/L	10 U	10 U	10 U	10 U	10 U
19 Chlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U
20 Chloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
21 Chloroform	ug/L	10 U	10 U	10 U	10 U	10 U
22 Chloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
23 Dibromochloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
24 Ethylbenzene	ug/L	10 U	10 U	10 U	10 U	10 U
25 Methylene Chloride	ug/L	10 U	10 U	10 U	10 U	10 U
26 Styrene	ug/L	10 U	10 U	10 U	10 U	10 U
27 Tetrachloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
28 Toluene	ug/L	10 U	10 U	10 U	10 U	10 U
29 Trichloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
30 Vinyl Chloride	ug/L	10 U	10 U	10 U	10 U	10 U
31 Xylene (total)	ug/L	10 U	10 U	10 U	10 U	10 U
32 cis-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U	10 U
33 trans-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U	10 U
•	-				10 0	10 0

VOCS						
	DG:	54287	54287	54287	54287	54287
STUDY	<b>TID</b> :	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATI	RIX:	WATER	WATER	WATER	WATER	WATER
LAB SAMP	. ID:	273461	275441	273462	273464	273624
EPA SAMP	. ID:	SW26-7	SW26-8	SW26-9	TB10795	TB10895
QC CC	DE:	SA	SA	SA	TB	TB
% MOISTU						
% SOL						
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
2 1,1,2,2-Tetrachloroethane	ug/L	10 U	10 U	<b>10</b> U	10 U	10 U
3 1,1,2-Trichloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
4 1,1-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	. 10 U
5 1,1-Dichloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
6 1,2-Dichloroctopane	ug/L	10 U	10 U	10 U	10 U	10 U
7 1,2-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
8 1,2-Dichloroethene (total)	ug/L	10 U	10 U	10 U	10 U	10 U
9 2-Butanone	ug/L	10 U	10 U	10 U	10 U	10 U
10 2-Hexanone	ug/L	10 U	10 U	10 U	10 U	10 U
11 4-Methyl-2-Pentanone	ug/L	10 U	10 U	10 U	10 U	10 U
12 Acetone	ug/L	10 U	10 U	10 U	10 U	10 U
13 Benzene	ug/L	10 U	10 U	10 U	10 U	10 U
14 Bromodichloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
15 Bromoform	ug/L	10 U	10 U	10 U	10 U	10 U
16 Bromomethane	ug/L	10 U	10 U	10 U	10 U	10 U
17 Carbon Disulfide	ug/L	10 U	10 U	10 U	10 U	10 U
18 Carbon Tetrachloride	ug/L	10 U	10 U	10 U	10 U	10 U
19 Chlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U
20 Chloroethane	ug/L	10 U	10 U	10 U	<b>10</b> U	10 U
21 Chloroform	ug/L	10 U	10 U	10 U	10 U	10 U
22 Chloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
23 Dibromochloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
24 Ethylbenzene	ug/L	10 U	10 U	10 U	10 U	10 U
25 Methylene Chloride	ug/L	10 U	10 U	10 U	10 U	10 U
26 Styrene	ug/L	10 U	10 U	10 U	10 U	10 U
27 Tetrachloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
28 Toluene	ug/L	10 U	10 U	10 U	10 U	10 U
29 Trichloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
30 Vinyl Chloride	ug/L	10 U	10 U	` 10 U	10 U	10 U
31 Xylene (total)	ug/L	10 U	10 U	10 U	10 U	10 U
32 cis-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U	10 U
33 trans-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U	10 U

SVOCs			
SD	G:	54287	54287
STUDY ID:		PHASE 1	PHASE 1
MATRIX:		WATER	WATER
LAB SAMP. ID:		275067	275066
EPA SAMP. ID:		SW26-11	SD26-10R
QC CODE:		DU	FB
% MOISTURE:			
% SOLID			
76 BOBIE	ъ.		
PARAMETI	ER UNIT '	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/L	10 U	10 U
1 1,2,4-Trichlorobenzene	UG/L	10 U	10 U
2 1,2-Dichlorobenzene	UG/L	10 U	10 U
3 1,3-Dichlorobenzene	UG/L	10 U	10 U
4 1,4-Dichlorobenzene	UG/L	10 U	10 U
5 2,4,5-Trichlorophenol	UG/L	26 U	26 U
6 2,4,6-Trichlorophenol	UG/L	10 U	10 U
7 2,4-Dichlorophenol	UG/L	10 U	10 U
8 2,4-Dimethylphenol	UG/L	10 U	10 U
9 2,4-Dinitrophenol	UG/L	26 U	26 U
10 2,4-Dinitrotoluene	UG/L	10 U	10 U
11 2,6-Dinitrotoluene	UG/L	10 U	10 U
12 2-Chloronaphthalene	UG/L	10 U	10 U
13 2-Chlorophenol	UG/L	10 U	10 U
14 2-Methylnaphthalene	UG/L	10 U	10 U
15 2-Methylphenol	UG/L	10 U	10 U
16 2-Nitroaniline	UG/L	26 U	26 U
17 2-Nitrophenol	UG/L	10 U	10 U
18 3,3'-Dichlorobenzidine	UG/L	10 U	. 10 U
19 3-Nitroaniline	UG/L	<b>26</b> U	<b>26</b> U
20 4,6-Dinitro-2-methylphenol	UG/L	26 U	26 U
21 4-Bromophenyl-phenylether	UG/L	10 U	10 U
22 4-Chloro-3-methylphenol	UG/L	10 U	10 U
23 4-Chloroaniline	UG/L	10 U	10 U
24 4-Chlorophenyl-phenylether	UG/L	10 U	10 U
25 4-Methylphenol	UG/L	10 U	10 U
26 4-Nitroaniline	UG/L	<b>26</b> U	26 U
27 4-Nitrophenol	UG/L	26 U	<b>26</b> U
28 Acenaphthene	UG/L	10 U	10 U
29 Acenaphthylene	UG/L	10 U	10 U
30 Anthracene	UG/L	10 U	10 U
31 Benzo(a)anthracene	UG/L	10 U	10 U
32 Benzo(a)pyrene	UG/L	10 U	10 U
33 Benzo(b)fluoranthene	UG/L	10 U	10 U
34 Benzo(g,h,i)perylene	UG/L	10 U	10 U

svo	Cs			
	SD	G:	54287	54287
	STUDY ID:		PHASE 1	PHASE 1
	MATRIX:		WATER	WATER
LAB SAMP. ID:		275067	275066	
	EPA SAMP. ID:		SW26-11	SD26-10R
OC CODE:		DU	FB	
% MOISTURE:				
% SOLIDS:				
	70 5022			
	PARAMET	ER UNIT	VALUE Q	VALUE Q
1	1,2,4-Trichlorobenzene	UG/L	10 U	10 U
35	Butylbenzylphthalate	UG/L	10 U	10 U
36	Carbazole	UG/L	10 U	10 U
37	Chrysene	UG/L	10 U	10 U
38	Di-n-butylphthalate	UG/L	10 U	10 U
39	Di-n-oprylphthalate	UG/L	10 U	10 U
40	Dibenz(a,h)anthracene	UG/L	10 U	10 U
41	Dibenzofuran	UG/L	10 U	10 U
42	Diethylphthalate	UG/L	10 U	10 U
43	Dimethylphthalate	UG/L	10 U	10 U
44	Fluoranthene	UG/L	10 U	10 U
45	Fluorene	UG/L	10 U	10 U
46	Hexachlorobenzene	UG/L	10 U	10 U
47	Hexachlorobutadiene	UG/L	10 U	10 U
48	Hexachlorocyclopentadiene	UG/L	10 U	10 U
49	Hexachloroethane	UG/L	10 U	10 U
50	Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U
51	Isophorone	UG/L	10 U	10 U
52	N-Nitroso-di-n-ctopylamine	UG/L	10 U	. 10 U
53	N-Nitrosodiphenylamine (1)	UG/L	10 U	10 U
54	Naphthalene	UG/L	10 U	10 U
55	Nitrobenzene	UG/L	10 U	10 U
56	Pentachlorophenol	UG/L	<b>2</b> 6 U	26 U
57	Phenanthrene	UG/L	10 U	10 U
58	Phenol	UG/L	10 U	10 U
59	Pyrene	UG/L	10 U	10 U
60	benzo(k)fluoranthene	UG/L	10 U	10 U
61	bis(2-Chloroethoxy) methane	UG/L	10 U	10 U
62	bis(2-Chloroethyl) ether	UG/L	10 U	10 U
63	bis(2-Chloroisoctopyl) ether	UG/L	10 U	10 U
64	bis(2-Ethylhexyl)phthalate	UG/L	13 B	6 BJ

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SVOCs						
STUDY		54287 PHASE 1	54287 PHASE 1	54287 PHASE 1	54287 PHASE 1	54287 PHASE 1
MATT		WATER	WATER	WATER	WATER	WATER
LAB SAMP.		275065	275065	275065	275442	273457
EPA SAMP.		SW26-10MS	SW26-10MSD	SW26-10	SW26-12	SW26-2
QC CO		MS	MSD	SA	SA	SA
% MOISTU						
% SOLI	DS:					
PARAMET		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/L	50	46	<b>20</b> Ù	11 U	10 U
1 1,2,4-Trichlorobenzene	UG/L	50	46	<b>20</b> U	11 U	10 U
2 1,2-Dichlorobenzene	UG/L	20 U	21 U	<b>20</b> U	11 U	10 U
3 1,3-Dichlorobenzene	UG/L	20 U	21 U	<b>20</b> U	11 U	10 U
4 1,4-Dichlorobenzene	UG/L	46	44	20 U	11 U	10 U
5 2,4,5-Trichlorophenol	UG/L	51 U	<b>52</b> U	51 U	28 U	25 U
6 2,4,6-Trichlorophenol	UG/L	20 U	21 U	<b>20</b> U	11 U	10 U
7 2,4-Dichlorophenol	UG/L	20 U	21 U	<b>2</b> 0 U	11 U	10 U
8 2,4-Dimethylphenol	UG/L	20 U	21 U	20 U	11 U	10 U
9 2,4-Dinitrophenol	UG/L	51 U	52 U	51 U	28 U	<b>25</b> U
10 2,4-Dinitrotoluene	UG/L	32	36	20 U	11 U	10 U
11 2,6-Dinitrotoluene	UG/L	20 U	21 U	<b>20</b> U	11 U	10 U
12 2-Chloronaphthalene	UG/L	20 U	21 U	20 U	11 U	10 U
13 2-Chlorophenol	UG/L	72	78	20 U	11 U	10 U
14 2-Methylnaphthalene	UG/L	20 U	21 U	20 U	11 U	10 U
15 2-Methylphenol	UG/L	20 U	21 U	20 U	11 U	10 U
16 2-Nitroaniline	UG/L	51 U	52 U	51 U	28 U	25 U
17 2-Nitrophenol	UG/L	20 U	21 U	20 U	11 U	10 U
18 3,3'-Dichlorobenzidine	UG/L	<b>20</b> U	21 U	20 U	11 U	10 U
19 3-Nitroaniline	UG/L	51 U	52 U	51 U	28 U	25 U
20 4,6-Dinitro-2-methylphenol	UG/L	51 U	52 U	51 U	28 U	25 U
21 4-Bromophenyl-phenylether	UG/L	20 U	21 U	<b>2</b> 0 U	11 U	10 U
22 4-Chloro-3-methylphenol	UG/L	77	72	20 U	11 U	10 U
23 4-Chloroaniline	UG/L	20 U	21 U	20 U	11 U	10 U
24 4-Chlorophenyl-phenylether	UG/L	20 U	21 U	20 U	11 U	10 U
25 4-Methylphenol	UG/L	20 U	<b>21</b> U	20 U	11 U	10 U
26 4-Nitroaniline	UG/L	. 51 U	52 U	51 U	28 U	25 U
27 4-Nitrophenol	UG/L	76	80	51 U	28 U	25 U
28 Acenaphthene	UG/L	48	45	20 U	11 U	10 U
29 Acenaphthylene	UG/L	20 U	21 U	20 U	11 U	10 U
30 Anthracene	UG/L	20 U	21 U	20 U	11 U	10 U
31 Benzo(a)anthracene	UG/L	20 U	21 U	20 U	11 U	10 U
32 Benzo(a)pyrene	UG/L	20 U	21 U	20 U	11 U	10 U
33 Benzo(b)fluoranthene	UG/L	20 U	21 U	20 U	11 U	10 U 10 U
34 Benzo(g,h,i)perylene	UG/L	20 U	21 U	20 U	11 U	
5 i Donno (E, ii, i )poi j iono	OGL	20 0	21 0	20 0	11 U	10 U

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01000	OG:	54287	54287	54007	54287	54287
				54287		
STUDY		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATR		WATER	WATER	WATER	WATER	WATER
LAB SAMP.		275065	275065	275065	275442	273457
EPA SAMP.		SW26-10MS	SW26-10MSD	SW26-10	SW26-12	SW26-2
QC COI		MS	MSD	SA	SA	SA
% MOISTU	RE:					
% SOLI	DS:					
PARAMET	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/L	50	46	20 U	11 U	10 U
35 Butylbenzylphthalate	UG/L	<b>2</b> 0 U	21 U	20 U	11 U	10 U
36 Carbazole	UG/L	20 U	<b>21</b> U	<b>2</b> 0 U	11 U	10 U
37 Chrysene	UG/L	20 U	21 U	20 U	11 U	10 U
38 Di-n-butylphthalate	UG/L	20 U	21 U	20 U	11 U	10 U
39 Di-n-oprylphthalate	UG/L	<b>20</b> U	21 U	20 U	11 U	10 U
40 Dibenz(a,h)anthracene	UG/L	20 U	21 U	20 U	11 U	10 U
41 Dibenzofuran	UG/L	20 U	21 U	20 U	11 U	10 U
42 Diethylphthalate	UG/L	<b>2</b> 0 U	21 U	20 U	11 U	10 U
43 Dimethylphthalate	UG/L	20 U	21 U	20 U	11 U	10 U
44 Fluoranthene	UG/L	<b>2</b> 0 U	21 U	20 U	11 U	10 U
45 Fluorene	UG/L	<b>2</b> 0 U	21 U	20 U	11 U	10 U
46 Hexachlorobenzene	UG/L	20 U	<b>2</b> 1 U	20 U	11 U	10 U
47 Hexachlorobutadiene	UG/L	<b>2</b> 0 U	21 U	<b>20</b> U	11 U	10 U
48 Hexachlorocyclopentadiene	UG/L	20 U	21 U	20 U	11 U	10 U
49 Hexachloroethane	UG/L	20 U	<b>21</b> U	<b>2</b> 0 U	11 U	10 U
50 Indeno(1,2,3-cd)pyrene	UG/L	20 U	21 U	20 U	11 U	10 U
51 Isophorone	UG/L	<b>2</b> 0 U	<b>21</b> U	<b>20</b> U	11 U	10 U
52 N-Nitroso-di-n-ctopylamine	UG/L	47	50	20 U	11 U	10 U
53 N-Nitrosodiphenylamine (1)	UG/L	20 U	21 U	20 U	11 U	10 U
54 Naphthalene	UG/L	20 U	21 U	<b>2</b> 0 U	ິ 11 U	10 U
55 Nitrobenzene	UG/L	20 U	21 U	<b>20</b> U	11 U	10 U
56 Pentachlorophenol	UG/L	90	83	51 U	28 U	25 U
57 Phenanthrene	UG/L	<b>2</b> 0 U	21 U	20 U	11 U	10 U
58 Phenol	UG/L	78	78	20 U	11 U	10 U
59 Pyrene	UG/L	42	40	20 U	11 U	10 U
60 benzo(k)fluoranthene	UG/L	20 U	<b>21</b> U	20 U	11 U	10 U
61 bis(2-Chloroethoxy) methane	UG/L	<b>20</b> U	<b>2</b> 1 U	20 U	11 U	10 U
62 bis(2-Chloroethyl) ether	UG/L	. 20 U	21 U	20 U	11 U	10 U
63 bis(2-Chloroisoctopyl) ether	UG/L	20 U	21 U	20 U	11 U	10 U
64 bis(2-Ethylhexyl)phthalate	UG/L	6 BJ	6 BJ	5 BJ	3 BJ	35 B
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21	70	US.

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	DG:	54287	54287	54287	54287	54287
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE I	PHASE I
MATR	UX:	WATER	WATER	WATER	WATER	WATER
LAB SAMP.	ID:	273623	273458	273459	273460	273461
EPA SAMP.		SW26-3	SW26-4	SW26-5	SW26-6	SW26-7
QC CO		SA	SA	SA	SA	SA
% MOISTU				521	671	Of t
% SOLI						
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PARAME1	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1.2.4-Trichlorobenzene	UG/L	10 U	10 U	15 Ü	10 U	10 U
1 1,2,4-Trichlorobenzene	UG/L	10 U	10 U	15 U	10 U	10 U
2 1,2-Dichlorobenzene	UG/L	10 U	10 U	15 U	10 U	10 U
3 1,3-Dichlorobenzene	UG/L	10 U	10 U	15 U	10 U	10 U
4 1,4-Dichlorobenzene	UG/L	10 U	10 U	15 U	10 U	10 U
5 2,4,5-Trichlorophenol	UG/L	25 U	<b>2</b> 6 U	37 U	25 U	26 U
6 2,4,6-Trichlorophenol	UG/L	10 U	10 U	15 U	10 U	10 U
7 2,4-Dichlorophenol	UG/L	10 U	10 U	15 U	10 U	10 U
8 2,4-Dimethylphenol	UG/L	10 U	10 U	15 U	10 U	10 U
9 2,4-Dinitrophenol	UG/L	25 U	26 U	37 U	25 U	26 U
10 2,4-Dinitrotoluene	UG/L	10 U	10 U	15 U	10 U	10 U
11 2,6-Dinitrotoluene	UG/L	10 U	10 U	15 U	10 U	10 U
12 2-Chloronaphthalene	UG/L	10 U	10 U	15 U	10 U	10 U
13 2-Chlorophenol	UG/L	10 U	10 U	15 U	10 U	10 U
14 2-Methylnaphthalene	UG/L	10 U	10 U	15 U	10 U	10 U
15 2-Methylphenol	UG/L	10 U	10 U	15 U	10 U	10 U
16 2-Nitroaniline	UG/L	25 U	26 U	37 U	25 U	26 U
17 2-Nitrophenol	UG/L	10 U	10 U	15 U	10 U	10 U
18 3,3'-Dichlorobenzidine	UG/L	10 U	10 U	15 U	10 U	10 U
19 3-Nitroaniline	UG/L	25 U	26 U	37 U	25 U	26 U
20 4,6-Dinitro-2-methylphenol	UG/L	25 U	26 U	37 U	25 U	26 U
21 4-Bromophenyl-phenylether	UG/L	10 U	10 U	15 U	10 U	10 U
22 4-Chloro-3-methylphenol	UG/L	10 U	10 U	15 U	10 U	10 U
23 4-Chloroaniline	UG/L	10 U	10 U	15 U	10 U	10 U
24 4-Chlorophenyl-phenylether	UG/L	10 U	10 U	15 U	10 U	10 U
25 4-Methylphenol	UG/L	10 U	10 U	15 U	10 U	10 U
26 4-Nitroaniline	UG/L	25 U	26 U	37 U	25 U	26 U
27 4-Nitrophenol	UG/L	25 U	26 U	37 U	25 U	26 U
28 Acenaphthene	UG/L	10 U	10 U	15 U	10 U	
29 Acenaphthylene	UG/L	10 U	10 U	15 U	10 U	10 U 10 U
30 Anthracene	UG/L	10 U	10 U	15 U	10 U	
31 Benzo(a)anthracene	UG/L	10 U	10 U	15 U	10 U	10 U
32 Benzo(a)pyrene	UG/L	10 U	10 U	15 U	10 U	10 U
33 Benzo(b)fluoranthene	UG/L	10 U	10 U	15 U	10 U	10 U
34 Benzo(g,h,i)perylene	UG/L	10 U	10 U	15 U	10 U 10 U	10 U
J. Zemo(Bini)per Jiene	30/1	10 0	10 0	15 0	10 0	10 U

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SD	·G·	54287	54287	54287	54287	54287
STUDY I		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRI		WATER	WATER	WATER	WATER	WATER
LAB SAMP. 1		273623	273458	273459	273460	273461
EPA SAMP. 1		SW26-3	SW26-4	SW26-5	SW26-6	SW26-7
QC COL		SA SA	SA SA	SA SA	SA SA	SA
% MOISTUR		SA	5A	SA	br.	27.1
% SOLII	28:					
PARAMET	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/L	10 U	10 U	15 U	10 U	10 U
35 Butylbenzylphthalate	UG/L	10 U	10 U	15 U	10 U	10 U
36 Carbazole	UG/L	10 U	10 U	15 U	10 U	10 U
37 Chrysene	UG/L	10 U	10 U	15 U	10 U	10 U
38 Di-n-butylphthalate	UG/L	10 U	10 U	15 ·U	. 10 U	10 U
39 Di-n-oprylphthalate	UG/L	10 U	10 U	15 U	10 U	10 U
40 Dibenz(a,h)anthracene	UG/L	10 U	10 U	15 U	10 U	10 U
41 Dibenzofuran	UG/L	10 U	10 U	15 U	10 U	10 U
42 Diethylphthalate	UG/L	10 U	3 Ј	15 U	10 U	10 U
43 Dimethylphthalate	UG/L	10 U	10 U	15 U	10 U	10 U
44 Fluoranthene	UG/L	10 U	10 U	15 U	10 U	10 U
45 Fluorene	UG/L	10 U	10 U	15 U	10 U	10 U
46 Hexachlorobenzene	UG/L	10 U	10 U	15 U	10 U	10 U
47 Hexachlorobutadiene	UG/L	10 U	10 U	15 U	10 U	10 U
48 Hexachlorocyclopentadiene	UG/L	10 U	10 U	15 U	10 U	10 U
49 Hexachloroethane	UG/L	10 U	10 U	15 U	10 U	10 U
50 Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U	15 U	10 U	10 U
51 Isophorone	UG/L	10 U	10 U	15 U	10 U	10 U
52 N-Nitroso-di-n-ctopylamine	UG/L	10 U	10 U	15 U	10 U	10 U
53 N-Nitrosodiphenylamine (1)	UG/L	10 U	10 U	15 U	10 U	, 10 U
54 Naphthalene	UG/L	10 U	10 U	15 U	10 U	10 U
55 Nitrobenzene	UG/L	10 U	10 U	15 U	10 U	10 U
56 Pentachlorophenol	UG/L	25 U	26 U	37 U	25 U	<b>2</b> 6 U
57 Phenanthrene	UG/L	10 U	10 U	15 U	10 U	10 U
58 Phenol	UG/L	10 U	10 U	15 U	10 U	10 U
59 Pyrene	UG/L	10 U	10 U	15 U	10 U	10 U
60 benzo(k)fluoranthene	UG/L	10 U	10 U	15 U	10 U	10 U
61 bis(2-Chloroethoxy) methane	UG/L	10 U	10 U	15 U	10 U	10 U
62 bis(2-Chloroethyl) ether	UG/L	10 U	10 U	15 U	10 U	10 U
63 bis(2-Chloroisoctopyl) ether	UG/L	10 U	10 U	15 U	10 U	10 U
64 bis(2-Ethylhexyl)phthalate	UG/L	5 BJ	15 B	71 B	<b>20</b> B	7 BJ

	SI	G:	54287	54287
	STUDY	ID:	PHASE 1	PHASE 1
	MATR	IX:	WATER	WATER
	LAB SAMP.	ID:	275441	273462
	EPA SAMP.	ID:	SW26-8	SW26-9
	QC COI	DE:	SA	SA
	% MOISTUI	RE:		
	% SOLII	OS:		
	PARAMET	ER UNIT	VALUE Q	VALUE Q
1	1,2,4-Trichlorobenzene	UG/L	11 U	10 U
1	1,2,4-Trichlorobenzene	UG/L	11 U	10 U
2	1,2-Dichlorobenzene	UG/L	11 U	10 U
3	1,3-Dichlorobenzene	UG/L	11 U	10 U
4	1,4-Dichlorobenzene	UG/L	11 U	10 U
5	2,4,5-Trichlorophenol	UG/L	27 U	25 U
6	2,4,6-Trichlorophenol	UG/L	11 U	10 U
7	2,4-Dichlorophenol	UG/L	11 U	10 U
8	2,4-Dimethylphenol	UG/L	11 U	10 U
9	2,4-Dinitrophenol	UG/L	<b>27</b> U	<b>25</b> U
10	2,4-Dinitrotoluene	UG/L	11 U	10 U
11	2,6-Dinitrotoluene	UG/L	11 U	10 U
12	2-Chloronaphthalene	UG/L	11 U	10 U
13	2-Chlorophenol	UG/L	11 U	10 U
	2-Methylnaphthalene	UG/L	11 U	10 U
15	2-Methylphenol	UG/L	11 U	10 U
	2-Nitroaniline	UG/L	27 U	25 U
	2-Nitrophenol	UG/L	11 U	10 U
	3,3'-Dichlorobenzidine	UG/L	11 U	10 U
	3-Nitroaniline	UG/L	27 U	25 U
	4,6-Dinitro-2-methylphenol	UG/L	27 U	25 U
	4-Bromophenyl-phenylether	UG/L	11 U	10 U
	4-Chloro-3-methylphenol	UG/L	11 U	10 U
	4-Chloroaniline	UG/L	11 U	10 U
	4-Chlorophenyl-phenylether	UG/L	11 U	10 U
	4-Methylphenol	UG/L	11 U	10 U
	4-Nitroaniline	UG/L	27 U	25 U
	4-Nitrophenol	UG/L	27 U	25 U
	Acenaphthene	UG/L	, 11 U	10 U
	Acenaphthylene	UG/L	11 U	10 U
	Anthracene	UG/L	11 U	10 U
	Benzo(a)anthracene	UG/L	11 U	10 U
	Benzo(a)pyrene	UG/L	11 U	10 U
	Benzo(b)fluoranthene	UG/L	11 U	10 U
34	Benzo(g,h,i)perylene	UG/L	11 U	10 U

SVO	Cs			
	SDO	3:	54287	54287
	STUDY II	<b>D</b> :	PHASE 1	PHASE 1
	MATRI	K:	WATER	WATER
	LAB SAMP. II	<b>D</b> :	275441	273462
	EPA SAMP. II	<b>D</b> :	SW26-8	SW26-9
	OC COD	E:	SA	SA
	% MOISTUR			
	% SOLID		,	
	PARAMETE		VALUE Q	VALUE Q
	1,2,4-Trichlorobenzene	UG/L	11 U	10 U
	Butylbenzylphthalate	UG/L	11 U	10 U
	Carbazole	UG/L	11 U	10 Ü
37	Chrysene	UG/L	11 U	10 U
38	Di-n-butylphthalate	UG/L	11 U	1 J
39	Di-n-oprylphthalate	UG/L	11 U	10 U
40	Dibenz(a,h)anthracene	UG/L	11 U	10 U
41	Dibenzofuran	UG/L	11 U	10 U
42	Diethylphthalate	UG/L	11 U	10 U
43	Dimethylphthalate	UG/L	11 U	10 U
44	Fluoranthene	UG/L	11 U	10 U
45	Fluorene	UG/L	11 U	10 U
46	Hexachlorobenzene	UG/L	11 U	10 U
47	Hexachlorobutadiene	UG/L	11 U	10 U
48	Hexachlorocyclopentadiene	UG/L	11 U	10 U
	Hexachloroethane	UG/L	11 U	10 U
50	Indeno(1,2,3-cd)pyrene	UG/L	11 U	10 U
	Isophorone	UG/L	11 U	10 U
	N-Nitroso-di-n-ctopylamine	UG/L	11 U	10 U
	N-Nitrosodiphenylamine (1)	UG/L	11 U	10 U
	Naphthalene	UG/L	11 U	10 U
	Nitrobenzene	UG/L	11 U	10 U
56	Pentachlorophenol	UG/L	27 U	25 U
	Phenanthrene	UG/L	11 U	10 U
58	Phenol	UG/L	11 U	10 U
59	Pyrene	UG/L	11 U	10 U
	benzo(k)fluoranthene	UG/L	11 U	10 U
	bis(2-Chloroethoxy) methane	UG/L	11 U	10 U
	bis(2-Chloroethyl) ether	UG/L	. 11 U	10 U
	bis(2-Chloroisoctopyi) ether	UG/L	11 U	10 U
	bis(2-Ethylhexyl)phthalate	UG/L	11 U	5 BJ
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	S	DG:	54287	54287
	STUDY	7 ID:	PHASE 1	PHASE 1
	MAT	RIX:	WATER	WATER
	LAB SAMP	. ID:	275067	275066
	EPA SAMP	. ID:	SW26-11	SD26-10R
	oc co	DDE:	DU	FB
	% MOIST			
	% SOL	IDS:		
	PARAME		VALUE Q	VALUE Q
	1,2,4-Trichlorobenzene	UG/L	10 U	10 U
1	1,2,4-Trichlorobenzene	UG/L	10 U	10 U
2	1,2-Dichlorobenzene	UG/L	10 U	10 U
	1,3-Dichlorobenzene	UG/L	10 U	10 U
	1,4-Dichlorobenzene	UG/L	10 U	10 U
	2,4,5-Trichlorophenol	UG/L	<b>2</b> 6 U	26 U
	2,4,6-Trichlorophenol	UG/L	10 U	10 U
	2,4-Dichlorophenol	UG/L	10 U	10 U
	2,4-Dimethylphenol	UG/L	10 U	10 U
9	2,4-Dinitrophenol	UG/L	<b>2</b> 6 U	<b>26</b> U
	2,4-Dinitrotoluene	UG/L	10 U	10 U
	2,6-Dinitrotoluene	UG/L	10 U	10 U
12	2-Chloronaphthalene	UG/L	10 U	10 U
	2-Chlorophenol	UG/L	10 U	10 U
	2-Methylnaphthalene	UG/L	10 U	10 U
15	2-Methylphenol	UG/L	10 U	10 U
16	2-Nitroaniline	UG/L	26 U	<b>2</b> 6 U
	2-Nitrophenol	UG/L	10 U	10 U
	3,3'-Dichlorobenzidine	UG/L	10 U	. 10 U
	3-Nitroaniline	UG/L	26 U	26 U
	4,6-Dinitro-2-methylphenol	UG/L	<b>2</b> 6 U	26 U
	4-Bromophenyl-phenylether	UG/L	10 U	10 U
	4-Chloro-3-methylphenoi	UG/L	10 U	10 U
	4-Chloroaniline	UG/L	10 U	10 U
	4-Chlorophenyl-phenylether	UG/L	10 U	10 U
	4-Methylphenol	UG/L	10 U	10 U
	4-Nitroaniline	UG/L	26 U	26 U
	4-Nitrophenol	UG/L	26 U	26 U
	Acenaphthene	UG/L	10 U	10 U
	Acenaphthylene	UG/L	10 U	10 U
	Anthracene	UG/L	10 U	10 U
	Benzo(a)anthracene	UG/L	10 U	10 U
	Benzo(a)pyrene	UG/L	10 U	10 U
	Benzo(b)fluoranthene	UG/L	10 U	10 U
34	Benzo(g,h,i)perylene	UG/L	10 U	10 U

SVO	US			
	SDC	<del>}</del> :	54287	54287
	STUDY II	<b>)</b> :	PHASE 1	PHASE 1
	MATRIX	ζ:	WATER	WATER
	LAB SAMP. II	<b>)</b> :	275067	275066
	EPA SAMP. II	):	SW26-11	SD26-10R
	QC CODI	Ξ:	DU	FB
	% MOISTURI	E:		
	% SOLIDS	S:		
	PARAMETE	R UNIT	VALUE Q	VALUE Q
1	1,2,4-Trichlorobenzene	UG/L	10 U	10 U
	Butylbenzylphthalate	UG/L	10 U	10 U
	Carbazole	UG/L	10 U	10 U
	Chrysene	UG/L	10 U	10 U
	Di-n-butylphthalate	UG/L	10 U	10 U
	Di-n-oprylphthalate	UG/L	10 U	10 U
	Dibenz(a,h)anthracene	UG/L	10 U	10 U
	Dibenzofuran	UG/L	10 U	10 U
	Diethylphthalate	UG/L	10 U	10 U
	Dimethylphthalate	UG/L	10 U	10 U
	Fluoranthene	UG/L	10 U	10 U
	Fluorene	UG/L	10 U	10 U
	Hexachlorobenzene	UG/L	10 U	10 U
	Hexachlorobutadiene	UG/L	10 U	10 U
	Hexachlorocyclopentadiene	UG/L	10 U	10 U
	Hexachloroethane	UG/L	10 U	10 U
	Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U
	Isophorone	UG/L	10 U	10 U
	N-Nitroso-di-n-ctopylamine	UG/L	10 U	10 U
	N-Nitrosodiphenylamine (1)	UG/L	10 U	10 U
	Naphthalene	UG/L	10 U	10 U
	Nitrobenzene	UG/L	10 U	10 U
56	Pentachlorophenol	UG/L	26 U	26 U
	Phenanthrene	UG/L	10 U	10 U
58	Phenol	UG/L	10 U	10 U
59	Pyrene	UG/L	10 U	10 U
	benzo(k)fluoranthene	UG/L	10 U	10 U
	bis(2-Chloroethoxy) methane	UG/L	10 U	10 U
	bis(2-Chloroethyl) ether	UG/L	10 U	10 U
	bis(2-Chloroisoctopyl) ether	UG/L	10 U	10 U
64	bis(2-Ethylhexyl)phthalate	UG/L	13 B	6 BJ
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· SVOCs

34003						
S	SDG:	54287	54287	54287	54287	54287
STUDY	Z ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MAT		WATER	WATER	WATER	WATER	WATER
LAB SAMP		275065	275065	275065	275442	273457
EPA SAMP		SW26-10MS	SW26-10MSD	SW26-10	SW26-12	SW26-2
QC CC		MS	MSD	SA SA	SA SA	SW 20-2
% MOIST		1413	MSD	SA	SA	SA
% SOL						
76 SOL	шз.					
PARAME	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE O
1 1,2,4-Trichlorobenzene	UG/L	50	46	20 U	11 U	10 U
1 1,2,4-Trichlorobenzene	UG/L	50	46	20 U	11 U	10 U
2 1,2-Dichlorobenzene	UG/L	20 U	21 U	20 U	11 U	10 U
3 1,3-Dichlorobenzene	UG/L	20 U	21 U	20 U	11 U	10 U
4 1,4-Dichlorobenzene	UG/L	46	44	20 U	11 U	10 U
5 2,4,5-Trichlorophenol	UG/L	51 U	52 U	51 U	28 U	25 U
6 2,4,6-Trichlorophenol	UG/L	20 U	21 U	20 U	28 U 11 U	10 U
7 2,4-Dichlorophenol	UG/L	20 U	21 U	20 U	11 U	10 U
8 2,4-Dimethylphenol	UG/L	20 U	21 U	20 U	11 U	10 U
9 2,4-Dinitrophenol	UG/L	51 U	52 U	51 U	28 U	25 U
10 2,4-Dinitrotoluene	UG/L	32	36	20 U	11 U	10 U
11 2,6-Dinitrotoluene	UG/L	20 U	21 U	20 U	11 U	10 U
12 2-Chloronaphthalene	UG/L	20 U	21 U	20 U	11 U	
13 2-Chlorophenol	UG/L	72	78	20 U		10 U
14 2-Methylnaphthalene	UG/L	20 U	76 21 U	20 U	11 U 11 U	10 U
15 2-Methylphenol	UG/L	20 U	21 U	20 U	11 U	10 U
16 2-Nitroaniline	UG/L	51 U	52 U	51 U	28 U	10 U 25 U
17 2-Nitrophenol	UG/L	20 U	21 U	20 U	28 U 11 U	
18 3,3'-Dichlorobenzidine	UG/L	20 U	. 21 U	20 U	11 U	10 U
19 3-Nitroaniline	UG/L	51 U	52 U	20 U	28 U	10 U 25 U
20 4,6-Dinitro-2-methylphenol	UG/L	51 U	52 U	51 U	28 U	
21 4-Bromophenyl-phenylether	UG/L	20 U	21 U	20 U	28 U 11 U	25 U
22 4-Chloro-3-methylphenol	UG/L	77	72	20 U	11 U	10 U
23 4-Chloroaniline	UG/L	20 U	21 U	20 U	11 U	10 U
24 4-Chlorophenyl-phenylether	UG/L	20 U	21 U	20 U	11 U	10 U
25 4-Methylphenol	UG/L	20 U	21 U	20 U	11 U	10 U
26 4-Nitroaniline	UG/L	51 U	52 U	51 U	28 U	10 U
27 4-Nitrophenol	UG/L	76	80	51 U	28 U	25 U
28 Acenaphthene	UG/L	48	45	20 U	28 U 11 U	25 U
29 Acenaphthylene	UG/L	20 U	21 U	20 U	11 U	10 U
30 Anthracene	UG/L	20 U	21 U	20 U	11 U	10 U
31 Benzo(a)anthracene	UG/L	20 U	21 U	20 U	11 U	10 U
32 Benzo(a)pyrene	UG/L	20 U	21 U	20 U		10 U
33 Benzo(b)fluoranthene	UG/L	20 U	21 U	20 U	11 U 11 U	10 U
34 Benzo(g,h,i)perylene	UG/L	20 U	21 U	20 U	11 U 11 U	10 U
2 vimo(Birit)horitone	OGIL	20 0	21 0	20 0	11 0	10 U .

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SVOCS						
SD	G:	54287	54287	54287	54287	54287
STUDY I	D:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRI	X:	WATER	WATER	WATER	WATER	WATER
LAB SAMP. I	D:	275065	275065	275065	275442	273457
EPA SAMP. I	D:	SW26-10MS	SW26-10MSD	SW26-10	SW26-12	SW26-2
QC COD	E:	MS	MSD	SA	SA	SA
% MOISTUR						
% SOLII	OS:					
PARAMET	ER UNIT ,	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1.2.4-Trichlorobenzene	UG/L	50	46	20 U	11 U	10 U
35 Butylbenzylphthalate	UG/L	20 U	21 U	<b>20</b> U	11 U	10 U
36 Carbazole	UG/L	20 U	21 U	20 U	11 U	10 U
37 Chrysene	UG/L	20 U	21 U	<b>2</b> 0 U	11 U	10 U
38 Di-n-butylphthalate	UG/L	20 U	21 U	<b>20</b> U	11 U	10 U
39 Di-n-oprylphthalate	UG/L	20 U	21 U	20 U	11 U	10 U
40 Dibenz(a,h)anthracene	UG/L	20 U	21 U	<b>2</b> 0 U	11 U	10 U
41 Dibenzofuran	UG/L	20 U	21 U	20 U	11 U	10 U
42 Diethylphthalate	UG/L	20 U	21 U	20 U	11 U	10 U
43 Dimethylphthalate	UG/L	20 U	<b>21</b> U	20 U	11 U	10 U
44 Fluoranthene	UG/L	20 U	21 U	20 U	11 U	10 U
45 Fluorene	UG/L	20 U	<b>21</b> U	20 U	11 U	10 U
46 Hexachlorobenzene	UG/L	20 U	21 U	20 U	11 U	10 U
47 Hexachlorobutadiene	UG/L	20 U	21 U	<b>20</b> U	11 U	10 U
48 Hexachlorocyclopentadiene	UG/L	20 U	21 U	20 U	11 U	10 U
49 Hexachloroethane	UG/L	20 U	21 U	20 U	11 U	10 U
50 Indeno(1,2,3-cd)pyrene	UG/L	20 U	21 U	20 U	11 U	10 U
51 Isophorone	UG/L	20 U	21 U	20 U	11 U	10 U
52 N-Nitroso-di-n-ctopylamine	UG/L	47	50	20 U	11 U	10 U
53 N-Nitrosodiphenylamine (1)	UG/L	20 U	21 U	20 U	11 U	10 U
54 Naphthalene	UG/L	20 U	21 U	20 U	11 U	10 U
55 Nitrobenzene	UG/L	20 U	<b>21</b> U	<b>2</b> 0 U	11 U	10 U
56 Pentachlorophenol	UG/L	90	83	51 U	28 U	25 U
57 Phenanthrene	UG/L	20 U	21 U	<b>20</b> U	11 U	10 U
58 Phenol	UG/L	78	78	<b>20</b> U	11 U	10 U
59 Pyrene	UG/L	42	40	<b>20</b> U	11 U	10 U
60 benzo(k)fluoranthene	UG/L	20 U	21 U	20 U	11 U	10 U
61 bis(2-Chloroethoxy) methane	UG/L	20 U	21 U	20 U	11 U	10 U
62 bis(2-Chloroethyl) ether	UG/L	20 U	21 U	20 U	11 U	10 U
63 bis(2-Chloroisoctopyl) ether	UG/L	20 U	21 U	20 U	11 U	10 U
64 bis(2-Ethylhexyl)phthalate	UG/L	6 BJ	6 BJ	5 BJ	3 BJ	35 B

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SVOCS						
S	SDG:	54287	54287	54287	54287	54287
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MAT	RIX:	WATER	WATER	WATER	WATER	WATER
LAB SAMP	. ID:	273623	273458	273459	273460	273461
EPA SAMP	. ID:	SW26-3	SW26-4	SW26-5	SW26-6	SW26-7
QC CC		SA	SA	SA	SA	SA ·
% MOIST				571	571	5/1
% SOL						
70002	200.					
PARAME	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/L	10 U	10 U	15 U	10 U	10 U
1 1,2,4-Trichlorobenzene	UG/L	10 U	10 U	15 U	10 U	10 U
2 1,2-Dichlorobenzene	UG/L	10 U	10 U	15 U	10 ·U	10 U
3 1,3-Dichlorobenzene	UG/L	10 U	10 U	15 U	10 U	10 U
4 1,4-Dichlorobenzene	UG/L	10 U	10 U	15 U	10 U	10 U
5 2,4,5-Trichlorophenol	UG/L	25 U	26 U	37 U	25 U	26 U
6 2,4,6-Trichlorophenol	UG/L	10 U	10 U	15 U	10 U	10 U
7 2,4-Dichlorophenol	UG/L	10 U	10 U	15 U	10 U	10 U
8 2,4-Dimethylphenol	UG/L	10 U	10 U	15 U	10 U	10 U
9 2,4-Dinitrophenol	UG/L	25 U	26 U	37 U	25 U	26 U
10 2,4-Dinitrotoluene	UG/L	10 U	10 U	15 U	10 U	10 U
11 2,6-Dinitrotoluene	UG/L	10 U	10 U	15 U	10 U	10 U
12 2-Chloronaphthalene	UG/L	10 U	10 U	15 U	10 U	10 U
13 2-Chlorophenol	UG/L	10 U	10 U	15 U	10 U	10 U
14 2-Methylnaphthalene	UG/L	10 U	10 U	15 U	10 U	10 U
15 2-Methylphenol	UG/L	10 U	10 U	15 U	10 U	10 U
16 2-Nitroaniline	UG/L	25 U	26 U	37 U	25 U	26 U
17 2-Nitrophenol	UG/L	10 U	10 U	15 U	10 U	10 U
18 3,3'-Dichlorobenzidine	UG/L	10 U	10 U	15 U	10 U	10 U
19 3-Nitroaniline	UG/L	25 U	26 U	37 U	25 U	26 U
20 4,6-Dinitro-2-methylphenol	UG/L	25 U	26 U	37 U	25 U	26 U
2I 4-Bromophenyl-phenylether	UG/L	10 U	10 U	15 U	10 U	10 U
22 4-Chloro-3-methylphenol	UG/L	10 U	10 U	15 U	10 U	10 U
23 4-Chloroaniline	UG/L	10 U	10 U	15 U	10 U	10 U
24 4-Chlorophenyl-phenylether	UG/L	10 U	10 U	15 U	10 U	10 U
25 4-Methylphenol	UG/L	10 U	10 U	15 U	10 U	10 U
26 4-Nitroaniline	UG/L	25 U	26 U	37 U	25 U	26 U
27 4-Nitrophenol	UG/L	25 U	<b>26</b> U	37 U	25 U	26 U
28 Acenaphthene	UG/L	10 U	10 U	15 U	10 U	10 U
29 Acenaphthylene	UG/L	10 U	10 U	15 U	10 U	10 U
30 Anthracene	UG/L	10 U	10 U	15 U	10 U	10 U
31 Benzo(a)anthracene	UG/L	10 U	10 U	15 U	10 U	10 U
32 Benzo(a)pyrene	UG/L	10 U	10 U	15 U	10 U	10 U
33 Benzo(b)fluoranthene	UG/L	10 U	10 U	15 U	10 U	10 U
34 Benzo(g,h,i)perylene	UG/L	10 U	10 U	15 U	10 U	10 U
					10 0	10 0

CZ	OCs
- O V	UCS

B + CC3						
SD	OG:	54287	54287	54287	54287	54287
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATR	IX:	WATER	WATER	WATER	WATER	WATER
LAB SAMP.	ID:	273623	273458	273459	273460	273461
EPA SAMP. 1	ID:	SW26-3	SW26-4	SW26-5	SW26-6	SW26-7
QC COI	DE:	SA	SA	SA	SA	SA
% MOISTUI	RE:					
% SOLII	OS:					
		*******	******			******
PARAMET		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/L	10 U	10 U	15 U	10 U	10 U
35 Butylbenzylphthalate	UG/L	10 U	10 U	15 U	10 U	10 U
36 Carbazole	UG/L	10 U	10 U	15 U	10 U	10 U
37 Chrysene	UG/L	10 U	10 U	15 U	10 U	10 U
38 Di-n-butylphthalate	UG/L	10 U	10 U	15 U	10 U	10 U
39 Di-n-oprylphthalate	UG/L	10 U	10 U	15 U	10 U	10 U
40 Dibenz(a,h)anthracene	UG/L	10 U	10 U	15 U	10 U	10 U
41 Dibenzofuran	UG/L	10 U	10 U	15 U	10 U	10 U
42 Diethylphthalate	UG/L	10 U	3 J	15 U	10 U	10 U
43 Dimethylphthalate	UG/L	10 U	10 U	15 U	10 U	10 U
44 Fluoranthene	UG/L	10 U	10 U	15 U	10 U	10 U
45 Fluorene	UG/L	10 U	10 U	15 U	10 U	10 U
46 Hexachlorobenzene	UG/L	10 U	10 U	15 U	10 U	10 U
47 Hexachlorobutadiene	UG/L	10 U	10 U	15 U	10 U	10 U
48 Hexachlorocyclopentadiene	UG/L	10 U	10 U	15 U	10 U	10 U
49 Hexachloroethane	UG/L	10 U	10 U	15 U	10 U	10 U
50 Indeno(1,2,3-cd)pyrene	UG/L	10 U	10 U	15 U	10 U	10 U
51 Isophorone	UG/L	10 U	10 U	15 U	10 U	10 U
52 N-Nitroso-di-n-ctopylamine	UG/L	10 U	10 U	15 U	10 U	10 U
53 N-Nitrosodiphenylamine (1)	UG/L	10 U	· 10 U	15 U	10 U	10 U
54 Naphthalene	UG/L	10 U	10 U	15 U	10 U	10 U
55 Nitrobenzene	UG/L	10 U	10 U	15 U	10 U	10 U
56 Pentachlorophenol	UG/L	25 U	26 U	37 U	25 U	26 U
57 Phenanthrene	UG/L	10 U	10 U	15 U	10 U	10 U
58 Phenol	UG/L	10 U	10 U	15 U	10 U	10 U
59 Pyrene	UG/L	10 U	10 U	15 U	10 U	10 U
60 benzo(k)fluoranthene	UG/L	10 U	10 U	15 U	10 U	10 U
61 bis(2-Chloroethoxy) methane	UG/L	10 U	10 U	15 U	10 U	10 U
62 bis(2-Chloroethyl) ether	UG/L	10 U	10 U	15 U	10 U	10 U
63 bis(2-Chloroisoctopyl) ether	UG/L	10 U	10 U	15 U	10 U	10 U
64 bis(2-Ethylhexyl)phthalate	UG/L	5 BJ	15 B	71 B	20 B	7 BJ

SI	OG:	54287	54287
STUDY	ID:	PHASE 1	PHASE 1
MATR	IX:	WATER	WATER
LAB SAMP.	ID:	275441	273462
EPA SAMP.	ID:	SW26-8	SW26-9
. QC COI	DE:	SA	SA
% MOISTU	RE:		
% SOLI	DS:		
PARAMET		VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/L	11 U	10 U
1 1,2,4-Trichlorobenzene	UG/L	11 U	10 U
2 1,2-Dichlorobenzene	UG/L	11 U	10 U
3 1,3-Dichlorobenzene	UG/L	11 U	10 U
4 1,4-Dichlorobenzene	UG/L	11 U	10 U
5 2,4,5-Trichlorophenol	UG/L	27 U	25 U
6 2,4,6-Trichlorophenol	UG/L	11 U	10 U
7 2,4-Dichlorophenol	UG/L	11 U	10 U
8 2,4-Dimethylphenol	UG/L	11 U	10 U
9 2,4-Dinitrophenol	UG/L	27 U	25 U
10 2,4-Dinitrotoluene	UG/L	11 U	10 U
11 2,6-Dinitrotoluene	UG/L	11 U	10 U
12 2-Chloronaphthalene	UG/L	11 U	10 U
13 2-Chlorophenol	UG/L	11 U	10 U
14 2-Methylnaphthalene	UG/L	11 U	10 U
15 2-Methylphenol	UG/L	11 U	10 U
16 2-Nitroaniline	UG/L	27 U	<b>25</b> U
17 2-Nitrophenol	UG/L	11 U	10 U
18 3,3'-Dichlorobenzidine	UG/L	11 U	10 U
19 3-Nitroaniline	UG/L	27 U	25 U
20 4,6-Dinitro-2-methylphenol	UG/L	27 U	25 U
21 4-Bromophenyl-phenylether	UG/L	11 U	10 U
22 4-Chloro-3-methylphenol	UG/L	11 U	10 U
23 4-Chloroaniline	UG/L	11 U	10 U
24 4-Chlorophenyl-phenylether	UG/L	11 U	10 U
25 4-Methylphenol	UG/L	11 U	10 U
26 4-Nitroaniline	UG/L	27 U	25 U
27 4-Nitrophenol	UG/L	27 U	25 U
28 Acenaphthene	UG/L	11 U	10 U
29 Acenaphthylene	UG/L	11 U	10 U
30 Anthracene	UG/L	11 U	10 U
31 Benzo(a)anthracene	UG/L	11 U	10 U
32 Benzo(a)pyrene	UG/L	11 U	10 U
33 Benzo(b)fluoranthene	UG/L	11 U	10 U
34 Benzo(g,h,i)perylene	UG/L	11 U	10 U

STUDY ID:	S	DG:	54287	54287
LAB SAMP. ID:   SW26-8   SW26-9   QC CODE:   SA   SA   SA   SA   SA   SA   SA   S	STUDY	ID:	PHASE 1	PHASE 1
EPA SAMP. ID: QC CODE: SA SA SA  % MOISTURE: % SOLIDS:  PARAMETER UNIT VALUE Q VALUE Q  1 1,2,4-Trichlorobenzene UG/L 11 U 10 U  35 Butylbenzylphthalate UG/L 11 U 10 U  36 Carbazole UG/L 11 U 10 U  37 Chrysene UG/L 11 U 10 U  38 Di-n-butylphthalate UG/L 11 U 10 U  39 Di-n-butylphthalate UG/L 11 U 10 U  40 Dibenz(a, h)anthracene UG/L 11 U 10 U  41 Dibenz(a, h)anthracene UG/L 11 U 10 U  42 Diethylphthalate UG/L 11 U 10 U  43 Diethylphthalate UG/L 11 U 10 U  44 Diethylphthalate UG/L 11 U 10 U  45 Diethylphthalate UG/L 11 U 10 U  46 Hexachlorobenzene UG/L 11 U 10 U  47 Hevachlorobenzene UG/L 11 U 10 U  48 Hexachlorobenzene UG/L 11 U 10 U  49 Hexachlorocyclopentadiene UG/L 11 U 10 U  49 Hexachlorocyclopentadiene UG/L 11 U 10 U  49 Hexachlorocyclopentadiene UG/L 11 U 10 U  50 Indeno(1,2,3-cd)pyrene UG/L 11 U 10 U  51 Isophorone UG/L 11 U 10 U  52 N-Nitroso-di-n-ctopylamine UG/L 11 U 10 U  53 N-Nitrosodiphenylamine (1) UG/L 11 U 10 U  55 Nitrobenzene UG/L 11 U 10 U  56 Pentachlorophenol UG/L 11 U 10 U  57 Phenanthrene UG/L 11 U 10 U  58 Phenol UG/L 11 U 10 U  59 Pyrene UG/L 11 U 10 U  60 benzo(k)fluoranthene UG/L 11 U 10 U  61 bis(2-Chloroethoxy) methane UG/L 11 U 10 U  62 bis(2-Chloroethoxy) ether UG/L 11 U 10 U  63 bis(2-Chloroethoxy) ether UG/L 11 U 10 U  64 bis(2-Chloroethoxy) ether UG/L 11 U 10 U	MATI	RIX:	WATER	WATER
QC CODE:         SA         SA           % MOISTURE:         % SOLIDS:           PARAMETER UNIT VALUE Q         VALUE Q           1 1,2,4-Trichlorobenzene         UG/L         11 U         10 U           35 Butylbenzylphthalate         UG/L         11 U         10 U           36 Carbazole         UG/L         11 U         10 U           37 Chrysene         UG/L         11 U         10 U           38 Di-n-butylphthalate         UG/L         11 U         10 U           40 Dibenz(a,h)anthracene         UG/L         11 U         10 U           40 Dibenz(a,h)anthracene         UG/L         11 U         10 U           41 Dibenzofuran         UG/L         11 U         10 U           42 Diethylphthalate         UG/L         11 U         10 U           43 Dimethylphthalate         UG/L         11 U         10 U           45 Fluorene         UG/L         11 U         10 U           45 Fluorene         UG/L         11 U         10 U           46 Hexachlorobutadiene         UG/L         11 U         10 U           47 Hexachlorobutadiene         UG/L         11 U         10 U           48 Hexachlorobutadiene         U	LAB SAMP	. ID:	275441	273462
## MOISTURE: ## SOLIDS:    PARAMETER	EPA SAMP	. ID:	SW26-8	SW26-9
PARAMETER   UNIT   VALUE   Q   VALUE   Q	oc co	DE:	SA	SA
PARAMETER   UNIT   VALUE   Q   VALUE   Q				
1 1,2,4-Trichlorobenzene         UG/L         11 U         10 U           35 Butylbenzylphthalate         UG/L         11 U         10 U           36 Carbazole         UG/L         11 U         10 U           37 Chrysene         UG/L         11 U         10 U           38 Di-n-butylphthalate         UG/L         11 U         1 J           39 Di-n-oprylphthalate         UG/L         11 U         10 U           40 Dibenz(a,h)anthracene         UG/L         11 U         10 U           41 Dibenzofuran         UG/L         11 U         10 U           42 Diethylphthalate         UG/L         11 U         10 U           43 Dimethylphthalate         UG/L         11 U         10 U           44 Fluoranthene         UG/L         11 U         10 U           45 Fluorene         UG/L         11 U         10 U           46 Hexachlorobenzene         UG/L         11 U         10 U           47 Hexachlorobenzene         UG/L         11 U         10 U           48 Hexachlorocyclopentadiene         UG/L         11 U         10 U           49 Hexachlorocyclopentadiene         UG/L         11 U         10 U           50 Indeno(1,2,3-ed)pyrene         UG/L         <	% SOL	IDS:		
1 1,2,4-Trichlorobenzene         UG/L         11 U         10 U           35 Butylbenzylphthalate         UG/L         11 U         10 U           36 Carbazole         UG/L         11 U         10 U           37 Chrysene         UG/L         11 U         10 U           38 Di-n-butylphthalate         UG/L         11 U         1 J           39 Di-n-oprylphthalate         UG/L         11 U         10 U           40 Dibenz(a,h)anthracene         UG/L         11 U         10 U           41 Dibenzofuran         UG/L         11 U         10 U           42 Diethylphthalate         UG/L         11 U         10 U           43 Dimethylphthalate         UG/L         11 U         10 U           44 Fluoranthene         UG/L         11 U         10 U           45 Fluorene         UG/L         11 U         10 U           46 Hexachlorobenzene         UG/L         11 U         10 U           47 Hexachlorobenzene         UG/L         11 U         10 U           48 Hexachlorocyclopentadiene         UG/L         11 U         10 U           49 Hexachlorocyclopentadiene         UG/L         11 U         10 U           50 Indeno(1,2,3-ed)pyrene         UG/L         <				
35 Butylbenzylphthalate			_	-
36 Carbazole         UG/L         11 U         10 U           37 Chrysene         UG/L         11 U         10 U           38 Di-n-butylphthalate         UG/L         11 U         10 U           39 Di-n-oprylphthalate         UG/L         11 U         10 U           40 Dibenz(a,h)anthracene         UG/L         11 U         10 U           41 Dibenzofuran         UG/L         11 U         10 U           42 Diethylphthalate         UG/L         11 U         10 U           43 Dimethylphthalate         UG/L         11 U         10 U           44 Fluoranthene         UG/L         11 U         10 U           45 Fluorene         UG/L         11 U         10 U           45 Fluorene         UG/L         11 U         10 U           46 Hexachlorobenzene         UG/L         11 U         10 U           47 Hexachlorobenzene         UG/L         11 U         10 U           48 Hexachlorocyclopentadiene         UG/L         11 U         10 U           49 Hexachlorocyclopentadiene         UG/L         11 U         10 U           50 Indeno(1,2,3-ed)pyrene         UG/L         11 U         10 U           51 Isophorone         UG/L         11 U         <				
37 Chrysene         UG/L         11 U         10 U           38 Di-n-butylphthalate         UG/L         11 U         1 J           39 Di-n-oprylphthalate         UG/L         11 U         10 U           40 Dibenz(a,h)anthracene         UG/L         11 U         10 U           41 Dibenzofuran         UG/L         11 U         10 U           42 Diethylphthalate         UG/L         11 U         10 U           43 Dimethylphthalate         UG/L         11 U         10 U           45 Fluoranthene         UG/L         11 U         10 U           45 Fluoranthene         UG/L         11 U         10 U           45 Fluorene         UG/L         11 U         10 U           46 Hexachlorobenzene         UG/L         11 U         10 U           47 Hexachlorobutadiene         UG/L         11 U         10 U           48 Hexachlorocyclopentadiene         UG/L         11 U         10 U           49 Hexachlorocyclopentadiene         UG/L         11 U         10 U           49 Hexachlorocethane         UG/L         11 U         10 U           50 Indeno(1,2,3-cd)pyrene         UG/L         11 U         10 U           51 Isophorone         UG/L         11 U </td <td></td> <td></td> <td></td> <td></td>				
38 Di-n-butylphthalate         UG/L         11 U         1 J           39 Di-n-oprylphthalate         UG/L         11 U         10 U           40 Dibenz(a,h)anthracene         UG/L         11 U         10 U           41 Dibenzofuran         UG/L         11 U         10 U           42 Diethylphthalate         UG/L         11 U         10 U           42 Dimethylphthalate         UG/L         11 U         10 U           43 Dimethylphthalate         UG/L         11 U         10 U           44 Fluoranthene         UG/L         11 U         10 U           45 Fluorene         UG/L         11 U         10 U           46 Hexachlorobutadiene         UG/L         11 U         10 U           47 Hexachlorobutadiene         UG/L         11 U         10 U           48 Hexachlorocyclopentadiene         UG/L         11 U         10 U           48 Hexachlorocyclopentadiene         UG/L         11 U         10 U           50 Indeno(1,2,3-cd)pyrene         UG/L         11 U         10 U           51 Isophorone         UG/L         11 U         10 U           52 N-Nitroso-di-n-ctopylamine         UG/L         11 U         10 U           53 N-Nitrosodiphenylamine (1)				
39 Di-n-oprylphthalate         UG/L         11 U         10 U           40 Dibenz(a,h)anthracene         UG/L         11 U         10 U           41 Dibenzofuran         UG/L         11 U         10 U           42 Diethylphthalate         UG/L         11 U         10 U           43 Dimethylphthalate         UG/L         11 U         10 U           44 Fluoranthene         UG/L         11 U         10 U           45 Fluorene         UG/L         11 U         10 U           46 Hexachlorobenzene         UG/L         11 U         10 U           47 Hexachlorobutadiene         UG/L         11 U         10 U           48 Hexachlorocyclopentadiene         UG/L         11 U         10 U           48 Hexachlorocyclopentadiene         UG/L         11 U         10 U           49 Hexachlorocyclopentadiene         UG/L         11 U         10 U           50 Indeno(1,2,3-cd)pyrene         UG/L         11 U         10 U           51 Isophorone         UG/L         11 U         10 U           52 N-Nitroso-di-n-ctopylamine         UG/L         11 U         10 U           53 N-Nitrosodiphenylamine (1)         UG/L         11 U         10 U           54 Naphthalene				
40 Dibenz(a,h)anthracene         UG/L         11 U         10 U           41 Dibenzofuran         UG/L         11 U         10 U           42 Diethylphthalate         UG/L         11 U         10 U           43 Dimethylphthalate         UG/L         11 U         10 U           44 Fluoranthene         UG/L         11 U         10 U           45 Fluorene         UG/L         11 U         10 U           46 Hexachlorobenzene         UG/L         11 U         10 U           47 Hexachlorobutadiene         UG/L         11 U         10 U           48 Hexachlorocyclopentadiene         UG/L         11 U         10 U           49 Hexachlorocethane         UG/L         11 U         10 U           50 Indeno(1,2,3-cd)pyrene         UG/L         11 U         10 U           51 Isophorone         UG/L         11 U         10 U           52 N-Nitroso-di-n-ctopylamine         UG/L         11 U         10 U           53 N-Nitrosodiphenylamine (1)         UG/L         11 U         10 U           54 Naphthalene         UG/L         11 U         10 U           55 Nitrobenzene         UG/L         11 U         10 U           56 Pentachlorophenol         UG/L	38 Di-n-butylphthalate			
41 Dibenzofuran       UG/L       11 U       10 U         42 Diethylphthalate       UG/L       11 U       10 U         43 Dimethylphthalate       UG/L       11 U       10 U         44 Fluoranthene       UG/L       11 U       10 U         45 Fluorene       UG/L       11 U       10 U         46 Hexachlorobenzene       UG/L       11 U       10 U         47 Hexachlorobutadiene       UG/L       11 U       10 U         48 Hexachlorocyclopentadiene       UG/L       11 U       10 U         49 Hexachlorocyclopentadiene       UG/L       11 U       10 U         50 Indeno(1,2,3-ed)pyrene       UG/L       11 U       10 U         51 Isophorone       UG/L       11 U       10 U         52 N-Nitroso-di-n-ctopylamine       UG/L       11 U       10 U         53 N-Nitrosodiphenylamine(1)       UG/L       11 U       10 U         54 Naphthalene       UG/L       11 U       10 U         55 Nitrobenzene       UG/L       11 U       10 U         56 Pentachlorophenol       UG/L       11 U       10 U         57 Phenol       UG/L       11 U       10 U         58 Phenol       UG/L       11 U       10 U	39 Di-n-oprylphthalate			
42 Diethylphthalate       UG/L       11 U       10 U         43 Dimethylphthalate       UG/L       11 U       10 U         44 Fluoranthene       UG/L       11 U       10 U         45 Fluorene       UG/L       11 U       10 U         46 Hexachlorobenzene       UG/L       11 U       10 U         47 Hexachlorobutadiene       UG/L       11 U       10 U         48 Hexachlorocyclopentadiene       UG/L       11 U       10 U         49 Hexachlorocyclopentadiene       UG/L       11 U       10 U         50 Indeno(1,2,3-cd)pyrene       UG/L       11 U       10 U         51 Isophorone       UG/L       11 U       10 U         52 N-Nitroso-di-n-ctopylamine       UG/L       11 U       10 U         53 N-Nitrosodiphenylamine(1)       UG/L       11 U       10 U         54 Naphthalene       UG/L       11 U       10 U         55 Nitrobenzene       UG/L       11 U       10 U         56 Pentachlorophenol       UG/L       11 U       10 U         57 Phenonthrene       UG/L       11 U       10 U         58 Phenol       UG/L       11 U       10 U         59 Pyrene       UG/L       11 U       10 U				
43 Dimethylphthalate       UG/L       11 U       10 U         44 Fluoranthene       UG/L       11 U       10 U         45 Fluorene       UG/L       11 U       10 U         46 Hexachlorobenzene       UG/L       11 U       10 U         47 Hexachlorobutadiene       UG/L       11 U       10 U         48 Hexachlorocyclopentadiene       UG/L       11 U       10 U         49 Hexachlorocyclopentadiene       UG/L       11 U       10 U         49 Hexachlorocyclopentadiene       UG/L       11 U       10 U         49 Hexachlorocyclopentadiene       UG/L       11 U       10 U         49 Hexachlorocyclopentadiene       UG/L       11 U       10 U         49 Hexachlorocyclopentadiene       UG/L       11 U       10 U         49 Hexachlorocyclopentadiene       UG/L       11 U       10 U         50 Indeno(1,2,3-cd)pyrene       UG/L       11 U       10 U         51 Isophorone       UG/L       11 U       10 U         52 N-Nitroso-di-n-ctopylamine       UG/L       11 U       10 U         53 N-Nitrosodiphenylamine (1)       UG/L       11 U       10 U         54 Naphthalene       UG/L       11 U       10 U         55 Nit	41 Dibenzofuran			
44 Fluoranthene       UG/L       11 U       10 U         45 Fluorene       UG/L       11 U       10 U         46 Hexachlorobenzene       UG/L       11 U       10 U         47 Hexachlorobutadiene       UG/L       11 U       10 U         48 Hexachlorocyclopentadiene       UG/L       11 U       10 U         49 Hexachlorocyclopentadiene       UG/L       11 U       10 U         49 Hexachlorocyclopentadiene       UG/L       11 U       10 U         50 Indeno(1,2,3-cd)pyrene       UG/L       11 U       10 U         51 Isophorone       UG/L       11 U       10 U         52 N-Nitroso-di-n-ctopylamine       UG/L       11 U       10 U         53 N-Nitrosodiphenylamine (1)       UG/L       11 U       10 U         54 Naphthalene       UG/L       11 U       10 U         55 Nitrobenzene       UG/L       11 U       10 U         56 Pentachlorophenol       UG/L       27 U       25 U         57 Phenanthrene       UG/L       11 U       10 U         58 Phenol       UG/L       11 U       10 U         59 Pyrene       UG/L       11 U       10 U         60 benzo(k)fluoranthene       UG/L       11 U	42 Diethylphthalate			
45 Fluorene       UG/L       11 U       10 U         46 Hexachlorobenzene       UG/L       11 U       10 U         47 Hexachlorobutadiene       UG/L       11 U       10 U         48 Hexachlorocyclopentadiene       UG/L       11 U       10 U         49 Hexachlorocthane       UG/L       11 U       10 U         50 Indeno(1,2,3-cd)pyrene       UG/L       11 U       10 U         51 Isophorone       UG/L       11 U       10 U         51 Isophorone       UG/L       11 U       10 U         52 N-Nitroso-di-n-ctopylamine       UG/L       11 U       10 U         53 N-Nitrosodiphenylamine (1)       UG/L       11 U       10 U         54 Naphthalene       UG/L       11 U       10 U         55 Nitrobenzene       UG/L       11 U       10 U         56 Pentachlorophenol       UG/L       11 U       10 U         57 Phenanthrene       UG/L       11 U       10 U         58 Phenol       UG/L       11 U       10 U         59 Pyrene       UG/L       11 U       10 U         60 benzo(k)fluoranthene       UG/L       11 U       10 U         61 bis(2-Chloroethoxy) methane       UG/L       11 U	43 Dimethylphthalate	1		
46 Hexachlorobenzene       UG/L       11 U       10 U         47 Hexachlorobutadiene       UG/L       11 U       10 U         48 Hexachlorocyclopentadiene       UG/L       11 U       10 U         49 Hexachloroethane       UG/L       11 U       10 U         50 Indeno(1,2,3-cd)pyrene       UG/L       11 U       10 U         51 Isophorone       UG/L       11 U       10 U         52 N-Nitroso-di-n-ctopylamine       UG/L       11 U       10 U         53 N-Nitrosodiphenylamine (1)       UG/L       11 U       10 U         54 Naphthalene       UG/L       11 U       10 U         55 Nitrobenzene       UG/L       11 U       10 U         56 Pentachlorophenol       UG/L       11 U       10 U         57 Phenanthrene       UG/L       11 U       10 U         58 Phenol       UG/L       11 U       10 U         59 Pyrene       UG/L       11 U       10 U         60 benzo(k)fluoranthene       UG/L       11 U       10 U         61 bis(2-Chloroethoxy) methane       UG/L       11 U       10 U         62 bis(2-Chloroethoyl) ether       UG/L       11 U       10 U	44 Fluoranthene			
47 Hexachlorobutadiene       UG/L       11 U       10 U         48 Hexachlorocyclopentadiene       UG/L       11 U       10 U         49 Hexachloroethane       UG/L       11 U       10 U         50 Indeno(1,2,3-cd)pyrene       UG/L       11 U       10 U         51 Isophorone       UG/L       11 U       10 U         52 N-Nitroso-di-n-ctopylamine       UG/L       11 U       10 U         53 N-Nitrosodiphenylamine (1)       UG/L       11 U       10 U         54 Naphthalene       UG/L       11 U       10 U         55 Nitrobenzene       UG/L       11 U       10 U         56 Pentachlorophenol       UG/L       11 U       10 U         57 Phenanthrene       UG/L       11 U       10 U         58 Phenol       UG/L       11 U       10 U         59 Pyrene       UG/L       11 U       10 U         60 benzo(k)fluoranthene       UG/L       11 U       10 U         61 bis(2-Chloroethoxy) methane       UG/L       11 U       10 U         62 bis(2-Chloroethoyl) ether       UG/L       11 U       10 U	45 Fluorene			
48 Hexachlorocyclopentadiene       UG/L       11 U       10 U         49 Hexachlorocthane       UG/L       11 U       10 U         50 Indeno(1,2,3-cd)pyrene       UG/L       11 U       10 U         51 Isophorone       UG/L       11 U       10 U         52 N-Nitroso-di-n-ctopylamine       UG/L       11 U       10 U         53 N-Nitrosodiphenylamine (1)       UG/L       11 U       10 U         54 Naphthalene       UG/L       11 U       10 U         55 Nitrobenzene       UG/L       11 U       10 U         56 Pentachlorophenol       UG/L       27 U       25 U         57 Phenanthrene       UG/L       11 U       10 U         58 Phenol       UG/L       11 U       10 U         59 Pyrene       UG/L       11 U       10 U         60 benzo(k)fluoranthene       UG/L       11 U       10 U         61 bis(2-Chloroethoxy) methane       UG/L       11 U       10 U         62 bis(2-Chloroethyl) ether       UG/L       11 U       10 U         63 bis(2-Chloroisoctopyl) ether       UG/L       11 U       10 U	46 Hexachlorobenzene			
49 Hexachloroethane       UG/L       11 U       10 U         50 Indeno(1,2,3-cd)pyrene       UG/L       11 U       10 U         51 Isophorone       UG/L       11 U       10 U         52 N-Nitroso-di-n-ctopylamine       UG/L       11 U       10 U         53 N-Nitrosodiphenylamine (1)       UG/L       11 U       10 U         54 Naphthalene       UG/L       11 U       10 U         55 Nitrobenzene       UG/L       11 U       10 U         56 Pentachlorophenol       UG/L       27 U       25 U         57 Phenanthrene       UG/L       11 U       10 U         58 Phenol       UG/L       11 U       10 U         59 Pyrene       UG/L       11 U       10 U         60 benzo(k)fluoranthene       UG/L       11 U       10 U         61 bis(2-Chloroethoxy) methane       UG/L       11 U       10 U         62 bis(2-Chloroethyl) ether       UG/L       11 U       10 U         63 bis(2-Chloroisoctopyl) ether       UG/L       11 U       10 U	47 Hexachlorobutadiene			
50 Indeno(1,2,3-cd)pyrene         UG/L         11 U         10 U           51 Isophorone         UG/L         11 U         10 U           52 N-Nitroso-di-n-ctopylamine         UG/L         11 U         10 U           53 N-Nitrosodiphenylamine (1)         UG/L         11 U         10 U           54 Naphthalene         UG/L         11 U         10 U           55 Nitrobenzene         UG/L         11 U         10 U           56 Pentachlorophenol         UG/L         27 U         25 U           57 Phenanthrene         UG/L         11 U         10 U           58 Phenol         UG/L         11 U         10 U           59 Pyrene         UG/L         11 U         10 U           60 benzo(k)fluoranthene         UG/L         11 U         10 U           61 bis(2-Chloroethoxy) methane         UG/L         11 U         10 U           62 bis(2-Chloroethyl) ether         UG/L         11 U         10 U           63 bis(2-Chloroisoctopyl) ether         UG/L         11 U         10 U	• •			
51 Isophorone       UG/L       11 U       10 U         52 N-Nitroso-di-n-ctopylamine       UG/L       11 U       10 U         53 N-Nitrosodiphenylamine (1)       UG/L       11 U       10 U         54 Naphthalene       UG/L       11 U       10 U         55 Nitrobenzene       UG/L       11 U       10 U         56 Pentachlorophenol       UG/L       27 U       25 U         57 Phenanthrene       UG/L       11 U       10 U         58 Phenol       UG/L       11 U       10 U         59 Pyrene       UG/L       11 U       10 U         60 benzo(k)fluoranthene       UG/L       11 U       10 U         61 bis(2-Chloroethoxy) methane       UG/L       11 U       10 U         62 bis(2-Chloroethyl) ether       UG/L       11 U       10 U         63 bis(2-Chloroisoctopyl) ether       UG/L       11 U       10 U	49 Hexachloroethane			
52 N-Nitroso-di-n-ctopylamine       UG/L       11 U       10 U         53 N-Nitrosodiphenylamine (1)       UG/L       11 U       10 U         54 Naphthalene       UG/L       11 U       10 U         55 Nitrobenzene       UG/L       11 U       10 U         56 Pentachlorophenol       UG/L       27 U       25 U         57 Phenanthrene       UG/L       11 U       10 U         58 Phenol       UG/L       11 U       10 U         59 Pyrene       UG/L       11 U       10 U         60 benzo(k)fluoranthene       UG/L       11 U       10 U         61 bis(2-Chloroethoxy) methane       UG/L       11 U       10 U         62 bis(2-Chloroethyl) ether       UG/L       11 U       10 U         63 bis(2-Chloroisoctopyl) ether       UG/L       11 U       10 U	50 Indeno(1,2,3-cd)pyrene			
53       N-Nitrosodiphenylamine (1)       UG/L       11       U       10       U         54       Naphthalene       UG/L       11       U       10       U         55       Nitrobenzene       UG/L       11       U       10       U         56       Pentachlorophenol       UG/L       27       U       25       U         57       Phenanthrene       UG/L       11       U       10       U         58       Phenol       UG/L       11       U       10       U         59       Pyrene       UG/L       11       U       10       U         60       benzo(k)fluoranthene       UG/L       11       U       10       U         61       bis(2-Chloroethoxy) methane       UG/L       11       U       10       U         62       bis(2-Chloroethyl) ether       UG/L       11       U       10       U         63       bis(2-Chloroisoctopyl) ether       UG/L       11       U       10       U				
54 Naphthalene       UG/L       11 U       10 U         55 Nitrobenzene       UG/L       11 U       10 U         56 Pentachlorophenol       UG/L       27 U       25 U         57 Phenanthrene       UG/L       11 U       10 U         58 Phenol       UG/L       11 U       10 U         59 Pyrene       UG/L       11 U       10 U         60 benzo(k)fluoranthene       UG/L       11 U       10 U         61 bis(2-Chloroethoxy) methane       UG/L       11 U       10 U         62 bis(2-Chloroethyl) ether       UG/L       11 U       10 U         63 bis(2-Chloroisoctopyl) ether       UG/L       11 U       10 U	52 N-Nitroso-di-n-ctopylamine			
55 Nitrobenzene         UG/L         11 U         10 U           56 Pentachlorophenol         UG/L         27 U         25 U           57 Phenanthrene         UG/L         11 U         10 U           58 Phenol         UG/L         11 U         10 U           59 Pyrene         UG/L         11 U         10 U           60 benzo(k)fluoranthene         UG/L         11 U         10 U           61 bis(2-Chloroethoxy) methane         UG/L         11 U         10 U           62 bis(2-Chloroethyl) ether         UG/L         11 U         10 U           63 bis(2-Chloroisoctopyl) ether         UG/L         11 U         10 U			11 U	
56 Pentachlorophenol         UG/L         27 U         25 U           57 Phenanthrene         UG/L         11 U         10 U           58 Phenol         UG/L         11 U         10 U           59 Pyrene         UG/L         11 U         10 U           60 benzo(k)fluoranthene         UG/L         11 U         10 U           61 bis(2-Chloroethoxy) methane         UG/L         11 U         10 U           62 bis(2-Chloroethyl) ether         UG/L         11 U         10 U           63 bis(2-Chloroisoctopyl) ether         UG/L         11 U         10 U	-			
57 Phenanthrene       UG/L       11 U       10 U         58 Phenol       UG/L       11 U       10 U         59 Pyrene       UG/L       11 U       10 U         60 benzo(k)fluoranthene       UG/L       11 U       10 U         61 bis(2-Chloroethoxy) methane       UG/L       11 U       10 U         62 bis(2-Chloroethyl) ether       UG/L       11 U       10 U         63 bis(2-Chloroisoctopyl) ether       UG/L       11 U       10 U	55 Nitrobenzene			
58 Phenol       UG/L       11 U       10 U         59 Pyrene       UG/L       11 U       10 U         60 benzo(k)fluoranthene       UG/L       11 U       10 U         61 bis(2-Chloroethoxy) methane       UG/L       11 U       10 U         62 bis(2-Chloroethyl) ether       UG/L       11 U       10 U         63 bis(2-Chloroisoctopyl) ether       UG/L       11 U       10 U	56 Pentachlorophenol			
59 Pyrene       UG/L       11 U       10 U         60 benzo(k)fluoranthene       UG/L       11 U       10 U         61 bis(2-Chloroethoxy) methane       UG/L       11 U       10 U         62 bis(2-Chloroethyl) ether       UG/L       11 U       10 U         63 bis(2-Chloroisoctopyl) ether       UG/L       11 U       10 U	57 Phenanthrene			
60       benzo(k)fluoranthene       UG/L       11       U       10       U         61       bis(2-Chloroethoxy) methane       UG/L       11       U       10       U         62       bis(2-Chloroethyl) ether       UG/L       11       U       10       U         63       bis(2-Chloroisoctopyl) ether       UG/L       11       U       10       U	58 Phenol			
61 bis(2-Chloroethoxy) methane       UG/L       11 U       10 U         62 bis(2-Chloroethyl) ether       UG/L       11 U       10 U         63 bis(2-Chloroisoctopyl) ether       UG/L       11 U       10 U	•			
62 bis(2-Chloroethyl) ether UG/L 11 U 10 U 63 bis(2-Chloroisoctopyl) ether UG/L 11 U 10 U				
63 bis(2-Chloroisoctopyl) ether UG/L 11 U 10 U	•			
	• • •			
64 bis(2-Ethylhexyl)phthalate UG/L 11 U 5 BJ				
	64 bis(2-Ethylhexyl)phthalate	UG/L	11 U	5 BJ

PES		

LAE EPA %1	SDG: STUDY ID: MATRIX: B SAMP. ID: A SAMP. ID: QC CODE: MOISTURE: % SOLIDS:	54287 PHASE 1 WATER 275067 SW26-11 DU	54287 PHASE 1 WATER 275066 SD26-10R FB	54287 PHASE 1 WATER 275065 SW26-10MS MS	54287 PHASE 1 WATER 275065 SW26-10MSD MSD	54287 PHASE 1 WATER 275065 SW26-10 SA
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/L	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
2 4,4'-DDE	UG/L	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
3 4,4'-DDT	UG/L	0.1 U	0.11 U	0.83	0.76	0.1 U
4 Aldrin	UG/L	0.052 U	0.054 U	0.44	0.4	0.052 U
5 Aroclor-1016	UG/L	1 U	1.1 U	1 U	1 U	1 U
6 Aroclor-1221	UG/L	2.1 U	2.2 U	2.1 U	2 U	2.1 U
7 Aroclor-1232	UG/L	1 U	1.1 U	1 U	1 U	1 U
8 Aroclor-1242	UG/L	1 U	1.1 U	1 U	1 U	1 U
9 Aroclor-1248	UG/L	1 U	1.1 U	1 U	1 U	1 U
10 Aroclor-1254	UG/L	1 U	1.1 U	1 U	1 U	1 U
11 Aroclor-1260	UG/L	1 U	1.1 U	1 U	1 U	1 U
12 Dieldrin	UG/L	0.1 U	0.11 U	0.94	0.84	0.1 U
13 Endosulfan I	UG/L	0.052 U	0.054 U	0.052 U	0.051 U	0.052 U
14 Endosulfan II	UG/L	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
15 Endosulfan sulfate	UG/L	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
16 Endrin	UG/L	0.1 U	0.11 U	0.91	0.83	0.1 U
17 Endrin aldehyde	UG/L	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
18 Endrin ketone	UG/L	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
19 Heptachlor	UG/L	0.052 U	0.054 U	. 0.45	0.41	0.052 U
20 Heptachlor epoxide	UG/L	0.052 U	0.054 U	0.052 U	0.051 U	0.052 U
21 Methoxychlor	UG/L	0.52 U	0.54 U	0.52 U	0.51 U	0.52 U
22 Toxaphene	UG/L	5.2 U	5.4 U	5.2 U	5.1 U	5.2 U
23 alpha-BHC	UG/L	0.052 U	0.054 U	0.052 U	0.051 U	0.052 U
24 alpha-Chlordane	UG/L	0.052 U	0.054 U	0.052 U	0.051 U	0.052 U
25 beta-BHC	UG/L	0.064 P	0.054 U	0.046 JP	0.03 JP	0.037 JP
26 delta-BHC	UG/L	0.052 U	0.054 U	0.052 U	0.051 U	0.052 U
27 gamma-BHC (Lindane	-	0.052 U	0.054 U	0.42	0.4	0.052 U
28 gamma-Chlordane	UG/L	0.027 JP	0.054 U	0.027 JP	0.051 U	0.026 JP

PES <sub>1</sub>	 117	г.

LAB S EPA S Q % MO	SDG: I'UDY ID: MATRIX: AMP. ID: C CODE: DISTURE: SOLIDS:	54287 PHASE 1 WATER 275442 SW26-12 SA	54287 PHASE 1 WATER 273457 SW26-2 SA	54287 PHASE 1 WATER 273623 SW26-3 SA	54287 PHASE 1 WATER 273458 SW26-4 SA	54287 PHASE 1 WATER 273459 SW26-5 SA
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 <b>4,4'-DDD</b>	UG/L	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
2 4,4'-DDE	UG/L	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
3 4,4'-DDT	UG/L	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
4 Aldrin	UG/L	0.057 U	0.05 U	0.052 U	0.051 U	0.052 U
5 Aroclor-1016	UG/L	1.1 U	1 U	1 U	1 U	1 U
6 Aroclor-1221	UG/L	2.3 U	2 U	2.1 U	2 U	2.1 U
7 Aroclor-I232	UG/L	1.1 U	1 U	1 U	1 U	1 U
8 Aroclor-1242	UG/L	1.1 U	1 U	1 U	1 U	1 U
9 Aroclor-1248	UG/L	1.1 U	1 U	1 U	1 U	1 U
10 Aroclor-1254	UG/L	1.1 U	1 U	1 U	1 U	1 U
11 Aroclor-1260	UG/L	1.1 U	1 U	1 U	1 U	1 U
12 Dieldrin	UG/L	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
13 Endosulfan I	UG/L	0.057 U	0.05 U	0.052 U	0.051 U	0.052 U
14 Endosulfan II	UG/L	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
15 Endosulfan sulfate	UG/L	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
I6 End <del>rin</del>	UG/L	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
17 Endrin aldehyde	UG/L	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
18 Endrin ketone	UG/L	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
19 Heptachlor	UG/L	0.057 U	0.05 U	0.052 U	0.03 J	0.052 U
20 Heptachlor epoxide	UG/L	0.057 U	0.05 U	0.052 U	0.051 U	0.052 U
21 Methoxychlor	UG/L	0.57 U	0.5 U	0.52 U	0.51 U	0.52 U
22 Toxaphene	UG/L	5.7 U	5 U	5.2 U	5.1 U	5.2 U
23 alpha-BHC	UG/L	0.057 U	0.05 U	0.052 U	0.051 U	0.052 U
24 alpha-Chlordane	UG/L	0.057 U	0.05 U	0.052 U	0.051 U	0.052 U
25 beta-BHC	UG/L	0.057 U	0.05 U	0.052 U	0.051 U	0.052 U
26 delta-BHC	UG/L	0.057 U	0.05 U	0.052 U	0.051 U	0.052 U
27 gamma-BHC (Lindane)	UG/L	0.057 U	0.05 U	0.052 U	0.051 U	0.052 U
28 gamma-Chlordane	UG/L	0.057 U	0.05 U	0.052 U	0.051 U	0.052 U

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	SDG: STUDY ID: MATRIX: LAB SAMP. ID: EPA SAMP. ID: QC CODE: % MOISTURE: % SOLIDS:	54287 PHASE 1 WATER 273460 SW26-6 SA	54287 PHASE 1 WATER 273461 SW26-7 SA	54287 PHASE 1 WATER 275441 SW26-8 SA	54287 PHASE 1 WATER 273462 SW26-9 SA
PARAMET	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/L	0.11 U	0.1 U	0.11 U	0.1 U
2 4,4'-DDE	UG/L	0.11 U	0.1 U	0.11 U	0.1 U
3 4,4'-DDT	UG/L	0.11 U	0.1 U	0.11 U	0.1 U
4 Aldrin	UG/L	0.053 U	0.052 U	0.054 U	0.052 U
5 Aroclor-10		1.1 U	1 <b>U</b>	1.1 U	1 U
6 Aroclor-122		<b>2.1</b> U	2.1 U	2.2 U	2.1 U
7 Aroclor-123		1.1 U	1 U	1.1 U	1 U
8 Aroclor-12	,	1.1 U	1 U	1.1 U	1 U
9 Aroclor-12	\	1.1 U	1 U	1.1 U	1 U
10 Aroclor-12:		1.1 U	1 U	1.1 U	1 U
11 Aroclor-12		1.1 U	1 U	1.1 U	1 U
12 Dieldrin	UG/L	0.11 U	0.1 U	0.11 U	0.1 U
13 Endosulfan		0.053 U	0.052 U	0.054 U	0.052 U
14 Endosulfan		0.11 U	0.1 U	0.11 U	0.1 U
15 Endosulfan		0.11 U	0.1 U	0.11 U	0.1 U
16 Endrin	UG/L	0.11 U	0.1 U	0.11 U	0.1 U
17 Endrin alde	-	0.11 U	0.1 U	0.11 U	0.1 U
18 Endrin keto		0.11 U	0.1 U	0.11 U	0.1 U
19 Heptachlor		0.053 U	0.052 U	0.054 U	0.052 U
20 Heptachlor	•	0.053 U	0.052 U	0.054 U	0.052 U
21 Methoxych		0.53 U	0.52 U	0.54 U	0.52 U
22 Toxaphene		5.3 U	5.2 U	5.4 U	5.2 U
23 alpha-BHC		0.053 U	0.052 U		0.052 U
24 alpha-Chlo		0.053 U	0.052 U	0.054 U	0.052 U
25 beta-BHC	UG/L	0.053 U	0.052 U	0.054 U	0.052 U
26 delta-BHC	UG/L	0.053 U	0.052 U	0.054 U	0.052 U
•	C (Lindane) UG/L	0.053 U	0.052 U	0.054 U	0.052 U
28 gamma-Chi	lordane UG/L	0.053 U	0.052 U	0.054 U	0.052 U

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	SDG:	54287	54287	54287	54287	54287
Si	TUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
1	MATRIX:	WATER	WATER	WATER	WATER	WATER
LAB S	AMP. ID:	275067	275066	275065	275442	273457
EPA S	AMP. ID:	SW26-11	SD26-10R	SW26-10	SW26-12	SW26-2
Q	C CODE:	DU	FB	SA	SA	SA
	DISTURE:					
	SOLIDS:	0	0	0	0	0
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	UG/L	80.3 B	19.9 B	103 B	403	161 B
2 Antimony	UG/L	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
3 Arsenic	UG/L	7.4 B	2.1 U	6.2 B	2.1 U	2.1 U
4 Barium	UG/L	57.7 B	3.4 U	50.7 B	17.8 B	26 B
5 Beryllium	UG/L	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
6 Cadmium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
7 Calcium	UG/L	46800	86.3 U	41400	33600	61500
8 Chromium	UG/L	0.5 U	0.5 U	0.5 Ü	1.1 B	0.5 U
9 Cobalt	UG/L	1 U	0.99 U	1 U	1 U	1 U
10 Copper	UG/L	0.7 U	0.87 B	0.7 U	0.93 B	1.1 B
11 Cyanide	UG/L	5 U	5 U	5 U	5 U	5 U
12 Iron	UG/L	560	20.3 B	497	466	152
13 Lead	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
14 Magnesium	UG/L	3230 B	91.7 U	2880 B	3620 B	7520
15 Manganese	UG/L	9.9 B	0.4 U	7.6 B	10.3 B	8 B
16 Mercury	UG/L	0.03 B	0.03 B	0.02 U	0.02 U	0.02 U
17 Nickel	UG/L	3.3 B	1.1 B	3.1 B	2.4 B	1.6 B
18 Potasium	UG/L	3520 B	104 U	3160 B	3210 B	2100 B
19 Selenium	UG/L	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
20 Silver	UG/L	0.8 U	0. <b>7</b> 9 U	0.8 U	0.8 U	0.8 U
21 Sodium	UG/L	3170 B	199 U	2950 B	898 B	2370 B
22 Thallium	UG/L	3 U	3 U	3 U	3 U	3 U
23 Vanadium	UG/L	1.1 U	1.1 U	1.1 U	1.4 B	1.1 U
24 Zinc	UG/L	8.6 B	2.2 B	6.8 B	6.3 B	8.1 B

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	CDC.	54207	54207	54007	5.4005	5 4005
	SDG:	54287	54287	54287	54287	54287
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	WATER	WATER	WATER	WATER	WATER
	AB SAMP. ID:	273623	273458	273459	273460	273461
EF	PA SAMP. ID:	SW26-3	SW26-4	SW26-5	SW26-6	SW26-7
	QC CODE:	SA	SA	SA	SA	SA
%	MOISTURE:					
	% SOLIDS:	0	0	0 .	0	0
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	UG/L	582	41.9 B	128 B	174 B	735
2 Antimony	UG/L	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
3 Arsenic	UG/L	2.1 U	2.1 U	3.8 B	2.3 B	2.2 B
4 Barium	UG/L	27.5 B	29.3 B	24.4 B	23.2 B	28.9 B
5 Beryllium	UG/L	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
6 Cadmium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
7 Calcium	UG/L	80500	92400	44900	43400	46300
8 Chromium	UG/L	0.5 B	0.5 U	4.1 B	3.8 B	29.2
9 Cobalt	UG/L	0.99 U	0.99 U	0.99 U	1 U	1 U
10 Copper	UG/L	2.1 B	1.2 B	1.1 B	1.6 B	3.1 B
11 Cyanide	UG/L	5 U	5 U	5 U	5 U	5 U
12 Iron	UG/L	755	52.5 B	150	196	1720
13 Lead	UG/L	1.5 U	1.5 U	1.5 U	1.5 U	2.1 B
14 Magnesium	UG/L	12300	20900	4470 B	4360 B	5220
15 Manganese	UG/L	16.9	43.8	10.2 B	10.9 B	42.7
16 Mercury	UG/L	0.02 U	0.02 B	0.02 U	0.02 B	0.03 B
17 Nickel	UG/L	2.3 B	1.2 B	2.1 B	3.1 B	35.9 B
18 Potasium	UG/L	2960 B	4050 B	3040 B	3420 B	5400
19 Selenium	UG/L	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
20 Silver	UG/L	0.79 U	0.79 U	0.79 U	0.8 U	0.8 U
21 Sodium	UG/L	1590 B	2650 B	1490 B	1420 B	
22 Thallium	UG/L	3 U	3 U	3 U	3 U	2120 B
23 Vanadium	UG/L	1.1 U	1.1 U	1.1 U		3 U
24 Zinc	UG/L	7.5 B	2.6 B	219	1.1 U	2.3 B
L T LIN	OG/L	1.J D	2.0 D	219	202	160

## **METALS**

IAICI	ALS			
		SDG:	54287	54287
		STUDY ID:	PHASE 1	PHASE 1
		MATRIX:	WATER	WATER
		LAB SAMP. ID:	275441	273462
		EPA SAMP, ID:	SW26-8	SW26-9
		QC CODE:	· SA	SA
		% MOISTURE:		
		% SOLIDS:	0	0
	PARAMETER	UNIT	VALUE	Q VALUE Q
1	Aluminimum	UG/L	2140	217
2	Antimony	UG/L	2.2	U 2.2 U
3	Arsenic	UG/L	2.9	B 2.1 U
4	Barium	UG/L	28.5	B 28.5 B
5	Beryllium	UG/L	0.27	U 0.27 U
6	Cadmium	UG/L	0.3	U 0.3 U
7	Calcium	UG/L	23700	62000
8	Chromium	UG/L	167	0.5 U
9	Cobalt	UG/L	3.5	B 1 U
10	Copper	UG/L	4	B 3.6 B
	Cyanide	UG/L	5	U 5 U
12	Iron	UG/L	6910	322
13	Lead	UG/L	6.4	1.5 U
14	Magnesium	UG/L	5240	7780
	Manganese	UG/L	128	16.4
	Mercury	UG/L	0.06	B 0.02 U
17	Nickel	UG/L	209	1.3 B
18	Potasium	UG/L	4000	B 5650
19	Selenium	UG/L	3.7	U 3.7 U
20	Silver	UG/L	0.79	U 0.8 U
21	Sodium	UG/L	1360	B 2820 B
22	Thallium	UG/L	3	U 3 U
23	Vanadium	UG/L	8.2	B 1.3 B
24	Zinc	UG/L	142	62.6

oc	3			
			54298	54298
			PHASE 1	PHASE 1
			WATER	WATER
			275516	273896
			SD25-3R	TB101195
			SA	TB
	PARAM	METER UNIT	VALUE Q	VALUE Q
	1,1,1-Trichloroethane	ug/L	10 U	10 U
	1,1,1-Trichloroethane	ug/L	10 U	10 U
1	1,1,2,2-Tetrachloroethane	ug/L	10 U	10 U
2	1,1,2-Trichloroethene	ug/L	10 U	10 U
3	1,1-Dichloroethane	ug/L	10 U	10 U
4	1,1-Dichloroethene	ug/L	10 U	10 U
5	1,2-Dichloroctopane	ug/L	10 U	10 U
6	1,2-Dichloroethane	ug/L	10 U	10 U
7	1,2-Dichloroethene (total)	ug/L	10 U	10 U
8	2-Butanone	ug/L	10 U	10 U
9	2-Hexanone	ug/L	10 U	10 U
10	4-Methyl-2-Pentanone	ug/L	10 U	10 U
11	Acetone	ug/L	10 U	10 U
12	Benzene	ug/L	10 U	10 U
13	Bromodichloromethane	ug/L	10 U	10 U
14	Bromoform	ug/L	10 U	10 U
15	Bromomethane	ug/L	10 U	10 U
16	Carbon Disulfide	ug/L	10 U	10 U
17	Carbon Tetrachloride	ug/L	10 U	. 10 U
18	Chlorobenzene	ug/L	10 U	10 U
19	Chloroethane	ug/L	10 U	10 U
20	Chloroform	ug/L	3 J	10 U
21	Chloromethane	ug/L	10 U	10 U
	Dibromochloromethane	ug/L	10 U	10 U
	Ethylbenzene	ug/L	10 U	10 U
24	Methylene Chloride	ug/L	10 U	10 U
25	Styrene	ug/L	10 U	10 U
	Tetrachloroethene	ug/L	10 U	. 10 U
27	Toluene	ug/L	10 U	10 U
	Trichloroethene	ug/L	10 U	10 U
	Vinyl Chloride	ug/L	10 U	10 U
	Xylene (total)	ug/L	10 U	10 U
	cis-1,3-Dichloroctopene	ug/L	10 U	10 U
32	trans-1,3-Dichloroctopene	ug/L	10 U	10 U

54298 PHASE 1 WATER 274881 TB101695 TB

	PARAMETER	UNIT	VALUE Q
	1,1,1-Trichloroethane	ug/L	10 U
	1,1,1-Trichloroethane	ug/L	10 U
1	1,1,2,2-Tetrachloroethane	ug/L	10 U
2	1,1,2-Trichloroethene	ug/L	10 U
3	1,1-Dichloroethane	ug/L	10 U
4	1,1-Dichloroethene	ug/L	10 U
5	1,2-Dichloroctopane	ug/L	10 U
6	1,2-Dichloroethane	ug/L	10 U
7	1,2-Dichloroethene (total)	ug/L	10 U
8	2-Butanone	ug/L	10 U
9	2-Hexanone	ug/L	10 U
10	4-Methyl-2-Pentanone	ug/L	10 U
11	Acetone	ug/L	10 U
	Benzene	ug/L	10 U
	Bromodichloromethane	ug/L	10 U
14	Bromoform	ug/L	10 U
	Bromomethane	ug/L	10 U
	Carbon Disulfide	ug/L	10 U
	Carbon Tetrachloride	ug/L	10 U
	Chlorobenzene	ug/L	10 U
	Chloroethane	ug/L	10 U
	Chloroform	ug/L	10 U
	Chloromethane	ug/L	10 U
	Dibromochloromethane	ug/L	10 U
	Ethylbenzene	ug/L	10 U
	Methylene Chloride	ug/L	10 U
	Styrene	ug/L	10 U
	Tetrachloroethene	ug/L	10 U
	Toluene	ug/L	10 U
	Trichloroethene	ug/L	10 U
	Vinyl Chloride	ug/L	10 U
	Xylene (total)	ug/L	10 U
	cis-1,3-Dichloroctopene	ug/L	10 U
32	trans-1,3-Dichloroctopene	ug/L	10 U

UC	S			
			54298	54298
			PHASE 1	PHASE 1
			SOIL	SOIL
			274887	274887
			SB25-11-00MS	SB25-11-00MSD
			MS	MSD
			21	21
	PARAM	IETER UNIT	VALUE O	VALUE O
	1,1,1-Trichloroethane	ug/Kg	13 U	VALUE Q 13 U
	1,1,1-Trichloroethane	ug/Kg ug/Kg	13 U	13 U
1	1,1,2,2-Tetrachloroethane	ug/Kg ug/Kg	13 U	
	1,1,2-Trichloroethene	~ -	13 U	13 U
	1,1-Dichloroethane	ug/Kg	13 U	13 U
	1,1-Dichloroethene	ug/Kg	60	13 U
	1,2-Dichloroctopane	ug/Kg	13 U	58
	1,2-Dichloroethane	ug/Kg		13 U
	1,2-Dichloroethene (total)	ug/Kg	13 U	13 U
	2-Butanone	ug/Kg	13 U	13 U
	2-Butanone	ug/Kg	13 U	13 U
		ug/Kg	13 U	13 U
	4-Methyl-2-Pentanone	ug/Kg	13 U	13 U
-	Acetone	ug/Kg	13 U	4 JB
	Benzene	ug/Kg	73	71
	Bromodichloromethane	ug/Kg	13 U	13 U
	Bromoform	ug/Kg	13 U	13 U
	Bromomethane	ug/Kg	13 U	13 U
	Carbon Disulfide	ug/Kg	13 U	13 U
	Carbon Tetrachloride	ug/Kg	13 U	13 U
	Chlorobenzene	ug/Kg	68	. 66
_	Chloroethane	ug/Kg	13 U	13 U
	Chloroform	ug/Kg	13 U	13 U
	Chloromethane	ug/Kg	13 U	13 U
	Dibromochloromethane	ug/Kg	13 U	13 U
	Ethylbenzene	ug/Kg	13 U	13 U
	Methylene Chloride	ug/Kg	13 U	13 U
25		ug/Kg	13 U	13 U
	Tetrachloroethene	ug/Kg	13 U	13 U
	Toluene	ug/Kg	80	80
	Trichloroethene	ug/Kg	66	64
	Vinyl Chloride	ug/Kg	13 U	13 U
	Xylene (total)	ug/Kg	13 U	13 U
	cis-1,3-Dichloroctopene	ug/Kg	13 U	13 U
32	trans-1,3-Dichloroctopene	ug/Kg	13 U	13 U

Vocs		54298	54298	54298	54298	54298
		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
		SOIL	SOIL	SOIL	SOIL	SOIL
		274887	274888	274889	274889	274878
		SB25-11-00	SB25-11-02	SB25-11-03	SB25-11-03DL	SB25-12-00
		SA	SA	SA	SA	SA
		21	17	8	8	20
PARAME	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1,1,1-Trichloroethane	ug/Kg ′	13 Ū	12 U	11 U	54 U	12 U
1,1,1-Trichloroethane	ug/Kg	13 U	12 U	11 U	54 U	12 U
1 1,1,2,2-Tetrachloroethane	ug/Kg	13 U	12 U	11 U	54 U	12 U
2 1,1,2-Trichloroethene	ug/Kg	13 U	12 U	11 U	54 U	12 U
3 1,1-Dichloroethane	ug/Kg	13 U	12 U	11 U	<b>54</b> U	12 U
4 1,1-Dichloroethene	ug/Kg	13 U	12 U	11 U	54 U	12 U
5 1,2-Dichloroctopane	ug/Kg	13 U	12 U	11 U	54 U	12 U
6 1,2-Dichloroethane	ug/Kg	13 U	12 U	11 U	54 U	12 U
7 1,2-Dichloroethene (total)	ug/Kg	<b>13</b> U	12 U	11 U	54 U	12 U
8 2-Butanone	ug/Kg	13 U	12 U	11 U	54 U	12 U
9 2-Hexanone	ug/Kg	13 U	12 U	11 U	54 U	12 U
10 4-Methyl-2-Pentanone	ug/Kg	13 U	12 U	11 U	54 U	12 U
11 Acetone	ug/Kg	3 JB	4 JB	5 JB	9 Ј	12 U
12 Benzene	ug/Kg	13 U	12 U	11 U	54 U	12 U
13 Bromodichloromethane	ug/Kg	13 U	<b>12</b> U	11 U	54 U	12 U
14 Bromoform	ug/Kg	13 U	12 U	11 U	54 U	12 U
15 Bromomethane	ug/Kg	13 U	12 U	11 U	54 U	12 U
16 Carbon Disulfide	ug/Kg	13 U	12 U	2 J	54 U	12 U
17 Carbon Tetrachloride	ug/Kg	13 U	12 U	11 U	54 U	12 U
18 Chlorobenzene	ug/Kg	13 U	12 U	11 U	54 U	12 U
19 Chloroethane	ug/Kg	13 U	12 U	11 U	54 U	12 U
20 Chloroform	ug/Kg	13 U	12 U	11 U	54 U	12 U
21 Chloromethane	ug/Kg	13 U	12 U	11 U	54 U	12 U
22 Dibromochloromethane	ug/Kg	13 U	12 U	11 U	54 U	12 U
23 Ethylbenzene	ug/Kg	13 U	12 U	11 U	54 U	12 U
24 Methylene Chloride	ug/Kg	13 U	12 U	11 U	54 U	12 U
25 Styrene	ug/Kg	13 U	12 U	11 U	54 U	12 U
26 Tetrachloroethene	ug/Kg	13 U	12 U	11 U	54 U	12 U
27 Toluene	ug/Kg	13 U	12 U	11 U	54 U	12 U
28 Trichloroethene	ug/Kg	13 U	12 U	11 U	54 U	12 U
29 Vinyl Chloride	ug/Kg	13 U	12 U	11 U	54 U	12 U
30 Xylene (total)	ug/Kg	13 U	12 U	69	21 J	12 U
31 cis-1,3-Dichloroctopene	ug/Kg	13 U	12 U	11 U	54 U	12 U
32 trans-1,3-Dichloroctopene	ug/Kg	13 U	12 U	11 U	54 U	12 U

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			54298 PHASE 1 SOIL 274879 SB25-12-02	54298 PHASE 1 SOIL 274880 SB25-12-03	54298 PHASE 1 SOIL 273572 SB25-13-00	54298 PHASE 1 SOIL 273573 SB25-13-02	54298 PHASE 1 SOIL 273574 SB25-13-04
			SA 9	SA 10	SA 19	SA 10	<b>SA</b> 9
	PARAMI	ETER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
	1,1,1-Trichloroethane	ug/Kg	11 U	11 Ũ	12 Ù	11 Ù	11 Ù
	1,1,1-Trichloroethane	ug/Kg	11 U	11 U	12 U	11 U	11 U
1	1,1,2,2-Tetrachloroethane	ug/Kg	11 U	11 U	12 U	11 U	11 U
2	1,1,2-Trichloroethene	ug/Kg	11 U	11 U	12 U	11 U	11 U
	1,1-Dichloroethane	ug/Kg	11 U	11 U	12 Ü	11 U	11 U
4	1,1-Dichloroethene	ug/Kg	11 U	11 U	12 U	11 U	11 U
	1,2-Dichloroctopane	ug/Kg	11 U	11 U	12 U	11 U	11 U
	1,2-Dichloroethane	ug/Kg	11 U	11 U	12 U	11 U	11 U
	1,2-Dichloroethene (total)	ug/Kg	11 U	11 U	12 U	11 U	11 U
	2-Butanone	ug/Kg	11 U	11 U	12 U	11 U	11 U
	2-Hexanone	ug/Kg	11 U	11 U	12 U	11 U	11 U
	4-Methyl-2-Pentanone	ug/Kg	11 U	11 U	12 U	11 U	11 U
	Acetone	ug/Kg	4 JB	5 JB	<b>12</b> U	11 U	11 U
	Benzene	ug/Kg	11 U	11 U	12 U	11 U	11 U
	Bromodichloromethane	ug/Kg	11 U	11 U	12 U	11 U	11 U
	Bromoform	ug/Kg	11 U	11 U	12 U	11 U	11 U
	Bromomethane	ug/Kg	11 U	11 U	12 U	11 U	11 U
	Carbon Disulfide	ug/Kg	11 U	11 U	12 U	11 U	11 U
_	Carbon Tetrachloride	ug/Kg	11 U	11 U	12 U	11 U	11 U
	Chlorobenzene	ug/Kg	11 U	11 U	12 U	11 U	11 U
	Chloroethane	ug/Kg	11 U	11 U	12 U	11 U	11 U
	Chloroform	ug/Kg	11 U	11 U	12 U	11 U	11 U
	Chloromethane	ug/Kg	11 U	11 U	12 U	11 U	11 U
	Dibromochloromethane	ug/Kg	11 U	11 U	12 U	11 U	11 U
	Ethylbenzene	ug/Kg	11 U	11 U	12 U	11 U	11 U
	Methylene Chloride	ug/Kg	11 U	11 U	12 U	11 U	11 U
	Styrene	ug/Kg	11 U	11 U	12 U	11 Ú	11 U
	Tetrachloroethene	ug/Kg	11 U	11 U	12 U	11 U	11 U
	Toluene	ug/Kg	11 U	11 U	12 U	11 U	11 U
	Trichloroethene	ug/Kg	11 U	11 U	12 U	11 U	11 U
	Vinyl Chloride	ug/Kg	11 U	11 U	12 U	11 U	11 U
	Xylene (total)	ug/Kg	11 U	11 U	<b>12</b> U	11 U	11 U
	cis-1,3-Dichloroctopene	ug/Kg	11 U	11 U	12 U	11 U	11 U
32	trans-1,3-Dichloroctopene	ug/Kg	11 U	11 U	12 U	11 U	11 U

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VOCS		54298	54298	54298	54298	54298
		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
		SOIL	SOIL	SOIL	SOIL	SOIL
		273893	273894	273895	274890	274891
		SB25-14-00	SB25-14-01	SB25-14-02	SB25-15-00	SB25-15-01
		SA	SA	SA	SA	SA
		20	16	11	19	12
PARAME		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1,1,1-Trichloroethane	ug/Kg	12 U	12 U	11 U	12 U	11 U
1,1,1-Trichloroethane	ug/Kg	12 U	12 U	11 U	12 U	11 U
1 1,1,2,2-Tetrachloroethane	ug/Kg	12 U	12 U	11 U	12 U	11 U
2 1,1,2-Trichloroethene	ug/Kg	12 U	12 U	11 U	12 U	11 U
3 1,1-Dichloroethane	ug/Kg	12 U	12 U	11 U	<b>12</b> U	11 U
4 1,1-Dichloroethene	ug/Kg	12 U	12 U	11 U	12 U	11 U
5 1,2-Dichloroctopane	ug/Kg	12 U	12 U	11 U	12 U	11 U
6 1,2-Dichloroethane	ug/Kg	12 U	12 U	11 U	12 U	11 U
7 1,2-Dichloroethene (total)	ug/Kg	12 U	12 U	11 U	12 U	11 U
8 2-Butanone	ug/Kg	12 U	12 U	11 U	12 U	11 U
9 2-Hexanone	ug/Kg	12 U	12 U	11 U	12 U	11 U
10 4-Methyl-2-Pentanone	ug/Kg	12 U	<b>12</b> U	11 U	12 U	11 U
11 Acetone	ug/Kg	12 U	12 U	11 U	4 JB	25 B
12 Benzene	ug/Kg	<b>12</b> U	12 U	11 U	12 U	11 U
13 Bromodichloromethane	ug/Kg	<b>12</b> U	12 U	11 U	12 U	11 U
14 Bromoform	ug/Kg	12 U	12 U	11 U	12 U	11 U
15 Bromomethane	ug/Kg	12 U	12 U	11 U	12 U	11 U
16 Carbon Disulfide	ug/Kg	<b>12</b> U	12 U	11 U	12 U	11 U
17 Carbon Tetrachloride	ug/Kg	12 U	12 U	11 U	12 U	11 U
18 Chlorobenzene	ug/Kg	12 U	· 12 U	11 U	12 U	11 U
19 Chloroethane	ug/Kg	12 U	12 U	11 U	12 U	11 U
20 Chloroform	ug/Kg	12 U	12 U	11 Ú	12 U	11 U
21 Chloromethane	ug/Kg	12 U	· 12 U	11 U	12 U	11 U
22 Dibromochloromethane	ug/Kg	12 U	<b>12</b> U	11 U	12 U	11 U
23 Ethylbenzene	ug/Kg	12 U	12 U	11 U	<b>12</b> U	11 U
24 Methylene Chloride	ug/Kg	12 U	12 U	11 U	12 U	11 U
25 Styrene	ug/Kg	12 U	12 U	11 U	12 U	11 U
26 Tetrachloroethene	ug/Kg	12 U	12 U	11 U	12 U	11 U
27 Toluene	ug/Kg	<b>12</b> U	12 U	11 U	12 U	11 U
28 Trichloroethene	ug/Kg	12 U	12 U	11 U	12 U	11 U
29 Vinyl Chloride	ug/Kg	12 U	12 U	11 U	12 U	11 U
30 Xylene (total)	ug/Kg	12 U	12 U	11 U	12 U	11 U
31 cis-1,3-Dichloroctopene	ug/Kg	12 U	12 U	11 Ü	12 U	11 U
32 trans-1,3-Dichloroctopene	ug/Kg	12 U	12 U	11 U	12 U	11 U
32 dam 1,3 Diemototopene	-6·-6			11 0	12 0	11 0

		54298	54298	54298	54298	54298
		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
		SOIL	SOIL	SOIL	SOIL	SOIL
		274892	275515	275517	273575	273576
		SB25-15-02	SD25-3	SD25-30	SD25-7	SD25-8
		SA	SA	SA	SA	SA
		10	26	42	62	59
PARAME		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1,1,1-Trichloroethane	ug/Kg	11 U	14 U	17 U	26 U	24 U
1,1,1-Trichloroethane	ug/Kg	11 U	14 U	17 U	26 U	<b>2</b> 4 U
1 1,1,2,2-Tetrachloroethane	ug/Kg	11 U	14 U	17 U	· 26 U	· 24 U
2 1,1,2-Trichloroethene	ug/Kg	11 U	14 U	17 U	26 U	24 U
3 1,1-Dichloroethane	ug/Kg	11 U	14 U	17 U	26 U	24 U
4 1,1-Dichloroethene	ug/Kg	11 U	14 Ü	17 U	26 U	24 U
5 1,2-Dichloroctopane	ug/Kg	11 U	14 U	1 <b>7</b> U	26 U	24 U
6 1,2-Dichloroethane	ug/Kg	11 U	14 U	17 U	26 U	<b>24</b> U
7 1,2-Dichloroethene (total)	ug/Kg	11 U	14 U	17 U	26 U	<b>24</b> U
8 2-Butanone	ug/Kg	11 U	14 U	17 U	12 J	17 J
9 2-Hexanone	ug/Kg	11 U	14 U	<b>17</b> U	<b>2</b> 6 U	24 U
10 4-Methyl-2-Pentanone	ug/Kg	11 U	14 U	17 U	<b>2</b> 6 U	24 U
11 Acetone	ug/Kg	5 JB	14 U	17 U	24 J	39
12 Benzene	ug/Kg	11 U	14 U	17 U	26 U	24 U
13 Bromodichloromethane	ug/Kg	11 U	14 U	17 U	<b>2</b> 6 U	24 U
14 Bromoform	ug/Kg	11 U	14 U	17 U	26 U	24 U
15 Bromomethane	ug/Kg	11 U	14 U	17 U	26 U	24 U
16 Carbon Disulfide	ug/Kg	11 U	14 U	17 U	3 J	24 U
17 Carbon Tetrachloride	ug/Kg	11 U	. 14 U	17 U	<b>2</b> 6 U	24 U
18 Chlorobenzene	ug/Kg	11 U	14 U	17 U	26 U	24 U
19 Chloroethane	ug/Kg	11 U	14 U	17 U	<b>2</b> 6 U	24 U
20 Chloroform	ug/Kg	11 U	14 U	17 U	26 U	24 U
21 Chloromethane	ug/Kg	11 U	14 U	17 U	26 U	24 U
22 Dibromochloromethane	ug/Kg	11 U	14 U	17 U	26 U	24 U
23 Ethylbenzene	ug/Kg	11 U	14 U	17 U	26 U	24 U
24 Methylene Chloride	ug/Kg	11 U	14 U	17 U	<b>2</b> 6 U	<b>24</b> U
25 Styrene	ug/Kg	11 U	14 U	17 U	26 U	<b>24</b> U
26 Tetrachloroethene	ug/Kg	11 U	14 U	17 U	26 U	24 U
27 Toluene	ug/Kg	11 U	14 U	17 U	26 U	3 J
28 Trichloroethene	ug/Kg	11 U	14 U	17 U	26 U	24 U
29 Vinyl Chloride	ug/Kg	11 U	14 U	17 U	26 U	24 U
30 Xylene (total)	ug/Kg	11 U	14 U	17 U	26 U	24 U
31 cis-1,3-Dichloroctopene	ug/Kg	11 U	14 U	17 U	26 U	24 U
32 trans-1,3-Dichloroctopene	ug/Kg	11 U	14 U	17 U	<b>26</b> U	24 U

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			34270
		-	PHASE 1
			SOIL
			273577
			SD25-9
			SA
			72
	PARA	METER UNIT	VALUE Q
	1,1,1-Trichloroethane	ug/Kg	36 U
	1,1,1-Trichloroethane	ug/Kg	36 U
1	1,1,2,2-Tetrachloroethane	ug/Kg	36 U
	1,1,2-Trichloroethene	ug/Kg	36 U
	1,1-Dichloroethane	ug/Kg	36 U
	1,1-Dichloroethene	ug/Kg	36 U
5	1,2-Dichloroctopane	ug/Kg	36 U
	1,2-Dichloroethane	ug/Kg	36 U
	1,2-Dichloroethene (total)	, ug/Kg	36 U
	2-Butanone	\ ug/Kg	15 J
9	2-Hexanone	ug/Kg	36 U
	4-Methyl-2-Pentanone	ug/Kg	36 U
11	Acetone	ug/Kg	23 J
12	Benzene	ug/Kg	36 U
13	Bromodichloromethane	ug/Kg	36 U
14	Bromoform	ug/Kg	36 U
15	Bromomethane	ug/Kg	36 U
16	Carbon Disulfide	ug/Kg	36 U
17	Carbon Tetrachloride	ug/Kg	36 U
18	Chlorobenzene	ug/Kg	36 U
19	Chloroethane	ug/Kg	36 U
20	Chloroform	ug/Kg	36 U
21	Chloromethane	ug/Kg	36 U
22	Dibromochloromethane	ug/Kg	36 U
23	Ethylbenzene	ug/Kg	36 U
24	Methylene Chloride	ug/Kg	36 U
	Styrene	ug/Kg	36 U
26	Tetrachloroethene	ug/Kg	36 U
27	Toluene	ug/Kg	36 U
28	Trichloroethene	ug/Kg	36 U
29	Vinyl Chloride	ug/Kg	36 U
	Xylene (total)	ug/Kg	36 U
	cis-1,3-Dichloroctopene	ug/Kg	36 U
	trans-1,3-Dichloroctopene	ug/Kg	36 U
	-	- <del>-</del>	

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54 <b>2</b> 98
PHASE 1
WATER
275516
SD25-3R
SA

PARAMET	ER UNIT	VALUE Q
1,2,4-Trichlorobenzene	UG/L	10 U
1 1,2-Dichlorobenzene	UG/L	10 U
1,2,4-Trichlorobenzene	UG/L	10 U
1 1,2-Dichlorobenzene	UG/L	10 U
2 1,3-Dichlorobenzene	UG/L	10 U
3 1,4-Dichlorobenzene	UG/L	10 U
4 2,4,5-Trichlorophenol	UG/L	26 U
5 2,4,6-Trichlorophenol	UG/L	10 U
6 2,4-Dichlorophenol	UG/L	10 U
7 2,4-Dimethylphenol	UG/L	10 U
8 2,4-Dinitrophenol	UG/L	<b>2</b> 6 U
9 2,4-Dinitrotoluene	UG/L	10 U
10 2,6-Dinitrotoluene	UG/L	10 U
11 2-Chloronaphthalene	UG/L	10 U
12 2-Chlorophenol	UG/L	10 U
13 2-Methylnaphthalene	UG/L	10 U
14 2-Methylphenol	UG/L	10 U
15 2-Nitroaniline	UG/L	26 U
16 2-Nitrophenol	UG/L	10 U
17 3,3'-Dichlorobenzidine	UG/L	10 U
18 3-Nitroaniline	UG/L	26 U
19 4,6-Dinitro-2-methylphenol	UG/L	<b>26</b> U
20 4-Bromophenyl-phenylether	UG/L	10 U
21 4-Chloro-3-methylphenol	UG/L	10 U
22 4-Chloroaniline	UG/L	10 U
23 4-Chlorophenyl-phenylether	UG/L	10 U
24 4-Methylphenol	UG/L	10 U
25 4-Nitroaniline	UG/L	<b>26</b> U
26 4-Nitrophenol	UG/L	<b>26</b> U
27 Acenaphthene	UG/L	10 U
28 Acenaphthylene	UG/L	10 U
29 Anthracene	UG/L	10 U
30 Benzo(a)anthracene	UG/L	10 U
31 Benzo(a)pyrene	UG/L	10 U
32 Benzo(b)fluoranthene	UG/L	10 U
33 Benzo(g,h,i)perylene	UG/L	10 U
34 Butylbenzylphthalate	UG/L	10 U

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PHASE 1
WATER
275516
SD25-3R
SA

	PARAMETE	R UNIT		VALUE Q
	1,2,4-Trichlorobenzene	UG/L		10 U
1	1,2-Dichlorobenzene	UG/L		10 U
35	Carbazole	UG/L		10 U
36	Chrysene	UG/L	1	10 U
37	Di-n-butylphthalate	UG/L	1	10 U
38	Di-n-oprylphthalate	UG/L	·	10 U
<b>3</b> 9	Dibenz(a,h)anthracene	UG/L		10 U
40	Dibenzofuran	UG/L		10 U
41	Diethylphthalate	UG/L		10 U
42	Dimethylphthalate	UG/L		10 U
43	Fluoranthene	UG/L		10 U
44	Fluorene	UG/L		10 U
45	Hexachlorobenzene	UG/L		10 U
46	Hexachlorobutadiene	UG/L		10 U
47	Hexachlorocyclopentadiene	UG/L		10 U
48	Hexachloroethane	UG/L		10 U
49	Indeno(1,2,3-cd)pyrene	UG/L		10 U
50	Isophorone	UG/L		10 U
	N-Nitroso-di-n-ctopylamine	UG/L		10 U
52	N-Nitrosodiphenylamine (1)	UG/L		10 U
	Naphthalene	UG/L		10 U
54	Nitrobenzene	UG/L		10 U
	Pentachlorophenol	UG/L		26 U
	Phenanthrene	UG/L		10 U
57	Phenol	UG/L		10 U
58	Pyrene	UG/L		10 U
	benzo(k)fluoranthene	UG/L		10 U
	bis(2-Chloroethoxy) methane	UG/L		10 U
	bis(2-Chloroethyl) ether	UG/L		10 U
	bis(2-Chloroisoctopyl) ether	UG/L		10 U
63	bis(2-Ethylhexyl)phthalate	UG/L	*	22 B

51003						
		54298	54298	54298	54298	54298
		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE I
		SOIL	SOIL	SOIL	SOIL	SOIL
		274887	274887	274887	274888	274889
		SB25-11-00MS	SB25-11-00MSD	SB25-11-00	SB25-11-02	SB25-11-03
		MS	MSD	SA	SA	SA
		23	23	23	14	10
		23	23	23	14	10
PARAMETE	R UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	1600	1800	430 U	380 U	360 U
2 1,2-Dichlorobenzene	UG/KG	430 U	430 U	430 U	380 U	360 U
3 1,3-Dichlorobenzene	UG/KG	430 U	430 U	430 U	380 U	360 U
4 1,4-Dichlorobenzene	UG/KG	1400	1700	430 U	380 U	360 U
5 2,4,5-Trichlorophenol	UG/KG	1000 U	1000 U	1000 U	920 U	880 U
6 2,4,6-Trichlorophenol	UG/KG	430 U	430 U	430 U	380 U	360 U
7 2,4-Dichlorophenol	UG/KG	430 U	430 U	430 U	380 U	360 U
8 2,4-Dimethylphenol	UG/KG	430 U	430 U	430 U	380 U	360 U
9 2,4-Dinitrophenol	UG/KG	1000 U	1000 U	1000 U	920 U	880 U
10 2.4-Dinitrotoluene	UG/KG	1600	1700	430 U	380 U	360 U
11 2,6-Dinitrotoluene	UG/KG	430 U	430 U	430 U	380 U	360 U
12 2-Chloronaphthalene	UG/KG	430 U	430 U	430 U	380 U	360 U
13 2-Chlorophenol	UG/KG	2500	2800	430 U	380 U	360 U
14 2-Methylnaphthalene	UG/KG	430 U	430 U	430 U	380 U	360 U
15 2-Methylphenol	UG/KG	430 U	430 U	430 U	380 U	360 U
16 2-Nitroaniline	UG/KG	1000 U	1000 U	1000 U	920 U	880 U
17 2-Nitrophenol	UG/KG	430 U	430 U	430 U	380 U	360 U
18 3.3'-Dichlorobenzidine	UG/KG	430 U	430 U	430 U	380 U	360 U
19 3-Nitroaniline	UG/KG	1000 U	1000 U	1000 U	920 U	880 U
20 4,6-Dinitro-2-methylphenol	UG/KG	1000 U	· 1000 U	1000 U	920 U	880 U
21 4-Bromophenyl-phenylether	UG/KG	430 U	430 U	430 U	380 U	360 U
22 4-Chloro-3-methylphenol	UG/KG	2600	2800	430 U	380 U	360 U
23 4-Chloroaniline	UG/KG	430 U	430 U	430 U	380 U	360 U
24 4-Chlorophenyl-phenylether	UG/KG	430 U	430 U	430 U	380 U	360 U
25 4-Methylphenol	UG/KG	430 U	430 U	430 U	380 U	360 U
26 4-Nitroaniline	UG/KG	1000 U	1000 U	1000 U	920 U	880 U
27 4-Nitrophenol	UG/KG	2900	3800	1000 U	920 U	880 U
28 Acenaphthene	UG/KG	1500	1800	430 U	380 U	360 U
29 Acenaphthylene	UG/KG	430 U	430 U	430 U	380 U	
30 Anthracene	UG/KG	430 U	430 U	430 U	380 U	360 U
31 Benzo(a)anthracene	UG/KG	430 U	430 U	430 U	380 U	360 U
32 Benzo(a)pyrene	UG/KG	430 U	430 U	430 U	380 U	360 U
33 Benzo(b)fluoranthene	UG/KG	430 U	430 U	430 U		360 U
34 Benzo(g,h,i)perylene	UG/KG	430 U	430 U		380 U	360 U
35 Butylbenzylphthalate	UG/KG	430 U	430 U	430 U 430 U	380 U	360 U
55 Datytooneyipiimatate	OU/KU	430 0	430 0	430 U	380 U	360 U

SVOCS						,
		54298	54298	54298	54298	54298
		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
		SOIL	SOIL	SOIL	SOIL	SOIL
		274887	274887	274887	274888	274889
		SB25-11-00MS	SB25-11-00MSD	SB25-11-00	SB25-11-02	SB25-11-03
		MS	MSD	SA	SA	SA
		23	23	23	14	10
DADAMES	ER UNIT	VALUE Q	WALLE O	TALLE O	WALTE O	WALTE
PARAMET 36 Carbazole	UG/KG	430 U	VALUE Q 430 U	VALUE Q 430 U	VALUE Q 380 U	VALUE Q 360 U
		430 U 44 J		•		
37 Chrysene	UG/KG	44 J 66 J	110 J 68 J	59 J	380 U	360 U 39 J
38 Di-n-butylphthalate	UG/KG	430 U	430 U	67 J	64 J 380 U	360 U
39 Di-n-oprylphthalate	UG/KG	430 U 430 U		430 U 430 U	380 U	
40 Dibenz(a,h)anthracene	UG/KG	430 U 430 U	430 U			360 U
41 Dibenzofuran	UG/KG		430 U	430 U	380 U	360 U
42 Diethylphthalate	UG/KG	430 U	430 U	430 U	380 U	360 U
43 Dimethylphthalate	UG/KG	430 U	430 U	430 U	380 U	360 U
44 Fluoranthene	UG/KG	82 J	240 J	100 J	380 U	360 U
45 Fluorene	UG/KG	430 U	430 U	430 U	380 U	360 U
46 Hexachlorobenzene	UG/KG	430 U	430 U	430 U	380 U	360 U
47 Hexachlorobutadiene	UG/KG	430 U	430 U	430 U	380 U	360 U
48 Hexachlorocyclopentadiene	UG/KG	430 U	430 U	430 U	380 U	360 U
49 Hexachloroethane	UG/KG	430 U	<b>430</b> U	430 U	380 U	360 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	430 U	430 U	430 U	380 U	360 U
51 Isophorone	UG/KG	430 U	430 U	430 U	380 U	360 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	1400	1700	430 U	380 U	360 U
53 N-Nitrosodiphenylamine (1)	UG/KG	<b>43</b> 0 U	430 U	430 U	380 U	360 U
54 Naphthalene	UG/KG	430 U	430 U	430 U	380 U	360 U
55 Nitrobenzene	UG/KG	430 U	. 430 U	430 U	380 U	360 U
56 Pentachlorophenol	UG/KG	2100	2800	1000 U	920 U	880 U
57 Phenanthrene	UG/KG	46 J	170 J	61 J	380 U	360 U
58 Phenol	UG/KG	1900	2800	430 U	380 U	360 U
59 Pyrene	UG/KG	1400	1700	74 J	380 U	360 U
60 benzo(k)fluoranthene	UG/KG	430 U	430 U	430 U	380 U	360 U
61 bis(2-Chloroethoxy) methane	UG/KG	430 U	430 U	430 U	380 U	360 U
62 bis(2-Chloroethyl) ether	UG/KG	430 U	430 U	430 U	380 U	360 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	430 U	430 U	430 U	380 U	360 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	430 U	430 U	430 U	220 J	160 J
						<del>-</del>

		54298	54298	54298	54298	54298
		PHASE 1	PHASE 1	PHASE 1	PHASE I	PHASE I
		SOIL	SOIL	SOIL	SOIL	SOIL
		274878	274879	274880	273572	273573
		SB25-12-00	SB25-12-02	SB25-12-03	SB25-13-00	SB25-13-02
		SA	SA	SA	SA	SA
		21	10	10	23	8
PARAMET	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	420 U	370 U	1600	430 U	360 U
2 1,2-Dichlorobenzene	UG/KG	420 U	370 U	360 U	430 U	360 U
3 1,3-Dichlorobenzene	UG/KG	420 U	370 U	360 U	430 U	360 U
4 1,4-Dichlorobenzene	UG/KG	420 U	370 U	1700	430 U	360 U
5 2,4,5-Trichlorophenol	UG/KG	1000 U	890 U	880 U	1000 U	860 U
6 2,4,6-Trichlorophenol	UG/KG	420 U	370 U	360 U	430 U	360 U
7 2,4-Dichlorophenol	UG/KG	420 U	370 U	360 U	430 U	360 U
8 2,4-Dimethylphenol	UG/KG	420 U	370 U	360 U	430 U	360 U
9 2,4-Dinitrophenol	UG/KG	1000 U	890 U	880 U	1000 U	860 U
10 2,4-Dinitrotoluene	UG/KG	420 U	370 U	1600	430 U	360 U
11 2,6-Dinitrotoluene	UG/KG	420 U	370 U	360 U	430 U	360 U
12 2-Chloronaphthalene	UG/KG	420 U	370 U	360 U	430 U	360 U
13 2-Chlorophenol	UG/KG	420 U	370 U	2600	430 U	360 U
14 2-Methylnaphthalene	UG/KG	420 U	370 U	360 U	430 U	360 U
15 2-Methylphenol	UG/KG	420 U	370 U	360 U	430 U	360 U
16 2-Nitroaniline	UG/KG	1000 U	890 U	880 U	1000 U	860 U
17 2-Nitrophenol	UG/KG	<b>420</b> U	370 U	360 U	430 U	360 U
18 3,3'-Dichlorobenzidine	UG/KG	<b>420</b> U	370 U	360 U	430 U	360 U
19 3-Nitroaniline	UG/KG	1000 U	890 U	880 U	1000 U	860 U
20 4,6-Dinitro-2-methylphenol	UG/KG	1000 U	. 890 U	880 U	1000 U	860 U
21 4-Bromophenyl-phenylether	UG/KG	<b>420</b> U	370 U	360 U	430 U	360 U
22 4-Chloro-3-methylphenol	UG/KG	420 U	370 U	2600	430 U	360 U
23 4-Chloroaniline	UG/KG	420 U	370 U	360 U	430 U	360 U
24 4-Chlorophenyl-phenylether	UG/KG	420 U	370 U	360 U	430 U	360 U
25 4-Methylphenol	UG/KG	420 U	370 U	360 U	430 U	360 U
26 4-Nitroaniline	UG/KG	1000 U	890 U	880 U	1000 U	860 U
27 4-Nitrophenol	UG/KG	1000 U	890 U	1700	1000 U	860 U
28 Acenaphthene	UG/KG	420 U	370 U	2000	430 U	360 U
29 Acenaphthylene	UG/KG	420 U	370 U	360 U	430 U	360 U
30 Anthracene	UG/KG	420 U	370 U	360 U	430 U	360 U
31 Benzo(a)anthracene	UG/KG	420 U	370 U	360 U	430 U	360 U
32 Benzo(a)pyrene	UG/KG	420 U	370 U	360 U	430 U	360 U
33 Benzo(b)fluoranthene	UG/KG	420 U	370 U	360 U	430 U	360 U
34 Benzo(g,h,i)perylene	UG/KG	420 U	370 U	360 U	430 U	360 U
35 Butylbenzylphthalate	UG/KG	<b>42</b> 0 U	370 U	360 U	430 U	360 U

SVOCS		54298	54298	54298	54298	54298
		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
		SOIL	SOIL	SOIL	SOIL	SOIL
		274878	274879	274880	273572	273573
		SB25-12-00	SB25-12-02	SB25-12-03	SB25-13-00	SB25-13-02
		SA	SA	SA	SA	SA
		21	10	10	23	8
PARAMET		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
36 Carbazole	UG/KG	<b>42</b> 0 U	370 U	360 U	430 U	360 U
37 Chrysene	UG/KG	420 U	3 <b>7</b> 0 U	360 U	430 U	360 U
38 Di-n-butylphthalate	UG/KG	57 J	40 J	360 U	69 BJ	77 BJ
39 Di-n-oprylphthalate	UG/KG	<b>42</b> 0 U	3 <b>7</b> 0 U	360 U	430 U	360 U
40 Dibenz(a,h)anthracene	UG/KG	<b>42</b> 0 U	3 <b>7</b> 0 U	360 U	430 U	360 U
41 Dibenzofuran	UG/KG	<b>42</b> 0 U	3 <b>7</b> 0 U	360 U	430 U	360 U
42 Diethylphthalate	UG/KG	420 U	3 <b>7</b> 0 U	360 U	430 U	360 U
43 Dimethylphthalate	UG/KG	420 U	<b>37</b> 0 U	360 U	430 U	360 U
44 Fluoranthene	UG/KG	74 J	370 U	360 U	49 J	360 U
45 Fluorene	UG/KG	<b>42</b> 0 U	370 U	360 U	430 U	360 U
46 Hexachlorobenzene	UG/KG	<b>42</b> 0 U	370 U	360 U	430 U	360 U
47 Hexachlorobutadiene	UG/KG	<b>42</b> 0 U	3 <b>7</b> 0 U	360 U	430 U	360 U
48 Hexachlorocyclopentadiene	UG/KG	420 U	370 U	360 U	430 U	360 U
49 Hexachloroethane	UG/KG	420 U	370 U	360 U	430 U	360 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	<b>420</b> U	370 U	360 U	430 U	360 U
51 Isophorone	UG/KG	420 U	370 U	360 U	430 U	360 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	420 U	370 U	1900	430 U	360 U
53 N-Nitrosodiphenylamine (1)	UG/KG	420 U	370 U	360 U	430 U	360 U
54 Naphthalene	UG/KG	420 U	370 U	360 U	430 U	360 U
55 Nitrobenzene	UG/KG	420 U	. 370 U	360 U	430 U	360 U
56 Pentachlorophenol	UG/KG	1000 U	890 U	2300	1000 U	860 U
57 Phenanthrene	UG/KG	420 U	370 U	360 U	430 U	360 U
58 Phenol	UG/KG	420 U	370 U	2400	430 U	360 U
59 Pyrene	UG/KG	62 J	370 U	2000	48 J	360 U
60 benzo(k)fluoranthene	UG/KG	<b>420</b> U	370 U	360 U	430 U	360 U
61 bis(2-Chloroethoxy) methane	UG/KG	420 U	370 U	360 U	430 U	360 U
62 bis(2-Chloroethyl) ether	UG/KG	420 U	370 U	360 U	430 U	360 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	420 U	370 U	360 U	430 U	360 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	50 J	130 Ј	360 U	170 J	480

		54298	54298	54298	54298	54298
		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
		SOIL	SOIL	SOIL	SOIL	SOIL
		273574	273893	273894	273895	274890
		SB25-13-04	SB25-14-00	SB25-14-01	SB25-14-02	SB25-15-00
		SA	SA	SA	SA	SA
		8	21	17	10	20
PARAMETER UNIT		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	360 U	410 U	400 U	360 U	410 U
2 1,2-Dichlorobenzene	UG/KG	360 U	410 U	400 U	360 U	410 U
3 1,3-Dichlorobenzene	UG/KG	360 U	410 U	400 U	360 U	410 U
4 1,4-Dichlorobenzene	UG/KG	360 U	410 U	400 U	360 U	410 U
5 2,4,5-Trichlorophenol	UG/KG	870 U	1000 U	960 U	880 U	990 U
6 2,4,6-Trichlorophenol	UG/KG	360 U	410 U	400 U	360 U	410 U
7 2,4-Dichlorophenol	UG/KG	360 U	410 U	400 U	360 U	410 U
8 2,4-Dimethylphenol	UG/KG	360 U	410 U	400 U	360 U	410 U
9 2,4-Dinitrophenol	UG/KG	870 U	1000 U	960 U	880 U	990 U
10 2,4-Dinitrotoluene	UG/KG	360 U	410 U	400 U	360 U	410 U
11 2,6-Dinitrotoluene	UG/KG	360 U	410 U	400 U	360 U	410 U
12 2-Chloronaphthalene	UG/KG	360 U	410 U	400 U	360 U	410 U
13 2-Chlorophenol	UG/KG	360 U	410 U	400 U	360 U	410 U
14 2-Methylnaphthalene	UG/KG	360 U	410 U	400 U	360 U	410 U
15 2-Methylphenol	UG/KG	360 U	410 U	400 U	360 U	410 U
16 2-Nitroaniline	UG/KG	870 U	1000 U	960 U	880 U	990 U
17 2-Nitrophenol	UG/KG	360 U	410 U	400 U	360 U	410 U
18 3,3'-Dichlorobenzidine	UG/KG	360 U	410 U	400 U	360 U	410 U
19 3-Nitroaniline	UG/KG	870 U	1000 U	960 U	880 U	990 U
20 4,6-Dinitro-2-methylphenol	UG/KG	870 U	1000 U	960 U	880 U	990 U
21 4-Bromophenyl-phenylether	UG/KG	360 U	410 U	400 U	360 U	410 U
22 4-Chloro-3-methylphenol	UG/KG	360 U	410 U	400 U	360 U	410 U
23 4-Chloroaniline	UG/KG	360 U	410 U	400 U	360 U	410 U
24 4-Chlorophenyl-phenylether	UG/KG	360 U	410 U	400 U	360 U	410 U
25 4-Methylphenol	UG/KG	360 U	410 U	400 U	360 U	410 U
26 4-Nitroaniline	UG/KG	870 U	1000 U	960 U	880 U	990 U
27 4-Nitrophenol	UG/KG	870 U	1000 U	960 U	880 U	990 U
28 Acenaphthene	UG/KG	360 U	410 U	400 U	360 U	410 U
29 Acenaphthylene	UG/KG	360 U	410 U	400 U	360 U	410 U
30 Anthracene	UG/KG	360 U	410 U	400 U	360 U	410 U
31 Benzo(a)anthracene	UG/KG	360 U	410 U	400 U	360 U	410 U
32 Benzo(a)pyrene	UG/KG	360 U	410 U	400 U	360 U	410 U
33 Benzo(b)fluoranthene	UG/KG	360 U	410 U	400 U	360 U	410 U
34 Benzo(g,h,i)perylene	UG/KG	360 U	51 J	120 J	360 U	410 U
35 Butylbenzylphthalate	UG/KG	360 U	410 U	400 U	360 U	410 U
					300 0	410 0

SVOCS		54298 PHASE 1 SOIL 273574 SB25-13-04 SA 8	54298 PHASE 1 SOIL 273893 SB25-14-00 SA 21	54298 PHASE 1 SOIL 273894 SB25-14-01 SA 17	54298 PHASE 1 SOIL 273895 SB25-14-02 SA 10	54298 PHASE 1 SOIL 274890 SB25-15-00 SA 20
PARAMETER UNIT		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
36 Carbazole	UG/KG	360 U	410 U	400 U	360 U	410 U
37 Chrysene	UG/KG	360 U	45 J	400 U	360 U	410 U
38 Di-n-butylphthalate	UG/KG	64 BJ	410 U	69 BJ	62 BJ	410 U
39 Di-n-oprylphthalate	UG/KG	360 U	410 U	400 U	360 U	410 U
40 Dibenz(a,h)anthracene	UG/KG	360 U	410 U	400 U	360 U	410 U
41 Dibenzofuran	UG/KG	360 U	410 U	400 U	360 U	410 U
42 Diethylphthalate	UG/KG	360 U	410 U	400 U	360 U	410 U
43 Dimethylphthalate	UG/KG	360 U	410 U	400 U	360 U	410 U
44 Fluoranthene	UG/KG	360 U	79 J	400 U	360 U	66 J
45 Fluorene	UG/KG	360 U	410 U	400 U	360 U	410 U
46 Hexachlorobenzene	UG/KG	360 U	410 U	400 U	360 U	410 U
47 Hexachlorobutadiene	UG/KG	360 U	410 U	400 U	360 U	410 U
48 Hexachlorocyclopentadiene	UG/KG	360 U	410 U	400 U	360 U	410 U
49 Hexachloroethane	UG/KG	360 U	410 U	400 U	360 U	410 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	360 U	410 U	400 U	360 U	410 U
51 Isophorone	UG/KG	360 U	410 U	400 U	360 U	410 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	360 U	410 U	400 U	360 U	410 U
53 N-Nitrosodiphenylamine (1)	UG/KG	360 U	410 U	400 U	360 U	410 U
54 Naphthalene	UG/KG	360 U	410 U	400 U	360 U	410 U
55 Nitrobenzene	UG/KG	360 U	. 410 U	400 U	360 U	410 U
56 Pentachlorophenol	UG/KG	870 U	1000 U	960 U	880 U	990 U
57 Phenanthrene	UG/KG	360 U	54 J	400 U	360 U	410 U
58 Phenol	UG/KG	360 U	410 U	400 U	360 U	410 U
59 Pyrene	UG/KG	360 U	70 J	400 U	360 U	59 J
60 benzo(k)fluoranthene	UG/KG	360 U	410 U	400 U	360 U	410 U
61 bis(2-Chloroethoxy) methane	UG/KG	360 U	410 U	400 U	360 U	410 U
62 bis(2-Chloroethyl) ether	UG/KG	360 U	410 U	400 U	360 U	410 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	360 U	410 U	400 U	360 U	410 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	190 J	120 J	360 J	360 U	57 J

		54298	54298	54298	54298	54298
		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
		SOIL	SOIL	SOIL	SOIL	SOIL
		274891	274892	275515	275517	273575
		SB25-15-01	SB25-15-02	SD25-3	SD25-30	SD25-7
		SA	SA	SA	SA	SA
		15	11	25	25	63
PARAME		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	380 U	370 U	440 U	440 U	8900 U
2 1,2-Dichlorobenzene	UG/KG	380 U	370 U	440 U	440 U	8900 U
3 1,3-Dichlorobenzene	UG/KG	380 U	370 U	440 U	440 U	8900 U
4 1,4-Dichlorobenzene	UG/KG	380 U	370 U	440 U	440 U	8900 U
5 2,4,5-Trichlorophenol	UG/KG	930 U	900 U	1100 U	1100 U	22000 U
6 2,4,6-Trichlorophenol	UG/KG	380 U	370 U	440 U	440 U	8900 U
7 2,4-Dichlorophenol	UG/KG	380 U	370 U	440 U	440 U	8900 U
8 2,4-Dimethylphenol	UG/KG	380 U	370 U	440 U	440 U	8900 U
9 2,4-Dinitrophenol	UG/KG	930 U	900 U	1100 U	1100 U	22000 U
10 2,4-Dinitrotoluene	UG/KG	380 U	370 U	440 U	440 U	8900 U
11 2,6-Dinitrotoluene	UG/KG	380 U	370 U	440 U	440 U	8900 U
12 2-Chloronaphthalene	UG/KG	380 U	370. U	440 U	440 U	8900 U
13 2-Chlorophenol	UG/KG	380 U	370 U	440 U	440 Ŭ	8900 U
14 2-Methylnaphthalene	UG/KG	380 U	<b>37</b> 0 U	440 U	440 U	8900 U
15 2-Methylphenol	UG/KG	380 U	370 U	440 U	440 U	8900 U
16 2-Nitroaniline	UG/KG	930 U	900 U	1100 U	1100 U	22000 U
17 2-Nitrophenol	UG/KG	380 U	370 U	440 U	440 U	8900 U
18 3,3'-Dichlorobenzidine	UG/KG	380 U	370 U	440 U	440 U	8900 U
19 3-Nitroaniline	UG/KG	930 U	900 U	1100 U	1100 U	22000 U
20 4,6-Dinitro-2-methylphenol	UG/KG	930 U	900 U	1100 U	1100 U	22000 U
21 4-Bromophenyl-phenylether	UG/KG	380 U	370 U	440 U	440 U	8900 U
22 4-Chloro-3-methylphenol	UG/KG	380 U	370 U	440 U	440 U	8900 U
23 4-Chloroaniline	UG/KG	380 U	370 U	440 U	440 U	8900 U
24 4-Chlorophenyl-phenylether	UG/KG	380 U	370 U	440 U	440 U	8900 U
25 4-Methylphenol	UG/KG	380 U	370 U	440 U	440 U	8900 U
26 4-Nitroaniline	UG/KG	930 U	900 U	1100 U	1100 U	22000 U
27 4-Nitrophenol	UG/KG	930 U	900 U	1100 U	1100 U	22000 U
28 Acenaphthene	UG/KG	380 U	370 U	440 U	440 U	1100 Ј
29 Acenaphthylene	UG/KG	380 U	370 U	440 U	440 U	2100 J
30 Anthracene	UG/KG	380 U	370 U	47 J	44 J	3700 J
31 Benzo(a)anthracene	UG/KG	380 U	370 U	220 J	210 J	8500 J
32 Benzo(a)pyrene	UG/KG	380 U	370 U	300 J	270 Ј	12000
33 Benzo(b)fluoranthene	UG/KG	380 U	370 U	240 J	220 J	25000
34 Benzo(g,h,i)perylene	UG/KG	380 U	370 U	<b>2</b> 60 J	240 J	11000
35 Butylbenzylphthalate	UG/KG	380 U	370 U	440 U	440 U	8900 U

SVOCs						
		54298	54298	54298	54298	54298
		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
		SOIL	SOIL	SOIL	SOIL	SOIL
		274891	274892	275515	275517	273575
		SB25-15-01	SB25-15-02	SD25-3	SD25-30	SD25-7
		SA	SA	SA	SA	SA
		15	11	25	25	63
PARAMET	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
36 Carbazole	UG/KG	380 U	370 U	440 U	440 U	8900 U
37 Chrysene	UG/KG	380 U	370 U	370 J	330 J	11000
38 Di-n-butylphthalate	UG/KG	380 U	370 U	440 U	440 U	<b>8</b> 900 U
39 Di-n-oprylphthalate	UG/KG	380 U	370 U	440 U	440 U	8900 U
40 Dibenz(a,h)anthracene	UG/KG	380 U	<b>37</b> 0 U	120 J	9 <b>7</b> J	5900 J
41 Dibenzofuran	UG/KG	380 U	370 U	440 Ü	440 U	<b>8</b> 900 U
42 Diethylphthalate	UG/KG	380 U	370 U	440 U	440 U	<b>8</b> 900 U
43 Dimethylphthalate	UG/KG	380 U	<b>37</b> 0 U	440 U	440 U	8900 U
44 Fluoranthene	UG/KG	380 U	370 U	610	560	21000
45 Fluorene	UG/KG	380 U	370 U	440 U	440 U	<b>8</b> 900 U
46 Hexachlorobenzene	UG/KG	380 U	370 U	440 U	440 U	8900 U
47 Hexachlorobutadiene	UG/KG	380 U	370 U	440 U	440 U	8900 U
48 Hexachlorocyclopentadiene	UG/KG	380 U	370 U	440 U	440 U	8900 U
49 Hexachloroethane	UG/KG	380 U	370 U	440 U	440 U	<b>8</b> 900 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	380 U	370 U	240 J	200 Ј	9200
51 Isophorone	UG/KG	380 U	370 U	440 U	440 U	8900 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	380 U	<b>37</b> 0 U	440 U	440 U	<b>8</b> 900 U
53 N-Nitrosodiphenylamine (1)	UG/KG	380 U	370 U	440 U	440 U	<b>8</b> 900 U
54 Naphthalene	UG/KG	380 U	<b>37</b> 0 U	440 U	440 U	8900 U
55 Nitrobenzene	UG/KG	380 U	. 370 U	440 U	440 U	8900 U
56 Pentachlorophenol	UG/KG	930 U	900 U	1100 U	1100 U	22000 U
57 Phenanthrene	UG/KG	380 U	370 U	310 J	280 J	8300 J
58 Phenol	UG/KG	380 U	<b>37</b> 0 U	440 U	440 U	8900 U
59 Pyrene	UG/KG	380 U	370 U	520	500	14000
60 benzo(k)fluoranthene	UG/KG	380 U	370 U	400 J	300 J	8900 U
61 bis(2-Chloroethoxy) methane	UG/KG	380 U	370 U	440 U	440 U	8900 U
62 bis(2-Chloroethyl) ether	UG/KG	380 U	370 U	440 U	440 U	<b>8</b> 900 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	380 U	370 U	440 U	440 U	<b>8</b> 900 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	89 J	63 J	440 U	440 U	3900 J

SVU	Cs			
			54298	54298
			PHASE 1	PHASE 1
			SOIL	SOIL
			273576	273577
			SD25-8	SD25-9
			SA	SA
			73	76
	PARAM	IETER UNIT	VALUE	Q VALUE Q
1	1,2,4-Trichlorobenzene	UG/KG	3500	U 1700 U
2	1,2-Dichlorobenzene	UG/KG	3500	U 1700 U
3	1,3-Dichlorobenzene	UG/KG	3500	U 1700 U
4	1,4-Dichlorobenzene	UG/KG	3500	U 1700 U
5	2,4,5-Trichlorophenol	UG/KG	8400	U 4200 U
6	2,4,6-Trichlorophenol	UG/KG	3500	U 1700 U
7	2,4-Dichlorophenol	UG/KG	3500	U 1700 U
8	2,4-Dimethylphenol	UG/KG	3500	U 1700 U
9	2,4-Dinitrophenol	UG/KG	8400	U 4200 U
10	2,4-Dinitrotoluene	UG/KG	3500	U 1700 U
11	2,6-Dinitrotoluene	UG/KG	3500	U 1700 U
12	2-Chloronaphthalene	UG/KG	3500	U 1700 U
13	2-Chlorophenol	UG/KG	3500	U 1700 U
	2-Methylnaphthalene	UG/KG	3500	
15	2-Methylphenol	UG/KG	3500	
	2-Nitroaniline	UG/KG	8400	
17	2-Nitrophenol	UG/KG	3500	
	3,3'-Dichlorobenzidine	UG/KG	3500	
19	3-Nitroaniline	UG/KG	8400	
	4,6-Dinitro-2-methylphenol	UG/KG	8400	
	4-Bromophenyl-phenylether	UG/KG	3500	
	4-Chloro-3-methylphenol	UG/KG	3500	
	4-Chloroaniline	UG/KG	3500	
24	4-Chlorophenyl-phenylether	UG/KG	3500	
	4-Methylphenol	UG/KG	3500	
	4-Nitroaniline	UG/KG	8400	
27	4-Nitrophenol	UG/KG	8400	
	Acenaphthene	UG/KG	610	
	Acenaphthylene	UG/KG	3500	2100
	Anthracene	UG/KG	3700	2500
	Benzo(a)anthracene	UG/KG	9000	4500
	Benzo(a)pyrene	UG/KG	13000	6600
	Benzo(b)fluoranthene	UG/KG	21000	13000
	Benzo(g,h,i)perylene	UG/KG	19000	7300
	Butylbenzylphthalate	UG/KG	3500	
23	DaylocheJiphimalate	UU/KU	3300	1/00 0

			54298	54298
			PHASE 1	PHASE 1
			SOIL	SOIL
			273576	273577
			SD25-8	SD25-9
			SA	SA
			73	76
	PARAMET	ER UNIT	VALUE Q	VALUE Q
36	Carbazole	UG/KG	1400 J	1000 J
37	Chrysene	UG/KG	11000	5700
38	Di-n-butylphthalate	UG/KG	3500 U	1700 U
39	Di-n-oprylphthalate	UG/KG	3500 U	1700 U
40	Dibenz(a,h)anthracene	UG/KG	7100	2900
41	Dibenzofuran	UG/KG	540 J	180 J
42	Diethylphthalate	UG/KG	3500 U	1700 U
43	Dimethylphthalate	UG/KG	3500 U	1700 U
44	Fluoranthene	UG/KG	14000	8200
45	Fluorene	UG/KG	1300 J	550 J
46	Hexachlorobenzene	UG/KG	3500 U	1700 U
47	Hexachlorobutadiene	UG/KG	3500 U	1700 U
48	Hexachlorocyclopentadiene	UG/KG	3500 U	1700 U
49	Hexachloroethane	UG/KG	3500 U	1700 U
50	Indeno(1,2,3-cd)pyrene	UG/KG	14000	6900
51	Isophorone	UG/KG	3500 U	1700 U
52	N-Nitroso-di-n-ctopylamine	UG/KG	3500 U	1700 U
53	N-Nitrosodiphenylamine (1)	UG/KG	3500 U	1700 U
54	Naphthalene	UG/KG	440 J	200 J
55	Nitrobenzene	UG/KG	3500 U	. 1700 U
56	Pentachlorophenol	UG/KG	8400 U	4200 U
57	Phenanthrene	UG/KG	5900	2600
58	Phenol	UG/KG	3500 U	1700 U
59	Pyrene	UG/KG	18000	9000
60	benzo(k)fluoranthene	UG/KG	3500 U	1700 U
61	bis(2-Chloroethoxy) methane	UG/KG	3500 U	1700 U
62	bis(2-Chloroethyl) ether	UG/KG	3500 U	1700 U
63	bis(2-Chloroisoctopyl) ether	UG/KG	3500 U	1700 U
64	bis(2-Ethylhexyl)phthalate	UG/KG	5100	2400

54298 PHASE 1 WATER 275516 SD25-3R SA

	,	
	PARAMETER UNIT	VALUE Q
1 4,4'-DDD	UG/L	0.11 U
2 4,4'-DDE	UG/L	0.11 U
3 4,4'-DDT	UG/L	0.11 U
4 Aldrin	UG/L	0.054 U
5 Aroclor-1016	UG/L	1.1 U
6 Aroclor-1221	UG/Lॄ	2.1 U
7 Aroclor-1232	UG/L	1.1 U
8 Aroclor-1242	UG/L	1.1 U
9 Aroclor-1248	UG/L	1.1 U
10 Aroclor-1254	UG/L	1.1 U
11 Aroclor-1260	UG/L	1.1 U
12 Dieldrin	UG/L	0.11 U
13 Endosulfan I	UG/L	0.054 U
14 Endosulfan II	UG/L	0.11 U
15 Endosulfan sulfate	UG/L	0.11 U
16 Endrin	UG/L	0.11 U
17 Endrin aldehyde	UG/L	0.11 U
18 Endrin ketone	UG/L	0.11 U
19 Heptachlor	UG/L	0.054 U
20 Heptachlor epoxide	UG/L	0.054 U
21 Methoxychlor	UG/L	0.54 U
22 Toxaphene	UG/L	5.4 U
23 alpha-BHC	UG/L	0.054 U
24 alpha-Chlordane	UG/L	0.054 U
25 beta-BHC	UG/L	0.054 U
26 delta-BHC	UG/L	0.054 U
27 gamma-BHC (Lind	ane) UG/L	0.054 U
28 gamma-Chlordane	UG/L	0.054 U

		54298	54298	54298	54298	54298
		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
		SOIL	SOIL	SOIL	SOIL	SOIL
		274887	275486	274887	274887	274888
		SB25-11-00MS	MSBF5	SB25-11-00MSD	SB25-11-00	SB25-11-02
		MS	MSB	MSD	SA	SA
		23		23	23	15
	PARAMETER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	4.3 U	3.3 U	4.3 U	4.3 U	3.9 U
2 4,4'-DDE	UG/KG	2.9 JP	1.7 J	2.3 JP	4.3 U	3.9 U
3 4,4'-DDT	UG/KG	38	31	28	4.3 U	3.9 U
4 Aldrin	UG/KG	20	16	15	<b>2.2</b> U	2 U
5 Aroclor-1016	UG/KG	43 U	33 U	43 U	<b>43</b> U	39 U
6 Aroclor-1221	UG/KG	<b>87</b> U	67 U	87 U	87 U	79 U
7 Aroclor-1232	UG/KG	43 U	33 U	43 U	<b>43</b> U	39 U
8 Aroclor-1242	UG/KG	43 U	33 U	43 U	43 U	39 U
9 Aroclor-1248	UG/KG	43 U	33 U	43 U	43 U	39 U
10 Aroclor-1254	UG/KG	43 U	33 U	43 U	43 U	<b>3</b> 9 U
11 Aroclor-1260	\ UG/KG	43 U	33 U	43 U	43 U	<b>3</b> 9 U
12 Dieldrin	UG/KG	39	33	30	4.3 U	3.9 U
13 Endosulfan I	UG/KG	1.7 J	1.7 U	1.5 JP	1.8 J	2 U
14 Endosulfan II	UG/KG	4.3 U	3.3 U	4.3 U	4.3 U	3.9 U
15 Endosulfan sulfate	UG/KG	4.3 U	3.3 U	4.3 U	4.3 U	3.9 U
16 Endrin	UG/KG	40	33	32	4.3 U	3.9 U
17 Endrin aldehyde	UG/KG	4.3 U	3.3 U	4.3 U	4.3 U	3.9 U
18 Endrin ketone	UG/KG	4.3 U	3.3 U	4.3 U	4.3 U	3.9 U
19 Heptachlor	UG/KG	19	16	15	<b>2.2</b> U	2 U
20 Heptachlor epoxide	UG/KG	<b>2.2</b> U	1.7 U	<b>2.2</b> U	2.2 U	2 U
21 Methoxychlor	UG/KG	<b>22</b> U	17 U	22 U	<b>22</b> U	<b>2</b> 0 U
22 Toxaphene	UG/KG	<b>22</b> 0 U	170 U	<b>22</b> 0 U	220 U	<b>2</b> 00 U
23 alpha-BHC	UG/KG	<b>2.2</b> U	1.7 U	<b>2.2</b> U	<b>2.2</b> U	2 U
24 alpha-Chlordane	. UG/KG	<b>2.2</b> U	1.7 U	<b>2.2</b> U	2.2 U	2 U
25 beta-BHC	UG/KG	2.2 U	1.7 U	2.2 U	2.2 U	2 U
26 delta-BHC	UG/KG	2.2 U	1.7 U	2.2 U	2.2 U	2 U
27 gamma-BHC (Lind	ane) UG/KG	16	13	12	2.2 U	2 U
28 gamma-Chlordane	UG/KG	2.2 U	1.7 U	<b>2.2</b> U	<b>2.2</b> U	2 U

PEST		

LSTCIDES		54298	54298	54200	54000	54209
				54298	54298	54298
		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
		SOIL	SOIL	SOIL	SOIL	SOIL
		274889	274878	274879	274880	273572
		SB25-11-03	SB25-12-00	SB25-12-02	SB25-12-03	SB25-13-00
		SA	SA	SA	SA	SA
		10	21	10	10	23
P	PARAMETER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	3.6 U	4.2 U	3.7 Ū	3.6 U	4.3 Ū
2 4,4'-DDE	UG/KG	3.6 U	4.2 U	3.7 U	3.6 U	4.3 U
3 4,4'-DDT	UG/KG	3.6 U	4.2 U	3.7 U	3.6 U	4.3 U
4 Aldrin	UG/KG	1.9 U	2.2 U	1.9 U	1.9 U	<b>2.2</b> U
5 Aroclor-1016	UG/KG	36 U	42 U	37 U	36 U	43 U
6 Aroclor-1221	UG/KG	<b>74</b> U	85 U	<b>74</b> U	74 U	87 U
7 Aroclor-1232	UG/KG	36 U	42 U	<b>37</b> U	36 U	43 U
8 Aroclor-1242	UG/KG	36 U	42 U	37 U	36 U	43 U
9 Aroclor-1248	UG/KG	36 U	42 U	37 U	36 U	43 U
10 Aroclor-1254	UG/KG	36 U	42 U	37 U	36 U	43 U
11 Aroclor-1260	UG/KG	36 U	42 U	<b>37</b> U	36 U	43 U
12 Dieldrin	UG/KG	3.6 U	4.2 U	3.7 U	3.6 U	4.3 U
13 Endosulfan I	UG/KG	1.9 U	2.2 U	1.9 U	1.9 U	2.2 U
14 Endosulfan II	UG/KG	3.6 U	4.2 U	3.7 U	3.6 U	4.3 U
15 Endosulfan sulfate	UG/KG	3.6 U	4.2 U	3.7 U	3.6 U	4.3 U
16 Endrin	UG/KG	3.6 U	4.2 U	3.7 U	3.6 U	4.3 U
17 Endrin aldehyde	UG/KG	3.6 U	2.3 ЈР	3.7 U	3.6 U	4.3 U
18 Endrin ketone	UG/KG	3.6 U	4.2 U	3.7 U	3.6 U	4.3 U
19 Heptachlor	UG/KG	1.9 U	2.2 U	1.9 U	1.9 U	2.2 U
20 Heptachlor epoxide	UG/KG	1.9 U	2.2 U	1.9 U	1.9 U	2.2 U
21 Methoxychlor	UG/KG	19 U	22 U	19 U	19 U	22 U
22 Toxaphene	UG/KG	190 U	220 U	190 U	190 U	<b>22</b> 0 U
23 alpha-BHC	UG/KG	1.9 U	2,2 U	1.9 U	1.9 U	2.2 U
24 alpha-Chlordane	UG/KG	1.9 U	2.2 U	1.9 U	1.9 U	2.2 U
25 beta-BHC	UG/KG	1.9 U	2.2 U	1.9 U	1.9 U	2.2 U
26 delta-BHC	UG/KG	1.9 U	2.2 U	1.9 U	1.9 U	2.2 U
27 gamma-BHC (Lindan	ie) UG/KG	1.9 U	<b>2.2</b> U	1.9 U	1.9 U	2.2 U
28 gamma-Chlordane	UG/KG	1.9 U	2.2 U	1.9 U	1.9 U	2.2 U

FS		

PESTICIDES		54298 PHASE 1 SOIL 273573 SB25-13-02 SA 8	54298 PHASE 1 SOIL 273574 SB25-13-04 SA 8	54298 PHASE 1 SOIL 273893 SB25-14-00 SA 21	54298 PHASE 1 SOIL 273894 SB25-14-01 SA 17	54298 PHASE 1 SOIL 273895 SB25-14-02 SA 10
,	PARAMETER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	3.6 U	3.5 U	4.1 U	3.9 Ù	3.6 U
2 4,4'-DDE	UG/KG	3.6 U	3.5 U	4.1 U	3.9 U	3.6 U
3 4,4'-DDT	UG/KG	3.6 U	3.5 U	4.1 U	.3.9 U	3.6 U
4 Aldrin	UG/KG	1.8 U	1.8 U	2.1 U	2 U	1.9 U
5 Aroclor-1016	UG/KG	36 U	35 U	41 U	39 U	36 U
6 Aroclor-1221	UG/KG	<b>72</b> U	<b>72</b> U	83 U	80 U	<b>74</b> U
7 Aroclor-1232	UG/KG	36 U	35 U	41 U	39 U	36 U
8 Aroclor-1242	UG/KG	36 U	35 U	41 U	39 Ú	36 U
9 Aroclor-1248	UG/KG	36 U	35 U	41 U	39 U	36 U
10 Aroclor-1254	UG/KG	36 U	35 U	41 U	39 U	36 U
11 Aroclor-1260	UG/KG	36 U	35 U	41 U	39 U	36 U
12 Dieldrin	UG/KG	3.6 U	3.5 U	4.1 U	3.9 U	3.6 U
13 Endosulfan I	UG/KG	1.8 U	1.8 U	2.1 U	2 U	1.9 U
14 Endosulfan II	UG/KG	3.6 U	3.5 U	4.1 U	3.9 U	3.6 U
15 Endosulfan sulfate	UG/KG	3.6 U	3.5 U	4.1 U	3.9 U	3.6 U
16 Endrin	UG/KG	3.6 U	3.5 U	4.1 U	3.9 U	3.6 U
17 Endrin aldehyde	UG/KG	3.6 U	3.5 U	4.1 U	3.9 U	3.6 U
18 Endrin ketone	UG/KG	3.6 U	3.5 U	4.1 U	3.9 U	3.6 U
19 Heptachlor	UG/KG	1.8 U	1.8 U	2.1 U	2 U	1.9 U
20 Heptachlor epoxide	UG/KG	1.8 U	1.8 U	2.1 U	2 U	1.9 U
21 Methoxychlor	UG/KG	18 U	18 U	21 U	<b>2</b> 0 U	19 U
22 Toxaphene	UG/KG	180 U	180 U	210 U	200 U	190 U
23 alpha-BHC	UG/KG	1.8 U	1.8 U	2.1 U	2 U	1.9 U
24 alpha-Chlordane	UG/KG	1.8 U	1.8 U	2.1 U	2 U	1.9 U
25 beta-BHC	UG/KG	1.8 U	1.8 U	2.1 U	2 U	1.9 U
26 delta-BHC	UG/KG	1.8 U	1.8 U	2.1 U	2 U	1.9 U
27 gamma-BHC (Linda		1.8 U	1.8 U	2.1 U	2 U	1.9 U
28 gamma-Chlordane	UG/KG	1.8 U	1.8 U	2.1 U	2 U	1.9 U

		54298 PHASE 1 SOIL 274890 SB25-15-00 SA 20	54298 PHASE 1 SOIL 274891 SB25-15-01 SA 15	54298 PHASE I SOIL 274892 SB25-15-02 SA 11	54298 PHASE 1 SOIL 275515 SD25-3 SA 25	54298 PHASE 1 SOIL 275517 SD25-30 SA 25
PA	RAMETER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	4.1 U	3.9 U	3.7 U	4.4 U	4.4 U
2 4,4'-DDE	UG/KG	4.1 U	3.9 U	3.7 U	3 ЈР	2.4 JP
3 4,4'-DDT	UG/KG	4.1 U	3.9 U	3.7 U	4.2 J	2.6 ЛР
4 Aldrin	UG/KG	2.1 U	2 U	1.9 U	2.2 U	2.3 U
5 Aroclor-1016	UG/KG	41 U	39 U	37 U	44 U	44 U
6 Aroclor-1221	UG/KG	83 U	<b>7</b> 9 U	75 U	88 U	89 U
7 Aroclor-1232	UG/KG	41 U	39 U	37 U	44 U	44 U
8 Aroclor-1242	UG/KG	41 U	39 U	37 U	44 U	44 U
9 Aroclor-1248	, UG/KG	41 U	39 U	37 U	44 U	44 U
10 Aroclor-1254	\ UG/KG	41 U	39 U	37 U	44 U	44 U
11 Aroclor-1260	UG/KG	41 U	39 U	37 U	44 U	44 U
12 Dieldrin	UG/KG	4.1 U	3.9 U	3.7 U	4.4 U	4.4 U
13 Endosulfan I	UG/KG	2.1 U	2 U	1.9 U	2.2 U	2.3 U
14 Endosulfan II	U <b>G/KG</b>	4.1 U	3.9 U	3.7 U	4.4 U	4.4 U
15 Endosulfan sulfate	UG/KG	4.1 U	3.9 U	3.7 U	4.4 U	4.4 U
16 Endrin	UG/KG	4.1 U	3.9 U	3.7 U	4.4 U	4.4 U
17 Endrin aldehyde	UG/KG	3.2 ЛР	3.9 U	3.7 U	4.4 U	14 P
18 Endrin ketone	UG/KG	4.1 U	3,9 U	3.7 U	4.4 U	4.4 U
19 Heptachlor	UG/KG	2.1 U	2 U	1.9 U	2.2 U	<b>2</b> .3 U
20 Heptachlor epoxide	UG/KG	2.1 U	2 U	1.9 U	<b>2.2</b> U	<b>2</b> .3 U
21 Methoxychlor	UG/KG	21 U	20 U	19 U	<b>22</b> U	23 U
22 Toxaphene	UG/KG	210 U	200 U	190 U	<b>220</b> U	230 U
23 alpha-BHC	UG/KG	2.1 U	2 U	1.9 U	2.2 U	2.3 U
24 alpha-Chlordane	UG/KG	2.1 U	2 U	1.9 U	2.2 U	2.3 U
25 beta-BHC	UG/KG	2.1 U	2 U	I.9 U	2.2 U	2.3 U
26 delta-BHC	UG/KG	2.1 U	2 U	1.9 U	2.2 U	2.3 U
27 gamma-BHC (Lindane)		2.1 U	2 U	1.9 U	2.2 U	2.3 U
28 gamma-Chlordane	UG/KG	2.1 U	2 U	1.9 U	<b>2.2</b> U	2.3 U

PES	ICIDES		54298		54298		54298	
			PHASE 1		PHASE 1		PHASE 1	
			SOIL		SOIL		SOIL	
			273575		273576		273577	
			SD25-7		SD25-8		SD25-9	
			SA SA		SA		SA	
			63		73		76	
			05		7.5			
		PARAMETER UNIT	VALUE	Q	VALUE	Q	VALUE	Q
1	4,4'-DDD	UG/KG	550	-	480		300	
	4,4'-DDE	UG/KG	45	JР	120	U	140	U
	4,4'-DDT	UG/KG	93		120	U	140	U
	Aldrin	UG/KG	46	U	63	U	71	U
	Aroclor-1016	UG/KG	890	U	1200	U	1400	U
	Aroclor-1221	UG/KG	1800	U	2500	U	2800	U
_	Aroclor-1232	UG/KG	890	U	1200	U	1400	U
	Aroclor-1242	UG/KG	890	U	1200	U	1400	U
	Aroclor-1248	UG/KG	890	U	1200	U	1400	U
	Aroclor-1254	UG/KG	890	U	1200	U	1400	U
	Aroclor-1260	UG/KG	890	U	1200	U	1400	U
	Dieldrin	UG/KG	89	U	120	U	140	U
	Endosulfan I	UG/KG	46	U	63	U	71	U
	Endosulfan II	UG/KG	89	U	120	U	140	U
15		UG/KG	89	U	120	U	140	U
16	Endrin	UG/KG	89	U	120	U	140	U
17		UG/KG	89	U	120	U	140	U
18		UG/KG	52	JP	120	U	140	U
19	Heptachlor	UG/KG	46	U	63	U	71	U
20		UG/KG	46	U	63		71	U
21		UG/KG	460	U	630	U	710	U
22	. •	UG/KG	4600	U	6300	U	7100	U
23		UG/KG	46	U	63	U	71	U
24		UG/KG	56		45	$\mathbf{J}\mathbf{P}$	64	J
25	beta-BHC	UG/KG	46	U	63		71	U
26	delta-BHC	UG/KG	46	U	63	U	71	U
27		ane) UG/KG	46	U	63	U	71	U
	gamma-Chlordane	UG/KG	62		50	JP	69	J
	-							

54298PS.WK4

## **METALS**

		54298
		PHASE 1
		WATER
		275516
		SD25-3R
		SA
		0
	PARAMETER UNIT	VALUE Q
1 Aluminimum	UG/L	16.2 B
2 Antimony	UG/L	2.2 U
3 Arsenic	UG/L	2.1 U
4 Barium	UG/L	3.4 U
5 Beryllium	UG/L	0.2 U
6 Cadmium	UG/L	0.3 U
7 Calcium	UG/L	86.8 U
8 Chromium	UG/L	0.65 B
9 Cobalt	UG/L	1 U
10 Copper	UG/L	3.7 B
11 Cyanide	UG/L	5 U
12 Iron	UG/L	23.1 B
13 Lead	UG/L	1.5 U
14 Magnesium	UG/L	92.3 U
15 Manganese	UG/L	0.4 U
16 Mercury	UG/L	0.02 U
17 Nickel	UG/L	13.3 B
18 Potasium	UG/L	105 U
19 Selenium	UG/L	3.7 U
20 Silver	UG/L	0.8 U
21 Sodium	UG/L	200 U
22 Thallium	UG/L	3 U
23 Vanadium	UG/L	1.1 U
24 Zinc	UG/L	19.3 B

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METALS		54298	54298	54298	54298	54298
		PHASE 1	PHASE 1		PHASE 1	PHASE 1
			SOIL	PHASE 1	SOIL	SOIL
		SOIL 274887	274888	SOIL 274 <b>889</b>	274878	274879
				The state of the s		SB25-12-02
		\$B25-11-00	SB25-11-02	SB25-11-03	SB25-12-00	SB23-12-02 SA
		SA	SA	SA	SA	δA
		77.2	85.5	89.6	79.4	90.4
	PARAMETER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	MG/K	21900	16900	14900	17100	9510
2 Antimony	MG/K	1.2 B	0.59 B	0.52 B	0.64 B	0.5 B
3 Arsenic	MG/K	6.5	7.5	5.9	5.8	4
4 Barium	MG/K	97.5	99.8	73	<b>1</b> 01	72.2
5 Beryllium	MG/K	0. <b>8</b> B	0.8 B	0.66 B	0.8 B	0.45 B
6 Cadmium	MG/K	0.07 U	0.05 U	0.07 U	0.07 U	0.06 U
7 Calcium	MG/K	9790 *	7080 *	61900 *	2840 *	104000 *
8 Chromium	MG/K	26	23.5	22.1	22.6	14.7
9 Cobalt	MG/K	9.7	13.7	10.4	11.6	7.4
10 Copper	MG/K	19.3	31.8	20.1	17.7	17.4
11 Cyanide	MG/K	0.53 U	0.58 U	0.51 U	0.67 U	0.48 U
12 Iron	MG/K	24200	30100	25200	25600	18100
13 Lead	MG/K	34.5	20.7	11.9	29.6	6.5
14 Magnesium	MG/K	4620	5590	13000	4100	17600
15 Manganese	MG/K	573	950	428	859	415
16 Mercury	MG/K	0.13	0.05	0.08 B	0.08	0.02 B
17 Nickel	MG/K	25,3	39.2	30.4	25.4	22.8
18 Potasium	MG/K	2660 E	1930 E	2740 E	1620 E	1780 E
19 Selenium	MG/K	1.1 B	0.6 U	0.83 U	0.85 U	0.79 U
20 Silver	MG/K	0.19 U	0.13 U	0.18 U	0.18 U	0.17 U
21 Sodium	MG/K	47.6 U	50.8 B	113 B	45.8 U	104 B
22 Thallium	MG/K	0.77 B	1.1 B	0.67 U	0.69 U	0.64 U
23 Vanadium	MG/K	37.2	29.5	24.4	29	16.6
24 Zinc	MG/K	84.5	96.8	74.1	76.7	49

## **METALS**

		54298	54298	54298	54298	54298
		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
		SOIL	SOIL	SOIL	SOIL	SOIL
		274880	273572	273573	273574	273893
		SB25-12-03	SB25-13-00	SB25-13-02	SB25-13-04	SB25-14-00
		SA	SA	SA	SA	SA
		90.2	76.8	91.7	92.3	79.4
	PARAMETER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimu		9380	15400	6650	6490	15400
2 Antimony	MG/K	0.58 B	1 B	0.33 U	0.37 U	0.74 B
3 Arsenic	MG/K	5.6	6.2	3.4	4.1	5.2
4 Barium	MG/K	86.5	79.1	46.5	59	72.6
5 Beryllium	MG/K	0.46 B	0.67 B	0.33 B	0.33 B	0.65 B
6 Cadmium	MG/K	0.06 U	0.08 U	0.05 U	0.05 U	0.07 U
7 Calcium	MG/K	79600 *	3300 *	105000 *	92700 *	2790 *
8 Chromium	MG/K	15.2	20.5	10.3	11.1	19.7
9 Cobalt	MG/K	9.8	10	6.7	6.9	8.8
10 Copper	MG/K	24.2	22.6	15.4	16.3	17.4
11 Cyanide	MG/K	0.51 U	0.62 U	0.53 U	0.54 U	0.72 U
12 Iron	MG/K	21000	24100	14000	15300	23700
13 Lead	MG/K	9.2	44.4	4.6	5.1	32.6
14 Magnesium	MG/K	17200	4050	19300	17700	3600
15 Manganese	MG/K	447	412	371	393	495
16 Mercury	MG/K	0.04 B	0.12	0.08 B	0.04 B	0.04 B
17 Nickel	MG/K	25.5	23.9	18	18.6	20.8
18 Potasium	MG/K	1440 E	1240 BE	1350 E	1210 E	1370 E
19 Selenium	MG/K	0.72 U	0.94 U	0.56 U	0.62 U	1.3 N
20 Silver	MG/K	0.16 U	0.2 U	0.12 U	0.13 U	0.18 U
21 Sodium	MG/K	79.2 B	50.6 U	94.7 B	106 B	44.2 U
22 Thallium	MG/K	0.58 U	0.86 B	0.45 U	0.5 U	0.66 U
23 Vanadium	MG/K	16.4	26.2	12.8	11.9	26.7
24 Zinc	MG/K	60.9	74.3	44.6	49	71.1

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METALS		54298	54298	54298	54298	54298
		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
		SOIL	SOIL	SOIL	SOIL	SOIL
		273894	273895	274890	274891	274892
		SB25-14-01	SB25-14-02	SB25-15-00	SB25-15-01	SB25-15-02
		SA	SA	SA	SA	SA
		83.1	89.7	80	85.4	88.6
	PARAMETER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	MG/K	15200	14100	19000	14300	14200
2 Antimony	MG/K	0.89 B	0.52 B	0.82 B	0.49 B	0.66 B
3 Arsenic	MG/K	5.1	5.6	6.1	4.1	5.8
4 Barium	MG/K	76.1	70.6	95.8	76.2	75.8
5 Beryllium	MG/K	0.6 B	0.65 B	0.86 B	0.69 B	0.67 B
6 Cadmium	MG/K	0.06 U	0.05 U	0.05 U	0.06 U	0.07 U
7 Calcium	MG/K	3610 *	60800 *	10900 *	105000 *	58600 *
8 Chromium	MG/K	19.3	19.8	25	20.8	20.6
9 Cobalt	MG/K	10.2	9.3	14.2	8.3	10.3
10 Copper	MG/K	15.5	24.9	19.3	22.2	24.5
11 Cyanide	MG/K	0.56 U	0.53 U	0.53 U	0.46 U	0.5 U
12 Iron	MG/K	22800	24200	30900	21800	24100
13 Lead	MG/K	21.7	9.5	32.6	9	19
14 Magnesium	MG/K	4050	10600	5300	9890	13700
15 Manganese	MG/K	561	408	1250	391	460
16 Mercury	MG/K	0.04 B	0.12	0.1	0.05	0.08 B
17 Nickel	MG/K	21.6	28.6	29.1	28.6	31.3
18 Potasium	MG/K	1210 E	2600 E	1900 E	2500 E	2300 E
19 Selenium	MG/K	0.77 B	0.59 U	1 N	0.75 U	0.8 U
20 Silver	MG/K	0.15 U	0.13 U	0.14 U	0.16 U	0.17 U
21 Sodium	MG/K	38.2 U	78.2 B	50.4 B	118 B	95.8 B
22 Thallium	MG/K	0.57 U	0.85 B	1 B	0.61 U	0.65 U
23 Vanadium	MG/K	25.2	24.7	32.4	24	23.9
24 Zinc	MG/K	74.9	67.5	78.5	60.9	75. <b>7</b>

54298MS.WK4

## **METALS**

	54298	54298	54298	54298	54298
	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	SOIL	SOIL	SOIL	SOIL	SOIL
	275515	275517	273575	273576	273577
	SD25-3	SD25-30			SD25-9
	SA	SA			SA
	74.8	75	37.1	26.6	24.4
PARAMETER UNIT	VALUE Q	VALUE Q	VALUE Q		VALUE Q
MG/K	15600	12100	3430	9310	21900
MG/K	0.66 B	0.57 U	0.86 B	1.4 U	3.4 B
MG/K	7.7	5.1	3 B	6.2 B	12.2
MG/K	85.7	65.3	39.3 B	77.3 B	133 B
MG/K	0.8 B	0.6 B	0.19 B	0.51 B	1.1 B
MG/K	0.05 U	0.08 U	1.2 B	2.5 B	2.7 B
MG/K	16800 *	17600 *	47100 *	106000 *	55700 *
MG/K	24.1	18.6	27.9	39.5	59
MG/K	15.3	8.9	3.9	8.8	26.7
MG/K	35.6	24	48.2	96.6	116
MG/K	0.59 U	0.49 U	1.4 U	2.2 U	2.1 U
MG/K	33200	21900	8020	18000	54700
MG/K	24.5	20.4	175		378
MG/K	6490	5690	5080		14400
MG/K	711	411	129		835
MG/K	0.12	0.05 B	0.11 B	0.22	0.38
MG/K	40.9	27.4	12.3 B	29.1	72.6
MG/K	1870 E	1690 E	718 BE	2180 BE	3270 BE
MG/K	0.78 B	0.96 U	1.3 U		2.9 U
MG/K	0.14 U	0.21 U	3.4 B	6.6	10.2
MG/K	631 B	460 B	509 B	485 B	832 B
MG/K	0.54 U	0.78 U	1.1 U	1.9 U	2.4 U
MG/K	27.9	22.5	17.3 B	42.3	84.6
MG/K	102	88.1	141	272	541
	MG/K MG/K MG/K MG/K MG/K MG/K MG/K MG/K	SOIL 275515 SD25-3 SA  74.8  PARAMETER UNIT VALUE Q  MG/K 15600 MG/K 0.66 B  MG/K 7.7 MG/K 85.7 MG/K 0.8 B  MG/K 0.05 U  MG/K 16800 *  MG/K 24.1 MG/K 35.6 MG/K 35.6 MG/K 35.6 MG/K 35.6 MG/K 33200 MG/K 33200 MG/K 33200 MG/K 44.5 MG/K 6490 MG/K 711 MG/K 711 MG/K 711 MG/K 0.12 MG/K 0.12 MG/K 40.9 MG/K 40.9 MG/K 40.9 MG/K 1870 E MG/K 0.78 B MG/K 0.78 B MG/K 0.14 U MG/K 631 B MG/K 0.54 U MG/K 0.54 U MG/K 0.54 U MG/K 0.54 U	PHASE 1 SOIL SOIL 275515 SOIL 275517 SD25-3 SD25-30 SA SA SA  74.8 75 PARAMETER UNIT WALUE Q MG/K 15600 12100 MG/K 15600 12100 MG/K 0.66 B 0.57 U MG/K 7.7 5.1 MG/K 85.7 65.3 MG/K 0.8 B 0.6 B MG/K 0.05 U 0.08 U MG/K 15.3 MG/K 1	PHASE 1 SOIL SOIL SOIL SOIL SOIL SOIL SOIL SOIL	PHASE   PHASE   PHASE   PHASE   PHASE   SOIL SOIL SOIL SOIL SOIL SOIL SOIL SOIL

VOCS		54539 PHASE 1 SOIL 275151 SB26-12-04MS MS 18	54539 PHASE 1 SOIL 275151 SB26-12-04MSD MSD 18	54539 PHASE 1 SOIL 275150 SB26-12-00 SA 11	54539 PHASE 1 SOIL 275151 SB26-12-04 SA 18	54539 PHASE 1 SOIL 275152 SB26-12-08 SA 15
PARAME	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE O	VALUE Q
1 1,1,1-Trichloroethane	ug/Kg ′	1500 U	1500 U	11 U	1500 U	12 U
2 1,1,2,2-Tetrachloroethane	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
3 1.1.2-Trichloroethene	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
4 1,1-Dichloroethane	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
5 1,1-Dichloroethene	ug/Kg	6700	6600	11 U	1500 U	12 U
6 1,2-Dichloroctopane	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
7 1.2-Dichloroethane	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
8 1,2-Dichloroethene (total)	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
9 2-Butanone	ug/Kg	1500 U	1500 U	11 U	1500 U	2 JB
10 2-Hexanone	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
11 4-Methyl-2-Pentanone	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
12 Acetone	ug/Kg	1600 B	1600 B	8 JB	1800 B	8 J
13 Benzene	ug/Kg	7500	7500	11 U	1500 U	12 U
14 Bromodichloromethane	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
15 Bromoform	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
16 Bromomethane	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
17 Carbon Disulfide	ug/Kg	1500 U	1500 U	2 J	1500 U	12 U
18 Carbon Tetrachloride	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
19 Chlorobenzene	ug/Kg	7800	7600	11 <b>U</b>	1500 U	12 U
20 Chloroethane	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
21 Chloroform	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
22 Chloromethane	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
23 Dibromochloromethane	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
24 Ethylbenzene	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
25 Methylene Chloride	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
26 Styrene	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
27 Tetrachloroethene	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
28 Toluene	ug/Kg	7700	7400	11 U	1500 U	12 U
29 Trichloroethene	ug/Kg	7600	7400	11 U	1500 U	12 U
30 Vinyl Chloride	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
31 Xylene (total)	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
32 cis-1,3-Dichloroctopene	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U
33 trans-1,3-Dichloroctopene	ug/Kg	1500 U	1500 U	11 U	1500 U	12 U

54539VS.WK4

			SOIL
			275153
			SD26-10
			SA
			23
	PARAMETER	UNIT	VALUE Q
1	1,1,1-Trichloroethane	ug/Kg	1600 U
2	1,1,2,2-Tetrachloroethane	ug/Kg	1600 U
3	1,1,2-Trichloroethene	ug/Kg	1600 U
4	1,1-Dichloroethane	ug/Kg	1600 U
5	1,1-Dichloroethene	ug/Kg	1600 U
6	1,2-Dichloroctopane	ug/Kg	1600 U
7	1,2-Dichloroethane	ug/Kg	1600 U
8	1,2-Dichloroethene (total)	ug/Kg	1600 U
9	2-Butanone	ug/Kg	1200 J
10	2-Hexanone	ug/Kg	1600 U
11	4-Methyl-2-Pentanone	ug/Kg	1600 U
12	Acetone	ug/Kg	2900 B
13	Benzene	ug/Kg	1600 U
14	Bromodichloromethane	ug/Kg	1600 U
15	Bromoform	ug/Kg	1600 U
	Bromomethane	ug/Kg	1600 U
17	Carbon Disulfide	ug/Kg	1600 U
18	Carbon Tetrachloride	ug/Kg	1600 U
	Chlorobenzene	ug/Kg	1600 U
20	Chloroethane	ug/Kg	1600 U
21	Chloroform	ug/Kg	1600 U
22	Chloromethane	ug/Kg	1600 U
	Dibromochloromethane	ug/Kg	1600 U
	Ethylbenzene	ug/Kg	310 J
	Methylene Chloride	ug/Kg	1600 U
26	Styrene	ug/Kg	1600 U
27	Tetrachloroethene	ug/Kg	1600 U
	Toluene	ug/Kg	1600 U
	Trichloroethene	ug/Kg	1600 U
	Vinyl Chloride	ug/Kg	1600 U
	Xylene (total)	ug/Kg	2400
	cis-1,3-Dichloroctopene	ug/Kg	1600 U
33	trans-1,3-Dichloroctopene	ug/Kg	1600 U

54539 PHASE 1

		54539	54539	54539	54539
		PHASE 1	PHASE 1	PHASE 1	PHASE 1
		SOIL	SOIL	SOIL	SOIL
		275150	275151	275152	275153
		SB26-12-00	SB26-12-04	SB26-12-08	SD26-10
		SA	SA	SA	SA
		9	16	20	17
PARAME	ETER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	1800 U	1300 U	<b>820</b> U	98000 U
2 1,2-Dichlorobenzene	UG/KG	1800 U	1300 U	820 U	98000 U
3 1,3-Dichlorobenzene	UG/KG	1800 U	1300 U	<b>82</b> 0 U	98000 U
4 1,4-Dichlorobenzene	UG/KG	1800 U	1300 U	820 U	98000 U
5 2,4,5-Trichlorophenol	UG/KG	4400 U	3200 U	2000 U	240000 U
6 2,4,6-Trichlorophenol	UG/KG	1800 U	1300 U	820 U	98000 U
7 2,4-Dichlorophenol	UG/KG	1800 U	1300 U	820 U	98000 U
8 2,4-Dimethylphenol	UG/KG	1800 U	1300 U	<b>820</b> U	98000 U
9 2,4-Dinitrophenol	UG/KG	4400 U	3200 U	2000 U	240000 U
10 2,4-Dinitrotoluene	UG/KG	1800 U	1300 U	820 U	98000 U
11 2,6-Dinitrotoluene	UG/KG	1800 U	1300 U	820 U	98000 U
12 2-Chloronaphthalene	UG/KG	1800 U	1300 U	820 U	98000 U
13 2-Chlorophenol	UG/KG	1800 U	1300 U	820 U	98000 U
14 2-Methylnaphthalene	UG/KG	1800 U	2100	820 U	33000 J
15 2-Methylphenol	UG/KG	1800 U	1300 U	<b>82</b> 0 U	98000 U
16 2-Nitroaniline	UG/KG	4400 U	3200 U	2000 U	240000 U
17 2-Nitrophenol	ÚG/KG	1800 U	1300 U	820 U	98000 U
18 3,3'-Dichlorobenzidine	UG/KG	1800 U	1300 U	820 U	98000 U
19 3-Nitroaniline	UG/KG	4400 U	3200 U	2000 U	240000 U
20 4,6-Dinitro-2-methylphenol	UG/KG	4400 U	3200 U	2000 U	240000 U
21 4-Bromophenyl-phenylether	UG/KG	1800 U	1300 U	820 U	98000 U
22 4-Chloro-3-methylphenol	UG/KG	1800 U	1300 U	820 U	98000 U
23 4-Chloroaniline	UG/KG	1800 U	1300 U	820 U	98000 U
24 4-Chlorophenyl-phenylether	UG/KG	1800 U	1300 U	820 U	98000 U
25 4-Methylphenol	UG/KG	1800 U	1300 U	820 U	98000 U
26 4-Nitroaniline	UG/KG	4400 U	3200 U	2000 U	240000 U
27 4-Nitrophenol	UG/KG	4400 U	3200 U	2000 U	240000 U
28 Acenaphthene	UG/KG	1800 U	250 J	820 U	11000 J
29 Acenaphthylene	UG/KG	1800 U	1300 U	820 U	98000 U
30 Anthracene	UG/KG	1800 U	1300 U	820 U	98000 U
31 Benzo(a)anthracene	UG/KG	1800 U	1300 U	820 U	98000 U
32 Benzo(a)pyrene	UG/KG	1800 U	1300 U	820 U	98000 U
33 Benzo(b)fluoranthene	UG/KG	1800 U	1300 U	820 U	98000 U
34 Benzo(g,h,i)perylene	UG/KG	1800 U	1300 U	820 U	98000 U
35 Butylbenzylphthalate	UG/KG	1800 U	1300 U	820 U	98000 U

54539SS.WK4

		54539	54539	54539	54539
		PHASE 1	PHASE 1	PHASE 1	PHASE 1
		SOIL	SOIL	SOIL	SOIL
		275150	275151	275152	275153
		SB26-12-00	SB26-12-04	SB26-12-08	SD26-10
		SA	SA	SA	SA
		9	16	20	17
PARAMET	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
36 Carbazole	UG/KG	1800 U	1300 U	820 U	98000 U
37 Chrysene	UG/KG	1800 U	1300 U	820 U	98000 U
38 Di-n-butylphthalate	UG/KG	1800 U	1300 U	820 U	98000 U
39 Di-n-oprylphthalate	UG/KG	1800 U	1300 U	820 U	98000 U
40 Dibenz(a,h)anthracene	UG/KG	1800 U	1300 U	820 U	98000 U
41 Dibenzofuran	UG/KG	1800 U	1300 U	820 U	98000 U
42 Diethylphthalate	UG/KG	1800 U	1300 U	820 U	98000 U
43 Dimethylphthalate	UG/KG	1800 U	1300 U	820 U	98000 U
44 Fluoranthene	UG/KG	1800 U	1300 U	820 U	98000 U
45 Fluorene	UG/KG	1800 U	320 J	820 U	16000 J
46 Hexachlorobenzene	UG/KG	1800 U	1300 U	820 U	98000 U
47 Hexachlorobutadiene	UG/KG	1800 U	1300 U	820 U	98000 U
48 Hexachlorocyclopentadiene	UG/KG	1800 U	1300 U	820 U	98000 U
49 Hexachloroethane	UG/KG	1800 U	1300 U	820 U	98000 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	1800 U	1300 U	820 U	98000 U
51 Isophorone	UG/KG	1800 U	1300 U	820 U	98000 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	1800 U	1300 U	820 U	98000 U
53 N-Nitrosodiphenylamine (1)	UG/KG	1800 U	1300 U	820 U	98000 U
54 Naphthalene	UG/KG	1800 U	. 1300 U	820 U	98000 U
55 Nitrobenzene	UG/KG	1800 U	1300 U	820 U	98000 U
56 Pentachlorophenol	UG/KG	4400 U	3200 U	2000 U	240000 U
57 Phenanthrene	UG/KG	1800 U	810 J	130 J	30000 J
58 Phenol	UG/KG	1800 U	1300 U	820 U	98000 U
59 Pyrene	UG/KG	230 J	1300 U	120 J	98000 U
60 benzo(k)fluoranthene	UG/KG	1800 U	1300 U	820 U	98000 U
61 bis(2-Chloroethoxy) methane	UG/KG	1800 U	1300 U	820 U	98000 U
62 bis(2-Chloroethyl) ether	UG/KG	1800 U	1300 Ú	820 U	98000 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	1800 U	1300 U	820 U	98000 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	1800 U	1300 U	530 J	98000 U

		54539	54539	54539
		PHASE 1	PHASE 1	PHASE 1
		SOIL	SOIL	SOIL
		275150	275151	275152
		SB26-12-00	SB26-12-04	SB26-12-08
		SA	SA	SA
		9	16	20
	PARAMETER UNIT	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	3.3 J	3.9 U	4.1 U
2 4,4'-DDE	UG/KG	2.7 JP	3.9 U	4.1 U
3 4,4'-DDT	UG/KG	4.1 P	3.9 U	4.1 U
4 Aldrin	UG/KG	1.8 U	2 U	2.1 U
5 Aroclor-1016	UG/KG	36 U	39 U	41 U
6 Aroclor-1221	UG/KG	<b>73</b> U	<b>7</b> 9 U	<b>83</b> U
7 Aroclor-1232	UG/KG	36 U	39 U	41 U
8 Aroclor-1242	UG/KG	36 U	39 U	41 U
9 Aroclor-1248	UG/KG	36 U	39 U	41 U
10 Aroclor-1254	UG/KG	<b>3</b> 6 U	<b>3</b> 9 U	41 U
11 Aroclor-1260	UG/KG	36 U	<b>3</b> 9 U	41 U
12 Dieldrin	UG/KG	2.4 J	3.9 U	4.1 U
13 Endosulfan I	UG/KG	4.3 P	<b>2</b> U	<b>2</b> .1 U
14 Endosulfan II	UG/KG	19 P	3.9 U	4.1 U
15 Endosulfan sulfate	UG/KG	3.6 U	3.9 U	4.1 U
16 Endrin	UG/KG	3.6 U	3.9 U	4.1 U
17 Endrin aldehyde	UG/KG	<b>12</b> P	3.9 U	4.1 U
18 Endrin ketone	UG/KG	3.9	3.9 U	4.1 U
19 Heptachlor	UG/KG	1.8 U	<b>2</b> U	<b>2</b> .1 U
20 Heptachlor epoxide		2.8 P	<b>2</b> U	<b>2</b> .1 U
21 Methoxychlor	UG/KG	18 U	<b>2</b> 0 U	<b>21</b> U
22 Toxaphene	UG/KG	180 U	200 U	210 U
23 alpha-BHC	UG/KG	1.8 U	2 U	<b>2</b> .1 U
24 alpha-Chlordane	UG/KG	1.8 U	2 U	<b>2</b> .1 U
25 beta-BHC	UG/KG	1.8 U	2 U	2.1 U
26 delta-BHC	UG/KG	1.8 U	<b>2</b> U	2.1 U
27 gamma-BHC (Linda		1.8 U	<b>2</b> U	2.1 U
28 gamma-Chlordane	UG/KG	1.1 JP	2 U	2.1 U

		TIM TOLD I
		SOIL
		275153
		SD26-10
		SA
		17
	PARAMETER UNIT	VALUE Q
1 4,4'-DDD	UG/KG	40 U
2 4,4'-DDE	UG/KG	40 U
3 4,4'-DDT	UG/KG	40 U
4 Aldrin	UG/KG	20 U
5 Aroclor-1016	UG/KG	400 U
6 Aroclor-1221	UG/KG	810 U
7 Aroclor-1232	UG/KG	400 U
8 Aroclor-1242	UG/KG	400 U
9 Aroclor-1248	UG/KG	400 U
10 Aroclor-1254	UG/KG	400 U
11 Aroclor-1260	UG/KG	400 U
12 Dieldrin	UG/KG	40 U
13 Endosulfan I	UG/KG	20 U
14 Endosulfan II	UG/KG	46 P
15 Endosulfan sulfate	UG/KG	52 P
16 Endrin	UG/KG	40 U ·
17 Endrin aldehyde	UG/KG	99 P
18 Endrin ketone	UG/KG	23 Ј
19 Heptachlor	UG/KG	20 U
20 Heptachlor epoxide	UG/KG	26
21 Methoxychlor	UG/KG	200 U
22 Toxaphene	UG/KG	2000 U
23 alpha-BHC	UG/KG	11 J
24 alpha-Chlordane	UG/KG	<b>20</b> U
25 beta-BHC	UG/KG	20 U
26 delta-BHC	UG/KG	20 U
27 gamma-BHC (Linda	ane) UG/KG	17 J
28 gamma-Chlordane	UG/KG	<b>20</b> U

54539 PHASE 1

WETALS		54539 PHASE 1 SOIL	54539 PHASE 1 SOIL	54539 PHASE 1 SOIL	54539 PHASE 1 SOIL
		275150	275151	275152	275153
		SB26-12-00	SB26-12-04	SB26-12-08	SD26-10
	•	SA SA	SB20-12-04 SA	SA SA	SA
		90.7	83.7	80.5	82.6
	PARAMETER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	MG/K	424	11500	11500	681
2 Antimony	MG/K	0.37 U	0.33 U	0.39 U	0.27 U
3 Arsenic	MG/K	3.7	8.7	6.3	3.7
4 Barium	MG/K	22.5 B	71.5	71.4	21 B
5 Beryllium	MG/K	0.18 B	0.6 B	0.57 B	0.19 B
6 Cadmium	MG/K	0.08 B	0.05 U	0.05 U	0.31 B
7 Calcium	MG/K	305000	49600	9200	267000
8 Chromium	MG/K	1.7 B	18.5	19.4	2.1
9 Cobalt	MG/K	2.7 B	11.1	11.3	2.8 B
10 Copper	MG/K	10.1	26	25.5	17.6
11 Cyanide	MG/K	0.41 U	0.61 U	0.59 U	0.56 U
12 Iron	MG/K	2910	25600	26900	3070
13 Lead	MG/K	0.25 U	9.5 E	15 E	9.4 E
14 Magnesium	MG/K	7450	6610	6780	7230
15 Manganese	MG/K	207	1140	530	190
16 Mercury	MG/K	0.03 B	0.04 B	0.06 B	0.02 B
17 Nickel	MG/K	9 E	29.4 E	35.7 E	9.9 E
18 Potasium	MG/K	406 B	879	1200	472 B
19 Selenium	MG/K	0.63 U	0.92	0.66 U	0.45 U
20 Silver	MG/K	0.14 U	0.12 U	0.14 U	0.1 U
21 Sodium	MG/K	176 B	168 B	44.8 B	146 B
22 Thallium	MG/K	0.79 B	0.59 B	0.53 U	0.37 U
23 Vanadium	MG/K	4.4 B	18.1	19.3	4.6 B
24 Zinc	MG/K	15.4	72.3	99.9	65.4

MATRIX:			WATER
	LAB SAMP.	275154	
	EPA SAMP.	SW26-11	
	OC COI		DU
	% MOISTUE		37
	% SOLII		37
	76 BOLII	<i>J</i> 3.	
	PARAMETER	UNIT	VALUE Q
1	1,1,1-Trichloroethane	ug/L	10 U
2	1,1,2,2-Tetrachloroethane	ug/L	10 U
3	1,1,2-Trichloroethene	ug/L	10 U
4	1,1-Dichloroethane	ug/L	10 U
5	1, I-Dichloroethene	ug/L	10 U
6	1,2-Dichloroctopane	ug/L	10 U
7	1,2-Dichloroethane	ug/L	10 U
8	1,2-Dichloroethene (total)	ug/L	10 U
9	2-Butanone	ug/L	10 U
10	2-Hexanone	ug/L	10 U
11	4-Methyl-2-Pentanone	ug/L	10 U
12	Acetone	ug/L	10 U
13	Benzene	ug/L	10 U
14	Bromodichloromethane	ug/L	10 U
15	Bromoform	ug/L	10 U
16	Bromomethane	ug/L	10 U
	Carbon Disulfide	ug/L	10 U
18	Carbon Tetrachloride	ug/L	10 U
	Chlorobenzene	ug/L	10 U
	Chloroethane	ug/L	10 U
	Chloroform	ug/L	10 U
	Chloromethane	ug/L	10 U
	Dibromochloromethane	ug/L	10 U
	Ethylbenzene	ug/L	10 U
	Methylene Chloride	ug/L	10 U
	Styrene	ug/L	10 U
	Tetrachloroethene	ug/L	10 U
	Toluene	ug/L	10 U
	Trichloroethene	ug/L	10 U
	Vinyl Chloride	ug/L	10 U
	Xylene (total)	ug/L	10 U
	cis-1,3-Dichloroctopene	ug/L	10 U
33	trans-1,3-Dichloroctopene	ug/L	10 U

SDG:

STUDY ID:

54541

PHASE 1

VOC						
	S	SDG:	54541	54541	54541	54541
	STUDY	TID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MAT	RIX:	SOIL	SOIL	SOIL	SOIL
	LAB SAMP	. ID:	275154	275154	275474	275476
	EPA SAMP		SW26-11MS	SW26-11MSD	SS26-39RE	SS26-41RE
	QC CC		MS	MSD	RE	RE
	% MOISTU		37	37	21	7
	% SOL		5,			
	70 BOL	1100.				
	PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1	1,1,1-Trichloroethane	ug/Kg	1900 U	1900 U	13 U	11 U
	1,1,2,2-Tetrachloroethane	ug/Kg	1900 U	1900 U	13 U	11 U
	1.1.2-Trichloroethene	ug/Kg	1900 U	1900 U	13 U	11 U
	1,1-Dichloroethane	ug/Kg	1900 U	1900 U	13 U	11 U
	1,1-Dichloroethene	ug/Kg	3500	5800	13 U	. 11 U
	1,2-Dichloroctopane	ug/Kg	1900 U	1900 U	13 U	11 U
	1,2-Dichloroethane	ug/Kg	1900 U	1900 U	13 U	11 U
	1,2-Dichloroethene (total)	ug/Kg	1900 U	1900 U	13 U	11 U
	2-Butanone	ug/Kg	860 JB	870 JB		11 U
	2-Hexanone	ug/Kg	1900 U	1900 U	13 U	11 U
	4-Methyl-2-Pentanone	ug/Kg	1900 U	1900 U	13 U	11 U
	Acetone	ug/Kg ug/Kg	920 JB	920 JB		1 J
	Benzene	ug/Kg ug/Kg	6100	7300	13 U	11 U
13		ug/Kg ug/Kg	1900 U	1900 U	13 U	11 U
	Bromoform	ug/Kg ug/Kg	1900 U	1900 U	13 U	11 U
	Bromomethane	ug/Kg ug/Kg	1900 U	1900 U	13 U	11 U
	Carbon Disulfide	ug/Kg ug/Kg	1900 U	1900 U	13 U	11 U
	Carbon Tetrachloride	ug/Kg ug/Kg	1900 U	1900 U	13 U	11 U
	Chlorobenzene	ug/Kg ug/Kg	7600	6800	13 U	11 U
	Chloroethane		1900 U	1900 U	13 U	11 U
	Chloroform	ug/Kg	1900 U	1900 U	13 U	11 U
_		ug/Kg	1900 U	1900 U	13 U	11 U
	Chloromethane Dibromochloromethane	ug/Kg	1900 U	1900 U	13 U	11 U
		ug/Kg ug/Kg	230 J	240 J	13 U	11 U
	Ethylbenzene		1900 U	1900 U	13 U	11 U
	Methylene Chloride	ug/Kg	1900 U	1900 U	13 U	11 U
	Styrene	ug/Kg	1900 U	1900 U	13 U	11 U
	Tetrachloroethene	ug/Kg	6700	7200	13 U	11 U
	Toluene	ug/Kg		7400	13 U	11 U
	Trichloroethene	ug/Kg	6000	1900 U	13 U	
	Vinyl Chloride	ug/Kg	1900 U			11 U
	Xylene (total)	ug/Kg	2200	2000	13 U	11 U
	cis-1,3-Dichloroctopene	ug/Kg	1900 U	1900 U	13 U	11 U
33	trans-1,3-Dichloroctopene	ug/Kg	1900 U	1900 U	13 U	11 U

VOCs

STUDY MATI LAB SAMP EPA SAMP QC CO % MOISTI % SOL	RIX: . ID: . ID: DDE: JRE:	54541 PHASE 1 SOIL 275459 SB26-11-00 SA 6	54541 PHASE 1 SOIL 275461 SB26-11-03 SA 14	54541 PHASE 1 SOIL 275462 SB26-11-06 SA 10	54541 PHASE 1 SOIL 275465 SD26-12 SA 34	54541 PHASE 1 SOIL 275464 SD26-8 SA 35
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	ug/Kg	11 U	12 U	11 U	15 U	15 U
2 1,1,2,2-Tetrachloroethane	ug/Kg	, 11 U	12 U	11 U	15 U	15 U
3 1,1,2-Trichloroethene	ug/Kg	11 U	12 U	11 U	15 U	15 U
4 1,1-Dichloroethane	ug/Kg	: 11 U	12 U	11 U	15 U	15 U
5 1,1-Dichloroethene	ug/Kg	11 U	12 U	11 U	15 U	15 U
6 1,2-Dichloroctopane	ug/Kg	11 U	12 U	11 U	15 U	15 U
7 1,2-Dichloroethane	ug/Kg	11 U	12 U	11 U	15 U	15 U
8 1,2-Dichloroethene (total)	ug/Kg	11 U	12 U	11 U	15 U	15 U
9 2-Butanone	ug/Kg	11 U	16	4 JB	15 U	15 U
10 2-Hexanone	ug/Kg	11 U	12 U	11 U	15 U	15 U
11 4-Methyl-2-Pentanone	ug/Kg	11 U	12 U	11 U	15 U	15 U
12 Acetone	ug/Kg	11 U	75 B	22	5 JB	8 J
13 Benzene	ug/Kg	11 U	12 U	11 U	15 U	15 U
14 Bromodichloromethane	ug/Kg	11 U	12 U	11 U	15 U	15 U
15 Bromoform	ug/Kg	11 U	12 U	11 U	15 U	15 U
16 Bromomethane	ug/Kg	11 U	12 U	11 U	15 U	15 U
17 Carbon Disulfide	ug/Kg	11 U	1 J	11 U	15 U	15 U
18 Carbon Tetrachloride	ug/Kg	11 U	12 U	11 U	15 U	15 U
<ul><li>19 Chlorobenzene</li><li>20 Chloroethane</li></ul>	ug/Kg	11 U 11 U	12 U 12 U	11 U	15 U	15 U
21 Chloroform	ug/Kg	11 U	12 U	11 U 11 U	15 U	15 U
22 Chloromethane	ug/Kg ug/Kg	11 U	12 U	11 U	15 U 15 U	15 U
23 Dibromochloromethane	ug/Kg ug/Kg	11 U	12 U	11 U	15 U	. 15 U
24 Ethylbenzene	ug/Kg ug/Kg	11 U	12 U	11 U	15 U	15 U 15 U
25 Methylene Chloride	ug/Kg ug/Kg	11 U	12 U	11 U	15 U	15 U
26 Styrene	ug/Kg	11 U	12 U	11 U	15 U	15 U
27 Tetrachloroethene	ug/Kg	11 U	12 U	11 Ü	15 U	15 U
28 Toluene	ug/Kg	11 U	12 U	11 U	15 U	15 U
29 Trichloroethene	ug/Kg	11 U	12 U	11 U	15 U	15 U
30 Vinyl Chloride	ug/Kg	11 U	12 U	11 U	15 U	15 U
31 Xylene (total)	ug/Kg	11 U	12 U	11 U	15 U	15 U
32 cis-1,3-Dichloroctopene	ug/Kg	11 U	12 U	11 U	15 U	15 U
33 trans-1,3-Dichloroctopene	ug/Kg	11 U	12 U	11 U	15 U	15 U
	- 6 0			~~ ~	15 0	15 0

54541VS.WK4

VOCs						54541
	SDG:	54541	54541	54541	54541	54541
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MAT	RIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP	P. ID:	275466	275467	275468	275469	275470
EPA SAMP		SS26-24	SS26-27	SS26-29	SS26-33	SS26-35
OC CO		SA	SA	SA	SA	SA
% MOISTU		9	5	6	10	22
% SOL		-	_		•	
70001	abo.	•				
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	ug/Kg	11 U	10 U	11 U	11 U	13 U
2 1,1,2,2-Tetrachloroethane	ug/Kg	11 U	10 U	11 U	11 U	13 U
3 1,1,2-Trichloroethene	ug/Kg	11 U	10 U	11 U	11 U	13 U
4 1.1-Dichloroethane	ug/Kg	11 U	10 U	11 U	11 U	13 U
5 1,1-Dichloroethene	ug/Kg	11 U	10 U	11 U	11 U	13 U
6 1,2-Dichloroctopane	ug/Kg	11 U	10 U	11 U	11 U	13 U
7 1.2-Dichloroethane	ug/Kg	11 U	10 U	11 U	11 U	13 U
8 1,2-Dichloroethene (total)	ug/Kg	11 U	10 U	11 U	11 U	13 U
9 2-Butanone	ug/Kg	11 U	10 U	11 U	11 U	13 U
10 2-Hexanone	ug/Kg	11 U	10 U	11 U	11 U	13 U
11 4-Methyl-2-Pentanone	ug/Kg	11 U	10 U	11 U	11 U	13 U
12 Acetone	ug/Kg	14	13	4 JB	9 JB	7 J
13 Benzene	ug/Kg	11 U	10 U	11 U	11 U	13 U
14 Bromodichloromethane	ug/Kg	11 U	10 U	11 U	11 U	13 U
15 Bromoform	ug/Kg	11 U	10 U	11 Ü	11 U	13 U
16 Bromomethane	ug/Kg	11 U	10 U	11 U	11 U	13 U
17 Carbon Disulfide	ug/Kg	11 U	10 U	11 U	11 U	13 U
18 Carbon Tetrachloride	ug/Kg	11 U	10 U	11 U	11 U	13 U
19 Chlorobenzene	ug/Kg	11 U	10 U	11 U	11 U	13 U
20 Chloroethane	ug/Kg	11 U	10 U	11 U	11 U	13 U
21 Chloroform	ug/Kg	11 U	10 Ü	11 U	11 U	13 U
22 Chloromethane	ug/Kg	11 U	10 U	11 U	11 U	13 · U
23 Dibromochloromethane	ug/Kg	11 U	10 U	11 U	11 U	13 U
24 Ethylbenzene	ug/Kg	11 U	10 U	11 U	11 U	13 U
25 Methylene Chloride	ug/Kg	11 U	10 U	11 U	11 U	13 U
26 Styrene	ug/Kg	11 U	10 U	11 U	11 U	13 U
27 Tetrachloroethene	ug/Kg	11 U	10 U	11 U	11 U	13 U
28 Toluene	ug/Kg	11 U	10 U	2 J	11 U	13 U
29 Trichloroethene	ug/Kg ug/Kg	11 U	10 U	11 U	11 U	13 U
30 Vinyl Chloride	ug/Kg ug/Kg	11 U	10 U	11 U	11 U	13 U
31 Xylene (total)	ug/Kg ug/Kg	11 U	10 U	6 J	11 U	13 U
	ug/Kg ug/Kg	11 U	10 U	11 U	11 U	13 U
32 cis-1,3-Dichloroctopene	ug/Kg ug/Kg	11 U	10 U	11 U	11 U	13 U
33 trans-1,3-Dichloroctopene	ng/rg	11 0	10 0	11 0	11 0	13 U

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S	SDG:	54541	54541	54541	54541	54541
STUDY		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MAT	RIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP	. ID:	275471	275472	275473	275474	275475
EPA SAMP	P. ID:	SS26-36	SS26-37	SS26-38	SS26-39	SS26-40
QC CC	DDE:	SA	SA	SA	SA	SA
% MOISTU		6	5	11	21	15
% SOL	IDS:					
				.1		
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	ug/Kg	11 U	10 U	11 U	13 U	12 U
2 1,1,2,2-Tetrachloroethane	ug/Kg	11 U	10 U	11 U	13 U	12 U
3 1,1,2-Trichloroethene	ug/Kg	11 U	10 U	11 U	13 U	12 U
4 1,1-Dichloroethane	ug/Kg	11 U	10 U	11 U	13 U	12 U
5 1,1-Dichloroethene	ug/Kg	11 U	10 U	11 U	. 13 U	12 U
6 1,2-Dichloroctopane	ug/Kg	11 U	10 U	11 U	13 U	12 U
7 1,2-Dichloroethane	ug/Kg	11 U	10 U	11 U	13 U	12 U
8 1,2-Dichloroethene (total)	ug/Kg	11 U	10 U	11 U	13 U	12 U
9 2-Butanone	ug/Kg	11 U	10 U	11 U	13 U	12 U
10 2-Hexanone	ug/Kg	11 U	10 U	11 U	13 U	12 U
11 4-Methyl-2-Pentanone	ug/Kg	11 U	10 U	11 U	13 U	12 U
12 Acetone	ug/Kg	1 J	3 Ј	4 J	22 B	5 J
13 Benzene	ug/Kg	11 U	10 U	11 U	13 U	12 U
14 Bromodichloromethane	ug/Kg	11 U	10 U	11 U	13 U	12 U
15 Bromoform	ug/Kg	11 U	10 U	11 U	13 U	12 U
16 Bromomethane	ug/Kg	11 U	10 U	11 U	13 U	12 U
17 Carbon Disulfide	ug/Kg	11 U	10 U	11 U	13 U	12 U
18 Carbon Tetrachloride	ug/Kg	11 U	10 U	11 U	13 U	12 U
19 Chlorobenzene	ug/Kg	11 U	10 U	11 U	13 U	12 U
20 Chloroethane	ug/Kg	11 U	10 U	11 U	13 U	12 U
21 Chloroform	ug/Kg	11 U	10 U	11 U	13 U	12 U
22 Chloromethane	ug/Kg	11 U	10 U	11 U	13 U	12 U
23 Dibromochloromethane	ug/Kg	11 U	10 U	11 U	13 U	12 U
24 Ethylbenzene	ug/Kg	11 U	10 U	11 U	13 U	12 U
25 Methylene Chloride	ug/Kg	11 U	10 U	11 U	13 U	12 U
26 Styrene	ug/Kg	11 U	10 U	11 U	13 U	12 U
27 Tetrachloroethene	ug/Kg	11 U	10 U	11 U	13 U	12 U
28 Toluene	ug/Kg	11 U	10 U	11 U	13 U	12 U
29 Trichloroethene	ug/Kg	11 U	10 U	11 U	13 U	12 U
30 Vinyl Chloride	ug/Kg	11 U	10 U	11 U	13 U	12 U
31 Xylene (total)	ug/Kg	11 U	10 U	11 U	13 U	12 U
32 cis-1,3-Dichloroctopene	ug/Kg	11 U	10 U	11 U	13 U	12 U
33 trans-1,3-Dichloroctopene	ug/Kg	11 U	10 U	11 U	13 U	12 U
•				_		12 0

54541VS.WK4

VOC		an a	54541	5.5		54541
		SDG:	54541	54541	54541	54541
	STUD		PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:		SOIL	SOIL	SOIL	SOIL
	LAB SAM	P. ID:	275476	275477	275478	275479
	EPA SAM	P. ID:	SS26-41	SS26-42	SS26-43	SS26-44
	QC C	ODE:	SA	SA	SA	SA
	% MOIST	URE:	7	11	17	14
	% SO					
	PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1	1,1,1-Trichloroethane	ug/Kg	11 U	11 U	12 U	12 U
	1,1,2,2-Tetrachloroethane	ug/Kg	11 U	11 U	12 U	12 U
	1,1,2-Trichloroethene	ug/Kg	11 U	11 U	12 U	· 12 U
	1,1-Dichloroethane	ug/Kg	11 U	11 U	12 U	12 U
	1,1-Dichloroethene	ug/Kg	11 U	11 U	12 U	12 U
	1,2-Dichloroctopane	ug/Kg	11 U	11 U	12 U	12 U
	1,2-Dichloroethane	ug/Kg	11 U	11 U	12 U	12 U
	1,2-Dichloroethene (total)	ug/Kg	11 U	11 U	12 U	12 U
	2-Butanone	ug/Kg	11 U	11 U	12 U	12 U
	2-Hexanone	ug/Kg	11 U	11 U	12 U	12 U
	4-Methyl-2-Pentanone	ug/Kg	11 U	11 U	12 U	12 U
	Acetone	ug/Kg	5 ЛВ	11 U	12 U	12 U
	Benzene	ug/Kg	11 U	11 U	12 U	12 U
	Bromodichloromethane	ug/Kg	11 U	11 U	12 U	12 U
	Bromoform	ug/Kg	11 U	11 U	12 U	12 U
	Bromomethane	ug/Kg	11 U	11 U	12 U	12 U
	Carbon Disulfide	ug/Kg	11 U	11 U	12 U	12 U
	Carbon Tetrachloride	ug/Kg	11 U	11 U	12 U	12 U
	Chlorobenzene	ug/Kg	11 U	11 U	12 U	12 U
	Chloroethane	ug/Kg	11 U	11 U	12 U	12 U
	Chloroform	ug/Kg	11 U	11 U	12 U	12 U
	Chloromethane	ug/Kg ug/Kg	11 U	11 U	12 U	12 U
	Dibromochloromethane	ug/Kg ug/Kg	11 U	11 U	12 U	12 U
	Ethylbenzene	ug/Kg ug/Kg	11 U	11 U	12 U	12 U
	Methylene Chloride	ug/Kg	11 U	11 U	12 U	12 U
	Styrene Chloride	ug/Kg ug/Kg	11 U	11 U	12 U	12 U
	Tetrachloroethene	ug/Kg	11 U	11 U	12 U	12 U
	Toluene		11 U	11 U	12 U	12 U
	Trichloroethene	ug/Kg	11 U	11 U	12 U	12 U
		ug/Kg		11 U		
	Vinyl Chloride	ug/Kg	11 U		12 U	12 U
	Xylene (total)	ug/Kg	11 U	11 U	12 U	12 U
	cis-1,3-Dichloroctopene	ug/Kg	11 U	11 U	12 U	12 U
33	trans-1,3-Dichloroctopene	ug/Kg	11 U	11 U	12 U	12 U

800	Cs		
	SDG:		54541
	STUDY ID:		PHASE 1
	MATRIX:		WATER
	LAB SAMP. ID:		275154
	EPA SAMP. ID:		SW26-11
	QC CODE:		DU
	% MOISTURE:		17
	% SOLIDS:		
	W BOLLESO.		
	PARAMETER	UNIT	VALUE Q
1	1,2,4-Trichlorobenzene	UG/L	10 U
1	1,2,4-Trichlorobenzene	UG/L	10 U
2	1,2-Dichlorobenzene	UG/L	10 U
3	1,3-Dichlorobenzene	UG/L	10 U
	1,4-Dichlorobenzene	UG/L	10 U
	2,4,5-Trichlorophenol	UG/L	26 U
	2,4,6-Trichlorophenol	UG/L	10 U
	2,4-Dichlorophenol	UG/L	10 U
	2,4-Dimethylphenol	UG/L	10 U
	2,4-Dinitrophenol	UG/L	26 U
	2,4-Dinitrotoluene	UG/L	10 U
	2,6-Dinitrotoluene	UG/L	10 U
	2-Chloronaphthalene	UG/L	10 U
	2-Chlorophenol	UG/L	10 U
	2-Methylnaphthalene	UG/L	10 U
	2-Methylphenol	UG/L	10 U
	2-Nitroaniline	UG/L	26 U
17	2-Nitrophenol	UG/L	10 U
	3,3'-Dichlorobenzidine	UG/L	10 U
19	3-Nitroaniline	UG/L	26 U
	4,6-Dinitro-2-methylphenol	UG/L	26 U
	4-Bromophenyl-phenylether	UG/L	10 U
	4-Chloro-3-methylphenol	UG/L	10 U
23	4-Chloroaniline	UG/L	10 U
24	4-Chlorophenyl-phenylether	UG/L	10 U
25	4-Methylphenol	UG/L	10 U
26	4-Nitroaniline	UG/L	26 U
27	4-Nitrophenol	UG/L	26 U
28	Acenaphthene	UG/L	10 U
	Acenaphthylene	UG/L	10 U
30	Anthracene	UG/L	10 U
31	Benzo(a)anthracene	UG/L	10 U
	Benzo(a)pyrene	UG/L	10 U
	Benzo(b)fluoranthene	UG/L	10 U
34	Benzo(g,h,i)perylene	UG/L	10 U

B 1 0 0 5		
SD	G:	54541
STUDY I	D:	PHASE 1
MATRI	IX:	WATER
LAB SAMP. I	D:	275154
EPA SAMP. I	ID:	SW26-11
OC COL		DU
% MOISTUR		17
% SOLII		
/V BODIL		
PARAMET	ER UNIT	VALUE Q
1 1,2,4-Trichlorobenzene	UG/L	10 U
35 Butylbenzylphthalate	UG/L	10 U
36 Carbazole	UG/L	10 U
37 Chrysene	UG/L	10 U
38 Di-n-butylphthalate	UG/L	10 U
39 Di-n-oprylphthalate	UG/L	10 U
40 Dibenz(a,h)anthracene	UG/L	10 U
41 Dibenzofuran	UG/L	10 U
42 Diethylphthalate	UG/L	10 U
43 Dimethylphthalate	UG/L	10 U
44 Fluoranthene	UG/L	10 U
45 Fluorene	UG/L	10 U
46 Hexachlorobenzene	UG/L	10 U
47 Hexachlorobutadiene	UG/L	10 U
48 Hexachlorocyclopentadiene	UG/L	10 U
49 Hexachloroethane	UG/L	10 U
50 Indeno(1,2,3-cd)pyrene	UG/L	10 U
51 Isophorone	UG/L	10 U
52 N-Nitroso-di-n-ctopylamine	UG/L	10 U
53 N-Nitrosodiphenylamine (1)	UG/L	10 U
54 Naphthalene	UG/L	10 U
55 Nitrobenzene	UG/L	10 U
56 Pentachlorophenol	UG/L	26 U
57 Phenanthrene	UG/L	10 U
58 Phenol	UG/L	10 U
59 Pyrene	UG/L	10 U
60 benzo(k)fluoranthene	UG/L	10 U
61 bis(2-Chloroethoxy) methane	UG/L	10 U
62 bis(2-Chloroethyl) ether	UG/L	10 U
(2 1:-(2 (1::	IIC/I	10 11

UG/L UG/L 10 U 10 U 13 B

62 bis(2-Chloroethyl) ether 63 bis(2-Chloroisoctopyl) ether 64 bis(2-Ethylhexyl)phthalate

SVO	Cs				
	SDG:		54541		54541
	STUDY ID:		PHASE 1		PHASE 1
	MATRIX:		SOIL		SOIL
	LAB SAMP. ID:		275154		275154
	EPA SAMP. ID:		SW26-11MS		SW26-11MSD
	QC CODE:		MS		MSD
	% MOISTURE:		17		17
	% SOLIDS:				
	PARAMETER	UNIT	VALUE	Q	VALUE Q
1	1,2,4-Trichlorobenzene	UG/KG	79000	U	79000 U
1	1,2,4-Trichlorobenzene	UG/KG	79000	U	79000 U
2	1,2-Dichlorobenzene	UG/KG	79000	U	79000 U
3	1,3-Dichlorobenzene	UG/KG	79000	U	79000 U
4	1,4-Dichlorobenzene	UG/KG	79000	U	79000 U
5	2,4,5-Trichlorophenol	UG/KG	190000	U	190000 U
	2,4,6-Trichlorophenol	UG/KG	79000	U	79000 U
	2,4-Dichlorophenol	UG/KG	79000	Ū	79000 U
	2,4-Dimethylphenol	UG/KG	79000		79000 U
	2,4-Dinitrophenol	UG/KG	190000		190000 U
	2,4-Dinitrotoluene	UG/KG	79000		79000 U
	2,6-Dinitrotoluene	UG/KG	79000		79000 U
	2-Chloronaphthalene	UG/KG	79000	-	79000 U
	2-Chlorophenol	UG/KG	79000	-	79000 U
	2-Methylnaphthalene	UG/KG	28000	-	29000 J
	2-Methylphenol	UG/KG	79000	-	79000 U
	2-Nitroaniline	UG/KG	190000	-	190000 U
17	2-Nitrophenol	UG/KG	79000		79000 U
	3,3'-Dichlorobenzidine	UG/KG	79000		79000 U
	3-Nitroaniline	UG/KG	190000		190000 U
	4,6-Dinitro-2-methylphenol	UG/KG	190000		190000 U
	4-Bromophenyl-phenylether	UG/KG	79000		79000 U
	4-Chloro-3-methylphenol	UG/KG	79000		79000 U
	4-Chloroaniline	UG/KG	79000	U	79000 U
24	4-Chlorophenyl-phenylether	UG/KG	79000		79000 U
	4-Methylphenol	UG/KG	79000	U	79000 U
26	4-Nitroaniline	UG/KG	190000	U	190000 U
27	4-Nitrophenol	UG/KG	190000	U	190000 U
28	Acenaphthene	UG/KG	79000	U	79000 U
29	Acenaphthylene	UG/KG	79000	U	79000 U
30	Anthracene	UG/KG	79000	U	79000 U
31	Benzo(a)anthracene	UG/KG	79000		79000 U
	Benzo(a)pyrene	UG/KG	79000		79000 U
	Benzo(b)fluoranthene	UG/KG	79000		79000 U
	Benzo(g,h,i)perylene	UG/KG	79000		79000 U
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	SDC		54541		54541
	STUDY II		PHASE 1		PHASE 1
	MATRE		SOIL		SOIL
	LAB SAMP. II		275154		275154
	EPA SAMP. II		SW26-11MS		SW26-11MSD
	QC CODI	E:	MS		MSD
	% MOISTUR	E:	17		17
	% SOLID	S:			
	PARAMETE	R UNIT	VALUE	Q	VALUE Q
1	1,2,4-Trichlorobenzene	UG/KG	79000	U	79000 U
	Butylbenzylphthalate	UG/KG	79000	U	79000 U
	Carbazole	UG/KG	79000	U	79000 U
37	Chrysene	UG/KG	79000	U	79000 U
	Di-n-butylphthalate	UG/KG	79000	U	79000 U
	Di-n-oprylphthalate	UG/KG	79000	U	79000 U
	Dibenz(a,h)anthracene	UG/KG	79000	U	79000 U
	Dibenzofuran	UG/KG	79000	U	79000 U
42	Diethylphthalate	UG/KG	79000	U	79000 U
	Dimethylphthalate	UG/KG	79000	U	79000 U
44	Fluoranthene	UG/KG	79000	U	79000 U
45	Fluorene	UG/KG	16000	J	17000 J
46	Hexachlorobenzene	UG/KG	79000	U	79000 U
47	Hexachlorobutadiene	UG/KG	79000	U	<b>7</b> 9000 U
48	Hexachlorocyclopentadiene	UG/KG	79000	U	<b>7</b> 9000 U
49	Hexachloroethane	UG/KG	79000	U	<b>7</b> 9000 U
	Indeno(1,2,3-cd)pyrene	UG/KG	79000	U	79000 U
	Isophorone	UG/KG	79000	U	<b>79000 U</b>
52	N-Nitroso-di-n-ctopylamine	UG/KG	79000	U	. 79000 U
53	N-Nitrosodiphenylamine (1)	UG/KG	79000	U	<b>7</b> 9000 U
54	Naphthalene	UG/KG	79000	U	<b>7</b> 9000 U
	Nitrobenzene	UG/KG	79000	U	<b>79000 U</b>
	Pentachlorophenol	UG/KG	190000	U	190000 U
57	Phenanthrene	UG/KG	31000	J	33000 J
58	Phenol	UG/KG	79000	U	79000 U
59	Рутепе	UG/KG	79000	U	<b>7</b> 9000 U
60	benzo(k)fluoranthene	UG/KG	79000	U	79000 U
61	bis(2-Chloroethoxy) methane	UG/KG	79000	U	79000 U
	bis(2-Chloroethyl) ether	UG/KG	79000	U	79000 U
	bis(2-Chloroisoctopyl) ether	UG/KG	79000	U	79000 U
	bis(2-Ethylhexyl)phthalate	UG/KG	79000	U	<b>7</b> 9000 U

SVOCs						
SDG	:	54541	54541	54541	54541	54541
STUDY ID	:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRIX	:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP. ID	:	275459	275461	275462	275465	275464
EPA SAMP. ID	:	SB26-11-00	SB26-11-03	SB26-11-06	SD26-12	SD26-8
QC CODE		SA	SA	SA	SA	SA
% MOISTURE		8	15	10	52	26
% SOLIDS						
PARAMETER	R UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	360 U	390 U	370 U	680 U	440 U
1 1,2,4-Trichlorobenzene	UG/KG	360 U	390 U	370 U	680 U	440 U
2 1,2-Dichlorobenzene	UG/KG	360 U	390 U	370 U	680 U	440 U
3 1,3-Dichlorobenzene	UG/KG	360 U	390 U	370 U	680 U	440 U
4 1.4-Dichlorobenzene	UG/KG	360 U	390 U	370 U	680 U	440 U
5 2,4,5-Trichlorophenol	UG/KG	870 U	940 U	890 U	1700 U	1100 U
6 2,4,6-Trichlorophenol	UG/KG	360 U	390 U	370 U	680 U	440 U
7 2,4-Dichlorophenol	UG/KG	360 U	390 U	370 U	680 U	440 U
8 2,4-Dimethylphenol	UG/KG	360 U	390 U	370 U	680 U	440 U
9 2,4-Dinitrophenol	UG/KG	870 U	940 U	890 U	1700 U	1100 U
10 2,4-Dinitrotoluene	UG/KG	360 U	390 U	370 U	680 U	440 U
11 2,6-Dinitrotoluene	UG/KG	360 U	390 U	370 U	680 U	440 U
12 2-Chloronaphthalene	UG/KG	360 U	390 U	370 U	680 U	440 U
13 2-Chlorophenol	UG/KG	360 U	390 U	370 U	680 U	440 U
14 2-Methylnaphthalene	UG/KG	360 U	390 U	370 U	680 U	440 U
15 2-Methylphenol	UG/KG	360 U	390 U	370 U	680 U	440 U
16 2-Nitroaniline	UG/KG	870 U	940 U	890 U	1700 U	1100 U
17 2-Nitrophenol	UG/KG	360 U	390 U	370 Ú	680 U	440 U
18 3,3'-Dichlorobenzidine	UG/KG	360 U	. 390 U	370 U	680 U	440 U
19 3-Nitroaniline	UG/KG	870 U	940 U	890 U	1700 U	1100 U
20 4,6-Dinitro-2-methylphenol	UG/KG	870 U	940 U	890 U	1700 U	1100 U
21 4-Bromophenyl-phenylether	UG/KG	360 U	390 U	370 U	680 U	440 U
22 4-Chloro-3-methylphenol	UG/KG	360 U	390 U	370 U	680 U	440 U
23 4-Chloroaniline	UG/KG	360 U	390 U	<b>370</b> U	680 U	440 U
24 4-Chlorophenyl-phenylether	UG/KG	360 U	390 U	370 U	680 U	440 U
25 4-Methylphenol	UG/KG	360 U	390 U	370 U	680 U	440 U
26 4-Nitroaniline	UG/KG	870 U	940 U	890 U	1700 U	1100 U
27 4-Nitrophenol	UG/KG	870 U	940 U	890 U	1700 U	1100 U
28 Acenaphthene	UG/KG	360 U	390 U	370 U	130 J	440 U
29 Acenaphthylene	UG/KG	360 U	390 U	370 U	680 U	440 U
30 Anthracene	UG/KG	360 U	390 U	370 U	260 Ј	440 U
31 Benzo(a)anthracene	UG/KG	360 U	390 U	370 U	560 J	440 U
32 Benzo(a)pyrene	UG/KG	360 U	390 U	370 U	470 J	440 U
33 Benzo(b)fluoranthene	UG/KG	360 U	390 U	370 U	470 Ј	94 GJ
34 Benzo(g,h,i)perylene	UG/KG	360 U	390 U	370 U	290 Ј	440 U .

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SDO	<b>3</b> .	54541	54541	54541	54541	54541
STUDY II		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRIX		SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP. II		275459	275461	275462	275465	275464
EPA SAMP. II		SB26-11-00	SB26-11-03	SB26-11-06	SD26-12	SD26-8
QC CODI		SA	SA	\$A	SA	SA
% MOISTURI		8	15	10	52	26
% SOLID		3	15	10	32	20
70 SOLID	<b>.</b>					
PARAMETE	R UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	360 U	390 U	370 U	; 680 U	440 U
35 Butylbenzylphthalate	UG/KG	360 U	390 U	370 U	680 U	440 U
36 Carbazole	UG/KG	360 U	390 U	370 U	400 J	440 U
37 Chrysene	UG/KG	360 U	<b>390</b> U	370 U	560 J	53 J
38 Di-n-butylphthalate	UG/KG	360 U	390 U	370 U	680 U	440 U
39 Di-n-oprylphthalate	UG/KG	360 U	390 U	370 U	680 U	440 U
40 Dibenz(a,h)anthracene	UG/KG	360 U	390 U	370 U	130 J	440 U
41 Dibenzofuran	UG/KG	360 U	390 U	370 U	680 U	440 U
42 Diethylphthalate	UG/KG	360 U	390 U	370 U	680 U	440 U
43 Dimethylphthalate	UG/KG	360 U	390 U	<b>37</b> 0 U	680 U	440 U
44 Fluoranthene	UG/KG	360 U	390 U	<b>370</b> U	1500	69 J
45 Fluorene	UG/KG	360 U	390 U	370 U	86 J	440 U
46 Hexachlorobenzene	UG/KG	360 U	390 U	<b>37</b> 0 U	680 U	440 U
47 Hexachlorobutadiene	UG/KG	360 U	390 U	370 U	680 U	440 U
48 Hexachlorocyclopentadiene	UG/KG	360 U	390 U	370 U	680 U	440 U
49 Hexachloroethane	UG/KG	360 U	390 U	370 U	680 U	440 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	360 U	390 U	370 U	330 J	440 U
51 Isophorone	UG/KG	360 U	390 U	370 U	680 U	440 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	360 U	390 U	370 U	680 U	440 U
53 N-Nitrosodiphenylamine (1)	UG/KG	360 U	390 U	370 U	680 U	440 U
54 Naphthalene	UG/KG	360 U	390 U	370 U	680 U	440 U
55 Nitrobenzene	UG/KG	360 U	390 U	<b>370</b> U	680 U	440 U
56 Pentachlorophenol	UG/KG	870 U	940 U	890 U	1700 U	1100 U
57 Phenanthrene	UG/KG	360 U	390 U	370 U	1100	440 U
58 Phenol	UG/KG	360 U	390 U	370 U	680 U	440 U
59 Pyrene	UG/KG	360 U	390 U	<b>37</b> 0 U	1200	57 J
60 benzo(k)fluoranthene	UG/KG	360 U	390 U	370 U	490 Ј	440 U
61 bis(2-Chloroethoxy) methane	UG/KG	360 U	390 U	370 U	680 U	440 U
62 bis(2-Chloroethyl) ether	UG/KG	360 U	390 U	370 U	680 U	440 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	360 U	390 U	370 U	680 U	440 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	360 U	84 J	370 U	680 U	440 U

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S	DG:	54541	54541	54541	54541	54541
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE I
MATE	RIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP.	. ID:	275466	275467	275468	275469	275470
EPA SAMP.	. ID:	SS26-24	SS26-27	SS26-29	SS26-33	SS26-35
OC CO		SA	SA	SA	SA	SA
% MOISTU		8	7	9	11	23
% SOLI				•	•-	
70 5021						
PARAME:	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	360 U	350 U	360 U	370 U	430 U
1 1,2,4-Trichlorobenzene	UG/KG	360 U	350 U	360 U	370 U	430 U
2 1,2-Dichlorobenzene	UG/KG	360 U	350 U	360 U	370 U	430 U
3 1,3-Dichlorobenzene	UG/KG	360 U	350 U	360 U	370 U	430 U
4 1,4-Dichlorobenzene	UG/KG	360 U	350 U	360 U	370 U	430 U
5 2,4,5-Trichlorophenol	UG/KG	870 U	860 U	880 U	900 U	1000 U
6 2,4,6-Trichlorophenol	UG/KG	360 U	350 U	360 U	370 U	430 U
7 2,4-Dichlorophenol	UG/KG	360 U	350 U	360 U	370 U	430 U
8 2,4-Dimethylphenol	UG/KG	360 U	350 U	360 U	370 U	430 U
9 2,4-Dinitrophenoi	UG/KG	870 U	860 U	880 U	900 U	1000 U
10 2,4-Dinitrotoluene	UG/KG	360 U	350 U	360 U	370 U	430 U
11 2,6-Dinitrotoluene	UG/KG	360 U	350 U	360 U	370 U	430 U
12 2-Chloronaphthalene	UG/KG	360 U	350 U	360 U	370 U	430 U
13 2-Chlorophenol	UG/KG	360 U	350 U	360 U	370 U	430 U
14 2-Methylnaphthalene	UG/KG	360 U	350 U	360 U	370 U	430 U
15 2-Methylphenol	UG/KG	360 U	350 U	360 U	370 U	430 U
16 2-Nitroaniline	UG/KG	870 U	860 U	880 U	900 U	1000 U
17 2-Nitrophenol	UG/KG	360 U	350 U	360 U	370 U	430 U
18 3,3'-Dichlorobenzidine	UG/KG	360 U	350 U	360 U	370 U	430 U
19 3-Nitroaniline	UG/KG	870 U	860 U	880 U	900 U	1000 U
20 4,6-Dinitro-2-methylphenol	UG/KG	870 U	860 U	880 U	900 U	1000 U
21 4-Bromophenyl-phenylether	UG/KG	360 U	350 U	360 U	370 U	430 U
22 4-Chloro-3-methylphenol	UG/KG	360 U	350 U	360 U	370 U	430 U
23 4-Chloroaniline	UG/KG	360 U	350 U	360 U	370 U	430 U
24 4-Chlorophenyl-phenylether	UG/KG	360 U	350 U	360 U	370 U	430 U
25 4-Methylphenol	UG/KG	360 U	350 U	360 U	370 U	430 U
26 4-Nitroaniline	UG/KG	870 U	860 U	880 U	900 U	1000 U
27 4-Nitrophenol	UG/KG	870 U	860 U	880 U	900 U	1000 U
28 Acenaphthene	UG/KG	360 U	350 U	41 J	370 U	430 U
29 Acenaphthylene	UG/KG	360 U	350 U	360 U	370 U	430 U
30 Anthracene	UG/KG	360 U	350 U	180 J	40 J	430 U 430 U
31 Benzo(a)anthracene	UG/KG	120 J	350 U	650	150 J	
32 Benzo(a)pyrene	UG/KG	120 J 110 J	350 U	600	150 J 150 J	430 U
33 Benzo(b)fluoranthene	UG/KG	130 J	350 U	660	150 J 190 J	430 U
34 Benzo(g,h,i)perylene	UG/KG	74 J	350 U	480	190 J 110 J	430 U
5. Delizo(g,ii,i)peryrolic	OU/RU	/ <del>4</del> J	350 0	400	110 J	430 U

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SVOCS						
SE	OG:	54541	54541	54541	54541	54541
STUDY	ID:	PHASE 1	PHASE 1	PHASE I	PHASE 1	PHASE 1
MATR	IX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP. 1	ID:	275466	275467	275468	275469	275470
EPA SAMP. 1	ID:	SS26-24	SS26-27	SS26-29	SS26-33	SS26-35
QC COI	DE:	SA	SA	SA	SA	SA
% MOISTUI	RE:	8	7	9	11	23
% SOLII	OS:					
PARAMET	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	360 U	350 U	360 U	370 U	430 U
35 Butylbenzylphthalate	UG/KG	360 U	350 U	360 U	370 U	430 U
36 Carbazole	UG/KG	360 U	350 U	140 J	370 U	430 U
37 Chrysene	UG/KG	140 J	350 U	650	170 Ј	430 U
38 Di-n-butylphthalate	UG/KG	360 U	350 U	360 U	370 U	430 U
39 Di-n-oprylphthalate	UG/KG	360 U	350 U	360 U	370 U	430 U
40 Dibenz(a,h)anthracene	UG/KG	360 U	350 U	230 Ј	41 J	430 U
41 Dibenzofuran	UG/KG	360 U	350 U	360 U	370 U	430 U
42 Diethylphthalate	UG/KG	360 U	350 U	360 U	370 U	430 U
43 Dimethylphthalate	UG/KG	360 U	350 U	360 U	370 U	430 U
44 Fluoranthene	UG/KG	270 Ј	350 U	1200	380	46 J
45 Fluorene	UG/KG	360 U	350 U	43 J	370 U	430 U
46 Hexachlorobenzene	UG/KG	360 U	350 U	360 U	370 U	430 U
47 Hexachlorobutadiene	UG/KG	360 U	350 U	360 U	370 U	430 U
48 Hexachlorocyclopentadiene	UG/KG	360 U	350 U	360 U	370 U	430 U
49 Hexachloroethane	UG/KG	360 U	350 U	360 U	370 U	430 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	76 J	350 U	500	110 J	430 U
51 Isophorone	UG/KG	360 U	350 U	360 U	370 U	430 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	360 U	350 U	360 U	370 U	430 U
53 N-Nitrosodiphenylamine (1)	UG/KG	360 U	350 U	360 U	370 U	430 U
54 Naphthalene	UG/KG	360 U	350 U	360 U	370 U	430 U
55 Nitrobenzene	UG/KG	360 U	350 U	360 U	370 U	430 U
56 Pentachlorophenol	UG/KG	870 U	860 U	880 U	900 U	1000 U
57 Phenanthrene	UG/KG	130 J	350 U	490	160 J	430 U
58 Phenol	UG/KG	360 U	350 U	360 U	370 U	430 U
59 Pyrene	UG/KG	250 J	350 U	990	290 J	430 U
60 benzo(k)fluoranthene	UG/KG	90 J	350 U	470	100 J	430 U
61 bis(2-Chloroethoxy) methane	UG/KG	360 U	350 U	360 U	370 U	430 U
62 bis(2-Chloroethyl) ether	UG/KG	, 360 U	350 U	360 U	370 U	430 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	360 U	350 U	360 U	370 U	430 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	220 J	350 U	210 J	110 J	430 U

5 1 0 0 3						
SDG	:	54541	54541	54541	54541	54541
STUDY ID	:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRIX		SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP, ID		275471	275472	275473	275474	275475
EPA SAMP. ID		SS26-36	SS26-37	SS26-38	SS26-39	SS26-40
OC CODE		SA	SA	SA	SA	SA
% MOISTURE		11	8	14	17	17
% SOLIDS		11	8	14	17	17
70 BOLIDS	•					
PARAMETER	R UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	370 U	360 U	380 U	. 400 U	400 U
1 1,2,4-Trichlorobenzene	UG/KG	370 U	360 U	380 U	400 U	400 U
2 1,2-Dichlorobenzene	UG/KG	370 U	360 U	380 U	400 U	400 U
3 1,3-Dichlorobenzene	UG/KG	370 U	360 U	380 U	400 U	400 U
4 1,4-Dichlorobenzene	UG/KG	370 U	360 U	380 U	400 U	400 U
5 2,4,5-Trichlorophenol	UG/KG	890 U	870 U	930 U	960 U	960 U
6 2,4,6-Trichlorophenol	UG/KG	370 U	360 U	380 U	400 U	400 U
7 2,4-Dichlorophenol	UG/KG	370 U	360 U	380 U	400 U	400 U
8 2,4-Dimethylphenol	UG/KG	370 U	360 U	380 U	400 U	400 U
9 2,4-Dinitrophenol	UG/KG	890 U	870 U	930 U	960 U	960 U
10 2,4-Dinitrotoluene	UG/KG	370 U	360 U	380 U	400 U	400 U
11 2,6-Dinitrotoluene	UG/KG	370 U	360 U	380 U	400 U	400 U
12 2-Chloronaphthalene	UG/KG	370 U	360 U	380 U	400 U	400 U
13 2-Chlorophenol	UG/KG	370 U	360 U	380 U	400 U	400 U
14 2-Methylnaphthalene	UG/KG	370 U	360 U	380 U	400 U	400 U
15 2-Methylphenol	UG/KG	370 U	360 U	380 U	400 U	400 U
16 2-Nitroaniline	UG/KG	890 U	870 U	930 U	960 U	960 U
17 2-Nitrophenol	UG/KG	370 U	360 U	380 U	400 U	400 U
18 3,3'-Dichlorobenzidine	UG/KG	370 U	360 U	380 U	400 U	400 U
19 3-Nitroaniline	UG/KG	890 U	870 U	930 U	960 U	960 U
20 4,6-Dinitro-2-methylphenol	UG/KG	890 U	870 U	930 U	960 U	960 U
21 4-Bromophenyl-phenylether	UG/KG	370 U	360 U	380 U	400 U	400 U
22 4-Chloro-3-methylphenol	UG/KG	370 U	360 U	380 U	400 U	400 U
23 4-Chloroaniline	UG/KG	370 U	360 U	380 U	400 U	400 U
24 4-Chlorophenyl-phenylether	UG/KG	370 U	360 U	380 U	400 U	400 U
25 4-Methylphenol	UG/KG	370 U	360 U	380 U	400 U	400 U
26 4-Nitroaniline	UG/KG	890 U	870 U	930 U	960 U	960 U
27 4-Nitrophenol	UG/KG	890 U	870 U	930 U	960 U	960 U
28 Acenaphthene	UG/KG	370 U	360 U	380 U	400 U	
29 Acenaphthylene	UG/KG	370 U	360 U	380 U	400 U	400 U 400 U
30 Anthracene	UG/KG	370 U	360 U	380 U	400 U 56 J	
31 Benzo(a)anthracene	UG/KG	370 U	360 U	380 U	210 J	400 U
32 Benzo(a)pyrene	UG/KG	370 U	360 U	380 U	210 J 180 J	91 J
33 Benzo(b)fluoranthene	UG/KG	370 U	360 U	380 U		93 J
34 Benzo(g,h,i)perylene	UG/KG	370 U	36 J	380 U	400 U	83 J
24 Demot guiller yiene	JU/KU	370 0	30 J	380 U	150 J	71 J

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SVOCs						0
SD	G:	54541	54541	54541	54541	54541
STUDY I	D:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRI	X:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP. I	D:	275471	275472	275473	275474	275475
EPA SAMP. I	D:	SS26-36	SS26-37	SS26-38	SS26-39	SS26-40
OC COD		SA	SA	SA	SA	SA
% MOISTUR		11	8	14	17	17
% SOLIE			-	2.		
PARAMETI	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	370 U	360 U	380 U	400 U	400 U
35 Butylbenzylphthalate	UG/KG	370 U	360 U	380 U	400 U	400 U
36 Carbazole	UG/KG	370 U	360 U	380 U	63 J	400 U
37 Chrysene	UG/KG	370 U	360 U	380 U	230 Ј	99 J
38 Di-n-butylphthalate	UG/KG	370 U	360 U	380 U	. 400 U	400 U
39 Di-n-oprylphthalate	UG/KG	370 U	360 U	380 U	400 U	400 U
40 Dibenz(a,h)anthracene	UG/KG	370 U	360 U	380 U	51 J	400 U
41 Dibenzofuran	UG/KG	370 U	360 U	380 U	400 U	400 U
42 Diethylphthalate	UG/KG	370 U	360 U	380 U	400 U	400 U
43 Dimethylphthalate	UG/KG	370 U	360 U	380 U	400 U	400 U
44 Fluoranthene	UG/KG	370 U	360 U	380 U	530	160 J
45 Fluorene	UG/KG	370 U	360 U	380 U	400 U	400 U
46 Hexachlorobenzene	UG/KG	370 U	360 U	380 U	400 U	400 U
47 Hexachlorobutadiene	UG/KG	370 U	360 U	380 U	400 U	400 U
48 Hexachlorocyclopentadiene	ÚG/KG	370 U	360 U	380 U	400 U	400 U
49 Hexachloroethane	UG/KG	370 U	360 U	380 U	400 U	_ 400 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	370 U	37 J	380 U	150 J	72 J
51 Isophorone	UG/KG	370 U	360 U	380 U	400 U	400 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	370 U	360 U	380 U	400 U	400 U
53 N-Nitrosodiphenylamine (1)	UG/KG	370 U	360 U	380 U	400 U	400 U
54 Naphthalene	UG/KG	370 U	360 U	380 U	400 U	400 U
55 Nitrobenzene	UG/KG	370 U	360 U	380 U	400 U	400 U
56 Pentachlorophenol	UG/KG	890 U	870 U	930 U	960 U	960 U
57 Phenanthrene	UG/KG	370 U	360 U	380 U	300 J	57 J
58 Phenol	UG/KG	370 U	360 U	380 U	400 U	400 U
59 Pyrene	UG/KG	370 U	360 U	380 U	380 J	120 J
60 benzo(k)fluoranthene	UG/KG	370 U	360 U	380 U	540 G	110 J
61 bis(2-Chloroethoxy) methane	UG/KG	370 U	360 U	380 U	400 U	400 U
62 bis(2-Chloroethyl) ether	UG/KG	370 U	360 U	380 U	400 U	400 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	370 U	360 U	380 U	400 U	400 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	370 U	<b>360</b> U	380 U	400 U	400 U
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	SI	OG:	54541	54541	54541	54541
	STUDY		PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATR		SOIL	SOIL	SOIL	SOIL
	LAB SAMP.		275476	275477	275478	275479
	EPA SAMP.		SS26-41	SS26-42	SS26-43	SS26-44
	QC COI		SA	SA	\$520-45 \$A	SA
	% MOISTU		9	15	15	14
	% SOLI		•		13	17
	PARAMET	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1	1,2,4-Trichlorobenzene	UG/KG	360 U	390 U	390 U	380 U
1	1,2,4-Trichlorobenzene	UG/KG	360 U	390 U	390 U	380 U
2	1,2-Dichlorobenzene	UG/KG	360 U	390 U	390 U	380 U
3	1,3-Dichlorobenzene	UG/KG	360 U	390 U	390 U	380 U
	1,4-Dichlorobenzene	UG/KG	360 U	390 U	390 U	380 U
	2,4,5-Trichlorophenol	UG/KG	870 U	940 U	940 U	920 U
	2,4,6-Trichlorophenol	UG/KG	360 U	390 U	390 U	380 U
	2,4-Dichlorophenol	UG/KG	360 U	390 U	390 U	380 U
	2,4-Dimethylphenol	UG/KG	360 U	390 U	390 U	380 U
	2,4-Dinitrophenol	UG/KG	870 U	940 U	940 U	920 U
	2,4-Dinitrotoluene	UG/KG	360 U	390 U	390 U	380 U
	2,6-Dinitrotoluene	UG/KG	360 U	390 U	390 U	380 U
	2-Chloronaphthalene	UG/KG	360 U	390 U	390 U	380 U
	2-Chlorophenol	UG/KG	360 U	390 U	390 U	380 U
	2-Methylnaphthalene	UG/KG	360 U	390 U	390 U	380 U
	2-Methylphenol	UG/KG	360 U	390 U	390 U	380 U
	2-Nitroaniline	UG/KG	870 U	940 U	940 U	920 U
	2-Nitrophenol	UG/KG	360 U	390 U	390 U	380 U
	3,3'-Dichlorobenzidine	UG/KG	360 U	. 390 U	390 U	380 U
	3-Nitroaniline	UG/KG	870 U	940 U	940 U	920 U
	4,6-Dinitro-2-methylphenol	UG/KG	870 U	940 U	940 U	920 U
	4-Bromophenyl-phenylether	UG/KG	360 U	390 U	390 U	380 U
	4-Chloro-3-methylphenol	UG/KG	360 U	390 U	390 U	380 U
	4-Chloroaniline	UG/KG	360 U	390 U	390 U	380 U
	4-Chlorophenyl-phenylether	UG/KG	360 U	390 U	390 U	380 U
	4-Methylphenol	UG/KG	360 U	390 U	390 U	380 U
_	4-Nitroaniline	UG/KG	870 U	940 U	940 U	9 <b>2</b> 0 U
	4-Nitrophenol	UG/KG	870 U	940 U	940 U	920 U
	Acenaphthene	UG/KG	360 U	390 U	390 U	380 U
	Acenaphthylene	UG/KG	360 U	390 U	390 U	380 U
	Anthracene	UG/KG	360 U	220 J	390 U	40 J
	Benzo(a)anthracene	UG/KG	50 J	740	50 J	130 J
	Benzo(a)pyrene	UG/KG	54 J	620	61 J	120 J
	Benzo(b)fluoranthene	UG/KG	47 J	540	43 J	110 J
34	Benzo(g,h,i)perylene	UG/KG	53 J	500	53 J	96 J

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	DG:	54541	54541	54541	54541
STUDY		PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATE		SOIL	SOIL	SOIL	SOIL
LAB SAMP.		275476	275477	275478	275479
EPA SAMP.		SS26-41	SS26-42	SS26-43	SS26-44
QC CO		SA	SA	SA	SA
% MOISTU		9	15	15	14
% SOLI	DS:				
PARAMET	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	360 U	390 U	390 U	380 U
35 Butylbenzylphthalate	UG/KG	360 U	390 U	390 U	380 U
36 Carbazole	UG/KG	360 U	82 J	390 U	48 J
37 Chrysene	UG/KG	64 J	760	60 J	150 J
38 Di-n-butylphthalate	UG/KG	360 U	390 U	390 U	380 U
39 Di-n-oprylphthalate	UG/KG	360 U	390 U	390 U	380 U
40 Dibenz(a,h)anthracene	UG/KG	360 U	220 J	390 U	380 U
41 Dibenzofuran	UG/KG	360 U	390 U	390 U	380 U
42 Diethylphthalate	UG/KG	360 U	390 U	390 U	380 U
43 Dimethylphthalate	UG/KG	360 U	390 U	390 U	380 U
44 Fluoranthene	UG/KG	110 J	1700	100 J	370 J
45 Fluorene	UG/KG	360 U	390 U	390 U	380 U
46 Hexachlorobenzene	UG/KG	360 U	390 U	390 U	380 U
47 Hexachlorobutadiene	UG/KG	360 U	390 U	390 U	380 U
48 Hexachlorocyclopentadiene	UG/KG	360 U	390 U	390 U	380 U
49 Hexachloroethane	UG/KG	360 U	390 U	390 U	380 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	49 J	500	44 J	91 J
51 Isophorone	UG/KG	360 U	390 U	390 U	380 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	360 U	390 U	390 U	380 U
53 N-Nitrosodiphenylamine (1)	UG/KG	360 U	390 U	390 U	380 U
54 Naphthalene	UG/KG	360 U	390 U	390 U	380 U
55 Nitrobenzene	UG/KG	360 U	390 U	390 U	380 U
56 Pentachlorophenol	UG/KG	870 U	940 U	940 U	920 U
57 Phenanthrene	UG/KG	60 J	610	40 J	230 J
58 Phenol	UG/KG	360 U	390 U	390 U	380 U
59 Pyrene	UG/KG	78 J	1200	70 J	240 J
60 benzo(k)fluoranthene	UG/KG	66 J	720	78 J	140 J
61 bis(2-Chloroethoxy) methane	UG/KG	360 U	390 U	390 U	380 U
62 bis(2-Chloroethyl) ether	UG/KG	360 U	390 U	390 U	380 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	360 U	390 U	390 U	380 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	360 U	270 J	240 J	380 U
0-7 Ma(2-Emymexyr)phimalate	JOING	500 0	2.00	= , 0	200 0

## **PESTICIDES**

S	SDG:	54541
STUD	Y ID:	PHASE 1
MAT	RIX:	WATER
LAB SAME	P. ID:	275154
EPA SAMI	P. ID:	SW26-11
QC CC	ODE:	DU
% MOIST		17
% SOL	LIDS:	
PARAMETER	UNIT	VALUE O
1 4,4'-DDD	UG/L	VALUE Q 0.1 U
2 4,4'-DDE	UG/L UG/L	
3 4,4'-DDT	UG/L UG/L	0.1 U
4 Aldrin		0.1 U
	UG/L	0.052 U
5 Aroclor-1016 6 Aroclor-1221	UG/L	1 U
7 Aroclor-1232	UG/L	2.1 U
	UG/L	1 U
8 Aroclor-1242	UG/L	1 U
9 Aroclor-1248 10 Aroclor-1254	UG/L	1 U
10 Aroclor-1254 11 Aroclor-1260	UG/L	1 U
12 Dieldrin	UG/L UG/L	1 U
13 Endosulfan I	UG/L	0.1 U 0.052 U
14 Endosulfan II	UG/L	0.032 U 0.1 U
15 Endosulfan sulfate	UG/L	
16 Endrin	UG/L	0.1 U 0.1 U
17 Endrin aldehyde	UG/L	0.1 U
18 Endrin ketone	UG/L	0.1 U
19 Heptachlor	UG/L	0.052 U
20 Heptachlor epoxide	UG/L	0.052 U
21 Methoxychlor	UG/L	0.52 U
22 Toxaphene	UG/L	5.2 U
23 alpha-BHC	UG/L	0.052 U
24 alpha-Chlordane	UG/L	0.052 U
25 beta-BHC	UG/L	0.064 P
26 delta-BHC	UG/L	0.052 U
27 gamma-BHC (Lindane)	UG/L	0.052 U
28 gamma-Chlordane	UG/L	0.032 U 0.027 JP
20 Samina-Cinordano	OOL	0.027 JF

PEST		

PESTICIDES	SDG:	54541	54541	54541	54541	54541	54541
	TUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	AMP. ID:	275154	275154	275154	275459	275461	275462
	AMP. ID:	SD26-11DL	SW26-11MS	SW26-11MSD	SB26-11-00	SB26-11-03	SB26-11-06
	C CODE:	DL	MS	MSD	SA	SA	SA
% MC	DISTURE:	17	17	17	8	15	10
%	SOLIDS:						
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	39 U	4 U	7.7 P	3.6 U	3.8 U	3.7 U
2 4,4'-DDE	UG/KG	76 PD	4.6 P	4 P	3.6 U	3.8 U	3.7 U
3 4,4'-DDT	UG/KG	39 U	34 P	33 P	3.6 U	3.8 U	3.7 U
4 Aldrin	UG/KG	20 U	6.1	6.2 P	1.8 U	2 U	1.9 U
5 Aroclor-1016	UG/KG	390 U	<b>40</b> U	40 U	36 U	38 U	37 0
6 Aroclor-1221	UG/KG	800 U	<b>80</b> U	81 U	73 U	78 U	74 U
7 Aroclor-1232	UG/KG	390 U	40 U	40 U	36 U	38 U	37 U
8 Aroclor-1242	UG/KG	390 U	40 U	40 U	36 U	38 U	37 U
9 Aroclor-1248	UG/KG	390 U	40 U	40 U	36 U	38 U	37 U
10 Aroclor-1254	UG/KG	390 U	<b>40</b> U	40 U	36 U	38 U	37 U
11 Aroclor-1260	UG/KG	1100 PD	850	770	36 U	38 U	37 U
12 Dieldrin	UG/KG	39 U	34 P	33 P	3.6 U	3.8 U	3.7 U
13 Endosulfan I	UG/KG	20 U	6.5 P	6.3 P	1.8 U	2 U	1.9 U
14 Endosulfan II	UG/KG	39 U	35	31	3.6 U	3.8 U	3.7 U
15 Endosulfan sulfate	UG/KG	80 D	2.3 ЛР	2.3 ЛР	3.6 U	3.8 U	3.7 U
16 Endrin	UG/KG	39 U	37 P	37 P	3.6 U	3.8 U	3.7 U
17 Endrin aldehyde	UG/KG	81 PD	52 P	44 P	3.6 U	3.8 U	3.7 U
18 Endrin ketone	UG/KG	39 U	4 U	12 P	3.6 U	3.8 U	3.7 U
19 Heptachlor	UG/KG	20 U	4.7 P	4.3 P	1.8 U	2 U	1.9 U
20 Heptachlor epoxide	UG/KG	20 U	2 U	2 U	1.8 U	2 U	1.9 U
21 Methoxychlor	UG/KG	200 U	38 P	34 P	18 U	20 U	19 U
22 Toxaphene	UG/KG	2000 U	200 U	200 U	180 U	200 U	190 U
23 alpha-BHC	UG/KG	<b>20</b> U	2 U	6.3 P	1.8 U	2 U	1.9 U
24 alpha-Chlordane	UG/KG	20 U	12 P	11 P	1.8 U	2 U	1.9 U
25 beta-BHC	UG/KG	20 U	11 P	8.8 P	1.8 U	2 U	1.9 U
26 delta-BHC	UG/KG	20 U	2 U	2 U	1.8 U	2 U	1.9 U
27 gamma-BHC (Lindane)	UG/KG	20 U	11 P	12	1.8 U	2 U	1.9 U
28 gamma-Chlordane	UG/KG	<b>20</b> U	2 U	2 U	1.8 U	2 U	1.9 U

PESTICIDES						
	SDG:	54541	54541	54541	54541	54541
:	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
	SAMP. ID:	275465	275464	275466	275467	275468
	SAMP. ID:	SD26-12	SD26-8	SS26-24	SS26-27	SS26-29
	QC CODE:	SA	SA	SA	SA	SA
	IOISTURE:	52	26	8	7	9
•	% SOLIDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	6.8 U	4.5 U	3.6 U	4.7 P	3.6 U
2 4,4'-DDE	UG/KG	4.3 JP	5.4 P	3.6 U	140	3.6 U
3 4,4'-DDT	UG/KG	6.8 U	4.7	3.6 U	66	2.4 JP
4 Aldrin	UG/KG	3.5 U	2.3 U	1.8 U	1.8 U	1.8 U
5 Aroclor-1016	UG/KG	68 U	45 U	36 U	35 U	36 U
6 Aroclor-1221	UG/KG	140 U	91 U	73 U	72 U	73 U
7 Aroclor-1232	UG/KG	68 U	45 U	36 U	35 U	36 U
8 Aroclor-1242	UG/KG	68 U	45 U	36 U	35 U	36 U
9 Aroclor-1248	UG/KG	68 U	45 U	36 U	35 U	36 U
10 Aroclor-1254	UG/KG	68 U	45 U	36 U	35 U	36 U
11 Aroclor-1260	UG/KG	68 U	45 U	36 U	35 U	36 U
12 Dieldrin	UG/KG	6.8 U	4.5 U	3.6 U	3.5 U	3.6 U
13 Endosulfan I	UG/KG	3.5 U	3.1 P	2.8	1.8 U	1.8 U
14 Endosulfan II	UG/KG	6. <b>8</b> U	4.5 U	3.6 U	3.7	3.6 U
15 Endosulfan sulfate	UG/KG	6.8 U	4.5 U	3.6 U	3.5 U	3.6 P
16 Endrin	UG/KG	6.8 U	4.5 U	3.6 U	3.5 U	3.6 U
17 Endrin aldehyde	UG/KG	6.8 U	4.5 U	3.6 U	3.5 U	2.3 JP
18 Endrin ketone	UG/KG	6.8 U	4.5 U	3.6 U	3.5 U	3.6 U
19 Heptachlor	UG/KG	3.5 U	2.3 U	1.8 U	1.8 U	1.8 U
20 Heptachlor epoxide	UG/KG	3.5 U	2.3 U	1.8 U	1.8 U	1.8 U
21 Methoxychlor	UG/KG	35 U	<b>23</b> U	18 U	18 U	18 U
22 Toxaphene	UG/KG	350 U	230 U	180 U	180 U	180 U
23 alpha-BHC	UG/KG	3.5 U	2.3 .U	1.8 U	1.8 U	1.8 U
24 alpha-Chlordane	UG/KG	3.5 U	2.3 Ú	1.8 U	1.8 U	1.8 U
25 beta-BHC	UG/KG	3.5 U	2.3 U	1.8 U	1.8 U	1.8 U
26 delta-BHC	UG/KG	3.5 U	2.3 U	1.8 U	1.8 U	1.8 U
27 gamma-BHC (Lindane)		3.5 U	2.3 U	1.8 U	1.8 U	1.8 U
28 gamma-Chlordane	UG/KG	3.5 U	2.3 U	1.8 U	1.8 U	1.8 U

PESTICIDES						
	SDG:	54541	54541	54541	54541	54541
S	TUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
1	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB S	AMP. ID:	275469	275470	275471	275472	275473
EPA S	AMP. ID:	SS26-33	SS26-35	SS26-36	SS26-37	SS26-38
Q	C CODE:	SA	SA	SA	SA	SA
% MC	DISTURE:	11	23	11	8	14
%	SOLIDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
	UG/KG	3711	4.3 U	3.7 U	3.5 U	3.8 U
1 4,4'-DDD	UG/KG	5.9	4.3 U	3.7 U	2.9 JP	3.8 U
2 4,4'-DDE 3 4,4'-DDT	UG/KG	2.6 J	4.3 U	3.7 U	3.5 U	3.8 U
4 Aldrin	UG/KG	1.9 U	2.2 U	1.9 U	1.8 U	2 U
5 Aroclor-1016	UG/KG	37 U	43 U	37 U	35 U	38 U
6 Aroclor-1221	UG/KG	75 U	86 U	75 U	72 U	78 U
7 Aroclor-1232	UG/KG	37 U	43 U	37 U	35 U	38 U
8 Aroclor-1242	UG/KG	37 U	43 U	37 U	35 U	38 U
9 Aroclor-1248	UG/KG	37 U	43 U	37 U	35 U	38 U
10 Aroclor-1254	UG/KG	37 U	43 U	37 U	35 U	38 U
11 Aroclor-1260	UG/KG	37 U	43 U	37 U	35 U	38 U
12 Dieldrin	UG/KG	3.7 U	4.3 U	3.7 U	3.5 U	3.8 U
13 Endosulfan I	UG/KG	1.9 U	2.2 U	1.9 U	1.8 U	2 U
14 Endosulfan II	UG/KG	3.7 U	4.3 U	3.7 U	3.5 U	3.8 U
15 Endosulfan sulfate	UG/KG	3.7 U	4.3 U	3.7 U	3.5 U	3.8 U
16 Endrin	UG/KG	3.7 U	4.3 U	3.7 U	3.5 U	3.8 U
17 Endrin aldehyde	UG/KG	3.7 U	4.3 U	3.7 U	2.4 JP	3.8 U
18 Endrin ketone	UG/KG	3.7 U	4.3 U	3.7 U	3.5 U	3.8 U
19 Heptachlor	UG/KG	1.9 U	2.2 U	1.9 U	1.8 U	2 U
20 Heptachlor epoxide	UG/KG	1.4 JP	2.2 U	1.9 U	1.1 JP	2 U
21 Methoxychlor	UG/KG	19 U	22 U	19 U	18 U	20 U
22 Toxaphene	UG/KG	190 U	220 U	190 U	180 U	200 U
23 alpha-BHC	UG/KG	1.9 U	2.2 U	1.9 U	1.8 U	2 U
24 alpha-Chlordane	UG/KG	1.9 U	2.2 U	1.9 U	1.8 U	2 U
25 beta-BHC	UG/KG	1.9 U	2.2 U	1.9 U	1.8 U	2 U
26 delta-BHC	UG/KG	1.2 ЛР	2.2 U	1.9 U	1.8 U	2 U
27 gamma-BHC (Lindane)	UG/KG	1.9 U	2.2 U	1.9 U	1.8 U	2 U
28 gamma-Chlordane	UG/KG	1.9 U	<b>2.2</b> U	1.9 U	1.8 U	2 U
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PESTICIDES .						
	SDG:	54541	54541	54541	54541	54541
STU	DY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MA	ATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAN	MP. ID:	275474	275475	275476	275477	275478
EPA SAM	MP. ID:	SS26-39	SS26-40	SS26-41	SS26-42	SS26-43
QC	CODE:	SA	SA	SA	SA	SA
% MOIS	TURE:	17	18	9	15	15
% S0	OLIDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE O	VALUE Q
1 4,4'-DDD	UG/KG	4 U	4 U	3.6 U	3.9 U	3.9 U
2 4,4'-DDE	UG/KG	3.6 J	5.8	3.4 J	2.5 JP	2.4 JP
3 4,4'-DDT	UG/KG	4 U	2.2 J	3.6 U	2.3 J	1.9 JP
4 Ald <del>ri</del> n	UG/KG	2 U	2.1 U	1.9 U	2 U	2 U
5 Aroclor-1016	UG/KG	40 U	40 U	36 U	39 U	. 39 U
6 Aroclor-1221	UG/KG	80 U	81 U	73 U	78 U	79 U
7 Aroclor-1232	UG/KG	40 U	40 U	36 U	39 U	39 U
8 Aroclor-1242	UG/KG	40 U	40 U	36 U	39 U	39 U
9 Aroclor-1248	UG/KG	40 U	40 U	36 U	39 U	39 U
10 Aroclor-1254	UG/KG	40 U	40 U	36 U	39 U	39 U
11 Aroclor-1260	UG/KG	40 U	40 U	36 U	39 U	39 U
12 Dieldrin	UG/KG	4 U	4 Ü	3.6 U	3.9 U	3.9 U
13 Endosulfan I	UG/KG	. 2 U	2.1 U	1.9 U	2 U	2 U
14 Endosulfan II	UG/KG	4 U	4 U	3.6 U	3.9 U	3.9 U
15 Endosulfan sulfate	UG/KG	4 U	4 U	3.6 U	3.9 U	3.9 U
16 Endrin	UG/KG	4 U	4 U	3.6 U	3.9 U	3.9 U
17 Endrin aldehyde	UG/KG	4 U	4 U	3.6 U	3.9 U	3.9 U
18 Endrin ketone	UG/KG	4 U	4 U	3.6 U	3.9 U	3.9 U
19 Heptachlor	UG/KG	2 U	2.1 U	1.9 U	2 U	2 U
20 Heptachlor epoxide	UG/KG	2 U	2.1 U	1.9 U	2 U	2 U
21 Methoxychlor	UG/KG	20 U	21 U	19 U	20 U	20 U
22 Toxaphene	UG/KG	200 U	210 U	190 U	200 U	200 U
23 alpha-BHC	UG/KG	2 U	2.1 .U	1.9 U	2 U	2 U
24 alpha-Chlordane	UG/KG	2 U	2.1 U	1.9 U	2 U	2 U
25 beta-BHC	UG/KG	2 U	2.1 U	1.9 U	2 U	2 U
26 delta-BHC	UG/KG	2 U	2.1 U	1.9 U	2 U	2 U
27 gamma-BHC (Lindane)	UG/KG	2 U	2.1 U	1.9 U	2 U	2 U
28 gamma-Chlordane	UG/KG	2 U	2.1 U	1.9 U	2 U	2 Ü

#### PESTICIDES

ESTICIDES	SDG:	
	54541	
STU	PHASE 1	
M	SOIL	
LAB SAI	275479	
EPA SAI	MP. ID:	SS26-44
QC	CODE:	SA
% MOIS	STURE:	14
% S	OLIDS:	
PARAMETER	UNIT	VALUE Q
1 4,4'-DDD	UG/KG	3.8 U
2 4,4'-DDE	UG/KG	3.8 U
3 4,4'-DDT	UG/KG	3.8 U
4 Aldrin	UG/KG	2 U
5 Aroclor-1016	UG/KG	38 U
6 Aroclor-1221	UG/KG	77 U
7 Aroclor-1232	UG/KG	38 U
8 Aroclor-1242	UG/KG	38 U
9 Aroclor-1248	UG/KG	38 U
10 Aroclor-1254	UG/KG	38 U
11 Aroclor-1260	UG/KG	38 U
12 Dieldrin	UG/KG	3.8 U
13 Endosulfan I	UG/KG	2 U
14 Endosulfan II	UG/KG	3.8 U
15 Endosulfan sulfate	UG/KG	3.8 U
16 Endrin	UG/KG	3.8 U
17 Endrin aldehyde	UG/KG	3.8 U
18 Endrin ketone	UG/KG	3.8 U
19 Heptachlor	UG/KG	2 U
20 Heptachlor epoxide	UG/KG	2 U
21 Methoxychlor	UG/KG	20 U
22 Toxaphene	UG/KG	200 U
23 alpha-BHC	UG/KG	2 U
24 alpha-Chlordane	UG/KG	2 U
25 beta-BHC	UG/KG	2 U
26 delta-BHC	UG/KG	2 U
27 gamma-BHC (Lindane)	UG/KG	2 U
28 gamma-Chlordane	UG/KG	2 U
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# · METALS

	SDG:		
	STUDY ID:		
	MATRIX: LAB SAMP, ID:		
	EPA SAMP. ID:	SW26-11	
	QC CODE:	DU	
	% MOISTURE:		
	% SOLIDS:	83.2	
PARAMETER	UNIT	VALUE Q	
1 Aluminimum	UG/L	80.3 B	
2 Antimony	UG/L	2.2 U	
3 Arsenic	UG/L	7.4 B	
4 Barium	UG/L	57.7 B	
5 Beryllium	UG/L	0.27 U	
6 Cadmium	UG/L	0.3 U	
7 Calcium	UG/L	46800	
8 Chromium	UG/L	0.5 U	
9 Cobalt	UG/L	1 U	
10 Copper	UG/L	0.7 U	
11 Cyanide	UG/L	5 U	
12 Iron	UG/L	560	
13 Lead	UG/L	1.5 U	
14 Magnesium	UG/L	3230 B	
15 Manganese	UG/L	9.9 B	
16 Mercury	UG/L	0.03 B	
17 Nickel	UG/L	3.3 B	
18 Potasium	UG/L	3520 B	
19 Selenium	UG/L	<b>3.7</b> U	
20 Silver	UG/L	0.8 U	
21 Sodium	UG/L	3170 B	
22 Thallium	UG/L	3 U	
23 Vanadium	UG/L	1.1 U	
24 Zinc	UG/L	8.6 B	

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METALS	SDG:	54541	54541	54541	54541	54541
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
T A*		275459	275461	275462	275465	275464
	B SAMP. ID:	SB26-11-00	SB26-11-03	SB26-11-06	SD26-12	SD26-8
EP.	A SAMP. ID: QC CODE:	SB20-11-00 SA	SA SA	SA	SA	SA
0.4	MOISTURE:	3A	SA	5A	52.1	
70	% SOLIDS:	92.3	85.1	89.9	48.1	73.7
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	MG/K	4700	15700	8220	15300	9810
2 Antimony	MG/K	0.41 U	0.44 U	0.36 U	0.8 U	0.53 B
3 Arsenic	MG/K	5	6	4.2	8.2	24.8
4 Barium	MG/K	34.9 B	96.3	87.1	118	54.1
5 Beryllium	MG/K	0.35 B	0.75 B	0.41 B	0.83 B	0.49 B
6 Cadmium	MG/K	0.06 U	0.06 U	0.05 U	0.11 U	0.06 U
7 Calcium	MG/K	196000	6230	86100	12300	6700
8 Chromium	MG/K	8.5	24.6	13.1	25.1	22.2
9 Cobalt	MG/K	7.8 B	14.7	8.2	11.6 B	13.4
10 Copper	MG/K	15.9	24.6	20.4	23.9	22.1
11 Cyanide	MG/K	0.59 U	0.62 U	0.64 U	1.1 U	0.72 U
12 Iron	MG/K	10700	31400	18000	29400	25400
13 Lead	MG/K	6	12.8	6.9	31.6	17.5
14 Magnesium	MG/K	11500	5750	14700	5770	4580
15 Manganese	MG/K	318	641	579	803	906
16 Mercury	MG/K	0.02 B	0.04 B	0.02 B	0.08 B	0.02 B
17 Nickel	MG/K	23.2	39.8	22.6	34.4	38.5
18 Potasium	MG/K	1080	1540	1660	1500 B	905 B
19 Selenium	MG/K	0.69 U	0.74 U	0.61 U	1.3 U	0.71 U
20 Silver	MG/K	0.15 U	0.16 U	0.13 U	0. <b>2</b> 9 U	0.15 U
21 Sodium	MG/K	86.4 B	39.9 U	96.1 B	73 U	38.5 U
22 Thallium	MG/K	0.56 U	1 B	0.92 B	1.1 Ü	0.58 U
23 Vanadium	MG/K	10.2	23.9	14.1	26.5	15.6
24 Zinc	MG/K	50	94.5	52.2	126	325

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	SDG:		54541	54541	54541	54541	54541
	STUDY ID:		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:		SOIL	SOIL	SOIL	SOIL	SOIL
	LAB SAMP. ID:		275466	275467	275468	275469	275470
	EPA SAMP. ID:		SS26-24	SS26-27	SS26-29	SS26-33	SS26-35
	QC CODE:		SA	SA	SA		
	% MOISTURE:						
	% SOLIDS:		91.7	92.6	90.6	88.6	76.9
PARAMETER		UNIT	VALUE	Q VALUE	Q VALUE	Q VALUE	Q VALUE Q
1 Aluminimum		MG/K	6690	6750	13100	12400	17200
2 Antimony		MG/K	0.38 U	J 0.45	U 0.38		
3 Arsenic		MG/K	8.2	4.7	6.8	5.3	5.6
4 Barium		MG/K	42.4	28.3	B 77.4	62.2	74
5 Beryllium		MG/K	0.49 E	3 0.42	B 0.64	B 0.62	B 0.64 B
6 Cadmium		MG/K	0.05 U	J 0.06	U 0.05	U 0.05	
7 Calcium		MG/K	208000	169000	79000	82200	41600
8 Chromium		MG/K	11.1	12.6	26.3	20.8	21.2
9 Cobalt		MG/K	9.4	9.4	B 11.6	12.3	8 B
10 Copper		MG/K	26.2	15.3	25	25.1	17.5
11 Cyanide		MG/K	0.64 t	J 0.61	U 0.61	U 0.61	U 0.63 U
12 Iron		MG/K	15800	15200	25600	24600	21800
13 Lead		MG/K	7.7	16.9	42.6	17.6	14.5
14 Magnesium		MG/K	5390	15600	9420	9180	11700
15 Manganese		MG/K	331	516	499	467	432
16 Mercury		MG/K	0.04 E		B 0.02	B 0.04	B 0.07 B
17 Nickel		MG/K	30.3	27.1	34.2	37.9	20.8
18 Potasium		MG/K	1070	1280	1870	1810	2530
19 Selenium		MG/K	0.64 L			U 0.63	U 0.7 U
20 Silver		MG/K	0.14 t			****	U 0.15 U
21 Sodium		MG/K	80.2 E			_	B 68.8 B
22 Thallium		MG/K	0.53 E			B 0.51	U 0.65 B
23 Vanadium		MG/K	12.2	14	21.3	20	28.6
24 Zinc		MG/K	88.1	124	106	127	155

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METALS						
	SDG:	54541	54541	54541	54541	54541
S	TUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB S	SAMP. ID:	275471	275472	275473	275474	275475
EPA S	SAMP. ID:	SS26-36	SS26-37	SS26-38	SS26-39	SS26-40
Ç	OC CODE:	SA	SA	SA	SA	SA
% M0	OISTURE:					
%	6 SOLIDS:	89.3	92.3	86.4	83.2	82.5
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	MG/K	9080	6870	6670	17000	8120
2 Antimony	MG/K	0.55 B	0.38 U	0.53 B	0.4 U	0.47 U
3 Arsenic	MG/K	12.2	5.8	10.2	5.8	4.6
4 Barium	MG/K	47.1	35.2	40.5 B	61.2	33.8 B
5 Beryllium	MG/K	0.61 B	0.47 B	0.51 B	0.83 B	0.46 B
6 Cadmium	MG/K	0.05 U	0.05 U	0.07 U	0.05 U	0.06 U
7 Calcium	MG/K	194000	258000	260000	49500	107000
8 Chromium	MG/K	12.3	11	9.4	28.9	14
9 Cobalt	MG/K	8.5	7.1 B	7 B	15.8	9.4 B
10 Copper	MG/K	29.3	17	25.4	31.2	16.5
11 Cyanide	MG/K	0.42 U	0.54 U	0.67 U	0.66 U	0.68 U
12 Iron	MG/K	14100	10300	11800	31600	16700
13 Lead	MG/K	10	7.1	6.4	25.1	21.1
14 Magnesium	MG/K	4760	16300	6000	9280	12500
15 Manganese	MG/K	283	305	266	517	357
16 Mercury	MG/K	0.04 B	0.02 B	0.03 B	0.02 B	0.04 B
17 Nickel	MG/K	33.3	25.3	28.4	54.9	27.6
18 Potasium	MG/K	3020	2560	2250	2600	1530
19 Selenium	MG/K	0.6 U	0.64 U	0.82 U	0.67 U	0.79 U
20 Silver	MG/K	0.13 U	0.14 U	0.18 U	0.14 U	0.17 U
21 Sodium	MG/K	91.9 B	154 B	64 B	101 B	126 B
22 Thallium	MG/K	0.66 B	0.52 U	0.7 B	0.82 B	0.64 U
23 Vanadium	MG/K	20.1	17.6	15.7	26.2	14.4
24 Zinc	MG/K	33	81.1	28.1	149	62

### · METALS

	5	SDG:	54541	54541	54541	54541
	STUD	YID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MAT	RIX:	SOIL	SOIL	SOIL	SOIL
	LAB SAME	P. ID:	275476	275477	275478	275479
	EPA SAMI	P. ID:	SS26-41	SS26-42	SS26-43	SS26-44
	QC CC	ODE:	SA	SA	SA	SA
	% MOIST					
	% SOL	LIDS:	91.3	84.7	85.5	85.7
	PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1	Aluminimum	MG/K	7880	13100	17700	15300
2	Antimony	MG/K	0.44 U	0.51 U	0.46 U	0.47 U
3	Arsenic	MG/K	5.6	9.5	7.4	6.6
4	Barium	MG/K	36.7 B	64.1	77.9	82
5	Beryllium	MG/K	0.48 B	0.65 B	0.82 B	0.74 B
6	Cadmium	MG/K	0.06 U	0.07 U	0.06 U	0.06 U
7	Calcium	MG/K	177000	65900	12100	20500
8	Chromium	, MG/K	13.3	21.8	27.1	24.4
9	Cobalt	\ MG/K	8.6 B	11.2 B	14.7	13.5
10	Copper	MG/K	14.9	25.5	28.1	23.3
11	Cyanide	MG/K	0.64 U	0.55 U	0.56 U	0.6 U
12	Iron	MG/K	14100	27400	32000	31700
13	Lead	MG/K	15.5	18.6	22	21.6
14	Magnesium	MG/K	18200	9320	7320	6460
15	Manganese	MG/K	478	682	544	731
16	Mercury	MG/K	0.02 B	0.04 B	0.04 B	0.09 B
17	Nickel	MG/K	22.7	32.6	43.8	35.8
18	Potasium	MG/K	2140	1950	2640	1570
	Selenium	MG/K	0.74 U	0.86 U	0.91 B	0.79 U
20	Silver	MG/K	0.16 U	0.19 U	0.17 U	0.17 U
	Sodium	MG/K	116 B	132 B	67.1 B	42.9 U
	Thallium	MG/K	0.6 U	0.95 B	1.1 B	1.1 B
	Vanadium	MG/K	17.9	21.4	28.2	22.4
24	Zinc	MG/K	70.4	101	I 17	103

S		
	54598	
STUD	PHASE 1	
MA	WATER	
LAB SAM	275503	
EPA SAM	P. ID:	SS26-34R
oc c	ODE:	FB
% MOIST	URE:	
% SO	LIDS:	
PARAMETER	UNIT	VALUE Q
1.1.1-Trichloroethane	UG/L	10 U
· ·	UG/L	10 U
1,1,2-Trichloroethene	UG/L	10 U
1,1-Dichloroethane	UG/L	10 U
1,1-Dichloroethene	UG/L	10 U
,	UG/L	10 U
-	UG/L	10 U
The state of the s	UG/L	10 U
2-Butanone	UG/L	10 U
2-Hexanone	UG/L	10 U
4-Methyl-2-Pentanone	UG/L	10 U
Acetone	UG/L	10 U
Benzene	UG/L	10 U
Bromodichloromethane	UG/L	10 U
Bromoform	UG/L	10 U
Bromomethane	UG/L	10 U
Carbon Disulfide	UG/L	10 U
Carbon Tetrachloride	UG/L	10 U
Chlorobenzene	UG/L	10 U
Chloroethane	UG/L	10 U
Chloroform	UG/L	3 J
Chloromethane	UG/L	10 U
Dibromochloromethane	UG/L	10 U
Ethylbenzene	UG/L	10 U
Methylene Chloride	UG/L	10 U
Styrene	UG/L	10 U
Tetrachloroethene	UG/L	10 U
Toluene	UG/L	10 U
Trichloroethene	UG/L	10 U
Vinyl Chloride	UG/L	10 U
Xylene (total)	UG/L	10 U
cis-1,3-Dichloroctopene	UG/L	10 U
trans-1,3-Dichloroctopene	UG/L	10 U
	STUD MA LAB SAM EPA SAM QC C % MOIST % SO  PARAMETER 1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 2-Hexanone 4-Methyl-2-Pentanone Acetone Benzene Bromodichloromethane Bromoform Bromomethane Carbon Disulfide Carbon Tetrachloride Chlorobenzene Chloroethane Chloroform Chloromethane Dibromochloromethane Ethylbenzene Methylene Chloride Styrene Tetrachloroethene Toluene Trichloroethene Vinyl Chloride Xylene (total) cis-1,3-Dichloroctopene	SDG: STUDY ID: MATRIX:  LAB SAMP. ID: EPA SAMP. ID: QC CODE: % MOISTURE: % SOLIDS:  PARAMETER UNIT 1,1,1-Trichloroethane 1,2,2-Tetrachloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,3-Dichloroethane 1,3-Dichloroethane 1,3-Dichloroethane 1,3-Dichloroethane 1,3-Dichloroethane 1,3-Dichloroethane 1,3-Dichloroethane 1,3-Dichloroethane 1,3-Dichloroetopene 1,3-Dichloroetopene 1,3-Dichloroetopene 1,3-Dichloroetopene 1,3-Dichloroetopene 1,3-Dichloroetopene 1,3-Dichloroetopene 1,3-Dichloroetopene 1,3-Dichloroetopene 1,3-Dichloroetopene 1,3-Dichloroetopene 1,3-Dichloroetopene 1,3-Dichloroetopene 1,3-Dichloroetopene 1,3-Dichloroetopene 1,3-Dichloroetopene 1,3-Dichloroetopene 1,3-Dichloroetopene 1,3-Dichloroetopene 1,4-Methylen

54598VW.WK4

	SDG: STUDY ID: MATRIX: LAB SAMP. ID: EPA SAMP. ID: QC CODE: % MOISTURE:		54598 PHASE 1 SOIL 275502 SS26-52 DU 10		54598 PHASE 1 SOII 275631 SS26-53 DU	1 3 3	54598 PHASE I SOIL 275483 26-45MS MS	ss	54598 PHASE 1 SOIL 275483 26-45MSD MSD
	% MOISTURE:		10		14	•	14		14
	PARAMETER	UNIT	VALUE	Q	VALUE	Ε Ο	VALUE	0	VALUE Q
1	1,1,1-Trichloroethane	UG/KG	. 11			: บ ิ	12		12 U
	1,1,2,2-Tetrachloroethane	UG/KG	11		12	. U	12		12 U
3	1,1,2-Trichloroethene	UG/KG	1 11	U	12	? U	12	U	12 U
4	I,1-Dichloroethane	UG/KG	11	U	12	! U	12	U	12 U
5	1,1-Dichloroethene	UG/KG	11	U	12	? U	61		62
6	1,2-Dichloroctopane	UG/KG	11	U	12	! U	12	U	12 U
7	1,2-Dichloroethane	UG/KG	11	U	12	! U	12	U	12 U
8	1,2-Dichloroethene (total)	UG/KG	11	U	12	. U	12	U	12 U
9	2-Butanone	UG/KG	11	U	12	. U	12	U	12 U
10	2-Hexanone	UG/KG	11	U	12	: U	12	U	12 U
11	4-Methyl-2-Pentanone	UG/KG	11	U	12	2 U	12	U	12 U
12	Acetone	UG/KG	2	J	3	JB	12	U	12 U
13	Benzene	UG/KG	11	U	12	! U	62		63
14	Bromodichloromethane	UG/KG	11	U	12	? U	12	U	12 U
	Bromoform	UG/KG	11		12	2 U	12	U	12 U
	Bromomethane	UG/KG	11	U	12	: U	12	U	12 U
17	Carbon Disulfide	UG/KG		U	12	2 U	12	U	12 U
18	Carbon Tetrachloride	UG/KG		U		2 U	12	U	12 U
	Chlorobenzene	UG/KG		U		2 U	62		62
	Chloroethane	UG/KG		U		2 U	12		12 U
	Chloroform	UG/KG		U		2 U	12		12 U
	Chloromethane	UG/KG		U		2 U	12		12 U
	Dibromochloromethane	UG/KG	11			2 U	12		12 U
	Ethylbenzene	UG/KG		U		U	12		12 U
	Methylene Chloride	UG/KG		Ü		2 U	12		12 U
	Styrene	UG/KG		U		2 U	12		12 U
_	Tetrachloroethene	UG/KG		U		2 U	12	U	12 U
	Toluene	UG/KG		U		2 U	69		68
	Trichloroethene	UG/KG		U		2 U	56		57
	Vinyl Chloride	UG/KG		U		2 U	12		12 U
	Xylene (total)	UG/KG		U		2 U	12		12 U
	cis-1,3-Dichloroctopene	UG/KG		U		2 U	12		12 U
33	trans-1,3-Dichloroctopene	UG/KG	11,	U	12	2 U	12	U	12 U

. VOCs

VOCs						
	SDG:	54598	54598	54598	54598	54598
STUD		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE I
	RIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMI		275491	275494	275495	275496	275497
EPA SAMI		SS26-19RE	SS26-22RE	SS26-23RE	SS26-25RE	SS26-26RE
QC C		RE	RE	RE	RE	RE
% MOIST	URE:	15	12	7	12	11
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	UG/KG	<b>12</b> U	11 U	11 U	11 U	11 U
2 1,1,2,2-Tetrachloroethane	UG/KG	12 U	11 U	11 U	11 U	11 U
3 1,1,2-Trichloroethene	UG/KG	12 U	11 U	11 U	. 11 U	. 11 U
4 1,1-Dichloroethane	UG/KG	<b>12</b> U	11 U	11 U	11 U	11 U
5 1,1-Dichloroethene	UG/KG	<b>12</b> U	11 U	11 U	11 U	11 U
6 1,2-Dichloroctopane	UG/KG	12 U	11 U	11 U	11 U	11 U
7 1,2-Dichloroethane	UG/KG	12 U	11 U	11 U	11 U	11 U
8 1,2-Dichloroethene (total)	UG/KG	<b>12</b> U	11 U	11 U	11 U	11 U
9 2-Butanone	UG/KG	12 U	11 U	11 U	11 U	11 U
10 2-Hexanone	UG/KG	12 U	11 U	11 U	11 U	11 U
11 4-Methyl-2-Pentanone	UG/KG	<b>12</b> U	11 U	11 U	11 U	11 U
12 Acetone	UG/KG	<b>12</b> U	5 JB	11 U	4 JB	4 JB
13 Benzene	UG/KG	12 U	11 U	11 U	' 11 U	11 U
14 Bromodichloromethane	UG/KG	12 U	11 U	11 U	11 U	11 U
15 Bromoform	UG/KG	<b>12</b> U	11 U	11 U	11 U	11 U
16 Bromomethane	UG/KG	1 <b>2</b> U	11 U	11 U	11 U	11 U
17 Carbon Disulfide	UG/KG	<b>12</b> U	11 U	11 U	11 U	11 U
18 Carbon Tetrachloride	UG/KG	12 U	11 U	11 U	11 U	11 U
19 Chlorobenzene	UG/KG	12 U	11 U	11 U	11 U	11 U
20 Chloroethane	UG/KG	<b>12</b> U	· 11 U	11 U	11 U	11 U
21 Chloroform	UG/KG	<b>12</b> U	11 U	11 U	11 U	11 U
22 Chloromethane	UG/KG	12 U	11 U	11 U	11 U	11 U
23 Dibromochloromethane	UG/KG	<b>12</b> U	11 U	11 U	11 U	11 U
24 Ethylbenzene	UG/KG	<b>12</b> U	11 U	11 U	11 U	11 U
25 Methylene Chloride	UG/KG	12 U	11 U	11 U	11 U	11 U
26 Styrene	UG/KG	12 U	11 U	11 U	11 U	11 U
27 Tetrachloroethene	UG/KG	12 U	11 U	11 U	11 U	11 U
28 Toluene	UG/KG	12 U	11 U	11 U	11 U	11 U
29 Trichloroethene	UG/KG	12 U	11 U	11 U	11 U	11 U
30 Vinyl Chloride	UG/KG	12 U	11 U	11 U	11 U	11 U
31 Xylene (total)	UG/KG	12 U	11 U	11 U	11 U	11 U
32 cis-1,3-Dichloroctopene	UG/KG	12 U	11 U	11 U	11 U	11 U
33 trans-1,3-Dichloroctopene	UG/KG	12 U	11 U	11 U	11 U	11 U

	SDG:	54598	54598	54598	54598	54598
STUD	Y ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MA	TRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAM	P. ID:	275498	275500	275629	275488	275489
EPA SAM	P. ID:	SS26-30RE	SS26-32RE	SS26-15	SS26-16	SS26-17
QC C	ODE:	RE	RE	SA	SA	SA
% MOIST	TURE:	13	10	20	22	20
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	UG/KG	11 U	11 U	12 U	13 U	12 U
2 1,1,2,2-Tetrachloroethane	UG/KG	11 U	11 U	12 U	13 U	12 U
3 1,1,2-Trichloroethene	UG/KG	11 U	11 U	12 U	13 U	12 U
4 1,1-Dichloroethane	UG/KG	11 U	11 U	12 U	13 U	12 U
5 1,1-Dichloroethene	UG/KG	11 U	11 U	12 U	13 U	12 U
6 1,2-Dichloroctopane	UG/KG	11 U	11 U	12 U	13 U	12 U
7 1,2-Dichloroethane	UG/KG	11 U	11 U	12 U	13 U	12 U
8 1,2-Dichloroethene (total)	UG/KG	11 U	11 U	12 U	13 U	12 U
9 2-Butanone	UG/KG	11 U	11 U	12 U	13 U	12 U
10 2-Hexanone	UG/KG	11 U	11 U	12 U	13 U	12 U
11 4-Methyl-2-Pentanone	UG/KG	11 U	11 U	12 U	13 U	12 U
12 Acetone	UG/KG	2 JB	11 U	<b>12</b> U	13 U	10 J
13 Benzene	UG/KG	11 U	11 U	12 U	13 U	12 U
14 Bromodichloromethane	UG/KG	11 U	11 U	12 U	13 U	12 U
15 Bromoform	UG/KG	11 U	11 U	12 U	13 U	12 U
16 Bromomethane	UG/KG	11 U	11 U	12 U	13 U	12 U
17 Carbon Disulfide	UG/KG	11 U	11 U	12 U	13 U	12 U
18 Carbon Tetrachloride	UG/KG	11 U	11 U	12 U	13 U	12 U
19 Chlorobenzene	UG/KG	11 U	11 U	12 U	13 U	12 U
20 Chloroethane	UG/KG	11 U	11 U	<b>12</b> U	13 U	12 U
21 Chloroform	UG/KG	11 U	11 U	12 U	13 U	12 U
22 Chloromethane	UG/KG	11 U	11 U	12 U	13 U	12 U
23 Dibromochloromethane	UG/KG	11 U	11 U	12 Ü	13 U	12 U
24 Ethylbenzene	UG/KG	11 U	11 U	12 U	13 U	12 U
25 Methylene Chloride	UG/KG	11 U	11 U	12 U	13 Ú	12 U
26 Styrene	UG/KG	11 U	11 U	12 U	13 U	12 U
27 Tetrachloroethene	UG/KG	11 U	11 U	12 U	13 U	12 U
28 Toluene	UG/KG	11 U	11 U	12 U	13 U	12 U
29 Trichloroethene	UG/KG	11 U	11 U	12 U	13 U	12 U
30 Virryl Chloride	UG/KG	11 U	11 U	12 U	13 U	12 U
31 Xylene (total)	UG/KG	11 U	11 U	12 U	13 U	12 U
32 cis-1,3-Dichloroctopene	UG/KG	11 U	11 U	12 U	13 U	12 U
33 trans-1,3-Dichloroctopene	UG/KG	11 U	11 U	12 U	13 U	12 U

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VOCs					*****	5.4500
	SDG:	54598 PHASE 1	54598	54598	54598	54598
STUD	STUDY ID:		PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRIX:		SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMI	P. ID:	275490	275491	275492	275493	275494
EPA SAMI	P. ID:	SS26-18	SS26-19	SS26-20	SS26-21	SS26-22
QC CC		SA	SA	SA	SA	SA
% MOIST		19	15	18	10	12
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	UG/KG	12 U	<b>12</b> U	12 U	11 U	11 U
2 1,1,2,2-Tetrachloroethane	UG/KG	12 U	12 U	12 U	11 U	11 U
3 1,1,2-Trichloroethene	UG/KG	12 U	<b>12</b> U	12 U	11 U	11 U
4 1,1-Dichloroethane	UG/KG	12 U .	12 U	12 U	'11 U	· 11 U
5 1,1-Dichloroethene	UG/KG	12 U	12 U	<b>12</b> U	11 U	11 U
6 1,2-Dichloroctopane	UG/KG	12 U	12 U	12 U	11 U	11 U
7 1,2-Dichloroethane	UG/KG	12 U	12 U	12 U	11 U	11 U
8 1,2-Dichloroethene (total)	UG/KG	12 U	12 U	12 U	11 U	11 U
9 2-Butanone	UG/KG	12 U	12 U	12 U	11 U	11 Ü
10 2-Hexanone	UG/KG	12 U	12 U	12 U	11 U	11 U
11 4-Methyl-2-Pentanone	UG/KG	12 U	12 U	12 U	11 U	11 U
12 Acetone	UG/KG	7 Ј	8 J	19	7 J	31
13 Benzene	UG/KG	12 U	12 U	12 U	11 U	11 U
14 Bromodichloromethane	UG/KG	12 U	12 U	12 U	11 U	11 U
15 Bromoform	UG/KG	12 U	12 U	12 U	11 U	11 U
16 Bromomethane	UG/KG	12 U	12 U	12 U	11 Ŭ	11 U
17 Carbon Disulfide	UG/KG	12 U	12 U	12 U	11 U	11 U
18 Carbon Tetrachloride	UG/KG	12 U	12 U	12 U	11 U	11 U
19 Chlorobenzene	UG/KG	12 U	12 U	12 U	11 U	11 U
20 Chloroethane	UG/KG	12 U	· 12 U	12 U	11 U	11 U
21 Chloroform	UG/KG	12 U	12 U	12 U	11 U	11 U
22 Chloromethane	UG/KG	12 U	12 U	12 U	11 U	11 U
23 Dibromochloromethane	UG/KG	12 U	12 U	12 U	11 U	, 11 U
24 Ethylbenzene	UG/KG	12 U	12 U	12 U	11 U	11 U
25 Methylene Chloride	UG/KG	12 U	12 U	12 U	11 U	11 U
26 Styrene	UG/KG	12 U	<b>12</b> U	12 U	11 U	11 U
27 Tetrachloroethene	UG/KG	12 U	12 U	12 U	11 U	11 U
28 Toluene	UG/KG	12 U	12 U	12 U	11 U	11 U
29 Trichloroethene	UG/KG	12 U	12 U	12 U	11 U	11 U
30 Vinyl Chloride	UG/KG	12 U	12 U	12 U	11 U	11 U
31 Xylene (total)	UG/KG	12 U	2 Ј	12 U	11 U	11 U
32 cis-1,3-Dichloroctopene	UG/KG	12 U	12 U	12 U	11 U	11 U
33 trans-1,3-Dichloroctopene	UG/KG	12 U	12 U	12 U	11 U	11 U
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VOC	⁄S						
		RIX: P. ID:	54598 PHASE 1 SOIL 275495 SS26-23	54598 PHASE 1 SOIL 275496 SS26-25	54598 PHASE 1 SOIL 275497 SS26-26	54598 PHASE 1 SOIL 275630 SS26-28	54598 PHASE 1 SOIL 275498 SS26-30
	QC CC		SA	SA	SA	SA	SA
	% MOIST	URE:	7	12	11	11	13
	PARAMETER	UNIT	VALUE Q				
1	1,1,1-Trichloroethane	UG/KG	11 U	11 U	11 U	11 U	11 U
2	1,1,2,2-Tetrachloroethane	UG/KG	11 U	11 U	11 U	11 U	11 U
3	1,1,2-Trichloroethene	UG/KG	11 U	11 U	11 U	11 U	11 U
4	1,1-Dichloroethane	UG/KG	11 U	11 U	11 U	11 U	11 U
	1,1-Dichloroethene	UG/KG	11 U	11 U	11 U	11 U	11 U
6	1,2-Dichloroctopane	UG/KG	11 U	11 U	11 U	11 U	11 U
7	1,2-Dichloroethane	UG/KG	11 U	11 U	11 U	11 U	11 U
8	1,2-Dichloroethene (total)	UG/KG	11 U	11 U	11 U	11 U	11 U
9	2-Butanone	UG/KG	11 U	11 U	11 U	11 U	11 U
10	2-Hexanone	UG/KG	11 U	11 U	11 U	11 U	11 U
11	4-Methyl-2-Pentanone	UG/KG	11 U	11 U	11 U	11 U	11 U
12	Acetone	UG/KG	8 J	9 <b>J</b>	11 U	2 JB	11 U
13	Benzene	UG/KG	11 U	11 U	11 U	' 11 U	11 U
14	Bromodichloromethane	UG/KG	11 U	11 U	11 U	11 U	11 U
15	Bromoform	UG/KG	11 U	11 U	11 U	11 U	11 U
16	Bromomethane	UG/KG	11 U	11 U	11 U	11 U	11 U
17	Carbon Disulfide	UG/KG	11 U	11 U	11 U	11 U	11 U
18	Carbon Tetrachloride	UG/KG	11 U	11 U	11 U	11 U	11 U
19	Chlorobenzene	UG/KG	11 U	11 U	11 U	11 U	11 U
20	Chloroethane	UG/KG	11 U	· 11 U	11 U	11 U	11 U
21	Chloroform	UG/KG	11 <sub>.</sub> U	11 U	11 U	11 U	11 U
22	Chloromethane	UG/KG	11 U	11 U	11 U	11 U	11 U
	Dibromochloromethane	UG/KG <sup>-</sup>	11 U	11 U	11 U	11 U	11 U
	Ethylbenzene	UG/KG	11 U	11 U	11 U	11 U	11 U
25	Methylene Chloride	UG/KG	11 U	11 U	11 U	11 U	11 U
	Styrene	UG/KG	11 U	11 U	11 U	11 U	11 U
27	Tetrachloroethene	UG/KG	11 U	11 U	11 U	11 U	11 U
	Toluene	UG/KG	11 U	11 U	11 U	11 U	11 U
29	Trichloroethene	UG/KG	. З Ј	11 U	11 U	11 U	11 U
30	Vinyl Chloride	UG/KG	11 U	11 U	11 U	11 U	11 U
31	Xylene (total)	UG/KG	11 U	11 U	11 U	11 U	11 U
32	cis-1,3-Dichloroctopene	UG/KG	11 U	11 U	11 U	11 U	11 U
33	trans-1,3-Dichloroctopene	UG/KG	11 U	11 U	11 U	11 U	11 U
							11 0

VOCs						
S	DG:	54598	54598	54598	54598	54598
STUDY	7 ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRIX: LAB SAMP. ID:		SOIL	SOIL	SOIL	SOIL	SOIL
		275499	275500	275501	275483	275484
EPA SAMP		SS26-31	SS26-32	SS26-34	SS26-45	SS26-46
QC CC		SA	SA	SA SA	SA	SA
% MOISTU		12	10	10	14	14
% MOISTC	JKE:	12	10	10	14	1,
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1.1.1-Trichloroethane	UG/KG '	11 U	11 U	11 U	12 U	12 U
2 1,1,2,2-Tetrachloroethane	UG/KG	11 U	11 U	11 U	12 U	12 U
3 1,1,2-Trichloroethene	UG/KG	11 U	11 U	11 U	12 U	12 U
4 1,1-Dichloroethane	UG/KG	11 U	11 U	11 U	12 U	12 U
5 1,1-Dichloroethene	UG/KG	11 U	11 U	11 U	12 U	12 U
6 1,2-Dichloroctopane	UG/KG	11 U	11 U	11 U	12 U	12 U
7 1,2-Dichloroethane	UG/KG	11 U	11 U	11 U	12 U	12 U
8 1,2-Dichloroethene (total)	UG/KG	11 U	11 U	11 U	12 U	12 U
9 2-Butanone	UG/KG	11 Ü	11 U	11 U	12 U	12 U
10 2-Hexanone	UG/KG	11 U	11 U	11 U	12 U	12 U
11 4-Methyl-2-Pentanone	UG/KG	11 U	11 U	11 U	12 U	12 U
12 Acetone	UG/KG	11 U	8 J	11 U	12 U	12 U
	UG/KG	11 U	11 U	11 U	12 U	12 U
13 Benzene 14 Bromodichloromethane	UG/KG	11 U	11 U	11 U	12 U	12 U
14 Bromodicnioromeinane 15 Bromoform	UG/KG UG/KG	11 U	11 U	11 U	12 U	12 U
	UG/KG	11 U	11 U	11 U	12 U	12 U
16 Bromomethane		11 U	11 U	11 U	12 U	12 U
17 Carbon Disulfide	UG/KG	11 U	11 U	11 U	12 U	12 U
18 Carbon Tetrachloride	UG/KG	11 U	11 U	11 U	12 U	12 U
19 Chlorobenzene	UG/KG	11 U	11 U	11 U	12 U	12 U
20 Chloroethane	UG/KG	11 U	11 U	11 U	12 U	12 U
21 Chloroform	UG/KG	11 U	11 U	11 U	12 U	12 U
22 Chloromethane	UG/KG	11 U	11 U	11 U	12 U	12 U
23 Dibromochloromethane	UG/KG		11 U	11 U	12 U	12 U
24 Ethylbenzene	UG/KG	11 U		11 U	12 U	
25 Methylene Chloride	UG/KG	11 U	11 U			12 U
26 Styrene	UG/KG	11 U	11 U	11 U	12 U	12 U
27 Tetrachloroethene	UG/KG	11 U	11 U	11 Ŭ	12 U	12 U
28 Toluene	UG/KG	2 J	11 U	11 U	12 U	12 U
29 Trichloroethene	UG/KG	11 U	11 U	11 U	12 U	12 U
30 Vinyl Chloride	UG/KG	11 U	11 U	11 U	12 U	12 U
31 Xylene (total)	UG/KG	7 Ј	11 U	11 U	12 U	12 U
32 cis-1,3-Dichloroctopene	UG/KG	11 U	11 U	11 U	<b>12</b> U	12 U
33 trans-1,3-Dichloroctopene	UG/KG	11 U	11 U	11 U	12 U	12 U

	S		
		SDG:	54598
	STU	JDY ID:	PHASE 1
	M	ATRIX:	SOIL
	LAB SA	MP. ID:	275485
	EPA SA	MP. ID:	SS26-47
	QC	CODE:	SA
	% MOI	STURE:	11
	PARAMETER	UNIT	VALUE Q
1	1,1,1-Trichloroethane	UG/KG	11 U
2	1,1,2,2-Tetrachloroethane	UG/KG	11 U
3	1,1,2-Trichloroethene	UG/KG	11 U
4	1,1-Dichloroethane	UG/KG	11 U
5	1,1-Dichloroethene	UG/KG	11 U
6	1,2-Dichloroctopane	UG/KG	11 U
7	1,2-Dichloroethane	UG/KG	11 U
8	1,2-Dichloroethene (total)	UG/KG	11 U
9	2-Butanone	UG/KG	11 U
10	2-Hexanone	UG/KG	11 U
11	4-Methyl-2-Pentanone	UG/KG	11 U
	Acetone	UG/KG	11 U
13	Benzene	UG/KG	11 U
14	Bromodichloromethane	UG/KG	11 U
15	Bromoform	UG/KG	11 U
16	Bromomethane	UG/KG	11 U
17	Carbon Disulfide	UG/KG	11 U
18	Carbon Tetrachloride	UG/KG	11 U
19	Chlorobenzene	UG/KG	11 U
20	Chloroethane	UG/KG	11 U
21	Chloroform	UG/KG	11 U
22	Chloromethane	UG/KG	11 U
23	Dibromochloromethane	UG/KG <sup>-</sup>	11 U
24	Ethylbenzene	UG/KG	11 U
25	Methylene Chloride	UG/KG	11 U
26	Styrene	UG/KG	11 U
27	Tetrachloroethene	UG/KG	11 U
28	Toluene	UG/KG	11 U
29	Trichloroethene	UG/KG	11 U
30	Vinyl Chloride	UG/KG	11 U
31	Xylene (total)	UG/KG	11 U
32	cis-1,3-Dichloroctopene	UG/KG	11 U
33	trans-1,3-Dichloroctopene	UG/KG	11 U
	_		

	SDG: STUDY ID: MATRIX: LAB SAMP. ID: EPA SAMP. ID: QC CODE: % MOISTURE: % SOLIDS:		54598 PHASE 1 WATER 275503 SS26-34R FB
	PARAMETER	UNIT	VALUE Q
1	1,2,4-Trichlorobenzene	UG/L	10 U
	1,2-Dichlorobenzene	UG/L	10 U
	1,3-Dichlorobenzene	UG/L	10 U
	1,4-Dichlorobenzene	UG/L	10 U
	2,4,5-Trichlorophenol	UG/L	26 U
	2,4,6-Trichlorophenol	UG/L	10 U
	2,4-Dichlorophenol	UG/L	10 U
	2,4-Dimethylphenol	UG/L	10 U
	2,4-Dinitrophenol	UG/L	26 U
	2,4-Dinitrotoluene	UG/L	10 U
11	2,6-Dinitrotoluene	UG/L	10 U
12	2-Chloronaphthalene	UG/L	10 U
	2-Chlorophenol	UG/L	10 U
14	2-Methylnaphthalene	UG/L	10 U
15	2-Methylphenol	UG/L	10 U
16	2-Nitroaniline	UG/L	26 U
17	2-Nitrophenol	UG/L	10 U
18	3,3'-Dichlorobenzidine	UG/L	10 U
19	3-Nitroaniline	UG/L	26 U
20	4,6-Dinitro-2-methylphenol	UG/L	26 U
21	4-Bromophenyl-phenylether	UG/L	10 U
22	4-Chloro-3-methylphenol	UG/L	10 U
23	4-Chloroaniline	UG/L	10 U
24	4-Chlorophenyl-phenylether	UG/L	10 U
25	4-Methylphenol	UG/L	10 U
<b>2</b> 6	4-Nitroaniline	UG/L	26 U
27	4-Nitrophenol	UG/L	26 U
28	Acenaphthene	UG/L	10 U
<b>2</b> 9	Acenaphthylene	UG/L	10 U
30	Anthracene	UG/L	10 U
	Benzo(a)anthracene	UG/L	10 U
32	Benzo(a)pyrene	UG/L	10 U
	Benzo(b)fluoranthene	UG/L	10 U
34	Benzo(g,h,i)perylene	UG/L	10 U

SDG:	54598
STUDY ID:	PHASE 1
MATRIX:	WATER
LAB SAMP. ID:	275503
EPA SAMP. ID:	SS26-34R
QC CODE:	FB
% MOISTURE:	
% SOLIDS:	

PARAME	TER UNIT	VALUE Q
35 Butylbenzylphthalate	UG/L	10 U
36 Carbazole	UG/L	10 U
37 Chrysene	UG/L	10 U
38 Di-n-butylphthalate	UG/L	10 U
39 Di-n-oprylphthalate	UG/L	10 U
40 Dibenz(a,h)anthracene	UG/L	10 U
41 Dibenzofuran	UG/L	10 U
42 Diethylphthalate	UG/L	10 U
43 Dimethylphthalate	UG/L	10 U
44 Fluoranthene	UG/L	10 U
45 Fluorene	UG/L	10 U
46 Hexachlorobenzene	UG/L	10 U
47 Hexachlorobutadiene	UG/L	10 U
48 Hexachlorocyclopentadiene	UG/L	10 U
49 Hexachloroethane	UG/L	10 U
50 Indeno(1,2,3-cd)pyrene	UG/L	10 U
51 Isophorone	UG/L	10 U
52 N-Nitroso-di-n-ctopylamine	UG/L	10 U
53 N-Nitrosodiphenylamine (1)	UG/L	10 U
54 Naphthalene	UG/L	10 U
55 Nitrobenzene	UG/L	10 U
56 Pentachlorophenol	UG/L .	26 U
57 Phenanthrene	UG/L	10 U
58 Phenol	UG/L	10 U
59 Ругепе	UG/L	10 U
60 benzo(k)fluoranthene	UG/L	10 Ù
61 bis(2-Chloroethoxy) methane	UG/L	10 U
62 bis(2-Chloroethyl) ether	UG/L	10 U
63 bis(2-Chloroisoctopyl) ether	UG/L	10 U
64 bis(2-Ethylhexyl)phthalate	UG/L	5 JB

#### **SVOCs**

	SDC	<del>}</del> :	54598	54598	
	STUDY II		PHASE 1	PHASE 1	
	MATRIX		SOIL	SOIL	
	LAB SAMP. II		275502	275631	
	EPA SAMP. II		SS26-52	SS26-53	
	QC CODE		DU	DU	
	% MOISTURE		12	15	
	% SOLIDS				
	PARAMETE	R UNIT	VALUE	Q VALUE	Q
1	1,2,4-Trichlorobenzene	UG/KG	1200	U 390	U È
	1,2-Dichlorobenzene	UG/KG	1200	U 390	U
	1,3-Dichlorobenzene	UG/KG	1200	U 390	U
4	1,4-Dichlorobenzene	UG/KG	1200	U 390	U
5	2,4,5-Trichlorophenol	UG/KG	3000	U 940	U
6	2,4,6-Trichlorophenol	UG/KG	1200	U 390	U
	2,4-Dichlorophenol	UG/KG	1200	U 390	U
8	2,4-Dimethylphenol	UG/KG	1200	U 390	U
	2,4-Dinitrophenol	UG/KG	3000	U 940	U
10	2,4-Dinitrotoluene	UG/KG	1200	U 390	U
11	2,6-Dinitrotoluene	UG/KG	1200	U 390	U
12	2-Chloronaphthalene	UG/KG	1200	U 390	U
13	2-Chlorophenol	UG/KG	1200	U 390	U
14	2-Methylnaphthalene	UG/KG	68	J 390	U
15	2-Methylphenol	UG/KG	· 1200	U 390	U
	2-Nitroaniline	UG/KG	3000	U 940	U
17	2-Nitrophenol	UG/KG	1200	U 390	U
18	3,3'-Dichlorobenzidine	UG/KG	1200	U 390	U
19	3-Nitroaniline	UG/KG	3000	U . 940	U
20	4,6-Dinitro-2-methylphenol	UG/KG	3000	U 940	U
21	4-Bromophenyl-phenylether	UG/KG	1200	U 390	U
22	4-Chloro-3-methylphenol	UG/KG	1200	U 390	U
23	4-Chloroaniline	UG/KG	1200	U 390	U
24	4-Chlorophenyl-phenylether	UG/KG	1200		_
25	4-Methylphenol	UG/KG	1200		U
26	4-Nitroaniline	UG/KG	3000	U 940	U
27	4-Nitrophenol	UG/KG	3000	U 940	U
28	Acenaphthene	UG/KG	1200	U 84	J
29	Acenaphthylene	UG/KG	1200	U 390	U
30	Anthracene	UG/KG	1200		J
31	Benzo(a)anthracene	UG/KG	160		
32	Benzo(a)pyrene	UG/KG	240	J 650	
33	Benzo(b)fluoranthene	UG/KG	220	J 960	
34	Benzo(g,h,i)perylene	UG/KG	400	J 490	

	SDG:		54598	54598	
	STUDY ID:		PHASE 1	PHASE 1	
	MATRIX:		SOIL	SOIL	
	LAB SAMP. ID:		275502	275631	
	EPA SAMP. ID:		SS26-52	SS26-53	
	QC CODE:		DU	DU	
	% MOISTURE:		12	15	
	% SOLIDS:				
	PARAMETER	UNIT	VALUE	Q VALUE	Q
35	Butylbenzylphthalate	UG/KG	1200	U 390	U
36	Carbazole	UG/KG	1200	U 140 .	J
37	Chrysene	UG/KG	210	J 680	
38	Di-n-butylphthalate	UG/KG	1200	U 48 .	J
39	Di-n-oprylphthalate	UG/KG	1200	U 390	U
40	Dibenz(a,h)anthracene	UG/KG	1200	U 240 .	J
41	Dibenzofuran	UG/KG	1200	U 390	U
42	Diethylphthalate	UG/KG	1200	U 390	U
	Dimethylphthalate	UG/KG	1200	U 390	U
44	Fluoranthene	UG/KG	260	J 1600	
45	Fluorene	UG/KG	1200	U 55 .	J
46	Hexachlorobenzene	UG/KG	1200	U 390	U
47	Hexachlorobutadiene	UG/KG	1200	U 390	U
48	Hexachlorocyclopentadiene	UG/KG	1200	U 390	U
49	Hexachloroethane	UG/KG	1200	U 390	U
50	Indeno(1,2,3-cd)pyrene	UG/KG	250	J 500	
51	Isophorone	UG/KG	1200	U 390	U
52	N-Nitroso-di-n-ctopylamine	UG/KG	1200	U 390	U
53	N-Nitrosodiphenylamine (1)	UG/KG	1200	U 390	U
54	Naphthalene	UG/KG	1200	U 390	U
55	Nitrobenzene	UG/KG	1200	U 390	U
56	Pentachlorophenol	UG/KG ·	3000	U 940	U
57	Phenanthrene	UG/KG	140	J 720	
58	Phenol	UG/KG	1200	U 390	U
59	Pyrene	UG/KG	270	J 1100	
60	benzo(k)fluoranthene	UG/KG	220	J 420	
61	bis(2-Chloroethoxy) methane	UG/KG	1200	U 390	U
62	bis(2-Chloroethyl) ether	UG/KG	1200	U 390	U
63	bis(2-Chloroisoctopyl) ether	UG/KG	1200	U 390	U
	bis(2-Ethylhexyl)phthalate	UG/KG	370	J 190	J

SVOCs					
	SDG:	54598	54598	54598	54598
STUD	Y ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MAT	TRIX:	SOIL	SOIL	SOIL	SOIL
LAB SAM	P. ID:	275483	275483	275495	275629
EPA SAMI	P. ID:	SS26-45MS	SS26-45MSD	SS26-23RE	SS26-15
QC C	ODE:	MS	MSD	RE	SA
% MOIST		11	<b>I</b> 1	12	13
% SOI					
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<b></b>				
PARAMI	ETER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	1200	1400	370 U	380 U
2 1,2-Dichlorobenzene	UG/KG	370 U	370 U	370 U	380 U
3 1,3-Dichlorobenzene	UG/KG	370 U	370 U	370 U	380 U
4 1,4-Dichlorobenzene	UG/KG	1300	1300	370 U	380 U
5 2,4,5-Trichlorophenol	UG/KG	900 U	890 U	910 U	910 U
6 2,4,6-Trichlorophenol	UG/KG	370 U	370 U	370 U	380 U
7 2,4-Dichlorophenol	UG/KG	370 U	370 U	370 U	380 U
8 2,4-Dimethylphenol	UG/KG	370 U	370 U	370 U	380 U
9 2,4-Dinitrophenol	UG/KG	900 U	890 U	910 U	910 U
10 2,4-Dinitrotoluene	UG/KG	1500	1600	370 U	380 U
11 2,6-Dinitrotoluene	UG/KG	370 U	370 U	370 U	380 U
12 2-Chloronaphthalene	UG/KG	370 U	370 U	370 U	380 U
13 2-Chlorophenol	UG/KG	2500	2600	370 U	380 U
14 2-Methylnaphthalene	UG/KG	370 U	370 U	370 U	380 U
15 2-Methylphenol	UG/KG	370 U	370 U	370 U	380 U
16 2-Nitroaniline	UG/KG	900 U	890 U	910 U	910 U
17 2-Nitrophenol	UG/KG	370 U	370 U	370 U	380 U
18 3,3'-Dichlorobenzidine	UG/KG	370 U	370 U	370 U	380 U
19 3-Nitroaniline	UG/KG	900 U	890 U	910 U	910 U
20 4,6-Dinitro-2-methylphenol	UG/KG	900 U	890 U	910 U	910 U
	4.	370 U	370 U	370 U	380 U
22 4-Chloro-3-methylphenol	UG/KG UG/KG	2500	2800	370 U	380 U
23 4-Chloroaniline	UG/KG	370 U	370 U	370 U	380 U
24 4-Chlorophenyl-phenylether	IIC/VC	370 U	370 U	370 U	380 U
25 4-Methylphenol	UG/KG	370 U	370 U	370 U	380 U
26 4-Nitroaniline	UG/KG	900 U	890 U	910 U	910 U
27 4-Nitrophenol	UG/KG	2400	2400	910 U	910 U
28 Acenaphthene	UG/KG	1400	1700	370 U	220 J
29 Acenaphthylene	UG/KG	370 U	370 U	370 U	380 U
	₹ UG/KG UG/KG	39 J	46 J	370 U	350 J
30 Anthracene 31 Benzo(a)anthracene	UG/KG	200 J	210 J	370 U	1200
• •	UG/KG	200 J 190 J	210 J 200 J	370 U	1100
32 Benzo(a)pyrene	UG/KG	190 J 160 J	200 J 200 J	370 U	1500
33 Benzo(b)fluoranthene	UG/KG	140 J	200 J 170 J	370 U	870
34 Benzo(g,h,i)perylene	UA/DU	140 J	170 J	370 0	8/0

SDO	<b>3</b> :	54598	54598	54598	54598
STUDY II	D:	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRI	X:	SOIL	SOIL	SOIL	SOIL
LAB SAMP. II	D:	275483	275483	275495	275629
EPA SAMP. II	D:	SS26-45MS	SS26-45MSD	SS26-23RE	SS26-15
QC COD	Е:	MS	MSD	RE	SA
% MOISTUR		11	11	12	13
% SOLID	S:				
PARAMETE		VALUE Q	VALUE Q	VALUE Q	VALUE Q
35 Butylbenzylphthalate	UG/KG	370 U	370 U	370 U	380 U
36 Carbazole	UG/KG	370 U	370 U	370 U	230 J
37 Chrysene	UG/KG	220 J	230 J	370 U	1300
38 Di-n-butylphthalate	UG/KG	370 U	370 U	370 U	380 U
39 Di-n-oprylphthalate	UG/KG	370 U	370 U	370 U	380 U
40 Dibenz(a,h)anthracene	UG/KG	43 J	68 J	370 U	380 U
41 Dibenzofuran	UG/KG	370 U	370 U	370 U	64 J
42 Diethylphthalate	UG/KG	370 U	370 U	22 JB	380 U
43 Dimethylphthalate	UG/KG	370 U	370 U	370 U	380 U
44 Fluoranthene	UG/KG	500	530	370 U	2900
45 Fluorene	UG/KG	370 U	370 U	370 U	170 J
46 Hexachlorobenzene	UG/KG	370 U	370 U	370 U	380 U
47 Hexachlorobutadiene	UG/KG	370 U	370 U	370 U	380 U
48 Hexachlorocyclopentadiene	UG/KG	370 U	370 U	370 U	380 U
49 Hexachloroethane	UG/KG	370 U	370 U	370 U	380 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	140 J	160 J	370 U	810
51 Isophorone	UG/KG	370 U	370 U	370 U	380 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	1400	1300	370 U	380 U
53 N-Nitrosodiphenylamine (1)	UG/KG	370 U	· 370 U	370 U	380 U
54 Naphthalene	UG/KG	370 U	370 U	370 U	380 U
55 Nitrobenzene	UG/KG	370 U	370 U	370 U	380 U
56 Pentachlorophenol	UG/KG-	1800	2200	910 U	910 U
57 Phenanthrene	UG/KG	210 J	220 J	370 U	1800
58 Phenol	UG/KG	2200	2000	370 U	380 U
59 Pyrene	UG/KG	1300	1500	370 U	2600
60 benzo(k)fluoranthene	UG/KG	220 J	160 J	370 U	960
61 bis(2-Chloroethoxy) methane	UG/KG	370 U	370 U	370 U	380 U
62 bis(2-Chloroethyl) ether	UG/KG	370 U	370 U	370 U	380 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	370 U	370 U	370 U	380 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	190 Ј	130 J	360 J	230 JB

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SVOCs						
S	DG:	54598	54598	54598	54598	54598
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATE		SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP.		275488	275489	275490	275491	275492
EPA SAMP.		SS26-16	SS26-17	SS26-18	SS26-19	SS26-20
QC CO	DE:	SA	SA	SA	SA	SA
% MOISTU		20	18	15	25	19
% SOLI						
				:		
PARAMET	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	410 U	400 U	390 U	440 U	410 U
2 1,2-Dichlorobenzene	UG/KG	410 U	400 U	390 U	440 U	410 U
3 1,3-Dichlorobenzene	UG/KG	410 U	400 U	390 U	440 U	410 U
4 1,4-Dichlorobenzene	UG/KG	410 U	400 U	390 U	440 U	410 U
5 2,4,5-Trichlorophenol	UG/KG	1000 U	970 U	940 U	· 1100 U	990 U
6 2,4,6-Trichlorophenol	UG/KG	410 U	400 U	390 U	440 U	410 U
7 2,4-Dichlorophenol	UG/KG	410 U	400 U	390 U	440 U	410 U
8 2,4-Dimethylphenol	UG/KG	410 U	400 U	390 U	440 U	410 U
9 2,4-Dinitrophenol	UG/KG	1000 U	970 U	940 U	1100 U	990 U
10 2,4-Dinitrotoluene	UG/KG	410 U	400 U	390 U	440 U	410 U
11 2,6-Dinitrotoluene	UG/KG	410 U	400 U	390 U	440 U	410 U
12 2-Chloronaphthalene	UG/KG	410 U	400 U	390 U	440 U	410 U
13 2-Chlorophenol	UG/KG	410 U	400 U	390 U	440 U	410 U
14 2-Methylnaphthalene	UG/KG	410 U	400 U	390 U	440 U	410 U
15 2-Methylphenol	UG/KG	410 U	400 U	390 U	440 U	410 U
16 2-Nitroaniline	UG/KG	1000 U	970 U	940 U	1100 U	990 U
17 2-Nitrophenol	UG/KG	410 U	400 U	390 U	440 U	410 U
18 3,3'-Dichlorobenzidine	UG/KG	410 U	400 U	390 U	440 U	410 U
19 3-Nitroaniline	UG/KG	1000 U	. 9 <b>7</b> 0 U	940 U	1100 U	990 U
20 4,6-Dinitro-2-methylphenol	UG/KG	1000 U	9 <b>7</b> 0 U	940 U	1100 U	990 U
21 4-Bromophenyl-phenylether	UG/KG	410 U	400 U	390 U	440 U	410 U
22 4-Chloro-3-methylphenol	UG/KG	410 U	400 U	390 U	440 U	410 U
23 4-Chloroaniline	UG/KG	410 U	400 U	390 U	440 U	410 U
24 4-Chlorophenyl-phenylether	UG/KG	410 U	400 U	390 U	440 U	410 U
25 4-Methylphenol	UG/KG	410 U	400 U	390 U	440 U	410 U
26 4-Nitroaniline	UG/KG	1000 U	970 U	940 U	1100 U	990 U
27 4-Nitrophenol	UG/KG	1000 U	970 U	940 U	1100 U	990 U
28 Acenaphthene	UG/KG	56 J	400 U	390 U	440 U	410 U
29 Acenaphthylene	UG/KG	410 U	400 U	390 U	440 U	410 U
30 Anthracene	UG/KG	79 J	400 U	390 U	440 U	410 U
31 Benzo(a)anthracene	UG/KG	420	23 J	<b>2</b> 9 J	57 J	410 U
32 Benzo(a)pyrene	UG/KG	450	28 J	31 J	65 J	410 U
33 Benzo(b)fluoranthene	UG/KG	520	33 J	37 J	80 J	19 J
34 Benzo(g,h,i)perylene	UG/KG	340 J	20 Ј	24 Ј	47 J	410 U

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SE	OG:	54598	54598	54598	54598	54598
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATR	IX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP.	ID:	275488	275489	275490	275491	275492
EPA SAMP.	ID:	SS26-16	SS26-17	SS26-18	SS26-19	SS26-20
OC COI	DE:	SA	SA	SA	SA	SA
% MOISTUR	RE:	20	18	15	25	19
% SOLII	DS:				25	• •
PARAMET		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
35 Butylbenzylphthalate	UG/KG	410 U	51 JB	390 U	440 U	410 U
36 Carbazole	UG/KG	71 J	400 U	390 U	440 U	410 U
37 Chrysene	UG/KG	470	32 J	39 J	69 J	410 U
38 Di-n-butylphthalate	UG/KG	410 U	400 U	31 J	33 J	410 U
39 Di-n-oprylphthalate	UG/KG	410 U	400 U	390 U	440 U	410 U
40 Dibenz(a,h)anthracene	UG/KG	410 U	400 U	390 U	440 U	410 U
41 Dibenzofuran	UG/KG	410 U	400 U	390 U	440 U	410 U
42 Diethylphthalate	UG/KG	410 U	400 U	22 JB	440 U	410 U
43 Dimethylphthalate	UG/KG	410 U	400 U	390 U	440 U	410 U
44 Fluoranthene	UG/KG	1000	46 J	66 J	120 J	32 J
45 Fluorene	UG/KG	36 J	400 U	390 U	440 U	410 U
46 Hexachlorobenzene	UG/KG	410 U	400 U	390 U	440 U	410 U
47 Hexachlorobutadiene	UG/KG	410 U	400 U	390 U	440 U	410 U
48 Hexachlorocyclopentadiene	UG/KG	410 U	400 U	390 U	440 U	410 U
49 Hexachloroethane	UG/KG	410 U	400 U	390 U	440 U	410 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	310 Ј	400 U	23 J	41 J	410 U
51 Isophorone	UG/KG	410 U	400 U	390 U	440 U	410 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	410 U	400 U	390 U	440 U	410 U
53 N-Nitrosodiphenylamine (1)	UG/KG	410 U	400 U	390 U	440 U	410 U
54 Naphthalene	UG/KG	410 Ü	400 U	390 U	440 U	410 U
55 Nitrobenzene	UG/KG	410 U	400 U	390 U	440 U	410 U
56 Pentachlorophenol	UG/KG	1000 U	970 U	940 U	1100 U	990 U
57 Phenanthrene	UG/KG	500	400 U	25 J	40 J	410 U
58 Phenol	UG/KG	410 U	400 U	390 U	440 U	410 U
59 Pyrene	UG/KG	890	39 J	50 J	96 J	29 J
60 benzo(k)fluoranthene	UG/KG	460	27 J	36 J	63 J	410 U
61 bis(2-Chloroethoxy) methane	UG/KG	410 U	400 U	390 U	440 U	410 U
62 bis(2-Chloroethyl) ether	UG/KG	410 U	400 U	390 U	440 U	410 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	410 U	400 U	390 U	440 U	
64 bis(2-Ethylhexyl)phthalate	UG/KG	220 J	60 J	42 J	66 J	410 U
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SVUCS						
SDG	i:	54598	54598	54598	54598	54598
STUDY ID	) <del>:</del>	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRIX		SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP. ID	) <del>:</del>	275493	275494	275495	275496	275497
EPA SAMP. ID	) <u>:</u>	SS26-21	SS26-22	SS26-23	SS26-25	SS26-26
QC CODE	<b>;</b>	SA	SA	SA	SA	SA
% MOISTURE	<b>:</b> :	15	17	12	16	10
% SOLIDS	l:					
PARAMETER		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	390 U	400 U	370 U	390 U	1500 U
2 1,2-Dichlorobenzene	UG/KG	390 U	400 U	370 U	390 U	1500 U
3 1,3-Dichlorobenzene	UG/KG	390 U	400 U	370 U	390 U	1500 U
4 1,4-Dichlorobenzene	UG/KG	390 U	400 U	370 U	390 U	1500 U
5 2,4,5-Trichlorophenol	UG/KG	940 U	960 U	910 U	950 U	3500 U
6 2,4,6-Trichlorophenol	UG/KG	390 U	400 U	370 U	390 U	1500 U
7 2,4-Dichlorophenol	UG/KG	390 U	400 U	3 <b>7</b> 0 U	390 U	1500 U
8 2,4-Dimethylphenol	UG/KG	390 U	400 U	370 U	390 U	1500 U
9 2,4-Dinitrophenol	UG/KG	940 U	960 U	910 U	950 U	3500 U
10 2,4-Dinitrotoluene	UG/KG	390 U	400 U	3 <b>7</b> 0 U	390 U	1500 U
11 2,6-Dinitrotoluene	UG/KG	390 U	400 U	3 <b>7</b> 0 U	390 U	1500 U
12 2-Chloronaphthalene	UG/KG	390 U	400 U	370 U	390 U	1500 U
13 2-Chlorophenol	UG/KG	390 U	400 U	3 <b>7</b> 0 U	390 U	1500 U
14 2-Methylnaphthalene	UG/KG	390 U	400 U	3 <b>7</b> 0 U	390 U	100 J
15 2-Methylphenol	UG/KG	390 U	400 U	370 U	390 U	1500 U
16 2-Nitroaniline	UG/KG	940 U	960 U	910 U	950 U	3500 U
17 2-Nitrophenol	UG/KG	390 U	400 U	370 U	390 U	1500 U
18 3,3'-Dichlorobenzidine	UG/KG	390 U	400 U	3 <b>7</b> 0 U	390 U	1500 U
19 3-Nitroaniline	UG/KG	940 U	. 960 U	910 U	950 U	3500 U
20 4,6-Dinitro-2-methylphenol	UG/KG	940 U	960 U	910 U	950 U	3500 U
21 4-Bromophenyl-phenylether	UG/KG	390 U	400 U	370 U	390 U	1500 U
22 4-Chloro-3-methylphenol	UG/KG	390 U	400 U	370 U	390 U	1500 U
23 4-Chloroaniline	UG/KG	390 U	400 U	370 U	390 U	1500 U
24 4-Chlorophenyl-phenylether	UG/KG	390 U	400 U	3 <b>7</b> 0 U	390 U	1500 U
25 4-Methylphenol	UG/KG	390 U	400 U	370 U	390 U	1500 U
26 4-Nitroaniline	UG/KG	940 U	960 U	910 U	950 U	3500 U
27 4-Nitrophenol	UG/KG	940 U	960 U	910 U	950 U	3500 U
28 Acenaphthene	UG/KG	78 J	180 Ј	370 U	390 U	720 J
29 Acenaphthylene	UG/KG	390 U	400 U	370 U	390 U	1500 U
30 Anthracene	UG/KG	120 J	310 J	370 U	390 U	1600
31 Benzo(a)anthracene	UG/KG	330 Ј	1100	370 U	20 Ј	3300
32 Benzo(a)pyrene	UG/KG	320 J	1100	370 U	22 Ј	2300
33 Benzo(b)fluoranthene	UG/KG	390	1200	370 U	28 Ј	2600
34 Benzo(g,h,i)perylene	UG/KG	190 J	740	370 U	20 Ј	1200 J

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SD	G:	54598	54598	54598	54598	54598
STUDY I	D:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRI	IX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP. I	ID:	275493	275494	275495	275496	275497
EPA SAMP. I	D:	SS26-21	SS26-22	SS26-23	SS26-25	SS26-26
OC COL	DE:	SA	SA	SA	SA	SA
% MOISTUR	E:	15	17	12	16	10
% SOLII	OS:			<del></del>		
				vi e		
PARAMET	er unit	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
35 Butylbenzylphthalate	UG/KG	390 U	400 U	370 U	63 JB	1500 U
36 Carbazole	UG/KG	89 Ј	210 J	370 U	390 U	1200 J
37 Chrysene	UG/KG	360 J	1200	370 U	25 J	3300
38 Di-n-butylphthalate	UG/KG	26 Ј	400 U	370 U	390 U	1500 U
39 Di-n-oprylphthalate	UG/KG	390 U	400 U	370 U	390 U	1500 U
40 Dibenz(a,h)anthracene	UG/KG	390 U	400 U	370 U	390 U	150 J
41 Dibenzofuran	UG/KG	41 J	58 J	370 U	390 U	480 J
42 Diethylphthalate	UG/KG	390 U	26 ЛВ	370 U	390 U	280 JB
43 Dimethylphthalate	UG/KG	390 U	400 U	370 U	390 U	1500 U
44 Fluoranthene	UG/KG	880	2800	370 U	39 J	9300
45 Fluorene	UG/KG	70 J	150 J	370 U	390 U	960 J
46 Hexachlorobenzene	UG/KG	390 U	400 U	370 U	390 U	1500 U
47 Hexachlorobutadiene	UG/KG	390 U	400 U	370 U	390 U	1500 U
48 Hexachlorocyclopentadiene	UG/KG	390 U	400 U	370 U	390 U	1500 U
49 Hexachloroethane	UG/KG	390 U	400 U	370 U	390 U	1500 U
50 Indeno(1,2,3-cd)pyrene	UG/KG	180 J	710	370 U	390 U	1200 J
51 Isophorone	UG/KG	390 U	400 U	370 U	390 U	1500 U
52 N-Nitroso-di-n-ctopylamine	UG/KG	390 U	400 U	370 U	390 U	1500 U
53 N-Nitrosodiphenylamine (1)	UG/KG	390 U	400 U	370 U	390 U	1500 U
54 Naphthalene	UG/KG	390 U	400 U	370 U	390 U	1500 U
55 Nitrobenzene	UG/KG	390 U	400 U	370 U	390 U	1500 U
56 Pentachlorophenol	UG/KG ·	940 U	960 U	910 U	950 U	3500 U
57 Phenanthrene	UG/KG	630	1700	370 U	20 J	8900
58 Phenol	UG/KG	390 U	400 U	370 U	390 U	1500 U
59 Pyrene	UG/KG	640	2200	370 U	34 J	7400
60 benzo(k)fluoranthene	UG/KG	280 J	1000	370 U	23 J	2300
61 bis(2-Chloroethoxy) methane	UG/KG	390 U	400 U	370 U	390 U	1500 U
62 bis(2-Chloroethyl) ether	UG/KG	390 U	400 U	370 U	390 U	1500 U
63 bis(2-Chloroisoctopyl) ether	UG/KG	390 U	400 U	370 U	390 U	1500 U
64 bis(2-Ethylhexyl)phthalate	UG/KG	280 J	300 J	320 J	390 U	1500 U
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SI	OG:	54598	54598	54598	54598	54598
STUDY		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATR		SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP.		275630	275498	275499	275500	275501
EPA SAMP.		SS26-28	SS26-30	SS26-31	SS26-32	SS26-34
QC COI		SA	SA	SA	SA	SA
% MOISTUI		11	12	15	9	11
% SOLI		••			-	
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PARAMET	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/KG	6200 U	1900 U	390 U	480 U	920 U
2 1,2-Dichlorobenzene	UG/KG	6200 U	1900 U	390 U	480 U	920 U
3 1,3-Dichlorobenzene	UG/KG	6200 U	1900 U	390 U	480 U	920 U
4 1,4-Dichlorobenzene	UG/KG	6200 U	1900 U	390 U	480 U	920 U
5 2,4,5-Trichlorophenol	UG/KG	15000 U	4500 U	940 U	1200 U	2200 U
6 2,4,6-Trichlorophenol	UG/KG	6200 U	1900 U	390 U	480 U	920 U
7 2,4-Dichlorophenol	UG/KG	6200 U	1900 U	390 U	480 U	920 U
8 2,4-Dimethylphenol	UG/KG	6200 U	1900 U	390 U	480 U	920 U
9 2,4-Dinitrophenol	UG/KG	15000 U	4500 U	940 U	1200 U	2200 U
10 2,4-Dinitrotoluene	UG/KG	6200 U	1900 U	390 U	480 U	920 U
11 2,6-Dinitrotoluene	UG/KG	6200 U	1900 U	390 U	480 U	920 U
12 2-Chloronaphthalene	UG/KG	6200 U	1900 U	390 U	480 U	920 U
13 2-Chlorophenol	UG/KG	6200 U	1900 U	390 U	480 U	920 U
14 2-Methylnaphthalene	UG/KG	480 J	1900 U	390 U	480 U	55 J
15 2-Methylphenol	UG/KG	6200 U	1900 U	390 U	480 U	920 U
16 2-Nitroaniline	UG/KG	15000 U	4500 U	940 U	1200 U	2200 U
17 2-Nitrophenol	UG/KG	6200 U	1900 U	390 U	480 U	920 U
18 3,3'-Dichlorobenzidine	UG/KG	6200 U	1900 U	390 U	480 U	920 U
19 3-Nitroaniline	UG/KG	15000 U	4500 U	940 U	1200 U	2200 U
20 4,6-Dinitro-2-methylphenol	UG/KG	15000 U	4500 U	940 U	1200 U	2200 U
21 4-Bromophenyl-phenylether	UG/KG	6200 U	1900 U	390 U	480 U	920 U
22 4-Chloro-3-methylphenol	UG/KG	6200 U	1900 U	390 U	480 U	.920 U
23 4-Chloroaniline	UG/KG	6200 U	1900 U	390 U	480 U	920 U
24 4-Chlorophenyl-phenylether	UG/KG	6200 U	1900 U	390 U	480 U	920 U
25 4-Methylphenol	UG/KG	6200 U	1900 U	390 U	480 U	920 U
26 4-Nitroaniline	UG/KG	15000 U	4500 U	940 U	1200 U	2200 U
27 4-Nitrophenol	UG/KG	15000 U	4500 U	940 U	1200 U	2200 U
28 Acenaphthene	UG/KG	6200 U	560 Ј	390 U	340 J	920 U
29 Acenaphthylene	UG/KG	6200 U	1900 U	390 U	480 U	920 U
30 Anthracene	UG/KG	6200 U	1200 J	390 U	420 J	64 J
31 Benzo(a)anthracene	UG/KG	6200 U	4700	390 U	1100	310 J
32 Benzo(a)pyrene	UG/KG	6200 U	4400	390 U	1000	320 J
33 Benzo(b)fluoranthene	UG/KG	6200 U	5000	390 U	1100	300 J
34 Benzo(g,h,i)perylene	UG/KG	6200 U	2800	20 J	730	430 J
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21	OCs.

3 <b>7</b> OCS						
SDC	<del>}</del> :	54598	54598	54598	54598	54598
STUDY II	<b>)</b> :	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRIX	ζ:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAMP. II	<b>)</b> :	275630	275498	275499	275500	275501
EPA SAMP. II	<b>)</b> :	SS26-28	SS26-30	SS26-31	SS26-32	SS26-34
QC CODI	Ξ:	SA	SA	SA	SA	SA
% MOISTURI		11	12	15	9	11
% SOLIDS			_			
PARAMETE	R UNIT	VALUE Q	VALUE	Q VALUE (	Q VALUE (	Q VALUE Q
35 Butylbenzylphthalate	UG/KG	6200 U	1900 U	J 390 U	480 U	920 U
36 Carbazole	UG/KG	6200 U	660 J	390 U	410 Ј	920 U
37 Chrysene	UG/KG	6200 U	4900	390 U	1200	300 J
38 Di-n-butylphthalate	UG/KG	6200 U	1900 U	J 390 U	480 U	920 U
39 Di-n-oprylphthalate	UG/KG	6200 U	1900 U	J 390 U	480 U	920 U
40 Dibenz(a,h)anthracene	UG/KG	6200 U	230 J	390 U	480 U	920 U
41 Dibenzofuran	UG/KG	6200 U	160 J	390 U	120 Ј	920 U
42 Diethylphthalate	UG/KG	6200 U	1900 U	J 390 U	25 Л	В 320 ЛВ
43 Dimethylphthalate	UG/KG	6200 U	1900 U	J 390 U	480 U	920 U
44 Fluoranthene	UG/KG	6200 U	11000	390 U	3600	520 J
45 Fluorene	UG/KG	6200 U	460. J	390 U	260 Ј	920 U
46 Hexachlorobenzene	UG/KG	6200 U	1900 U	J 390 U	480 U	920 U
47 Hexachlorobutadiene	UG/KG	6200 U	1900 U	J 390 U	480 U	920 U
48 Hexachlorocyclopentadiene	UG/KG	6200 U	1900 U	J 390 U	480 U	
49 Hexachloroethane	UG/KG	6200 U	1900 U			
50 Indeno(1,2,3-cd)pyrene	UG/KG	6200 U	2800	390 U		290 J
51 Isophorone	UG/KG	6200 U	1900 U			
52 N-Nitroso-di-n-ctopylamine	UG/KG	6200 U	1900 U	J 390 U		
53 N-Nitrosodiphenylamine (1)	UG/KG	6200 U	· 1900 t	J 390 U		
54 Naphthalene	UG/KG	6200 U	1900 U	J 390 U		_
55 Nitrobenzene	UG/KG	6200 U	1900 U	J 390 U		
56 Pentachlorophenol	UG/KG-	15000 U	4500 U	J 940 U		
57 Phenanthrene	UG/KG	430 J	5400	390 U		280 J
58 Phenol	UG/KG	6200 U	1900 U			
59 Pyrene	UG/KG	440 J	8500	22 J		500 J
60 benzo(k)fluoranthene	UG/KG	6200 U	4200	390 U		320 J
61 bis(2-Chloroethoxy) methane	UG/KG	6200 U	1900 T			
62 bis(2-Chloroethyl) ether	UG/KG	6200 U	1900 T			720 0
63 bis(2-Chloroisoctopyl) ether	UG/KG	6200 U	1900 U			720 0
64 bis(2-Ethylhexyl)phthalate	UG/KG	380 JB	1900 U			320 0
, , <u>, , , , , , , , , , , , ,</u>				100 5	150 3	320 <b>3</b>

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340			54500	54598	54500
		OG:	54598		54598
	STUDY		PHASE 1	PHASE 1	PHASE 1
	MATRI		SOIL	SOIL	SOIL
LAB SAMP. ID:			275483	275484	275485
EPA SAMP. ID:			SS26-45	SS26-46	SS26-47
	QC COI		SA	SA	SA
	% MOISTUR	RE:	11	17	12
	% SOLII	OS:			
	PARAMET	ER UNIT	VALUE O	VALUE Q	VALUE Q
	1,2,4-Trichlorobenzene	UG/KG	370 U	400 U	370 U
	1,2-Dichlorobenzene	UG/KG	370 U	400 U	370 U
	1,3-Dichlorobenzene	UG/KG	370 U	400 U	370 U
	1,4-Dichlorobenzene	UG/KG	370 U	400 U	370 U
	, –	UG/KG	900 U	960 U	910 U
	2,4,5-Trichlorophenol	UG/KG	370 U	400 U	370 U
	2,4,6-Trichlorophenol	UG/KG	370 U	400 U	370 U
	2,4-Dichlorophenol	UG/KG	370 U	400 U	370 U
	2,4-Dimethylphenol	UG/KG UG/KG	900 U	960 U	910 U
	2,4-Dinitrophenol	UG/KG UG/KG	370 U	400 U	370 U
	2,4-Dinitrotoluene	UG/KG	370 U	400 U	370 U
	2,6-Dinitrotoluene	UG/KG	370 U	400 U	370 U
	2-Chloronaphthalene		370 U	400 U	370 U
	2-Chlorophenol	UG/KG	370 U	400 U	370 U
14	2-Methylnaphthalene	UG/KG			370 U
15	2-Methylphenol	UG/KG	370 U	400 U 960 U	910 U
	2-Nitroaniline	UG/KG	900 U	400 U	370 U
17	•	UG/KG	370 U	400 U	370 U
	3,3'-Dichlorobenzidine	UG/KG	370 U		
	3-Nitroaniline	UG/KG	900 U	960 U	910 U 910 U
	4,6-Dinitro-2-methylphenol	UG/KG	900 U	960 U	
	4-Bromophenyl-phenylether	UG/KG	370 U	400 U	370 U
	4-Chloro-3-methylphenol	UG/KG	370 U	400 U	370 U
	4-Chloroaniline	UG/KG	370 U	400 U	370 U
	4-Chlorophenyl-phenylether	UG/KG	370 U	400 U	370 U
	4-Methylphenol	UG/KG	370 U	400 U	370 U
	4-Nitroaniline	UG/KG	900 U	960 U	910 U
	4-Nitrophenol	UG/KG	900 U	960 U	910 U
28	Acenaphthene	UG/KG	370 U	400 U	370 U
29	Acenaphthylene	UG/KG	370 U	400 U	370 U
30	Anthracene	UG/KG	76 J	61 J	370 U
31	Benzo(a)anthracene	UG/KG	280 J	170 J	370 U
32	Benzo(a)pyrene	UG/KG	260 J	170 J	370 U
33	Benzo(b)fluoranthene	UG/KG	640	210 J	370 U
34	Benzo(g,h,i)perylene	UG/KG	230 J	170 J	370 U

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SDG: 54598	54598	54598
STUDY ID: PHASE 1	PHASE 1	PHASE 1
MATRIX: SOIL	SOIL	SOIL
LAB SAMP. ID: 275483	275484	275485
EPA SAMP. ID: SS26-45	SS26-46	SS26-47
QC CODE: SA	SA	SA
% MOISTURE:	17	12
% SOLIDS:		
PARAMETER UNIT VALUE Q	VALUE Q	VALUE Q
35 Butylbenzylphthalate UG/KG 370 U	400 U	370 U
36 Carbazole UG/KG 370 U	400 U	370 U
37 Chrysene UG/KG 260 J	160 J	370 U
38 Di-n-butylphthalate UG/KG 370 U	400 U	370 U
39 Di-n-oprylphthalate UG/KG 370 U	400 U	370 U
40 Dibenz(a,h)anthracene UG/KG 100 J	68 J	370 U
41 Dibenzofuran UG/KG 370 U	400 U	370 U
42 Diethylphthalate UG/KG 370 U	400 U	370 U
43 Dimethylphthalate UG/KG 370 U	400 U	370 U
44 Fluoranthene UG/KG 660	410	370 U
45 Fluorene UG/KG 370 U	400 U	370 U
46 Hexachlorobenzene UG/KG 370 U	400 U	370 U
47 Hexachlorobutadiene UG/KG 370 U	400 U	370 U
48 Hexachlorocyclopentadiene UG/KG 370 U	400 U	370 U
49 Hexachloroethane UG/KG 370 U	400 Ŭ	370 U
50 Indeno(1,2,3-cd)pyrene UG/KG 200 J	140 J	370 U
51 Isophorone UG/KG 370 U	400 U	370 U
52 N-Nitroso-di-n-ctopylamine UG/KG 370 U	400 U	370 U
53 N-Nitrosodiphenylamine (1) UG/KG 370 U	. 400 U	370 U
54 Naphthalene UG/KG 370 U	400 U	370 U
55 Nitrobenzene UG/KG 370 U	400 U	370 U
56 Pentachlorophenol UG/KG. 900 U	960 U	910 U
57 Phenanthrene UG/KG 280 J	230 Ј	370 U
58 Phenol UG/KG 370 U	400 U	370 U
59 Pyrene UG/KG 520	320 J	370 U
60 benzo(k)fluoranthene UG/KG 370 U	110 J	370 U
61 bis(2-Chloroethoxy) methane UG/KG 370 U	400 U	370 U
62 bis(2-Chloroethyl) ether UG/KG 370 U	400 U	370 U
63 bis(2-Chloroisoctopyl) ether UG/KG 370 U	400 U	370 U
64 bis(2-Ethylhexyl)phthalate UG/KG 380	280 J	370 U

	SDG:	54598
STU	DY ID:	PHASE 1
M	ATRIX:	WATER
LAB SAI	MP. ID:	275503
EPA SAI	MP. ID:	SS26-34R
QC	CODE:	FB
% MOIS	STURE:	
% S	OLIDS:	
PARAMETER	UNIT	VALUE Q
1 4,4'-DDD	UG/L	0.11 U
2 4,4'-DDE	UG/L	0.11 U
3 4,4'-DDT	UG/L	0.11 U
4 Aldrin	UG/L	0.053 U
5 Aroclor-1016	UG/L	1.1 U
6 Aroclor-1221	UG/L	2.1 U
7 Aroclor-1232	UG/L	1.1 U
8 Aroclor-1242	UG/L	1.1 U
9 Aroclor-1248	UG/L	1.1 U
10 Aroclor-1254	UG/L	1.1 U
11 Aroclor-1260	UG/L	1.1 U
12 Dieldrin	UG/L	0.11 U
13 Endosulfan I	UG/L	0.053 U
14 Endosulfan II	UG/L	0.11 U
15 Endosulfan sulfate	UG/L	0.11 U .
16 Endrin	UG/L	0.11 U
17 Endrin aldehyde	UG/L	0.11 U
18 Endrin ketone	UG/L	0.11 U
19 Heptachlor	UG/L	0.053 U
20 Heptachlor epoxide	UG/L	0.053 U
21 Methoxychlor	UG/L	0.53 U
22 Toxaphene	UG/L	5.3 U
23 alpha-BHC	UG/L	0.053 U
24 alpha-Chlordane	UG/L	0.053 U
25 beta-BHC	UG/L	0.053 U
26 delta-BHC	UG/L	0.053 U
27 gamma-BHC (Lindane)	UG/L	0.053 U
28 gamma-Chlordane	UG/L	0.053 U

		SDG:	54598	54598	54598
		STUDY ID:	PHASE 1	PHASE 1	PHASE 1
		MATRIX:	SOIL	SOIL	SOIL
	LAB	SAMP. ID:	275502	275631	275483
	EPA	SAMP. ID:	SS26-52	SS26-53	SS26-45MS
		QC CODE:	DU	DU	MS
	% N	MOISTURE:	12	15	11
		% SOLIDS:			
	PARAMETER	UNIT '	VALUE Q	VALUE Q	VALUE Q
1	4,4'-DDD	UG/KG	10 P	3.9 U	3.7 U
	4,4'-DDE	UG/KG	5.7 P	2.3 JP	3.3 J
	4,4'-DDT	UG/KG	7.9 P	2.6 J	35
	Aldrin	UG/KG	1.9 U	2 U	18
5	Aroclor-1016	UG/KG	37 U	39 U	37 U
6	Aroclor-1221	UG/KG	<b>7</b> 6 U	79 U	75 U
7	Aroclor-1232	UG/KG	37 U	39 U	37 U
8	Aroclor-1242	UG/KG	37 U	39 U	37 U
9	Aroclor-1248	UG/KG	37 U	39 U	37 U
10	Aroclor-1254	UG/KG	37 U	39 U	37 U
11	Aroclor-1260	UG/KG	37 U	39 U	37 U
12	Dieldrin	UG/KG	3.7 U	3.9 U	32
13	Endosulfan I	UG/KG	1.9 U	2 U	1.9 U
	Endosulfan II	UG/KG	6.3	3.9 U	3.7 U
15	Endosulfan sulfate	UG/KG	6 P	3.1 ЈР	3.7 U
16	Endrin	UG/KG	3.7 U	3.9 U	36
17	Endrin aldehyde	UG/KG	2.6 ЈР	12 P	14 P
	Endrin ketone	UG/KG	4.5 P	3.9 U	3.7 U
	Heptachlor	UG/KG	1.5 J	· 2 U	18
20		UG/KG	1.4 JP	2 U	1.9 U
21	Methoxychlor	UG/KG	19 U	<b>20</b> U	19 U
22	Toxaphene	UG/KG	190 U	200 U	190 U
23	alpha-BHC	UG/KG	1.9 U	2 U	1.9 U
	alpha-Chlordane	UG/KG	1.9 U	1.5 JP	1.9 U
	beta-BHC	UG/KG	1.9 U	<b>2</b> U	1.9 U
	delta-BHC	UG/KG	1.9 U	2 U	1.9 U
	gamma-BHC (Lindane)		1.9 U	2 U	14
28	gamma-Chlordane	UG/KG	1.9 U	2 U	1.9 U

	SDG:	54598	54598	54598
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL
L	AB SAMP. ID:	275631	275483	275631
E	EPA SAMP, ID:	SS26-53MS	SS26-45MSD	SS26-53MSD
	QC CODE:	MS	MSD	MSD
Ç	% MOISTURE:	15	11	15
	% SOLIDS:			
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	3.9 U	3.7 U	3.9 U
2 4,4'-DDE	UG/KG	4.1	2.9 J	2.9 JP
3 4,4'-DDT	UG/KG	36	34	36
4 Aldrin	UG/KG	18	18	18
5 Aroclor-1016	UG/KG	39 U	37 U	39 U
6 Aroclor-1221	UG/KG	<b>7</b> 9 U	75 U	79 U
7 Aroclor-1232	UG/KG	39 U	37 U	39 U
8 Aroclor-1242	, UG/KG	39 U	37 U	39 U
9 Aroclor-1248	\ UG/KG	39 U	37 U	39 U
10 Aroclor-1254	UG/KG	39 U	37 U	39 U
11 Aroclor-1260	UG/KG	39 U	37 U	39 U
12 Dieldrin	UG/KG	33 P	33	33
13 Endosulfan I	UG/KG	2 U	3	2 U
14 Endosulfan II	UG/KG	3.9 U	3.7 U	3.9 U
15 Endosulfan sulfate	UG/KG	6.4 P	3.7 U	4.3 P
16 Endrin	UG/KG	37	37	38
17 Endrin aldehyde	UG/KG	3.9 U	3.7 U	3.9 U
18 Endrin ketone	UG/KG	3.9 U	3.7 U	3.9 U
19 Heptachlor	UG/KG	18	17	18
20 Heptachlor epoxide		2 U	1.9 U	2 U
21 Methoxychlor	UG/KG	20 U	19 U	<b>20</b> U
22 Toxaphene	UG/KG	200 U	190 U	200 U
23 alpha-BHC	UG/KG	2 U	1.9 U	2 U
24 alpha-Chlordane	UG/KG	1.6 ЛР	1.9 U	1.5 JP
25 beta-BHC	UG/KG	2 U	1.9 U	2 U
26 delta-BHC	UG/KG	2 U	1.9 U	2 U
27 gamma-BHC (Linda		14	14	14
28 gamma-Chlordane	UG/KG	2 U	1.9 U	2 U

LAB EPA % N	SDG: STUDY ID: MATRIX: SAMP. ID: SAMP. ID: QC CODE: MOISTURE: % SOLIDS:	54598 PHASE 1 SOIL 275629 SS26-15 SA 13	54598 PHASE 1 SOIL 275488 SS26-16 SA 20	54598 PHASE 1 SOIL 275489 SS26-17 SA 18	54598 PHASE 1 SOIL 275490 SS26-18 SA	54598 PHASE 1 SOIL 275491 SS26-19 SA 25
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	2.4 JP	4.1 U	4 U	3.9 U	4.4 U
2 4,4'-DDE	UG/KG	<b>2</b> .6 J	30	16	2 J	12
3 4,4'-DDT	UG/KG	3.7 JP	25	16	3.9 U	11
4 Aldrin	UG/KG	1.9 U	2.1 U	2.1 U	2 U	2.3 U
5 Aroclor-1016	UG/KG	38 U	41 U	40 U	39 U	44 U
6 Aroclor-1221	UG/KG	<i>7</i> 7 U	83 U	82 U	78 U	89 U
7 Aroclor-1232	UG/KG	38 U	41 U	40 U	39 U	44 U
8 Aroclor-1242	UG/KG	38 U	41 U	40 U	39 U	44 U
9 Aroclor-1248	UG/KG	38 U	41 U	40 U	39 U	44 U
10 Aroclor-1254	UG/KG	38 U	41 U	40 U	39 U	44 U
11 Aroclor-1260	UG/KG	38 U	41 U	40 U	39 U	44 U
12 Dieldrin	UG/KG	3.8 U	4.1 U	4 U	3.9 U	4.4 U
I3 Endosulfan I	UG/KG	1.9 U	2.1 U	2.1 U	2 U	2.3 U
14 Endosulfan II	UG/KG	27 P	4.1 U	4 U	3.9 U	4.3 JP
15 Endosulfan sulfate	UG/KG	13 P	4.1 U	4 U	3.9 U	2.4 JP
16 Endrin	UG/KG	2.3 JP	4.1 U	4 U	3.9 U	4.4 U
17 Endrin aldehyde	UG/KG	5.6 P	4.1 U	4 U	3.9 U	3.3 JP
18 Endrin ketone	UG/KG	3.8 U	4.1 U	4 U	3.9 U	4.4 U
19 Heptachlor	UG/KG	3.8	1.2 J	2.1 U	2 U	1.8 J
20 Heptachlor epoxide	UG/KG	1.9 U	2.1 U	2.1 U	2 U	2.3 U
21 Methoxychlor	UG/KG	19 U	21 U	21 U	20 U	23 U
22 Toxaphene	UG/KG	190 U	210 U	210 U	200 U	230 U
23 alpha-BHC	UG/KG	1.9 U	2.1 U	2.1 U	2 U	2.3 U
24 alpha-Chlordane	UG/KG	2.1 P	2.1 U	2.1 U	2 U	2.3 U
25 beta-BHC	UG/KG	1.9 U	2.1 U	2.1 U	2 U	2.3 U
26 delta-BHC	UG/KG	1.9 U	2.1 U	2.1 U	2 U	2.3 U
27 gamma-BHC (Lindane)		1.9 U	2.1 U	2.1 U	2 U	2.3 U
28 gamma-Chlordane	UG/KG	1.8 J	2.1 U	2.1 U	2 U	2.3 U

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PESTICIDES						
	SDG:	54598	54598	54598	54598	54598
STU	DY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
M	ATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
LAB SAI	MP. ID:	275492	275493	275494	275495	275496
EPA SAI	MP. ID:	SS26-20	SS26-21	SS26-22	SS26-23	SS26-25
QC	CODE:	SA	SA	SA	SA	SA
% MOIS	STURE:	19	15	17	12	16
% Se	OLIDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	4 U	2.5 J	4 U	3.7 U	3.9 U
2 4,4'-DDE	UG/KG	4 U	5.7 P	18	3.7 U	4
3 4,4'-DDT	UG/KG	4 U	5.4 P	12	3.7 U	3.9 U
4 Aldrin	UG/KG	2.1 U	2 U	2 U	1.9 U	2 U
5 Aroclor-1016	UG/KG	40 U	39 U	40 U	37 U	39 U
6 Aroclor-1221	UG/KG	<b>82</b> U	<b>7</b> 9 U	81 U	<b>7</b> 6 U	<b>7</b> 9 U
7 Aroclor-1232	UG/KG	40 U	39 U	40 U	37 U	<b>3</b> 9 U
8 Aroclor-1242	UG/KG	40 U	39 U	40 U	37 U	<b>3</b> 9 U
9 Aroclor-1248	UG/KG	40 U	39 U	40 U	37 U	39 U
10 Aroclor-1254	UG/KG	40 U	39 U	40 U	37 U	39 U
11 Aroclor-1260	UG/KG	40 U	39 U	40 U	37 U	39 U
12 Dieldrin	UG/KG	4 U	3.9 U	4 U	3.7 U	3.9 U
13 Endosulfan I	UG/KG	2.1 U	2 U	2 U	1.9 U	2 U
14 Endosulfan II	UG/KG	4 U	3.9 U	4 U	3.7 U	3.9 U
15 Endosulfan sulfate	UG/KG	4 U	4.4 P	4.5 P	3.7 U	3.9 U
16 Endrin	UG/KG	4 U	3.9 U	4 U	3.7 U	3.9 U
17 Endrin aldehyde	UG/KG	4 U	3.9 U	4 U	3.7 U	3.9 U
18 Endrin ketone	UG/KG	4 U	3.9 U	4 U	3.7 U	3.9 U
19 Heptachlor	UG/KG	1.2 J	· 2 U	2 U	1.7 J	2 U
20 Heptachlor epoxide	UG/KG	2.1 U	2 U	2 U	1.9 U	2 U
21 Methoxychlor	UG/KG	21 U	20 U	20 U	19 U	20 U
22 Toxaphene	UG/KG	210 U	<b>200</b> U	200 U	190 U	200 U
23 alpha-BHC	UG/KG	2.1 U	<b>2</b> U	2 U	1.9 U	2 U
24 alpha-Chlordane	UG/KG	<b>2.1</b> U	2 U	2 U	1.9 U	2 U
25 beta-BHC	UG/KG	<b>2.1</b> U	<b>2</b> U	2 U	1.3 J	2 U
26 delta-BHC	UG/KG	2.1 U	2 U	2 U	1.9 U	2 U
27 gamma-BHC (Lindane)	UG/KG	2.1 U	<b>2</b> U	2 U	1.9 U	2 U
28 gamma-Chlordane	UG/KG	, 2.1 U	2 U	2 Ų	1.9 U	2 U

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1201101222	SDG:	54598	54598	54598	54598	54598
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL	SOIL	SOIL
I.A.I	B SAMP. ID:	275497	275630	275498	275499	275500
	A SAMP. ID:	SS26-26	SS26-28	SS26-30	SS26-31	SS26-32
2.	QC CODE:	SA	SA	SA	\$520-51 \$A	SA
<b>%</b> ]	MOISTURE:	10	11	12	15	9
	% SOLIDS:		**	12	15	,
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	WALLIE O	VALUE O
1 4.4'-DDD	UG/KG	3.6 U	9.2 P	3.7 U	VALUE Q 3.9 U	VALUE Q 3.6 U
2 4,4'-DDE	UG/KG	17	9.2 F 2.9 JP	3.7 U	3.9 U	2.8 JP
3 4,4'-DDT	UG/KG	5.7	4.7 P	2.6 JP	3.9 U	2.8 JF 2.2 J
4 Aldrin	UG/KG	1.9 U	1.9 U	1.9 U	3.9 U	1.9 U
5 Aroclor-1016	UG/KG	36 U	37 U	37 U	39 U	36 U
6 Aroclor-1221	UG/KG	73 U	75 U	76 U	78 U	73 U
7 Aroclor-1232	UG/KG	36 U	37 U	37 U	39 U	36 U
8 Aroclor-1242	UG/KG	36 U	37 U	37 U	39 U	36 U
9 Aroclor-1248	UG/KG	36 U	37 U	37 U	39 U	36 U
10 Aroclor-1254	UG/KG	36 U	37 U	37 U	39 U	36 U
11 Aroclor-1260	UG/KG	36 U	37 U	37 U	39 U	36 U
12 Dieldrin	UG/KG	3.6 U	4.4 P	2.5 J	3.9 U	3.6 U
13 Endosulfan I	UG/KG	1.9 U	5.6 P	1.9 U	2 U	1.9 U
14 Endosulfan II	UG/KG	2.1 ЛР	19 P	3.7 U	3.9 U	3.6 U
15 Endosulfan sulfate	UG/KG	5.4 P	17 P	3.4 JP	3.9 U	4
16 Endrin	UG/KG	3.6 U	2.6 JP	3.7 U	3.9 U	3.6 U
17 Endrin aldehyde	UG/KG	3.7 P	14 P	3.7 U	3.9 U	3.6 U
18 Endrin ketone	UG/KG	3.6 U	5.4 P	3.7 U	3.9 U	3.6 U
19 Heptachlor	UG/KG	1.3 J	1.9 U	1.9 U	2 U	1.9 U
20 Heptachlor epoxide	UG/KG	1.9 U	2.1 P	1.8 JP	2 U	1.9 U
21 Methoxychlor	UG/KG	19 U	19 U	19 U	<b>20</b> U	19 U
22 Toxaphene	UG/KG	190 U	190 U	190 U	200 U	190 U
23 alpha-BHC	UG/KG	1.9 U	1.9 U	1.9 U	2 U	1.9 U
24 alpha-Chlordane	UG/KG	1.9 U	1.9 U	1.9 U	2 U	1.9 U
25 beta-BHC	UG/KG	1.9 U	1.9 U	1.9 U	2 U	1.9 U
26 delta-BHC	UG/KG	1.9 U	1.9 U	1.9 U	2 U	1.9 U
27 gamma-BHC (Lindane	,	1.9 U	1.9 U	1.9 U	2 U	1.9 U
28 gamma-Chlordane	UG/KG	1.9 U	2.6 P	1.9 U	2 U	1.9 U

PESTICIDES					
	SDG:	54598	54598	54598	54598
STU	DY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MA	ATRIX:	SOIL	SOIL	SOIL	SOIL
LAB SAN	MP. ID:	275501	275483	275484	275485
EPA SAM	MP. ID:	SS26-34	SS26-45	SS26-46	SS26-47
QC (	CODE:	SA	SA	SA	SA
% MOIS	TURE:	11	11	17	12
% SC	OLIDS:				
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	13 P	3.7 U	4 U	3.7 U
2 4,4'-DDE	UG/KG	5.7 P	3.7 U	4 U	3.7 U
3 4,4'-DDT	UG/KG	15 P	3.7 U	4 U	3.7 U
4 Aldrin	UG/KG	1.9 U	1.9 U	2 U	1.9 U
5 Aroclor-1016	UG/KG	37 U	37 U	40 U	37 U
6 Aroclor-1221	UG/KG	75 U	75 U	81 U	76 U
7 Aroclor-1232	UG/KG	37 U	37 U	40 U	37 U
8 Aroclor-1242	UG/KG	37 U	37 U	40 U	37 U
9 Aroclor-1248	UG/KG	37 U	37 U	40 U	37 U
10 Aroclor-1254	UG/KG	37 U	37 U	40 U	37 U
11 Aroclor-1260	UG/KG	37 U	37 U	40 U	37 U
12 Dieldrin	UG/KG	1.9 JP	3.7 U	4 U	3.7 U
13 Endosulfan I	UG/KG	1.9 U	1.9 U	2 U	1.9 U
14 Endosulfan II	UG/KG	2 JP	3.7 U	17 P	3.7 U
15 Endosulfan sulfate	UG/KG	8.8 P	3.7 U	4 U	3.7 U
16 Endrin	UG/KG	3.7 U	3.7 U	4 U	3.7 U
17 Endrin aldehyde	UG/KG	8.7 P	3.7 U	8 P	3.7 U
18 Endrin ketone	UG/KG	2.6 JP	3.7 U	4 U	3.7 U
19 Heptachlor	UG/KG	1.9 U	1.9 U	<b>2</b> .9	1.9 U
20 Heptachlor epoxide	UG/KG	1.9 JP	1.9 U	2 U	1.9 U
21 Methoxychlor	UG/KG	19 U	19 U	20 U	19 U
22 Toxaphene	UG/KG	190 U	190 U	200 U	190 U
23 alpha-BHC	UG/KG	1.9 U	1.9 U	2 U	1.9 U
24 alpha-Chlordane	UG/KG	1.9 U	1.9 U	1.2 JP	1.9 U
25 beta-BHC	UG/KG	1.9 U	1.9 U	2 U	1.9 U
26 delta-BHC	UG/KG	1.9 U	1.9 U	2 U	1.9 U
27 gamma-BHC (Lindane)	UG/KG	1.9 U	1.9 U	2 U	1.9 U
28 gamma-Chlordane	UG/KG	1.9 U	1.9 U	2 U	1.9 U

	SDG:	54598	54598	54598	54598	54598
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	AREA	SEAD-26	SEAD-26	SEAD-26	SEAD-26	SEAD-26
	MATRIX	SURFACE SOIL	SURFACE SOIL	SURFACE SOIL	SURFACE SOIL	SURFACE SOIL
	ANAL. METH.	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP
	SAMP ID:	SS26-15	SS26-16	SS26-17	SS26-18	SS26-19
	QC CODE:	SA	SA	SA	SA	SA
		******	*******	*******	******	*********
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminum	MG/KG	14700	14000	12100	14000	13600
2 Antimony	MG/KG	0.32 U	0.45 U	0.42 U	0.43 U	0.37 U
3 Arsenic	MG/KG	8.9	7.3	5.3	5.8	6
4 Barium	MG/KG	65.7	79.3	60.6	63.7	84.5
5 Beryllium	MG/KG	0.62 B	0.68 B	0.57 B	0.61 B	0.68 B
6 Cadmium	MG/KG	0.04 U	0.06 U	0.06 U	0.06 U	0.05 U
7 Calcium	MG/KG	46700 *	37900 *	16600 *	12200 *	25200 *
8 Chromium	MG/KG	21.5	22.1	18.7	21.4	20.6
9 Cobalt	MG/KG	10.6	14.9	10.4	11.2	12.1
10 Copper	MG/KG	19.2	24.3	18.6	18.6	25.4
11 Cyanide	MG/KG	0.57 U	0.57 U	0.54 U	0.57 U	0.66 U
12 Iron	MG/KG	26300	28100	24900	27100	25300
13 Lead	MG/KG	17.8	28.7	17.9	18.2	31.4
14 Magnesium	MG/KG	11900 *	8250 *	8710 *	6160 *	6970 *
15 Manganese	MG/KG	603 *	693 *	512 *	520 *	595 *
16 Mercury	MG/KG	0.04 B	0.05 B	0.06 B	0.07 B	0.07
17 Nickel	MG/KG	29	38.6	28.5	31.3	32.6
18 Potassium	MG/KG	2530 E	2140 E	1530 E	1780 E	2170 E
19 Selenium	MG/KG	0.55 U	0.75 U	0.71 U	0.72 U	0.62 U
20 Silver	MG/KG	0.12 U	0.16 U	0.15 U	0.16 U	0.13 U
21 Sodium	MG/KG	68.7 B	40.7 U	38.4 U	39.1 U	33.3 U
22 Thallium	MG/KG	1.1 B	1.1 B	1.1 B	0.62 B	0.73 B
23 Vanadium	MG/KG	22.9	23,2	18.7	21.5	22.9
24 Zinc	MG/KG	99.2	178	130	93.3	227

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### . METALS

	SDG:	54598	54598	54598	54598	54598
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	AREA	SEAD-26	SEAD-26	SEAD-26	SEAD-26	SEAD-26
	MATRIX	SURFACE SOIL	SURFACE SOIL	SURFACE SOIL	SURFACE SOIL	SURFACE SOIL
	ANAL. METH.	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP
	SAMP ID:	SS26-20	SS26-21	SS26-22	SS26-23	SS26-25
	QC CODE:	SA	SA	SA	SA	SA
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminum	MG/KG	15300	13000	7820	5070	3570
2 Antimony	MG/KG	0.47 U	0.44 U	0.52 U	<b>0.39</b> U	0.41 U
3 Arsenic	MG/KG	8.4	7	3.7	9.5	3.9
4 Barium	MG/KG	77.9	77.7	35 B	33.8 B	. 30.6 B
5 Beryllium	MG/KG	0.69 B	0.62 B	0.39 B	0.4 B	0.27 B
6 Cadmium	MG/KG	0.06 U	0.06 U	0.07 U	0.05 U	1.2
7 Calcium	MG/KG	7640 *	32400 *	71100 *	249000 *	259000 *
8 Chromium	MG/KG	23.6	20.8	14.1	6.8	6.9
9 Cobalt	MG/KG	10.5	12.8	8.1	5.9	5.7
10 Copper	MG/KG	20.3	22.8	14.5	22.4	10.2
11 Cyanide	MG/KG	0.55 U	0.39 U	0.56 U	0.46 U	0.34 U
12 Iron	MG/KG	28900	27200	16700	9640	7150
13 Lead	MG/KG	16.7	21.6	19.9	5.1	11.8
14 Magnesium	MG/KG	5880 *	6940 *	7690 *	4450 *	17200 *
15 Manganese	MG/KG	491 *	624 *	294 *	219 *	307 *
16 Mercury	MG/KG	0.06 B	0.06 B	0.07 B	0.05	0.02 B
17 Nickel	MG/KG	32.7	33.2	27.3	23.6	15
18 Potassium	MG/KG	2270 E	1960 E	1490 E	2060 E	2030 E
19 Selenium	MG/KG	0.8 U	0.73 U	<b>0.87</b> U	0.65 U	0.69 U
20 Silver	MG/KG	0.17 U	0.16 U	0.19 U	0.14 U	0.15 U
21 Sodium	MG/KG	43.1 U	39.7 U	52.3 B	96.2 B	128 B
22 Thallium	MG/KG	0.83 B	0.96 B	0.71 U	0.53 U	0.56 U
23 Vanadium	MG/KG	24	20.7	13.2	11.8	10.2
24 Zinc	MG/KG	100	112	48.7	26.5	503

	SDG:	54598	54598	54598	54598	54598
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	AREA	SEAD-26	SEAD-26	SEAD-26	SEAD-26	SEAD-26
	MATRIX	SURFACE SOIL	SURFACE SOIL	SURFACE SOIL	SURFACE SOIL	SURFACE SOIL
	ANAL. METH.	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP
	SAMP ID:	SS26-26	SS26-28	SS26-30	SS26-31	SS26-32
	QC CODE:	SA	SA	SA	SA	SA
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminum	MG/KG	8690	1560	16200	5550	10900
2 Antimony	MG/KG	0.37 U	0.4 U	0.41 B	0.3 U	0.37 U
3 Arsenic	MG/KG	4.3	3	5.9	2.8	4.8
4 Barium	MG/KG	40.9	17 B	74.6	39.1	46.2
5 Beryllium	MG/KG	0.47 B	0.18 B	0.77 B	0.35 B	0.55 B
6 Cadmium	MG/KG	0.05 U	0.05 U	0.05 U	0.04 U	0.05 U
7 Calcium	MG/KG	117000 *	280000 *	30600 *	210000 *	. 87700 *
8 Chromium	MG/KG	16.9	3.1	27.3	9.4	18.7
9 Cobalt	MG/KG	9.4	2.2	16.7	5.2	12.1
10 Copper	MG/KG	23.3	8	31.3	15.5	22.5
11 Cyanide	MG/KG	0.43 U	0.46 U	0.51 U	0.45 U	0.48 U
12 Iron	MG/KG	18400	2920	31700	10100	23400
13 Lead	MG/KG	19.6	<b>0.27</b> U	14.4	10.6	14.7
14 Magnesium	MG/KG	16100 *	6140 *	8160 *	6760 *	15900 *
15 Manganese	MG/KG	308 *	176 *	580 *	285 *	525 *
16 Mercury	MG/KG	0.03 B	0.01 B	0.04 B	0.03 B	0.03 B
17 Nickel	MG/KG	33	9.1	48.2	16.8	36.2
18 Potassium	MG/KG	1780 E	1220 E	2460 E	1440 E	2020 E
19 Selenium	MG/KG	0.62 U	0.67 U	0.61 U	0.5 U	0.61 U
20 Silver	MG/KG	0.13 U	0.15 U	0.13 U	0.11 U	0.13 U
21 Sodium	MG/KG	93.4 B	120 B	85.8 B	104 B	83.8 B
22 Thallium	MG/KG	0.51 U	0.58 B	0.78 B	0.54 B	0.5 U
23 Vanadium	MG/KG	14.4	7.8 B	22.8	11.5	17.9
24 Zinc	MG/KG	141	15.9	102	39.5	111

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	SDG:	54598	54598	54598	54598
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	AREA	SEAD-26	SEAD-26	SEAD-26	SEAD-26
	MATRIX	SURFACE SOIL	SURFACE SOIL	SURFACE SOIL	SURFACE SOIL
	ANAL. METH.	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP	NYSDEC-CLP
	SAMP ID:	SS26-34	SS26-45	SS26-46	SS26-47
	QC CODE:	SA	SA	SA	SA
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminum	MG/KG	6980	18000	15100	18600
2 Antimony	MG/KG	0.46 U	0.39 U	0.37 U	0.39 U
3 Arsenic	MG/KG	4.3	6.5	5.8	7.1
4 Barium	MG/KG	122	99.7	79.3	85.2
5 Beryllium	MG/KG	0.42 B	0.75 B	0.66 B	0.82 B
6 Cadmium	MG/KG	0.06 U	0.05 U	0.05 U	0.05 U
7 Calcium	MG/KG	153000 *	7770 *	31000 *	4660 *
8 Chromium	MG/KG	12.4	23.9	21.8	26.2
9 Cobalt	MG/KG	8.6	12.6	11	12.2
10 Copper	MG/KG	17.9	19.6	20	25.2
11 Cyanide	MG/KG	0.49 U	0.55 U	0.59 U	0.6 U
12 Iron	MG/KG	14600	26900	25500	29700
13 Lead	MG/KG	43.7	17.8	14.8	12.8
14 Magnesium	MG/KG	13700 *	5160 *	7010 *	5560 *
15 Manganese	MG/KG	378 *	788 *	516 *	639 *
16 Mercury	MG/KG	0.03 B	0.07 B	0.05 B	0.05 B
17 Nickel	MG/KG	23.1	30	29.8	34.1
18 Potassium	MG/KG	1720 E	3070 E	2450 E	3500 E
19 Selenium	MG/KG	0.77 U	0.66 U	0.62 U	0.65 U
20 Silver	MG/KG	0.17 U	0.14 U	0.13 U	0.14 U
21 Sodium	MG/KG	<b>89.9</b> B	35.6 U	62.3 B	36.8 B
22 Thallium	MG/KG	0.62 U	1.3 B	0.74 B	1.2 B
23 Vanadium	MG/KG	14.6	29.5	24.3	31.5
24 Zinc	MG/KG	71.7	106	120	103

	SDG:	54598	54598	54598	
	STUDY ID:	PHASE	PHASE 1	PHASE 1	
	AREA	SEAD-20	SEAD-26	SEAD-26	
	MATRIX	SURFACE SOIL	SURFACE SOIL	WATER	
	ANAL. METH	NYSDEC-CLI	NYSDEC-CLP	NYSDEC-CLP	
	SAMP ID:	SS26-52	SS26-53	SS26-34R	
	QC CODE:	DU	J DU		
PARAMETER	UN	IIT VALUI	E Q VALUE	Q VALUE Q	
1 Aluminum	MG	/KG 6180	15600	10.6 B U	JG/L
2 Antimony	MG	KG 0.28	U 1.8	BN 2.2 U U	JG/L
3 Arsenic	MG	6/KG 4.6	7.5	2.5 B U	JG/L
4 Barium	MG	3/KG 113	72.2	3.4 U U	JG/L
5 Beryllium	MG	7/KG 0.42	2 B 0.65	B 0.27 U U	UG/L
6 Cadmium	MG	KG 0.04	U 0.05	U 0.3 U T	UG/L
7 Calcium	MG	KG 155000	22800	* 86.4 U U	UG/L
8 Chromium	MO	6/KG 9.5	23.4	0.61 B T	JG/L
9 Cobalt	MO	6/KG 6.6	12.6	0.99 U I	UG/L
10 Copper	MO	KG 14.3	32.6	2.2 B (	UG/L
11 Cyanide	MO	6/KG 0.56	U 0.44	U 5 U T	UG/L
12 Iron	MC	6/KG 11800	30600	93.2 B U	JG/L
13 Lead	MO	6/KG 30.5	18.5	1.5 U T	UG/L
14 Magnesium	MO	6/KG 13200	7070	• 91.8 U T	UG/L
15 Manganese	MO	3/KG 351	• 621	• 1.4 B T	UG/L
16 Mercury	MC	6/KG 0.03	3 B 0.04	B 0.05 B T	UG/L
17 Nickel	MO	F/KG 18.4	33.2	0.99 U I	UG/L
18 Potassium	MC	7/KG 1620	E 2190	E 104 U T	UG/L
19 Selenium	MO	6/KG 0.46	U 0.63	UN 3.7 U T	UG/L
20 Silver	MC	6/KG 0.1	U 0.14	U 0.79 U I	UG/L
21 Sodium	MC	F/KG 102	2 B 33.9	U 199 U I	UG/L
22 Thallium	MC	6/KG 0.47	' B 0.93	B 3.1 B T	UG/L
23 Vanadium	MO	5/KG 10.1	23.6		
24 Zinc	MO	5/KG 54.1	99.2	0.99 B T	UG/L

		34399		
	STUE	PHASE 1		
	MA	WATER		
	LAB SAM	IP. ID:	275487	
	EPA SAM		SW25-3	
	QC C	CODE:	SA	
	% MOIST	ΓURE:		
	% SO	LIDS:		
	PARAMETER	UNIT	VALUE Q	
1	1,1,1-Trichloroethane	ug/L	10 U	
2	1,1,2,2-Tetrachloroethane	ug/L	10 U	
3	1,1,2-Trichloroethene	ug/L	10 U	
4	1,1-Dichloroethane	ug/L	10 U	
5	1,1-Dichloroethene	ug/L	10 U	
6	1,2-Dichloroctopane	ug/L	10 U	
7	1,2-Dichloroethane	ug/L	10 U	
8	1,2-Dichloroethene (total)	ug/L	10 U	
9	2-Butanone	ug/L	10 U	
10	2-Hexanone	ug/L	10 U	
11	4-Methyl-2-Pentanone	ug/L	10 U	
	Acetone	ug/L	10 U	
13	Benzene	ug/L	10 U	
14	Bromodichloromethane	ug/L	10 U	
15	Bromoform	ug/L	10 U	
16	Bromomethane	ug/L	10 U	
17	Carbon Disulfide	ug/L	10 U	
18	Carbon Tetrachloride	ug/L	10 U	
19	Chlorobenzene	ug/L	10 U	
20	Chloroethane	ug/L	10 U	
21	Chloroform	ug/L	10 U	
22	Chloromethane	ug/L	10 U	
23	Dibromochloromethane	ug/L	10 U	
24	Ethylbenzene	ug/L	10 U	
25	Methylene Chloride	ug/L	10 U	
26	Styrene	ug/L	10 U	
27	Tetrachloroethene	ug/L	10 U	
28	Toluene	ug/L	10 U	
29	Trichloroethene	ug/L	10 U	
30	Vinyl Chloride	ug/L	10 U	
	Xylene (total)	ug/L	10 U	
	cis-1,3-Dichloroctopene	ug/L	10 U	
	trans-1,3-Dichloroctopene	ug/L	10 U	
	-	-		

SDG:

54599

	SDG: STUDY ID: MATRIX: LAB SAMP. ID: EPA SAMP. ID: QC CODE:		54599 PHASE 1 WATER 275487 SW25-3 SA
	% MOISTURE:		
	% SOLIDS:		
	PARAMETER	UNIT	VALUE O
1	1,2,4-Trichlorobenzene	ug/L	10 U
2	1,2-Dichlorobenzene	ug/L	10 U
3	1,3-Dichlorobenzene	ug/L	10 U
4	1,4-Dichlorobenzene	ug/L	10 U
5	2,4,5-Trichlorophenol	ug/L	<b>26</b> U
6	2,4,6-Trichlorophenol	ug/L	10 U
7	2,4-Dichlorophenol	ug/L	10 U
8	2,4-Dimethylphenol	ug/L	10 U
9	2,4-Dinitrophenol	ug/L	26 U
10	2,4-Dinitrotoluene	ug/L	10 U
11	2,6-Dinitrotoluene	ug/L	10 U
12	2-Chloronaphthalene	ug/L	10 U
13	2-Chlorophenol	ug/L	10 U
14	2-Methylnaphthalene	ug/L	10 U
15	2-Methylphenol	ug/L	10 U
16	2-Nitroaniline	ug/L	26 U
17	2-Nitrophenol	ug/L	10 U
18	3,3'-Dichlorobenzidine	ug/L	10 U
19	3-Nitroaniline	ug/L	26 U
20	4,6-Dinitro-2-methylphenol	ug/L	26 U
21	4-Bromophenyl-phenylether	ug/L	10 U
22	4-Chloro-3-methylphenol	ug/L	10 U
	4-Chloroaniline	ug/L	10 U
24	4-Chlorophenyl-phenylether	ug/L	10 U
25	4-Methylphenol	ug/L	10 U
	4-Nitroaniline	ug/L	26 U
	4-Nitrophenol	ug/L	26 U
	Acenaphthene	ug/L	10 U
	Acenaphthylene	ug/L	10 U
	Anthracene	ug/L	10 U
	Benzo(a)anthracene	ug/L	10 U
	Benzo(a)pyrene	ug/L	10 U
	Benzo(b)fluoranthene	ug/L	10 U
34	Benzo(g,h,i)perylene	ug/L	10 U

	SDG:		54599
	STUDY ID:		PHASE 1
	MATRIX:		WATER
	LAB SAMP. ID:		275487
	EPA SAMP. ID:		SW25-3
	QC CODE:		SA
	% MOISTURE:		
	% SOLIDS:		
	PARAMETER	UNIT	VALUE Q
35	Butylbenzylphthalate	ug/L	10 U
	Carbazole	ug/L	10 U
37	Chrysene	ug/L	10 U
38	Di-n-butylphthalate	ug/L	10 U
	Di-n-oprylphthalate	ug/L	10 U
	Dibenz(a,h)anthracene	ug/L	10 U
41	Dibenzofuran	ug/L	10 U
42	Diethylphthalate	ug/L	10 U
43	Dimethylphthalate	ug/L	10 U
44	Fluoranthene	ug/L	10 U
45	Fluorene	ug/L	10 U
46	Hexachlorobenzene	ug/L	10 U
47	Hexachlorobutadiene	ug/L	10 U
48	Hexachlorocyclopentadiene	ug/L	10 U
49	Hexachloroethane	ug/L	10 U
50	Indeno(1,2,3-cd)pyrene	ug/L	10 U
51	lsophorone	ug/L	10 U
	N-Nitroso-di-n-ctopylamine	ug/L	10 U
53	N-Nitrosodiphenylamine (1)	ug/L	10 U
54	Naphthalene	ug/L	10 U
<b>5</b> 5	Nitrobenzene	ug/L	10 U
56	Pentachlorophenol	ug/L	26 U
7.	Phenanthrene	ug/L	10 U
58	Phenol	ug/L	10 U
	Pyrene	ug/L	10 U
	benzo(k)fluoranthene	ug/L	10 U
	bis(2-Chloroethoxy) methane	ug/L	10 U
	bis(2-Chloroethyl) ether	ug/L	10 U
	bis(2-Chloroisoctopyl) ether	ug/L	10 U
64	bis(2-Ethylhexyl)phthalate	ug/L	2 JB

	SDG:	54599
Si	TUDY ID:	PHASE 1
]	MATRIX:	WATER
LAB S	AMP. ID:	275487
EPA S	AMP. ID:	SW25-3
O	C CODE:	SA
	DISTURE:	
	SOLIDS:	
	,	
PARAMETER	UNIT	VALUE Q
1 4,4'-DDD	UG/L	0.1 U
2 4,4'-DDE	UG/L	0.1 U
3 4,4'-DDT	UG/L	0.1 U
4 Aldrin	UG/L	0.05 U
5 Aroclor-1016	UG/L	1 U
6 Aroclor-1221	UG/L	2 U
7 Aroclor-1232	UG/L	1 U
8 Aroclor-1242	UG/L	1 U
9 Aroclor-1248	UG/L	1 U
10 Aroclor-1254	UG/L	1 U
11 Aroclor-1260	UG/L	1 U
12 Dieldrin	UG/L	0.1 U
13 Endosulfan I	UG/L	0.05 U
14 Endosulfan II	UG/L	0.1 U
15 Endosulfan sulfate	UG/L	0.1 U
16 Endrin	UG/L	0.1 U
17 Endrin aldehyde	UG/L	0.1 U
18 Endrin ketone	UG/L	0.1 U
19 Heptachlor	UG/L	0.05 U
20 Heptachlor epoxide	UG/L	0.05 U
21 Methoxychlor	UG/L	0.5 U
22 Toxaphene	UG/L	5 U
23 alpha-BHC	UG/L	0.05 U
24 alpha-Chlordane	UG/L	0.05 U
25 beta-BHC	UG/L	0.05 U
26 delta-BHC	UG/L	0.05 U
27 gamma-BHC (Lindane)	UG/L	0.05 U
28 gamma-Chlordane	UG/L	0.05 U

	SDG:	54599
	STUDY ID:	PHASE 1
	MATRIX:	WATER
	LAB SAMP. ID:	275487
	EPA SAMP. ID:	SW25-3
•	QC CODE:	SA
	% MOISTURE:	
	% SOLIDS:	0
PARAMETER	UNIT	VALUE Q
1 Aluminimum	UG/L	953
2 Antimony	UG/L	2.2 U
3 Arsenic	UG/L	2.1 U
4 Barium	UG/L	19.5 B
5 Beryllium	UG/L	0.27 U
6 Cadmium	, UG/L	0.3 U
7 Calcium	\ UG/L	33800
8 Chromium	UG/L	2 B
9 Cobalt	UG/L	1 U
10 Copper	UG/L	4.4 B
11 Cyanide	UG/L	5 U
12 Iron	UG/L	1040 E
13 Lead	UG/L	2.8 B
14 Magnesium	UG/L	2920 B
15 Manganese	UG/L	12.4 B
16 Mercury	UG/L	0.02 U
17 Nickel	UG/L	3 B
18 Potasium	UG/L	6170
19 Selenium	UG/L	3.7 U
20 Silver	UG/L	0.8 U
21 Sodium	UG/L	38100
22 Thallium	UG/L	3 U
23 Vanadium	UG/L	2.5 B
24 Zinc	UG/L	16.5 B

/OC	S		
	SDG	:	54636
	STUDY ID	:	PHASE 1
	MATRIX	:	WATER
	LAB SAMP. ID	:	275624
	EPA SAMP. ID	:	SS26-15R
	OC CODE	:	FB
	% MOISTURE	:	
	% SOLIDS		
	PARAMETER	UNIT	VALUE Q
1	1,1,1-Trichloroethane	ug/L	10 U
2	1,1,2,2-Tetrachloroethane	ug/L	10 U
3	1,1,2-Trichloroethene	ug/L	10 U
4	1,1-Dichloroethane	ug/L	10 U
	1,1-Dichloroethene	ug/L	10 U
6	1,2-Dichloroctopane	ug/L	10 U
7	1,2-Dichloroethane	ug/L	10 U
8	1,2-Dichloroethene (total)	ug/L	10 U
9	2-Butanone	ug/L	10 U
10	2-Hexanone	ug/L	10 U
11	4-Methyl-2-Pentanone	ug/L	10 U
12	Acetone	ug/L	10 U
13	Benzene	ug/L	10 U
14	Bromodichloromethane	ug/L	10 U
15	Bromoform	ug/L	10 U
16	Bromomethane	ug/L	10 U
17	Carbon Disulfide	ug/L	10 U
18	Carbon Tetrachloride	ug/L	10 U
19	Chlorobenzene	ug/L	10 U
20	Chloroethane	ug/L	10 U
21	Chloroform	ug/L	3 J
22	Chloromethane	ug/L	10 U
23	Dibromochloromethane	ug/L	10 U
24	Ethylbenzene	ug/L	10 U
25	Methylene Chloride	ug/L	10 U
26	Styrene	ug/L	10 U
27	Tetrachloroethene	ug/L	10 U
28	Toluene	ug/L	10 U
29	Trichloroethene	ug/L	10 U
	Vinyl Chloride	ug/L	10 U
	Xylene (total)	ug/L	10 U
32	cis-1,3-Dichloroctopene	ug/L	10 U
33	trans-1,3-Dichloroctopene	ug/L	10 U

SDG:		54636
STUDY ID:		PHASE 1
MATRIX:		WATER
LAB SAMP. ID:		275624
EPA SAMP. ID:		SS26-15R
QC CODE:		FB
% MOISTURE:		
% SOLIDS:		
PARAMETER	UNIT	VALUE
nzene us	2/L	10

	PARAMETER	UNIT		VALUE Q
1	1,2,4-Trichlorobenzene	ug/L		10 U
2	1,2-Dichlorobenzene	ug/L		10 U
. 3	1,3-Dichlorobenzene	ug/L		10 U
4	1,4-Dichlorobenzene	ug/L		10 U
5	2,4,5-Trichlorophenol	ug/L	!	26 U
6	2,4,6-Trichlorophenol	ug/L		10 U
7	2,4-Dichlorophenol	ug/L		10 U
8	2,4-Dimethylphenol	ug/L		10 U
9	2,4-Dinitrophenol	ug/L		<b>2</b> 6 U
10	2,4-Dinitrotoluene	ug/L		10 U
11	2,6-Dinitrotoluene	ug/L		10 U
12	2-Chloronaphthalene	ug/L		10 U
13	2-Chlorophenol	ug/L		10 U
14	2-Methylnaphthalene	ug/L		10 U
15	2-Methylphenol	ug/L		10 U
16	2-Nitroaniline	ug/L		26 U
17	2-Nitrophenol	ug/L		10 U
18	3,3'-Dichlorobenzidine	ug/L		10 U
19	3-Nitroaniline	ug/L		26 U
20	4,6-Dinitro-2-methylphenol	ug/L		<b>2</b> 6 U
21	4-Bromophenyl-phenylether	ug/L		10 U
22	4-Chloro-3-methylphenol	ug/L		10 U
23	4-Chloroaniline	ug/L		10 U
24	4-Chlorophenyl-phenylether	ug/L		10 U
25	4-Methylphenol	ug/L		10 U
26	4-Nitroaniline	ug/L		26 U
27	4-Nitrophenol	ug/L		<b>26</b> U
28	Acenaphthene	ug/L		10 U
29	Acenaphthylene	ug/L		10 U
30	Anthracene	ug/L		10 U
31	Benzo(a)anthracene	ug/L		10 U
32	Benzo(a)pyrene	ug/L		10 U
33	Benzo(b)fluoranthene	ug/L		10 U
34	Benzo(g,h,i)perylene	ug/L		10 U

SDG:	54636
STUDY ID:	PHASE 1
MATRIX:	WATER
LAB SAMP. ID:	275624
EPA SAMP. ID:	SS26-15R
QC CODE:	FB
% MOISTURE:	
% SOLIDS:	

	PARAMETER	UNIT	VALUE	Q
35	Butylbenzylphthalate	ug/L	10	U
36	Carbazole	ug/L	10	U
37	Chrysene	ug/L	10	U
38	Di-n-butylphthalate	ug/L	10	U
39	Di-n-oprylphthalate	ug/L	10	U
40	Dibenz(a,h)anthracene	ug/L	10	U
41	Dibenzofuran	ug/L	10	U
42	Diethylphthalate	ug/L	10	U
43	Dimethylphthalate ,	ug/L	10	U
44	Fluoranthene	ug/L	10	U
45	Fluorene	ug/L	10	U
46	Hexachlorobenzene	ug/L	10	U
47	Hexachlorobutadiene	ug/L	10	U
48	Hexachlorocyclopentadiene	ug/L	10	U
49	Hexachloroethane	ug/L	10	U
50	Indeno(1,2,3-cd)pyrene	ug/L	10	U
51	Isophorone	ug/L	10	U
52	N-Nitroso-di-n-ctopylamine	ug/L	10	U
53	N-Nitrosodiphenylamine (1)	ug/L	10	U
54	Naphthalene	ug/L	10	U
55	Nitrobenzene	ug/L	10	U
56	Pentachlorophenol	ug/L	26	U
57	Phenanthrene	ug/L	10	U
	Phenol	ug/L	10	U
59	Pyrene	ug/L	10	U
60	benzo(k)fluoranthene	ug/L	10	U
61	bis(2-Chloroethoxy) methane	ug/L	10	U
62	bis(2-Chloroethyl) ether	ug/L	10	U
63	bis(2-Chloroisoctopyl) ether	ug/L	10	U
64	bis(2-Ethylhexyl)phthalate	ug/L	1	JB

	SDG: STUDY ID: AREA MATRIX ANALYSIS METHOD SAMP ID: QC CODE:	54636 PHASE 1 SEAD-26 WATER NYSDEC-CLP SS26-15R FB
PARAMETER	UNIT	VALUE Q
1 4,4'-DDD	UG/L	0.1 Ù
1 4,4'-DDD	UG/L	0.1 U
2 4,4'-DDE	UG/L	0.1 U
3 4,4'-DDT	UG/L	0.1 U
4 Aldrin	UG/L	0.052 U
5 Aroclor-1016	UG/L	1 U
6 Aroclor-1221	UG/L	2.1 U
7 Aroclor-1232	UG/L	1 U
8 Aroclor-1242	UG/L	1 U
9 Aroclor-1248	UG/L	1 U
10 Aroclor-1254	UG/L	1 U
11 Aroclor-1260	UG/L	1 U
12 Dieldrin	UG/L	0.1 U
13 Endosulfan I	UG/L	0.052 U
14 Endosulfan II	UG/L	0.1 U
15 Endosulfan sulfate	UG/L	0.1 U
16 Endrin	UG/L	0.1 U
17 Endrin aldehyde	UG/L	0.1 U
18 Endrin ketone	UG/L	0.1 U
19 Heptachlor	UG/L	0.052 U
20 Heptachlor epoxide	UG/L	0.052 U
21 Methoxychlor	UG/L	0.52 U
22 Toxaphene	UG/L	5.2 U
23 alpha-BHC	UG/L	0.052 U
24 alpha-Chlordane	UG/L	0.052 U
25 beta-BHC	UG/L	0.052 U
26 delta-BHC	UG/L	0.052 U
27 gamma-BHC (Lindar	ne) UG/L UG/L	0.052 U
28 gamma-Chlordane	UG/L	0.052 U

	SDG:	54636
	STUDY ID:	PHASE 1
	MATRIX:	WATER
	LAB SAMP. ID:	275624
	EPA SAMP. ID:	SS26-15R
	QC CODE:	FB
	% MOISTURE:	
	% SOLIDS:	0
D 1 D 1 1 COTED	* D. 1775	******
PARAMETER	UNIT	VALUE Q
1 Aluminimum	UG/L	18.2 B
2 Antimony	UG/L	2.2 U
3 Arsenic	UG/L	2.1 U
4 Barium	UG/L	3.4 U
5 Beryllium	UG/L	0.27 U
6 Cadmium	UG/L	0.3 U
7 Calcium	UG/L	86.3 U
8 Chromium	UG/L	0.5 U
9 Cobalt	UG/L	0.99 U
10 Copper	UG/L	1.6 B
11 Cyanide	UG/L	5 U
12 Iron	UG/L	18.4 U
13 Lead	UG/L	1.5 U
14 Magnesium	UG/L	91.8 U
15 Manganese	UG/L	0.4 U
16 Mercury	UG/L	0.02 U
17 Nickel	UG/L	0.99 U
18 Potasium	UG/L	104 U
19 Selenium	UG/L	3.7 U
20 Silver	UG/L	0.79 U
21 Sodium	UG/L	199 U
22 Thallium	UG/L	3 U
23 Vanadium	UG/L	1.1 U
24 Zinc	UG/L	1.9 B

VOC	S				
	S	DG:	54646	54646	54646
	STUDY	ID:	PHASE 1	PHASE 1	PHASE 1
	MAT	RIX:	SOIL	SOIL	SOIL
	LAB SAMP	. ID:	275669	275669	275669
	EPA SAMP	. ID:	SB25-16-00MS	SB25-16-00MSD	SB25-16-00
	QC CC	DDE:	MS	MSD	SA
	% MOISTU		14	14	14
	% SOL				
	PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q
1	1,1,1-Trichloroethane	ug/Kg	12 U	12 U	12 U
2	1,1,2,2-Tetrachloroethane	ug/Kg	12 U	12 U	12 U
	1,1,2-Trichloroethene	ug/Kg	<b>12</b> U	12 U	12 U
4	1,1-Dichloroethane	ug/Kg	12 U	12 U	12 U
	1,1-Dichloroethene	ug/Kg	58	60	12 U
6	1,2-Dichloroctopane	ug/Kg	12 U	12 U	12 U
	1,2-Dichloroethane	ug/Kg	<b>12</b> U	12 U	12 U
8	1,2-Dichloroethene (total)	ug/Kg	12 U	12 U	12 U
	2-Butanone	ug/Kg	12 U	12 U	12 U
10	2-Hexanone	ug/Kg	12 U	12 U	12 U
	4-Methyl-2-Pentanone	ug/Kg	12 U	12 U	12 U
	Acetone	ug/Kg	4 J	7 Ј	2 Ј
13	Benzene	ug/Kg	62	65	12 U
14	Bromodichloromethane	ug/Kg	12 U	12 U	12 U
15	Bromoform	ug/Kg	12 U	12 U	12 U
16	Bromomethane	ug/Kg	12 U	12 U	12 U
17	Carbon Disulfide	ug/Kg	12 U	12 U	12 U
18	Carbon Tetrachloride	ug/Kg	12 U	12 U	12 U
19	Chlorobenzene	ug/Kg	60	64	12 U
20	Chloroethane	ug/Kg	12 U	12 U	12 U
21	Chloroform	ug/Kg	12 U	12 U	12 U
22	Chloromethane	ug/Kg	12 U	12 U	12 U
23	Dibromochloromethane	ug/Kg	12 U	I2 U	12 U
24	Ethylbenzene	ug/Kg	12 U	12 U	12 U
25	Methylene Chloride	ug/Kg	12 U	12 U	12 U
	Styrene	ug/Kg	12 U	12 U	12 U
27	Tetrachloroethene	ug/Kg	12 U	12 U	12 U
28	Toluene	ug/Kg	62	65	12 U
29	Trichloroethene	ug/Kg	59	61	12 U
30	Vinyl Chloride	ug/Kg	12 U	I2 U	12 U .
	Xylene (total)	ug/Kg	12 U	12 U	12 U
	cis-1,3-Dichloroctopene	ug/Kg	12 U	12 U	12 U
	trans-1,3-Dichloroctopene	ug/Kg	12 U	12 U	12 U
		66	•		0

SDG:		54646	54646	
	STUI	DY ID:	PHASE 1	PHASE 1
	MA	TRIX:	SOIL	SOIL
	LAB SAM	IP. ID:	275670	275671
	EPA SAM	IP. ID:	SB25-16-01	SB25-16-02
	QC (	CODE:	SA	SA
	% MOIS	TURE:	14	10
	% SC	LIDS:		
	PARAMETER	UNIT	VALUE Q	VALUE Q
1	1,1,1-Trichloroethane	ug/Kg	12 U	11 U
2	1,1,2,2-Tetrachloroethane	ug/Kg	12 U	11 U
3	1,1,2-Trichloroethene	ug/Kg	12 U	11 U
4	1,1-Dichloroethane	ug/Kg	12 U	11 U
5	1,1-Dichloroethene	ug/Kg	12 U	11 U
6	1,2-Dichloroctopane	ug/Kg	12 U	11 U
7	1,2-Dichloroethane	ug/Kg	12 U	11 U
8	1,2-Dichloroethene (total)	ug/Kg	12 U	11 U
9	2-Butanone	ug/Kg	12 U	11 U
10	2-Hexanone	ug/Kg	12 U	11 U
11	4-Methyl-2-Pentanone	ug/Kg	12 U	11 U
12	Acetone	ug/Kg	4 J	3 J
13	Benzene	ug/Kg	12 U	11 U
14	Bromodichloromethane	ug/Kg	12 U	11 Ü
15	Bromoform	ug/Kg	12 U	11 U
16	Bromomethane	ug/Kg	12 U	11 U
17	Carbon Disulfide	ug/Kg	12 U	11 U
18	Carbon Tetrachloride	ug/Kg	12 U	. 11 U
19	Chlorobenzene	ug/Kg	12 U	11 U
20	Chloroethane	ug/Kg	12 U	11 U
21	Chloroform	ug/Kg	12 U	11 U
22	Chloromethane	ug/Kg	12 U	11 U
23	Dibromochloromethane	ug/Kg	12 U	11 U
	Ethylbenzene	ug/Kg	12 U	11 U
	Methylene Chloride	ug/Kg	12 U	11 U
	Styrene	ug/Kg	12 U	11 <b>U</b>
27	Tetrachloroethene	ug/Kg	12 U	11 U
	Toluene	ug/Kg	12 U	11 U
	Trichloroethene	ug/Kg	12 U	11 U
	Vinyl Chloride	ug/Kg	12 U	11 U
	Xylene (total)	ug/Kg	12 U	11 U
	cis-1,3-Dichloroctopene	ug/Kg	12 U	11 U
33	trans-1,3-Dichloroctopene	ug/Kg	12 U	11 U

	SDG	١.	54646		54646		54646
	STUDY ID		PHASE 1		PHASE 1		PHASE 1
	MATRIX		SOIL		SOIL		SOIL
	LAB SAMP. ID		275669	'	275669		275669
	EPA SAMI . ID		SB25-16-00MS		SB25-16-00MSD		SB25-16-00
	QC CODE		MS		MSD		SA
	% MOISTURE		10		10		10
	% SOLIDS		10		10		10
	% SOLIDS	<b>).</b>					
	PARAMETE	R UNIT	VALUE	Q	VALUE	Q	VALUE Q
1	1,2,4-Trichlorobenzene	ug/Kg	1500		2000		360 U
	1,2-Dichlorobenzene	ug/Kg	360	U	360	U	360 U
	1,3-Dichlorobenzene	ug/Kg	360	U	360	U	360 U
4	1,4-Dichlorobenzene	ug/Kg	1400		1800		360 U
5	2,4,5-Trichlorophenol	ug/Kg	880	U	880	U	880 U
	2,4,6-Trichlorophenol	ug/Kg	360	U	360	U	360 U
7	2,4-Dichlorophenol	ug/Kg	360	U	360	U	360 U
8	2,4-Dimethylphenol	ug/Kg	360	U	360	U	360 U
9	2,4-Dinitrophenol	ug/Kg	880	U	880	U	880 U
10	2,4-Dinitrotoluene	ug/Kg	1600		2000		360 U
11	2,6-Dinitrotoluene	ug/Kg	360	U	360	U	360 U
12	2-Chloronaphthalene	ug/Kg	360	U	360	U	360 U
13	2-Chlorophenol	ug/Kg	2400		3000	E	360 U
14	2-Methylnaphthalene	ug/Kg	360	U	360	U	360 U
15	2-Methylphenol	ug/Kg	360	U	360	U	360 U
16	2-Nitroaniline	ug/Kg	880	U	880	U	880 U
17	2-Nitrophenol	ug/Kg	360	U	360	U	360 U
18	3,3'-Dichlorobenzidine	ug/Kg	360	U	360	U	360 U
19	3-Nitroaniline	ug/Kg	880	U	880		880 U
20	4,6-Dinitro-2-methylphenol	ug/Kg	880	U	880	U	880 U
21	4-Bromophenyl-phenylether	ug/Kg	360	U	360		360 U
22	4-Chloro-3-methylphenol	ug/Kg	2400		3000		360 U
_	4-Chloroaniline	ug/Kg	360		360		360 U
	4-Chlorophenyl-phenylether	ug/Kg	360		360	_	360 U
25	4-Methylphenol	ug/Kg	360		360		360 U
_	4-Nitroaniline	ug/Kg	880	U	880		880 U
	4-Nitrophenol	ug/Kg	2400		3300	E	880 U
	Acenaphthene	ug/Kg	1500		1900		360 U
	Acenaphthylene	ug/Kg	360		360		360 U
_	Anthracene	ug/Kg	360		360		360 U
	Benzo(a)anthracene	ug/Kg	65		49		78 J
	Benzo(a)pyrene	ug/Kg	64		52		87 J
	Benzo(b)fluoranthene	ug/Kg	63		54	-	86 J
34	Benzo(g,h,i)perylene	ug/Kg	44	J	36	J	61 J

	SDG:		54646		54646		54646
	STUDY ID:		PHASE I		PHASE I		PHASE 1
	MATRIX:		SOIL		SOIL		SOIL
	LAB SAMP. ID:		275669		275669		
	EPA SAMP. ID:		SB25-16-00MS		SB25-16-00MSD		275669
							SB25-16-00
	QC CODE:		MS		MSD		SA
	% MOISTURE:		10		10		10
	% SOLIDS:				`		
	PARAMETER	UNIT	VALUE	Q	VALUE	Q	VALUE Q
35	Butylbenzylphthalate	ug/Kg	360	U	360	U	360 U
36	Carbazole	ug/Kg	360	U	360	U	360 U
37	Chrysene	ug/Kg	87	J	70	J	110 J
38	Di-n-butylphthalate	ug/Kg	360	U	360	U	360 U
39	Di-n-oprylphthalate	ug/Kg	360	U	360	U	360 U
40		ug/Kg	360	U	360	U	20 J
41	Dibenzofuran	ug/Kg	360	U	360	U	360 U
42	Diethylphthalate	ug/Kg	360	U	360	U	360 U
43	Dimethylphthalate	ug/Kg	360	U	360	U	360 U
44	Fluoranthene	ug/Kg	170	J	130	J	200 J
45	Fluorene	ug/Kg	360	Ü	360	U	360 U
46	Hexachlorobenzene	ug/Kg	360	U	360	U	360 U
47	Hexachlorobutadiene	ug/Kg	360	U	360	U	360 U
48	Hexachlorocyclopentadiene	ug/Kg	360	U	360	U	360 U
49	Hexachloroethane	ug/Kg	360	U	360	U	360 U
50	Indeno(1,2,3-cd)pyrene	ug/Kg	39	J	32	J	51 J
51	Isophorone	ug/Kg	360	U	360	U	360 U
52	N-Nitroso-di-n-ctopylamine	ug/Kg	1800		2300		360 U
53	N-Nitrosodiphenylamine (1)	ug/Kg	360	U	360	U	360 U
54	Naphthalene	ug/Kg	360	U	360	U	360 U
55	Nitrobenzene	ug/Kg	360	U	360	U	360 U
56	Pentachlorophenol	ug/Kg	2600		2900		880 U
57	Phenanthrene	ug/Kg	110	J	73	J	130 J
58	Phenol	ug/Kg	2200		2800		360 U
59	Pyrene	ug/Kg	1600		2000		170 Ј
60	benzo(k)fluoranthene	ug/Kg	77	J	57	J	96 J
61	bis(2-Chloroethoxy) methane	ug/Kg	360	U	360	U	360 U
62	bis(2-Chloroethyl) ether	ug/Kg	360	U	360	U	360 U
	bis(2-Chloroisoctopyl) ether	ug/Kg	360	U	360	U	360 U
	bis(2-Ethylhexyl)phthalate	ug/Kg	21	JB	360	U	350 JB

	SD	G:	54646	54646
	STUDY I	D:	PHASE 1	PHASE 1
	MATRI	X:	SOIL	SOIL
	LAB SAMP. I	D:	275670	275671
	EPA SAMP. I	D:	SB25-16-01	SB25-16-02
	QC COD	E:	SA	SA
	% MOISTUR	E:	13	12
	% SOLID	S:		
	PARAMETE		VALUE Q	VALUE Q
1	1,2,4-Trichlorobenzene	ug/Kg	380 U	370 U
2	1,2-Dichlorobenzene	ug/Kg	380 U	370 U
3	1,3-Dichlorobenzene	ug/Kg	380 U	370 U
4	1,4-Dichlorobenzene	ug/Kg	380 U	370 U
5	2,4,5-Trichlorophenol	ug/Kg	910 U	910 U
6	2,4,6-Trichlorophenol	ug/Kg	380 U	370 U
7	2,4-Dichlorophenol	ug/Kg	380 U	370 U
8	2,4-Dimethylphenol	ug/Kg	380 U	370 U
9	2,4-Dinitrophenol	ug/Kg	910 U	910 U
10	2,4-Dinitrotoluene	ug/Kg	380 U	370 U
11	2,6-Dinitrotoluene	ug/Kg	380 U	370 U
12	2-Chloronaphthalene	ug/Kg	380 U	370 U
	2-Chlorophenol	ug/Kg	380 U	370 U
	2-Methylnaphthalene	ug/Kg	380 U	370 U
	2-Methylphenol	ug/Kg	380 U	370 U
	2-Nitroaniline	ug/Kg	910 U	910 U
17	2-Nitrophenol	ug/Kg	380 U	370 U
	3,3'-Dichlorobenzidine	ug/Kg	380 U	370 U
	3-Nitroaniline	ug/Kg	910 U	910 U
	4,6-Dinitro-2-methylphenol	ug/Kg	910 U	910 U
	4-Bromophenyl-phenylether	ug/Kg	380 U	370 U
	4-Chloro-3-methylphenol	ug/Kg	380 U	370 U
	4-Chloroaniline	ug/Kg	380 U	370 U
	4-Chlorophenyl-phenylether	ug/Kg	380 U	370 U
	4-Methylphenol	ug/Kg	380 U	370 U
	4-Nitroaniline	ug/Kg	910 U	910 U
	4-Nitrophenol	ug/Kg	910 U	910 U
	Acenaphthene	ug/Kg	380 U	370 U
	Acenaphthylene	ug/Kg	380 U	370 U
	Anthracene	ug/Kg	380 U	370 U
	Benzo(a)anthracene	ug/Kg	380 U	370 U
	Benzo(a)pyrene	ug/Kg ug/Kg	380 U	370 U
	Benzo(b)fluoranthene	ug/Kg ug/Kg	380 U	370 U
	Benzo(g,h,i)perylene	ug/Kg ug/Kg	380 U	370 U
54	Done of B'n'' the Brene	nk/17R	360 0	370 0

	SDG:		54646	54646
	STUDY ID:		PHASE 1	PHASE 1
	MATRIX		SOIL	
	LAB SAMP. ID:		275670	275671
	EPA SAMP. ID:		SB25-16-01	SB25-16-02
	QC CODE:		SA	
	% MOISTURE:		13	12
	% SOLIDS			
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•		
	PARAMETER	UNIT	VALUE	Q VALUE Q
35	Butylbenzylphthalate	ug/Kg	380	U 370 U
36	Carbazole	ug/Kg	380	U 370 U
	Chrysene	ug/Kg	19	J 370 U
38	Di-n-butylphthalate	ug/Kg	380	U 370 U
39	Di-n-oprylphthalate	ug/Kg	380	U 370 U
40	Dibenz(a,h)anthracene	ug/Kg	380	U 370 U
41	Dibenzofuran	ug/Kg	380	U 370 U
42	Diethylphthalate	ug/Kg	380	U 370 U
43	Dimethylphthalate	ug/Kg	380	U 370 U
44	Fluoranthene	ug/Kg	34	J 370 U
45	Fluorene	ug/Kg	380	U 370 U
	Hexachlorobenzene	ug/Kg	380	
	Hexachlorobutadiene	ug/Kg	380	U 370 U
48	Hexachlorocyclopentadiene	ug/Kg	380	U 370 U
49	Hexachloroethane	ug/Kg	380	
50	Indeno(1,2,3-cd)pyrene	ug/Kg	380	U 370 U
	Isophorone	ug/Kg	380	
	N-Nitroso-di-n-ctopylamine	ug/Kg	380	U 370 U
	N-Nitrosodiphenylamine (1)	ug/Kg	380	
	Naphthalene	ug/Kg	380	<del>-</del>
	Nitrobenzene	ug/Kg	380	
56	Pentachlorophenol	ug/Kg <sub>.</sub>	910	U 910 U
	Phenanthrene	ug/Kg	23	
	Phenol	ug/Kg	380	
	Pyrene	ug/Kg	32	J 370 U
	benzo(k)fluoranthene	ug/Kg	380	U 370 U
	bis(2-Chloroethoxy) methane	ug/Kg	380	U 370 U
	bis(2-Chloroethyl) ether	ug/Kg	380	
	bis(2-Chloroisoctopyl) ether	ug/Kg	380	
64	bis(2-Ethylhexyl)phthalate	ug/Kg	210	JB 220 JB

	SDG:	54646	54646	54646
S	TUDY ID:	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL
	SAMP. ID:	275669	275669	275669
	SAMP. ID:	SB25-16-00MS	SB25-16-00MSD	SB25-16-00
	QC CODE:	MS	MSD	SA
	OISTURE:	10	10	10
	% SOLIDS:			
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	3.7 U	3.7 U	3.7 U
2 4,4'-DDE	UG/KG	2.8 J	2.5 J	3.7 U
3 4,4'-DDT	UG/KG	34	31	3.7 U
4 Aldrin	UG/KG	18	16	1.9 U
5 Aroclor-1016	UG/KG	37 U	37 U	37 U
6 Aroclor-1221	UG/KG	74 U	74 U	74 U
7 Aroclor-1232	UG/KG	37 U	37 U	37 U
8 Aroclor-1242	UG/KG	37 U	37 U	37 U
9 Aroclor-1248	UG/KG	37 U	37 U	37 U
10 Aroclor-1254	UG/KG	37 U	37 U	37 U
11 Aroclor-1260	UG/KG	<b>37</b> U	37 U	37 U
12 Dieldrin	UG/KG	33	31	3.7 U
13 Endosulfan I	UG/KG	1.9 U	1.9 U	1.9 U
14 Endosulfan II	UG/KG	3.7 U	3.7 U	3.7 U
15 Endosulfan sulfate	UG/KG	3.7 U	3.7 U	3.7 U
16 Endrin	UG/KG	35	33	3.7 U
17 Endrin aldehyde	UG/KG	11 P	8.9	8.4 P
18 Endrin ketone	UG/KG	3.7 U	3.7 U	3.7 U
19 Heptachlor	UG/KG	17	16	1.9 U
20 Heptachlor epoxide	UG/KG	1.9 U	1.9 U	1.9 U
21 Methoxychlor	UG/KG	19 U	19 U	19 U
22 Toxaphene	UG/KG	190 U	190 U	190 U
23 alpha-BHC	UG/KG	1.9 U	1.9 U	1.9 U
24 alpha-Chlordane	UG/KG	1.9 U	1.9 U	1.9 U
25 beta-BHC	UG/KG	1.9 U	1.9 U	1.9 U
26 delta-BHC	UG/KG	1.9 U	1.9 U	1.9 U
27 gamma-BHC (Lindane)	UG/KG	14	13	1.9 U
28 gamma-Chlordane	UG/KG	1.9 U	1.9 U	1.9 U
₹				

	SDG:	54646	54646
STU	IDY ID:	PHASE 1	PHASE 1
M	ATRIX:	SOIL	SOIL
LAB SA	MP. ID:	275670	275671
EPA SA	MP. ID:	SB25-16-01	SB25-16-02
QC	CODE:	SA	SA
% MOI	STURE:	13	12
% S	SOLIDS:		
PARAMETER	UNIT	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	3.8 U	3.7 U
2 4,4'-DDE	UG/KG	3.8 U	3.7 U
3 4,4'-DDT	UG/KG	3.8 U	3.7 U
4 Aldrin	UG/KG	<b>2</b> U	1.9 U
5 Aroclor-1016	UG/KG	38 U	37 U
6 Aroclor-1221	UG/KG	77 U	76 U
7 Aroclor-1232	UG/KG	38 U	37 U
8 Aroclor-1242	UG/KG	<b>38</b> U	37 U
9 Aroclor-1248	UG/KG	38 U	37 U
10 Aroclor-1254	UG/KG	38 U	37 U
11 Aroclor-1260	UG/KG	38 U	37 U
12 Dieldrin	UG/KG	3.8 U	3.7 U
13 Endosulfan I	UG/KG	2 U	1.9 U
14 Endosulfan II	UG/KG	3.8 U	3.7 U
15 Endosulfan sulfate	UG/KG	3.8 U	3.7 U
16 Endrin	UG/KG	3.8 U	3.7 U
17 Endrin aldehyde	UG/KG	3.8 U	3.7 U
18 Endrin ketone	UG/KG	3.8 U	3.7 U
19 Heptachlor	UG/KG	2 U	1.9 U
20 Heptachlor epoxide	UG/KG	2 U	1.9 U
21 Methoxychlor	UG/KG	<b>20</b> U	19 U
22 Toxaphene	UG/KG	200 U	190 U
23 alpha-BHC	UG/KG	2 U	1.9 U
24 alpha-Chlordane	UG/KG	2 U	1.9 U
25 beta-BHC	UG/KG	2 U	1.9 U
26 delta-BHC	UG/KG	2 U	1.9 U
27 gamma-BHC (Lindane)	UG/KG	2 U	1.9 U
28 gamma-Chlordane	UG/KG	2 U	1.9 U

	SDG:	54646	54646	54646
S	TUDY ID:	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	SOIL	SOIL	SOIL
LAB	SAMP. ID:	275669	275669	275669
	SAMP. ID:	SB25-16-00MS	SB25-16-00MSD	SB25-16-00
(	QC CODE:	MS	MSD	SA
	OISTURE:	10	10	10
9	% SOLIDS:			
D / D / J (CONT)	t D UT	IIAIITE O	WALTER O	
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	3.7 U	3.7 U	3.7 U
2 4,4'-DDE	UG/KG	2.8 J	2.5 J	3.7 U
3 4,4'-DDT	UG/KG	34	31	3.7 U
4 Aldrin	UG/KG	18	16	1.9 U
5 Aroclor-1016	UG/KG	37 U	37 U	37 U
6 Aroclor-1221	UG/KG	74 U	74 U	74 U 37 U
7 Aroclor-1232	OUNG	37 U	37 U	37 U
8 Aroclor-1242	UG/KG	37 U 37 U	37 U 37 U	37 U
9 Aroclor-1248	UG/KG			
10 Aroclor-1254	UG/KG	37 U 37 U	37 U 37 U	37 U 37 U
11 Aroclor-1260	UG/KG		37 0	3.7 U
12 Dieldrin	UG/KG	33 1.9 U		1.9 U
13 Endosulfan I	UG/KG		1.9 U	3.7 U
14 Endosulfan II	UG/KG	3.7 U 3.7 U	3.7 U 3.7 U	3.7 U
15 Endosulfan sulfate	UG/KG UG/KG	35	33	3.7 U
16 Endrin	UG/KG UG/KG	11 P	8.9	8.4 P
17 Endrin aldehyde	UG/KG	3.7 U	3.7 U	3.7 U
18 Endrin ketone	UG/KG	17	16	1.9 U
<ul><li>19 Heptachlor</li><li>20 Heptachlor epoxide</li></ul>	UG/KG	1.9 U	1.9 U	1.9 U
21 Methoxychlor	UG/KG	1.9 U	1.9 U	1.9 U
22 Toxaphene	UG/KG	190 U	190 U	190 U
23 alpha-BHC	UG/KG	1.9 U	1.9 U	1.9 U
24 alpha-Chlordane	UG/KG	1.9 U	1.9 U	1.9 U
25 beta-BHC	UG/KG	1.9 U	1.9 U	1.9 U
26 delta-BHC	UG/KG	1.9 U	1.9 U	1.9 U
27 gamma-BHC (Lindane)	UG/KG	1.9 0	1.9 0	1.9 U
=	UG/KG	1.9 U	1.9 U	1.9 U
28 gamma-Chlordane	UU/NU	1.9 U	1.9 U	1.9 U

	SDG:	54646	54646
ST	CUDY ID:	PHASE 1	PHASE 1
MATRIX:		SOIL	SOIL
LAB SAMP. ID: EPA SAMP. ID:		275670	275671
		SB25-16-01	SB25-16-02
Q	C CODE:	SA	SA
% MC	DISTURE:	13	12
%	SOLIDS:		
PARAMETER	UNIT	VALUE Q	VALUE Q
1 4,4'-DDD	UG/KG	3.8 U	3.7 U
2 4,4'-DDE	UG/KG	3.8 U	3.7 U
3 4,4'-DDT	UG/KG	3.8 U	3.7 U
4 Aldrin	UG/KG	2 U	1.9 U
5 Aroclor-1016	UG/KG	<b>38</b> U	37 U
6 Aroclor-1221	UG/KG	<b>77</b> U	76 U
7 Aroclor-1232	UG/KG	38 U	37 U
8 Aroclor-1242	UG/KG	<b>38</b> U	37 U
9 Aroclor-1248	UG/KG	38 U	37 U
10 Aroclor-1254	UG/KG	<b>38</b> U	37 U
11 Aroclor-1260	UG/KG	38 U	37 U
12 Dieldrin	UG/KG	3.8 U	3.7 U
13 Endosulfan I	UG/KG	2 U	1.9 U
14 Endosulfan II	UG/KG	3.8 U	3.7 U
15 Endosulfan sulfate	UG/KG	3.8 U	3.7 U
16 Endrin	UG/KG	3.8 U	3.7 U
17 Endrin aldehyde	UG/KG	3.8 U	3.7 U
18 Endrin ketone	UG/KG	3.8 U	3.7 U
19 Heptachlor	UG/KG	2 U	1.9 U
20 Heptachlor epoxide	UG/KG	2 U	1.9 U
21 Methoxychlor	UG/KG	20 U	19 U
22 Toxaphene	UG/KG	<b>200</b> U	190 U
23 alpha-BHC	UG/KG	<b>2</b> U	1.9 U
24 alpha-Chlordane	UG/KG	2 U	1.9 U
25 beta-BHC	UG/KG	<b>2</b> U	1.9 U
26 delta-BHC	UG/KG	<b>2</b> U	1.9 U
27 gamma-BHC (Lindane)	UG/KG	2 U	1.9 U
28 gamma-Chlordane	UG/KG	2 U	1.9 U

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	SDG:		54646	54646	54646
	STUDY ID:		PHASE 1	PHASE 1	PHASE 1
	MATRIX:		SOIL	SOIL	SOIL
	LAB SAMP. ID:		275669	275670	275671
	EPA SAMP. ID:		SB25-16-00	SB25-16-01	SB25-16-02
	QC CODE:		SA	SA	SA
	% MOISTURE:				
	% SOLIDS:		90.4	87.1	88.5
PARAMETER	UNIT		VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	MG/K		18400	13900	9510
2 Antimony	MG/K	į.	0.44 B	0.76 B	0.47 B
3 Arsenic	MG/K		6.3	4.4	4
4 Barium	MG/K		75.4	66.8	60.5
5 Beryllium	MG/K		0.92 B	0.66 B	0.46 B
6 Cadmium	MG/K		0.06 U	0.06 U	0.04 U
7 Calcium	MG/K		3350 *	62300 *	57800 *
8 Chromium	MG/K		25.8	20.3	14.8
9 Cobalt	MG/K		9.4	8.3 B	9.2
10 Copper	MG/K		25.8	23.6	21
11 Cyanide	MG/K		0.51 U	0.67 U	0.59 U
12 Iron	MG/K		30300	22100	18300
13 Lead	MG/K		15.9 N	8.6 N	7.9 N
14 Magnesium	MG/K		4980	13000	11200
15 Manganese	MG/K		308 N	375 N	395 N
16 Mercury	MG/K		0.01 B	0.03 B	0.01 B
17 Nickel	MG/K		31.3	28.3	26.3
18 Potasium	MG/K		1940 E	2230 E	1460 E
19 Selenium	MG/K		0.68 U	0.71 U	0.51 U
20 Silver	MG/K		0.96 U	1 U	0.71 U
21 Sodium	MG/K		124 B	81.2 B	129 B
22 Thallium	MG/K		1.1 B	0. <b>58</b> U	0.63 B
23 Vanadium	MG/K		32.7	23.9	15.7
24 Zinc	MG/K		84.8 *	87.4 *	62.3 *

SDO STUDY II MATRIX LAB SAMP. II EPA SAMP. II QC CODI % MOISTURI % SOLID:	D: C: D: D: E: E:	54890 PHASE 1 WATER 278202 MW26-70 DU	54890 PHASE 1 WATER 278201 MW26-7R FB	54890 PHASE 1 WATER 278200 MW26-7MS MS	54890 PHASE 1 WATER 278200 MW26-7MSD MSD
DAD AN IETTED	I D ITT	WALLET O	TALLET O	******	******
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1,2-Tetrachloroethane	UG/L	0.5 U	0.5 U	11	, 9
2 1,1,1-Trichloroethane	UG/L	0.5 U	0.5 U	9	. 9
3 1,1,2,2-Tetrachloroethane	UG/L	0.5 U	0.5 U	10	10
4 1,1-Dichloroethane	UG/L UG/L	0.5 U 0.5 U	0.5 U 0.5 U	9	9
5 1,1-Dichloroethene				9	9
6 1,1-Dichloropropene	UG/L UG/L	0.5 U 0.5 U	0.5 U 0.5 U	9	9
7 1,2,3-Trichlorobenzene				8	9
8 1,2,3-Trichloropropane	UG/L UG/L	0.5 U	0.5 U 0.5 U	10	9
9 1,2,4-Trichlorobenzene	UG/L UG/L	0.5 U 6	0.5 U	8 21	8
10 1,2,4-Trimethylbenzene	UG/L UG/L	0.5 U	0.5 U		19
<ul><li>11 1,2-Dibromo-3-Chloropropane</li><li>12 1,2-Dibromoethane</li></ul>	UG/L	0.5 U	0.5 U	10 9	10 10
•	UG/L	0.5 U	0.5 U	9	
13 1,2-Dichlorobenzene	UG/L	0.5 U	0.5 U	9	9 9
<ul><li>14 1,2-Dichloroctopane</li><li>15 1,2-Dichloroethane</li></ul>	UG/L UG/L	0.5 U	0.5 U	9	9
16 1,3,5-Trimethylbenzene	UG/L UG/L	2	0.5 U	11	
• •	UG/L UG/L	0.5 U	0.5 U		12
17 1,3,5-Trimethylbenzene	UG/L UG/L	0.5 U		9	9
18 1,3-Dichlorobenzene			0.5 U	9	9
19 1,4-Dichlorobenzene	UG/L	0.5 U	0.5 U	9	9
20 2,2-Dichloropropane	UG/L UG/L	0.5 U 5 U	0.5 U	9	9
21 2-Butanone 22 2-Chlorotoluene			5 U	26	26
	UG/L	0.5 U	0.5 U	9	9
23 4-Chlorotoluene	UG/L	0.5 U	0.5 U	9	9
24 4-Methyl-2-Pentanone	UG/L	5 U	5 U	27	27
25 Acetone 26 Benzene	UG/L UG/L	5 U	5 U	26	25
		1	0.5 U	10	11
27 Bromochloromethane	UG/L	0.5 U	0.5 U	10	10
28 Bromodichloromethane 29 Bromoform	UG/L UG/L	0.5 U 0.5 U	0.5 U	9	9
			0.5 U	8	8
30 Bromomethane	UG/L	0.5 U	0.5 U	9	9
31 Carbon Disulfide	UG/L	0.5 U	0.5 U	8	8
32 Carbon Tetrachloride	UG/L	0.5 U	0.5 U	9	9
33 Chlorobenzene	UG/L	0.5 U	0.5 U	9	9

ALUE Q VALUE Q 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0 0.5 U 0 0 0.5 U 0 0 0.5 U 0 0 0.5 U 0 0 0.5 U 0 0 0.5 U 0 0 0.5 U 0 0 0.5 U 0 0 0 0.5 U 0 0 0 0.5 U 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	E1 PHASE ER WATEL D1 278200 FR MW26-7M FB M  UE Q VALU  .5 U 10 2 10 .5 U 5 U 5 U 5 U 10 .5 U 10 .5 U 10 .5 U 10 .5 U 10 .5 U 10 .5 U 10 .5 U 10 .5 U 10 .5 U 10 .5 U 10 .5 U 10 .5 U 10 .5 U 10 .5 U 10 .5 U 10	### PHASE 1 ### WATER ### ### ### ### ### ### ### ### ### ##	Q
78202 278202 278202 278202 MW26-70 MW26-70 DU II	ER WATEL 21 278200 7R MW26-7M FB M  UE Q VALU 1.5 U 10 2 10 5.5 U 2 5.5 U 3 5.	ER WATER 278200 278200 MW26-7MSD MSD WALUE 0 10 10 9 8 8 8 10 10 8 8 15 15 7	Q
78202 278202 278202 278202 MW26-70 MW26-70 DU II	DI 278200  OR MW26-7M  FB M  OF Q VALU  OF S U	278200 MSD MW26-7MSD MSD MSD UE Q VALUE 10 10 9 8 8 8 10 10 8 8 15 15 7	Q
726-70 MW26-70 DU II  ALUE Q VALUE Q 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0	TR MW26-7M TB M  TE Q VALU  1.5 U 10 2 10 1.5 U 2 1.5 U 3 1.5	MW26-7MSD MSD  DE Q VALUE 10 10 10 9 8 8 8 10 10 8 8 15 7	Q
DU H  ALUE Q VALU  0.5 U 0  0.5 U 0  0.5 U 0  0.5 U 0  0.5 U 0  0.5 U 0  0.5 U 0  0.5 U 0  0.5 U 0  0.5 U 0  0.5 U 0  0.5 U 0  0.5 U 0	JE Q VALU  .5 U 10  2 10  .5 U 5  .5 U 5  .5 U 10  .5 U 10  .5 U 10  .5 U 11  .5 U 11	MSD  JE Q VALUE 10 10 10 9 8 8 8 10 10 8 8 15 15 7	Q
ALUE Q VALUE Q 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0 0.5 U 0 0 0.5 U 0 0 0.5 U 0 0 0.5 U 0 0 0 0.5 U 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	JE Q VALU. 1.5 U 10 2 10 1.5 U 5 1.5 U 10 1.5 U 10 1.5 U 10 1.5 U 10 1.5 U 11	VALUE Q VALUE 10 10 10 9 8 8 8 10 10 8 8 15 15 7	Q
0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0	1.5 U 10 2 10 1.5 U 5 1.5 U 10 1.5 U 10 1.5 U 10	10       10       10       9       8       8       10       8       8       15       7	Q
0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0	1.5 U 10 2 10 1.5 U 5 1.5 U 10 1.5 U 10 1.5 U 10	10       10       10       9       8       8       10       8       8       15       7	Q
0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0	1.5 U 10 2 10 1.5 U 5 1.5 U 10 1.5 U 10 1.5 U 10	10       10       10       9       8       8       10       8       8       15       7	Q
0.5 U 0.5 U 0.5 U 0.5 U 0.5 U 0.5 U 0.5 U 0.5 U 0.5 U 0.5 U 0.5 U 0.5 U 0.5 U 0.5 U	2 10 .5 U .5 .5 U .6 .5 U .6 .5 U .6 .5 U .6	10 9 8 8 8 10 10 8 8 15 15 7	
0.5 U 0 0.5 U 0 0.5 U 0 0.5 U 0 6 0 0.5 U 0	.5 U .5 U .5 U .5 U .5 U .5 U .5 U .5 U	9 8 8 8 10 10 8 8 15 15 7 7	
0.5 U 0 0.5 U 0 0.5 U 0 6 0 0.5 U 0	.5 U .5 U .5 U .5 U .5 U .5 U .5 U .5 U	8 8 10 10 8 8 15 15 7 7	
0.5 U 0 0.5 U 0 6 0 0.5 U 0	1.5 U 10 1.5 U 11 1.5 U 11	10 10 8 8 15 15 7 7	
0.5 U 0 6 0 0.5 U 0	.5 U :	8 8 15 15 7 7	
6 0 0.5 U 0	.5 U 1:	15 7 7	
0.5 U 0		7 7	
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		6 8	
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		9 10	
		10 10	
0.5 U 0	.5 U	9 9	
		8 8	
		29 30	
		10 10	
		9 9	
		9 9	
0.5 U 0			
0.5 U 0 3 0	.5 U		
0.5 U 0 3 0 2 0			
0.5 U 0 3 0 2 0 2 0	.5 U 1	9 8	
0.5 U 0 3 0 2 0 2 0 0.5 U 0	.5 U 1		
0.5 U 0 3 0 2 0 2 0 0.5 U 0 0.5 U 0	.5 U 1 .5 U !	10 10 9	
	3 0.	3 0.5 U 1 2 0.5 U 2 0.5 U 1	3 0.5 U 12 12 2 0.5 U 9 9 2 0.5 U 11 10 0.5 U 0.5 U 9 8

7 7	$\sim$	
v	$\mathbf{oc}$	S

SD	G:	54890	54890	54890	54890	54890
STUDY I	D:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE I
MATRI	X:	WATER	WATER	WATER	WATER	WATER
LAB SAMP. I	D:	278187	278795	278796	277052	277497
EPA SAMP. I	D:	MW26-1	MW26-10	MW26-11	MW26-3	MW26-4
QC COD	E:	SA	SA	SA	SA	SA
% MOISTUR	E:					
% SOLID	S:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1,2-Tetrachloroethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2 1,1,1-Trichloroethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
3 1,1,2,2-Tetrachloroethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4 1,1-Dichloroethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
5 1,1-Dichloroethene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
6 1,1-Dichloropropene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
7 1,2,3-Trichlorobenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
8 1,2,3-Trichloropropane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
9 1,2,4-Trichlorobenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
10 1,2,4-Trimethylbenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
11 1,2-Dibromo-3-Chloropropane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
12 1,2-Dibromoethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
13 1,2-Dichlorobenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
14 1,2-Dichloroctopane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
15 1,2-Dichloroethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
16 1,3,5-Trimethylbenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
17 1,3,5-Trimethylbenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
18 1,3-Dichlorobenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
19 1,4-Dichlorobenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
20 2,2-Dichloropropane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
21 2-Butanone	UG/L	5 U	5 U	5 U	5 U	5 U
22 2-Chlorotoluene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
23 4-Chlorotoluene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
24 4-Methyl-2-Pentanone	UG/L	5 U	5 U	5 U	5 U	5 U
25 Acetone	UG/L	5 U	5 U	5 U	5 U	5 U
26 Benzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
27 Bromochloromethane	UG/L	0.5 U	0.5 U	0.5 U	<b>0.5</b> U	0.5 U
28 Bromodichloromethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
29 Bromoform	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
30 Bromomethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
31 Carbon Disulfide	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
32 Carbon Tetrachloride	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
33 Chlorobenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

VOCS						
STUD' MAT LAB SAMI EPA SAMI QC CC % MOIST % SOI	RIX: P. ID: P. ID: ODE: URE:	54890 PHASE 1 WATER 278187 MW26-1 SA	54890 PHASE 1 WATER 278795 MW26-10 SA	54890 PHASE 1 WATER 278796 MW26-11 SA	54890 PHASE 1 WATER 277052 MW26-3 SA	54890 PHASE 1 WATER 277497 MW26-4 SA
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
Chloroethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluromethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorobutadiene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene Chloride	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	UG/L	0.5 U	0:5 U	0.5 U	, 0.5 U	0.5 U
Styrene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl Chloride	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethane	UG/L	0.5 Ü	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloroctopene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
n-Butylbenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
n-Propylbenzene	UG/L ·	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Isopropyltoluene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
sec-Butylbenzene	UG/L	0.5 U	0.5 Ü	0.5 U	0.5 U	0.5 U
tert-Butylbenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloroctopene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

VOCs

	SDO STUDY II		54890 PHASE 1	54890 PHASE 1	54890 PHASE 1	54890 PHASE 1	54890 PHASE 1
	MATRIX		WATER	WATER	WATER	WATER	WATER
	LAB SAMP. II	<b>)</b> :	277053	277054	278200	277300	278188
	EPA SAMP. II	<b>D</b> :	MW26-5	MW26-6	MW26-7	MW26-8	MW26-9
	QC CODI	E:	SA	SA	SA	SA	SA
	% MOISTURI	E:					
	% SOLID	S:					
					i i		
	PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
	1,1,1,2-Tetrachloroethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2	1,1,1-Trichloroethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	1,1,2,2-Tetrachloroethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	1,1-Dichloroethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	1,1-Dichloroethene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	1,1-Dichloropropene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	1,2,3-Trichlorobenzene	UG/L	0.5 Ü	0.5 U	0.5 U	0.5 U	0.5 U
	1,2,3-Trichloropropane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	1,2,4-Trichlorobenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	1,2,4-Trimethylbenzene	UG/L	0.5 U	0.5 U	11	0.5 U	0.5 U
	1,2-Dibromo-3-Chloropropane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	1,2-Dibromoethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	1,2-Dichlorobenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	1,2-Dichloroctopane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	1,2-Dichloroethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	1,3,5-Trimethylbenzene	UG/L	0.5 U	0.5 U	3	0.5 U	0.5 U
	1,3,5-Trimethylbenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	1,3-Dichlorobenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	1,4-Dichlorobenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	2,2-Dichloropropane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	2-Butanone	UG/L	5 U	5 U	5 U	5 U	5 U
	2-Chlorotoluene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	4-Chlorotoluene 4-Methyl-2-Pentanone	UG/L UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	Acetone	UG/L UG/L	5 U 5 U	5 U	5 U	5 U	5 U
	Benzene	UG/L UG/L		5 U	5	5 U	5 U
	Bromochloromethane		0.5 U	0.5 U	2	0,5 U	0.5 U
	Bromodichloromethane	UG/L UG/L	0.5 U 0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	Bromoform	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	Bromomethane			0.5 U	0.5 U	0.5 U	0.5 U
	Carbon Disulfide	UG/L UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	Carbon Distinge Carbon Tetrachloride	UG/L UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	Chlorobenzene	UG/L UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
33	Chiologenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

OCs						
STUD MAT LAB SAM	TRIX: P. ID:	54890 PHASE 1 WATER 277053	54890 PHASE 1 WATER 277054	54890 PHASE 1 WATER 278200	54890 PHASE 1 WATER 277300	54890 PHASE I WATER 278188
EPA SAM		MW26-5	MW26-6	MW26-7	MW26-8	MW26-9
QC C		SA	SA	SA	SA	SA
% MOIST						
% SOI	LIDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
Chloroethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromochloromethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluromethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethylbenzene	UG/L	0.5 U	0.5 U	7	0.5 U	0.5 U
Hexachlorobutadiene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	UG/L	0.5 U	0.5 U	3	0.5 U	0.5 U
Methylene Chloride	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	UG/L	0.5 U	0.5 U	10	0.5 U	0.5 U
Styrene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Tetrachloroethene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl Chloride	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	UG/L	0.5 U	0.5 U	2	0.5 U	0.5 U
cis-1,2-Dichloroethane	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloroctopene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
n-Butylbenzene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
n-Propylbenzene	UG/L ·	0.5 U	0.5 U	3	0.5 U	0.5 U
p-Isopropyltoluene	UG/L	0.5 U	0.5 U	3	0.5 U	0.5 U
sec-Butylbenzene	UG/L	0.5 U	0.5 U	2	0.5 U	0.5 U
tert-Butylbenzene	UG/L	0.5 U	0.5 U	0.3 J	0.5 U	0.5 U
trans-1,2-Dichloroethene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloroctopene	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
,						0.5

VOC	S			
	SDC	3:	54890	54890
	STUDY II	D:	PHASE 1	PHASE 1
	MATRI	X:	WATER	WATER
	LAB SAMP. II	D:	278189	277055
	EPA SAMP. II	D:	TB111395	TB11595
	QC CODI	E:	TB	TB
	% MOISTUR	E:		
	% SOLID	S:		
	PARAMETER	UNIT	VALUE Q	VALUE Q
1	1,1,1,2-Tetrachloroethane	UG/L	0.5 U	0.5 U
	1,1,1-Trichloroethane	UG/L	0.5 U	0.5 U
3	1,1,2,2-Tetrachloroethane	UG/L	0.5 U	0.5 U
4	1,1-Dichloroethane	UG/L	0.5 U	0.5 U
5	1,1-Dichloroethene	UG/L	0.5 U	0.5 U
6	1,1-Dichloropropene	UG/L	0.5 U	0.5 U
7	1,2,3-Trichlorobenzene	UG/L	0.5 U	0.5 U
	1,2,3-Trichloropropane	UG/L	0.5 U	0.5 U
9	1,2,4-Trichlorobenzene	UG/L	0.5 U	0.5 U
	1,2,4-Trimethylbenzene	UG/L	0.5 U	0.5 U
11	1,2-Dibromo-3-Chloropropane	UG/L	0.5 U	0.5 U
12	1,2-Dibromoethane	UG/L	0.5 U	0.5 U
13	1,2-Dichlorobenzene	UG/L	0.5 U	0.5 U
14	1,2-Dichloroctopane	UG/L	0.5 U	0.5 U
15	1,2-Dichloroethane	UG/L	0.5 U	0.5 U
16	1,3,5-Trimethylbenzene	UG/L	0.5 U	0.5 U
17	1,3,5-Trimethylbenzene	UG/L	0.5 U	0.5 U
18	1,3-Dichlorobenzene	UG/L	0.5 U	0.5 U
19	1,4-Dichlorobenzene	UG/L	0.5 U	0.3 J
20	2,2-Dichloropropane	UG/L	0.5 U	0.5 U
21	2-Butanone	UG/L	5 U	5 U
22	2-Chlorotoluene	UG/L ·	0.5 U	0.5 U
23	4-Chlorotoluene	UG/L	0.5 U	0.5 U
24	4-Methyl-2-Pentanone	UG/L	5 U	5 U
25	Acetone	UG/L	5 U	5 U
26	Benzene	UG/L	0.5 U	0.5 U
27	Bromochloromethane	UG/L	0.5 U	0.5 U
28	Bromodichloromethane	UG/L	0.5 U	0.5 U
29	Bromoform	UG/L	0.5 U	0.5 U
30	Bromomethane	UG/L	0.5 U	0.5 U
31	Carbon Disulfide	UG/L	0.5 U	0.5 U
32	Carbon Tetrachloride	UG/L	0.5 U	0.5 U
33	Chlorobenzene	UG/L	0.5 U	0.5 U

	SDG:	54890	54890
STUD	Y ID:	PHASE 1	PHASE 1
MA	TRIX:	WATER	WATER
LAB SAM	P. ID:	278189	277055
EPA SAM	P. ID:	TB111395	TB11595
QC C	ODE:	TB	TB
% MOIST			
% SO:	LIDS:		
PARAMETER	UNIT '	VALUE Q	VALUE Q
Chloroethane	UG/L	0.5 U	0.5 U
Chloroform	UG/L	3	0.5 U
Chloromethane	UG/L	0.5 U	0.5 U
Dibromochloromethane	UG/L	0.5 U	0.5 U
Dibromomethane	UG/L	0.5 U	0.5 U
Dichlorodifluromethane	UG/L	0.5 U	0.5 U
Ethylbenzene	UG/L	0.5 U	0.5 U
Hexachlorobutadiene	UG/L	0.5 U	0.5 U
Isopropylbenzene	UG/L	0.5 U	0.5 U
Methylene Chloride	UG/L	0.5 U	0.5 U
Naphthalene	UG/L	0.5 U	0.5 U
Styrene	UG/L	0.5 U	0.5 U
Tetrachloroethene	UG/L	0.5 U	0.5 U
Toluene	UG/L	0.5 U	0.5 U
Trichloroethene	UG/L	0.5 U	0.5 U
Trichlorofluoromethane	UG/L	0.5 U	0.5 U
Vinyl Chloride	UG/L	0.5 U	0.5 U
Xylene (total)	UG/L	0.5 U	0.5 U
cis-1,2-Dichloroethane	UG/L	0.5 U	0.5 U
cis-1,3-Dichloroctopene	UG/L	0.5 U	0.5 U
n-Butylbenzene	UG/L	0.5 U	0.5 U
n-Propylbenzene	UG/L ·	0.5 U	0.5 U
p-Isopropyltoluene	UG/L	0.5 U	0.5 U
sec-Butylbenzene	UG/L	0.5 U	0.5 U
tert-Butylbenzene	UG/L	0.5 U	0.5 U
trans-1,2-Dichloroethene	UG/L	0.5 U	0.5 U
trans-1,3-Dichloroctopene	UG/L	0.5 U	0.5 U

CIT	-20
2 1	OCs.

SVOCS					i	
S STUDY MAT LAB SAMP EPA SAMP QC CC % MOISTU % SOL	RIX: 7. ID: 7. ID: DDE: JRE:	54890 PHASE 1 WATER 278202 MW26-70 DU	54890 PHASE 1 WATER 278201 MW26-7R FB	54890 PHASE 1 WATER 278200 MW26-7MS MS	54890 PHASE 1 WATER 278200 MW26-7MSD MSD	54890 PHASE 1 WATER 278187 MW26-1 SA
PARAME	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/L	10 U	11 · U	17	23	11 U
1 1,2,4-Trichlorobenzene	UG/L	10 U	11 U	17	23	11 U
2 1,2-Dichlorobenzene	UG/L	10 U	11 U	10 U	11 · U	11 U
3 1,3-Dichlorobenzene	UG/L	10 U	11 U	10 U	11 U	11 U
4 1,4-Dichlorobenzene	UG/L	10 U	11 U	10	20	11 U
5 2,4,5-Trichlorophenol	UG/L	25 U	27 U	25 U	<b>2</b> 6 U	27 U
6 2,4,6-Trichlorophenol	UG/L	10 U	11 U	10 U	11 U	11 U
7 2,4-Dichlorophenol	UG/L	10 U	11 U	10 U	11 U	11 U
8 2,4-Dimethylphenol	UG/L	10 U	11 U	10 U	11 U	11 U
9 2.4-Dinitrophenol	UG/L	25 U	27 U	25 U	<b>2</b> 6 U	27 U
10 2,4-Dinitrotoluene	UG/L	10 U	11 U	25	26	11 U
11 2,6-Dinitrotoluene	UG/L	10 U	11 U	10 U	11 U	11 U
12 2-Chloronaphthalene	UG/L	10 U	11 U	10 U	11 U	11 U
13 2-Chlorophenol	UG/L	10 U	11 U	29	37	11 U
14 2-Methylnaphthalene	UG/L	10	11 U	6 Ј	4 J	11 U
15 2-Methylphenol	UG/L	10 U	11 U	10 U	11 U	11 U
16 2-Nitroaniline	UG/L	25 U	27 U	25 U	26 U	27 U
17 2-Nitrophenol	UG/L	10 U	11 U	10 U	11 U	11 U
18 3,3'-Dichlorobenzidine	UG/L	10 U	11 U	10 U	11 U	11 U
19 3-Nitroaniline	UG/L	25 U	27 U	25 U	26 U	27 U
20 4,6-Dinitro-2-methylphenol	UG/L	25 U	27 U	25 U	<b>2</b> 6 U	27 U
21 4-Bromophenyl-phenylether	UG/L	10 U	11 U	10 U	11 U	11 U
22 4-Chloro-3-methylphenol	UG/L	10 U	11 U	49	45	11 U
23 4-Chloroaniline	UG/L	10 U	11 U	10 U	11 U	11 U
24 4-Chlorophenyl-phenylether	UG/L	10 U	11 U	10 U	11 U	11 U
25 4-Methylphenol	UG/L	10 U	11 U	10 U	11 U	11 U
26 4-Nitroaniline	UG/L	25 U	27 U	25 U	26 U	27 U
27 4-Nitrophenol	UG/L	25 U	27 U	70	80	27 U
28 Acenaphthene	UG/L	4 J	11 U	26	23	11 U
29 Acenaphthylene	UG/L	10 U	11 U	10 U	11 U	11 U
30 Anthracene	UG/L	10 U	11 U	10 U	11 U	11 U
31 Benzo(a)anthracene	UG/L	10 U	11 U	10 U	11 U	11 U
32 Benzo(a)pyrene	UG/L	10 U	11 U	10 U	11 U	11 U
33 Benzo(b)fluoranthene	UG/L	10 U	11 U	10 U	11 U	11 U
34 Benzo(g,h,i)perylene	UG/L	10 U	11 U	10 U	11 U	11 U .
				,	11 0	11 0 .

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SE STUDY: MATR LAB SAMP.: EPA SAMP.: QC COI % MOISTUR % SOLII	ID: IX: ID: ID: DE: RE:	54890 PHASE 1 WATER 278202 MW26-70 DU	54890 PHASE 1 WATER 278201 MW26-7R FB	54890 PHASE 1 WATER 278200 MW26-7MS MS	54890 PHASE 1 WATER 278200 MW26-7MSD MSD	54890 PHASE I WATER 278187 MW26-1 SA
		WALLE: O	WALLE O	WALLE O	VALUE Q	VALUE Q
PARAMET 1 1,2,4-Trichlorobenzene	ER UNIT UG/L	VALUE Q 10 U	VALUE Q 11 U	VALUE Q 17	23	VALUE Q 11 U
35 Butylbenzylphthalate	UG/L UG/L	10 U	11 U	17 10 U	11 U	11 U
36 Carbazole	UG/L	10 U	11 U	10 U	11 U	11 U
37 Chrysene	UG/L	10 U	11 U	10 U	11 U	11 U
38 Di-n-butylphthalate	UG/L	10 U	11 U	10 U	11 U	11 U
39 Di-n-oprylphthalate	UG/L	10 U	11 U	10 U	11 U	11 U
40 Dibenz(a,h)anthracene	UG/L	10 U	11 U	10 U	11 U	11 U
41 Dibenzofuran	UG/L	3 J	11 U	2 J	2 J	11 U
42 Diethylphthalate	UG/L	10 U	11 U	10 U	11 U	11 U
43 Dimethylphthalate	UG/L	10 U	11 U	10 U	11 U	11 U
44 Fluoranthene	UG/L	10 U	11 U	10 U	11 U	11 U
45 Fluorene	UG/L	5 J	11 U	3 J	3 Ј	11 U
46 Hexachlorobenzene	UG/L	10 U	11 U	10 U	11 U	11 U
47 Hexachlorobutadiene	UG/L	10 U	11 U	10 U	11 U	11 U
48 Hexachlorocyclopentadiene	UG/L	10 U	11 U	10 U	11 U	11 U
49 Hexachloroethane	UG/L	10 U	11 U	10 U	11 U	11 U
50 Indeno(1,2,3-cd)pyrene	UG/L	10 U	11 U	10 U	11 U	11 U
51 Isophorone	UG/L	10 U	11 U	10 U	11 U	11 U
52 N-Nitroso-di-n-ctopylamine	UG/L	10 U	11 U	25	28	11 U
53 N-Nitrosodiphenylamine (1)	UG/L	10 U	. 11 U	10 U	11 U	11 U
54 Naphthalene	UG/L	14	11 U	6 Ј	5 Ј	11 U
55 Nitrobenzene	UG/L	10 U	11 U	10 U	11 U	11 U
56 Pentachlorophenol	UG/L .	25 U	<b>27</b> U	56	66	27 U
57 Phenanthrene	UG/L	2 J	11 U	1 J	2 Ј	11 U
58 Phenol	UG/L	10 U	11 U	37	40	11 U
59 Pyrene	UG/L	10 U	11 U	31	28	11 U
60 benzo(k)fluoranthene	UG/L	10 U	11 U	10 U	11 U	11 U
61 bis(2-Chloroethoxy) methane	UG/L	10 U	11 U	10 U	11 U	11 U
62 bis(2-Chloroethyl) ether	UG/L	10 U	11 U	10 U	11 U	11 U
63 bis(2-Chloroisoctopyl) ether	UG/L	10 U	11 U	10 U	11 U	11 U
64 bis(2-Ethylhexyl)phthalate	UG/L	12 B	5 BJ	10 U	11 U	2 BJ

CI	OCs
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	SDG:	54890	54890	54890	54890	54890
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MAT		WATER	WATER	WATER	WATER	WATER
LAB SAMP	ID:	278795	278796	277052	277497	277053
EPA SAMP		MW26-10	MW26-11	MW26-3	MW26-4	MW26-5
QC CC		SA	SA			
% MOIST		SA	SA	SA	SA	SA
% MOISTC				0		0
% SOL	1D2:					
PARAME	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/L	11 U	11 U	10 U	11 U	10 U
1 1,2,4-Trichlorobenzene	UG/L	11 U	11 U	10 U	11 U	10 U
2 1,2-Dichlorobenzene	UG/L	11 U	11 U	10 U	11 U	10 U
3 1,3-Dichlorobenzene	UG/L	11 U	11 U	10 U	11 Ŭ	10 U
4 1.4-Dichlorobenzene	UG/L	11 U	11 U	10 U	11 Ü	10 U
5 2,4,5-Trichlorophenol	UG/L	27 U	27 U	25 U	27 U	25 U
6 2,4,6-Trichlorophenol	UG/L	11 U	11 U	10 U	11 U	10 U
7 2,4-Dichlorophenol	UG/L	11 U	11 U	10 U	11 U	10 U
8 2,4-Dimethylphenol	UG/L	11 U	11 U	10 U	11 U	10 U
9 2,4-Dinitrophenol	UG/L	27 U	27 U	25 U	27 U	25 U
10 2,4-Dinitrotoluene	UG/L	11 U	11 U	10 U	11 U	10 U
11 2,6-Dinitrotoluene	UG/L	11 U	11 U	10 U	11 U	
12 2-Chloronaphthalene	UG/L	11 U	11 U	10 U		10 U
13 2-Chlorophenol	UG/L	11 U	11 U	10 U	11 U	10 U
14 2-Methylnaphthalene	UG/L	11 U	11 U	10 U	11 U	10 U
15 2-Methylphenol	UG/L	11 U	11 U	_	11 U	10 U
16 2-Nitroaniline	UG/L	27 U	27 U	10 U	11 U	10 U
17 2-Nitrophenol	UG/L	27 U	27 U 11 U	25 U	27 U	25 U
18 3,3'-Dichlorobenzidine	UG/L	11 U		10 U	11 U	10 U
19 3-Nitroaniline	UG/L	27 U	11 U	10 U	11 U	10 U
20 4,6-Dinitro-2-methylphenol	UG/L		27 U	25 U	27 U	25 U
		27 U	27 U	25 U	27 U	25 U
21 4-Bromophenyl-phenylether 22 4-Chloro-3-methylphenol	UG/L UG/L	11 U	11 U	10 U	11 U	10 U
		11 U	11 U	10 U	11 U	10 U
23 4-Chloroaniline	UG/L	11 U	11 U	10 U	11 U	10 U
24 4-Chlorophenyl-phenylether	UG/L	11 U	11 U	10 U	11 U	10 U
25 4-Methylphenol	UG/L	11 U	11 U	10 U	11 U	10 U
26 4-Nitroaniline	UG/L	27 U	27 U	25 U	27 U	25 U
27 4-Nitrophenol	UG/L	27 U	27 U	25 U	27 U	25 U
28 Acenaphthene	UG/L	11 U	11 U	10 U	11 U	10 U
29 Acenaphthylene	UG/L	11 U	11 U	10 U	11 U	10 U
30 Anthracene	UG/L	11 U	11 U	10 U	11 U	10 U
31 Benzo(a)anthracene	UG/L	11 U	11 U ·	10 U	11 U	10 U
32 Benzo(a)pyrene	UG/L	11 U	11 U	10 U	11 U	10 U
33 Benzo(b)fluoranthene	UG/L	11 U	11 U	10 U	11 U	10 U
34 Benzo(g,h,i)perylene	UG/L	11 U	11 U	10 U	11 U	10 U
					11 0	10 0

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SVOCs						
SD STUDY I MATRI	D:	54890 PHASE 1 WATER	54890 PHASE 1 WATER	54890 PHASE 1 WATER	54890 PHASE 1 WATER	54890 PHASE 1 WATER
						277053
LAB SAMP. I		278795	278796	277052	277497	
EPA SAMP. I		MW26-10	MW26-11	MW26-3	MW26-4	MW26-5
QC COL		SA	SA	SA	SA	SA 0
% MOISTUR				0		U
% SOLII	DS:					
PARAMET		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/L	11 U	11 U	10 U	i 11 U	10 U
35 Butylbenzylphthalate	UG/L	11 U	11 U	10 U	11 U	10 U
36 Carbazole	UG/L	11 U	11 U	10 U	11 U	10 U
37 Chrysene	UG/L	11 U	11 U	10 U	11 U	10 U
38 Di-n-butylphthalate	UG/L	11 U	11 U	10 U	11 U	10 U
39 Di-n-oprylphthalate	UG/L	11 U	11 U	10 U	11 U	10 U
40 Dibenz(a,h)anthracene	UG/L	11 U	11 U	10 U	11 U	10 U
41 Dibenzofuran	UG/L	11 U	11 U	10 U	11 U	10 U
42 Diethylphthalate	UG/L	11 U	11 U	10 U	11 U	10 U
43 Dimethylphthalate	UG/L	11 U	11 U	10 U	11 U	10 U
44 Fluoranthene	UG/L	11 U	11 U	10 U	11 U	10 U
45 Fluorene	UG/L	11 U	11 U	10 U	11 U	10 U
46 Hexachlorobenzene	UG/L	11 U	11 U	10 U	11 U	10 U
47 Hexachlorobutadiene	UG/L	11 U ;	11 U	10 U	11 U	10 U
48 Hexachlorocyclopentadiene	UG/L	11 U	11 U	10 U	11 U	10 U
49 Hexachloroethane	UG/L	11 U	11 U	10 U	11 U	10 U
50 Indeno(1,2,3-cd)pyrene	UG/L	11 U	11 U	10 U	11 U	10 U
51 Isophorone	UG/L	11 U	11 U	10 U	11 U	10 U
52 N-Nitroso-di-n-ctopylamine	UG/L	11 U	11 U	10 U	11 U	10 U
53 N-Nitrosodiphenylamine (1)	UG/L	11 U	. 11 U	10 U	11 U	10 U
54 Naphthalene	UG/L	11 U	11 U	10 U	11 U	10 U
55 Nitrobenzene	UG/L	11 U	11 U	10 U	11 U	10 U
56 Pentachlorophenol	UG/L	<b>27</b> U	<b>27</b> U	25 U	<b>27</b> U	25 U
57 Phenanthrene	UG/L	11 U	11 U	10 U	11 U	10 U
58 Phenol	UG/L	11 U	11 U	10 U	11 U	10 U
59 Pyrene	UG/L	11 U	11 U	10 U	11 U	10 U
60 benzo(k)fluoranthene	UG/L	11 U	11 U	10 U	11 U	10 U
61 bis(2-Chloroethoxy) methane	UG/L	11 U	11 U	10 U	11 U	10 U
62 bis(2-Chloroethyl) ether	UG/L	11 U	11 U	10 U	11 U	10 U
63 bis(2-Chloroisoctopyl) ether	UG/L	11 U	11 U	10 U	11 U	10 U
64 bis(2-Ethylhexyl)phthalate	UG/L	2 BJ	1 BJ	3 JB	18 B	2 ЛВ

SDC	<del>}</del> :	54890	54890	54890	54890
STUDY II	<b>)</b> :	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRIX	ζ:	WATER	WATER	WATER	WATER
LAB SAMP. II	<b>)</b> :	277054	278200	277300	278188
EPA SAMP. II	):	MW26-6	MW26-7	MW26-8	MW26-9
QC CODI	E:	SA	SA	SA	SA
% MOISTURI		0		0	<b>5.1</b>
. % SOLID	S:			-	
PARAMETE		VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/L	11 U	10 U	10 U	11 U
1 1,2,4-Trichlorobenzene	UG/L	11 U	10 U	10 U	11 U
2 1,2-Dichlorobenzene	UG/L	11 U	10 U	10 U	11 U
3 1,3-Dichlorobenzene	UG/L	11 U	10 U	10 U	11 U
4 1,4-Dichlorobenzene	UG/L	11 U	10 U	10 U	11 U
5 2,4,5-Trichlorophenol	UG/L	<b>27</b> U	25 U	25 U	28 U
6 2,4,6-Trichlorophenol	UG/L	11 U	10 U	10 U	11 U
7 2,4-Dichlorophenol	UG/L	11 U	10 U	10 U	11 U
8 2,4-Dimethylphenol	UG/L	11 U	10 U	10 U	11 U
9 2,4-Dinitrophenol	UG/L	27 U	25 U	25 U	28 U
10 2,4-Dinitrotoluene	UG/L	11 U	10 U	10 U	11 U
11 2,6-Dinitrotoluene	UG/L	11 U	10 U	10 U	11 U
12 2-Chloronaphthalene	UG/L	11 U	10 U	10 U	11 U
13 2-Chlorophenol	UG/L	11 U	10 U	10 U	11 U
14 2-Methylnaphthalene	UG/L	11 U	7 Ј	10 U	11 U
15 2-Methylphenol	UG/L	11 U	10 U	10 U	11 U
16 2-Nitroaniline	UG/L	<b>27</b> U	25 U	25 U	28 U
17 2-Nitrophenol	UG/L	11 U	10 U	10 U	11 U
18 3,3'-Dichlorobenzidine	UG/L	11 U	. 10 U	10 U	11 U
19 3-Nitroaniline	UG/L	27 U	25 U	25 U	28 U
20 4,6-Dinitro-2-methylphenol	UG/L	27 U	25 U	25 U	28 U
21 4-Bromophenyl-phenylether	UG/L	11 U	10 U	10 U	11 U
22 4-Chloro-3-methylphenol	UG/L	11 U	10 U	10 U	11 U
23 4-Chloroaniline	UG/L	11 U	10 U	10 U	11 U
24 4-Chlorophenyl-phenylether	UG/L	11 U	10 U	10 U	11 U
25 4-Methylphenol	UG/L	11 U	10 U	10 U	11 U
26 4-Nitroaniline	UG/L	27 U	25 U	25 U	28 U
27 4-Nitrophenol	UG/L	27 U	25 U	25 U	28 U
28 Acenaphthene	UG/L	11 U	3 J	10 U	11 U
29 Acenaphthylene	UG/L	11 U	10 Ü	10 U	11 U
30 Anthracene	UG/L	11 U	10 U	10 U	11 U
31 Benzo(a)anthracene	UG/L	11 U	10 U	10 U	11 U
32 Benzo(a)pyrene	UG/L	11 U	10 U	10 U	11 U
33 Benzo(b)fluoranthene	UG/L	11 U	10 U	10 U	11 U
34 Benzo(g,h,i)perylene	UG/L	11 U	10 U	10 U	11 U

SVOCS					
SI	DG:	54890	54890	54890	54890
STUDY	ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATE	UX:	WATER	WATER	WATER	WATER
LAB SAMP.	ID:	277054	278200	277300	278188
EPA SAMP.	ID:	MW26-6	MW26-7	MW26-8	MW26-9
QC CO	DE:	SA	SA	SA	SA
% MOISTU		0		0	
% SOLI	DS:				
PARAMET		VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	UG/L	11 U	10 U	10 U	11 U
35 Butylbenzylphthalate	UG/L	11 U	10 U	10 U	11 U
36 Carbazole	UG/L	11 U	10 U	10 U	11 <sup>.</sup> U
37 Chrysene	UG/L	11 U	10 U	10 U	11 U
38 Di-n-butylphthalate	UG/L	11 U	10 U	10 U	11 U
39 Di-n-oprylphthalate	UG/L	11 U	10 U	10 U	11 U
40 Dibenz(a,h)anthracene	UG/L	11 U	10 U	10 U	11 U
41 Dibenzofuran	UG/L	11 U	3 J	10 U	11 U
42 Diethylphthalate	UG/L	11 U	10 U	10 U	11 U
43 Dimethylphthalate	UG/L	11 U	10 U	10 U	11 U
44 Fluoranthene	UG/L	11 U	10 U	10 U	11 U
45 Fluorene	UG/L	11 U	5 J	10 U	11 U
46 Hexachlorobenzene	UG/L	11 U	10 U	10 U	11 U
47 Hexachlorobutadiene	UG/L	11 U	10 U	10 U	11 U
48 Hexachlorocyclopentadiene	UG/L	11 U	10 U	10 U	11 U
49 Hexachloroethane	UG/L	11 U	10 U	10 U	11 U
50 Indeno(1,2,3-cd)pyrene	UG/L	11 U	10 U	10 U	11 U
51 Isophorone	UG/L	11 U	10 U	10 U	11 U
52 N-Nitroso-di-n-ctopylamine	UG/L	11 U	10 U	10 U	11 U
53 N-Nitrosodiphenylamine (1)	UG/L	11 U	10 U	10 U	11 U
54 Naphthalene	UG/L	11 U	11	10 U	11 U
55 Nitrobenzene	UG/L	11 U	10 U	10 U	11 U
56 Pentachlorophenol	UG/L	27 U	25 U	25 U	28 U
57 Phenanthrene	UG/L	11 U	4 J	10 U	11 U
58 Phenol	UG/L	11 U	10 U	10 U	11 U
59 Pyrene	UG/L	11 U	10 U	10 U	11 U
60 benzo(k)fluoranthene	UG/L	11 U	10 U	10 U	11 U
61 bis(2-Chloroethoxy) methane	UG/L	11 U	10 U	10 U	11 U
62 bis(2-Chloroethyl) ether	UG/L	11 U	10 U	10 U	11 U
63 bis(2-Chloroisoctopyl) ether	UG/L	11 U	10 U	10 U	11 U
64 bis(2-Ethylhexyl)phthalate	UG/L	3 JB	10 U	4 ЛВ	3 BJ

## PESTICIDES

M LAB SA EPA SA QC % MOI	SDG: UDY ID: MATRIX: MP. ID: MP. ID: C CODE: ISTURE: SOLIDS:	54890 PHASE 1 WATER 278202 MW26-70 DU	54890 PHASE 1 WATER 278201 MW26-7R FB	54890 PHASE 1 WATER 278200 MW26-7MS MS	54890 PHASE 1 WATER 278200 MW26-7MSD MSD
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/L	0.055 JP	0.1 U	0.054 J	0.072 JP
2 4,4'-DDE	UG/L	0.1 U	0.1 U	0.1 U	0.048 J
3 4,4'-DDT	UG/L	0.1 U	0.1 U	0.61	0.65
4 Aldrin	UG/L	0.052 U	0.05 U	0.28	0.32
5 Aroclor-1016	UG/L	1 U	1 U	1 U	1 U
6 Aroclor-1221	UG/L	2.1 U	2 U	2 U	2.1 U
7 Aroclor-1232	UG/L	1 U	1 U	1 U	1 U
8 Aroclor-1242	UG/L	1 U	1 U	1 U	1 U
9 Aroclor-1248	\ UG/L	1 U	1 U	1 U	1 U
10 Aroclor-1254	UG/L	1 U	1 U	1 U	1 U
11 Aroclor-1260	UG/L	1 U	1 U	1 U	1 U
12 Dieldrin	UG/L	0.1 U	0.1 U	0.63	0.72
13 Endosulfan I	UG/L	0.052 U	0.05 U	0.05 U	0.052 U
14 Endosulfan II	UG/L	0.1 U	0.44	0.084 JP	0.1 U
15 Endosulfan sulfate	UG/L	0.1 U	0.1 U	0.1 U	0.1 U
16 Endrin	UG/L	0.1 U	0.1 U	0.63	0.73
17 Endrin aldehyde	UG/L	0.1 U	0.1 U	0.1 U	0.1 U
18 Endrin ketone	UG/L	0.1 U	0.1 U	0.1 U	0.1 U
19 Heptachlor	UG/L	0.052 U	0.11	0.32	0.34
20 Heptachlor epoxide	UG/L	0.052 U	0.05 U	0.05 U	0.052 U
21 Methoxychlor	UG/L	0.52 U	0.5 U	0.5 U	0.52 U
22 Toxaphene	UG/L	5.2 U	5 U	5 U	5.2 U
23 alpha-BHC	UG/L	0.052 U	0.05 U	0.05 U	0.052 U
24 alpha-Chlordane	UG/L	0.052 U	0.05 U	0.05 U	0.052 U
25 beta-BHC	UG/L	0.052 U	0.05 U	0.05 U	0.052 U
26 delta-BHC	UG/L	0.052 U	0.05 U	0.05 U	0.052 U
27 gamma-BHC (Lindane)	UG/L	0.052 U	0.05 U	0.3	0.34
28 gamma-Chlordane	UG/L	0.052 U	0.05 U	0.05 U	0.052 U

PES:	

M LAB SA EPA SA QO % MO	SDG: UDY ID: MATRIX: AMP. ID: CCODE: ISTURE:	54890 PHASE 1 WATER 278192 MW26-1 SA	54890 PHASE 1 WATER 278795 MW26-10 SA	54890 PHASE 1 WATER 278796 MW26-11 SA	54890 PHASE 1 WATER 277052 MW26-3 SA	54890 PHASE 1 WATER 277497 MW26-4 SA
%:	SOLIDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U
2 4,4'-DDE	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U
3 4,4'-DDT	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U
4 Aldrin	UG/L	0.054 U	0.054 U	0.052 U	0.051 U	0.053 U
5 Aroclor-1016	UG/L	1.1 U	1.1 U	'1 U	1 U	1.1 U
6 Aroclor-1221	UG/L	2.2 U	2.2 U	2.1 U	2 U	<b>2.1</b> U
7 Aroclor-1232	UG/L	1.1 U	1.1 U	1 U	1 U	1.1 U
8 Aroclor-1242	UG/L	1.1 U	1.1 U	1 U	1 U	1.1 U
9 Aroclor-1248	UG/L	1.1 U	1.1 U	1 U	1 U	1.1 U
10 Aroclor-1254	UG/L	1.1 U	1.1 U	1 U	1 U	1.1 U
11 Aroclor-1260	UG/L	1.1 U	1.1 U	1 U	1 U	1.1 U
12 Dieldrin	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U
13 Endosulfan I	UG/L	0.054 U	0.054 U	0.052 U	0.051 U	0.053 U
14 Endosulfan II	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U
15 Endosulfan sulfate	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U
16 Endrin	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U
17 Endrin aldehyde	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U
18 Endrin ketone	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U
19 Heptachlor	UG/L	0.054 U	0.054 U	0.052 U	0.051 U	0.053 U
20 Heptachlor epoxide	UG/L	0.054 U	0.054 U	0.052 U	0.051 U	0.053 U
21 Methoxychlor	UG/L	0.54 U	0.54 U	0.52 U	0.51 U	0.53 U
22 Toxaphene	UG/L	5.4 U	5.4 U	5.2 U	5.1 U	5.3 U
23 alpha-BHC	UG/L	0.054 U	0.054 U	0.052 U	0.051 U	0.053 U
24 alpha-Chlordane	UG/L	0.054 U	0.054 U	0.052 U	0.051 U	0.053 U
25 beta-BHC	UG/L	0.054 U	0.054 U	0.052 U	0.051 U	0.053 U
26 delta-BHC	UG/L	0.054 U	0.054 U	0.052 U	0.051 U	0.053 U
27 gamma-BHC (Lindane)	UG/L	0.054 U	0.054 U	0.052 U	0.051 U	0.053 U
28 gamma-Chlordane	UG/L	0.054 U	0.054 U	0.052 U	0.051 U	0.053 U

DEG	TTA:	_	20
PES7	IIC.	ш	ES

	SDG:	54890	54890	54890	54890	54890
ST	UDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
M	IATRIX:	WATER	WATER	WATER	WATER	WATER
LAB SA	MP. ID:	277053	277054	278200	277300	278188
EPA SA	MP. ID:	MW26-5	MW26-6	MW26-7	MW26-8	MW26-9
QC	CODE:	SA	SA	SA	SA	SA
% MO	ISTURE:					
% :	SOLIDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/L	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
2 4,4'-DDE	UG/L	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
3 4.4'-DDT	UG/L	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
4 Aldrin	UG/L	0.052 U	0.052 U	0.052 U	0.055 U	0.1 U
5 Aroclor-1016	UG/L	1 U	1 U	1 U	1.1 U	1 U
6 Aroclor-1221	UG/L	2.1 U	2.1 U	2.1 U	2.2 U	2 U
7 Aroclor-1232	UG/L	1 U	2.1 U	2.1 U	1.1 U	1 U
8 Aroclor-1242	UG/L	i Ŭ	1 U	1 Ü	1.1 U	1 U
9 Aroclor-1248	UG/L	i Ü	1 U	1 U	1.1 U	1 U
10 Aroclor-1254	UG/L	1 U	1 U	1 U	1.1 U	1 U
11 Aroclor-1260	UG/L	i U	1 U	1 U	1.1 U	1 U
12 Dieldrin	UG/L	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
13 Endosulfan I	UG/L	0.052 U	0.052 U	0.052 U	0.055 U	0.05 U
14 Endosulfan II	UG/L	0.1 U	0.1 U	0.059 JP	0.11 U	0.1 U
I5 Endosulfan sulfate	UG/L	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
16 Endrin	UG/L	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
17 Endrin aldehyde	UG/L	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
18 Endrin ketone	UG/L	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
19 Heptachlor	UG/L	0.052 U	0.052 U	0.032 JP	0.055 U	0.05 U
20 Heptachlor epoxide	UG/L	0.052 U	0.052 U	0.052 U	0.055 U	0.05 U
21 Methoxychlor	UG/L	0.52 U	0.52 U	0.52 U	0.55 U	0.5 U
22 Toxaphene	UG/L	5.2 U	5.2 U	5.2 U	5.5 U	5 U
23 alpha-BHC	UG/L	0.052 U	0.052 U	0.052 U	0.055 U	0.05 U
24 alpha-Chlordane	UG/L	0.052 U	0.052 U	0.052 U	0.055 U	0.05 U
25 beta-BHC	UG/L	0.052 U	0.052 U	0.052 U	0.055 U	0.05 U
26 delta-BHC	UG/L	0.052 U	0.052 U	0.052 U	0.055 U	0.05 U
27 gamma-BHC (Lindane)	UG/L	0.052 U	0.052 U	0.052 U	0.055 U	0.05 U
28 gamma-Chlordane	UG/L	0.052 U	0.052 U	0.052 U	0.055 U	0.05 U
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54890PW.WK4

	LS

METALS					54000	£4000
	SDG:	54890	54890	54890	54890	54890
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	WATER	WATER	WATER	WATER	WATER
I	AB SAMP. ID:	278202	278201	278192	278795	278796
]	EPA SAMP. ID:	MW26-70	MW26-7R	MW26-1	MW26-10	MW26-11
	QC CODE:	DU	FB	SA	SA	SA
	% MOISTURE:					
	% SOLIDS:	0	0	0	0	0
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	UG/L	429	10.9 B	457	125 B	144 B
2 Antimony	UG/L	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
3 Arsenic	UG/L	19.5	2.1 U	2.1 U	2.1 U	2.1 U
4 Barium	UG/L	122 B	3.4 U	33.2 B	103 B	86.5 B
5 Beryllium	UG/L	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
6 Cadmium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
7 Calcium	UG/L	141000	86.6 U	121000	299000	116000
8 Chromium	UG/L	5.9 B	0.51 B	4.7 B	0.5 U	0.82 B
9 Cobalt	UG/L	1.5 B	1 U	1.1 B	1.4 B	4
10 Copper	UG/L	0.98 B	2.7 B	5.7 B	1.2 B	1.3 B
11 Cyanide	UG/L	5 U	5 U	5 U	5 U	5 U
12 Iron	UG/L	7180	18.4 U	867	202	1580
13 Lead	UG/L	1.8 B	1.5 U	7.8	1.5 U	1.5 U
14 Magnesium	UG/L	18200	92.1 U	16600	39000	28700
15 Manganese	UG/L	4130	0.42 B	27.5	947	5780
16 Mercury	UG/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
17 Nickel	UG/L	15.5 B	1 U	6.2 B	3.6 B	7.1 B
18 Potasium	UG/L	4230 B	105 U	3620 B	33600	82000
19 Selenium	UG/L	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
20 Silver	UG/L	0. <b>7</b> 9 U	0.8 U	0.8 U	0.8 U	0. <b>7</b> 9 U
21 Sodium	UG/L	12400 E	203 BE	24600 E	30300 E	3680 BE
22 Thallium	UG/L ·	4.8 B	3.3 B	4.3 B	4 B	3 U
23 Vanadium	UG/L	1.2 B	1.1 U	1.3 B	1.1 U	1.1 U
24 Zinc	UG/L	6.8 B	9.1 B	20.5	3.7 B	5.1 B

54890MW.WK4

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M	<b>⊢</b> I	ΙА		

	SDG:	54890	54890	54890	54890	54890
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	WATER	WATER	WATER	WATER	WATER
L	AB SAMP. ID:	277052	277497	277053	277054	278200
F	EPA SAMP. ID:	MW26-3	MW26-4	MW26-5	MW26-6	MW26-7
	QC CODE:	SA	SA	SA	SA	SA
Ģ	% MOISTURE:					
	% SOLIDS:	0	0	, 0	0	0
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	UG/L	342	22 B	26.7 B	26.3 B	286
2 Antimony	UG/L	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
3 Arsenic	UG/L	2.1 U	2.1 U	2.1 U	2.1 U	18
4 Barium	UG/L	76.3 B	83 B	90.6 B	68.3 B	124 B
5 Beryllium	UG/L	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
6 Cadmium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
7 Calcium	UG/L	184000	180000	226000	100000	141000
8 Chromium	UG/L	4 B	0.5 U	0.5 U	0.5 U	5.5 B
9 Cobalt	UG/L	1 U	1 U	1.5 B	0.99 U	1.5 B
10 Copper	UG/L	2.3 B	2.3 B	0.7 U	0.69 U	0.85 B
11 Cyanide	UG/L	5 U	5 U	5 U	5 U	5 U
12 Iron	UG/L	554	20 B	28.8 B	44.8 B	7250
13 Lead	UG/L	2.3 B	1.5 U	1.5 U	1.5 U	1.5 U
14 Magnesium	UG/L	33600	30600	39400	22000	18100
15 Manganese	UG/L	3540	1.1 B	947	908	4190
16 Mercury	UG/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
17 Nickel	UG/L	21.8 B	1.3 B	2.8 B	2.2 B	7.5 B
18 Potasium	UG/L	3370 B	96200	9060	6930	4210 B
19 Selenium	UG/L	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
20 Silver	UG/L	0.8 U	0.8 U	0. <b>7</b> 9 U	0.79 U	0.8 U
21 Sodium	UG/L	9960 E	14200 E	16600 E	5370 E	12400 E
22 Thallium	UG/L ·	3.3 B	4.3 B	7.6 B	5.4 B	3.1 B
23 Vanadium	UG/L	1.1 U	1.1 U	1.1 B	1.1 U	1.1 U
24 Zinc	UG/L	7.3 B	1.6 B	2.2 B	2.2 B	8.8 B

## METALS

		SDG:	54890	54890
		STUDY ID:	PHASE 1	PHASE 1
		MATRIX:	WATER	WATER
		LAB SAMP. ID:	277300	278188
		EPA SAMP. ID:	MW26-8	MW26-9
		QC CODE:	SA	SA
		% MOISTURE:		
		% SOLIDS:	0	0
	PARAMETER	UNI	T VALUE	Q VALUE Q
1	Aluminimum	UG/L	35.9 1	371
2	Antimony	UG/L	, 2.2 1	J 2.2 U
3	Arsenic	UG/L	, 2.1 1	J 2.1 U
4	Barium	UG/L	, 74.8 ]	
5	Beryllium	UG/L	. 0.27 1	U 0.27 U
6	Cadmium	UG/L	, 0.3 1	U 0.3 U
7	Calcium	UG/L	. 170000	146000
8	Chromium	UG/L	. 0.51 ]	3 18.9
9	Cobalt	UG/L	. 1.4 1	3 1.5 B
10	Соррег	UG/L	. 1.1 1	
11	Cyanide	UG/L	, 5 !	J 5 U
12	Iron	UG/L	. 41.8 1	664
13	Lead	UG/L	, 1.5 \	
14	Magnesium	UG/L	. 22300	18900
15	Manganese	UG/L		375
16	Mercury	UG/L		
17	Nickel	UG/L		
18	Potasium	UG/L	. 6170	8690
	Selenium	UG/L		
20	Silver	UG/L		
	Sodium	UG/L		
	Thallium	UG/L		
	Vanadium	UG/L		
24	Zinc	UG/L	. 2.2 1	3 18.7 B

VOC				
	:	SDG:	55106	55106
	STUD	Y ID:	PHASE 1	PHASE 1
	MAT	RIX:	WATER	WATER
	LAB SAMI	P. ID:	278847	278846
	EPA SAMI	P. ID:	MW25-50	MW25-5DR
	QC CC	DDE:	DÜ	FB
	% MOIST		_	
	% SOI			
	7,500			
	PARAMETER	UNIT	VALUE Q	VALUE Q
1	1,1,1-Trichloroethane	ug/L	10 U	10 U
2	1,1,2,2-Tetrachloroethane	ug/L	10 U	10 U
3	1,1,2-Trichloroethene	ug/L	10 U	10 U
4	1,1-Dichloroethane	ug/L	10 U	10 U
5	1,1-Dichloroethene	ug/L	10 U	10 U
6	1,2-Dichloroctopane	ug/L	10 U	10 U
7	1,2-Dichloroethane	ug/L	10 U	10 U
8	1,2-Dichloroethene (total)	ug/L	10 U	10 U
9	2-Butanone	ug/L	10 U	10 U
10	2-Hexanone	ug/L	10 U	10 U
11	4-Methyl-2-Pentanone	ug/L	10 U	10 U
12	Acetone	ug/L	14 B	10 B
13	Benzene	ug/L	10 U	10 U
14	Bromodichloromethane	ug/L	10 U	10 U
15	Bromoform	ug/L	10 U	10 U
16	Bromomethane	ug/L	10 U	10 U
17	Carbon Disulfide	ug/L	10 U	10 U
18	Carbon Tetrachloride	ug/L	10 U	10 U
19	Chlorobenzene	ug/L	10 U	10 U
20	Chloroethane	ug/L	10 U	10 U
21	Chloroform	ug/L	10 U	3 J
22	Chloromethane	ug/L	10 U	10 U
23	Dibromochloromethane	ug/L	10 U	10 U
24	Ethylbenzene	ug/L	10 U	10 U
25	Methylene Chloride	ug/L	10 U	10 U
26	Styrene	ug/L	10 U	10 U
27	Tetrachloroethene	ug/L	10 U	10 U
28	Toluene	ug/L	10 U	10 U
29	Trichloroethene	ug/L	10 U	10 U
30	Vinyl Chloride	ug/L	10 U	10 U
	Xylene (total)	ug/L	10 U	10 U
32	cis-1,3-Dichloroctopene	ug/L	10 U	10 U
33	trans-1,3-Dichloroctopene	ug/L	10 U	10 U

VOCs				****		55106
		SDG:	55106	55106	55106	55106
	STUDY ID:		PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MAT	TRIX:	WATER	WATER	WATER	WATER
	LAB SAM		278791	278791	279132	279135
	EPA SAM		MW25-12DMS	MW25-12DMSD	MW25-1	MW25-10
	QC C		MS	MSD	SA	SA
	% MOIST			11102		
	% SOI					
	76 SO	LIDS.				
P.	ARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1.	1,1-Trichloroethane	ug/L	10 U	10 U	10 U	10 U
	1.2.2-Tetrachloroethane	ug/L	10 U	10 U	10 U	10 U
	1.2-Trichloroethene	ug/L	10 U	10 U	10 U	10 U
	,1-Dichloroethane	ug/L	10 U	10 U	10 U	10 U
	,1-Dichloroethene	ug/L	39	39	10 U	10 U
	,2-Dichloroctopane	ug/L	10 U	10 U	10 U	10 U
	.2-Dichloroethane	ug/L	10 U	10 U	10 U	10 U
	.2-Dichloroethene (total)	ug/L	10 U	10 U	10 U	10 U
	-Butanone	ug/L	10 U	10 U	10 U	10 U
	-Hexanone	ug/L	10 U	10 U	10 U	10 U
	-Methyl-2-Pentanone	ug/L	10 U	10 U	10 U	10 U
	cetone	ug/L	10 U	10 U	8 JB	8 JB
	Benzene	ug/L	50	50	10 U	10 U
14 B	Bromodichloromethane	ug/L	10 U	10 U	10 U	10 U
15 B	Bromoform	ug/L	10 U	10 U	10 U	10 U
16 E	Bromomethane	ug/L	10 U	10 U	10 U	10 U
17 C	Carbon Disulfide	ug/L	10 U	10 U	10 U	10 U
18 C	Carbon Tetrachloride	ug/L	10 U	10 U	10 U	10 U
19 C	Chlorobenzene	ug/L	47	48	10 U	10 U
20 C	Chloroethane	ug/L	10 U	10 U	10 U	10 U
21 C	Chloroform	ug/L	10 U	10 U	10 U	10 U
22 C	Chloromethane	ug/L ·	10 U	10 U	10 U	10 U
23 D	Dibromochloromethane	ug/L	10 U	10 U	10 U	10 U
24 E	Ethylbenzene	ug/L	10 U	10 U	10 U	10 U
25 N	Methylene Chloride	ug/L	10 U	10 U	10 U	10 U
26 S	Styrene	ug/L	10 U	10 U	10 U	10 U
27 T	etrachloroethene	ug/L	10 U	10 U	10 U	10 U
28 T	Coluene	ug/L	48	48	10 U	10 U
29 T	richloroethene	ug/L	46	47	10 U	10 U
30 V	Vinyl Chloride	ug/L	10 U	10 U	10 U	10 U
31 2	Kylene (total)	ug/L	10 U	10 U	10 U	10 U
	is-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U
	rans-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U
		-				

VOCs

STUDY MATI LAB SAMP EPA SAMP QC CC % MOISTU % SOL	RIX: : ID: : ID: : DDE: JRE:	55106 PHASE 1 WATER 278790 MW25-11 SA	55106 PHASE 1 WATER 278791 MW25-12D SA	55106 PHASE 1 WATER 278792 MW25-13 SA	55106 PHASE 1 WATER 278793 MW25-14D SA	55106 PHASE 1 WATER 279033 MW25-15 SA
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
2 1,1,2,2-Tetrachloroethane	ug/L	10 U	10 U	10 U	. 10 U	10 U
3 1,1,2-Trichloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
4 1,1-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
5 1,1-Dichloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
6 1,2-Dichloroctopane	ug/L	10 U	10 U	10 U	10 U	10 U
7 1,2-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
8 1,2-Dichloroethene (total)	ug/L	10 U	10 U	10 U	10 U	10 U
9 2-Butanone	ug/L	10 U	10 U	10 U	10 U	10 U
10 2-Hexanone	ug/L	10 U	10 U	10 U	10 U	10 U
11 4-Methyl-2-Pentanone	ug/L	10 U	10 U	10 U	10 U	10 U
12 Acetone	ug/L	10 U	10 U	10 U	9 ЈВ	21 B
13 Benzene	ug/L	10 U	10 U	10 U	10 U	10 U
14 Bromodichloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
15 Bromoform	ug/L	10 U	10 U	10 U	10 U	10 U
16 Bromomethane	ug/L	10 U	10 U	10 U	10 U	10 U
17 Carbon Disulfide	ug/L	10 U	10 U	10 U	10 U	10 U
18 Carbon Tetrachloride	ug/L	10 U	10 U	10 U	10 U	10 U
19 Chlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U
20 Chloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
21 Chloroform	ug/L	10 U	10 U	10 U	10 U	10 U
22 Chloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
23 Dibromochloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
24 Ethylbenzene	ug/L	10 U	10 U	10 U	10 U	10 U
<ul><li>25 Methylene Chloride</li><li>26 Styrene</li></ul>	ug/L	10 U 10 U	10 U	10 U	10 U	10 U
27 Tetrachloroethene	ug/L ug/L	10 U	10 U 10 U	10 U	10 U	10 U
28 Toluene	ug/L ug/L	10 U	10 U	10 U	10 U	10 U
29 Trichloroethene	ug/L ug/L	10 U	10 U	10 U 10 U	10 U	10 U
30 Vinyl Chloride	ug/L	10 U	10 U	10 U	10 U	10 U
31 Xylene (total)	ug/L	10 U	10 U	10 U	10 U	10 U
32 cis-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U	10 U
33 trans-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U	10 U
22 dans 1,5 Exemplorotopolic	ug D	10 0	10 0	10 0	10 U	10 U

STUDY MAT LAB SAMF EPA SAMF QC CO	RIX: P. ID: P. ID:	55106 PHASE 1 WATER 279034 MW25-16D SA	55106 PHASE 1 WATER 279035 MW25-17 SA	55106 PHASE 1 WATER 279766 MW25-18 SA	55106 PHASE 1 WATER 279136 MW25-19 SA	55106 PHASE 1 WATER 279978 MW25-2 SA
% MOIST % SOL	URE:	JA.	JA.	SA	SA	S/A
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	ug/L	10 U	10 U	10 U	10 U	25 J
2 1,1,2,2-Tetrachloroethane	ug/L	10 U	10 U	10 U	10 U	59 U
3 1,1,2-Trichloroethene	ug/L	10 U	10 U	10 U	10 U	59 U
4 1,1-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	59 U
5 1,1-Dichloroethene	ug/L	10 U	10 U	10 U	10 U	59 U
6 1,2-Dichloroctopane	ug/L	10 U	10 U	10 U	10 U	59 U
7 1,2-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	59 U
8 1,2-Dichloroethene (total)	ug/L	10 U	10 U	10 U	10 U	37 J
9 2-Butanone	ug/L	10 U	10 U	10 U	10 U	59 U
10 2-Hexanone	ug/L	10 U	10 U	10 U	10 U	59 U
11 4-Methyl-2-Pentanone	ug/L	10 U	10 U	10 U	10 U	59 U
12 Acetone	ug/L	14 B	13 B	10 U	11 B	59 U
13 Benzene	ug/L	10 U	10 U	10 U	10 U	730
14 Bromodichloromethane	ug/L	10 U	10 U	10 U	10 U	59 U
15 Bromoform	ug/L	10 U	10 U	10 U	6 J	59 U
16 Bromomethane	ug/L	10 U	10 U	10 U	10 U	59 U
17 Carbon Disulfide	ug/L	10 U	10 U	10 U	10 U	59 U
18 Carbon Tetrachloride	ug/L	10 U	10 U	10 U	10 U	59 U
19 Chlorobenzene	ug/L	10 U	10 U	10 U	10 U	59 U
20 Chloroethane	ug/L	10 U	10 U	10 U	10 U	59 U
21 Chloroform	ug/L	10 U	10 U	10 U	10 U	59 U
22 Chloromethane	ug/L ·	10 U	10 U	10 U	10 U	59 U
23 Dibromochloromethane	ug/L	10 U	10 U	10 U	3 J	59 U
24 Ethylbenzene	ug/L	10 U	10 U	10 U	10 U	140
25 Methylene Chloride	ug/L	10 U	10 U	10 U	10 U	59 U
26 Styrene	ug/L	10 U	10 U	10 U	10 U	59 U
27 Tetrachloroethene	ug/L	10 U	10 U	10 U	10 U	59 U
28 Toluene	ug/L	10 U	10 U	10 U	10 U	370
29 Trichloroethene	ug/L	10 U	10 U	10 U	10 U	6 J
30 Vinyl Chloride	ug/L	10 U	10 U	10 U	10 U	59 U
31 Xylene (total)	ug/L	10 U	10 U	10 U	10 U	1800
32 cis-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U	59 U
33 trans-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U	59 U

STUDY MAT LAB SAMP EPA SAMP QC CC % MOISTE % SOL	RIX: P. ID: P. ID: DDE: JRE:	55106 PHASE 1 WATER 278844 MW25-3 SA	55106 PHASE 1 WATER 278504 MW25-4D SA	55106 PHASE 1 WATER 278845 MW25-5D SA	55106 PHASE 1 WATER 279133 MW25-6 SA	55106 PHASE 1 WATER 279134 MW25-7D SA
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
2 1,1,2,2-Tetrachloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
3 1,1,2-Trichloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
4 1,1-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
5 1,1-Dichloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
6 1,2-Dichloroctopane	ug/L	10 U	10 U	10 U	10 U	10 U
7 I,2-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
8 1,2-Dichloroethene (total)	ug/L	10 U	10 U	10 U	10 U	10 U
9 2-Butanone	ug/L	10 U	10 U	10 U	10 U	10 U
10 2-Hexanone	ug/L	10 U	10 U	10 U	10 U	10 U
11 4-Methyl-2-Pentanone	ug/L	10 U	10 U	10 U	10 U	10 U
12 Acetone	ug/L	10 U	10 U	10 U	7 JB	8 JB
13 Benzene	ug/L	5 J	10 U	10 U	10 U	10 U
14 Bromodichloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
I5 Bromoform	ug/L	10 U	10 U	10 U	10 U	10 U
16 Bromomethane	ug/L	10 U	10 U	10 U	10 U	10 U
17 Carbon Disulfide	ug/L	10 U	10 U	10 U	10 U	10 U
18 Carbon Tetrachloride	ug/L	10 U	10 U	10 U	10 U	10 U
19 Chlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U
20 Chloroethane 21 Chloroform	ug/L	10 U 10 U	10 U	10 U	10 U	10 U
22 Chloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
23 Dibromochloromethane	ug/L ug/L	10 U	10 U 10 U	10 U 10 U	10 U	10 U
24 Ethylbenzene	ug/L ug/L	3 J	10 U	10 U	10 U	10 U
25 Methylene Chloride	ug/L ug/L	10 U	10 U	10 U	10 U 10 U	10 U
26 Styrene	ug/L ug/L	10 U	10 U	10 U		10 U
27 Tetrachloroethene	ug/L	10 U	10 U	10 U	10 U 10 U	10 U
28 Toluene	ug/L	10 U	10 U	10 U	10 U	10 U
29 Trichloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
30 Vinyl Chloride	ug/L	10 U	10 U	10 U	10 U	10 U
31 Xylene (total)	ug/L	7 J	10 U	10 U	10 U	10 U 10 U
32 cis-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U	10 U 10 U
33 trans-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U	10 U
•	S				10 0	10 0

VOCs						
STUD	TRIX: P. IID: P. IID: ODE: URE:	55106 PHASE 1 WATER 279765 MW25-8 SA	55106 PHASE 1 WATER 278848 MW25-9 SA	55106 PHASE 1 WATER 278849 TB111995 TB	55106 PHASE 1 WATER 279767 TB112895 TB	55106 PHASE 1 WATER 279979 TB112995 TB
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,1,1-Trichloroethane	ug/L	10 U	VALUE Q 2 J	VALUE Q 10 U	10 U	10 U
2 1,1,2,2-Tetrachloroethane	ug/L ug/L	10 U	10 U	10 U	10 U	10 U
3 1,1,2-Trichloroethene	ug/L ug/L	10 U	10 U	10 U	10 U	10 U
4 1,1-Dichloroethane	ug/L ug/L	10 U	2 J	10 U	10 U	10 U
5 1,1-Dichloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
6 1,2-Dichloroctopane	ug/L	10 U	10 U	10 U	10 U	10 U
7 1,2-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
8 1.2-Dichloroethene (total)	ug/L	10 U	6 J	10 U	10 U	10 U
9 2-Butanone	ug/L	10 U	10 U	10 U	10 U	10 U
10 2-Hexanone	ug/L	10 U	10 U	10 U	10 U	10 U
11 4-Methyl-2-Pentanone	ug/L	10 U	10 U	10 U	10 U	10 U
12 Acetone	ug/L	10 U	10 U	13 B	10 U	10 U
13 Benzene	ug/L	10 U	60	10 U	10 U	10 U
14 Bromodichloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
15 Bromoform	ug/L	10 U	10 U	10 U	10 U	10 U
16 Bromomethane	ug/L	10 U	10 U	10 U	10 U	10 U
17 Carbon Disulfide	ug/L	10 U	10 U	10 U	10 U	10 U
18 Carbon Tetrachloride	ug/L	10 U	10 U	10 U	10 U	10 U
19 Chlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U
20 Chloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
21 Chloroform	ug/L	10 U	10 U	3 J	3 J	3 J
22 Chloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
23 Dibromochloromethane	ug/L	10 U	10 U	10 U	10 U	10 U
24 Ethylbenzene	ug/L	10 .U	10	10 U	10 U	10 U
25 Methylene Chloride	ug/L	10 U	10 U	10 U	10 U	10 U
26 Styrene	ug/L	10 U	10 U	10 U	10 U	10 U
27 Tetrachloroethene	ug/L	10 U	10 U	10 U	10 U	10 U
28 Toluene	ug/L	10 U	22	10 U	10 U	10 U
29 Trichloroethene	ug/L	10 U	10 U	10 U	10 U 10 U	10 U
30 Vinyl Chloride	ug/L	10 U	10 U	10 U 10 U	10 U 10 U	10 U
31 Xylene (total)	ug/L	10 U 10 U	73 10 U	10 U	10 U 10 U	10 U
32 cis-1,3-Dichloroctopene	ug/L	10 U	10 U	10 U	10 U 10 U	10 U
33 trans-1,3-Dichloroctopene	ug/L	10 0	10 0	10 0	10 0	10 U

SI STUDY MATR LAB SAMP. EPA SAMP. QC COI % MOISTU. % SOLI	EIX: ID: ID: DE: RE:	55106 PHASE I WATER 274847 MW25-50 DU	55106 PHASE 1 WATER 274846 MW25-5DR FB	55106 PHASE 1 WATER 278791 MW25-12DMS MS	55106 PHASE 1 WATER 278791 MW25-12DMSD MSD	55106 PHASE 1 WATER 279132 MW25-I SA
PARAMET	TER UNIT	VALUE Q	VALUE Q	VALUE O	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	ug/L	VALUE Q 11 U	VALUE Q 11 U	VALUE Q 48	VALUE Q 45	VALUE Q 10 U
2 1,2-Dichlorobenzene	ug/L	11 U	11 U	11 U	11 U	10 U
3 1,3-Dichlorobenzene	ug/L	11 U	11 U	11 U	11 U	10 U
4 1,4-Dichlorobenzene	ug/L	11 U	11 U	46	41	10 U
5 2,4,5-Trichlorophenol	ug/L	27 U	28 U	28 U	27 U	26 U
6 2,4,6-Trichlorophenol	ug/L	11 U	11 U	11 U	11 U	10 U
7 2,4-Dichlorophenol	ug/L	11 U	11 U	11 U	11 U	10 U
8 2,4-Dimethylphenol	ug/L	11 U	11 U	11 U	11 U	10 U
9 2,4-Dinitrophenol	ug/L	27 U	28 U	28 U	27 U	26 U
10 2,4-Dinitrotoluene	ug/L	11 U	11 U	50	54	10 U
11 2,6-Dinitrotoluene	ug/L	11 U	11 U	11 U	11 U	10 U
12 2-Chloronaphthalene	ug/L	11 U	11 U	11 U	11 U	10 U
13 2-Chlorophenol	ug/L	11 U	11 U	64	62	10 U
14 2-Methylnaphthalene	ug/L	11 U	11 U	11 U	11 U	10 U
15 2-Methylphenol	ug/L	11 U	11 U	11 U	11 U	10 U
16 2-Nitroaniline	ug/L	27 U	28 U	28 U	27 U	26 U
17 2-Nitrophenol	ug/L	11 U	11 U	11 U	11 U	10 U
18 3,3'-Dichlorobenzidine	ug/L	11 U	11 U	11 U	11 U	10 U
19 3-Nitroaniline	ug/L	<b>27</b> U	28 U	28 U	27 U	26 U
20 4,6-Dinitro-2-methylphenol	ug/L	<b>27</b> U	28 U	28 U	27 U	26 U
21 4-Bromophenyl-phenylether	ug/L	11 U	11 U	11 U	11 U	10 U
22 4-Chloro-3-methylphenol	ug/L	11 U	11 U	71	74	10 U
23 4-Chloroaniline	ug/L	11 U	11 U	11 U	11 U	10 U
24 4-Chlorophenyl-phenylether	ug/L	11 U	11 U	11 U	11 U	10 U
25 4-Methylphenol	ug/L	11 U	11 U	11 U	11 U	10 U
26 4-Nitroaniline	ug/L	<b>27</b> U	28 U	28 U	<b>27</b> U	26 U
27 4-Nitrophenol	ug/L	<b>27</b> U	28 U	79	90 E	26 U
28 Acenaphthene	ug/L	11 U	11 U	50	50	10 U
29 Acenaphthylene	ug/L	11 U	11 U	11 U	11 U	10 U
30 Anthracene	ug/L	11 U	11 U	11 U	11 U	10 U
31 Benzo(a)anthracene	ug/L	11 U	11 U	11 U	11 U	10 U
32 Benzo(a)pyrene	ug/L	11 U	11 U	11 U	11 U	10 U
33 Benzo(b)fluoranthene	ug/L	11 U	11 U	11 U	11 U	10 U
34 Benzo(g,h,i)perylene	ug/L	11 U	11 U	11 U	11 U	10 U

SDG: STUDY ID: MATRIX: LAB SAMP. ID: EPA SAMP. ID: QC CODE: % MOISTURE: % SOLIDS:		55106 PHASE 1 WATER 274847 MW25-50 DU	55106 PHASE 1 WATER 274846 MW25-5DR FB	55106 PHASE 1 WATER 278791 MW25-12DMS MS	55106 PHASE 1 WATER 278791 MW25-12DMSD MSD	55106 PHASE 1 WATER 279132 MW25-1 SA
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
	ug/L	11 U	11 U	11 U	11 U	10 U
	ug/L	11 U	11 U	11 U	11 U	10 U
	ug/L	11 U	11 U	11 U	1 <b>1</b> U	10 U
	ug/L	11 U	11 U	11 U	· 11 U	10 U
39 Di-n-oprylphthalate	ug/L	11 U	11 U	11 U	11 U	10 U
40 Dibenz(a,h)anthracene	ug/L	11 U	11 U	11 U	11 U	10 U
41 Dibenzofuran	ug/L	11 U	11 U	11 U	11 U	10 U
	ug/L	11 U	11 U	11 U	11 U	10 U
	ug/L	11 U	11 U	11 U	11 U	10 U
	ug/L	11 U	11 U	11 U	11 U	10 U
45 Fluorene	ug/L	11 U	11 U	11 U	11 U	10 U
46 Hexachlorobenzene	ug/L	11 U	11 U	11 U	11 U	10 U
47 Hexachlorobutadiene	ug/L	11 U	11 U	11 U	' 11 U	10 U
48 Hexachlorocyclopentadiene	ug/L	11 U	11 U	11 U	11 U	10 U
49 Hexachloroethane	ug/L	11 U	11 U	11 U	11 U	10 U
	ug/L	11 U	11 U	11 U	11 U	10 U
	ug/L	11 U	11 U	11 U	11 U	10 U
	ug/L	11 U	11 U	55	- 53	10 U
	ug/L	11 U	11 U	11 U	11 U	10 U
	ug/L	11 U	11 U	11 U	11 U	10 U
	ug/L	11 U	11 U	11 U	11 U	10 U
	ug/L	27 U	28 U	84	<b>89</b> E	26 U
	ug/L ·	11 U	11 U	11 U	11 U	10 U
	ug/L	11 U	11 U	61	59	10 U
	ug/L	11 U	11 U	51	51	10 U
	ug/L	11 U	11 U	11 U	11 U	10 U
	ug/L	11 U	11 U	11 U	11 U	10 U
	ug/L	11 U	11 U	11 U	11 U	10 U
	ug/L	11 U	11 U	11 U	11 U	10 U
64 bis(2-Ethylhexyl)phthalate	ug/L	2 JB	4 JB	2 JB	8 JB	3 JB

	S STUDY MATI LAB SAMP EPA SAMP QC CO % MOISTU % SOLI	RIX: . ID: . ID: DDE: JRE:	55106 PHASE 1 WATER 279135 MW25-10 SA	55106 PHASE 1 WATER 278790 MW25-11 SA	55106 PHASE 1 WATER 278791 MW25-12D SA	55106 PHASE 1 WATER 278792 MW25-13 SA	55106 PHASE 1 WATER 278793 MW25-14D SA
	PARAME	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1	1,2,4-Trichlorobenzene	ug/L	11 U	10 U	11 U	11 U	10 U
	1,2-Dichlorobenzene	ug/L	11 U	10 U	11 U	11 U	10 U
	1,3-Dichlorobenzene	ug/L	11 U	10 U	11 U	11 U	10 U
4 1	1,4-Dichlorobenzene	ug/L	11 U	10 U	11 U	11 U	10 U
	2,4,5-Trichlorophenol	ug/L	27 U	26 U	26 U	27 U	26 U
	2,4,6-Trichlorophenol	ug/L	11 U	10 U	11 U	11 U	10 U
7 2	2,4-Dichlorophenol	ug/L	11 U	10 U	11 U	11 U	10 U
8 2	2,4-Dimethylphenol	ug/L	11 U	10 U	11 U	11 U	10 U
9 2	2,4-Dinitrophenol	ug/L	<b>27</b> U	26 U	26 U	27 U	26 U
10 2	2,4-Dinitrotoluene	ug/L	11 U	10 U	11 U	11 U	10 U
	2,6-Dinitrotoluene	ug/L	11 U	10 U	11 U	11 U	10 U
	2-Chloronaphthalene	ug/L	11 U	10 U	11 U	11 U	10 U
	2-Chlorophenol	ug/L	11 U	10 U	11 U	11 U	10 U
	2-Methylnaphthalene	ug/L	11 U	10 U	11 U	11 U	10 U
	2-Methylphenol	ug/L	11 U	10 U	11 U	11 U	10 U
	2-Nitroaniline	ug/L	27 U	<b>26</b> U	<b>26</b> U	27 U	<b>2</b> 6 U
	2-Nitrophenol	ug/L	11 U	10 U	11 U	11 U	10 U
	3,3'-Dichlorobenzidine	ug/L	11 U	10 U	11 U	· 11 U	10 U
	3-Nitroaniline	ug/L	27 U	26 U	26 U	27 U	<b>2</b> 6 U
	4,6-Dinitro-2-methylphenol	ug/L	27 U	26 U	26 U	27 U	<b>2</b> 6 U
	4-Bromophenyl-phenylether	ug/L	11 U	10 U	11 U	11 U	10 U
	4-Chloro-3-methylphenol	ug/L	11 U	10 U	11 U	11 U	10 U
	4-Chloroaniline	ug/L	11 U	10 U	11 U	11 U	10 U
	4-Chlorophenyl-phenylether	ug/L	11 U	10 U	11 U	11 U	10 U
	4-Methylphenol 4-Nitroaniline	ug/L	11 U	10 U	11 U	11 U	10 U
		ug/L	27 U	26 U	26 U	<b>27</b> U	26 U
	4-Nitrophenol Acenaphthene	ug/L	27 U	26 U	26 U	27 U	26 U
	Acenaphthylene	ug/L	11 U 11 U	10 U 10 U	11 U	11 U	10 U
	Acenaphinylene Anthracene	ug/L	11 U		11 U	11 U	10 U
	Benzo(a)anthracene	ug/L ug/L	11 U	10 U 10 U	11 U	11 U	10 U
	Benzo(a)pyrene	ug/L ug/L	11 U	10 U 10 U	11 U	11 U	10 U
	Benzo(b)fluoranthene	ug/L ug/L	11 U	10 U	11 U	11 U	10 U
	Benzo(g,h,i)perylene	ug/L ug/L	11 U	10 U	11 U	11 U	10 U
J4 )	Dougo(E,II,I)poi yielle	ug/L	11 0	10 0	11 U	11 U	10 U

SDO STUDY ID MATRIX LAB SAMP. ID EPA SAMP. ID QC CODE % MOISTURE % SOLIDS	); G ); ); ); ); );	55106 PHASE 1 WATER 279135 MW25-10 SA	55106 PHASE 1 WATER 278790 MW25-11 SA	55106 PHASE 1 WATER 278791 MW25-12D SA	55106 PHASE 1 WATER 278792 MW25-13 SA	55106 PHASE 1 WATER 278793 MW25-14D SA
PARAMETE	R UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
35 Butylbenzylphthalate	ug/L	11 U	10 U	11 U	11 U	10 U
36 Carbazole	ug/L	11 U	10 U	11 U	11 U	10 U
37 Chrysene	ug/L	11 U	10 U	11 U	11 U	10 U
38 Di-n-butylphthalate	ug/L	11 U	10 U	11 U	11 U	10 U
39 Di-n-oprylphthalate	ug/L	11 U	10 U	11 U	11 U	10 U
40 Dibenz(a,h)anthracene	ug/L	11 U	10 U	11 U	11 U	10 U
41 Dibenzofuran	ug/L	11 U	10 U	11 U	11 U	10 U
42 Diethylphthalate	ug/L	11 U	10 U	11 U	11 U	10 U
43 Dimethylphthalate	ug/L	11 U	10 U	11 U	11 U	10 U
44 Fluoranthene	ug/L	11 U	10 U	11 U	11 U	10 U
45 Fluorene	ug/L	11 U	10 U	11 U	11 U	10 U
46 Hexachlorobenzene	ug/L	11 U	10 U	11 U	11 U	10 U
47 Hexachlorobutadiene	ug/L	11 U	10 U	11 U	11 U	10 U
48 Hexachlorocyclopentadiene	ug/L	11 U	10 U	11 U	11 U	10 U
49 Hexachloroethane	ug/L	11 U	10 U	11 U	11 U	10 U
50 Indeno(1,2,3-cd)pyrene	ug/L	11 U	10 U	11 U	11 U	10 U
51 Isophorone	ug/L	11 U	10 U	11 U	11 U	10 U
52 N-Nitroso-di-n-ctopylamine	ug/L	11 U	10 U	11 U	11 U	10 U
53 N-Nitrosodiphenylamine (1)	ug/L	11 U	10 U	11 U	11 U	10 U
54 Naphthalene	ug/L	11 U	10 U	11 U	11 U	10 U
55 Nitrobenzene	ug/L	11 U	10 U	11 U	11 U	10 U
56 Pentachlorophenol	ug/L	27 U	26 U	26 U	27 U	26 U
57 Phenanthrene	ug/L	11 U	10 U	11 U	11 U	10 U
58 Phenol	ug/L	11 U	10 U	11 U	11 U	10 U
59 Pyrene	ug/L	11 U	10 U	11 U	11 U	10 U
60 benzo(k)fluoranthene	ug/L	11 U	10 U	11 U	11 U	10 U
61 bis(2-Chloroethoxy) methane	ug/L	11 U	10 U	11 U	11 U	10 U
62 bis(2-Chloroethyl) ether	ug/L	11 U	10 U	11 U	11 U	10 U
63 bis(2-Chloroisoctopyl) ether	ug/L	11 U	10 U 6 JB	11 U 4 JB	11 U 15 B	10 U
64 bis(2-Ethylhexyl)phthalate	ug/L	2 JB	0 JB	4 JB	13 B	13 B

	SDG STUDY ID MATRIX LAB SAMP. ID EPA SAMP. ID QC CODE % MOISTURE % SOLIDS	: : : :	55106 PHASE 1 WATER 279033 MW25-15 SA	55106 PHASE 1 WATER 279034 MW25-16D SA	55106 PHASE 1 WATER 279035 MW25-17 SA	55106 PHASE 1 WATER 279766 MW25-18 SA	55106 PHASE 1 WATER 279136 MW25-19 SA
	PARAMETER	R UNIT	VALUE O	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1	1,2,4-Trichlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U
	1,2-Dichlorobenzene	ug/L	10 U	10 U	io U	10 U	10 U
3	1,3-Dichlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U
4	1,4-Dichlorobenzene	ug/L	10 U	10 U	10 U	: 10 U	10 U
5	2,4,5-Trichlorophenol	ug/L	<b>2</b> 6 U	<b>26</b> U	<b>2</b> 6 U	26 U	<b>26</b> U
6	2,4,6-Trichlorophenol	ug/L	10 U	10 U	10 U	10 U	10 U
7	2,4-Dichlorophenol	ug/L	10 U	10 U	10 U	10 U	10 U
	2,4-Dimethylphenol	ug/L	10 U	10 U	10 U	10 U	10 U
	2,4-Dinitrophenol	ug/L	26 U	<b>2</b> 6 U	26 U	<b>26</b> U	26 U
	2,4-Dinitrotoluene	ug/L	10 U	10 U	10 U	10 U	10 U
	2,6-Dinitrotoluene	ug/L	10 U	10 U	10 U	10 U	10 U
	2-Chloronaphthalene	ug/L	10 U	10 U	10 U	10 U	10 U
	2-Chlorophenol	ug/L	10 U	10 U	10 U	10 U	10 U
	2-Methylnaphthalene	ug/L	10 U	10 U	10 U	10 U	10 U
	2-Methylphenol	ug/L	10 U	10 U	10 U	10 U	10 U
	2-Nitroaniline	ug/L	26 U	<b>2</b> 6 U	<b>2</b> 6 U	<b>2</b> 6 U	26 U
	2-Nitrophenol	ug/L	10 U	10 U	10 U	10 U	10 U
	3,3'-Dichlorobenzidine	ug/L	10 U	10 U	10 U	· 10 U	10 U
	3-Nitroaniline	ug/L	<b>26</b> U	<b>2</b> 6 U	26 U	26 U	26 U
	4,6-Dinitro-2-methylphenol	ug/L	<b>2</b> 6 U	<b>2</b> 6 U	<b>2</b> 6 U	<b>26</b> U	<b>2</b> 6 U
	4-Bromophenyl-phenylether	ug/L	10 U	10 U	10 U	10 U	10 U
	4-Chloro-3-methylphenol	ug/L	10 U	10 U	10 U	10 U	10 U
	4-Chloroaniline	ug/L ·	10 U	10 U	10 U	10 U	10 U
	4-Chlorophenyl-phenylether	ug/L	10 U	10 U	10 U	10 U	10 U
	4-Methylphenol	ug/L	10 U	10 U	10 U	10 U	10 U
	4-Nitroaniline	ug/L	26 U	26 U	26 U	26 U	<b>26</b> U
	4-Nitrophenol	ug/L	26 U	26 U	<b>2</b> 6 U	<b>26</b> U	<b>2</b> 6 U
	Acenaphthene	ug/L	10 U	10 U	10 U	10 U	10 U
	Acenaphthylene	ug/L	10 U	10 U	10 U	10 U	10 U
	Anthracene	ug/L	10 U	10 U	10 U	10 U	10 U
	Benzo(a)anthracene	ug/L	10 U	10 U	10 U	10 U	10 U
	Benzo(a)pyrene	ug/L	10 U	10 U	10 U	10 U	10 U
	Benzo(b)fluoranthene	ug/L	10 U	10 U	10 U	10 U	10 U
34	Benzo(g,h,i)perylene	ug/L	10 U	10 U	10 U	10 U	10 U

SE STUDY I MATRI LAB SAMP. I EPA SAMP. I QC COE % MOISTUR % SOLIE	D: X: D: D: DE: EE:	55106 PHASE 1 WATER 279033 MW25-15 SA	55106 PHASE 1 WATER 279034 MW25-16D SA	55106 PHASE 1 WATER 279035 MW25-17 SA	55106 PHASE 1 WATER 279766 MW25-18 SA	55106 PHASE 1 WATER 279136 MW25-19 SA
PARAMET	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
35 Butylbenzylphthalate	ug/L	10 U	10 U	10 U	10 U	10 U
36 Carbazole	110/1	10 U	· 10 U	10 U	10 U	10 U
37 Chrysene	ug/L	10 U	10 U	10 U	10 U	10 U
38 Di-n-butylphthalate	ug/L	10 U	10 U	10 U	10 U	10 U
39 Di-n-oprylphthalate	ug/L	10 U	10 U	10 U	10 U	10 U
40 Dibenz(a,h)anthracene	ug/L	10 U	10 U	10 U	10 U	10 U
41 Dibenzofuran	ug/L	10 U	10 U	10 U	10 U	10 U
42 Diethylphthalate	ug/L	10 U	10 U	10 U	10 U	10 U
43 Dimethylphthalate	ug/L	10 U	10 U	10 U	10 U	10 U
44 Fluoranthene	ug/L	10 U	10 U	10 U	· 10 U	10 U
45 Fluorene	ug/L	10 U	<b>10 U</b>	10 U	10 U	10 U
46 Hexachlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U
47 Hexachlorobutadiene	ug/L	10 U	10 U	10 U	10 U	10 U
48 Hexachlorocyclopentadiene	ug/L	10 U	10 U	10 U	10 U	10 U
49 Hexachloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
50 Indeno(1,2,3-cd)pyrene	ug/L	10 U	10 U	10 U	10 U	10 U
51 Isophorone	ug/L	10 U	10 U	<b>10</b> U	10 U	10 U
52 N-Nitroso-di-n-ctopylamine	ug/L	10 U	10 U	10 U	. 10 U	10 U
53 N-Nitrosodiphenylamine (1)	ug/L	10 U	10 U	10 U	10 U	10 U
54 Naphthalene	ug/L	10 U	10 U	10 U	10 U	10 U
55 Nitrobenzene	ug/L	10 U	10 U	10 U	10 U	10 U
56 Pentachlorophenol	ug/L	26 U	<b>2</b> 6 U	<b>2</b> 6 U	<b>2</b> 6 U	26 U
57 Phenanthrene	ug/L	10 U	10 U	10 U	10 U	10 U
58 Phenol	ug/L	10 U	10 U	10 U	10 U	10 U
59 Pyrene	ug/L	10 U	10 U	<b>10</b> U	10 U	10 U
60 benzo(k)fluoranthene	ug/L	10 U	10 U	10 U	10 U	10 U
61 bis(2-Chloroethoxy) methane	ug/L	10 U	10 U	10 U	10 U	10 U
62 bis(2-Chloroethyl) ether	ug/L	10 U	10 U	10 U	10 U	10 U
63 bis(2-Chloroisoctopyl) ether	ug/L	10 U	10 U	10 U	10 U	10 U
64 bis(2-Ethylhexyl)phthalate	ug/L	4 JB	1 JB	6 JB	13 B	2 JB

M. LAB SAI EPA SAI QC % MOIS	MP. ID: CODE:	55106 PHASE 1 WATER 279978 MW25-2 SA	55106 PHASE 1 WATER 278844 MW25-3 SA	55106 PHASE 1 WATER 278504 MW25-4D SA	55106 PHASE 1 WATER 278845 MW25-5D SA	55106 PHASE 1 WATER 279133 MW25-6 SA
PARA	METER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1.2,4-Trichlorobenzene	ug/L	21 U	11 U	10 U	10 U	11 U
2 1.2-Dichlorobenzene	ug/L	21 U	11 U	10 U	10 U	11 U
3 1,3-Dichlorobenzene	ug/L	21 U	11 U	10 U	10 U	11 U
4 1,4-Dichlorobenzene	ug/L	21 U	11 U	10 U	10 U	11 U
5 2,4,5-Trichlorophenol	ug/L	52 U	26 U	25 U	26 U	27 U
6 2,4,6-Trichlorophenol	ug/L	21 U	11 U	10 U	10 U	11 U
7 2,4-Dichlorophenol	ug/L	21 U	11 U	10 U	10 U	11 U
8 2,4-Dimethylphenol	ug/L	29	11 U	10 U	10 U	11 U
9 2,4-Dinitrophenol	ug/L	52 U	26 U	25 U	26 U	27 U
10 2,4-Dinitrotoluene	ug/L	21 U	11 U	10 U	10 U	11 U
11 2,6-Dinitrotoluene	ug/L	21 U	11 U	10 U	10 U	11 U
12 2-Chloronaphthalene	ug/L	21 U	11 U	10 U	10 U	11 U
13 2-Chlorophenol	ug/L	<b>21</b> U	11 U	10 U	10 U	11 U
14 2-Methylnaphthalene	ug/L	46	11 U	10 U	10 U	11 U
15 2-Methylphenol	ug/L	8 J	11 U	10 U	10 U	11 U
16 2-Nitroaniline	ug/L	52 U	26 U	25 U	<b>2</b> 6 U	27 U
17 2-Nitrophenol	ug/L	21 U	11 U	10 U	10 U	11 U
18 3,3'-Dichlorobenzidine	ug/L	21 U	11 U	10 U	· 10 U	11 U
19 3-Nitroaniline	ug/L	52 U	<b>2</b> 6 U	25 U	<b>26</b> U	27 U
20 4,6-Dinitro-2-methylphenol		52 U	26 U	25 U	<b>2</b> 6 U	27 U
21 4-Bromophenyl-phenylether		<b>21</b> U	11 U	10 U	10 U	11 U
22 4-Chloro-3-methylphenol	ug/L	21 U	11 U	10 U	10 U	11 U
23 4-Chloroaniline	ug/L	21 U	11 U	10 U	10 U	11 U
24 4-Chlorophenyl-phenylether		21 U	11 U	10 U	10 U	11 U
25 4-Methylphenol	ug/L	21 U	11 U	10 U	10 U	11 U
26 4-Nitroaniline	ug/L	52 U	26 U	25 U	26 U	27 U
27 4-Nitrophenol	ug/L	52 U	26 U	25 U	26 U	27 U
28 Acenaphthene	ug/L	21 U	11 U	10 U	10 U	11 U
29 Acenaphthylene	ug/L	21 U	11 U	10 U	10 U	11 U
30 Anthracene	ug/L	21 U	11 U	10 U	10 U	11 U
31 Benzo(a)anthracene	ug/L	21 U	11 U	10 U	10 U	11 U
32 Benzo(a)pyrene	ug/L	21 U	11 U	10 U	10 U	11 U
33 Benzo(b)fluoranthene	ug/L	21 U	11 U	10 U	10 U	11 U
34 Benzo(g,h,i)perylene	ug/L	21 U	11 U	10 U	10 U	11 U

SD STUDY I MATRI LAB SAMP. I EPA SAMP. I QC COD % MOISTUR % SOLID	D: X: D: D: Æ: Æ:	55106 PHASE 1 WATER 279978 MW25-2 SA	55106 PHASE 1 WATER 278844 MW25-3 SA	55106 PHASE 1 WATER 278504 MW25-4D SA	55106 PHASE I WATER 278845 MW25-5D SA	55106 PHASE 1 WATER 279133 MW25-6 SA
PARAMETI	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
35 Butylbenzylphthalate	ug/L	21 U	11 U	10 U	10 U	11 U
36 Carbazole	ug/L	21 U	11 U	10 U	10 U	11 U
37 Chrysene	ug/L	21 U	11 U	10 U	10 U	11 U
38 Di-n-butylphthalate	ug/L	21 U	11 U	10 U	10 U	11 U
39 Di-n-oprylphthalate	ug/L	21 U	11 U	10 U	10 U	11 U
40 Dibenz(a,h)anthracene	ug/L	<b>21</b> U	11 U	10 U	10 U	11 U
41 Dibenzofuran	ug/L	21 U	11 U	10 U	10 U	11 U
42 Diethylphthalate	ug/L	21 U	11 U	10 U	10 U	11 U
43 Dimethylphthalate	ug/L	21 U	11 U	10 U	10 U	11 U
44 Fluoranthene	ug/L	21 U	11 U	10 U	10 U	11 U
45 Fluorene	ug/L	21 U	11 U	10 U	10 U	11 U
46 Hexachlorobenzene	ug/L	21 U	11 U	10 U	10 U	11 U
47 Hexachlorobutadiene	ug/L	<b>21</b> U	11 U	10 U	. 10 U	11 U
48 Hexachlorocyclopentadiene	ug/L	<b>21</b> U	11 U	10 U	10 U	11 U
49 Hexachloroethane	ug/L	21 U	11 U	10 U	10 U	11 U
50 Indeno(1,2,3-cd)pyrene	ug/L	<b>21</b> U	11 U	10 U	10 U	11 U
51 Isophorone	ug/L	21 U	11 U	10 U	10 U	11 U
52 N-Nitroso-di-n-ctopylamine	ug/L	21 U	11 U	10 U	10 U	11 U
53 N-Nitrosodiphenylamine (1)	ug/L	21 U	11 U	10 U	10 U	11 U
54 Naphthalene	ug/L	110	11 U	10 U	10 U	11 U
55 Nitrobenzene	ug/L	<b>21</b> U	11 U	10 U	10 U	11 U
56 Pentachlorophenol	ug/L	52 U	<b>2</b> 6 U	25 U	26 U	27 U
57 Phenanthrene	ug/L ·	1 J	11 U	10 U	10 U	11 U
58 Phenol	ug/L	<b>21</b> U	11 U	10 U	10 U	11 U
59 Pyrene	ug/L	21 U	11 U	10 U	10 U	11 U
60 benzo(k)fluoranthene	ug/L	21 U	11 U	10 U	10 U	11 U
61 bis(2-Chloroethoxy) methane	ug/L	21 U	11 U	10 U	10 U	11 U
62 bis(2-Chloroethyl) ether	ug/L	21 U	11 U	10 U	10 U	11 U
63 bis(2-Chloroisoctopyl) ether	ug/L	21 U	11 U	10 U	10 U	11 U
64 bis(2-Ethylhexyl)phthalate	ug/L	15 JB	5 JB	3 JB	5 JB	2 JB

	SDG STUDY ID MATRIX LAB SAMP. ID EPA SAMP. ID QC CODE	: : : :	55106 PHASE 1 WATER 279134 MW25-7D SA		55106 PHASE 1 WATER 279765 MW25-8 SA		55106 PHASE 1 WATER 274848 MW25-9 SA
	% MOISTURE % SOLIDS						
			******				
1	PARAMETER 1,2,4-Trichlorobenzene		VALUE 10	-	VALUE 10	-	VALUE Q 10 U
	1,2-Dichlorobenzene	ug/L ug/L	10		10		
	1,3-Dichlorobenzene	ug/L ug/L	10	_	10		10 U 10 U
	1,4-Dichlorobenzene	ug/L ug/L	10	-	10	-	10 U
	2,4,5-Trichlorophenol	ug/L ug/L	26	_	26		26 U
	2,4,6-Trichlorophenol	ug/L ug/L	10		10		10 U
	2,4-Dichlorophenol	ug/L ug/L	10		10	-	10 U
	2,4-Dimethylphenoi	ug/L ug/L	10		10	-	10 U
	2,4-Dinitrophenol	ug/L	26		26		26 U
	2,4-Dinitrophenol	ug/L	10		10	_	10 U
	2,6-Dinitrotoluene	ug/L ug/L	10		10	-	10 U
	2-Chloronaphthalene	ug/L	10		10		10 U
	2-Chlorophenol	ug/L	10	-	10		10 U
	2-Methylnaphthalene	ug/L	10		10	-	10 U
	2-Methylphenol	ug/L	10		10	-	10 U
	2-Nitroaniline	ug/L	26		26	-	26 U
	2-Nitrophenol	ug/L	10		10		10 U
	3.3'-Dichlorobenzidine	ug/L	10		10		10 U
	3-Nitroaniline	ug/L	26	-	26	_	26 U
	4,6-Dinitro-2-methylphenol	ug/L	26	-	26	-	26 U
	4-Bromophenyl-phenylether	ug/L	10	-	10	-	10 U
	4-Chloro-3-methylphenol	ug/L	10		10	-	10 U
	4-Chloroaniline	ug/L ·	10		10		10 U
	4-Chlorophenyl-phenylether	ug/L	10		10	_	10 U
	4-Methylphenol	ug/L	10	-	10	-	10 U
	4-Nitroaniline	ug/L	26		26		26 U
	4-Nitrophenol	ug/L	26		26		26 U
	Acenaphthene	ug/L	10		10		10 U
	Acenaphthylene	ug/L	10	Ū	10		10 U
30	Anthracene	ug/L	10	U	10	Ū	10 U
	Benzo(a)anthracene	ug/L	10		10		10 U
	Benzo(a)pyrene	ug/L	10		10	-	10 U
	Benzo(b)fluoranthene	ug/L	10		10		10 U
	Benzo(g,h,i)perylene	ug/L	10		10		10 U
		-					

	SDG: STUDY ID: MATRIX: LAB SAMP. ID: EPA SAMP. ID: QC CODE: % MOISTURE: % SOLIDS:		55106 PHASE 1 WATER 279134 MW25-7D SA		55106 PHASE 1 WATER 279765 MW25-8 SA		55106 PHASE 1 WATER 274848 MW25-9 SA
	PARAMETER	UNIT	VALUE	Q	VALUE	-	VALUE Q
35	Butylbenzylphthalate	ug/L	10	U	10		10 U
36	Carbazole	ug/L	10		10		10 U
37	Chrysene	ug/L	10	U	10		10 U
38	Di-n-butylphthalate	ug/L	10	_	10	_	10 U
	Di-n-oprylphthalate	ug/L	10		10		10 U
	Dibenz(a,h)anthracene	ug/L	10		10		10 U
	Dibenzofuran	ug/L	10		10		10 U
	Diethylphthalate	ug/L	10		10		10 U
	Dimethylphthalate	ug/L	10		10		10 U
	Fluoranthene	ug/L	10		10		10 U
	Fluorene	ug/L	10	_	10		10 U
	Hexachlorobenzene	ug/L	10		10		10 U 10 U
	Hexachlorobutadiene	ug/L	10		10	_	10 U
	Hexachlorocyclopentadiene	ug/L	10	_	10 10		10 U
	Hexachloroethane	ug/L	. 10 10		10		10 U
	Indeno(1,2,3-cd)pyrene	ug/L	10	_	10		10 U
	Isophorone	ug/L	10		10		10 U
	N-Nitroso-di-n-ctopylamine	ug/L	10	_	10	_	10 U
	N-Nitrosodiphenylamine (1)	ug/L	10		10		2 J
	Naphthalene Nitrobenzene	ug/L ug/L	10		10	_	10 U
	Pentachlorophenol	ug/L ug/L	26		26		26 U
	Phenanthrene	ug/L	10	-	10		10 U
	Phenol	ug/L ug/L	10	_	10		10 U
-	Pyrene	ug/L	10		10		10 U
	benzo(k)fluoranthene	ug/L	10		10	U	10 U
	bis(2-Chloroethoxy) methane	ug/L	10		10		10 U
	bis(2-Chloroethyl) ether	ug/L	10		10		10 U
	bis(2-Chloroisoctopyl) ether	ug/L	10		10		10 U
	bis(2-Ethylhexyl)phthalate	ug/L		JВ	9	JB	6 JB
	·	-					

55106SW.WK4

**SVOCs** 

31003						
	SDG:	55106	55106	55106	55106	55106
STUDY		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
, MAT	RIX:	WATER	WATER	WATER	WATER	WATER
LAB SAMP	P. ID:	274847	274846	278791	278791	279132
EPA SAMP	P. ID:	MW25-50	MW25-5DR	MW25-12DMS	MW25-12DMSD	MW25-1
QC CC		DU	FB	MS	MSD	SA
% MOIST						
% SOL	LIDS:					
PARAME		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	ug/L	11 U	11 U	48	45	10 U
1 1,2,4-Trichlorobenzene	ug/L	11 U	11 U	48	45	10 U
2 1,2-Dichlorobenzene	ug/L	11 U	11 U	11 U	11 U	10 U
3 1,3-Dichlorobenzene	ug/L	11 U	11 U	11 U	11 U	10 U
4 1,4-Dichlorobenzene	ug/L	11 U	11 U	46	41	10 U
5 2,4,5-Trichlorophenol	ug/L	<b>27</b> U	28 U	28 U	<b>27</b> U	<b>2</b> 6 U
6 2,4,6-Trichlorophenol	ug/L	11 U	11 U	11 U	11 U	10 U
7 2,4-Dichlorophenol	ug/L	11 U	11 U	11 U	11 U	10 U
8 2,4-Dimethylphenol	ug/L	11 U	11 U	11 U	11 U	10 U
9 2,4-Dinitrophenol	ug/L	27 U	28 U	<b>28</b> U	27 U	<b>26</b> U
10 2,4-Dinitrotoluene	ug/L	11 U	11 U	50	54	10 U
11 2,6-Dinitrotoluene	ug/L	11 U	11 U	11 U	· 11 U	10 U
12 2-Chloronaphthalene	ug/L	11 U	11 U	11 U	11 U	10 U
13 2-Chlorophenol	ug/L	11 U	11 U	64	62	10 U
14 2-Methylnaphthalene	ug/L	11 U	11 U	11 U	11 U	10 U
15 2-Methylphenol	ug/L	11 U	11 U	11 U	11 U	10 U
16 2-Nitroaniline	ug/L	27 U	28 U	28 U	27 U	26 U
17 2-Nitrophenol	ug/L	11 U	11 U	11 U	. 11 U	10 U
18 3,3'-Dichlorobenzidine	ug/L	11 U	11 U	11 U	11 U	10 U
19 3-Nitroaniline	ug/L	27 U	28 U	28 U	27 U	26 U
20 4,6-Dinitro-2-methylphenol	ug/L	27 U	28 U	28 U	27 U	26 U
21 4-Bromophenyl-phenylether	ug/L	11 U	11 U	11 U	11 U	10 U
22 4-Chloro-3-methylphenol	ug/L	11 U	11 U	71	74	10 U
23 4-Chloroaniline	ug/L	11 U	11 U	11 U	11 U	10 U
24 4-Chlorophenyl-phenylether	ug/L	11 U	11 U	11 U	11 U	10 U
25 4-Methylphenol	ug/L	11 U	11 U	11 U	11 U	10 U
26 4-Nitroaniline	ug/L	27 U	28 U	28 U	27 U	26 U
27 4-Nitrophenol	ug/L	27 U	28 U	79	90 E	26 U
28 Acenaphthene	ug/L	11 U	11 U	50	50	10 U
29 Acenaphthylene	ug/L	11 U	11 U	11 U	11 U	10 U
30 Anthracene	ug/L	11 U	11 U	11 U	11 U	10 U 10 U
31 Benzo(a)anthracene	ug/L	11 U	11 U	11 U	11 U	
32 Benzo(a)pyrene	ug/L	11 U	11 U	11 U	11 U	10 U
33 Benzo(b)fluoranthene	ug/L	11 U	11 U	11 U	11 U 11 U	10 U
34 Benzo(g,h,i)perylene	ug/L	11 U	11 U	11 U		10 U
o. Deller Britisher Jiens	ag D	11 0	11 0	11 0	11 U	10 U .

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SDG		55106	55106	55106	55106	55106
STUDY II		PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
MATRI	X:	WATER	WATER	WATER	WATER	WATER
LAB SAMP. II	D:	274847	274846	278791	<b>27</b> 8791	279132
EPA SAMP. II	D:	MW25-50	MW25-5DR	MW25-12DMS	MW25-12DMSD	MW25-1
QC COD	E:	DU	FB	MS	MSD	SA
% MOISTUR	E:					
% SOLID	S:					
PARAMETE	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	ug/L	11 U	11 U	48	45	10 U
35 Butylbenzylphthalate	ug/L	11 U	11 U	11 U	11 U	10 U
36 Carbazole	ug/L	11 U	11 U	11 U	11 U	10 U
37 Chrysene	ug/L	11 U	11 U	11 U	11 U	10 U
38 Di-n-butylphthalate	ug/L	11 U	11 U	11 U	11 U	10 U
39 Di-n-oprylphthalate	ug/L	11 U	11 U	11 U	11 U	10 U
40 Dibenz(a,h)anthracene	ug/L	11 U	11 U	11 U	11 U	10 U
41 Dibenzofuran	ug/L	11 U	11 U	11 U	11 U	10 U
42 Diethylphthalate	ug/L	11 U	11 U	11 U	11 U	10 U
43 Dimethylphthalate	ug/L	11 U	11 U	11 U	11 U	10 U
44 Fluoranthene	ug/L	11 U	11 U /	11 0	11 U	10 U
45 Fluorene	ug/L	11 U	11 U	11 U	11 U	10 U
46 Hexachlorobenzene	ug/L	11 U	11 U	11 U	11 U	10 U
47 Hexachlorobutadiene	ug/L	11 U	11 U	11 U	11 U	10 U
48 Hexachlorocyclopentadiene	ug/L	11 U	11 U	11 U	11 U	10 U
49 Hexachloroethane	ug/L	11 U	11 U	11 U	11 U	10 U
50 Indeno(1,2,3-cd)pyrene	ug/L	11 <b>U</b>	11 U	11 U	11 U	10 U
51 Isophorone	ug/L	11 U	11 U	11 U	11 U	10 U
52 N-Nitroso-di-n-ctopylamine	ug/L	11 U	11 U	55	53	10 U
53 N-Nitrosodiphenylamine (1)	ug/L	11 U	11 U	11 U	11 U	10 U
54 Naphthalene	ug/L	11 U	11 U	11 U	11 U	10 U
55 Nitrobenzene	ug/L	11 U	11 U	11 U	11 U	10 U
56 Pentachlorophenol	ug/L	<b>27</b> U	28 U	84	89 E	26 U
57 Phenanthrene	ug/L	11 U	11 U	11 U	11 U	10 U
58 Phenol	ug/L	11 U	11 U	61	59	10 U
59 Pyrene	ug/L	11 U	11 U	51	51	10 U
60 benzo(k)fluoranthene	ug/L	11 U	11 U	11 U	11 U	10 U
61 bis(2-Chloroethoxy) methane	ug/L	11 U	11 U	11 U	11 U	10 U
62 bis(2-Chloroethyl) ether	ug/L	11 U	11 U	11 U	11 U	10 U
63 bis(2-Chloroisoctopyl) ether	ug/L	11 U	11 U	11 U	11 U	10 U
64 bis(2-Ethylhexyl)phthalate	ug/L	2 ЛВ	4 JB	2 JB	8 JB	3 JB

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SE STUDY MATR LAB SAMP. EPA SAMP. QC COI % MOISTUR % SOLII	IX: ID: ID: DE: RE:	55106 PHASE 1 WATER 279135 MW25-10 SA	55106 PHASE 1 WATER 278790 MW25-11 SA	55106 PHASE 1 WATER 278791 MW25-12D SA	55106 PHASE 1 WATER 278792 MW25-13 SA	55106 PHASE 1 WATER 278793 MW25-14D SA
PARAMET	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	ug/L	11 U	10 U	11 U	11 U	10 U
1 1,2,4-Trichlorobenzene	ug/L	11 U	10 U	11 U	11 U	10 U
2 1,2-Dichlorobenzene	ug/L	11 U	10 U	11 U	11 U	10 U
3 1,3-Dichlorobenzene	ug/L	11 U	10 U	11 U	11 U	10 U
4 1,4-Dichlorobenzene	ug/L	11 U	10 U	11 U	11 U	10 U
5 2,4,5-Trichlorophenol	ug/L	27 U	<b>2</b> 6 U	<b>2</b> 6 U	<b>27</b> U	26 U
6 2,4,6-Trichlorophenol	ug/L	11 U	10 U	11 U	11 U	10 U
7 2,4-Dichlorophenol	ug/L	11 U	10 U	11 U	11 U	10 U
8 2,4-Dimethylphenol	ug/L	11 U	10 U	11 U	11 U	10 U
9 2,4-Dinitrophenol	ug/L	<b>27</b> U	<b>26</b> U	<b>26</b> U	<b>27</b> U	26 U
10 2,4-Dinitrotoluene	ug/L	11 U	10 U	11 U	11 U	10 U
11 2,6-Dinitrotoluene	ug/L	11 U	10 U	11 U	11 U	10 U
12 2-Chloronaphthalene	ug/L	11 U	10 U	11 U	11 U	10 U
13 2-Chlorophenol	ug/L	11 U	10 U	11 U	11 U	10 U
14 2-Methylnaphthalene	ug/L	11 U	10 U	11 U	11 U	10 U
15 2-Methylphenol	ug/L	11 U	10 U	11 U	11 U	10 U
16 2-Nitroaniline	ug/L	27 U	26 U	<b>26</b> U	<b>27</b> U	<b>26</b> U
17 2-Nitrophenol	ug/L	11 U	10 U	11 U	11 U	10 U
18 3,3'-Dichlorobenzidine	ug/L	11 U	10 U	11 U	11 U	10 U
19 3-Nitroaniline	ug/L	27 U	26 U	<b>2</b> 6 U	27 U	26 U
20 4,6-Dinitro-2-methylphenol	ug/L	27 U	26 U	<b>26</b> U	<b>27</b> U	26 U
21 4-Bromophenyl-phenylether	ug/L	11 U	10 U	11 U	11 U	10 U
22 4-Chloro-3-methylphenol	ug/L	11 U	10 U	11 U	11 U	10 U
23 4-Chloroaniline	ug/L	11 U	10 U	11 U	11 U	10 U
24 4-Chlorophenyl-phenylether	ug/L	11 U	10 U	11 U	11 U	10 U
25 4-Methylphenol 26 4-Nitroaniline	ug/L	11 U	10 U	11 U	11 U	10 U
	ug/L	27 U	26 U	26 U	27 U	26 U
27 4-Nitrophenol 28 Acenaphthene	ug/L	27 U 11 U	26 U 10 U	26 U	27 U	<b>2</b> 6 U
29 Acenaphthylene	ug/L ug/L	11 U	10 U	11 U	11 U	10 U
30 Anthracene	ug/L ug/L	11 U	10 U	11 U	11 U	10 U
31 Benzo(a)anthracene		11 U		11 U	11 U	10 U
32 Benzo(a)pyrene	.ug/L ug/L	11 U	10 U 10 U	11 U	11 U	10 U
33 Benzo(b)fluoranthene	ug/L ug/L	11 U	10 U	11 U 11 U	11 U	10 U
34 Benzo(g,h,i)perylene	ug/L	11 U	10 U	11 U	11 U	10 U
5.1 Delizo(E, il, i)por yrone	ag L	11 0	10 0	11 0	11 U	10 U

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20 A	OCs

SDO STUDY II MATRE LAB SAMP. II EPA SAMP. II QC COD % MOISTUR % SOLID	D: X: D: D: E: E:	55106 PHASE 1 WATER 279135 MW25-10 SA	55106 PHASE 1 WATER 278790 MW25-11 SA	55106 PHASE 1 WATER 278791 MW25-12D SA	55106 PHASE 1 WATER 278792 MW25-13 SA	55106 PHASE 1 WATER 278793 MW25-14D SA
PARAMETE	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	ug/L	11 U	10 U	11 U	11 U	10 U
35 Butylbenzylphthalate	ug/L	11 U	10 U	11 U	11 U	10 U
36 Carbazole	ug/L	11 U	10 U	11 U	11 U	10 U
37 Chrysene	ug/L	11 U	10 U	11 U	11 U	10 U
38 Di-n-butylphthalate	ug/L	11 U	10 U	11 U	11 U	10 U
39 Di-n-oprylphthalate	ug/L	11 U	10 U	11 U	11 U	10 U
40 Dibenz(a,h)anthracene	ug/L	11 U	10 U	11 U	11 U	10 U
41 Dibenzofuran	ug/L	11 U	10 U	11 U	11 U	10 U
42 Diethylphthalate	ug/L	11 U	10 U	11 U	11 U	10 U
43 Dimethylphthalate	ug/L	11 U	10 U	11 U	11 U	10 U
44 Fluoranthene	ug/L	11 U	10 U	11 U	11 U	10 U
45 Fluorene	ug/L	11 U	10 U	11 U	11 U	10 U
46 Hexachlorobenzene	ug/L	11 U	10 U	11 U	11 U	10 U
47 Hexachlorobutadiene	ug/L	11 U	10 U	11 U	11 U	10 U
48 Hexachlorocyclopentadiene	ug/L	11 U	10 U	11 U	11 U	10 U
49 Hexachloroethane	ug/L	11 U	10 U	11 U	11 U	10 U
50 Indeno(1,2,3-cd)pyrene	ug/L	11 U	10 U	11 U	11 U	10 U
51 Isophorone	ug/L	11 U	10 U	11 U	11 U	10 U
52 N-Nitroso-di-n-ctopylamine	ug/L	11 U	10 U	11 U	11 U	10 U
53 N-Nitrosodiphenylamine (1)	ug/L	11 U	10 U	11 U	11 U	10 U
54 Naphthalene	ug/L	11 U	10 U	11 U	11 U	10 U
55 Nitrobenzene	ug/L	11 U	10 U	11 U	11 U	10 U
56 Pentachlorophenol	ug/L	27 U	26 U	26 U	27 U	<b>26</b> U
57 Phenanthrene	ug/L	11 U	10 U	11 U	11 U	10 U
58 Phenol	ug/L	11 U	10 U	11 U	11 U	10 U
59 Pyrene	ug/L	11 U	10 U	11 U	11 U	10 U
60 benzo(k)fluoranthene	ug/L	11 U	10 U	11 U	11 U	10 U
61 bis(2-Chloroethoxy) methane	ug/L	11 U	10 U	11 U	11 U	10 U
62 bis(2-Chloroethyl) ether	ug/L	11 U	10 U	11 U	11 U	10 U
63 bis(2-Chloroisoctopyl) ether	ug/L	11 U	10 U	11 U	11 U	10 U
64 bis(2-Ethylhexyl)phthalate	ug/L	2 JB	6 JB	4 JB	15 B	13 B

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SDO STUDY III MATRIX LAB SAMP. III EPA SAMP. III QC CODE % MOISTURE % SOLIDS	): 2 ): ): ): ): ): ):	55106 PHASE 1 WATER 279033 MW25-15 SA	55106 PHASE 1 WATER 279034 MW25-16D SA	55106 PHASE 1 WATER 279035 MW25-17 SA	55106 PHASE 1 WATER 279766 MW25-18 SA	55106 PHASE 1 WATER 279136 MW25-19 SA
PARAMETE	R UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U
1 1,2,4-Trichlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U
2 1,2-Dichlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U
3 1,3-Dichlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U
4 1,4-Dichlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U
5 2,4,5-Trichlorophenol	ug/L	26 U	26 U	<b>2</b> 6 U	<b>26</b> U	26 U
6 2,4,6-Trichlorophenol	ug/L	10 U	10 U	10 U	10 U	10 U
7 2,4-Dichlorophenol	ug/L	10 U	10 U	10 U	10 U	10 U
8 2,4-Dimethylphenol	ug/L	10 U	10 U	10 U	. 10 U	10 U
9 2,4-Dinitrophenol	ug/L	26 U	26 U	26 U	<b>26</b> U	<b>26</b> U
10 2,4-Dinitrotoluene	ug/L	10 U	10 U	10 U	10 U	10 U
11 2,6-Dinitrotoluene	ug/L	10 U	10 U	10 U	10 U	10 U
12 2-Chloronaphthalene	ug/L	10 U	10 U	10 U	10 U	10 U
13 2-Chlorophenol	ug/L	10 U	10 U	10 U	10 U	10 U
14 2-Methylnaphthalene	ug/L	10 U	10 U	10 U	10 U	10 U
15 2-Methylphenol	ug/L	10 U	10 U	10 U	10 U	10 U
16 2-Nitroaniline	ug/L	26 U	26 U	26 U	26 U	26 U
17 2-Nitrophenol	ug/L	10 U	10 U	10 U	10 U	10 U
18 3,3'-Dichlorobenzidine	ug/L	10 U	10 U	10 U	10 U	10 U
19 3-Nitroaniline	ug/L	26 U	26 U	26 U	26 U	26 U
20 4,6-Dinitro-2-methylphenol	ug/L	26 U	26 U	26 U	26 U	<b>26</b> U
21 4-Bromophenyl-phenylether	ug/L	10 U	10 U	10 U	10 U	10 U
22 4-Chloro-3-methylphenol	ug/L	10 U	10 U	10 U	10 U	10 U
23 4-Chloroaniline	ug/L	10 U 10 U	10 U	10 U	10 U	10 U
<ul><li>24 4-Chlorophenyl-phenylether</li><li>25 4-Methylphenol</li></ul>	ug/L	10 U	10 U 10 U	10 U	10 U	10 U
26 4-Nitroaniline	ug/L ug/L	26 U	26 U	10 U <b>26</b> U	10 U	10 U
27 4-Nitrophenol	ug/L ug/L	26 U	26 U	26 U	26 U	26 U
28 Acenaphthene	ug/L ug/L	10 U	10 U	10 U	<b>2</b> 6 U 10 U	26 U
29 Acenaphthylene	ug/L ug/L	10 U	10 U	10 U	10 U	10 U
30 Anthracene	ug/L ug/L	10 U	10 U	10 U	10 U	10 U
31 Benzo(a)anthracene	ug/L ug/L	10 U	10 U	10 U	10 U	10 U
32 Benzo(a)pyrene	ug/L	10 U	10 U	10 U	10 U	10 U
33 Benzo(b)fluoranthene	ug/L	10 U	10 U	10 U	10 U	10 U
34 Benzo(g,h,i)perylene	ug/L	10 U	10 U	10 U	10 U	10 U
	-6-5	10 0	10 0	10 0	10 0	10 U

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SD STUDY I MATRI LAB SAMP. I	D: X:	55106 PHASE 1 WATER 279033	55106 PHASE 1 WATER 279034	55106 PHASE 1 WATER 279035	55106 PHASE 1 WATER 279766	55106 PHASE 1 WATER 279136
EPA SAMP. I	D:	MW25-15	MW25-16D	MW25-17	MW25-18	MW25-19
QC COD		SA	SA	SA	SA	SA
% MOISTUR			2.2	5.1	2.1	
% SOLID						
/V BOLLIE						
PARAMETI		VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U
35 Butylbenzylphthalate	ug/L	10 U	10 U	10 U	10 U	10 U
36 Carbazole	ug/L	10 U	10 U	10 U	10 U	. 10 U
37 Chrysene	ug/L	10 U	10 U	10 U	10 U	10 U
38 Di-n-butylphthalate	ug/L	10 U	10 U	10 U	10 U	10 U
39 Di-n-oprylphthalate	ug/L	10 U	10 U	10 U	10 U	10 U
40 Dibenz(a,h)anthracene	ug/L	10 U	10 U	10 U	10 U	10 U
41 Dibenzofuran	ug/L	10 U	10 U	10 U	10 U	10 U
42 Diethylphthalate	ug/L	10 U	10 U	10 U	10 U	10 U
43 Dimethylphthalate	ug/L	10 U	10 U	10 U	10 U	10 U
44 Fluoranthene	ug/L	10 U	10 U	10 U	10 U	10 U
45 Fluorene	ug/L	10 U	10 U	10 U	10 U	10 U
46 Hexachlorobenzene	ug/L	10 U	10 U	10 U	10 U	10 U
47 Hexachlorobutadiene	ug/L	10 U	10 U	10 U	10 U	10 U
48 Hexachlorocyclopentadiene	ug/L	10 U	10 U	10 U	10 U	10 U
49 Hexachloroethane	ug/L	10 U	10 U	10 U	10 U	10 U
50 Indeno(1,2,3-cd)pyrene	ug/L	10 U	10 U	10 U	. 10 U	10 U
51 Isophorone	ug/L	10 U	10 U	10 U	10 U	10 U
52 N-Nitroso-di-n-ctopylamine	ug/L	10 U	10 U	10 U	10 U	10 U
53 N-Nitrosodiphenylamine (1)	ug/L	10 U	10 U	10 U	10 U	10 U
54 Naphthalene	ug/L	10 U	10 U	10 U	10 U	10 U
55 Nitrobenzene	ug/L	10 U	10 U	10 U	10 U	10 U
56 Pentachlorophenol	ug/L	<b>2</b> 6 U	<b>2</b> 6 U	26 U	26 U	26 U
57 Phenanthrene	ug/L	10 U	10 U	10 U	10 U	10 U
58 Phenol	ug/L	10 U	10 U	10 U	10 U	10 U
59 Pyrene	ug/L	10 U	10 U	10 U	10 U	10 U
60 benzo(k)fluoranthene	ug/L	10 U	10 U	10 U	10 U	10 U
61 bis(2-Chloroethoxy) methane	ug/L	10 U	10 U	10 U	10 U	10 U
62 bis(2-Chloroethyl) ether	ug/L	10 U	10 U	10 U	10 U	10 U
63 bis(2-Chloroisoctopyl) ether	ug/L	10 U	10 U	10 U	10 U	10 U
64 bis(2-Ethylhexyl)phthalate	ug/L	4 JB	1 JB	6 JB	13 B	2 JB

SVOCs

SI STUDY MATR LAB SAMP. EPA SAMP. QC CO. % MOISTU % SOLI	EIX: ID: ID: DE: RE:	55106 PHASE 1 WATER 279978 MW25-2 SA	55106 PHASE 1 WATER 278844 MW25-3 SA	55106 PHASE 1 WATER 278504 MW25-4D SA	55106 PHASE 1 WATER 278845 MW25-5D SA	55106 PHASE 1 WATER 279133 MW25-6 SA
PARAMET	TER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	ug/L	21 U	11 U	10 U	10 U	11 U
1 1,2,4-Trichlorobenzene	ug/L	21 U	11 U	10 U	10 U	11 U
2 1,2-Dichlorobenzene	ug/L	<b>21</b> U	11 U	10 U	10 U	11 U
3 1,3-Dichlorobenzene	ug/L	<b>21</b> U	11 U	10 U	10 U	11 U
4 1,4-Dichlorobenzene	ug/L	21 U	11 U	10 U	10 U	11 U
5 2,4,5-Trichlorophenol	ug/L	52 U	26 U	<b>25</b> U	26 U	27 U
6 2,4,6-Trichlorophenol	ug/L	21 U	11 U	10 U	10 U	11 U
7 2,4-Dichlorophenol	ug/L	<b>21</b> U	11 U	10 U	10 U	11 U
8 2,4-Dimethylphenol	ug/L	29	11 U	10 U	10 U	11 U
9 2,4-Dinitrophenol	ug/L	52 U	26 U	25 U	26 U	<b>27</b> U
10 2,4-Dinitrotoluene	ug/L	21 U	11 U	10 U	10 U	11 U
11 2,6-Dinitrotoluene	ug/L	21 U	11 U	10 U	. 10 U	11 U
12 2-Chloronaphthalene	ug/L	21 U	11 U	10 U	10 U	11 U
13 2-Chlorophenol	ug/L	21 U	11 U	10 U	10 U	11 U
14 2-Methylnaphthalene	ug/L	46	11 U	10 U	10 U	11 U
15 2-Methylphenol	ug/L	8 J	11 U	10 U	10 U	11 U
16 2-Nitroaniline	ug/L	52 U	26 U	25 U	26 U	27 U
17 2-Nitrophenol	ug/L	21 U	11 U	10 U	10 U	11 U
18 3,3'-Dichlorobenzidine	ug/L	21 U	11 U	10 U	10 U	11 U
19 3-Nitroaniline	ug/L	52 U	26 U	25 U	26 U	27 U
20 4,6-Dinitro-2-methylphenol	ug/L	52 U 21 U	26 U	25 U	26 U	27 U
21 4-Bromophenyl-phenylether 22 4-Chloro-3-methylphenol	ug/L ug/L	21 U	11 U 11 U	10 U 10 U	10 U	11 U
23 4-Chloroaniline	ug/L ug/L	21 U	11 U	10 U	10 U	11 U
24 4-Chlorophenyl-phenylether	ug/L ug/L	21 U	11 U	10 U	10 U 10 U	11 U
25 4-Methylphenol	ug/L ug/L	21 U	11 U	10 U	10 U	11 U
26 4-Nitroaniline	ug/L ug/L	52 U	26 U	25 U	26 U	11 U 27 U
27 4-Nitrophenol	ug/L	52 U	26 U	25 U	26 U	27 U
28 Acenaphthene	ug/L	21 U	11 U	10 U	20 U	27 U
29 Acenaphthylene	ug/L	21 U	11 U	10 U	10 U	11 U
30 Anthracene	ug/L	21 U	11 U	10 U	10 U	11 U
31 Benzo(a)anthracene	ug/L	21 U	11 U	10 U	10 U	11 U
32 Benzo(a)pyrene	ug/L	21 U	11 U	10 U	10 U	11 U
33 Benzo(b)fluoranthene	ug/L	21 U	11 U	10 U	10 U	11 U
34 Benzo(g,h,i)perylene	ug/L	21 U	11 U	10 U	10 U	11 U
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SD STUDY I MATRI LAB SAMP, I EPA SAMP, I QC COL % MOISTUR % SOLII	ID: IX: ID: ID: DE: RE:	55106 PHASE 1 WATER 279978 MW25-2 SA	55106 PHASE 1 WATER 278844 MW25-3 SA	55106 PHASE 1 WATER 278504 MW25-4D SA	55106 PHASE 1 WATER 278845 MW25-5D SA	55106 PHASE 1 WATER 279133 MW25-6 SA
PARAMET	ER UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 1,2,4-Trichlorobenzene	ug/L	21 U	11 U	10 U	10 U	11 U
35 Butylbenzylphthalate	ug/L	21 U	11 U	10 U	10 U	11 U
36 Carbazole	ug/L	21 U	11 U	10 U	10 U	· 11 U
37 Chrysene	ug/L	21 U	11 U	10 U	10 U	11 U
38 Di-n-butylphthalate	ug/L	21 U	11 U	10 U	10 U	11 U
39 Di-n-oprylphthalate	ug/L	21 U	11 U	10 U	10 U	11 U
40 Dibenz(a,h)anthracene	ug/L	21 U	11 U	10 U	10 U	11 U
41 Dibenzofuran	ug/L	21 U	11 U	10 U	10 U	11 U
42 Diethylphthalate	ug/L	21 U	11 U	10 U	10 U	11 U
43 Dimethylphthalate	ug/L	21 U	11 U	10 U	10 U	11 U
44 Fluoranthene	ug/L	21 U	11 U	10 U	10 U	11 U
45 Fluorene	ug/L	21 U	11 U	10 U	10 U	11 U
46 Hexachlorobenzene	ug/L	<b>21</b> U	11 U	10 U	10 U	11 U
47 Hexachlorobutadiene	ug/L	21 U	11 U	10 U	10 U	11 U
48 Hexachlorocyclopentadiene	ug/L	21 U	11 U	10 U	10 U	11 U
49 Hexachloroethane	ug/L	21 U	11 U	10 U	10 U	11 U
50 Indeno(1,2,3-cd)pyrene	ug/L	21 U	11 U	10 U	10 U	11 U
51 Isophorone	ug/L	21 U	11 U	10 U	10 U	11 U
52 N-Nitroso-di-n-ctopylamine	ug/L	21 U	11 U	10 U	10 U	11 U
53 N-Nitrosodiphenylamine (1)	ug/L	21 U	11 U	10 U	10 U	11 U
54 Naphthalene	ug/L	110	11 U	10 U	10 U	11 U
55 Nitrobenzene	ug/L	21 U	11 U	10 U	10 U	11 U
56 Pentachlorophenol	ug/L	52 U	26 U	25 U	26 U	27 U
57 Phenanthrene	ug/L	1 J	11 U	10 U	10 U	11 U
58 Phenol	ug/L	21 U	11 U	10 U	10 U	11 U
59 Pyrene	ug/L	21 U	11 U	10 U	10 U	11 U
60 benzo(k)fluoranthene	ug/L	21 U	11 U	10 U	10 U	11 U
61 bis(2-Chloroethoxy) methane	ug/L	21 U	11 U	10 U	10 U	11 U
62 bis(2-Chloroethyl) ether	ug/L	21 U	11 U	10 U	10 U	11 U
63 bis(2-Chloroisoctopyl) ether	ug/L	21 U	11 U	10 U	10 U	11 U
64 bis(2-Ethylhexyl)phthalate	ug/L	15 JB	5 JB	3 JB	5 JB	2 JB

svo	Cs				
	SDG:		55106	55106	55106
	STUDY ID:		PHASE 1	PHASE 1	PHASE 1
	MATRIX:		WATER	WATER	WATER
	LAB SAMP. ID:		279134	279765	274848
	EPA SAMP. ID:		MW25-7D	MW25-8	MW25-9
	OC CODE:		SA	SA	SA
	% MOISTURE:		SA	SA	SA
	% SOLIDS:				
	PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q
1	1,2,4-Trichlorobenzene	ug/L	10 U	10 U	10 U
	-,-,		10 U	10 U	10 U
	1,2,4-Trichlorobenzene	ug/L			
	1,2-Dichlorobenzene	ug/L	10 U	10 U	10 U
	1,3-Dichlorobenzene	ug/L	10 U	10 U	10 U
	1,4-Dichlorobenzene	ug/L	10 U	10 U	10 U
	2,4,5-Trichlorophenol	ug/L	26 U	26 U	26 U
	2,4,6-Trichlorophenol	ug/L	10 U	10 U	10 U
	2,4-Dichlorophenol	ug/L	10 U	10 U	10 U
	2,4-Dimethylphenol	ug/L	10 U	10 U	10 U
9	2,4-Dinitrophenol	ug/L	<b>2</b> 6 U	<b>2</b> 6 U	26 U
10	2,4-Dinitrotoluene	ug/L	10 U	10 U	10 U
11	2,6-Dinitrotoluene	ug/L	10 U	10 U	10 U
12	2-Chloronaphthalene	ug/L	10 U	10 U	10 U
	2-Chlorophenol	ug/L	10 U	10 U	10 U
14	2-Methylnaphthalene	ug/L	10 U	10 U	10 U
	2-Methylphenol	ug/L	10 U	10 U	10 U
	2-Nitroaniline	ug/L	26 U	26 U	26 U
	2-Nitrophenol	ug/L	10 U	10 U	10 U
	3,3'-Dichlorobenzidine	ug/L	10 U	10 U	10 U
	3-Nitroaniline	ug/L	26 U	26 U	26 U
	4,6-Dinitro-2-methylphenol	ug/L	26 U	26 U	26 U
	4-Bromophenyl-phenylether	ug/L	10 U	10 U	10 U
	4-Chloro-3-methylphenol	ug/L	10 U	10 U	10 U
	4-Chloroaniline	ug/L	10 U	10 U	10 U
	4-Chlorophenyl-phenylether	ug/L	10 U	10 U	10 U
	4-Methylphenol	ug/L	10 U	10 U	10 U
	4-Nitroaniline	ug/L ug/L	26 U	26 U	26 U
	4-Nitrophenol	ug/L ug/L	26 U	26 U	
	•	_	10 U		26 U
	Acenaphthene	ug/L	_	10 U	10 U
	Acenaphthylene	ug/L	10 U	10 U	10 U
	Anthracene	ug/L	10 U	10 U	10 U
	Benzo(a)anthracene	ug/L	10 U	10 U	10 U
	Benzo(a)pyrene	ug/L	10 U	10 U	10 U
	Benzo(b)fluoranthene	ug/L	10 U	10 U	10 U
34	Benzo(g,h,i)perylene	ug/L	10 U	10 U	10 U

2.0	SDG:	1	55106	55106	55106
	STUDY ID:		PHASE 1	PHASE 1	PHASE 1
	MATRIX		WATER	WATER	WATER
	LAB SAMP. ID:		279134	279765	274848
	EPA SAMP. ID:		MW25-7D	MW25-8	MW25-9
	QC CODE		SA	SA	SA
	% MOISTURE				
	% SOLIDS				
		•			
	PARAMETER		VALUE Q	VALUE Q	VALUE Q
	1,2,4-Trichlorobenzene	ug/L	10 U	10 U	10 U
	Butylbenzylphthalate	ug/L	10 U	10 U	10 U
	Carbazole	ug/L	10 U	10 U	10 U
	Chrysene	ug/L	10 U	10 U	10 U
	Di-n-butylphthalate	ug/L	10 U	10 U	10 U
	Di-n-oprylphthalate	ug/L	10 U	10 U	10 U
	Dibenz(a,h)anthracene	ug/L	10 U	10 U	10 U
	Dibenzofuran	ug/L	10 U	10 U	10 U
	Diethylphthalate	ug/L	10 U	10 U	10 U
	Dimethylphthalate	ug/L	10 U	10 U	10 U
	Fluoranthene	ug/L	10 U	10 U	10 U
	Fluorene	ug/L	10 U	10 U	10 U
	Hexachlorobenzene	ug/L	10 U	10 U	10 U
47	Hexachlorobutadiene	ug/L	10 U	10 U	10 U
	Hexachlorocyclopentadiene	ug/L	10 U	10 U	10 U
	Hexachloroethane	ug/L	10 U	10 U	10 U
	Indeno(1,2,3-cd)pyrene	ug/L	10 U	10 U	10 U
	Isophorone	ug/L	10 U	10 U	10 U
	N-Nitroso-di-n-ctopylamine	ug/L	10 U	10 U	10 U
	N-Nitrosodiphenylamine (1)	ug/L	10 U	10 U	10 U
	Naphthalene	ug/L	10 U	10 U	2 J
	Nitrobenzene	ug/L	10 U	10 U	10 U
	Pentachlorophenol	ug/L	<b>26</b> U	26 U	<b>26</b> U
	Phenanthrene	ug/L	10 U	10 U	10 U
	Phenol	ug/L	10 U	10 U	10 U
	Pyrene	ug/L	10 U	10 U	10 U
	benzo(k)fluoranthene	ug/L	10 U	10 U	10 U
	bis(2-Chloroethoxy) methane	ug/L	10 U	10 U	10 U
	bis(2-Chloroethyl) ether	ug/L	10 U	10 U	10 U
	bis(2-Chloroisoctopyl) ether	ug/L	10 U	10 U	10 U
64	bis(2-Ethylhexyl)phthalate	ug/L	2 Љ	9 JB	6 JB

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PEST		

I LAB S. EPA S. Q W MO	SDG: UDY ID: MATRIX: AMP. ID: AMP. ID: C CODE: ISTURE: SOLIDS:	55106 PHASE 1 WATER 278847 MW25-50 DU	55106 PHASE 1 WATER 278846 MW25-5DR FB	55106 PHASE 1 WATER 278791 MW25-12DMS MS	55106 PHASE 1 WATER 278791 MW25-12DMSD MSD	55106 PHASE 1 WATER 279132 MW25-1 SA	55106 PHASE 1 WATER 279135 MW25-10 SA	55106 PHASE 1 WATER 278790 MW25-11 SA
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/L	0.11 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U
2 4,4'-DDE	UG/L	0.11 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U
3 4,4'-DDT	UG/L	0.11 U	0.11 U	1.2	1.1	0.1 U	0.1 U	0.1 U
4 Ald <del>rin</del>	UG/L	0.053 U	0.054 U	0.6	0.56	0.051 U	0.05 U	0.051 U
5 Aroclor-1016	UG/L	· 1.1 U	1.1 U	1.2 U	1.2 U	1 U	1 <b>U</b>	1 U
6 Aroclor-1221	UG/L	2.1 U	2.2 U	2.5 Ū	2.3 U	2 U	2 U	2 U
7 Aroclor-1232	UG/L	1.1 U	1.1 U	1.2 U	1.2 U	1 U	1 <b>U</b>	1 U
8 Aroclor-1242	UG/L	1.1 U	1.1 U	1.2 U	1.2 U	1 U	1 U	1 U
9 Aroclor-1248	UG/L	1.1 U	1.1 <b>U</b>	1.2 U	1.2 U	l U	1 U	1 U
10 Aroclor-1254	UG/L	1.1 U	1.1 U	1. <b>2</b> U	1.2 U	1 U	1 U	1 U
11 Aroclor-1260	UG/L	1.1 U	1.1 U	1.2 U	1.2 U	1 U	1 U	1 U
12 Dield <del>rin</del>	UG/L	0.11 U	0.11 U	1.2	1.1	0.1 U	0.1 U	0.1 U
13 Endosulfan I	UG/L	0.053 U	0.054 U	0.062 U	0.058 U	0.051 U	0.05 U	0.051 U
14 Endosulfan II	UG/L	0.11 U	0.11 U	0,12 U	0.12 U	0.1 U	0.1 U	0.1 U
15 Endosulfan sulfate	UG/L	0.11 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U
16 Endrin	UG/L	0.11 U	0.11 U	1.1	i 1.1	0.1 U	0.1 U	0.1 U
17 Endrin aldehyde	UG/L	0.11 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U
18 Endrin ketone	UG/L	0.11 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U
19 Heptachlor	UG/L	0.053 U	0.054 U	0.53	0.49	0.051 U	0.05 U	0.051 U
20 Heptachlor epoxide	UG/L	0.053 U	0.054 U	0.062 U	0.058 U	0.051 U	0.05 U	0.051 U
21 Methoxychlor	UG/L	0.53 U	0.54 U	0.62 U	0.58 U	0.51 U	0.5 U	0.51 U
22 Toxaphene	UG/L	5.3 U	5.4 U	6.2 U	5.8 U	5.1 U	5 U	5.1 U
23 alpha-BHC	UG/L	0.053 U	0.054 U	0.062 U	0.058 U	0.051 U	0.05 U	0.051 U
24 alpha-Chlordane	UG/L	0.053 U	0.054 U	0.062 U	0.058 U	0.051 U	0.05 U	0.051 U
25 beta-BHC	UG/L	0.053 U	0.054 U	0.062 U	0.058 U	0.051 U -	0.05 U	0.051 U
26 delta-BHC	UG/L	0.053 U	0.054 U	0.062 U	0.058 U	0.051 U	0.05 U	0.051 U
27 gamma-BHC (Lindane)	UG/L	0.053 U	0.054 U	0.56	0.52	0.051 U	0.05 U	0.051 U
28 gamma-Chlordane	UG/L	0.053 U	0.054 U	0.062 U	0.058 U	0.051 U	0.05 U	0.051 U

PES	HCI	DEO

Ē	SDG: STUDY ID: MATRIX: AB SAMP. ID: EPA SAMP. ID: QC CODE: % MOISTURE: % SOLIDS:	55106 PHASE 1 WATER 278791 MW25-12D SA	55106 PHASE 1 WATER 278792 MW25-13 SA	55106 PHASE 1 WATER 278793 MW25-14D SA	55106 PHASE 1 WATER 279033 MW25-15 SA	55106 PHASE 1 WATER 279034 MW25-16D SA
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
2 4,4'-DDE	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
3 4,4'-DDT	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
4 Ald <del>ri</del> n	UG/L	0.054 U	0.055 U	0.05 U	0.052 U	0.052 U
5 Aroclor-1016	UG/L	1.1 U	1.1 U	1 U	1 U	1 U
6 Aroclor-1221	UG/L	2.2 U	2.2 U	2 U	2.1 U	2.1 U
7 Aroclor-1232	UG/L	1.1 U	1.1 U	1 U	1 U	1 U
8 Aroclor-1242	UG/L	1.1 U	1.1 U	1 U	1 U	1 U
9 Aroclor-1248	UG/L	1.1 U	1.1 U	1 U	1 U	1 U
10 Aroclor-1254	UG/L	1.1 U	1.1 U	1 U	1 U	1 U
11 Aroclor-1260	UG/L	1.1 U	1.1 U	1 U	1 U	1 U
12 Dieldrin	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
13 Endosulfan I	UG/L	0.054 U	0.055 U	0.05 U	0.052 U	0.052 U
14 Endosulfan II	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
15 Endosulfan sulfate	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
16 Endrin	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
17 Endrin aldehyde	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
18 Endrin ketone	UG/L	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
19 Heptachlor	UG/L	0.054 U	0.055 U	0.05 U	0.052 U	0.052 U
20 Heptachlor epoxide		0.054 U	0.055 U	0.05 U	0.052 U	0.052 U
21 Methoxychlor	UG/L	0.54 U	0.55 U	0.5 U	0.52 U	0.52 U
22 Toxaphene	UG/L	5.4 U	5.5 U	5 U	5.2 U	5.2 U
23 alpha-BHC	UG/L	0.054 U	0.055 U	0.05 U	0.052 U	0.052 U
24 alpha-Chlordane	UG/L	0.054 U	0.055 U	0.05 U	0.052 U	0.052 U
25 beta-BHC	UG/L	0.054 U	0.055 U	0.05 U	0.052 U	0.052 U
26 delta-BHC	UG/L	0.054 U	0.055 U	0.05 U	0.052 U	0.052 U
27 gamma-BHC (Linda		0.054 U	0.055 U	0.05 U	0.052 U	0.052 U
28 gamma-Chlordane	UG/L	0.054 U	0.055 U	0.05 U	0.052 U	0.052 U

CIDES

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	SDG:	55106	55106	55106	55106	55106
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	WATER	WATER	WATER	WATER	WATER
L	AB SAMP. ID:	279035	279766	279136	279978	278844
E	PA SAMP. ID:	MW25-17	MW25-18	MW25-19	MW25-2	MW25-3
	QC CODE:	SA	SA	SA	SA	SA
9,	6 MOISTURE:					
	% SOLIDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE O	VALUE Q
1 4,4'-DDD	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2 4,4'-DDE	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
3 4.4'-DDT	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
4 Aldrin	UG/L	0.052 U	0.05 U	0.05 U	0.052 U	0.052 U
5 Aroclor-1016	UG/L	1 U	1 U	1 U	1 U	1 U
6 Aroclor-1221	UG/L	2.1 U	2 U	2 U	2.1 U	2.1 U
7 Aroclor-1232	UG/L	1 U	1 U	1 U	1 U	1 U
8 Aroclor-1242	UG/L	i U	1 U	1 U	1 U	1 U
9 Aroclor-1248	UG/L	1 U	1 U	1 U	i U	1 U
10 Aroclor-1254	UG/L	1 U	1 U	1 U	1 U	1 U
11 Aroclor-1260	UG/L	1 U	1 U	1 U	1 U	1 U
12 Dieldrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
13 Endosulfan I	UG/L	0.052 U	0.05 U	0.05 U	0.052 U	0.052 U
14 Endosulfan II	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
15 Endosulfan sulfate	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
16 Endrin	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
17 Endrin aldehyde	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
18 Endrin ketone	UG/L	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
19 Heptachlor	UG/L	0.052 U	0.05 U	0.05 U	0.052 U	0.052 U
20 Heptachlor epoxide	UG/L	0.052 U	0.05 U	0.05 U	0.052 U	0.052 U
21 Methoxychlor	UG/L	0.52 U	0.5 U	0.5 U	0.52 U	0.52 U
22 Toxaphene	UG/L	5.2 U	5 U	5 U	5.2 U	5.2 U
23 alpha-BHC	UG/L	0.052 U	0.05 U	0.05 U	0.052 U	0.052 U
24 alpha-Chlordane	UG/L	0.052 U	0.05 U	0.05 U	0.052 U	0.052 U
25 beta-BHC	UG/L	0.052 U	0.05 U	0.05 U	0.052 U	0.052 U
26 delta-BHC	UG/L	0.052 U	0.05 U	0.05 U	0.052 U	0.052 U
27 gamma-BHC (Lindar		0.052 U	0.05 U	0.05 U	0.052 U	0.052 U
28 gamma-Chlordane	UG/L	0.052 U	0.05 U	0.05 U	0.052 U	0.052 U

PES:		

FESTICIDES	ma.	55106	55106	55106	55106	55106	55106
_	SDG:				PHASE 1	PHASE 1	
	TUDY ID:	PHASE 1	PHASE 1	PHASE 1			PHASE 1
	MATRIX:	WATER	WATER	WATER	WATER	WATER	WATER
	SAMP. ID:	278504	278845	279133	279134	279765	278848
	SAMP. ID:	MW25-4D	MW25-5D	MW25-6	MW25-7D	MW25-8	MW25-9
	QC CODE:	SA	SA	SA	SA	SA	SA
% M	DISTURE:						
%	6 SOLIDS:						
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 4,4'-DDD	UG/L	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U
2 4,4'-DDE	UG/L	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U
3 4,4'-DDT	UG/L	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U
4 Aldrin	UG/L	0.051 U	0.053 U	0.05 U	0.055 U	0.05 U	0.052 U
5 Aroclor-1016	UG/L	1 U	1.1 U	1 U	1.1 U	1 U	1 U
6 Aroclor-1221	UG/L	2 U	2.1 U	2 U	2.2 U	2 U	2.1 U
7 Aroclor-1232	UG/L	1 U	1.1 U	1 U	1.1 U	1 <b>U</b>	1 U
8 Aroclor-1242	UG/L	1 U	1.1 U	1 U	1.1 U	1 U	1 U
9 Aroclor-1248	UG/L	1 U	1.1 U	1 U	1.1 U	1 U	1 U
10 Aroclor-1254	UG/L	1 U	1.1 U	1 U	1.1 U	` 1 U	1 U
11 Aroclor-1260	UG/L	1 U	1.1 U	1 U	1.1 U	1 U	1 U
12 Dieldrin	UG/L	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U
13 Endosulfan I	UG/L	0.051 U	0.053 U	0.05 U	0.055 U	0.05 U	0.052 U
14 Endosulfan II	UG/L	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U
15 Endosulfan sulfate	UG/L	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U
16 Endrin	UG/L	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U
17 Endrin aldehyde	UG/L	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U
18 Endrin ketone	UG/L	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U
19 Heptachlor	UG/L	0.051 U	0.053 U	0.05 U	0.055 U	0.05 U	0.052 U
20 Heptachlor epoxide	UG/L	0.051 U	0.053 U	0.05 U	0.055 U	0.05 U	0.052 U
21 Methoxychlor	UG/L	0.51 U	0.53 U	0.5 U	0.55 U	0.5 U	0.52 U
22 Toxaphene	UG/L	5.1 U	5.3 U	5 U	5.5 U	5 U	5.2 U
23 alpha-BHC	UG/L	0.051 U	0.053 U	0.05 U	0.055 U	0.05 U	0.052 U
24 alpha-Chlordane	UG/L	0.051 U	0.053 U	0.05 U	0.055 U	0.05 U	0.052 U
25 beta-BHC	UG/L	0.051 U	0.053 U	0.05 U	0.055 U	0.05 U	0.052 U
26 delta-BHC	UG/L	0.051 U	0.053 U	0.05 U	0.055 U	0.05 U	0.052 U
27 gamma-BHC (Lindane)	UG/L	0.051 U	0.053 U	0.05 U	0.055 U	0.05 U	0.052 U
28 gamma-Chlordane	UG/L	0.051 U	0.053 U	0.05 U	0.055 U	0.05 U	0.052 U

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	SDG:	55106	55106	55106	55106	55106
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	WATER	WATER	WATER	WATER	WATER
	LAB SAMP. ID:	278847	278846	279132	279135	278790
	EPA SAMP. ID:	MW25-50	MW25-5DR	MW25-1	MW25-10	MW25-11
	QC CODE:	DU	FB	SA	SA	SA
	% MOISTURE:					
	% SOLIDS:					
0.4.0.4.3.400000	IDIT	WALLET O		******	******	*****
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	UG/L	132 B	10.5 B	18 B	99.2 B	37.4 B
2 Antimony	UG/L	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
3 Arsenic	UG/L	2.1 U	2.4 B	2.1 U	2.1 U	2.1 U
4 Barium	UG/L	113 B	3.4 U	77.1 B	28.9 B	42.3 B
5 Beryllium	UG/L	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
6 Cadmium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
7 Calcium	UG/L	132000	86.7 U	128000	90700	82700
8 Chromium	UG/L	1.2 B	1.1 B	0.68 B	0.62 B	<b>2</b> .9 B
9 Cobalt	· UG/L	1 U	1 U	0.99 U	1 U	1.5 B
10 Copper	UG/L	0.7 U	3.1 B	2 B	0.88 B	3.3 B
11 Cyanide	UG/L	5 U	5 U	5 U	5 U	5 U
12 Iron	UG/L	261	18.4 U	27.3 B	120	58.9 B
13 Lead	UG/L	2.9 B	2.6 B	3.4	1.5 U	3.6
14 Magnesium	UG/L	31000	92.2 U	23100	18400	13700
15 Manganese	UG/L	918	0.4 U	31.2	134	233
16 Mercury	UG/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
17 Nickel	UG/L	3.4 B	1 U	0.99 U	1.1 B	3.3 B
18 Potasium	UG/L	1450 B	105 U	1030 B	1490 B	3010 B
19 Selenium	UG/L	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
20 Silver	UG/L	0.8 U	0.8 U	0.8 U	0.8 U	0.79 U
21 Sodium	UG/L	15300 E	240 BE	64700 E	7780 E	110000 E
22 Thallium	UG/L ·	3 U	3 U	3 U	3 U	4.1 B
23 Vanadium	UG/L	1.1 U	1.1 U	1.1 U	1.1 B	1.1 B
24 Zinc	UG/L	2.3 B	3.7 B	6.3 B	1.7 B	7.6 B

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	SDG:	55106	55106	55106	55106	55106
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	WATER	WATER	WATER	WATER	WATER
Ţ	AB SAMP. ID:	278791	278792	278793	279033	279034
	EPA SAMP. ID:	MW25-12D	MW25-13	MW25-14D	MW25-15	MW25-16D
-	QC CODE:	SA	SA	SA	SA	SA
(	% MOISTURE:					
	% SOLIDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	UG/L	65.5 B	16.3 B	223	228	170 B
2 Antimony	UG/L	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
3 Arsenic	UG/L	2.1 U	2.2 B	3.8 B	2.2 B	2.1 U
4 Barium	UG/L	126 B	71.9 B	120 B	36.4 B	88.3 B
5 Beryllium	UG/L	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
6 Cadmium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.43 B
7 Calcium	UG/L	60000	147000	52000	98900	77100
8 Chromium	UG/L	0.5 U	0.88 B	1.1 B	0.61 B	1.6 B
9 Cobalt	UG/L	1 U	1 U	1 U	0.99 U	1 U
10 Copper	UG/L	0.7 U	0.95 B	0.7 U	0.69 U	0.7 U
11 Cyanide	UG/L	5 U	5 U	5 U	5 U	5 U
12 Iron	UG/L	302	23.5 B	543	327	483
13 Lead	UG/L	1.7 B	1.5 U	3.2	1.6 B	1.5 U
14 Magnesium	UG/L	22000	22200	19900	15900	30200
15 Manganese	UG/L	48.1	<b>24</b> 6	43.7	238	56.4
16 Mercury	UG/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
17 Nickel	UG/L	1 U	2.1 B	1 U	· 1.4 B	1.5 B
18 Potasium	UG/L	2120 B	9070	2110 B	1770 B	2200 B
19 Selenium	UG/L	3.7 U	3.7 U	3.7 U	4.8 B	3.7 U
20 Silver	UG/L	0.8 U	0.8 U	0.8 U	0. <b>7</b> 9 U	0.8 U
21 Sodium	UG/L	31900 E	188000 E	35700 E	3530 BE	19300 E
22 Thallium	UG/L	3 U	3 U	3 U	3 U	3 U
23 Vanadium	UG/L	1.1 U	1.1 U	1.1 B	1.1 U	1.1 U
24 Zinc	UG/L	1.8 B	2.7 B	2.7 B	2.6 B	2.2 B

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	SDG:	55106	55106	55106	55106	55106
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	WATER	WATER	WATER	WATER	WATER
	LAB SAMP. ID:	279035	279766	279136	279978	278844
	EPA SAMP. ID:	MW25-17	MW25-18	MW25-19	MW25-2	MW25-3
	QC CODE:	SA	SA	SA	SA	SA
	% MOISTURE:					
	% SOLIDS:					
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	UG/L	41.8 B	336	74.2 B	9.9 U	134 B
2 Antimony	UG/L	2.2 U	<b>2.2</b> U	2.2 U	. 2.2 U	2.2 U
3 Arsenic	UG/L	2.1 U	2.1 U	2.1 U	8.9 B	2.2 B
4 Barium	UG/L	68.5 B	93.6 B	59.3 B	115 B	49.1 B
5 Beryllium	UG/L	0.27 U	0. <b>27</b> U	0.27 U	0.27 U	0.27 U
6 Cadmium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
7 Calcium	UG/L	98600	155000	106000	169000	142000
8 Chromium	UG/L	4.2 B	5.5 B	2.3 B	1.3 B	0.5 U
9 Cobalt	UG/L	<b>1</b> U	3 B	1 U	2.7 B	3.4 B
10 Copper	UG/L	0.97 B	2 B	2.1 B	1.5 B	2.3 B
11 Cyanide	UG/L	5 U	5 U	5 U	5 U	5 U
12 Iron	UG/L	84.8 B	495	138	5310	389
13 Lead	UG/L	1.5 U	6.4	1.8 B	10.7	2.7 B
14 Magnesium	UG/L	26700	35400	22500	50100	20500
15 Manganese	UG/L	30	154	202	1540	1490
16 Mercury	UG/L	0.02 U	0.02 U	0.02 U	0.07 B	0.02 U
17 Nickel	UG/L	3.6 B	6.6 B	2.5 B	5.8 B	6.8 B
18 Potasium	UG/L	1350 B	2380 B	4750 B	<b>228</b> 0 B	1930 B
19 Selenium	UG/L	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
20 Silver	UG/L	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
21 Sodium	UG/L	3320 BE	59100 E	8790 E	13600 E	13300 E
22 Thallium	UG/L ·	3 U	3 U	3 U	3 U	3 U
23 Vanadium	UG/L	1.1 U	1.2 B	1.1 U	2 B	1.1 U
24 Zinc	UG/L	3.9 B	7.6 B	2.4 B	8.9 B	3.2 B
					0.5 2	J.2 D

55106MW.WK4

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WETALS	SDG:	55106	55106	55106	55106	55106
	STUDY ID:	PHASE 1	PHASE 1	PHASE 1	PHASE 1	PHASE 1
	MATRIX:	WATER	WATER	WATER	WATER	WATER
	LAB SAMP. ID:	278504	278845	279133	279134	279765
	EPA SAMP. ID:	MW25-4D	MW25-5D	MW25-6	MW25-7D	MW25-8
	QC CODE:	SA	SA	SA	SA	SA
	% MOISTURE:					
	% SOLIDS:					
						WALLET O
PARAMETER	UNIT	VALUE Q	VALUE Q	VALUE Q	VALUE Q	VALUE Q
1 Aluminimum	UG/L	142 B	149 B	162 B	83.7 B	361
2 Antimony	UG/L	2.2 U	2.2 U	2.2 U	2.2 U	2.2 U
3 Arsenic	UG/L	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
4 Barium	UG/L	106 B	111 B	85.6 B	192 B	33.9 B
5 Beryllium	UG/L	0. <b>27</b> U	0.27 U	0.27 U	0. <b>27</b> U	0.27 U
6 Cadmium	UG/L	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
7 Calcium	UG/L	93500	130000	133000	123000	96900
8 Chromium	UG/L	1.7 B	1.4 B	2.2 B	4.7 B	1.7 B
9 Cobalt	UG/L	0.99 U	1.1 B	1.3 B	0.99 U	1.6 B
10 Copper	UG/L	0.7 U	0.69 U	0.99 B	0.7 U	2.1 B
11 Cyanide	UG/L	5 U	5 U	5 U	5 U	5 U
12 Iron	UG/L	456	251	308	392	396
13 Lead	UG/L	2.6 B	1.5 B	4.4	5.6	5.4
14 Magnesium	UG/L	31300	30500	35900	44900	15500
15 Manganese	UG/L	68.1	927	56	96.5	56
16 Mercury	UG/L	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
17 Nickel	UG/L	0.99 U	3.1 B	2.6 B	5.2 B	2.1 B
18 Potasium	UG/L	2160 B	1430 B	1840 B	2170 B	989 B
19 Selenium	UG/L	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U
20 Silver	UG/L	0.8 U	0.79 U	0.8 U	0.8 U	0.79 U
21 Sodium	UG/L	13900 E	15300 E	20400 E	18 <b>2</b> 00 E	3370 BE
22 Thallium	UG/L	3 U	3 U	3 U	3 U	3 U
23 Vanadium	UG/L	1.1 U	1.1 U	1.4 B	1.1 U	1.1 U
24 Zinc	UG/L	2.1 B	4.1 B	7.5 B	5.1 B	8.8 B

55106MW.WK4

# **METALS**

		SDG:	55106
		STUDY ID:	PHASE 1
		MATRIX:	WATER
		LAB SAMP. ID:	278848
		EPA SAMP. ID:	MW25-9
		QC CODE:	SA
		% MOISTURE:	
		% SOLIDS:	
	PARAMETER	UNIT	VALUE Q
1	Aluminimum	UG/L	19.5 B
2	Antimony	UG/L	2.2 U
3	Arsenic	UG/L	2.1 U
4	Barium	UG/L	46.8 B
5	Beryllium	UG/L	0.27 U
6	Cadmium	UG/L	0.3 U
7	Calcium	UG/L	105000
8	Chromium	UG/L	0.5 U
9	Cobalt	UG/L	2.5 B
10	Copper	UG/L	0.69 U
11	Cyanide	UG/L	5 U
12	Iron	UG/L	181
13	Lead	UG/L	1.6 B
14	Magnesium	UG/L	24100
15	Manganese	UG/L	764
16	Mercury	UG/L	0.02 U
17	Nickel	UG/L	2.6 B
	Potasium	UG/L	2960 B
19	Selenium	UG/L	3.7 U
20	Silver	UG/L	0.79 U
	Sodium	UG/L	15800 E
	Thallium	UG/L	3 U
	Vanadium	UG/L	1.1 U
24	Zinc	UG/L	1.3 B

SEAD-25
Expanded Site Inspection

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	MATRIX LOCATION DEPTH (FEET) SAMPLE DATE ES ID LAB ID	SOIL SEAD -25 0-2 12/03/93 SB25-1.1 206050	SOIL SEAD - 25 4-6 12/03/93 SB25-1.3 206051	SOIL SEAD-25 6-8 12/03/93 SB25-1.4 206052	SOIL SEAD -25 0-2 12/03/93 SB25-2.1 206053	SOIL SEAD-25 0-2 12/03/93 SB25-2.4 206057 SB25-2.1DUi	SOIL SEAD -25 2-4 12/03/93 SB25-2.2 206055	SOIL SEAD - 25 4-6 12/03/93 SB25-2.3 206056	SOIL SEAD-25 0-2 12/03/93 SB25-3.1 206058	SOIL SEAD -25 2-4 12/03/93 SB25-3.2 206059	SOIL SEAD -25 4-5 12/03/93 SB25-3.3 206061
COMPOUND VOLATILE ORGANICS	UNITS					3623-2100	r				
Chioromethane	ug/Kg	11 U	11 U	11 U	11 U	11 U	19 U	11 U	52 U	12 U	11 U
Bromomethane	ug/Kg	11 U	11 U	11 U	11 U	11 U	19 U	11 U	52 U	12 U	11 U
Virtyl Chloride	ug/Kg	11 U	11 U	11 U	11 U	11 U	19 U	11 U	52 U	12 U 12 U	11 U 11 U
Chloroethane	ug/Kg	11 U	11 U	11 U	11 U 11 U	11 U 11 U	19 U 19 U	11 U 11 U	52 U 52 U	12 U	11 U
Methylene Chloride	ug/Kg	11 U 11 U	11 U 11 U	11 U 11 U	11 U	11 U	39	24	52 U	40	11 U
Acetone Carbon Disutfide	ug/Kg ug/Kg	11 U	11 U	11 U	11 U	11 U	19 U	11 U	52 U	12 U	11 U
1,1-Dichlorcethene	ug/Kg	11 U	11 U	11 U	11 U	11 U	19 U	11 U	52 U	12 U	11 U
1,1 - Dichloroethane	ug/Kg	11 U	11 U	11 U	11 U	11 U	19 U	11 U	52 U	12 U	11 U 11 U
1,2-Dichloroethene (total)	ug/Kg	11 U	11 U	11 U	11 U	11 U	19 U 19 U	11 U 11 U	52 U 52 U	12 U 12 U	11 U
Chloroform	ug/Kg	11 U 11 U	11 U 11 U	11 U 11 U	2J 11 U	11 U 11 U	19 U	11 U	52 U	12 U	11 U
1,2-Dichloroethane 2-Butanone	ug/Kg ug/Kg	11 U	11 0	11 U	11 U	11 U	10 J	11 U	52 U	8 J	11 U
1,1,1-Trichicroethane	ug/Kg	11 U	11 Ü	11 Ü	11 U	11 U	19 U	11 U	170	12 U	11 U
Carbon Tetrachloride	ug/Kg	11 U	11 U	11 U	11 U	11 U	19 U	11 U	52 U	12 U	11 U
Bromodichloromethane	ug/Kg	11 U	11 U	11 U	11 U	11 U	19 U 19 U	11 U 11 U	52 U 52 U	12 U 12 U	11 U 11 U
1,2-Dichloropropane	ug/Kg	11 U 11 U	11 U 11 U	11 U 11 U	11 U 11 U	11 U 11 U	19 U	11 U	52 U	12 U	11 U
cis-1,3-Dichloropropene Trichloroethene	ug/Kg ug/Kg	11 U	11 U	11 U	11 U	11 U	19 U	11 U	38 J	12 U	11 U
Dibromochloromethane	ug/Kg	11 U	11 U	11 Ü	11 Ü	11 U	19 U	11 U	52 U	12 U	11 U
1,1,2—Trichloroethane	ug/Kg	11 U	11 U	11 U	11 U	11 U	19 U	11 U	52 U	12 U	11 U
Benzene	ug/Kg	11 U	11 U	11 U	11 U	11 U	19 U 19 U	11 U 11 U	100 52 U	12 U 12 U	4 J 11 U
trans-1,3-Dichloropropene	ug/Kg	11 U	11 U 11 U	11 U 11 U	11 U 11 U	11 U 11 U	19 U	11 U	52 U	12 U	11 U
Bromoform	ug/Kg ug/Ka	11 U 11 U	11 U	11 U	11 U	11 U	19 U	11 U	52 U	12 U	11 U
4Methyl-2-Pentanone 2-Hexanone	ug/Kg	11 U	11 Ü	11 U	11 Ü	11 U	19 U	11 U	52 U	12 U	11 U
Tetrachicroethene	ug/Kg	11 U	11 U	11 U	11 U	11 U	19 U	11 U	52 U	12 U	11 U
1,1,2,2 - Tetrachloroethane	ug/Kg	11 U	11 U	11 U	11 U	11 U	19 U	11 U	52 U	12 U	11 U 30
Toluene	ug/Kg	11 U	11 U 11 U	11 U 11 U	11 U 11 U	11 U 11 U	19 U 19 U	11 U 11 U	840 52 U	4 J 12 U	11 U
Chlorobertzene	ug/Kg ug/Kg	11 U 11 U	11 U 11 U	11 U	11 U	11 U	19 U	6J	370	12 U	28
Ethylberizene Styrene	ug/Kg	11 U	11 U	11 U	11 U	11 U	19 U	11 U	52 U	12 U	11 U
Xylene (total)	ug/Kg	11 Ü	11 U	11 U	11 U	11 U	19 U	37	4100 J	49	320
MTBE	ug/Kg	11 U	11 U	11 U	11 U	11 U	19 U	11 U	52 U	12 U	11 U
HERBICIDES	ug/Kg	54 U	55 U	55 U	54 U	55 U	54 U	55 U	53 U	60 U	59 U
2,4~D 2,4~DB	⊔g/Kg	54 U	55 U	55 U	54 U	55 U	54 U	55 U	53 U	60 U	59 U
2,4,5-T	ug/Kg	5.4 U	5.5 U	5.5 U	5.4 U	5.5 U	5.4 U	5.5 U	5.3 U	6 U	5,9 U
2,4,5-TP (Silvex)	ug/Kg	5.4 U	5.5 U	5.5 U	5.4 U	5.5 U	5.4 U	5.5 U	5.3 U	6 U	5.9 U 150 U
Dalapon	ug/Kg	130 U	140 U 5.5 U	130 U 5.5 U	130 U 5.4 U	140 U 5.5 U	130 U 5,4 U	140 U 5.5 U	130 U 5.3 U	150 U 6 U	150 U 5.9 U
Dicamba	ug/Kg ug/Kg	5.4 ปี 54 ป	5.5 U	5.5 U	54 U	5.5 U	54 U	55 U	53 U	60 U	59 U
Dichloroprop Dinoseb	ug/Kg	27 U	28 U	28 U	27 U	28 U	27 U	28 U	27 U	30 U	30 U
MCPA	ug/Kg	5400 U	5500 U	5500 U	5400 U	5500 U	5400 U	5500 U	5300 U	6000 U	5900 U
MCPP	ug/Kg	5700 U	5400 U	5500 U	5400	5500 U	5400 U	5500 U	5300 U	6000 U	5900 U
NITROAROMATICS HMX	ug/Kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
RDX	ug/Kg	NS	NS	NS	NS	NS	NS	NS	NS .	NS	NS
1,3,5-Trinitrobenzene	ug/Kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dinitrobenzene	ug/Kg	NS '	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetryl	ug/Kg	NS	NS	NS	NS	NS	NS NS	NS	NS	NS	NS
2,4,8—Trinitrotoluene	цg/Kg	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS. NS
4-amino-2,6-Dinitrotoluene 2-amino-4,6-Dinitrotoluene	ug/Kg ug/Kg	NS NS	NS NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	ug/Kg ug/Kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	ug/Kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
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NOTES: NS stands for NOT SAMPLED NA stands for NOT ANALYZED

	MATRIX LOCATION	SOIL SEAD-25	SOIL SEAD-25	SOIL SEAD-25	SOIL SEAD-25	SOIL SEAD-25	SOIL SEAD-25	SOIL SEAD-25	SOIL	SOIL	SOIL
	DEPTH (FEET) SAMPLE DATE	0-2 12/03/93	4-6 12/03/93	6-8 12/03/93	0-2 12/03/93	0-2 12/03/93	2-4 12/03/93	4-6 12/03/93	SEAD 25 0 2 12/03/93	SEAD-25 2-4 12/03/93	SEAD-25 4-5 12/03/93
	ES ID LAB ID	SB25-1.1 206050	SB25-1.3 206051	SB25-1.4 206052	SB25-2.1 206053	SB25-2.4	SB25-2.2	SB25-2.3	SB253.1	SB25-3.2	SB25-3.3
COMPOUND	UNITS	200030	200051	200052	206053	206057 SB25-2.1DUP	206055	206056	206058	206059	206061
SEMIVOLATILE ORGANICS											
Phenol bis(2—Chloroethyl) ether	ug/Kg ug/Kg	720 U 720 U	360 U 360 U	500 U 500 U	350 U 350 U	500 U	3600 U	3600 U	6900 U	400 U	390 U
2-Chlorophenol	ug/Kg	720 U	360 U	500 U	350 U	500 U 500 U	3600 U 3600 U	3600 U 3600 U	6900 U 6900 U	400 U 400 U	390 U 390 U
1,3-Dichlorobenzene	ug/Kg	720 U	360 U	500 U	350 U	500 U	3800 U	3600 U	6900 U	400 U	390 U
1,4-Dichlorobenzene 1,2-Dichlorobenzene	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U	390 U
2-Methylphenol	ug/Kg ug/Kg	720 U 720 U	360 U 360 U	500 U 500 U	350 U 350 U	500 U 500 U	3600 U 3600 U	3600 U 3600 U	6900 U 6900 U	400 U 400 U	390 U
2,2'-oxybis(1-Chloropropane)	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U	390 U 390 U
4-Methylphenol	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U	390 U
N-Nitroso-di-n-propylamine Hexachloroethane	ug/Kg ug/Kg	720 U 720 U	360 U 360 U	500 U 500 U	350 U 350 U	500 U	3600 U	3600 U	6900 U	400 U	390 U
Nitrobertzene	ug/Kg	720 U	360 U	500 U	350 U	500 U 500 U	3600 U 3600 U	3600 U 3600 U	6900 U 6900 U	400 U 400 U	390 U
Isophorone	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U	390 U 390 U
2-Nitrophenol	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U	390 U
2,4-Dimethylphenol bis(2-Chloroethoxy) methane	ug/Kg ug/Kg	720 U 720 U	360 U 360 U	500 U 500 U	350 U 350 U	500 U 500 U	3600 U 3600 U	3600 U 3600 U	6900 U	400 U	390 U
2,4-Dichlorophenol	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U 400 U	390 U 390 U
1,2,4—Trichlorobenzene	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U	390 U
Naphthalene 4Chloroaniline	ug/Kg	720 U 720 U	360 U 360 U	500 U 500 U	350 U	500 U	390 J	250 J	1100 J	400 U	130 J
Hexachiorobutadiene	ug/Kg ug/Kg	720 U	360 U	500 U	350 U 350 U	500 U 500 U	3600 U 3600 U	3600 U 3600 U	6900 U	400 U 400 U	390 U
4-Chloro-3-methylphenol	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U	390 U 390 U
2-Methylnaphthalene	ug/Kg	55 J	360 U	500 U	40 J	51 J	5100	2800 J	4700 J	400 U	410
Hexachlorocyclopentacliene 2,4,6—Trichlorophenol	ug/Kg ug/Kg	720 U 720 U	360 U 360 U	500 U 500 U	350 U 350 U	500 U 500 U	3600 U 3600 U	3600 U	6900 U	400 U	390 U
2,4,5-Trichlorophenoi	ug/Kg	1700 U	870 U	1200 U	860 U	1200 U	8700 U	3600 U 8700 U	6900 U 17000 U	400 U 960 U	390 U 950 U
2Chioronaphthalene	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U	390 U
2-Nitroaniline	ug/Kg	1700 U	870 U	1200 U	860 U	1200 U	8700 U	6700 U	17000 U	960 U	950 U
Dimethylphthalate Acenaphthylene	ug/Kg ug/Kg	720 U 720 U	360 U 360 U	500 U 500 U	350 U 350 U	500 U 500 U	3600 U 3600 U	3600 U	6900 U	400 U	390 U
2,5-Dinitrotoluene	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U 3600 U	6900 U	400 U 400 U	390 U 390 U
3-Nitroaniline	ug/Kg	1700 U	870 U	1200 U	860 U	1200 U	8700 U	8700 U	17000 U	960 U	950 U
Acenaphthene 2,4-Dinitrophenol	ug/Kg ug/Kg	720 U 1700 U	360 U 870 U	500 U 1200 U	350 U 860 U	500 U 1200 U	300 J	220 J	6900 U	400 U	390 U
4-Nitrophenol	ug/Kg	1700 U	870 U	1200 U	860 U	1200 U	8700 U 8700 U	8700 U 8700 U	17000 U 17000 U	960 U 960 U	950 U
Diberizofuran	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 Ú	3600 U	6900 U	400 U	950 U 390 U
2,4-Dinitrotoluene Diethylphthalate	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U	390 U
4-Chlorophenyl-phenylether	ug/Kg ug/Kg	720 U 720 U	360 U 360 U	500 U 500 U	350 U 350 U	500 U 500 U	3600 U 3600 U	3600 U 3600 U	6900 U 6900 U	400 U	390 U
Fluorene	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	620 J	910 J	400 U 400 U	1 69 U 068
4-Nitroaniline	ug/Kg	1700 U	870 U	1200 U	860 U	1200 U	8700 U	8700 U	17000 U	960 U	950 U
4,5-Dinitro-2-methylphenol N-Nitrosodiphenylamine	ug/Kg ug/Kg	1700 U 720 U	870 U 360 U	1200 U 500 U	860 U 350 U	1200 U 500 U	8700 U 960 J	8700 U	17000 U	960 U	950 U
4-Bromophenyl-phenylether	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	870 J 3600 U	1500 J 6900 U	400 U 400 U	390 U
Hexachioroberizene	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U	390 U 390 U
Pentachlorophenol Phenanthrene	ug/Kg ug/Kg	1700 U 720 U	870 U 360 U	1200 U 500 U	860 U 350 U	1200 U	8700 U	8700 U	17000 U	960 U	950 U
Anthracene	ug/Kg	720 U	360 U	500 U	350 U	65 J 500 U	1400 J 3600 U	1200 J 3600 U	2500 J 6900 U	400 U	200 J
Carbazole	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U 400 U	390 U 390 U
Di –n – butyiphthalate Fluoranthene	ug/Kg	720 U 720 U	360 U 360 U	500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U	390 U
Pyrene	ug/Kg ug/Kg	720 U	360 U	500 U 500 U	350 U 350 U	500 U 500 U	3600 U 3600 U	3600 U	6900 U	400 U	38 J
Buty/benzy/phthalate	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U 3600 U	380 J 6900 U	400 U 400 U	57 J
3,3'-Dichlorobenzidine	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U	390 U 390 U
Benzo(a)a <del>mbracene</del> Chrysene	ug/Kg ug/Kg	720 U 720 U	360 U 360 U	500 U 500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U	27 J
bis (2—Ethylhexyl) phthalate	ug/Kg	160 J	53 J	90 J	350 U 25 J	500 U 49 J	3600 U 3600 U	3600 U 3600 U	6900 U	400 U	34 J
Di-n-octylphthalate	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U	480 J 6900 U	30 J 400 U	390 U
Benzo(b) fuoranthene	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U	390 U 390 U
Benzo(k) fuoranthene Benzo(a) pyrene	ug/Kg ug/Kg	720 U 720 U	360 U 360 U	500 U 500 U	350 U 350 U	500 U	3600 U	3600 U	6900 U	400 U	390 U
Indeno(1,2,3—cd)pyrene	ug/Kg	720 U	360 U	500 U	350 U	500 U 500 U	3600 U 3600 U	3600 U	6900 U 6900 U	400 U	390 U
Dibenz(a,h)amhracene	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U 400 U	390 U 390 U
Benzo(g,h,i)perylene	ug/Kg	720 U	360 U	500 U	350 U	500 U	3600 U	3600 U	6900 U	400 U	390 U

	MATRIX LOCATION DEPTH (FEET) SAMP LE DATE ES ID LAB ID	SOIL SEAD -25 0-2 12/03/93 SB25-1.1 206050	SOIL SEAD -25 4-6 12/03/93 SB25-1.3 206051	SOIL SEAD -25 6-8 12/03/93 SB25-1.4 206052	SOIL SEAD -25 0-2 12/03/93 SB25-2.1 206053	SOIL SEAD -25 0-2 12/03/93 SB25-2.4 206057	SOIL SEAD -25 2-4 12/03/93 SB25-2.2 206055	SOIL SEAD - 25 4 - 6 12/03/93 SB25 - 2.3 206056	SOIL SEAD -25 0-2 12/03/93 SB25-3.1 206058	SOIL SEAD - 25 2 - 4 12/03/93 SB25 - 3.2 206059	SOIL SEAD-25 4-5 12/03/93 SB25-3.3 206061
COMPOUND	UNITS					SB25-2.1DU	•				
PESTICIDES/PCB alpha-BHC	ug/Kg	1.8 W	1.8 U	1.9 U	1.8 U	2 U	2 U				
beta-BHC	ug/Kg	1.8 W	1.8 U	1.9 U	1.8 U	20	20				
delta-BHC	ug/Kg	1.8 W	1.8 U	1.9 U	1.8 U	2 U	2 U				
gammaBHC (Lindane)	ug/Kg	1.8 W	1.8 U	1.9 U	1.8 U	2 U	2 U				
Heptachlor	ug/Kg	1.8 W 1.8 UJ	1.8 U	1.8 U 1.8 U	1.8 U 1.8 U	1.8 U 1.8 U	1.8 U	1.9 U	1.8 U	2 U 2 U	2 U 2 U
Aldrin Heptachior epoxide	ug/Kg ug/Kg	1.8 UJ	1.8 U 1.8 U	1.8 U	1.8 U	1.8 U	1.8 U 1.8 U	1.9 U 1.9 U	1.8 U 2.8 J	2 U	2 U
Endosultan i	ug/Kg	1.8 W	1.8 U	1.9 U	2.5 J	20	20				
Dieldrin	ug/Kg	3.6 UJ	3.6 U	3.6 U	3.5 U	3.6 U	3.6 U	3.6 U	3.5 U	4 U	3.9 U
4.4'-DDE	ug/Kg	3.6 UJ	3.6 U	3.6 U	3.5 U	3.6 U	3.6 U	3.8 U	4.3	4 U	3.9 U
Endrin Endosulfan II	ug/Kg	3.6 UJ 3.6 UJ	3.8 U 3.6 U	3.6 U 3.6 U	3.5 U 3.5 U	3.6 U 3.6 U	3.6 U 3.6 U	3.6 U 3.6 U	3.4 J 3.5 U	4 U 4 U	3.9 U 3.9 U
4.4'-DDD	ug/Kg ug/Kg	3.6 UJ	3.6 U	3.6 U	3.5 U	3.6 U	3.6 U	3.6 U	3.5 U	4 U	3.9 U
Endosulfan sulfate	ug/Kg	3.6 W	3.6 U	3.6 U	3.5 U	3.6 U	3.6 U	3.6 U	3.5 U	4 Ü	3.9 U
4,4'-DDT	ug/Kg	3.6 W	3.6 U	3.6 U	3.5 U	3.6 U	3.6 U	3.6 U	3.4 J	4 U	3.9 U
Methoxychlor	ug/Kg	18 W	18 U	19 U	18 U	20 U	20 U				
Endrin ketone Endrin aldehyde	ug/Kg ug/Kg	3.6 UJ 3.6 UJ	3.8 U 3.6 U	3.6 U 3.6 U	3.5 U 3.5 U	3.6 U 3.6 U	3.6 U 3.6 U	3.6 U 3.6 U	3.5 U 3.7 J	4 U 4 U	3.9 U 3.9 U
alpha-Chlordane	ug/Kg	1.8 W	1.8 U	1.9 U	1.8 U	20	2 U				
gamma-Chlordane	ug/Kg	1.8 W	1.8 U	1.9 U	1.8 U	2 U	2 U				
Toxaphene	ug/Kg	180 W	180 U	190 U	180 U	200 U	200 U				
Arodor-1016	ug/Kg	36 UJ 73 UJ	36 U 73 U	36 U 73 U	35 U 72 U	36 U 73 U	36 U 73 U	36 U 74 U	35 U 70 U	40 U	39 U
Arocior-1221 Arocior-1232	ug/Kg ug/Kg	75 W	73 U	73 U 36 U	72 U	73 U	73 U 36 U	74 U 36 U	70 U	80 U 40 U	80 U 39 U
Arodor - 1242	ug/Ka	36 W	36 U	36 U	35 U	36 U	36 U	36 U	35 U	40 U	39 U
Aroclor - 1248	ug/Kg	36 WJ	36 U	36 U	35 U	36 U	36 U	36 U	35 U	40 U	39 U
Aroctor-1254	ug/Kg	36 W	36 U	36 U	35 U	38 U	36 U	36 U	35 U	40 U	39 U
Arocior-1260	ug/Kg	36 W	36 U	36 U	35 U	36 U	36 U	36 U	35 U	40 U	39 U
METALS											
Aluminum	mg/Kg	9720	10800	8730	9370	7330	9140	8640	6160	18600	6310
Antimony	mg/Kg	9.9 W	9.1 W	7.1 W	7.6 UJ	8.7 W	7.6 UJ	6.6 W	9.2 UJ	12 UJ	4.1 U
Arsenic Barium	mg/Kg mg/Kg	4.7 25 J	3.8 62.4	4.7 55.5	4.1 36.7	5.4 32.7 J	3.5 57.1	3,4 60.3	2.4 82.3	5 111	8.3 64.7
Beryllium Beryllium	mg/Kg	0.45 J	0.52 J	0.38 J	0.49 J	0.48 J	0.43 J	0.36 J	0.42 J	0.65 J	0.28 J
Cadmium	mg/Kg	0.62 U	0.57 U	0.44 U	0.48 U	0.64 J	0.47 U	0.73	0.58 U	0.75 U	0.4 U R
Calcium	mg/Kg	53800	67300	59100	112000	192000	70800	81800	195000	2760	141000
Chromium Cobatt	mg/Kg mg/Kg	16 9.7	17.6 9.8	14.6 8.7	15.4 10.5	11.5 9.8	14.5 8.2	15.8 7.2	11.9 6.3 J	25.2	12
Copper	mg/Kg	9.7 17	15.6	15.6	14.7	14.4	21.6	23.3	16.3	15.8 7.6	6.8 J 14.2 J
Iron	mg/Kg	20400	22100	21100	19100	14400	18700	16800	11900	54600	15400
Lead	mg/Kg	21.7 J	7.1 J	11.5 J	26.8 J	42.6 J	13.7 J	14.2 J	291 J	15.8 J	51
Magnesium	mg/Kg	6350	19600	12300	8590	12300	12800	21000	11300	3980	10000
Manganese Mercury	mg/Kg mg/Kg	394 0.06 J R	469 0.05 J R	435 0.07 J R	450 0.06 J FI	444 0.03 J R	464 0.03 J R	407 0.05 J R	384 0.03 J R	622 0.08 J R	529 J 0.03 U
Nickel	mg/Kg	27.1	27.1	23.6	46.4	23	35.3	23.7	17.5	21.7	18.6
Potassium	mg/Kg	844 J	1230	877	916	1370	979	1230	1420	1730	769 J
Selenium	mg/Kg	0.24 UJ	0.23 LU	0.19 W	0.17 WJ	0.21 W	0.12 UJ	0.18 W	0.15 W	0.2 UJ	2.3 J
Silver Sodium	mg/Kg mg/Kg	1.3 U 108 J	1.2 U 158 J	0.9 U 126 J	0.97 U 128 J	1.1 U 181 J	0.96 U 128 J	0.84 U 157 J	1.2 U	1.5 U	0.8 U
Thalium	mg/Kg	0.26 U	0.25 U	0.2 U	0.18 U	1.2 U	0.13 U	0.2 U	180 J 0.81 U	55 J 0.21 U	130 J 0.5 J
Vanadium	mg/Kg	12.2	16	13.2	12.4	11.5	14.8	14	10.1	39.8	11
Zinc .	mg/Kg	44.4	47.7	57.9	35.4	97.9	56.7	94.8	74.7	43.7	78.4 J
Cyanide	mg/Kg	0.49 U	0.52 U	0.47 U	0.51 U	0.5 U	0.48 U	0.49 U	0.48 U	U 88,0	0.71 U
OTHER ANALYSES											•
Nitrate/Nitrite - Nitrogen	mg/Kg	0.2	0.01	0.05	0.02	0.09	0.01	0.02	0.04	0.01 U	0.04
Total Solids	%W/W	91.6	91.8	92.4	92.9	92.5	92.2	91	94.7	83.3	83.6
Total Petroleum Hydrocarbons Fluoride	mg/Kg	1240 NS	68 NS	98 NS	1600 NS	1270 NS	3000 NG	1920	14800	112	410
pH	mg/Kg standard units	NS NS	NS NS	NS	NS						
F**		140		.10	110	110	140	140	140	NS	NS

COMPOUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROUNDS  VALUE CROU		MATRIX LOCATION DEPTH (FEET) SAMPLE DATE ES ID LAB ID	SOIL SEAD-25 0-2 12/03/93 SB25-4.1 206062	SOIL SEAD-25 2-4 12/03/93 SB25-4.2 206063	SOIL SEAD-25 4-6 12/03/93 SB25-4.3 206064	SOIL SEAD - 25 0 - 2 12/03/93 SB25 - 5.1 206065	SOIL SEAD25 2-4 12/03/93 SB25-5.2 206066	SOIL SEAD - 25 4 - 6 12/03/93 SB25 - 5.3 20606 7	SOIL SEAD-25 0-2 12/03/93 SB25-6.1 206068	SOIL SEAD-25 2-4 12/03/93 SB25-6.2 206069
Cristonstame		UNITS					200000	200001	200000	200003
Bromometame										
Variet Chicades										
Cristordame										
Methyshem Chloride										
Androine Up/Rg 1800 38 19 200 6800 U 760 U 71U U 11 U 11 U 11 U 11 U 11 U 11 U										
Carbon Disastinds										
1.1—Distrocembrane Up/Rg 1400 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 11 U 1200 U 6800 U 1200 U 11 U 11 U 11 U 11 U 11 U 11	Carbon Disulfide	ug/Kg	1400 U	11 U	11 U	1300 U				
12-Dictricrosters (chal)   ug/Ng   1400 U   11 U   11 U   1000 U   6800 U   1200 U   11 U   11 U   11 U   1200 U   11 U   11 U   11 U   1200 U   11 U   11 U   11 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   1200 U   11 U   11 U   1200 U   1200 U   1200 U   11 U   11 U   1200 U   1200 U   1200 U   11 U   11 U   1200 U   1200 U   1200 U   1200 U   11 U   11 U   1200 U   1200 U   1200 U   11 U   11 U   1200 U   1200 U   1200 U   11 U   11 U   1200 U   1200 U   11 U   11 U   1200 U   1200 U   1200 U   11 U   11 U   1200 U   1200 U   11 U   11 U   1200 U   1200 U   11 U   11 U   1200 U   1200 U   11 U   11 U   1200 U   1200 U   11 U   11 U   1200 U   1200 U   11 U   11 U   1200 U   1200 U   11 U   11 U   1200 U   1200 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   11 U   1200							6800 U	1200 U	11 U	
Chiestoriorm										
12-Dictidence   Ug/Ng										
2=Barrone   Ug/Kg   1400 U   11 U   11 U   1300 U   6800 U   1200 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11										
1,1,1—Titickinorethane ug/Kg 1400 U 11 U 11 U 1300 U 8800 U 1200 U 11 U 11 U 11 U 11 U 11 U 11										
Carbon Tetrachonde										
Bromotch from whaten   Ug/Fig   1400 U   11 U   11 U   1300 U   8800 U   1200 U   11 U   11 U   11 U   12 CH-Indercoproperies   Ug/Fig   1400 U   11 U   11 U   1300 U   8800 U   1200 U   11 U   11 U   11 U   11 U   12 CH-Indercoproperies   Ug/Fig   1400 U   11 U   11 U   11 U   1300 U   8800 U   1200 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11										
cia-1,3-Dichioropropere Tichioro-thore ug/Kg 1400 U 11 U 11 U 11 U 1200 U 1200 U 11 U 11 U 11 U 1300 U 6800 U 1200 U 11 U 11 U 11 U 11 U 11 U 11 U 11 U	Bromodichloromethane		1400 U	11 U						
Trichricorethame								1200 U	11 U	11 Ū
Dibromochisromethame								1200 U	11 U	11 U
1.12Trichrocostume										
Bername										
Tare   1,3-Dichtoropropense   Ug/Kg   1400 U   11 U   11 U   1300 U   8800 U   1200 U   11 U   11 U   11 U   11 U   1300 U   8800 U   1200 U   11 U   11 U   11 U   14 U   14 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U   15 U										
Bromoform   Light    1400 U   11 U   11 U   1300 U   6800 U   1200 U   11 U   11 U   11 U   11 U   1200 U   11 U   11 U   11 U   1200 U   1200 U   11 U   11 U   11 U   11 U   1200 U   6800 U   1200 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   1										
### A-Metry/-2-Pertanone   ug/Ng   1400 U   11 U   11 U   1300 U   6800 U   1200 U   11 U   11 U   11 U   11 U   11 U   11 U   1200 U   6800 U   1200 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11 U   11										
Z-Hexarione										
Tetrachicroethane			1400 U	11 U	11 U					
1,1,2,2—Tetrachicroethane	Tetrachioroethene		1400 U	11 U	11 U					
Chirobertzene		ug/Kg				1300 U	5800 U	1200 U		
Etylbergarne Ug/Kg 1400 U 11 U 11 U 190 J 17000 1200										11 U
Styrene										
Xylame (total)										
HERBICIDES  2.4—D										
HERBICIDES										
2,4-D	MIOL .	og i g	1400 0	11.0	110	1300 0	6600 0	1200 0	11 0	11 U
2.4—DB	HERBICIDES									
2.4—DB		ug/Kg	59 U	56 U	54 U	53 U	57 U	55 U	56 U	5411
2.45—TP (Silvex)		ug/Kg				53 U	57 U			
Dialapon									5.6 U	5.4 U
Dicambas		ug/Kg								
Dichloroprop										
Dincesb										
MCPA										
MCPP										
NITROAROMATICS   HMX										
FIDX	NITROAROMATICS							3333 5	3000 0	3400 0
FIDX		ug/Kg			NS	NS	NS	NS	NS	NS
1.3.5—Trinitroberzene ug/Kg NS NS NS NS NS NS NS NS NS NS NS NS NS							NS			
1,3-Dinitroberzere ug/Kg NS NS NS NS NS NS NS NS NS NS NS NS NS								NS		
2,4,6—Trinitrotoluene ug/Kg Ns Ns Ns Ns Ns Ns Ns Ns Ns Ns Ns Ns Ns										NS
4-amino-2,8-Dinitrotoluene ug/Kg NS NS NS NS NS NS NS NS NS NS NS NS NS										
2-amino4,6-Dinitrotoluene ug/Kg NS NS NS NS NS NS NS NS NS NS NS NS NS										
2.6-Diritrotolume ug/Kg NS NS NS NS NS NS NS NS NS NS										
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Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Column   Second Colum	(	MATRIX LOCATION DEPTH (FEET) SAMPLE DATE	SOIL SEAD -25 0-2 12/03/93	SOIL SEAD-25 2-4 12/03/93	SOIL SEAD-25 4-6 12/03/93	SOIL SEAD - 25 0-2 12/03/93	SOIL SEAD -25 2-4 12/03/93	SOIL SEAD-25 4-6 12/03/93	SOIL SEAD-25 0-2 12/03/93	SOIL SEAD-25 2-4 12/03/93
COMPONING   UNITS   COMPONING   UNITS   COMPONING   UNITS   COMPONING   UNITS   COMPONING   UNITS   COMPONING   UNITS   COMPONING   UNITS   COMPONING   UNITS   COMPONING   UNITS   COMPONING   UNITS   COMPONING   UNITS   COMPONING   UNITS   COMPONING   UNITS   COMPONING   UNITS   COMPONING   UNITS   COMPONING   UNITS   COMPONING   UNITS   COMPONING   UNITS   COMPONING   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS   UNITS										
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2.—Descriptoriement										
1,3—10-bidendewarens										
12-Districtorium	1,3-Dichlorobenzene	ug/Kg								
2—Mergiphemed ug/fig 1000 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 1500 U 15										
22-mg/st(1-Chrospropen) ug/fig 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U 1000 U										
### A-Margar-alpropylamine   Up/Fig   12000 U   1500 U   1500 U   11000 U   11000 U   350 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U				1500 U				11000 U	360 U	
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### Heachirorobunding	1,2,4-Trichlorobenzene	ug/Kg								
Homophiropeutadene										
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Hemselfrero-properties   Ug/Kg   12000 U   1500 U   1500 U   1500 U   1500 U   360 U   380 U   380 U   2,4.5—Trick-foro-phanel   Ug/Kg   22000 U   1500 U   1500 U   2700 U   1200 U   2700 U   1500 U   360 U   360 U   2,4.5—Trick-foro-phanel   Ug/Kg   12000 U   1500 U   1500 U   1500 U   1500 U   1500 U   360 U   360 U   2,4.5—Trick-foro-phanel   Ug/Kg   12000 U   1500 U   1500 U   1500 U   1500 U   1500 U   360 U   360 U   2,4.5—Trick-foro-phanel   Ug/Kg   12000 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U   1500 U			12000 U	1500 U	810 U	11000 U	510 U	11000 U	360 U	360 U
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Color										
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## Chlorophenyl phenyl ether   Ug/Kg   12000 U   1500 U   810 U   11000 U   510 U   11000 U   280 U   360 U   360 U   4-Ntroariline   Ug/Kg   29000 U   3800 U   2000 U   27000 U   1200 U   27000 U   880 U   870 U   4.6-Diritro-2-methyl phenot   Ug/Kg   29000 U   3800 U   2000 U   27000 U   1200 U   27000 U   880 U   870 U   4.6-Diritro-2-methyl phenot   Ug/Kg   29000 U   3600 U   2000 U   27000 U   1200 U   27000 U   880 U   870 U   4.6-Diritro-2-methyl phenot   Ug/Kg   12000 U   1500 U   810 U   11000 U   510 U   11000 U   360 U   360 U   360 U   4.6-Bronophenyl-phenyl ether   Ug/Kg   12000 U   1500 U   810 U   11000 U   510 U   11000 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U   360 U										
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Hexachloroberzene										
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3.3°—Dichforobenzidine Ug/Kg 12000 U 1500 U 810 U 11000 U 510 U 11000 U 230 J 360 U 500 U 500 U 1500 U 1500 U 11000 U 510 U 11000 U 230 J 360 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U 500 U										
Chrysene							510 U	11000 U		
bis(2-Ethylhexyl)phthalate										
Di-n-octylehthalate										
Bertzo(b) tuoranthene										
Bertzo(kr)fluoranthene			12000 U	1500 U	810 U	11000 U	510 U	11000 U	240 J	360 U
indero(1,2,3—cd)pyrene ug/Kg 12000 U 1500 U 810 U 11000 U 510 U 11000 U 170 J 360 U Diberız(a,h)anthracene ug/Kg 12000 U 1500 U 810 U 11000 U 510 U 11000 U 72 J 360 U	Bertzo(k) fluoranthene	ug/Kg								
Dibertz(a,h)anthracene ug/Kg 12000 U 1500 U 810 U 11000 U 510 U 11000 U 72 J 360 U										
					810 U	11000 U	510 U	11000 U		

	MATRIX LOCATION DEPTH (FEET) SAMPLE DATE ES ID	SOIL SEAD-25 0-2 12/03/93 SB25-4.1	SOIL SEAD-25 2-4 12/03/93 SB25-4.2	SOIL SEAD-25 4-6 12/03/93 SB25-4.3	SOIL SEAD-25 0-2 12/03/93 SB25-5.1	SOIL SEAD 25 24 12/03/93 SB255.2	SOIL SEAD - 25 4-6 12/03/93 SB25-5.3	SOIL SEAD-25 0-2 12/03/93 SB25-6.1	SOIL SEAD-25 2-4 12/03/93 SB25-6.2
COMPOUND	Lab id Units	206062	206063	206064	206065	206066	206067	206068	206069
PESTICIDES/PCB	. UNITS								
alpha-BHC	ug/Kg	2 W	1.9 U	2.2 U	1.8 UJ	1.9 UJ	1,9 U	1.9 U	1.8 U
beta-BHC	ug/Kg	2 W	1.9 U	22 U	1.8 UJ	1.9 W	1.9 U	1.9 U	1.8 U
delta-BHC	ug/Kg	2 W	1.9 U	2.2 U	1.8 W	1.9 W	1.9 U	1.9 U	1.8 U
gamma-BHC (Lindane) Heptachior	ug/Kg ug/Kg	2 เม	1.9 U 1.9 U	22 U '	1.8 W 1.8 W	1.9 W 1.9 W	1.9 U	1.9 U	1.8 U
Aldrin	ug/Kg	2 W	1,9 U	220	1.8 W	1.9 W	1.9 U 1.9 U	1.9 U 1.9 U	1.8 U 1.8 U
Heptachior epoxide	ug/Kg	2 W	1.9 U	220	2.9 J	1.9 W	1.9 U	1.9 U	1.8 U
Endosulfan i	ug/Kg	2 W	1.9 U	2.2 U	1.8 UJ	1.9 W	1.9 U	1.9 Ü	1.8 Ü
Dieldrin	ug/Kg	3.9 LU	3.7 U	4.3 U	3.5 W	3.7 W	3.6 U	3.7 U	3.6 U
4,4'-DDE	ug/Kg	3.9 W	3.7 U	4.3 U	4.8 J	3.7 W	3.6 U	3.7 U	3.6 U
Endrin Endosulfan II	ug/Kg ug/Kg	ນ e.s ພ e.s	3.7 U 3.7 U	4.3 U 4.3 U	2.1 J	3.7 W	3.5 U	3.7 U	3.6 U
4.4'-DDD	ug/Kg	3.9 W	3.7 U	4.3 U	3.5 W 3.5 W	3.7 เม 3.7 เม	3.6 U 3.6 U	3.7 U 3.7 U	3.6 U 3.6 U
Endosulfan sulfate	ug/Kg	3.9 W	3.7 U	4.3 U	3.5 W	3.7 W	3.6 U	3.7 U	3.6 U
4,4"-DDT	ug/Kg	3.9 W	3.7 U	4.3 U	3.5 W	3.7 W	3.6 U	4.3	3.6 U
Methoxychior	ug/Kg	20 W	19 U	22 U	18 WJ	19 W	19 U	19 U	18 U
Endrin ketone	ug/Kg	3.9 W	3.7 U	4.3 U	3.5 UJ	3.7 W	3.6 U	3.7 U	3.6 U
Endrin aldehyde alpha—Chlordane	ug/Kg	3.9 W	3.7 U	4.3 U	3.5 W	3.7 W	3.6 U	3.7 U	3.6 U
gamma—Chlordane	ug/Kg ug/Kg	2 W 2 W	1.9 U 1.9 U	2.2 U 2.2 U	25 J 1.8 W	1.9 ധ 1.9 ധ	1.9 U	1.9 U	1.8 U
Toxaphene	ug/Kg	200 UJ	190 U	220 U	1.8 W	1.9 W	1.9 U 190 U	1.9 U 190 U	1.8 U 180 U
Arodor-1016	ug/Kg	39 UJ	37 U	43 U	35 W	37 W	36 U	37 U	36 U
Arodor-1221	ug/Kg	79 UJ	74 Ú	86 U	71 W	75 W	74 U	74 U	73 U
Arocior-1232	ug/Kg	39 UJ	37 U	43 Ü	35 UJ	37 W	36 U	37 U	36 U
Arodor-1242	ug/Kg	39 UJ	37 U	43 U	35 W	37 W	36 U	37 U	36 U
Arodor - 1248	ug/Kg	39 W	37 U	43 U	35 W	37 W	36 U	37 U	36 U
Aroclor—1254 Aroclor—1260	ug/Kg ug/Kg	33 NJ 39 LJ	37 U 37 U	43 U 43 U	130 J	37 W	36 U	37 U	36 U
A 0000 - 1200	ug/Ng	39 00	37 0	43 0	35 W	37 UJ	36 U	37 U	36 U
METALS									
Aluminum	mg/Kg	19700	16600	7590	13200	23600	11600	10600	7070
Antimony	mg/Kg	4.2 U	4.5 U	4.6 U	2.5 J	3.8 U	4 U	4.2 U	3 U
Arsenic Barium	mg/Kg	12.2 57.4	7.4	9.1	5.1	8.3	8	8.3	4.8
Beryllium	mg/Kg mg/Kg	0.88 J	86.1 0.82 J	46,1 0,76 J	61.8 0.57 J	160	81.1	59.1	35
Cadmium	mg/Kg	0.41 U R	0.43 U R	0.44 U R	0.24 U R	1.1 0.37 U R	0.54 J 0.39 U R	0.48 J	0.35 J
Calcium	mg/Kg	5330	17800	128000	42600	5120	74200	0.41 U R 82500	0.29 U R 122000
Chromium	mg/Kg	26.4	26.8	15.8	21.1	30.4	17.5	16.9	11.3
Cobalt	mg/Kg	11.5	16.8	5.6 J	10.8	14	9.5	11.2	8.6 J
Copper	mg/Kg	35.7 J	26.3 J	11.4 J	17.6 J	34 J	22 J	20.2 J	12 J
Iron Lead	mg/Kg mg/Kg	38100 56.4	35200 16.4	14000 156	24400	31100	20700	21400	15800
Magnesium	mg/Kg	5210	8550	156 21800	77.2 6590	18 6950	15.6 17800	9.5	13.8
Manganese	mg/Kg	281 J	776 J	344 J	433 J	697 J	423 J	19600 722 J	22800 610 J
Mercury	mg/Kg	0.04 J	0.04 J	0.04 U	0.03 U	0.96	0.04 U	0.03 J	0.04 U
Nickel	mg/Kg	34.4	47.8	14.2	30.8	45.2	29.1	26.8	18
Potassium	mg/Kg	1430	1410	1980	1790	3250	2090	1480	1060
Selenium Silver	mg/Kg	0.92 J	0.85 J	1.5 J	1 J	0.67 J	0.68 J	0.97 J	0.63 J
Sodium	mg/Kg mg/Kg	0.81 U 55.2 J	0.87 U 81.3 J	0.89 U 176 J	0.48 U 97.4 J	0.73 U	0.78 U	0.82 U	0.59 U
Thallium	mg/Kg	0.51 J	0.48 J	0,79 J	97.43 0.55 J	98.1 J 0.62 J	162 J 0.23 J	269 J	186 J
Vanadium	mg/Kg	34.1	27.5	14.8	17.5	40.8	0.23 J 20.5	0.24 UJ 18.5	0.21 UJ
Zinc	mg/Kg	72.9 J	210 J	67 J	51.9 J	60.5 J	76.6 J	71,6 J	12 40.6 J
Cyanide	mg/Kg	0.66 U	0.59 U	0.57 U	0.55 U	0.63 U	0.65 U	0.58 U	40.6 J 0.64 U
OTHER ANALYSES								2.22	0.040
Nitrate/Nitrite Nitrogen	mg/Kg	0.01 U	0.01 U	0.01	0.01 U	0.01	0.02	0.17	0.01 U
Total Solids	%W/W	85.2	89.7	93	94.3	87.5	91.5	90	91.6
Total Petroleum Hydrocarbons Fluoride	mg/Kg	5800 NC	770	800 NC	740	27000	2100	99	112
pH	mg/Kg standard units	NS NS	NS NS	NS NS	NS	NS	NS	NS	NS
£		140	140	140	NS	NS	NS	NS	NS

SENECA ARMY DEPOT SEAD-25 EXPANDED SITE INSPECTION GROUNDWATER ANALYSIS RESULTS

	MATRIX LOCATION SAMPLE DATE ES ID LAB ID	WATER SEAD -25 02/06/94 MW25 - 1 210541	WATER SEAD-25 02/06/94 MW25-4 210543	WATER SEAD - 25 02/05/94 MW25 - 2 210480	WATER SEAD -25 11/15/93 MW25 - 3 204633,	WATER SEAD 25 11/15/93 MW25 3RE 204633
COMPOUND	UNITS		MW25~1DUP		204658	
VOLATILE ORGANICS						
Chloromethane	ug/L	10 U	10 U	10 U	10 U	NS
Bromomethane	ug/L	10 U	10 U	10 U	10 U	NS
Vinyl Chloride	ug/L	10 U	10 U	10 U 10 U	10 U 10 U	NS NS
Chloroethane	ug/L	10 U 10 U	10 U 10 U	10 U	10 U	NS NS
Methylene Chioride Acetone	ug/L ug/L	10 U	10 U	10 U	10 U	NS
Carbon Disulfide	ug/L	10 U	10 U	10 U	10 U	NS
1.1-Dichloroethene	ug/L	10 U	10 U	1 J	10 U	NS
1.1-Dichloroethane	ug/L	10 U	10 U	8 J	3 J	NS
1,2-Dichloroethene (total)	ug/L	10 U	10 U	25	2 J	NS
Chloroform	ug/L	10 U	10 U	17	10 U	NS
1,2-Dichloroethane	ug/L	10 U	10 U	10 U	10 U	NS
2-Butanone	ug/L	10 U	10 U	10 U	10 U	NS
1,1,1—Trichloroethane	ug/L	10 U	10 U	36 10 U	10 U 10 U	NS NS
Carbon Tetrachloride	ug/L	10 U 10 U	10 U 10 U	10 U	10 U	NS NS
Bromodichioromethane 1,2-Dichioropropane	ug/L ug/L	10 U	10 U	10 U	10 U	NS
cis-1,3-Dichloropropens	ug/L	10 U	10 U	10 U	10 U	NS
Trichloroethene	ug/L	10 Ü	10 U	10	10 U	NS
Dibromochloromethane	ug/L	10 U	10 U	10 U	10 U	NS
1,1,2-Trichloroethane	ug/L	10 U	10 U	10 U	10 U	NS
Benzene	ug/L '	10 U	10 U	780	30	NS
trans-1,3-Dichloropropene	ug/L	10 U	10 U	10 U	10 U	NS
Bromoform	ug/L	10 U	10 U	10 U	10 U	NS NS
4-Methyl-2-Peritanone	ug/L	10 U	10 U 10 U	10 U 10 U	10 U 10 U	NS NS
2-Hexanone	ug/L ug/L	10 U 10 U	10 U	1J	10 U	NS
Tetrachioroethene 1,1,2,2 – Tetrachioroethane	ug/L	10 U	10 U	10 U	10 U	NS
Toluene	ug/L	10 U	10 U	560	8 J	NS
Chlorobenzene	ug/L	10 U	10 U	10 U	10 U	NS
Ethylberizene	ug/L	10 U	10 U	110	18	NS
Styrene	ug/L	10 U	10 U	10 U	10 U	NS
Xylene (total)	ug/L	10 U	10 U	2500	82	NS
MTBE	ug/L	ND	ND	NA	ND	NS
HERBICIDES	ug/L	1.2 U	1.1 U	1.1 U	1.1 U	NS
2,4-D 2,4-DB	ug/L	1.2 U	1.1 U	1.1 U	1.1 U	NS
2,4,5-T	ug/L	0.12 U	0.11 U	0.11 U	0,11 U-	NS
2,4,5-TP (Silvex)	ug/L	0.12 U	0.11 U	0.11 U	0.11 U	NS
Dalapon	ug/L	2.6 U	2.6 U	2.6 U	2.5 U	NS
Dicamba	ug/L	0.12 U	0.11 U	0.11 U	0.11 U	NS
Dichloroprop	ug/L	1.2 Ü	1.1 U	1.1 U	1.1 U	NS
Dinoseb	ug/L	0.56 U	0.55 U	0.55 U	0.53 U	NS NS
MCPA	ug/L	120 U 120 U	110 U 110 U	110 U 110 U	110 U 110 U	NS NS
MCPP	ug/L	120 0	1100	110 0	1100	140
NITROAROMATICS						
HMX	ug/L	NS	NS	NS	NS	NS
RDX	ug/L	NS	NS	NS	NS	NS
1,3,5-Trinitrobertzene	ug/L	NS	NS	NS	NS	NS
1,3-Dinitrobenzene	ug/L	NS	NS	NS	NS	NS
Tetryl	ug/L	NS	NS	NS	NS	NS
2,4,5Trinitrotoluene	ug/L	NS	NS	NS	NS	NS
4-amino-2,6-Dinitrotoluene	ug/L	NS	NS	NS	NS	NS
2-amino-4,6-Dinitrotoluene	ug/L	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	ug/L	NS NS	NS NS	ns Ns	NS NS	NS NS
2,4-Dinitrotoluene	ug/L	No	NO	Mo	NO	NO

NOTES: NS stands for NOT SAMPLED NA stands for NOT ANALYZED

(	MATRIX LOCATION SAMPLE DATE ES ID LAB ID	WATER SEAD 25 02/06/94 MW25-1 210541	WATER SEAD -25 02/06/94 MW25-4 210543	WATER SEAD-25 02/05/94 MW25-2 210480	WATER SEAD-25 11/15/93 MW25-3 204633.	WATER SEAD - 25 11/15/93 MW25 - 3RE 204633
COMPOUND	UNITS	210341	MW25-1DUP	210400	204658	204633
SEMIVOLATILE ORGANICS		40.11	40.11			
Phenol bis(2-Chloroethyl) ether	ug/L ug/L	10 U 10 U	10 U 10 U	56 25 U	11 U , 11 U	12 U 12 U
2-Chlorophenol	ug/L	10 U	10 U	25 U	11 U	12 U
1,3-Dichlorobenzene	ug/L	10 U	10 U	25 U	11 U	12 U
1,4-Dichlorobenzene	ug/L	10 U	10 U	25 U	11 U	12 U
1,2-Dichlorobenzene	ug/L	10 U	10 U	25 U	11 U	12 U
2-Methylphenol 2.2'-exybis(1-Chloropropane)	ug/L ug/L	10 U 10 U	10 U 10 U	23 J 25 U	11 U 11 U	12 U 12 U
4-Methylphenol	ug/L	10 U	10 U	42	11 U	12 U
N-Nitroso-di-n-propylamine	ug/L	10 U	10 U	25 U	11 U	12 U
Hexachloroethane	ug/L	10 U	10 U	25 U	11 Ü	12 U
Nitrobertzene	ug/L	10 U	10 U	25 U	11 U	12 U
Isophorone 2Nitrophenol	ug/L ug/L	10 U 10 U	10 U 10 U	25 U 25 U	11 U 11 U	12 U
2,4-Dimethylphenol	ug/L	10 U	10 U	86	11 U	12 U 12 U
bis(2-Chloroethoxy) methane	ug/L	10 U	10 U	25 U	11 U	12 U
2,4-Dichlorophenol	ug/L	10 U	10 U	25 U	11 U	12 U
1,2,4Trichlorobenzene Naphthalene	ug/L	10 U	10 U	25 U	11 U	12 U
4-Chioroaniline	ug/L ug/L	10 U 10 U	10 U 10 U	86 25 U	11 U 11 U	12 U 12 U
Hexachiorobutadiene	ug/L	10 U	10 U	25 U	11 U	12 U
4-Chioro-3-methylphenol	ug/L	10 U	10 U	25 U	11 U	12 U
2-Methylnaphthalene	ug/L	10 U	10 U	37	11 U	12 U
Hexachiorocyclopentadiene	ug/L	10 U	10 U	25 U	11 U	12 U
2,4,6-Trichlorophenol 2,4,5-Trichlorophenol	ug/L ug/L	10 U 25 U	10 U 25 U	25 U 62 U	11 U 26 U	12 U 29 U
2-Chloronaphthalene	ug/L	10 U	10 U	25 U	11 U	12 U
2-Nitroantline	ug/L	25 U	25 U	62 U	26 U	29 U
Dimethylphthalate	ug/L	10 U	10 U	25 U	11 U	12 U
Acenaphthylene	ug/L	10 U	10 U	25 U	11 U	12 U
2,8Dinitrotoluene 3Nitroaniline	ug/L ug/L	10 U 25 U	10 U 25 U	25 U 62 U	11 U 26 U	12 Ü 29 U
Acenaphthene	ug/L	10 U	10 U	25 U	11 U	12 U
2,4-Dinitrophenol	ug/L	25 U	25 U	62 U	26 U	29 U
4-Nitrophenol	ug/L	25 U	25 U	62 U	26 U	29 U
Dibenzofuran 2.4-Dinitrotoluene	ug/L	10 U	10 U	25 U	11 U	12 U
Diethylphthalate	ug/L ug/L	10 U 10 U	10 U 10 U	25 U 25 U	11 U 11 U	12 U 12 U
4-Chlorophenyl-phenylether	ug/L	10 U	10 U	25 U	11 U	12 U
Fluorene	ug/L	10 U	10 U	1 J	11 U	12 U
4-Nitroaniline	ug/L	25 U	25 U	62 U	26 U	29 U
4,6—Dinitro—2—methylphenol N—Nitrosodiphenylamine	ug/L ug/L	25 U 10 U	25 U 10 U	62 U 25 U	26 U	29 Ú
4—Bromophenyl—phenylether	ug/L	10 U	10 U	25 U	11 U 11 U	12 U 12 U
Hexachiorobenzene	ug/L	10 U	10 U	25 U	11 U	12 U
Pentachlorophenol	ug/L	25 U	25 U	62 U	26 U	29 U
Phenanthrene Anthracene	ug/L	10 U	10 U	25 U	11 U	12 U
Carbazole	ug/L ug/L	10.U 10.U	10 U 10 U	25 Ü 25 Ü	11 U 11 U	12 U 12 U
Di-n-butylphthalate	ug/L	10 U	10 U	25 U	11 U	12 U
Fluoranthene	ug/L	10 U	10 U	25 U	11 Ü	12 U
Pyrene	ug/L	10 U	10 U	25 U	11 Ü	12 U
Butylberizylphthalate 3,3'-Dichloroberizidine	ug/L ug/L	10 U 10 U	10 U	25 U	11 U	12 U
Berzo(a)anthracene	ug/L	10 U	10 U 10 U	25 U 25 U	11 U 11 U	12 U 12 U
Chrysene	ug/L	10 U	10 U	25 U	11 U	12 U
bis (2-Ethylhexyl) phthalate	ug/L	10 U	10 U	25 U	11 Ü	12 U
Di-n-octylphthalate	ug/L	10 U	10 U	25 U	11 U	12 U
Benzo(b) Luoranthene	ug/L	10 U	10 U	25 U	11 U	12 U
Benzo(k) fluoranthene Benzo(a) pyrene	ug/L ug/L	10 U 10 U	10 U 10 U	25 U 25 U	11 U 11 U	12 U
Indeno(1,2,3-cd)pyrene	ug/L	10 U	10 U	25 U	11 U 11 U	12 U 12 U
Dibenz(a,h)anthracene	ug/L	10 U	10 U	25 U	11 0	12 U
Berzo(g,h,l)perylene	ug/L	10 U	10 U	25 U	11 U	12 U

COMPOUND	MATRIX LOCATION SAMP LE DATE ES ID LAB ID UNITS	WATER SEAD-25 02/06/94 MW25-1 210541	WATER SEAD - 25 02/06/94 MW25-4 210543 MW25-1DUF	WATER SEAD - 25 02/05/94 MW25 - 2 210480	WATER SEAD - 25 11/15/93 MW25 - 3 204533 204558	WATER SEAD-25 11/15/93 MW25-3RE 204633
PESTICIDES/PCB	Olilio		MINTED TOO		204030	
alpha-BHC	ug/L	0.056 U	0.06 U	0.06 U	0.053 U	NS
beta-BHC	ug/L	0.056 U	U 30,0	0.06 U	0.053 U	NS
delta-BHC	ug/L	0.056 U	0.06 U	0.06 U	0.053 U	NS
gamma-BHC (Lindane)	ug/L	0.056 U	0.06 U	0.06 U	0.053 U	NS
Heptachlor	ug/L	0.056 U	U 30.0	U 90.0	0.053 U	NS
Aldrin	ug/L	0.056 U	0.06 U	U 30.0	0.053 U	NS
Heptachlor epoxide	ug/L	0,056 U 0,056 U	0.06 U 0.06 U	0.06 U 0.00 U	0.053 U 0.053 U	NS NS
Endosulfan I Dieldrin	ug/L ug/L	0.036 U	0.12 U	0.12 U	0.053 U 0.11 U	NS
4.4'DDE	ug/L	0.11 U	0.12 U	0.12 U	0.11 U	NS
Endrin	ug/L	0.11 U	0.12 U	0.12 U	0.11 U	NS
Endosulfan II	ug/L	0.11 U	0.12 U	0.12 U	0.11 U	NS
4,4'-DDD	ug/L	0.11 U	0.12 U	0.12 U	0.11 U	NS
Endosulfan sulfate	⊔g/L	0.11 U	0.12 U	0.12 U	0.11 U	NS
4,4'-DDT	ug/L	0.11 U	0.12 U	0.12 U	0.11 U	NS
Methoxychlor	ug/L	0.56 U	0.6 U	U 8.0	0.53 U	NS
Endrin ketone	ug/L	0.11 U 0.11 U	0.12 U 0.12 U	0.12 U 0.12 U	0.11 U 0.11 U	NS NS
Endrin aldehyde alpha-Chlordane	ug/L ug/L	0.11 U 0.056 U	0.12 U 0.06 U	0.12 U 0.06 U	0.11 U 0.053 U	NS
gamma-Chlordane	ug/L	0.056 U	0.06 U	0.06 U	0.053 U	NS
Toxaphene	ug/L	5.6 U	6 U	6 U	5.3 U	NS
Aroclor - 1016	ug/L	1.1 U	1.2 U	1.2 U	1.1 U	NS
Aroclor - 1221	ug/L	2.2 U	2.4 U	2.4 U	2.1 U	NS
Aroclor - 1232	ug/L	1.1 U	1.2 U	1.2 U	1.1 U	NS
Aroclor - 1242	ug/L	1.1 U	1.2 U	1.2 U	1.1 U	NS
Aroclor – 1248	ug/L	1.1 U	1.2 U	1.2 U	1.1 U	NS
Aroclor - 1254	ug/L	1.1 U	1.2 U	1.2 U	1.1 U	NS NS
Arodor-1260	ug/L	1.1 U	1.2 U	1.2 U	1.1 U	No
METALS						
Aluminum	ug/L	894 J	1870 J	53.3 J	2260	NS
Antimony	ug/L	24.9 J R	36.3 J R	22.4 J R	52.7 U	NS
Arsenic	ug/L	1.4 U	1.4 U	3.8 J	1 U	NS
Barium	ug/L	115 J	121 J	74.1 J	54 J	NS
Beryllium	ug/L	0.4 U	0.4 U	0.4 U	0.31 J	NS NS
Cadmium	ug/L ug/L	2.1 U 142000	2.1 U 145000	2.1 U 143000	3.3 U 119000	NS NS
Calcium Chromium	ug/L	2.8 J	2.6 U	2.6 U	5 J	NS
Cobalt	ug/L	4.4 U	4.4 U	4.4 U	7.9 J	NS
Copper	ug/L	3.1 U	3,1 U	3.1 U	4.4 J	NS
Iron	ug/L	1300 J	3200 J	3730	4150	NS
Lead	ug/L	3 R	2.7 J R	2J R	3	NS
Magnesium	ug/L	26100	26900	48000	22000	NS
Manganese	ug/L	213	241	1330	2440	NS NS
Mercury	ug/L	0.05 J R 4.4 J	0.05 J R 6.8 J	0.04 U 4.7 J	0.07 UJ 11.5 J	NS NS
Nickel Potassium	ug/L ug/L	4.4.3 906 U	1010 J	9950	4170 J	NS NS
Selenium	ug/L	0.73 J	0.7 U	0.7 U	0.8 U	NS
Silver	ug/L	4.2 U	4.2 U	4.2 U	6.7 U	NS
Sodium	ug/L	52900	54100	13100	11500 R	NS
Thallium	ug/L	1.2 U	1.2 U	1.2 U	1.8 U	NS
Vanadium	ug/L	3.7 U	3.7 U	3.7 U	5.4 J	NS
Zinc	ug/L	12.4 J R	20.2 R	31.3 R	20 R	NS
Cyanide	ug/L	5 U	5 U	5 U	5 U	NS
OTHER ANALYSES						
Nitrate/Nitrite - Nitrogen	mg/L	0.16	0.17	0.01 U	0.07	NS
Total Petroleum Hydrocarbons	mg/L	0.4 U	0.4 U	2	1.6	NS
Fluoride	mg/L	NS NS	NS	NS	NS NS	NS
pH	standard units	7.01	NS	7.08	7.52	NS
Specific Conductivity	umhos/cm NTU	600 56.4	NS NS	600 3.6	510 2.2	NS NS
Turbidity	RIO	30.4	149	3.0	E.E	No

,		

SEAD-26
Expanded Site Inspection

	MATRIX LOCATION DEPTH (FEET) SAMPLE DATE ES ID LAB ID	SOIL SEAD-26 0-0.2 10/25/93 SS26-1 202245	SOIL SEAD-26 0-0.2 10/25/93 SS26-1RE 202245	SOIL SEAD-26 0-0.2 10/25/93 SS26-2 202246	SOIL SEAD-26 0-0.2 10/25/93 SS26-2RE 202246	SOIL SEAD -26 0-0.2 10/25/93 SS26-3 202247	SOIL SEAD26 00.2 10/25/93 SS269 202255	SOIL SEAD - 26 0 - 0.2 10/25/93 SS26 - 4 202249	SOIL SEAD -26 0-0.2 10/25/93 SS26-5 202251	SOIL SEAD26 00.2 10/25/93 SS266 202252	SOIL SEAD-26 0-0.2 10/25/93 SS26-7 202253
COMPOUND SEMIVOLATILE ORGANICS	UNITS						SS26-3DUP				
Phendi	∪g/Kg	19000 U	NS	4000 U	NS	45000 U	38000 U	450 U	340 U	1100 U	350 U
bis (2-Chloroethyl) ether	ug/Kg	19000 U	NS	4000 U	NS	45000 U	38000 U	450 U	340 U 340 U	1100 U 1100 U	350 U 350 U
2Chlorophend 1,3Dichlorobenzene	ug/Kg ug/Kg	19000 U 19000 U	NS NS	4000 U 4000 U	NS NS	45000 U 45000 U	38000 U 38000 U	450 U 450 U	340 U	1100 U	350 U
1,4-Dictional zene	ug/Kg	19000 U	NS	4000 U	NS	45000 U	38000 U	450 U	340 U	1100 U	350 U
1,2-DicHorobenzene	ug/Kg	19000 U	NS	4000 U	NS	45000 U	38000 U	450 U 450 U	340 U 340 U	1100 U 1100 U	350 U 350 U
2-Methylphenol 2.2'-oxybis(1-Chloropropane)	ug/Kg ua/Ka	19000 U 19000 U	NS NS	4000 U 4000 U	NS NS	45000 U 45000 U	38000 U 38000 U	450 U	340 U	1100 U	350 U
4-Methylphend	ug/Kg	19000 U	NS	4000 U	NS	45000 U	38000 U	450 U	340 U	1100 U	350 U
N-Nitroso-di-n-propylamine	ug/Kg	19000 U	NS	4000 U 4000 U	NS NS	45000 U 45000 U	38000 U 38000 U	450 U 450 U	340 U 340 U	1100 U 1100 U	350 U . 350 U
Hexachloroethane Nitrobenzene	ug/Kg ug/Kg	19000 U 19000 U	NS NS	4000 U	NS NS	45000 U	38000 U	450 U	340 U	1100 U	350 U
Isophorone	ug/Kg	19000 U	NS	4000 U	NS	45000 U	38000 U	450 U	340 U	1100 U	350 U
2-Nitrophenal	ug/Kg	19000 U	NS	4000 U 4000 U	NS NS	45000 U 45000 U	38000 U 38000 U	450 U 450 U	340 U 340 U	1100 U 1100 U	350 U 350 U
2,4-Dimethylphend bis(2-Chloroethoxy) methane	ug/Kg ug/Kg	19000 U 19000 U	NS NS	4000 U	NS	45000 U	38000 U	450 U	340 U	1100 U	350 U
2,4-Dichlorophenol	ug/Kg	19000 U	NS	4000 U '	NS	45000 U	38000 U	450 U	340 U	1100 U	350 U
1,2,4—Trichlorobenzene	ug/Kg	19000 U	NS	4000 U 4000 U	NS NS	45000 U 45000 U	38000 U 38000 U	450 U 450 U	340 U 24 J	1100 U 1100 U	350 U 350 U
Naphthalene 4Chloroanitine	ug/Kg ug/Kg	19000 U 19000 U	NS NS	4000 U	NS	45000 U	38000 U	450 U	340 U	1100 U	350 U
Hexachlorobutadiene	ug/Kg	19000 U	NS	4000 U	NS	45000 U	38000 U	450 U	340 U	1100 U	350 U
4-Chioro-3-methylphenol	ugKg	19000 U	NS NS	4000 U 590 J	NS NS	45000 U 45000 U	38000 U 38000 U	450 U 41 J	340 U 26 J	1100 U 1100 U	350 U 350 U
2-Methylnaphthalene Hexachlorocydopentadiene	ug/Kg ug/Kg	19000 U 19000 U	NS NS	4000 U	NS NS	45000 U	38000 U	450 U	340 U	1100 U	350 U
2,4,6—Trichlorophenol	ug/Kg	19000 U	NS	4000 U	NS	45000 U	38000 U	450 U	340 U	1100 U	350 U
2,4,5—Trichlorophenol	ug/Kg	46000 U	NS	9800 U 4000 U	NS NS	10000 U 45000 U	95000 U 38000 U	1100 U 450 U	830 U 340 U	2700 U 1100 U	840 U 350 U
2-Chloronaphthalene 2-Nitroaniline	ug/Kg ug/Kg	19000 U 46000 U	NS NS	9800 U	NS NS	10000 U	95000 U	1100 U	830 U	2700 U	840 U
Dimethylphthalate	ug/Kg	19000 U	NS	4000 U	NS	45000 U	38000 U	450 U	340 U	1100 U	350 U
Aceraphthylene	ug/Kg	19000 U	NS	4000 U	NS NS	45000 U 45000 U	38000 U 38000 U	450 U 450 U	340 U 340 U	1100 U 1100 U	350 U 350 U
2,6-Dinitrotoluene 3-Nitroaniline	ug/Kg ug/Kg	19000 U 46000 U	NS NS	4000 U 9800 U	NS	10000 U	95000 U	1100 U	830 U	2700 U	840 U
Acenaphthene	ug/Kg	19000 U	NS	4000 U	N\$	45000 U	38000 U	180 J	340 U	150 J	350 U
2,4-Dinitrophenol	ug/Kg	46000 U 46000 U	NS NS	9800 U 9800 U	NS NS	10000 U 10000 U	95000 U 95000 U	1100 U 1100 U	830 U . 830 U	2700 U 2700 U	840 U 840 U
4Nitrophend Dibenzaturan	ug/Kg ug/Kg	46000 U 19000 U	NS NS	4000 U	NS	45000 U	38000 U	62 J	340 U	1100 U	350 U
2,4 Dinitrotoluene	ug/Kg	19000 U	NS	4000 U	NS	45000 U	38000 U	450 U	340 U	1100 U	350 U
Diethylphthalate	ug/Kg	19000 U 19000 U	NS NS	4000 U 4000 U	NS NS	45000 U 45000 U	38000 U 38000 U	450 U 450 U	340 U 340 U	1100 U 1100 U	350 U 350 U
4Chiorophenylphenylether Fluorene	ug/Kg ug/Kg	19000 U	NS	4000 U	NS	45000 U	38000 U	130 J	340 U	130 J	350 U
4-Nitrozniline	ug/Kg	46000 U	NS	9800 U	NS	10000 U	95000 U	1100 U	830 U	2700 U	840 U
4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine	ug/Kg ug/Kg	46000 U 19000 U .	NS NS	9800 U 4000 U	NS NS	10000 U 45000 U	95000 U 38000 U	1100 U 450 U	830 U 340 U	2700 U 1100 U	840 U 350 U
4-Bromophern/-phern/lether	ug/Kg	19000 U	NS	4000 U	NS	45000 U	38000 U	450 U	340 U	1100 U	350 U
Hexachiorobertzene	ug/Kg	19000 U	NS	4000 U 9800 U	NS NS	45000 U 10000 U	38000 U 95000 U	450 U 1100 U	340 U 830 U	1100 U 2700 U	350 U 840 U
Pentachiorophenol Phenanthrene	ug/Kg ug/Kg	46000 U 19000 U	NS NS	4000 U	NS NS	45000 U	38000 U	1100 0	830 U 340 U	2700 U 2700	840 ป 350 U
Anthacene	ug/Kg	19000 U	NS	4000 U	NS	45000 U	38000 U	240 J	340 U	480 J	350 U
Carbazde	ug/Kg	19000 U	NS	4000 U	NS NS	45000 U	38000 U 38000 U	230 J	340 U	570 J	350 U
Di-n-butylphthalate Fluoranthene	ug/Kg ug/Kg	19000 U 19000 U	NS NS	4000 U 4000 U	NS NS	6200 J 45000 U	38000 U	450 U 2300	340 U 340 U	1100 U 7000	350 U 26 J
Pyrene	ug/Kg	1700 J	NS	720 J	NS	2500 J	3400 J	1900	19 J	6200	26 J
Butylbenzylphthalate	ug/Kg	19000 U	NS	4000 U	NS NS	45000 U 45000 U	38000 U 38000 U	450 U 450 U	340 U 340 U	210 J 1100 U	350 U
3,3'-Dichlorobenzidine Benzo(a)ambracene	ug/Kg ug/Kg	19000 U 19000 U	NS NS	4000 U 4000 U	NS	45000 U	38000 U	750 750	340 U	3700	350 U 18 J
Chrysene	ug/Kg	19000 U	NS	4000 U	NS	45000 U	38000 U	940	31 J	4300	28 J
bis(2-Ethylhexyl)phthalate	ug/Kg	19000 U	NS	4000 U	NS NS	45000 U 45000 U	38000 U 38000 U	450 U	340 U	1100 U	48 J
Di-n-octylphthalate Benzo(b)fluoranthene	ug/Kg ug/Kg	19000 U 19000 U	NS NS	4000 U 4000 U	NS NS	45000 U 45000 U	38000 U 38000 U	450 U 780	340 U 90 J	1100 U 4000	350 U 350 U
Benzo(k) fluoranthene	ug/Kg	19000 U	NS	4000 U	NS	45000 U	38000 U	690	39 J	3500	350 U
Benzo(a) pyrene	ugKg	19000 U	NS	4000 U	NS	45000 U	38000 U	720	46 J	3400	350 U
Indeno(1,2,3—cd)pyrene Dibenz(a,h)ambracene	ug/Kg ug/Kg	19000 U 19000 U	NS NS	4000 U 4000 U	NS NS	45000 U 45000 U	38000 U 38000 U	390 J 450 U	44 J 340 U	1500 750 J	350 U 350 U
Berzo(g,h,i)perylene	ug/Kg	19000 U	NS	4000 U	NS	45000 U	38000 U	250 J	42 J	900 J	350 U

COMPOUND	MATRIX LOCATION DEPTH (FEET) SAMPLE DATE ES ID LAB ID UNITS	SOIL SEAD -26 0-0.2 10/25/93 SS26-1 202245	SOIL SEAD-26 0-0.2 10/25/93 SS26-1RE 202245	SOIL SEAD -26 0-0.2 10/25/93 SS26-2 202246	SOIL SEAD26 0-0.2 10/25/93 SS262RE 202246	SOIL SEAD -26 0-0.2 10/25/93 SS26-3 202247	SOIL SEAD - 26 0 - 0.2 10/25/93 SS26 - 9 202255 SS26 - 3DUP	SOIL SEAD -28 0-0.2 10/25/93 SS26-4 202249	SOIL SEAD-26 0-0.2 10/25/93 SS26-5 202251	SOIL SEAD-26 0-0.2 10/25/93 SS26-6 202252	SOIL SEAD-26 0-0.2 10/25/93 SS26-7 202253
PESTICIDES/PCB											
alpha-BHC beta-BHC	ug/Kg ug/Kg	9.4 U 9.4 U	NS NS	9.6 U 9.6 U	NS NS	3.8 U 3.8 U	9,7 U	1.8 U	1.8 U	3.5 U	1.8 U
delta-BHC	ug/kg	9.4 U	NS	9.6 U	NS NS	3.8 U	9.7 U 9.7 U	1.8 U 1.8 U	1.4 J 1.8 U	3,5 U 3,5 U	1.8 U 1.8 U
gamma-BHC (Lindane)	ug/Kg	9.4 U	NS	9.6 U	NS	3.8 U	9.7 U	1.8 U	1.8 U	3.5 U	1.8 U
Heptachlor	ug/Kg	9.4 U	NS	9.6 U	NS	3.8 U	9.7 U	1.8 U	1.8 U	3.5 U	1.8 U
Aldrin	ug/Kg	9.4 U	NS	9.6 U	NS	3.8 U	9.7 U	1.8 U	1.8 U	3.5 U	1.8 U
Heptachlor epoxide Endosulfan I	ug/Kg	9.4 U 9.4 U	NS NS	9.6 U 9.8 U	NS NS	3.8 U	9.7 U	1.8 U	1.8 U	3.5 U	1.8 U
Dieldrin	ug/Kg ug/Kg	18 U	NS NS	9.8 U 19 U	NS NS	5.3 J 4.2 J	9.7 U 19 U	1.8 U 3.6 U	1.8 U 3.4 U	3.5 U 6.7 U	1.8 U 3.5 U
4.4'-DDE	ug/Kg	17 J	NS	14 J	NS	4.4 J	19 U	6J	3.4 U	6.7 U	3.5 U
Endrin	ug/Kg	18 U	NS	19 U	NS	7.4 U	19 U	3.6 U	3.4 U	6.7 U	3.5 U
Endosulfan ()	ug/Kg	35 J	NS	60 7	NS	7.4 U	19 U	3.6 U	3.4 U	6.7 U	3.5 U
4,4'-DDD	ug/Kg	22	NS	19 U	NS	7.4 U	19 U	3.6 U	3.4 U	6.7 U	3.5 U
Endosulfan sulfate 4.4'-DDT	ug/Kg ug/Kg	21 J 18 U	NS NS	23 J 19 U	NS NS	7.4 U 7.4 U	19 U 19 U	3.6 U 3.6 U	3.4 U	6.7 U	3.5 U
Methoxychlor	ug/Kg	94 U	NS	96 U	NS	21 J	97 U	18 U	3.4 U 18 U	6.7 U 35 U	3.5 U 18 U
Endrin ketone	ug/Kg	18 U	NS	19 U	NS	7.4 U	19 U	3.6 U	3,4 U	6.7 U	3.5 U
Endrin aldehyde	ug/Kg	18 U	NS	23 J	NS	15 J	17 J	3.6 U	3.4 U	6.7 U	3.5 U
alpha-Chiordane	ug/Kg	9.4 U	NS	9.6 U	NS	3.8 U	9.7 U	1.8 U	1.8 U	3.5 U	1.8 U
gamma-Chlordane Toxachene	ug/Kg ug/Kg	5.9 J 940 U	NS NS	7.6 J 960 U	NS NS	3.8 U 380 U	9.7 U 970 U	1.8 U 180 U	1.8 U 180 U	3.5 U	1.8 U
Aroclor-1016	ug/Kg	180 U	NS	190 U	NS	74 U	190 U	36 U	34 U	350 U . 67 U	180 U 35 U
Arodor-1221	ug/Kg	370 U	NS	380 U	NS	150 U	380 U	73 U	70 U	140 U	71 U
Aroclor-1232	ug/Kg	180 U	NS	190 U	NS	74 U	190 U	36 U	34 U	67 U	35 U
Aroclor-1242	ug/Kg	180 U	NS	190 U	NS	74 U	190 U	36 U	34 U	67 U	35 U
Aroclor – 1248 Aroclor – 1254	ug/Kg ug/Kg	180 U 180 U	NS NS	190 U 190 U	NS NS	74 U 74 U	190 U 190 U	36 U	34 U	67 U	35 U
Arodor-1260	ugKg	180 U	NS NS	190 U	NS NS	74 U	190 U	36 U 36 U	34 U 34 U	67 U 67 U	35 U 35 U
710000 1200	- J	1000		130 0	110	740	130 0	300	34 0	67 0	35 0
METALS											
Aluminum	mg/Kg	1750	NS	1560	NS	2050	1640	10900	5830	2650	5490
Antimony Arsenic	mg/Kg mg/Kg	8.9 W 3.3	NS NS	10.9 UJ 6.5	NS NS	7.4 WJ	8.5 W	8.1 W	7 W	8 W	8.8 UJ
Barium	mg/Kg	73.9	NS	45.7	NS	18 J	7.5 17.3 J	9.6 70.1	3.8 21.5 J	10.8 25.8 J	4.9 90.7
Beryllium	mg/Kg	0.25 J	NS	0.2 J	NS	0.24 J	0.22 J	0.48 J	. 0.22 J	0.23 J	90.7 0.33 J
Cadmium	mg/Kg	0.56 J	NS	0,68 U	NS	0.47 U	0.53 U	0.51 U	0.44 U	0.5 U	0.55 U
Calcium	mg/Kg	293000	NS	284000	NS	271000	285000	48100	44200	213000	222000
Chromium Cobait	mg/Kg mg/Kg	3.8 R 2.7 J	NS NS	3.9 R 3.5 J	NS NS	3.9 R 2.8 J	3.5 R	17.6	8.9	31.1	10.6
Copper	mg/Kg	12.8	NS	11.8	NS	2.8 J 10.5	3.1 J 11.6	9.7 19.3	4.5 J 16.5	5.7 J 259	6.6 J
Iron	mg/Kg	3510	NS	5970	NS	3270	3880	22100	11900	70200	19 13500
Lead	mg/Kg	6.8	NS	3.4	NS	3.2	3.7	20,8	8.7	522	58.5
Magnesium	mg/Kg	7980	NS	8180	NS	7810	9370	7180	15500	12800	18200
Manganese Mercury	mg/Kg mg/Kg	213 0.02 U	NS NS	212 0.87	NS NS	198 0.04 U	241	398	264	536	365
Nickel	mg/Kg	12.2 R	NS	13.4 R	NS	56 R	0.38 14.1 R	0.02 J 30.3 R	0.55 14.8 R	0,02 U 20.1 R	0.53
Potassium	mg/Kg	1030	NS	849 J	NS	1170	1010	1400	1050	1050	19.4 R 2070
Selenium	mg/Kg	0.23 U	NS	0.24 J	NS	0.23 U	0.35 J	0.19 U	0.21 U	0.19 U	0.14 U
Silver	mg/Kg	1.1 W	NS	1.4 W	NS	0.95 UJ	1.1 W	1 UJ	0.89 WJ	1 W	1.1 UJ
Sodium Thellium	mg/Kg mg/Kg	224 J 2.5 W	NS NS	236 J 2.6 UJ	NS NS	218 J	238 J	125 J	104 J	212 J	241 J
Vanadium	mg/Kg	12.2	NS NS	8.5 J	NS NS	2.5 W 10.5	1.5 W 9.2	0.21 UJ 17.3	0.23 W	0.2 W	1.5 W
Zinc	mg/Kg	98.9 R	NS	35.5 R	NS	10.5 105 R	9.2 31.3 R	17.3 75,9 R	12.4 51.5 R	11	14.8
Cyanide	mg/Kg	0.54 U	NS	0.58 U	NS	0.56	0.56 U	75.9 H 0.52 U	51.5 H 0.51 U	164 R 0.5 U	278 R 0,51 U
OTIED ANALYSIS										0.5 0	0.510
OTHER ANALYSES Nitrate/Nitrite Nitrogen	mg/Kg	0.85	NS	0.22	NS	0.05	0.40				
Total Solids	%W/W	89.6	NS NS	0.22 88.6	NS NS	0.05 88.6	0.12 88.4	0.07 92.5	0.14	0.04	0.44
Total Petroleum Hydrocarbons	mg/Kg	76	NS	71	NS	21000	17900	92.5 880	96.4 117	97.6 97	94.7
Fluoride	mg/Kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	330 NS
Hq	standard units	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS NS

COMPOUND	MATRIX LOCATION DEPTH (FEET) SAMPLE DATE ES ID LAB ID UNITS	SOIL SEAD-26 0-0.2 10/25/93 SS26-8 202254	SOIL SEAD -26 0-2 11/17/93 SB26-1.1 204829	SOIL SEAD-26 0-2 11/17/93 SB26-1.1RE 204829	SOIL SEAD-26 2-4 11/17/93 SB26-1.2 204830	SOIL SEAD26 2-4 11/17/93 SB261.2RE 204830	SOIL SEAD-26 0-2 11/18/93 SB26-2.1 205095	SOIL SEAD - 26 0 - 2 11/18/93 SB26 - 2.5 205096 SB26 - 2.1DUP	SOIL SEAD-26 0-2 11/18/93 SB26-2.5RE 205096 SB26-2.1DUP	SOIL SEAD -26 8-10 11/18/93 SB26-2.6 205097	SOIL SEAD - 26 10 - 12 11/15/93 SB26 - 2.7 205098
VOLATILE ORGANICS		11 U	11 U	NS	11 U	NO	44.11	40.11	4011 5	40.11	40.11
Chloromethane Bromomethane	ug/Kg ug/Kg	11 U	11 U	NS	11 U	NS NS	11 U 11 U	10 U 10 U	10 U R 10 U R	12 U 12 U	12 U 12 U
Vinyl Chloride	ug/Kg	11 U	11 U	NS	11 U	NS	11 U	10 U	10 U R	12 U	12 U
Chloroethane	ug/Kg	11 U 12 U	11 U 11 U	NS NS	11 U 11 U	NS NS	11 U	10 U	10 U R	12 U	12 U
Methylene Chloride Acetone	ug/Kg ug/Kg	12 U	11 U	NS NS	11 U	NS NS	11 U 25 U	10 U 10 U	4J R 10U R	12 U 13 U	12 U 12 U
Carbon Disulfide	ug/Kg	11 Ü	11 Ü	NS	11 U	NS	11 U	10 U	10 U R	12 U	12 U
1,1-Dichloroethene	ug/Kg	11 U 11 U	11 U	NS NS	11 U	NS	11 U	10 U	10 U R	12 U	12 U
1,1-Dichloroethane 1,2-Dichloroethene (total)	ug/Kg ug/Kg	11 U 11 U	11 U 11 U	NS NS	11 U 11 U	NS NS	11 U 11 U	10 U 10 U	10U R 10U R	12 U 12 U	12 U 12 U
Chloroform	ug/Kg	11 U	11 U	NS	11 U	NS	11 U	10 U	10 U . R	12 U	. 12 U
1,2-Dichloroethane	ug/Kg	11 U 11 U	11 U 11 U	NS NS	11 U	NS NS	11 U	10 U	10 U R	12 U	12 U
2-Butanone 1,1,1-Trichloroethane	ug/Kg ug/Kg	11 U	11 U	NS	11 U 11 U	NS NS	11 U 11 V	10 U 10 U	10 U R 10 U R	12 U 12 U	12 U 12 U
Carbon Tetrachioride	ug/Kg	11 U	11 U	NS	11 U	NS	าำ บั	10 U	10 U R	12 U	12 U
Bromodichlorometrane	ug/Kg	11 U	11 U 11 U	NS NS	11 U	NS	11 U	10 U	10 U R	12 U	12 U
1,2-Dichloropropane cls-1,3-Dichloropropene	ug/Kg ug/Kg	11 U 11 U	11 U 11 U	NS NS	11 U 11 U	NS NS	11 U 11 U	10 U 10 U	10 U R 10 U R	12 U 12 U	12 U 12 U
Trichloroethene	ugKg	11 U	11 U	NS	11 U	NS	11 0	10 U	10 U R	12 U	12 U
Dibromochoromethane	ug/Kg	11 U 11 U	11 U	NS	11 U	NS	11 U	10 U	10 U R	12 U	12 U
1,1,2-Trichloroethane Benzene	ug/Kg ug/Kg	11 U	11 U 11 U	NS NS	11 U 11 U	NS NS	11 U 11 U	10 U 10 U	10 U R 10 U R	12 U 12 U	12 U 12 U
trans-1,3-Dichloropropene	ug/Kg	11 U	11 U	NS	<b>1</b> 1 U	NS	11 Ü	10 U	10 U R	12 U	12 U
Bromoform	ug/Kg	11 U	11 U	NS NS	11 U	NS NS	11 U	10 U	10 U R	12 U	12 U
4-Methyl-2-Pentanone 2-Hexanone	ug/Kg ug/Kg	11 U 11 U	11 U 11 U	NS NS	11 U 11 U	NS NS	11 U 11 U	10 U 10 U	10 U FI 10 U FI	12 U 12 U	12 U 12 U
Tetrachioroethene	ug/Kg	11 Ŭ	11 Ü	NS	11 Ŭ	NS	11 Ŭ	10 U	10 U R	12 U	12 U
1,1,2,2—Tetrachioroethane	ug/Kg	11 U	11 U	NS	11 U	NS	11 U	10 U	10 U R	12 U	12 U
Taluene Chlorobenzene	ug/Kg ug/Kg	11 U 11 U	11 U 11 U	NS NS	11 U 11 U	NS NS	11 U 11 U	3 J 10 U	10U R 10U R	12 U 12 U	12 U 12 U
Ethylbenzene	ug/Kg	11 U	11 U	NS	11 U	NS	11 Ŭ	10 Ü	10 U R	12 U	12 U
Styrene	ug/Kg	11 U	11 U	NS	11 U	NS	11 U	10 U	10 U R	12 U	12 U
Xylene (total) MTBE	ug/Kg ug/Kg	11 U NA	11 U ND	NS NS	11 U ND	NS NS	11 U 10 U	10 U 10 U	10U R 10U R	12 U 10 U	12 U 10 U
	-9.19						100	100	100 11	100	.00
HERBICIDES	V-	54 U	55 U R	55 W	57 U R	57 UJ	ee 11				
2,4-D 2.4-DB	ug/Kg ug/Kg	54 U	55 U R	55 W	57 U R	57 UJ	55 U 55 U	53 U 53 U	NS NS	63 U 63 U	59 U 59 U
2,4,5-T	ug/Kg	5.4 U	5.5 U R	5.5 W	5.7 U R	5.7 W	5.5 U	5.3 U	NS	6.3 U	5.9 U
2,4,5-TP (Silvex)	ug/Kg	5.4 U 130 U	5.5 U R 140 U R	5.5 W 140 W	5.7 UR 140 UR	5.7 UJ 140 UJ	5.5 U	5.3 U	NS	6.3 U	5.9 U
Dalapon Dicamba	ug/Kg ug/Kg	5.4 U	5.5 U R	5.5 W	5.7 U R	5.7 LU	140 U 5.5 U	130 U 5.3 U	NS NS	150 U 6.3 U	140 U 5,9 U
Dichoroprop	ug/Kg	54 U	55 U R	55 W	57 U R	57 W	55 U	53 U	NS	63 U	59 U
Dinoseb MCPA	ug/Kg ug/Kg	27 U . 5400 U	28 U R 5500 U R	28 W 5500 W	29 U R 5700 U R	29 W 5700 W	28 U 5500 U	27 U 5300 U	NS	32 U	30 U
MCPP	ug/Kg	5400 U	5500 U R	5500 UJ	5700 U R	5700 WJ	5500 U	5300 U	NS NS	6300 U 6300 U	5900 U 5900 U
NITROAROMATICS HMX	ug/Kg	130 UJ	NS	NS	NS	NS	NS	NS	NS	•••	
RDX	ug/Kg	130 W	NS	NS	NS	NS	NS	NS	NS NS	NS NS	NS NS
1,3,5-Trinitrobenzene	ug/Kg	130 LU	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3 – Dinitrobenzena Tetryi	ug/Kg ug/Kg	130 W 130 W	NS NS	NS NS	NS NS	NS NS	NS NS	NS	NS	NS	NS
2.4.6—Trinitrotoluene	ug/kg	130 W	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
4-amino-2,5-Dinitrotoluene	ug/Kg	130 W	NS	NS	NS	NS	NS	NS	NS	NS	NS NS
2-amino-4,6-Dinitrotoluene	ug/Kg	130 W 130 W	NS NS	NS NS	NS	NS	NS	NS	NS	NS	NS .
2,6-Dinitrotoluene 2,4-Dinitrotoluene	ug/Kg ug/Kg	130 UJ	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS
	c Shirth	100 00	110	110	110	110	110	143	NO	NO	NS

COMPO	UND	MATRIX LOCATION DEPTH (FEET) SAMPLE DATE ES ID LAB ID UNITS	SOIL SEAD -26 0-0.2 10/25/93 SS26-8 202254	SOIL SEAD-26 0-2 11/17/93 SB26-1.1 204829	SOIL SEAD-26 0-2 11/17/93 SB26-1.1RE 204829	SOIL SEAD-26 2-4 11/17/93 SB26-1.2 204830	SOIL SEAD-26 2-4 11/17/93 SB26-1.2RE 204830	SOIL SEAD-26 0-2 11/18/93 SB25-2.1 205095	SOIL SEAD-26 0-2 11/18/93 SB26-2.5 205096 SB26-2.1DUP	SOIL SEAD-26 0-2 11/18/93 SB26-2.5RE 205096 SB26-2.1DUP	SOIL SEAD -26 8-10 11/18/93 SB26-2.6 205097	SOIL SEAD -26 10-12 11/18/93 SB26-2.7 205098
SEMIVOLATILE ORG	BANICS											
Phend bis(2—Chloroethyl) (	other	ug/Kg ug/Kg	350 U 350 U	360 U 360 U	NS NS	380 U 380 U	NS NS	360 U 360 U	350 U 350 U	NS	410 U	390 U
2-Chlorophend		ug/Kg	350 U	360 U	NS	380 U	NS	360 U	350 U	NS NS	410 U 410 U	390 U 390 U
1,3-Dichlorobenzer 1,4-Dichlorobenzer		ug/Kg	350 U 350 U	360 U 360 U	NS	380 U	NS	360 U	350 U	NS	410 U	390 U
1,4-Dichoroberizer		ug/Kg ug/Kg	350 U	360 U	NS NS	380 U 380 U	NS NS	360 U 360 U	350 U 350 U	NS NS	410 U 410 U	390 U 390 U
2-Methylphenol		ug/Kg	350 U	360 U	NS	380 U	NS	360 U	350 U	NS	410 U	390 U
2,2'-oxybis(1-Chlo 4-Methylphend	ropropane)	ug/Kg ug/Kg	350 U 350 U	360 U 380 U	NS NS	380 U 380 U	NS	360 U	350 U	NS	410 U	390 U
N-Nitroso-di-n-p	propylamine	ug/Kg	350 U	360 U	NS	380 U	NS NS	360 U 360 U	350 U 350 U	NS NS	410 U 410 U	390 U 390 U
Hexachioroethane		ug/Kg	350 U	360 U	NS	380 U	NS	360 U	350 U	NS	410 U	390 U
Nitrobenzene Isophorone		ug/Kg ug/Kg	350 U 350 U	360 U 360 U	NS NS	380 U 380 U	NS NS	360 U 360 U	350 U 350 U	NS NS	410 U 410 U	390 U 390 U
2-Nitrophend		ug/Kg	350 U	380 U	NS	380 U	NS	360 U	350 U	NS	410 U	390 U
2,4-Dimethylpheno bis(2-Chloroethoxy		ug/Kg ug/Kg	350 U 350 U	360 U	NS NS	380 U 380 U	NS	360 U	350 U	NS	410 U	390 U
2,4-Dichlorophenol		ug/Kg	350 U	360 U	NS	380 U	NS NS	360 U 360 U	350 U 350 U	NS NS	410 U 410 U	390 U 390 U
1,2,4-Trichlorobers	žen <del>o</del>	ug/Kg	350 U	360 U	NS	380 U	NS	360 U	350 U	NS	410 U	390 U
Naphthalene 4Chloroaniline		ug/Kg ug/Kg	350 U 350 U	360 U 360 U	NS NS	380 U 380 U	NS NS	360 U 360 U	350 U 350 U	NS NS	410 U	390 U
Herachiorobutadien	10	ugKg	350 U	360 U	NS	380 U	NS	360 U	350 U	NS NS	410 U 410 U	390 U 390 U
4-Chloro-3-metra 2-Metrylnaphthaler		ug/Kg ug/Kg	350 U 350 U	360 U	NS	380 U	NS	360 U	350 U	NS	410 U	390 U
Herachiorocydoper		ug/Kg	350 U	360 U 360 U	NS NS	380 U 380 U	NS NS	360 U 360 U	350 U 350 U	NS NS	410 U 410 U	390 U
2,4,6-Trichloropher	noi	ug/Kg	350 U	360 U	NS	380 U	NS	360 U	350 U	NS	410 U	390 U 390 U
2,4,5-Trictior opher 2-Chiororaphthale		ug/Kg ug/Kg	850 U 350 U	880 U 360 U	NS	920 Ü	NS	880 U	850 U	NS	990 U	940 U
2-Nitroaniline	110	ug/Kg	850 U	880 U	NS NS	380 U 920 U	NS NS	360 U 880 U	350 U 850 U	NS NS	410 U 990 U	390 U 940 U
Dimethylphthalate		ug/Kg	350 U	360 U	NS	380 U	NS	360 U	350 U	NS	410 U	390 U
Aceraphthylene 2.6-Dintrotoluene		ug/Kg ug/Kg	350 U 350 U	360 U 360 U	NS NS	380 U 380 U	NS NS	360 U	350 U	NS	410 U	390 U
3-Nitroaniline		ug/Kg	850 U	880 U	NS	920 U	NS NS	360 U 880 U	350 U 850 U	NS NS	410 U 990 U	390 U 940 U
Acenaphthene		ug/Kg	350 U	360 U	NS	380 U	NS	360 U	350 U	NS	410 U	390 U
2,4-Dinitrophend 4-Nitrophend		ug/Kg ug/Kg	850 U 850 U	880 U 880 U	NS NS	920 U 920 U	NS NS	880 U 880 U	850 U	NS	990 U	940 U
Dibenzofuran		ug/Kg	350 U	360 U	NS	380 U	NS NS	360 U	850 U - 350 U	NS NS	990 U 410 U	940 U 390 U
2,4-Dinitrotoluene		ug/Kg	350 U	360 U	Ns	380 U	NS	360 U	350 U	NS	410 U	390 U
Diethylphthalate 4-Chlorophenyl-p	herrylether	ug/Kg ug/Kg	350 U 350 U	360 U 360 U	NS NS	380 U 380 U	NS NS	360 U 360 U	350 U 350 U	NS	410 U	390 U
Fluorene		ug/Kg	350 U	360 U	NS	380 U	NS	360 U	350 U	NS NS	410 U 410 U	390 U 390 U
4-Nitroaniline 4,6-Dinitro-2-me	Harlahamal	ug/Kg	850 U 850 U	880 U	NS	920 U	NS	880 U	850 U	NS	990 U	940 U
N-Nitrosodiphenyla		ug/Kg ug/Kg	350 U .	880 U 360 U	NS NS	920 U 380 U	NS NS	880 U 360 U	850 U 350 U	NS NS	990 U	940 U
4-Bromophenyl-p		ug/Kg	350 U	360 U	NS	380 U	NS	360 U	350 U	NS NS	410 U 410 U	390 U 390 U
Herachloroberizene Pentachlorophenol	•	ug.Kg ug.Kg	350 U 850 U	360 U 880 U	NS NS	380 U	NS	360 U	350 U	NS	410 U	390 U
Phenanthrene		ug/Kg	140 J	24 J	NS NS	920 U 380 U	NS NS	880 U 31 J	850 U 22 J	NS NS	990 U	940 U
Anthracene		ug/Kg	24 J	360 U	NS	380 U	NS	360 U	350 U	NS	410 U 410 U	390 U 390 U
Carbazole Din-butylphthelat	-	ug/Kg ug/Kg	350 U 350 U	360 U 360 U	NS NS	380 U 380 U	NS NS	360 U	350 U	NS	410 U	390 U
Fluoranthene	-	ug/Kg	310 J	69 J	NS	380 U	NS NS	360 U 52 J	350 U 30 J	NS NS	410 U 410 U	390 U 390 U
Pyrene		ug/Kg	250 J	56 J	NS	380 U	NS	44 J	48 J	NS	410 U	390 U
Butylbenzylphthalati 3,3"—Dichlorobenzio		ug/Kg ug/Kg	350 U 350 U	360 U 360 U	NS NS	380 U 380 U	NS NS	360 U	350 U	NS	410 U	390 U
Benzo(a)anthracene		ug/Kg	130 J	31 J	NS	380 U	NS	360 U 360 U	350 U 350 U	NS NS	410 U 410 U	390 U
Chrysene	*****	ugKg	150 J	42 J	NS	380 U	NS	360 U	27 J	NS	410 U	390 U 390 U
bis(2-Ethylhexyl)ph Di-n-octylphthalat		ug/Kg ug/Kg	53 J 350 U	360 U 360 U	NS NS	380 U 380 U	NS NS	700 360 U	660	NS	410 U	500 U
Benzo(b)fluoranther	10	ug/Kg	130 J	36 J	NS	380 U	NS NS	360 U	350 U 350 U	NS NS	410 U 410 U	390 U
Berzok) fuoranther	70	ug/Kg	130 J	36 J	NS	380 U	NS	360 U	350 U	NS	410 U	390 U 390 U
Benzo(a)pyrene Indeno(1,2,3-cd)py	mene .	ug/Kg ug/Kg	130 J 66 J	34 J 360 U	NS NS	380 U 380 U	NS NS	360 U	350 U	NS	410 U	390 U
Dibenz (a,h)anthrace	9F10	ug/Kg	30 J	360 U	NS	380 U	NS NS	360 U	350 U 350 U	NS NS	410 U 410 U	390 U
Benzo(g,h,i)perylen	•	ug/Kg	100 J	360 U	NS	380 U	NS	360 U	350 U	NS	410 U	390 U 390 U ,

COMPOUND	MATRIX LOCATION DEPTH (FEET) SAMPLE DATE ES ID LAB ID UNITS	SOIL SEAD-26 0-0.2 10/25/93 SS26-8 202254	SOIL SEAD-26 0-2 11/17/93 SB26-1.1 204829	SOIL SEAD-26 0-2 11/17/93 SB26-1.1RE 204829	SOIL SEAD - 26 2-4 11/17/93 SB26-1.2 204830	SOIL SEAD -26 2-4 11/17/93 SB26-1.2RE 204830	SOIL SEAD-26 0-2 11/18/93 SB26-2.1 205095	SOIL SEAD - 26 0 - 2 11/18/93 SB26 - 2.5 205096 SB26 - 2.1DUP	SOIL SEAD-26 0-2 11/18/93 SB26-2.5RE 205096 SB26-2.1DUP	SOIL SEAD-26 8-10 11/18/93 SB26-2.6 205097	SOIL SEAD-26 10-12 11/18/93 SB26-2.7 205098
PESTICIDES/PCB alpha –BHC	ug/Kg	1.8 U	1,9 U	NS	2 U	NS	1.9 U	1.8 U	NS	2.1 U	2 U
beta-BHC	ug/Kg	1.6 U	1.9 U	NS	2 U	NS	1.9 U	1.8 U	NS	2.1 U	2 U
delta-BHC gamma-BHC (Lindane)	ug/Kg ug/Kg	1.8 U 1.8 U	1.9 U 1.9 U	NS NS	2 U 2 U	NS NS	1.9 U 1.9 U	1.8 U 1.8 U	NS NS	2.1 U 2.1 U	2 U 2 U
Heptachlor	ug/Kg	1.8 U	1.9 U	NS	2 Ü	NS	1.9 U	1.8 U	NS	2.1 U	2 U
Aldrin	ug/Kg	1.8 U	1.9 U	NS	2 U	NS	1.9 U	1.8 U	NS	2.1 U	2 U 2 U
Heptachlor epoxide Endosulfan I	ug/Kg ug/Kg	1.8 U 1.8 U	1.9 U 1.9 U	NS NS	2 U 2 U	NS NS	1.9 U 1.9 U	1.8 U 1.8 U	NS NS	2.1 U 2.1 U	2 U
Dieldrin	ug/Kg	3.5 U	3.6 U	NS	3.8 U	NS	3.6 U	3.5 U	NS	4.1 U	3.9 U
4,4'-DDE	ug/Kg	3.5 U	3 J	NS	3.6 U	NS	2.7 J	3.2 J	NS	4.1 U	3.9 U
Endrin Endesulfan II	ug/Kg ug/Kg	3.5 U 3.5 U	3.5 U 3.5 U	NS NS	3.8 U 3.8 U	NS NS	3.6 U 3.6 U	3.5 U 3.5 U	NS NS	4.1 U 4.1 U	3.9 U 3.9 U
4,4'DDD	ug/Kg	3.5 U	3.6 U	NS	3.8 U	NS	3.5 U	3.5 U	NS	4.1 U	3.9 U
Endosulfan sulfate	ug/Kg	3.5 U	3.6 U	NS NS	3.8 U 3.8 U	NS NS	3.6 U 3.6 U	3.5 U 3.5 U	NS NS	4.1 U 4.1 U	3.9 U 3.9 U
4,4'-DDT Methoxychlor	ug/Kg ug/Kg	3.5 U 18 U	3.5 J 19 U	NS NS	20 U	NS NS	3.6 U 19 U	18 U	NS	21 U	20 U
Endrin ketone	ugKg	3.5 U	3.6 U	NS	3.8 U	NS	3.6 U	3.5 U	NS	4.1 U	3.9 U
Endrin aldehyde	ug/Kg	3.5 U 1.8 U	3.6 U 1.9 U	NS NS	3.8 U 2 U	NS NS	3.6 U 1.9 U	3.5 U 1.8 U	NS NS	4.1 U 2.1 U	3.9 U 2 U
alpha-Chlordane gamma-Chlordane	ug/Kg ug/Kg	1.8 U	1.9 U	NS	2 U	NS	1.9 U	1.8 U	NS	210	2 Ü
Toxaphene	ug/Kg	180 U	190 U	NS	200 U	NS	190 U	180 U	NS	210 U	200 U
Arocior-1016 Arocior-1221	ug/Kg ug/Kg	35 U 72 U	38 U 74 U	NS NS	38 U 77 U	NS NS	36 U 73 U	35 U 71 U	NS NS	41 U 82 U	39 U 79 U
Aroclor – 1232	ug/Kg	35 U	36 U	NS	38 U	NS	36 U	35 U	NS	41 U	39 U
Aroclor-1242	ug/Kg	35 U	36 U	NS	38 U	NS	36 U	35 U	NS	41 U	39 U
Aroclor—1248 Aroclor—1254	ug/Kg ug/Kg	35 U 35 U	36 U 36 U	NS NS	38 U 38 U	NS NS	36 U 36 U	35 U 35 U	NS NS	41 U 41 U	39 U 39 U
Aroclor 1254 Aroclor 1260	ug/Kg	35 U	36 U	NS	38 U	NS	36 U	35 U	NS	41 U	39 U
.==											
METALS Aluminum	та/Ка	9400	5560	NS	9040	NS	5230	7900	NS	21000	14200
Antimony	mg/Kg	7.4 WJ	7.3 W	NS	6.7 W	NS	9.1 W	8.8 W	NS	11.5 W	11.5 UJ
Arsenic Barium	mg/Kg mg/Kg	7.5 36.1	3.2 73.2	NS NS	5.3 43.7	NS NS	6.5 J 21.1 J	5.3 J 102 J	NS NS	8.8 J 83.6	7.6 J 90.8
Beryllium	mg/Kg	0.47 J	0.35 J	NS	0.41 J	NS	0.32 J	0.46 J -	NS	0.97 J	0.67 J
Cadmium	mg/Kg	0.46 U	0.46 U	NS NS	0.42 U 47300	NS NS	0.57 U 238000	0.55 U 189000	NS NS	0.72 U 2090	0.72 U
Calcium Chromium	mg/Kg mg/Kg	157000 15.2	293000 10.3	NS NS	47300 15.7	NS NS	238000	189000	NS NS	2090 32.4	17800 21.9
Cobalt	mg/Kg	8.4	5.9 J	NS	9.5	NS	5.6 J	10.1	NS	17.5	11
Copper	mg/Kg	22.5	9.7 8770	NS NS	14.3 19100	NS NS	10.6 11400	14.3 15500	NS NS	24.4 44100	24 33700
iron Lead	mg/Kg mg/Kg	17200 16,1	6.33	NS	8.5	NS	10.3	15.5	NS NS	10.3	27
Magnesium	mg/Kg	8460 -	29100	NS	9160	NS	7790	18100	NS	7210	4700
Manganese	mg/Kg mg/Kg	297 0.09	309 0,02 U	NS NS	551 0.02 U	NS NS	442 R 0.03 W.	433 R 0.03 UJ	NS NS	279 R 0.05 J	712 R 0.03 W
Mercury Nickel	mg/Kg	31.6 R	16.3	NS	23.9	NS	17.5	29.2	NS	46.2	32.4
Potassium	mg/Kg	1970	1710	NS	901	NS	882	1710	NS	1490	1960
Selenium Silver	mg/Kg mg/Kg	0.15 J 0.94 UJ	0.13 W 0.92 W	NS NS	0.26 J 0.85 UJ	NS NS	0.14 W 1.2 U	0.14 W 1.1 U	NS NS	0.32 J 1.5 U	0.16 UJ 1.5 U
Sodium	mg/Kg	183 J	192 J	NS	108 J	NS	163 J	175 J	NS	67.1 J	220 J
Thallium	mg/Kg	1.5 W	0.73 U	NS	0.17 U	NS	0.2 U	10	NS	0.28 U	0.24 U
Vanadium Zinc	mg/Kg mg/Kg	17.4 283 R	12.7 5 <del>8</del>	NS NS	14.4 90.6	NS NS	10.9 29.5	15.9 54.8	NS NS	28 69.3	27.4 201
Cyanide	mg/Kg	0.54 U	0.48 U	NS	0.57 U	NS	0.53 U	0.5 U	NS	0.6 U	0.48 U
OTHER ANALYSES											
Nitrate/Nitrite—Nitrogen	mg/Kg	0.09	0.43	NS	0.48	NS	0.05	0.1	NS	0.26	2.2
Total Solids	%W/W	92.8	91.2	NS	87.1	NS	91.1	93.6	NS	80.5	84.9
Total Petroleum Hydrocarbons Fluoride	mg/Kg mg/Kg	260 NS	43 NS	NS NS	38 NS	NS NS	42 NS	57 NS	NS NS	74 NS	52 NS
pH	standard units	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

	MATRIX LOCATION DEPTH (FEET) SAMPLE DATE ES ID LAB ID	SOIL SEAD -26 0-2 11/18/93 SB26-3.1 205099	SOIL SEAD-26 6-8 11/18/93 SB26-3.4 205100	SOIL SEAD -26 10-12 11/18/93 SB26-3.6 205101	SOIL SEAD-26 0-2 11/19/93 SB26-4.1 205102	SOIL SEAD-26 2-4 11/19/93 SB26-4.2 205103	SOIL SEAD -26 6-8 11/19/93 SB26-4.4 205104	SOIL SEAD-26 0-0.7 11/18/93 TP261.1 205105	SOIL SEAD -26 5.0+ 11/18/93 TP26-1.2 205106	SOIL SEAD-26 0-0.7 11/18/93 TP26-2.1 205113	SOIL SEAD-26 5.0+ 11/18/93 TP26-2.2 205114
COMPOUND VOLATILE ORGANICS	UNITS										
Chloromethane	ug/Kg	12 Ü	12 Ü	13 U	11 U	11 U	12 U	11 U	12 U	11 U	12 U
Bromomethane	ug/Kg	12 U	12 U	13 U	11 U	11 U	12 U	11 Ü	12 U	11 Ü	12 U
Viryl Chloride	ug/Kg ug/Kg	12 U	12 U	13 U	11 U	11 U	12 U	11 U	12 U	11 U	12 U
Chloroethane Methylene Chloride	ug/Kg	12 U 12 U	12 U 12 U	13 U 13 U	11 U 11 U	11 U 11 U	12 U 12 U	11 U 11 U	12 U 12 U	11 U 11 U	12 U 12 U
Acetone	ug/Kg	12 Ü	12 U	13 U	11 U	11 U	12 U	11 U	12 U	11 U	78
Carbon Disulfide	ug/Kg	12 Ü	12 U	13 U	11 U	11 U	12 U	11 Ü	12 U	11 U	12 U
1,1-Dichloroethene 1,1-Dichloroethane	ug/Kg ug/Kg	12 U · 12 U	12 U 12 U	13 U 13 U	11 U 11 U	11 U 11 U	12 U 12 U	11 U	12 U	11 U	12 U
1,2-Dichloroethene (total)	ug/Kg	12 U	12 U	13 U	11 U	11 U	12 U	11 U 11 U	12 U 12 U	11 U 11 U	12 U 12 U
Chloroform	ugKg	12 U	12 U	13 U	11 Ü	11 U	12 U	11 U	12 U	11 Ŭ	12 U
1,2-DicHoroethane	ug/Kg	12 U 12 U	12 U 12 U	13 U	11 U	11 U	12 U	11 U	12 U	11 U	12 U
2-Butanone 1.1.1-Trichloroethane	ug/Kg ug/Kg	12 U	12 U 12 U	13 U 13 U	11 U 11 U	11 U 11 U	12 U 12 U	11 U 11 U	12 U 12 U	11 U 11 U	19 12 U
Carbon Tetrachloride	ug/Kg	12 Ü	120	13 U	11 U	11 0	12 U	11 U	12 U	11 0	12 U
Bromodichloromethane	ug/Kg	12 U	12 U	13 U	11 Ü	` 11 U	12 U	11 Ŭ	12 U	11 U	12 U
1,2-Dichloropropane cls-1,3-Dichloropropene	ug/Kg ug/Kg	12 U 12 U	12 U 12 U	13 U 13 U	11 U 11 U	11 U 11 U	12 U	11 U 11 U	12 U	11 U	12 U
Trichloroethene	ugKg	12 U	12 U	13 U	11 U	11 0	12 U 12 U	11 U	12 U 12 U	11 U 11 U	12 U 12 U
Dibromochoromethane	ugKg	12 U	12 U	13 U	11 U	11 U	12 U	11 Ü	12 U	11 Ü	12 U
1,1,2-Trichloroethane	ugKg	12 U	12 Ü	13 U	11 U	11 U	12 U	11 U	· 12 U	11 U	12 U
Benzere trans-1,3-Dichloropropene	ug/Kg ug/Kg	12 Ü 12 Ü	12 U 12 U	13 U 13 U	11 U 11 U	11 U 11 U /	12 U 12 U	11 U 11 U	12 U 12 U	11 U 11 U	12 U 12 U
Bromoform	ug/Kg	12 U	12 U	13 U	11 Ü	11 U	12 U	11 U	12 U	11 U	12 U
4-Methyl-2-Pentanone	ug/Kg	12 U	12 U	13 U	11 U	11 U	12 U	11 U	12 U	11 Ü	12 U
2-Hexanone	ug/Kg	12 U	12 U	13 U	11 U	11 U	12 U	11 U	12 U	11 U	12 U
Tetrachioroethene 1,1,2,2-Tetrachioroethane	ug/Kg ug/Kg	12 U 12 U	12 U 12 U	13 U 13 U	11 U 11 U	11 U 11 U	12 U 12 U	11 U 11 U	12 U 12 U	11 U 11 U	12 U 12 U
Toluene	ug/Kg	12 U	12 U	13 U	11 Ü	11 Ŭ	12 U	11 U	12 U	11 U	12 U
Chlorobenzene	ugKg	12 U	12 U	13 U	11 U	11 U	12 U	11 U	12 U	11 U	12 U
Ethylbenzene Styrene	ug/Kg ug/Kg	12 U 12 U	12 U 12 U	13 U 13 U	11 U 11 U	11 U 11 U	12 U 12 U	11 U 11 U	12 U	11 U	12 U
Xylene (total)	ug/Kg	12 U	12 U	13 U	11 U	11 U	12 U	11 U	12 U 12 U	11 U 11 U	12 U 12 U
MTBE	ug/Kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 Ŭ	10 U	10 U
HERBICIDES											
2.4-D	ugKg	58 U	61 U	58 U	57 U	56 U	58 U	57 U	57 U	54 U	62 U
2,4-08	ugKg	58 U	61 U	58 U	57 U	56 U	58 U	57 U	57 U	54 U	62 U
2,4,5-T 2,4,5-TP (Silvex)	ug/Kg	5.8 U	6,1 U 6.1 U	5.8 U	5.7 U	5.6 U	5.8 U	5.7 U	5.7 U	5.4 U	6.2 U
Dalapon	ug/Kg ug/Kg	5.8 U 140 U	150 U	5.8 Ü 140 Ü	5.7 U 140 U	5.6 U 140 U	5,8 U 140 U	5.7 U 140 U	5.7 U 140 U	5.4 U	6.2 U
Dicamba	ug/Kg	5.8 U	6.1 U	5.8 Ú	5.7 U	5.8	5.8 U	9.1	5.7 U	130 U 5.4 U	150 U 6.2 U
Dichoroprop	ug/Kg	58 U -	61 U	58 U	57 U	56 U	58 U	57 U	57 U	54 U	62 U
Dinoseb MCPA	úgKg ugKg	29 U 5800 U	31 U 6100 U	29 Ú 5800 U	29 U 5700 U	28 U 29000	29 U	27 U	29 U	27 U	31 U
MCPP	ug/Kg	5800 U	6100 U	5800 U	5700 U	5600 U	5800 5800 U	8100 5700 U	5700 U 5700 U	5400 U 5400 U	6200 U 6200 U
							0000	3730 0	3100 0	5400 G	6200 U
NITROAROMATICS HMX	ugKg	NS	NS	NS		***					
RDX	ugKg	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS	NS
1,3,5-Trinitrobenzene	ug/Kg	NS	NS	NS	NS	NS	NS	NS NS	NS NS	NS NS	NS NS
1,3-Dinitrobenzene	ugKg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetryi 2.4.6-Trinitrotoluene	ugKg ugKg	NS NS	NS NS	NS NS	NS NS	NS	NS	NS	NS	NS	NS
4-amino-2,6-Dinitrotoluene	ug/Kg	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS
2-amino-4,6-Dinitrotoluene	ug/Kg	NS	NS	NS	NS	NS	NS	NS NS	NS NS	NS NS	NS NS
2,6-Dinitrotoluene	ug/Kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS NS
2,4-Dinitrotoluene	ug/Kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

	MATRIX LOCATION DEPTH (FEET) SAMPLE DATE ES ID LAB ID	SOIL SEAD-26 0-2 11/18/93 SB26-3.1 205099	SOIL SEAD26 6-8 11/18/93 SB263.4 205100	SOIL SEAD – 26 10 – 12 11/18/93 SB26 – 3.6 205101	SOHL SEAD - 26 0 - 2 11/19/93 SB26 - 4.1 205102	SOIL SEAD - 26 2-4 11/19/93 SB264.2 205103	SOIL SEAD-26 6-8 11/19/93 SB26-4.4 205104	SOIL SEAD-26 0-0.7 11/18/93 TP26-1.1 205105	SOIL SEAD -26 5.0+ 11/18/93 TP26-1.2 205106	SOIL SEAD-26 0-0.7 11/18/93 TP26-2.1 205113	SOIL SEAD-26 5.0+ 11/18/93 TP26-2.2 205114
COMPOUND SEMIVOLATILE ORGANICS	UNITS										
Phenal	ug/Kg	380 U	400 U	380 UJ	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
bis(2-Chioroethyl) ether	ug/Kg	380 U 380 U	400 U 400 U	380 UJ 380 UJ	370 U 370 U	370 U 370 U	380 U 380 U	2500 U 2500 U	370 U 370 U	2400 U 2400 U	410 U 410 U
2-Chlorophend 1,3-Dichlorobenzene	ug/Kg ug/Kg	380 U	400 U	380 UJ	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
1,4-Dichlorobertzene	ug/Kg	380 U	400 U	380 UJ	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
1,2-Dichlorobertzene	ug/Kg	380 U	400 U	380 UJ 380 UJ	370 U 370 U	370 U 370 U	380 U 380 U	2500 U 2500 U	370 U 370 U	2400 U 2400 U	410 U 410 U
2-Methylphend 2,2'-oxybis(1-Chloropropane)	ug/Kg ug/Kg	380 U 380 U	400 U 400 U	380 UJ	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
4-Methylphend	ug/Kg	380 U	400 U	380 LÜJ	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
N-Nitroso-di-n-propylamine	ug/Kg	380 U	400 U 400 U	380 UJ 380 UJ	370 U 370 U	370 U 370 U	380 U 380 U	2500 U 2500 U	370 U 370 U	2400 U 2400 U	410 U 410 U
Hexachloroethane Nitrobenzene	ug/Kg ug/Kg	380 U 380 U	400 U	380 UJ	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
Isophorone	ug/Kg	380 U	400 U	380 W	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
2-Nitrophend	ug/Kg	380 U	400 U	380 W	370 U	370 U	380 U	2500 U 2500 U	370 U 370 U	2400 U 2400 U	410 U 410 U
2,4-Dimethylphenol bis(2-Chloroethoxy) methane	ug/Kg ug/Kg	380 U 380 U	400 U 400 U	380 UJ 380 UJ	370 U 370 U	370 U 370 U	380 U 380 U	2500 U	370 U	2400 U 2400 U	410 U
2.4-Dichlorophenol	uaKa	380 U	400 U	380 W	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
1,2,4—Trichlorobenzere	ug/Kg	380 U	400 U	380 UJ	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
Naphthalene 4Chioroaniline	ug/Kg ug/Kg	380 U 380 U	400 U 400 U	380 UJ 380 UJ	370 U 370 U	370 U 370 U	380 U 380 U	2500 U 2500 U	370 U 370 U	2400 U 2400 U	410 U 410 U
Hexachlorobutadiene	ug/Kg	380 U	400 U	380 W	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
4-Chioro-3-methylphenol	ug/Kg	380 U	400 U	380 UJ	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
2-Methylnaphthelene	ug/Kg	380 U	400 U 400 U	380 UJ 380 UJ	370 U 370 U	370 U 370 U	380 U 380 U	2500 U 2500 U	370 U 370 U	2400 U 2400 U	410 U 410 U
Hexachlorocydopentadiene 2.4.6-Trichtorophenol	ug/Kg ug/Kg	380 U 380 U	400 U	380 UJ	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
2,4,5—Trichtorophenol	ug/Kg	930 U	980 U	930 UJ	910 U	900 U	930 U	6100 U	910 U	5800 U	990 U
2-Chioronaphthalene	ug/Kg	380 U	400 U	380 UJ 930 UJ	370 U 910 U	370 U 900 U	U 086 U 068	2500 U 6100 U	370 U 910 U	2400 U 5800 U	410 U 990 U
2Nitroaniline Dimethylphthalate	ug/Kg ug/Kg	930 U 380 U	980 U 400 U	380 W	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
Acenaphthylene	ug/Kg	380 U	400 U	380 W	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
2.6-Dinitrotoluene	ug/Kg	380 U	400 U	380 UJ	370 U	370 U 900 U	380 U 930 U	2500 U 6100 U	370 U 910 U	2400 U 5800 U	410 U 990 U
3-Nitroaniline Acenaphthene	ug/Kg ug/Kg	930 U 380 U	980 U 400 U	930 UJ 380 UJ	910 U 370 U	370 U	10 08E	2500 U	370 U	2400 U	410 U
2,4-Dinitrophenol	ug/Kg	930 U	980 U	930 LU	910 U	900 U	930 U	6100 U	910 U	5800 U	990 U
4-Nitrophend	ug/Kg	930 U	980 U	930 LU	910 U 370 U	900 U 370 U	930 U 380 U	6100 U 2500 U	. 910 U 370 U	5800 U 2400 U	990 U 410 U
Dibenzofuran 2.4-Dinitrotoluene	ug/Kg ug/Kg	380 U 380 U	400 U 400 U	380 UJ 380 UJ	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U 410 U
Diethylphthalate	ug/Kg	380 U	400 U	380 UJ	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
4-Chiorophenyl-phenylether	ug/Kg	380 U	400 U	380 UJ	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
Fluorene	ug/Kg	380 U 930 U	22 J 980 U	380 LJ 930 LJ	370 U 910 U	370 U 900 U	380 U 930 U	2500 U 6100 U	370 U 910 U	2400 U 5800 U	410 U 990 U
4 – Nitrosniline 4,6 – Dinitro – 2 – methylphenol	ug/Kg ug/Kg	930 U	980 U	930 W	910 U	900 U	930 U	6100 U	910 U	5800 U	990 U
N-Nitrosodiphemylamine	ug/Kg	380 U .	400 U	380 UJ	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
4Bromophenylphenylether Hexachiorobenzene	ug/Kg	380 U 380 U	400 U 400 U	380 UJ 380 UJ	370 U 370 U	370 U 370 U	380 U 380 U	2500 U 2500 U	370 U 370 U	2400 U 2400 U	410 U 410 U
Pentachiorophenol	ug/Kg ug/Kg	930 U	980 U	930 LU	910 U	900 U	930 U	6100 U	910 U	5800 U	990 U
Phenanthrene	ug/Kg	380 U	190 J	380 LU	370 U	370 U	64 J	2500 U	370 U	2400 U	120 J
Anthracene	ug/Kg	380 U 380 U	45 J 400 U	380 UJ 380 UJ	370 U 370 U	370 U 370 U	380 U 380 U	2500 U 2500 U	370 U 370 U	2400 U 2400 U	22 J 410 U
Carbazde Din-butylphthelate	ug/Kg ug/Kg	380 U	400 U	380 LU	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U
Fluoranthene	ug/Kg	380 U	170 J	380 LU	24 J	370 U	71 J	2500 U	370 U	300 J	170 J
Pyrene	ug/Kg	380 U	130 J	380 LU 380 LU	30 J 370 ⊔	370 U 370 U	64 J 380 U	2500 U 2500 U	370 U 370 U	250 J 2400 U	130 J
Butylbenzylphthalate 3,3'-DicHorobenzidine	ug/Kg ug/Kg	380 U 380 U	400 U 400 U	380 UJ	370 U	370 U	380 U	2500 U	370 U	2400 U	410 U 410 U
Benzo(a)anthracene	ug/Kg	380 U	65 J	380 UJ	370 U	370 U	28 J	2500 U	370 U	160 J	71 J
Chrysene	ug/Kg	380 U	69 J	380 UJ	370 U	370 U	46 J	2500 U	370 U	180 J	97 J
bis(2-Ethylhexyl)phthalate	ug/Kg	380 U 380 U	400 U 400 U	230 J 380 UJ	930 370 U	820 370 U	380 U 380 U	2500 U 2500 U	370 U 370 U	2400 U 2400 U	410 U 410 U
Di⊷n~octylphthalate Benzo(b)fluoranthene	ug/Kg ug/Kg	380 U	400 U 42 J	380 UJ	370 U	370 U	33 J	2500 U	370 U	130 J	410 U 83 J
Benzo(k) fluoranthene	ug/Kg	380 U	51 J	380 UJ	370 U	370 U	41 J	2500 U	370 U	190 J	75 J
Benzo(a)pyrene	ug/Kg	380 U	55 J	380 UJ	370 U	370 U	40 J	2500 U	370 U	200 J	86 J
indeno(1,2,3cd)pyrene Dibenzía,h)anthracene	ug/Kg ug/Kg	380 U 380 U	400 U 400 U	380 UJ 380 UJ	370 U 370 U	370 U 370 U	380 U 380 U	2500 U 2500 U	370 U 370 U	2400 U 2400 U	69 J 29 J
Berizo(g,h,l)perylene	ug/Kg	380 U	400 U	380 LU	370 U	370 U	380 U	2500 U	370 U	2400 U	29 J 410 U
specific color of State of											

	MATRIX LOCATION DEPTH (FEET) SAMPLE DATE ES ID LAB ID	SOIL SEAD-26 0-2 11/18/93 SB26-3.1 205099	SOIL SEAD-26 6-8 11/18/93 SB26-3.4 205100	SOIL SEAD - 26 10-12 11/18/93 SB26-3.6 205101	SOIL SEAD-26 0-2 11/19/93 SB26-4.1 205102	SOIL SEAD-26 2-4 11/19/93 SB26-4-2 205103	SOIL SEAD -26 6-8 11/19/93 SB25-4.4 205104	SOIL SEAD-26 0-0.7 11/18/93 TP26-1.1 205105	SOIL SEAD26 5.0+ 11/18/93 TP26-1.2 205106	SOIL SEAD-26 0-0.7 11/18/93 TP26-2.1 205113	SOIL SEAD-26 5.0+ 11/18/93 TP26-22 205114
COMPOUND	UNITS										
PESTICIDES/PCB alpha-BHC	ug/Kg	2 U	2.1 U	2 U	1.9 U	1.9 U		4 - 11	4411		
beta-BHC	ug/Kg	20	21 U	2 U	1.9 U	1,9 U	2 U 2 U	1.9 U 1.9 U	1.9 U 1.9 U	1.8 U 1.8 U	2.1 U 2.1 U
delta-BHC	ug/Kg	20	2.1 U	20	1.9 U	1.9 U	20	1.9 U	1.9 U	1.8 U	2.1 U
gamma-BHC (Lindane)	ug/Kg	ŽŪ	2.1 U	2 Ü	1.9 U	1.9 U	2 Ü	1.9 U	1.9 U	1.8 U	2.1 U
Heptachlor	ug/Kg	2 Ü	21 U	2 U	1.9 U	1.9 U	20	1.9 U	1.9 U	1.8 U	2.1 U
Aldrin	ug/Kg	2 U	2.1 U	2 U	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.8 U	2.1 U
Heptachlor epoxide	ug/Kg	20	2.1 U	2 U	1,9 U	1.9 U	2 U	1.9 U	1.9 U	1.8 U	2.1 U
Endosulfan I	ugKg	20	2.1 U	2 U	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.8 U	2.1 U
Dieldrin	ug/Kg	3.8 U	4 U	3.6 U	3.7 U	3.7 U	3.8 U	3.7 U	3.7 U	3.6 U	4.1 U
4,4'-DDE Endrin	ug/Kg	3.8 U 3.8 U	4 U 4 U	3.8 U	3.7 U 3.7 U	3.7 U	3.8 U	6.4	3.7 U	3.6 U	4.1 U
Endosulfan II	ug/Kg ug/Kg	3.8 U	40	3.8 U 3.8 U	3.7 U	3.7 U 3.7 U	3.8 U 3.8 U	3.7 U 3.7 U	3.7 U 3.7 U	3.6 U	4.1 U
4.4'-DDD	ugKg	3.8 U	4 Ŭ	3.8 U	3.7 U	3.7 U	3.8 U	3.7 U	3.7 U	3.6 U 3.6 U	4.1 U 4.1 U
Endosulfan sulfate	ug/Kg	3.8 U	4 U	3.8 U	3.7 U	3.7 U	3.8 U	3.7 U	3.7 U	3.6 U	4.1 U
4,4'-DDT	ug/Kg	3.8 U	4 Ü	3,8 U	3.7 U	3.7 U	3.8 U	3.7 U	3.7 U	3.6 U	4.1 U
Methoxychlor	. ug/Kg	20 U	21 U	20 U	19 U	19 U	20 U	19 U	19 U	18 U	21 U
Endrin ketone	ug/Kg	3.8 U	4 U	3.8 U	3.7 U	3.7 U	3.8 U	3.7 U	3.7 U	3.6 U	4.1 U
Endrin aldehyde	ug/Kg	3.8 U	4 U	3.8 U	3.7 U	3.7 U	3.8 U	3.7 U	3.7 U	3.6 U	4.1 U
alpha-Chlordane	ug/Kg	2 U	2.1 U	2 U	1.9 U	1.9 U	2 U	1.9 U	1.9 U	1.8 U	2.1 U
gamma—Chlordane Toxaphene	ug/Kg ug/Kg	2 U 200 U	2.1 U 210 U	2 U 200 U	1.9 U 190 U	1.9 U 190 U	2 U 200 U	1.9 U 190 U	1.9 U	1.8 U	2.1 U
Aroclor-1016	ug/Kg	38 U	40 U	38 U	37 U	37 U	200 U	37 U	190 U 37 U	160 U 36 U	210 U
Aroclor-1221	ug/Kg	78 U	81 U	76 U	76 U	75 U	78 U	76 U	76 U	73 U	41 U 83 U
Arocior-1232	ug/Kg	38 U	40 U	38 U	37 U	37 U	38 U	37 U	37 U	36 U	41 U
Aroclor-1242	ug/Kg	38 U	40 U	38 Ü	37 U	37 U	38 Ü	37 U	37 U	36 U	41 U
Aroclor-1248	υg/Kg	38 U	40 U	38 U	37 U	37 U	38 U	37 U	37 U	36 U	41 U
Arodor-1254	ug/Kg	38 U	40 U	38 U	37 U	37 U	38 U	37 U	37 U	36 U	41 U
Aroclor-1260	ug/Kg	38 U	40 U	38 U	37 U	37 U	38 U	37 U	37 U	36 U	41 U
METALS											
Aluminum	mg/Kg	13700	14400	12900	14300	13800	15300	13100	10000	10000	10000
Antimony	mg/Kg	10.4 W	12.5 W	6.6 W	9.2 W	9.3 W	11.4 W	8 UJ	10.5 W	9.1 W	13200 12.3 UJ
Arsenic	mg/Kg	6.3 J	8.4 J	6.7 J	13 J	10.3 J	10.2 J	6.8 J	5.9 J	10 J	6.4 J
Barium	mg/Kg	77.1	93.2	57.5	87.3	62.4	74.3	105	67.3	38.2	119
Beryllium	mg/Kg .	0.69 J	0.66 J	0.61 J	0.67 J	0.61 J	0.73 J	0.62 J	. 0.47 J	0.48 J	0.7 J
Cadmium	mg/Kg	0.65 U	0.78 U	0.41 U	0.57 U	0.58 U	0.71 U	0.5 U	0.66 U	0.57 U	0.77 U
Calcium Chromium	mg/Kg	25600 20.7	20100 20.9	2820 21.4	28000 22.7	17500	14500	18500	65400	9330	41800
Cobalt	mg/Kg mg/Kg	10.8	20.9 7.9 J	11.8	15.8	22.2 12	23.5 14.8	20.2 12.5	15.2	16.5	19.7
Copper	mg/Kg	20.6	18.3	23.2	28.6	18.9	24.1	12.5	8.7 J 23.5	10 13.9	11.4 J
iron	mg/Kg	28400	25900	29600	31700	29000	33200	28300	20400	22200	23.5 25500
Lead	mg/Kg	20.7	14.9	10.5	14.6	11.7	13.1	13.6	11.9	6.5	66.8
Magnesium	mg/Kg	8760	4810	5290	6910	6330	6290	5340	15300	4720	5030
Manganese	mg/Kg	466 R	561 R	486 R	696 R	541 R	668 R	814 R	433 R	461 R	951 R
Mercury Nickel	mg/Kg	0.03 J	0.03 J	0.03 J	0.04 J	0.04 J	0.03 J	0.04 UJ	0.03 UJ	0.01 UJ	0.11 J
Potassium	mg/Kg mg/Kg	29.7 1140	29.1 1130 J	34.7 1110	35.2 1370	32.8 1140	38.5	31.1	28.7	25,5	30.2
Selenium	mg/Kg	0.48 J	0.79 J	0.18 W	0.37 J	1140 0.58 J	1390 0.28 J	950 0.25 J	1180	573 J	1840
Silver	mg/Kg	1.3 U	1.6 U	0.84 U	1.2 U	1.2 U	1.4 U	10	0.57 J 1.3 U	0.31 J	0.72 J
Sodium	mg/Kg	71.6 J	60.9 J	56.8 J	119 J	87.6 J	78 J	60.9 J	110 J	1.1 U 56.7 J	1.6 U 93.8 J
Thellium	mg/Kg	0.21 U	0.26 U	0.27 U	0.23 U	0.14 U	0.26 U	0.2 U	0.25 U	0.23 U	93.8 J 0.29 U
Vanadium	mg/Kg	22.2	21.6	19.5	20.1	18.6	22.2	18.5	16.3	12.8	21.1
Zinc	mg/Kg	64.9	78.2	72.5	84.9	72.4	115	80.7	60.1	59.6	135
Cyanide	mg/Kg	0.57 U	0.59 U	0.56 U	0.53 U	0.54 U	0.52 U	0.54 U	0.49 U	0,49 U	0.59 U
OTHER ANALYSES											
Nitrate/Nitrite-Nitrogen	mg/Kg	0.14	1.08	0.07	0.75	0.37	1,55	0.00			
Total Solids	%W/W	85.7	82	86.1	88.3	89	1.55 85.6	0.32	0.72	0.03	0.5
Total Petroleum Hydrocarbons	mg/Kg	69	71	74	90	65	85.6 66	87.7 87	88.3	91.8	80.7
Fluoride	mg/Kg	NS	, NS	' <sup>4</sup> NS	NS	NS	NS	87 NS	71 NS	72 NS	230
pH	standard units	NS	NS	NS	NS	NS	NS	NS	NS NS	NS NS	NS NS

	MATRIX LOCATION DEPTH (FEET) SAMPLE DATE ES ID LAB ID	SOIL SEAD -26 0-1 11/17/93 TP26-3.1 204832	SOIL SEAD ~26 0 -1 11/17/93 TP26 -3.1RE 204832	SOIL SEAD - 26 6.5-7.2 11/17/93 TP26-3.2 204833	SOIL SEAD - 26 6.5 - 7.2 11/17/93 TP26 - 3.2RE 204833	SOIL SEAD 26 SURFACE 11/17/93 TP264.1 204834	SOIL SEAD -26 SURFACE 11/17/93 TP26-4.1RE 204834	SOIL SEAD26 FILL 11/17/93 TP264.2 204835	SOIL SEAD -26 FILL 11/17/93 TP26-4.2RE 204835	SOIL SEAD 26 SURFACE 11/17/93 TP26 5.1 204836	SOIL SEAD – 26 SURFACE 11/17/93 TP26 – 5.1RE 204836
COMPOUND	UNITS										
VOLATILE ORGANICS		48.11	No.	46.11		44.11				46.11	NC
Chloromethane	ug/Kg	12 U 12 U	NS NS	12 U 12 U	NS NS	12 U 12 U	NS NS	12 U 12 U	NS NS	12 U 12 U	NS NS
Bromomethane	ug/Kg ug/Kg	12 U	NS NS	12 U	NS NS	12 U	NS NS	12 U	NS NS	12 U	NS
Virnyl Chloride Chloroethane	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
Methylene Chloride	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
Acetone	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
Carbon Disuffide	ug/Kg	12 U	NS	12 U	NS	12 U	NS .	12 U	NS	12 U	NS
1,1-Dichloroethene	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
1,1-Dichloroethane	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
1,2-Dichloroethene (total)	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS -	12 U	NS NS
Chloroform	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS NS	12 U 12 U	NS NS
1,2-Dichloroethane	ug/Kg	12 U 12 U	NS NS	12 U 12 U	NS NS	12 U 12 U	NS NS	12 U 12 U	NS NS	12 U	NS NS
2-Butanone 1,1,1-Trichlorgethane	ug/Kg ug/Kg	12 U	NS NS	12 U	NS NS	12 U	NS	12 U	NS	12 U	NS
Carbon Tetrachloride	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
Bromodichicromethane	ug/Kg	120	NS	12 Ü	NS	12 U	NS	12 U	NS	12 U	NS
1.2-Dichloropropane	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
cis-1,3-Dichloropropene	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
Trichlorcethene	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
Dibromochloromethane	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
1,1,2-Trichloroethane	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
Benzene	ug/Kg	12 U	NS NS	12 U 12 U	NS NS	12 U 12 U	NS NS	12 U 12 U	NS NS	12 U 12 U	NS NS
trans1,3Dichloropropene	ug/Kg	12 U 12 U	NS NS	12 U	NS NS	12 U	NS NS	12 U	NS	12 U	NS
Bromoform 4-Methyl-2-Pentanone	ug/Kg ug/Kg	12 U	NS NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
2-Hexanone	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
Tetrachloroethene	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
1,1,2,2-Tetrachioroethane	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
Toluene	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
Chlorobenzene	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
Ethylbenzene	ug/Kg	12 U	NS	12 U	NS	12 U	NS	12 U	NS	12 U	NS
Styrene	ug/Kg	12 U	NS	12 U 12 U	NS NS	12 U 12 U	NS NS	12 U 12 U	NS NS	12 U	NS NS
Xylene (total)	ug/Kg	12 U NA	NS NS	NA	NS NS	NA	NS NS	NA	NS NS	12 U NA	NS NS
MTBE	ug/Kg	N/A	NO	N/A	NO	IVA	NO	1975		1100	140
HERBICIDES											
2.4-D	ug/Kg	61 U R	61 W	e1U R	61 W	58 U R	58 W	55 U R	55 W	60 U R	60 W
2,4-DB	ug/Kg	61 U R	61 W	61 U R	61 W	58 U R	58 W	55 U R	55 UJ	60 U R	60 M
2,4,5-T	ug/Kg	6.1 U R	6.1 W	6.1 U R	6.1 UJ	5.8 U R	5.8 UJ	5.5 U R	5.5 W	6U R	eω
2,4,5-TP (Silvex)	ugKg	6.1 U R	6.1 W	6.1 U R	6.1 LU	5.8 U R	5.8 UJ	5.5 U R	5.5 UJ	6U R	6 W
Dalapon	ug/Kg	150 UR 6.1 UR	150 W 6.1 W	150 U R 6.1 U R	150 LU 6.1 LU	140 U R 5.8 U R	140 UJ 5.8 UJ	140 U R 5.5 U R	140 W 5.5 W	150 U R 6 U R	150 い 6 い
Dicamba Dichloroprop	ug/Kg ug/Kg	61 U . R	61 W	61 U R	61 LU	58 U R	58 UJ	55 U R	55 UJ	60 U R	60 UJ
Dinoseb	ug/Kg	31 U R	31 W	31 U R	31 UJ	29 U R	29 UJ	28 U R	28 LU	30 U R	30 LU
MCPA	ug/Kg	6100 U R	6100 W	6100 U R	6100 UJ	5800 U R	5800 UJ	5500 U R	5500 UJ	6000 U R	6000 M
MCPP	ugKg	6100 U R	6100 W	13000 R	6100 W	5800 U R	5800 UJ	5500 U R	5500 W	6000 U R	6000 LJ
NITROAROMATICS				130 U	NO	130 U	NS	400.11		!!	•••
HMX RDX	ug/Kg ug/Kg	130 U 130 U	NS NS	130 U	NS NS	130 U	NS NS	130 U 130 U	NS NS	130 U 130 U	NS NS
1,3,5-Trinitrobenzene	ug/kg	130 U	NS	130 U	NS	130 U	NS	130 U	NS NS	130 U	NS
1,3,5=11111100e12e18	ug/Kg	130 U	NS	130 U	NS	130 U	NS	130 U	NS	130 U	NS
Tetryl	ug/Kg	130 U	NS	130 U	NS	130 U	NS	130 U	NS	130 U	NS
2,4,6-Trinitrotoluene	ug/Kg	130 Ü	NS ·	130 U	NS	130 U	NS	130 U	NS	130 U	NS
4-amino-2,6-Dinitrotoluene	ug/Kg	130 U	NS	130 U	NS	130 U	NS	130 U	NS	130 U	NS
2-amino-4,6-Dinitrotoluene	ug/Kg	130 U	NS	130 U	NS	130 U	NS	130 U	NS	130 U	NS .
2,6-Dinitrotoluene	ug/Kg	130 U	NS	130 U	NS	130 U	NS	130 U	NS	130 U	NS
2,4-Dinitrotoluene	ug/Kg	130 U	NS	130 U	NS	130 U	NS	130 U	NS	130 U	NS

	MATRIX LOCATION DEPTH (FEET) SAMPLE DATE ES ID	SOIL SEAD-26 0-1 11/17/93 TP26-3.1	SOIL SEAD-26 0-1 11/17/93 TP26-3.1RE	SOIL SEAD-26 5.5-7.2 11/17/93 TP26-3.2	SOIL SEAD -26 6.5-7.2 11/17/93 TP26-3.2RE	SOIL SEAD-26 SURFACE 11/17/93 TP26-4.1	SOIL SEAD-26 SURFACE 11/17/93 TP26-4.1RE	SOIL SEAD -26 FILL 11/17/93 TP25-4.2	SOIL SEAD-26 FILL 11/17/93 TP26-4.2RE	SOIL SEAD -26 SURFACE 11/17/93 TP26-5.1	SOIL SEAD -26 SURFACE 11/17/93 TP26-5.1RE
COMPOUND	LAB ID	204832	204832	204833	204833	204834	204834	204835	204835	204836	204836
SEMIVOLATILE ORGANICS	UNITS				•						
Phend	ug/Kg	400 U	NS	400 U	NS	380 U	NS	370 U	NS	390 U	NS
bis(2-Chloroethyl) ether	ug/Kg	400 U	NS	400 U	NS	380 U	NS	370 U	NS	390 U	NS
2-Chlorophend 1,3-Dichlorobenzene	ug/Kg ug/Kg	400 U 400 U	NS NS	400 U 400 U	NS NS	380 U 380 U	NS	370 U	NS	390 U	NS
1,4-Dichlorobenzene	ug/Kg	400 U	NS	400 U	NS	380 U	NS NS	370 U 370 U	NS NS	390 U 390 U	NS NS
1,2-Dichlorobenzene	ug/Kg	400 U	NS	400 U	NS	380 U	NS	370 U	NS	390 U	NS
2-Methylphenol 2,2'-oxybis(1-Chloropropane)	ug/Kg ua/Ka	400 U 400 U	NS NS	400 U 400 U	NS NS	380 U 380 U	NS .	370 U	NS	390 U	NS
4-Methylphend	ug⊀g	400 U	NS	400 U	NS NS	380 U	NS NS	370 U 370 U	NS NS	390 U 390 U	NS NS
N-Nitroso-di-n-propylamine	ug/Kg	400 U	NS	400 U	NS	380 U	NS	370 U	NS	390 U	NS
Hexachioroethane Nitrobenzene	ug/Kg ug/Kg	400 U 400 U	NS NS	400 U 400 U	NS	380 U	NS	370 U	NS	390 U	NS
Isophorone	ug/Kg	400 U	NS	400 U	NS NS	380 U 380 U	NS NS	370 U 370 U	NS NS	390 U 390 U	NS NS
2-Nitrophend	ug/Kg	400 U	NS	400 U	NS	380 U	NS	370 U	NS	390 U	NS NS
2,4-Dimethylphenol bis(2-Chloroethoxy) methane	ug/Kg	400 U	NS	400 U	NS	380 U	NS	370 U	NS	390 U	NS
2.4-Dictiorophenol	ug/Kg ug/Kg	400 U 400 U	NS NS	400 U 400 U	NS NS	380 U 380 U	NS NS	370 U 370 U	NS NS	390 U	NS
1,2,4-Trichloroberizene	ug/Kg	400 U	NS	400 U	NS	380 U	NS	370 U	NS NS	390 U 390 U	NS NS
Naphthalene	ug/Kg	400 U	NS	400 U	NS	380 U	NS	370 U	NS	390 U	NS
4-Chiorcaniline Hexachiorobutadiene	ug/Kg , ug/Kg	400 U 400 U	NS NS	400 U 400 U	NS NS	380 U 380 U	NS NS	370 U 370 U	NS	390 U	NS
4-Chioro-3-methylphenol	ug/Kg ·	400 U	NS	400 U	NS	380 U	NS NS	370 U	NS NS	390 U 390 U	NS NS
2-Methylnaphthalene	ug/Kg	400 U	NS	400 U	NS	380 U	NS	370 U	NS	390 U	NS
Hexachlorocydopentaciene 2,4,6—Trichlorophenol	ug/Kg ug/Kg	400 U 400 U	NS NS	400 U 400 U	NS NS	380 U 380 U	NS NS	370 U 370 U	NS	390 U	NS
2,4,5—Trictiorophenol	ug/Kg	980 U	NS	980 U	NS	930 U	NS NS	890 U	NS NS	390 U 950 U	NS NS
2—Chlororaphthalene	ug/Kg	400 U	NS	400 U	NS	380 U	NS	370 U	NS	390 U	NS
2Nitroaniline Dimethylphthalate	ug/Kg ug/Kg	980 U 400 U	NS NS	980 U 400 U	NS NS	930 U	NS	890 U	NS	950 U	NS
Acensphthylene	ugKg	400 U	NS	400 U	NS	380 U 380 U	NS NS	370 U 370 U	NS NS	390 U 390 U	NS NS
2,6-Dinitrotoluene	ug/Kg	400 U	NS	400 U	NS	380 U	NS	370 U	NS	390 U	NS NS
3-Nitroaniline Acenaphthene	ug/Kg ug/Kg	980 U 400 U	NS NS	980 U 400 U	NS	930 U	NS	890 U	NS	950 U	NS
2,4-Dinitrophenol	ug/Kg	980 U	NS	980 U	NS NS	380 U 930 U	NS NS	370 U 890 U	NS NS	390 U 950 U	NS
4-Nitrophend	ug/Kg	980 U	NS	980 U	NS	930 U	NS	890 Ü	. NS	950 U	NS NS
Dibenzofuran 2.4Dinitrotoluene	ug/Kg ug/Kg	400 U 400 U	NS NS	400 U 400 U	NS NS	380 U 380 U	NS	370 U	NS	390 U	NS
Dietrylphthalate	ug/kg	400 U	NS	400 U	NS	380 U	NS NS	370 U 370 U	NS NS	390 U 390 U	NS
4—Chilorophenyl—phenylether	ugKg	400 U	NS	400 U	NS	380 U	NS	370 U	NS NS	390 U	NS NS
Fluorene 4-Nitroaniline	ug/Kg ug/Kg	400 U 980 U	NS NS	400 U 980 U	NS	380 U	NS	370 U	NS	390 U	NS
4.6-Dinitro-2-methylphenol	ug/Kg	980 U	NS	980 U	NS NS	930 U 930 U	NS NS	890 U 890 U	NS	950 U	NS
N-Nitrosodiphenylamine	ug/Kg	400 U ,	NS	400 U	NS	380 U	NS	370 U	NS NS	950 U 390 U	NS NS
4-Bromophenyl-phenylether Hexachloroberizene	ug/Kg ug/Kg	400 U 400 U	NS NS	400 U 400 U	NS	380 U	NS	370 U	NS	390 U	NS
Pentachlorophend	ugKg	980 U	NS	980 U	NS NS	380 U 930 U	NS NS	370 U 890 U	NS	390 U	NS
Phenanthrene	ug/Kg	400 U	NS	31 J	NS	31 J	NS	22 J	NS NS	950 U 68 J	NS NS
Anthracene Carbazde	ug/Kg ug/Kg	400 U 400 U	NS NS	400 U	NS	380 U	NS	370 U	NS	390 U	NS
Di-n-butyiphthalate	ugKg	400 U	NS NS	400 U 400 U	NS NS	380 U 380 U	NS NS	370 U	NS	390 U	NS
Fluoranthene	ug/Kg	30 J	NS	79 J	NS	71 J	NS	370 U 45 J	NS NS	390 U 150 J	NS NS
Pyrene First the same deleterations	ug/Kg	29 J	NS	64 J	NS	66 J	NS	43 J	NS	110 J	NS NS
Butylbenzylphthalate 3,3'-Dichlorobenzidine	ug/Kg ug/Kg	400 U 400 U	NS NS	400 U 400 U	NS NS	380 U 380 U	NS	370 U	NS	390 U	NS
Вепто(а)апіткаселе	ugKg	400 U	NS	37 J	NS	33 J	NS NS	370 U 22 J	NS NS	390 U	NS
Chrysene	ug/Kg	400 U	NS	43 J	NS	38 J	NS	25 J	NS	52 J 60 J	NS NS
bis(2-Ethylhexyl)phthalate Di-n-octylphthalate	ug/Kg ug/Kg	400 U 400 U	NS NS	400 U 400 U	NS NS	380 U	NS	370 U	NS	390 U	NS .
Benzop)fluoranthene	ugKg	400 U	NS	400 U	NS NS	380 U 33 J	NS NS	370 U	NS	390 U	NS
Benzok) fluoranthene	ug/Kg	400 U	NS	39 J	NS	35 J	NS NS	21 J 24 J	NS NS	55 J 45 J	NS
Benzo(a)pyrene Indeno(1,2,3-cd)pyrene	ug/Kg	400 U	NS	36 J	NS	31 J	NS	20 J	NS	52 J	NS NS
Dibenz(s,h)anthracene	ug/Kg ug/Kg	400 U 400 U	NS NS	24 J 400 U	NS NS	23 J 380 U	NS NS	370 U	NS	34 J	NS
Berizo(g,h,i)perylene	ugKg	400 U	NS	21 J	NS NS	23 J	NS NS	370 U 370 U	NS NS	390 U	NS
							110	5.00	NO	34 J	NS .

	MATRIX	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	LOCATION	SEAD-26	SEAD-26	SEAD-26	SEAD-26	SEAD-26 SURFACE	SEAD-26 SURFACE	SEAD-26 FILL	SEAD-26 FILL	SEAD-26 SURFACE	SEAD-26 SURFACE
	DEPTH (FEET) SAMPLE DATE	0-1 11/17/93	0-1 11/17/93	6.5-7.2 11/17/93	6.5-7.2 11/17/93	11/17/93	11/17/93	11/17/93	11/17/93	11/17/93	11/17/93
	ES ID	TP26-3.1	TP26-3.1RE	TP26-3.2	TP26-3.2RE	TP26-4.1	TP26-4.1RE	TP26-4.2	TP26-4.2RE	TP26-5.1	TP26-5.1RE
COMPOUND	LAB ID UNITS	204832	204832	204833	204833	204834	204834	204835	204835	204836	204836
PESTICIDES/PCB	011110										
alphaBHC	ug/Kg	2.1 U 2.1 U	NS NS	2.1 U 2.1 U	NS NS	2 U 2 U	NS NS	1.9 U 1.9 U	NS NS	2 U 2 U	NS NS
beta-BHC delta-BHC	ug/Kg ug/Kg	21U	NS NS	2.1 U	NS	2 U	NS	1.9 U	NS	2 Ü	NS
gamma-BHC (Lindane)	ug/Kg	2.1 U	NS	2.1 U	NS	2 U	NS	1.9 U	NS	2 U	NS NS
Heptachlor Aldrin	ug/Kg ug/Kg	2.1 U 2.1 U	NS NS	2.1 U 2.1 U	NS NS	2 U 2 U	NS NS	1.9 U 1.9 U	NS NS	2 U 2 U	NS NS
Heptachlor epoxide	ug/Kg	210	NS	21 U	NS	2 U	NS .	1.9 U	NS	2 U	NS
Endosultan I	ug/Kg	2.1 U	NS	2.1 U	NS NS	2 U 3.8 U	NS NS	1.9 U 3.7 U	NS NS	2 U 3.9 U	NS NS
Dieldrin 4.4'DDE	ug/Kg ug/Kg	4 U 4 U	NS NS	4 U 4 U	NS	3.8 U	NS	3.7 U	NS	3.9 U	NS
Endrin	ug/Kg	4 U	NS	4 U	NS	3.8 U	NS	3.7 U	NS NS	3.9 U 3.9 U	NS NS
Endosuitan II 4.4'-DDD	ug/Kg ug/Kg	4 U 4 U	NS NS	4 U 4 U	NS NS	3.8 U 3.8 U	NS NS	3.7 ปี 3.7 ป	NS NS	3.9 U	NS NS
Endosullari sulfate	ug/Kg	4 Ŭ	NS	4 U	NS	3.8 U	NS	3.7 U	NS	3.9 U	NS
4,4'-DDT	ug/Kg	4 U	NS NS	4 U 21 U	NS NS	3.8 U 20 U	NS NS	3.7 U 19 U	NS NS	3.9 U 20 U	NS NS
Methoxychlor Endrin ketone	ug/Kg ug/Kg	21 U 4 U	NS NS	21 U 4 U	NS NS	3.8 U	NS	3.7 U	NS	3.9 U	NS
Endrin aldehyde	ug/Kg	4 U	NS	4 U	NS	3.8 U	NS	3.7 U	NS	3.9 U	NS
alpha-Chiordane	ug/Kg	21 U 21 U	NS NS	2.1 U 2.1 U	NS NS	2 U 2 U	NS NS	1.9 U 1.9 U	NS NS	2 U 2 U	NS NS
gamma – Chlordane Toxaphene	ug/Kg ug/Kg	210 U	NS	210 U	NS	200 Ü	NS	190 U	NS	200 U	NS
Arocior-1016	ug/Kg	40 U	NS	40 U	NS NS	38 U 78 U	NS NS	37 U 74 U	NS NS	39 U 80 U	NS NS
Arocior – 1221 Arocior – 1232	ug/Kg ug/Kg	82 U 40 U	NS NS	82 U 40 U	NS NS	78 U 38 U	NS NS	74 U	NS	39 U	NS
Arocior 1242	ug/Kg	40 U	NS	40 U	NS	38 U	NS	37 U	NS	39 U	NS
Arodor-1248	ug/Kg	40 U 40 U	NS NS	40 U 40 U	NS NS	38 U 38 U	NS NS	37 U 37 U	NS NS	39 U 39 U	NS NS
Arodor-1254 Arodor-1260	ug/Kg ug/Kg	40 U	NS NS	40 U	NS	38 U	NS	37 U	NS	39 U	NS
METALS Aluminum	mg/Kg	4680	NS	15600	NS	11000	NS	11200	NS	15000	NS
Antimony	mg/Kg	6.4 W	NS	9.5 W	NS	7 W	NS	6.8 UJ	NS	12.4 W	NS
Arsenic	mg/Kg	5.8 48.5	NS NS	5.6 94.8	NS NS	9 58.1	NS NS	7.7 70.2	NS NS	5.6 94	NS NS
Barium Beryllium	mg/Kg mg/Kg	0.28 J	NS	0.76 J	NS	0.49 J	NS	0.5 J	. NS	0.73 J	NS
Cadmium	mg/Kg	0,4 U	NS NS	0.59 U 7500	NS NS	0.44 U 14100	NS NS	0.43 U 16300	NS NS	0.77 U 5330	NS NS
Calcium Chromium	mg/Kg mg/Kg	227000 6.9	NS NS	7500 22.1	NS NS	17.8	NS	18.4	NS	23.4	NS NS
Cobalt	mg/Kg	3 J	NS	10.6	NS	9.9	NS	12	NS	13.3	NS
Copper	mg/Kg	8.8 12000	NS NS	18.5 23800	NS NS	12.4 23200	NS NS	13.5 23200	NS NS	23 28500	NS NS
iron Lead	mg/Kg mg/Kg	17.4	NS	18.4	NS	10.3	NS	13.6	NS	19.5	NS
Magnesium	mg/Kg	120000 .	NS	4480	NS NS	5020 421	NS NS	5130 535	NS NS	5250 694	NS NS
Manganese Mercury	mg/Kg mg/Kg	1740 0.18	NS NS	657 0,02 U	NS NS	421 0,03 U	NS NS	0.03 J	NS NS	0.06	NS NS
Nickel	mg/Kg	7.8	NS	27.3	NS	26.7	NS	27.3	NS	34.9	NS
Potassium	mg/Kg	867 0.57 J	NS NS	1850 0.39 J	NS NS	1090 0.37 J	NS NS	1220 0.31 J	NS NS	1740 0.32 J	NS NS
Selenium Silver	mg/Kg mg/Kg	0.81 W	NS	1.2 W	NS	0.89 W	NS	0.87 UJ	NS	1.6 UJ	NS
Sodium	mg/Kg	247 J	NS	58.9 J	NS	56.4 J	NS	74.8 J	NS	46.8 J	NS
Thellium Vanadium	mg/Kg mg/Kg	0.23 U 17.1	NS NS	0.27 U 26.8	NS NS	0.25 U 16	NS NS	0.26 U 16.8	NS NS	0.18 U 24.9	NS NS
Zinc	mg/Kg	130	NS	78	NS	80.7	NS	69.2	NS	91.5	NS
Cyanide	mg/Kg	0.59 U	NS	0,53 U	NS	0.58 U	NS	0.46 U	NS	0.54 U	NS
OTHER ANALYSES											· ·
Nitrate/Nitrite-Nitrogen	mg/Kg	1.8	NS	2.1	NS	0.08	NS	0.03	NS	0.55	NS
Total Solids Total Petroleum Hydrocarbons	%W/W mg/Kg	81.5 49	NS NS	81.6 80	NS NS	85.6 68	NS NS	90.3 76	NS NS	83.6 42	NS NS
Fluoride	mg/Kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
рН	standard units	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

	MATRIX LOCATION DEPTH (FEET)	SOIL SEAD-26 FILL	SOIL SEAD-26 FILL	SOIL SEAD-26 0~0.7	SOIL SEAD-26 5.0+	SOIL SEAD-26 00,7	SOIL SEAD-26 5.0+	SOIL SEAD-26 0-0.7	SOIL SEAD-26 5.0+
	SAMPLE DATE	11/17/93	11/17/93	11/18/93	11/18/93	11/18/93	11/18/93	11/19/93	11/19/93
	ES ID LAB ID	TP26-5.2 204837	TP26-5.2RE 204837	TP266.1	TP26-6.2	TP26-7.1	TP26-7.2	TP26-8.1	TP26-8.2
COMPOUND	UNITS	204837	204837	205107	205108	205109	205110	205115	205116
VOLATILE ORGANICS	OHIIO								
Chloromethane	ug/Kg	12 U	NS	12 U	12 U	11 U	12 U	11 U	12 U
Bromometrane	ug/Kg	12 U	NS	12 U	12 U	11 0	12 U	11 U	12 U
Virtyl Chloride	ug/Kg	12 U	NS	12 U	12 U	11 0	12 U	11 Ŭ	12 U
Chlorcethane	ugKg	12 U	NS	12 U	12 U	11 U	12 U	11 0	12 U
Methylene Chloride	ug/Kg	12 U	NS	12 U	12 U	11 U	12 U	11 U	12 U
Acetone	ug/Kg	12 U	NS	12 U	12 U	11 U	12 U	11 U	12 U
Carbon Disuffide	ug/Kg	12 U	NS	12 U	12 U	11 U	12 U	11 U	12 U
1,1-Dichloroethene	ugKg	12 U	NS	12 U	12 U	11 Ü	12 U	11 U	12 U
1,1-Dichloroethane	ug/Kg	12 U	NS	12 U	12 U	11 U	12 U	11 U	12 U
1,2-Dichloroethene (total) Chloroform	ug/Kg	12 U	NS	12 U	12 U	11 U	12 U	11 U	12 U .
1,2-Dichloroethane	ug/Kg	12 U 12 U	NS NS	12 U	12 U	11 U	12 U	11 U	12 U
2-Butanone	ug/Kg ug/Kg	12 U	NS NS	12 U 12 U	12 U 12 U	11 U	12 U	11 U	12 U
1,1,1-Trichloroethane	ug/Kg	12 U	NS	12 U	12 U	11 U 11 U	12 U	11 U	12 U
Carbon Tetrachloride	ugKg	12 U	NS	12 U	12 U	11 U	12 U 12 U	11 U	12 U
Bromodichioromethane	uaKa	12 U	NS	12 U	12 U	11 U	12 U	11 U 11 U	12 U 12 U
1,2-Dichoropropane	ug/Kg	12 U	NS	12 Ü	12 U	11 U	12 U	11 U	12 U
cfs-1,3-Dichloropropene	ug/Kg	12 U	NS	12 U	12 U	11 U	12 U	11 U	120
Trichioroethene	ug/Kg	12 U	NS	12 U	12 U	11 Ü	12 U	11 0	12 U
Dibromochtoromethane	ug/Kg	12 U	NS	12 U	12 U	11 U	12 U	11 U	12 U
1,1,2—Trichloroethane	ug/Kg	12 U	NS	12 U	12 U	11 U	12 U	11 U	12 U
Bertzene	ug/Kg	12 U	NS	12 U	12 U	11 U	12 U	11 Ü	12 U
trans-1,3-Dichloropropens	ug/Kg	12 U	NS	12 U	12 Ų	11 U	12 U	11 U	12 U
Bromoform	ug/Kg	12 U	NS	12 U	12 U	11 U	12 U	11 U	12 U
4-Methyl-2-Pentanone 2-Hexanone	ug/Kg	12 U 12 U	NS	12 U	12 U	11 U	12 U	11 U	12 U
Tetrachioroethene	ug/Kg ug/Kg	120	NS NS	12 U	12 U	11 U	12 U	11 U	12 U
1,1,2,2—Tetrachioroethane	ug/kg	12 U	NS NS	12 U 12 U	12 U	11 U	12 U	11 U	12 U
Taluene	ug/Kg	12 U	NS	12 U	12 U 12 U	11 0	12 U	11 U	12 U
Chiorobenzene	ugKg	12 U	NS	12 U	12 U	11 U 11 U	12 U	11 U	12 U
Ethylbenzene	ug/Kg	12 U	NS	12 U	12 U	11 U	12 U 12 U	11 U 11 U	12 U
Styrene	ua/Ka	12 U	NS	12 U	12 U	11 U	12 U	11 U	12 U 12 U
Xylene (total)	ug/Kg	12 U	NS	12 U	12 U	11 U	12 U	11 U	12 U
MTBE	ug/Kg	NA	NS	10 U	10 U	10 U	10 U	10 U	10 U
							,	100	
HERBICIDES									
2,4-D	ug/Kg	59 U R	59 W	56 U	63 U	56 U	61 U	56 U	61 U
2,4-DB	ug/Kg	59 U R	59 W	56 U	63 U	56 U	61 U	56 U	61 U
2,4,5-T 2,4,5-TP (Silvex)	ug/Kg	5.9 U R 5.9 U R	5.9 LU	5.6 U	6.3 U	5.6 U	6.1 U	5.6 U	6.1 U
Dalapon	ug/Kg ug/Kg	5.9U R 140U R	5.9 W 140 W	5.6 U 140 U	6.3 U	5.6 U	6.1 U	5.6 U	6.1 U
Dicamba	ug/Kg	5.9 U R	5.9 W	140 U 5,6 U	160 U	140 U	150 U	140 U	150 U
Dichloroprop	ug/Kg	59 U. R	59 LU	56 U	5.3 U 63 U	5.6 U	6.1 U	5.6 U	6.1 U
Dinoseb	ua/Ka	30 U R	30 UJ	28 U	32 U	56 U 28 U	61 U	56 U	61 U
MCPA	ug/Kg	5900 U R	5900 W	5800 U	6300 U	5800	31 U 6100 U	28 U	31 U
MCPP	uaKa	5900 U R	5900 UJ	5800 U	6300 U	7600	6100 U	5600 U	6100 U
				0000	0,000	7000	6100 0	5600 U	6100 U
NITROAPOMATICS									
HMX	ug/Kg	130 U	NS	NS	NS	NS	NS	NS	NS
PIDX	ug/Kg	130 U	NS	NS	NS	NS	NS	NS	NS
1,3,5—Trinitrobenzene	ugKg	130 U	NS	NS	NS	NS	NS	NS	NS
1,3-Dinftrobenzene	ug/Kg	130 U	NS	NS	NS	NS	NS	NS	NS
Tetryl	ug/Kg	130 U	NS	NS	NS	NS	NS	NS	NS
2,4,6—Trinitrotoluene	ug/Kg	130 U	NS	NS	NS	NS	NS	NS	NS
4-amino-2,6-Dinitrotoluene 2-amino-4,6-Dinitrotoluene	ugKg	130 U 130 U	NS	NS	NS	NS	NS	NS	NS
2.6-Dinitrotoluene	ug,Kg ug,Kg	130 U	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	naka naka	130 U	NS NS	NS NS	NS	NS	NS	NS	NS
-, - Di 10 000001 A	r-Mu/A	130 0	No	ИЭ	NS	NS	NS	NS	NS

	MATRIX LOCATION DEPTH (FEET) SAMPLE DATE ES ID	SOIL SEAD - 26 FILL 11/17/93 TP26 - 5.2	SOIL SEAD -26 FILL 11/17/93 TP26-5.2RE	SOIL SEAD-26 0-0.7 - 11/18/93 TP26-6.1	SOIL SEAD-26 5.0+ 11/18/93 TP26-6.2	SOIL SEAD-26 0-0.7 11/18/93 TP26-7.1	SOIL SEAD-26 5.0+ 11/18/93 TP26-7.2	SOIL SEAD-26 0-0.7 11/19/93 TP26-8.1	SOIL SEAD-26 5.0+ 11/19/93 TP26-8.2
COMPOUND	LAB ID UNITS	204837	204837	205107	205108	205109	205110	205115	205116
SEMIVOLATILE ORGANICS	UNITS								
Phend	ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
bis(2-Chiloroethyl) ether	ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
2-Chlorophend	ug/Kg	390 U 390 U	NS NS	370 U 370 U	420 U 420 U	370 U 370 U	410 U 410 U	2500 U 2500 U	400 U 400 U
1,3-Dichlorobenzene 1,4-Dichlorobenzene	ug/Kg ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
1,4-Dichlorobenzene	ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
2-Methylphenol	ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
2,2'-oxybis(1-Chloropropane)	ug/Kg	390 U	NS	370 U	420 U 420 U	370 U 370 U	410 U 410 U	2500 U 2500 U	400 U 400 U
4Methylphend	ug/Kg ug/Kg	390 U 390 U	NS NS	370 U 370 U	420 U	370 U	410 U	2500 U	400 U
N-Nitroso-di-n-propylamine Hexachloroethane	ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
Nitroberizene	ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
Isophorone	ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U 2500 U	400 U 400 U
2-Nitrophend	ug/Kg	390 U 390 U	NS NS	370 U 370 U	420 U 420 U	370 U 370 U	410 U 410 U	2500 U	400 U
2,4-Dimethylphenol bis(2-Chloroethoxy) methane	ug/Kg ug/Kg	390 U	NS NS	370 U	420 U	370 U	410 U	2500 U	400 U
2.4-Dichlorophenol	ugKa	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
1,2,4-Trichlorobenzene	ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
Naphthelene	ug/Kg	390 U	NS	370 U 370 U	420 U 420 U	370 U 370 U	410 U 410 U	2500 U 2500 U	400 U 400 U
4-Chloroaniline	ug/Kg ug/Kg	390 U 390 U	NS NS	370 U	420 U	370 U	410 U	2500 U	400 U
Hexachlorobutadiene 4-Chloro-3-methylphenol	ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
2-Methylnaphthelene	ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
Hexachiorocydopentadiene	ug/Kg	390 U	NS	370 U	420 U	370 U 370 U	410 U 410 U	2500 U 2500 U	400 U 400 U
2,4,6-Trichlorophenol	ug/Kg	390 U 940 U	NS NS	370 U 890 U	420 U 1000 U	910 U	990 U	6000 U	980 U
2,4,5—Trichlorophenoi 2—Chloromaphthalene	ug/Kg ug/Kg	390 U	NS NS	370 U	420 U	370 U	410 U	2500 U	400 U
2—Nitroariline	ug/Kg	940 U	NS	890 U	1000 U	910 U	990 U	6000 U	980 U
Dimethylphthalate	ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
Acerephthylene	ug/Kg	390 U	NS	370 U 370 U	420 U 420 U	370 U 370 U	410 U 410 U	2500 U 2500 U	400 U 400 U
2,6-Dinitrotoluene	ug/Kg	390 U 940 U	NS NS	890 U	1000 U	910 U	990 U	6000 U	980 U
3-Nitroaniline Aceraphthene	ug/Kg ug/Kg	390 U	NS	370 U	420 U	42 J	410 U	820 J	400 U
2,4-Dinitrophend	ug/Kg	940 U	NS	890 U	1000 U	910 U	990 U	6000 U	980 U
4-Nitrophend	ugÆg	940 U	NS	890 U	1000 U	910 U 370 U	990 U 410 U	6000 U 240 J	. 980 U 400 U
Dibenzoluran	ug/Kg ug/Kg	390 U 390 U	NS NS	370 U 370 U	420 U 420 U	370 U	410 U	2500 U	400 U
2,4-Dinitrotoluene Diethylphthalate	ug/kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
4-Chlorophertyl-phenylether	ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
Fluorene	ug/Kg	390 U	NS	370 U	420 U	25 J 910 U	410 U 990 U	6000 N 600 J	400 U 980 U
4-Nitroeniline	ug/Kg	940 U 940 U	NS NS	890 U 890 U	1000 U 1000 U	910 U	990 U	6000 U	980 U
4,6-Dinitro-2-methylphenol N-Nitrosodiphenylamine	ug/Kg ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
4-Bromophenyl-phenylether	ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
Hexachicrobenzene	ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U 6000 U	400 U 980 U
Pentachiorophend	ug/Kg	940 U	NS NS	890 U 95 J	1000 U 420 U	910 U 370 J	990 U 410 U	7300 U	400 U
Pheranthrene Anthiacene	ug/Kg ug/Kg	390 U 390 U	NS NS	370 U	420 U	61 J	410 U	1400 J	400 U
Carbazde	ug/Kg	390 U	NS	370 U	420 U	40 J	410 U	1100 J	400 U
Di-n-butylphtralate	ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
Fluoranthene	ug/Kg	390 U	NS	250 J	62 J 61 J	770 610	410 U 410 U	13000 8500	38 J
Pyrene	ug/Kg ug/Kg	390 U 390 U	NS NS	220 J 370 U	420 U	370 U	410 U	2500 U	400 U
Butylbenzylphthalate 3.3'Dichlorobenzidine	ug/Kg	390 U	NS	370 U	420 U	370 U	410 U	2500 U	400 U
Berizo(a)anthracene	ug/Kg	390 U	NS	100 J	34 J	280 J	410 U	4500	400 U
Chrysene	ug/Kg	390 U	NS	120 J	37 J	320 J	410 U	4400	400 U
bis(2-Ethylhexyl)phthalate	ug/Kg	390 U	NS	370 U	420 U	370 U 370 U	410 U 410 U	2500 U	400 U
Di-n-octyphthalate	ugKg	390 U 390 U	NS NS	370 U 94 J	420 U 28 J	370 U	410 U 410 U	2500 U 4800	400 U 400 U
Benzo(b)fluoranthene Benzo(k)fluoranthene	ug/Kg ug/Kg	390 U	NS NS	120 J	34 J	270 J	410 U	3500	400 U
Benzo(a)pyrene	ug/Kg	390 U	NS	110 J	38 J	270 J	410 U	3900	62 J
indeno(1,2,3-cd)pyrene	ug/Kg	390 U	NS	65 J	420 U	190 J	410 U	2600	400 U
Dibenza,h)anthracene	ug/Kg	390 U	NS	370 U	420 U 420 U	370 U 160 J	410 U 410 U	1100 J 910 J	400 U 77 J
Benzo(g,h,l)perylene	ug/Kg	390 U	NS	56 J	420 0	160 3	410 0	9103	117

COMPOUND	MATRIX LOCATION DEPTH (FEET) SAMPLE DATE ES ID LAB ID UNITS	SOIL SEAD-26 FILL 11/17/93 TP26-5.2 204837	SOIL SEAD-26 FILL 11/17/93 TP26-5.2RE 204837	SOIL SEAD -26 0-0.7 11/18/93 TP26-6.1 205107	SOIL SEAD-26 5.0+ 11/18/93 TP26-6.2 205108	SOIL SEAD - 26 0 - 0.7 11/18/93 TP26 - 7.1 205109	SOIL SEAD -26 5.0+ 11/18/93 TP26-7.2 205110	SOIL SEAD -26 0-0.7 11/19/93 TP26-8.1 205115	SOIL SEAD-26 5.0+ 11/19/93 TP26-8.2 205116
PESTICIDES/PCB	ONIIS								
alpha-BHC	ug/Kg	2 U	NS	1.9 U	2.1 Ú	1.9 U	2.1 U	1.9 U	21U
beta-BHC	ug/Kg	2 U	NS	1.9 U	2.1 U	1.9 U	2.1 U	1.9 U	2.1 U
delta BHC	ug/Kg	2 U	NS	1.9 U	2.1 U	1.9 U	2.1 U	1.9 U	2.1 U
gamma-BHC (Lindane)	ug/Kg	2 U	NS	1.9 U	21 U	1.9 U	2.1 U	1.9 U	210
Heptachior	ug/Kg	2U	NS	1.9 U	2.1 U	1.9 U	21 U	1,9 U	2.1 U
Aldrin	ug/Kg	žU	NS	1.9 U	2.1 U	1.9 U	2.1 U	1.9 U	2.1 U
Heptachlor epoxide	ug/Kg	2 U	NS	1.9 U	2.1 U	1.9 U	21 U	1.9 U	2.1 U
Endosulfan I	ug/Kg	2 U	NS	1.9 U	2.1 U	1.9 U	2.1 U	1.9 U	2.1 U
Diedrin	ug/Kg	3.9 U	NS	3.7 U	4.1 U	3.7 U	4 U	3.7 U	4 U
4,4'-DDE	ug/Kg	3.9 U	NS	2.8 J	4.1 U	3.7 U	4 U	3.7 U	4 U
Endrin Endosultan II	ug/Kg	3.9 U 3.9 U	NS NS	3.7 U 3.7 U	4.1 U	3.7 U	4 U	3.7 U	4 U
4.4'-DDD	ug/Kg ug/Kg	3.9 U	NS NS	3.7 U 3.7 U	4.1 U 4.1 U	3.7 U 3.7 U	4 U 4 U	3.7 U	4 U
Endosufan suffate	ug/Kg	3.9 U	NS	3.7 U	4.1 U	3.7 U	4 U	3.7 U 3.7 U	4 U 4 U
4.4'-DDT	ug/Kg	3.9 U	NS	1.6 J	4.1 U	3.7 U	4 U	3.7 U	4 U
Methoxychlor	ug/Kg	20 U	NS	19 U	21 U	19 U	21 U	19 U	21 U
Endrin ketone	ug/Kg	3.9 U	NS	3.7 U	4.1 U	3.7 U	4 U	3.7 U	4 U
Endrin aldehyde	ugKg	3.9 U	NS	3.7 U	4.1 U	3.7 U	4 Ü	3.7 U	4 U
alpha-Chiordane	ug/Kg	2 U	NS	1.9 U	2.1 U	1.9 U	2.1 U	1,9 U	21 U
gamma-Chlordane	ug/Kg	2 U	NS	1.9 U	2.1 U	1.9 U	2.1 U	1.9 U	2.1 U
Toxaphene	ugKg	200 U	NS	190 U	210 U	190 U	210 U	190 U	210 U
Aroclor-1016	ug/Kg	39 U	NS	37 U	41 U	37 U	40 U	37 U	40 U
Arocior—1221	ug/Kg	79 U	NS NS	74 U	84 U	76 U	82 U	75 U	82 U
Arodor—1232 Arodor—1242	ug/Kg ug/Kg	39 U 39 U	NS NS	37 U 37 U	41 U 41 U	37 U 37 U	40 U	37 U	40 U
Arodor - 1242 Arodor - 1248	ugKg	39 U	NS NS	37 U	41 U	37 U	40 U 40 U	37 U 37 U	40 U
Arodor-1254	uaKa	39 U	NS	37 U	41 U	37 U	40 U	37 U	40 U 40 U
Arodor-1260	ug/Kg	39 U	NS	37 U	41 U	37 U	40 U	37 U	40 U
7-4	-9.4	000			41.0	3, 0	40.0	37 0	40 0
METALS									
Aluminum	mg/Kg	15700	NS	8060	15900	8550	10000	13700	20500
Antimony	mg/Kg	8.8 W	NS	10.1 UJ	10.1 W	10.9 WJ	12.4 UJ	7 W	12.5 UJ
Arsenic	mg/Kg	6,7	NS	6.6 J	9 J	8.1 J	7.6 J	6.4 J	5.4 J
Barium	mg/Kg	107	NS	45.7	81.4	43.6	53	69.2	109
Beryllium Cadmium	mg/Kg	0.81 J 0.55 U	NS NS	0.46 J	0.77 J	0.44 J	0.48 J	0.59 J	· 0.96 J
Calcium	mg/Kg mg/Kg	9500	NS NS	0.63 U 116000	0.63 U 6100	0.68 U 40600	0.78 U	0.44 U	0.78 U
Chromium	mg/Kg	24.2	NS	12.1	25.1	13.2	79300 14.3	42100	4090
Cobelt	mg/Kg	13.2	NS	7.9 J	14.3	7.1 J	7.1 J	21.7 11.1	26.3 12.5
Copper	mg/Kg	27.3	NS	14.5	29.1	17.1	13.1	21.3	21.8
tron	mg/Kg	32500	NS	17200	38100	18200	18600	27500	26900
Lead	mg/Kg	23.8	NS	15	13.5	12	16.2	13.1	18
Magnesium	mg/Kg	5850 .	NS	9180	6250	4760	26900	8260	4760
Manganese	mg/Kg	821	NS	487 R	507 R	596 R	573 R	594 R	1260 R
Mercury	mg/Kg	0.04 J	NS	0.02 J	0.03 J	0.04 J	0.05 J	0.04 J	0.07 J
Nickel Potassium	mg/Kg	34.2	NS	23	40.6	19.8	20.3	35.4	32.1
Selenium	mg/Kg mg/Kg	1330 0.44 J	NS NS	1050 0,82 J	1570 0.29 J	721 J	964 J	1290	2090
Silver	mg/Kg	1.1 UJ	NS	1.3 U	1.3 U	0.41 J 1.4 U	0.33 J	0.57 J	0,59 J
Sodium	mg/Kg	55.2 J	NS	101 J	52.6 J	90.7 J	1.6 U 117 J	0.88 U	1.6 U
Thellium	mg/Kg	0.25 U	NS	0.26 U	0.26 U	0.26 U	0.28 U	117 J 0.18 U	64.2 J
Vanadium	mg/Kg	28.1	NS	13.1	25.4	12.3	15.4	19.6	0.28 U 31.1
Zinc	mg/Kg	96.9	NS	70.3	88.1	50.9	62.7	78	88.2
Cyanide	mg/Kg	0.58 U	NS	0.53 U	0.54 U	0.54 U	0.52 U	0.54 U	0.55 U
OTHER ANALYSES									
Nitrate/Nitrite-Nitrogen	mg/Kg	0.17	NS	0.55	0.53	1.08	0.43	0.12	0.52
Total Solids	%W/W	84.9	NS	90.1	78.9	88,4	80.9	88.6	82.3
Total Petroleum Hydrocarbons Fluoride	mg/Kg mg/Kg	42 NS	NS NS	86 NO	550	63	72	137	113
pH	standard units	NS NS	NS NS	NS NS	NS	NS	NS	NS	NS
Pri	sea radio ur ius	140	no.	MS	NS	NS	NS	NS	NS

Ċ	MATRIX LOCATION SAMPLE DATE ES ID LAB ID	WATER SEAD-26 01/21/94 MW26-1 209256,	WATER SEAD - 26 01/22/94 MW26-3 209258	WATER SEAD 01/22/9 MW26- 209260
COMPOUND	UNITS	209945	200200	
VOLATILE ORGANICS				
Chloromethane	ug/L	10 U	10 U	10 U
Bromomethane	ug/L	10 U 10 U	10 U 10 U	10 U 10 U
Vinyl Chloride Chloroethane	ug/L ug/L	10 U	10 U	10 U
Methylene Chloride	ug/L	10 U	10 U	10 U
Acetone	ug/L	10 U	10 U	10 U
Carbon Disulfide	ug/L	10 U	10 U	10 U
1,1-Dichloroethene	ug/L	10 U	10 U 10 U	10 U 10 U
1,1-Dichloroethane 1,2-Dichloroethene (total)	ug/L ug/L	10 U 10 U	10 U	10 U
Chloroform	ug/L	10 U	10 U	10 U
1.2-Dichloroethane	ug/L	10 U	10 U	10 U
2-Butanone	ug/L	10 U	10 U	10 U
1,1,1 - Trichloroethane	ug/L	10 U	10 U	10 U
Carbon Tetrachloride	ug/L	10 U	10 U	10 U
Bromodichloromethane	ug/L ug/L	10 U 10 U	10 U 10 U	10 U 10 U
1,2-Dichloropropane cis-1,3-Dichloropropene	ug/L	10 U	10 U	10 U
Trichloroethene	ug/L	10 U	10 U	10 U
Dibromochloromethane	ug/L	10 U	10 U	10 U
1,1,2-Trichloroethane	ug/L	10 U	10 U	10 U
Benzene	ug/L	10 U 10 U	10 U 10 U	10 U 10 U
trans-1,3-Dichloropropene Bromoform	ug/L ug/L	10 U	10 U	10 U
4-Methyl-2-Pentanone	ug/L	10 U	10 U	10 U
2—Hexanone	ug/L	10 U	10 U	10 U
Tetrachioroethene	ug/L	10 U	10 U	10 U
1,1,2,2—Tetrachioroethane	ug/L	10 U	10 U	10 U
Toluene	ug/L	10 U 10 U	10 U 10 U	10 U 10 U
Chlorobenzene Ethylbenzene	ug/L ug/L	10 U	10 U	10 U
Styrene	ug/L	10 <sub>1</sub> U	10 U	10 U
Xylene (total)	ug/L	10 U	10 U	10 U
MTBE	ug/L	, NA	NA	NA
HERBICIDES		4011	1.1 U	1.2 U
2,4-D 2.4-DB	ug/L ug/L	1.2 U 1.2 U	1.1 U	1.2 U
2,4-06 2.4.5-T	ug/L	0.12 U	0.11 U	0.12 U
2,4,5-TP (Silvex)	ug/L	0.12 U	0.11 U	0.12 U
Dalapon	ug/L	2.7 U	2.5 U	2.7 U
Dicamba	ug/L	0.12 U	0.11 U	0.12 U 1.2 U
Dichloroprop	ug/L	1.2 U 0.58 U	1.1 U 0.53 U	1.2 U 0.58 U
Dinoseb MCPA	ug/L ug/L	120 U	110 U	120 U
MCPP	ug/L	120 U	110 U	120 U
NITROAROMATICS				
HMX	ug/L	NS	NS	NS
RDX	ug/L	NS	NS NS	NS NS
1,3,5—Trinitrobenzene 1,3—Dinitrobenzene	ug/L ug/L	NS NS	NS NS	NS NS
1,3~Dinktropenzene Tetryl	ug/L	NS NS	NS	NS
2.4.6—Trinitrotoluene	ug/L	NS	NS	NS
4-amino-2,6-Dinitrotoluene	ug/L	NS	NS	NS
2-amino-4,6-Dinitrotoluene	ug/L	NS	NS	NS
2,6-Dinitrotoluene	ug/L	NS	NS	NS
2,4-Dinitrotoluene	ug/L	NS	NS	NS

NOTES: NS stands for NOT SAMPLED NA stands for NOT ANALYZED

	MATRIX LOCATION SAMPLE DATE ES ID LAB ID	WATER SEAD - 26 01/21/94 MW26 - 1 20925 6.	WATER SEAD-26 01/22/94 MW26-3 209258	WATER SEAD-26 01/22/94 MW26-4 209260
COMPOUND	UNITS	209945	209236	209260
SEMIVOLATILE ORGANICS				
Phenol	ug/L	10 U	10 U	11 U
bis(2-Chioroethyl) ether	ug/L	10 U	10 U	11 U
2-Chlorophenol 1.3-Dichlorobenzene	ug/L ug/L	10 U 10 U	10 U 10 U	11 U 11 U
1.4-Dichiorobenzene	ug/L	10 U	10 U	11 U
1,2-Dichlorobenzene	ug/L	10 U	10 U	11 Ŭ
2-Methylphenol	ug/L	10 U	10 U	11 U
2,2'-oxybis(1-Chloropropane)	ug/L	10 U	10 U	11 U
4-Methylphenol N-Nitroso-di-n-propylamine	ug/L	10 U	10 U	11 U
Hexachloroethane	ug/L ug/L	10 U 10 U	10 U 10 U	11 U 11 U
Nitrobenzene	ug/L	10 U	10 U	11 U
Isophorone	ug/L	10 U	10 U	11 Ü
2-Nitrophenol	ug/L	10 U	10 U	11 U
2,4-Dimethylphenol	ug/L	10 U	10 U	11 U
bis(2-Chloroethoxy) methane 2.4-Dichlorophenol	ug/L	10 U	10 U	11 U
2,4-Dichicrophenol 1,2,4-Trichicrobenzene	ug/L ug/L	10 U 10 U	10 U 10 U	11 U 11 U
Naphthalene	ug/L	10 U 10 U	10 U	11 U 11 U
4-Chloroaniline	ug/L	10 U	10 U	11 U
Hexachlorobutadiene	ug/L	10 U	10 U	11 Ü
4-Chloro-3-methylphenol	ug/L	10 U	10 U	11 U
2-Methylnaphthalene	ug/L	10 U	10 U	11 U
Hexachiorocyclopentadiene 2.4.6-Trichlorophenol	ug/L ug/L	10 U 10 U	10 U 10 U	11 U 11 U
2.4.5—Trichlorophenol	ug/L	25 U	26 U	27 U
2-Chloronaphthalene	ug/L	10 U	10 U	11 Ŭ
2-Nitroaniline	ug/L	25 U	26 U	27 U
Dimethylphthalate	ug/L	10 U	10 U	11 U
Acenaphthylene	ug/L	10 U	10 U	11 U
2,6-Dinitrotoluene 3-Nitrosniline	ug/L	10 U	10 U	11 U
Acenaphthene	ug/L ug/L	25 U 10 U	26 U 10 U	27 U 11 U
2,4-Dinitrophenol	ug/L	25 U	26 U	27 U
4-Nitrophenol	ug/L	25 U	26 U	27 U
Dibenzofuran	ug/L	10 Ü	10 U	11 Ú
2,4-Dinitrotoluene	ug/L	10 U	10 U	11 U
Diethylphthalate 4-Chlorophenyl-phenylether	ug/L ug/L	0.6 J 10 U	10 U 10 U	0.5 J
Fluorene	ug/L ug/L	10 U	10 U	11 U 11 U
4-Nitroaniline	ug/L	25 U	26 U	27 U
4,6-Dinitro-2-methylphenol	ug/L	25 U	26 U	27 U
N-Nitrosodiphenylamine	ug/L	10 U	10 U	11 U
4-Bromophenyl-phenylether	ug/L	10 U	10 U	11 U
Hexachlorobenzene Pentachlorobenot	ug/L	10 U	10 U	11 U
Phenanthrene	ug/L ua/L	25 U 10 U	26 U 10 U	27 U 11 U
Anthracene	ug/L	10 U	10 U	11 U
Carbazole	ug/L	10 U	10 U	11 0
Di-n-butylphthalate	ug/L	10 U	10 U	11 U
Fluoranthene	ug/L	10 U	10 U	11 U
Pyrene	ug/L	10 U	10 U	11 U
Butylbenzylphthalate	ug/L	10 U	10 U	11 U
3,3'-Dichlorobenzidine Benzo(a)anthracene	ug/L ug/L	10 U 10 U	10 U 10 U	11 U 11 U
Chrysene	ug/L	10 U	10 U 10 U	11 U 11 U
bis(2-Ethylhexyl)phthalate	ug/L	10 U	10 U	11 U
Di-n-octylphthalate	ug/L	10 U	10 U	11 U
Benzo (b) tuoranthene	ug/L	10 U	10 U	11 0
Benzo(k) fuoranthene	ug/L	10 U	10 U	11 U
Berzo(a)pyrene	ug/L ug/L	10 U	10 U	11 U
		10 U	10 U	11 U
Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene	ug/L	10 U	10 U	11 U

	MATRIX LOCATION SAMPLE DATE ES ID LAB ID	WATER SEAD-26 01/21/94 MW26-1 209256,	WATEH SEAD26 01/22/94 MW263 209258	WATER SEAD -2 01/22/94 MW26-4 209260
COMPOUND	UNITS	209945		
PESTICIDES/PCB		0.000.111	0.054.111	0.055.111
alpha-BHC	ug/L ug/L	0.062 UJ 0.062 UJ	0.054 W 0.054 WJ	0.055 W 0.055 W
beta-BHC delta-BHC	ug/L ug/L	0.062 UJ	0.054 UJ	0.055 UJ
gammaBHC (Lindane)	ug/L	0.062 UJ	0.054 UJ	0.055 UJ
Heptachlor	ug/L	0.062 UJ	0.054 UJ	0.055 UJ
Aldrin	ug/L	0.062 UJ	0.054 UJ	0.055 UJ
Heptachlor epoxide	ug/L	0.062 WJ	0.054 UJ	0.055 WJ
Endosulfan i	ug/L	0.062 UJ	0.054 UJ	0.055 WJ
Dieldrin	ug/L	0.12 W	0.11 W	0.11 W
4,4'DDE	ug/L	0.12 W	0.11 W	0.11 W
Endrin	ug/L	0.12 W	0.11 W	0.11 W
Endosulfan II	ug/L	0.12 UJ 0.12 UJ	0.11 UJ 0.11 UJ	0.11 W 0.11 W
4,4'-DDD Endosulfan sulfate	ug/L ug/L	0.12 UJ	0.11 LU	0.11 UJ
4.4'-DDT	ug/L	0.12 UJ	0.11 W	0.11 W
Methoxychior	ug/L	0.62 UJ	0.54 UJ	0.55 W
Endrin ketone	ug/L	0,12 UJ	0.11 UJ	0.11 W
Endrin aldehyde	ug/L	0.12 WJ	0.11 UJ	0.11 W
alpha-Chlordane	ug/L	0.062 W	0.054 UJ	0.055 UJ
gamma-Chiordane	ug/L	0.062 UJ	0.054 UJ	0.055 W
Toxaphene	ug/L	6.2 W	5.4 W	5.5 W
Arccior - 1016 Arccior - 1221	ug/L ug/L	1.2 UJ 2.5 เม	1.1 W 2.2 W	1.1 W 22 W
Aroclor-1221 Aroclor-1232	ug/L ug/L	1.2 W	1.1 W	1.1 W
Aroclor = 1232 Aroclor = 1242	ug/L	1.2 W	1.1 W	1.1 W
Aroclor-1248	ug/L	1.2 UJ	1.1 W	1.1 W
Aroclor 1254	ug/L	1.2 UJ	1.1 W	1.1 W
Arcclor-1260	ug/L	1.2 W	1.1 W	1.1 W
METALS				
Aluminum	ug/L	188 J	665	73300
Antimony	ug/L	21.5 U	21.6 U	21.5 U
Arsenic	ug/L	0.8 U	1.3 J	32.6
Barlum	ug/L	31.9 J	83.8 J	399
Beryllium	ug/L	0.4 U	0.4 U	3.4 J
Cadmium	ug/L	2.1 U 115000	2.1 U 194000	2.1 U 199000
Calcium Chromium	ug/L ug/L	11500U 2.6 U	194000 2.6 U	199000
Cobalt	ug/L ug/L	4.4 U	4.4 J	62.2
Copper	ug/L	3.1 U	3.1 U	92
iron	ug/L	286	858	145000
Lead	ug/L	0.5 U	0.61 J	32.9
Magnesium	ug/L	16700 .	36500	60900
Manganese	ug/L	529	4280	2770
Mercury	ug/L	0.05 J R	0.04 U	0.14 J R
Nickel	ug/L	4 U	4.7 J 4480 J	163 108000
Potassium Selenium	ug/L ug/L	10200 0.7 U	0.85 J	108000 2J
Silver	ug/L	4.2 U	4.2 U	4.2 U
Sodium	ug/L	30300	11600	14600
Thatlium	ug/L	1.2 U	1.2 U	1.2 U
Vanadium	ug/L	3.7 U	3.7 U	110
Žine .	ug/L	26.7 R	13.9 J R	355
Cyanide	ug/L	5 U	5 U	5 U
OTHER ANALYSES				
Nitrate/Nitrite - Nitrogen	mg/L	1.18	0.04	3.6
Total Petroleum Hydrocarbons	mg/L	0.41 U	0.41	0.37 U
Fluoride	mg/L	NS	NS	NS
pН	standard units	7.63	6.8	6.95
Specific Conductivity	umhos/cm	400	650	775
Turbidity	NTU	4.8	325	5000

COMPOUND	MATRIX LOCATION DEPTH (FEET) SAMPLE DATE ES ID LAB ID UNITS	SOIL SEAD-26 0-0.2 10/25/93 SS26-1 202245	SOIL SEAD-26 0-0.2 10/25/93 SS26-1RE 202245	SOIL SEAD -26 0-0.2 10/25/93 SS262 202246	SOIL SEAD - 26 0 - 0.2 10/25/93 SS26 - 2RE 202245	SOIL SEAD -26 0-0.2 10/25/93 SS26-3 202247	SOIL SEAD-26 0-0.2 10/25/93 SS26-9 202255	SOIL SEAD - 26 0 - 0.2 10/25/93 SS26 - 4 202249	SOIL SEAD-26 0-0.2 10/25/93 SS26-5 202251	SOIL SEAD - 26 0-0.2 10/25/93 SS26-6 202252	SOIL SEAD-26 0-0.2 10/25/93 SS26-7 202253
VOLATILE ORGANICS	011110						SS26-3DUP				
Chloromethane	ug/Kg	11 W	11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U	11 U
Sromomethane	ug/Kg	11 W	11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U	11 U
Virni Chloride Chloroethane	ug/Kg	11 W 11 W	11 W 11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U	11 U
Methylene Chloride	ug/Kg ug/Kg	11 W	11 W	12 W 7 J	12 W 12 W	11 W 11 W	11 W 11 W	10 U	10 U	10 U	11 U
Acetone	ugKg	10J	11 W	12 LU	12 UJ	11 W	11 W	10 U 10 U	6 J 10 U	10 U 10 U	5 J 11 U
Carbon Disuffide	ug/Kg	11 W	11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U	11 U
1,1-Dichloroethene	ug/Kg	11 W	11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U	11 U
1,1-Dichloroethane	ug/Kg	11 W	11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U	11 U
1,2-Dichloroethene (total) Chloroform	ug/Kg ug/Kg	11 W 11 W	11 W 11 W	12 W 12 W	12 W 12 W	11 W	11 W	10 U	10 U	10 U	, 11 U
1,2-Dichloroethane	ug/Kg	11 W	11 W	12 W	12 W	6 J 11 LU	11 W 11 W	10 U 10 U	10 U 10 U	10 U	11 U
2-Butanone	ug/Kg	11 W	11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U 10 U	11 U 11 U
1,1,1-Trichloroethane	ug/Kg	11 W	11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U	11 U
Carbon Tetrachloride	ug/Kg	11 W	11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U	11 Ü
Bromodichloromethane 1,2-Dichloropropane	ug/Kg	11 W 11 W	11 W 11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U	11 U
cis-1,3-Dictioropropene	ug/Kg ug/Kg	11 W	11 W	12 W 12 W	12 W 12 W	11 W 11 W	11 W 11 W	10 U 10 U	10 U	10 U	11 U
Trichloroethene	ug/Kg	11 W	11 W	12 W	12 W	11 W	11 W	10 U	10 U 10 U	10 U 10 U	11 U 11 U
Dibromochoromethane	ugKg	11 W	11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U	11 U
1,1,2-Trichloroethane	ugKg	11 W	11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U	11 U
Bertzene trans-1,3-Dichloropropene	ug/Kg	11 W 11 W	11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U	11 U
Bromoform	ug/Kg ug/Kg	11 W	11 W 11 W	12 W 12 W	12 W 12 W	11 W 11 W	11 W 11 W	10 U	10 U	10 U	11 U
4-Methyl-2-Pentanone	ug/Kg	11 W	11 W	12 W	12 W	11 W	11 W	10 U 10 U	10 U 10 U	10 U 10 U	11 U
2-Hexanone	ug/Kg .	11 W	11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U	11 U 11 U
Tetrachloroethene	ug/Kg	11 W	11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U	11 U
1,1,2,2—Tetrachioroethane	ug/Kg	11 W	11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U	11 Ŭ
Toluene Chlorobenzene	ug/Kg ug/Kg	11 W 11 W	11 W 11 W	12 W 12 W	12 W 12 W	11 W	11 W	10 U	10 U	10 U	11 U
Ethylbenzene	ug/Kg	11 W	11 W	12 W	12 W	11 W 11 W	11 W 11 W	10 U 10 U	10 U 10 U	10 U	11 U
Styrene	ug/Kg	11 W	11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U 10 U	11 U 11 U
Xylene (total)	ug/Kg	11 W	11 W	12 W	12 W	11 W	11 W	10 U	10 U	10 U	11 U
MTBE	ug/Kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA NA
HERBICIDES		•									
2.4-D	ug∦g	55 U	NS	260	NS	56 U	57 U	54 U	52 U	51 U	
2,4-DB	ug/Kg	55 U	NS	170 U	NS	56 U	57 U	54 U	52 U	51 U	53 U 53 U
2,4,5-T	ug/Kg	15	NS	220	NS	11	5.7 U	5.4 U	5.2 U	5.1 U	5.3 U
2,4,5—TP (Silvex)	ug/Kg	5.5 U	NS	17 U	NS	5.6 U	5.7 U	5.4 U	5.2 U	5.1 U	5.3 U
Dalapon Dicamba	ug/Kg ug/Kg	140 U 5.5 U	NS NS	410 U 17 U	NS NS	140 U 5.6 U	140 U	130 U	130 U	130 U	130 U
Dictioroprop	ug/Kg	55 U .	NS	17 U	NS NS	5.6 U	5.7 U 57 U	5.4 U 54 U	5.2 U	5.1 U	5.3 U
Dinoseb	ug/Kg	28 U	NS	84 U	NS	28 U	29 U	27 U	52 U 26 U	51 U 26 U	53 U
MCPA	ug/Kg	5500 U	NS	17000 U	NS	5600 U	5700 U	5400 U	5200 U	5100 U	27 U 5300 U
MCPP	ug/Kg	5500 U	NS	17000 U	NS	5600 U	5700 U	5400 U	5200 U	5100 U	5300 U
NITROAROMATICS											
HMX	ug/Kg	130 U	NS	99 J	NS	110 J	130 UJ	40011			
RDX	ug/Kg	130 U	NS	130 U	NS	130 U	130 W	130 U 130 U	130 UJ 130 UJ	120 J 130 W	130 UJ
1,3,5—Trinitrobenzene	ug/Kg	130 U	NS	130 U	NS	130 U	130 UJ	130 U	130 W	130 W	130 UJ - ` 130 UJ
1,3-Dinitroberizens	ugKg	130 U	NS	130 U	NS	130 U	130 UJ	130 U	130 W	130 W	130 UJ
Tetryl 2.4.6-Trinktrotoluene	ug/Kg	130 U 130 U	NS NS	130 U	NS	130 U	130 W	130 U	130 LU	130 UJ	130 UJ
4-amino-2.6-Dinitrotoluene	ug/Kg ug/Kg	130 U 130 U	NS NS	130 U 130 U	NS NS	130 U	130 W	130 U	130 W	130 W	130 UJ
2-amino-4,6-Dinitrotduene	ug/Kg	130 U	NS	130 U	NS NS	130 J 130 U	130 UJ 130 UJ	130 U	130 UJ	130 W	130 UJ
2,6-Dinitrotoluene	ug/Kg	130 U	NS	130 U	NS	130 U	130 UJ	130 U 130 U	130 W 130 W	130 LU	130 UJ ·
2,4-Dinitrotoluene	ug/Kg	290 J	NS	330 J	NS	420 J	400 J	130 U	130 W	130 W 130 W	130 UJ 130 UJ
									100 00	130 00	130 03

NOTES: NS stands for NOT SAMPLED NA stands for NOT ANALYZED ND stands for NOT DETECTED

#### SENECA ARMY DEPOT SEAD-28 EXPANDED SITE INSPECTION SURFACE WATER ANALYSIS RESULTS

	MATRIX LOCATION SAMPLE DATE ES ID LAB ID	WATER SEAD-26 11/01/93 SW26-1 202399	WATER SEAD-26 11/01/93 SW200 202944
COMPOUND	UNITS	LULSUS	SW26-1DUP
VOLATILE ORGANICS			
Chloromethane	ug/L	10 U	NS
Bromomethane	ug/L	10 U	NS
Vinyl Chloride	ug/L	10 U	NS
Chloroethane	ug/L	10 U	NS NS
Methylene Chloride Acetone	ug/L ug/L	10 U 10 U	NS NS
Carbon Disulfide	ug/L	10 U	NS
1.1-Dichloroethene	ug/L	10 U ·	NS
1,1-Dichloroethane	ug/L	10 U	NS
1,2-Dichloroethene (total)	ug/L	10 U	NS
Chloroform	u <b>g/</b> L	10 U	NS
1,2-Dichloroethane	ug/L	10 U	NS
2-Butanone	ug/L	10 U	NS NS
1,1,1-Trichloroethane Carbon Tetrachloride	ug/L	10 U 10 U	NS NS
Bromodichloromethane	ug/L ug/L	10 U	NS NS
1,2-Dichloropropane	ug/L	10 U	NS
cis-1,3-Dichloropropene	ug/L	10 U	NS
Trichloroethene	ug/L	10 U	NS
Dibromochloromethane	ug/L	10 U	NS
1,1,2-Trichloroethane	ug/L	10 U	NS
Benzene	ug/L	10 U	NS
trans-1,3Dichloropropene	ug/L	10 U	NS
Bromoform 4-Methyl-2-Pentanone	ug/L	10 U 10 U	NS NS
2-Hexanone	ug/L ug/L	100	NS
Zenezarone Tetrachloroethene	ug/L	10 U	NS
1.1.2.2-Tetrachloroethane	ug/L	10 U	NS
Toluene	ug/L	10 U	NS
Chloroberizene	ug/L	10 U	NS
Ethylbenzene	ug/L	10 U	NS
Styrene	ug/L	10 U	NS
Xylene (total)	ug/L	10 U	NS NS
MTBE	ug/L	NA	NS
HERBICIDES			
2.4-D	ug/L	1.1 U	NS
2,4-DB	ug/L	2.9	NS
2,4,5-T	ug/L	0.11 U	NS
2,4,5-TP (SINex)	ug/L	0,11 U	NS
Dalapon	ug/L	2.4 <sub>.</sub> U 0.11 U	NS NS
Dicamba Dichloroprop	ug/L ug/L	0.11 U	NS NS
Dinoseb	ug/L	0.52 U	NS
MCPA	ug/L	110 U	NS
MCPP	ug/L	110 U	NS
NITROAROMATICS			
HMX	ug/L	0.13 U	NS
RDX	ug/L	0.13 U	NS
1,3,5-Trinitroberzene	ug/L	0.13 U 0.13 U	NS NS
1,3 - Dinitroberzene Tetrvi	ug/L ug/L	0.13 U	NS NS
2.4.6Trinitrotoluene	ug/L	0.13 U	NS
4-amino -2.6-Dinitrotoluene	ug/L	0.13 U	NS
2-amino -4,6-Dinitrotoluene	ug/L	0.13 U	NS
2,6-Dinitrotoluene	ug/L	0.13 U	NS
2,4-Dinitrotoluene	ug/L	3.5	NS

NOTES:

NS stands for NOT SAMPLED NA stands for NOT ANALYZED

#### SENECA ARMY DEPOT SEAD-26 EXPANDED SITE INSPECTION SURFACE WATER ANALYSIS RESULTS

	MATRIX LOCATION SAMPLE DATE ES ID LAB ID	WATER SEAD-26 11/01/93 SW26-1 202939	WATER SEAD26 11/01/93 SW200 202944
COMPOUND	UNITS	202939	SW26-1DUF
SEMIVOLATILE ORGANICS	Silli S		0,100 1001
Phenol	u <b>g/</b> L	20 U	NS
bis(2-Chloroethyl) ether	ug/L	20 U	NS
2-Chlorophenol	ug/L	20 U 20 U	NS NS
1,3-Dichlorobenzene 1,4-Dichlorobenzene	ug/L ug/L	20 U	NS NS
1,2-Dichloroberzene	ug/L	20 U	NS
2-Methylphenol	ug/L	20 U	NS
2,2'-oxybis (1-Chloropropane)	ug/L	20 U	NS
4-Methylphenol	ug/L	20 U	NS
N-Nitroso-di-n-propylamine Hexachloroethane	ug/L	20 U	NS NS
Nitrobenzene	ug/L ug/L	20 U	NS
isophorone	ug/L	20 U	NS
2-Ntrophenol	ug/L	20 U	NS
2,4-Dimethylphenol	ug/L	20 U	NS
bis(2-Chloroethoxy) methane 2,4-Dichlorophenol	ug/L ug/L	20 U 20 U	NS NS
1,2,4—Trichlorobenzene	ug/L	20 U	NS
Naphhalene	ug/L	20 U	NS
4-Chloroaniline	ug/L	20 U	NS
Hexachlorobutacliene	ug/L	20 U	NS
4-Chloro-3-methylphenol 2-Methylnaphthalene	ug/L	20 U 20 U	NS NS
Hexachiorocyclopentadiene	ug/L ug/L	20 U	NS
2,4,6Trichlorophenol	ug/L	20 U	NS
2,4,5-Trichlorophenol	ug/L	51 U	NS
2-Chloronaphthalene	ug/L	20 U	NS
2-Nitroaniline Dimethylphihalate	ug/L ug/L	51 U 20 U	NS NS
Acenaphinylene	ug/L	20 U	NS
2,6-Dinitrotoluene	ug/L	20 U	NS
3-Nitroaniline	ug/L	51 U	NS
Acenaphthene 2,4Dinitrophenol	ug/L ug/L	20 U 51 U	NS NS
4-Nitrophenoi	ug/L	51 U	NS
Dibenzofuran	ug/L	20 U	NS
2,4-Dinitrotoluene	ug/L	20 U	NS
Diethylphthalate 4-Chlorophenyl-phenylether	ug/L	20 U	NS NS
Fluorene	ug/L ug/L	20 U	NS
4-Nitroaniline	ug/L	51 U	NS
4,6-Dinitro-2-methylphenol	ug/L	51 U	NS
N-Nitrosodiphenylamine	u <b>g/</b> L	20 U	NS
4-Bromophenyl-phenylether Hexachloroberzene	ug/L ug/L	20 U 20 U	NS NS
Pentachlorophenol	ug/L	51 U	NS
Phenantrene	ug/L	20 U	NS
Anthracene	ug/L	20 U	NS
Carbazole Di-n-butylphthalate	ug/L ug/L	20 U 20 U	NS NS
Fluoranthene	ug/L	20 U	NS
Pyrane	ug/L	20 U	NS
Butylberzylphthalate	ug/L	20 U	NS
3,3'-Dichlorobenzidine	ug/L	20 U	NS
Benzo(a)anthracene Chrysene	ug/L ug/L	20 U 20 U	NS NS
bis(2-Ethylhexy)phthalate	ug/L	20 U	NS
Di-n-octylphthalate	ug/L	20 U	NS
Benzo(b)fluoranthene	ug/L	20 U	NS
Benzo(k)fluoranthene	ug/L	20 U	NS
Berizo(a)pyrene Indeno(1,2,3-cd)pyrene	ug/L ug/L	20 U	NS NS
Dibenz(a,h)antracene	ug/L	20 U	NS
Benzo(g,h,i)perylene	ug/L	20 U	NS

#### SENECA ARMY DEPOT SEAD-26 EXPANDED SITE INSPECTION SURFACE WATER ANALYSIS RESULTS

COMPOUND	MATRIX LOCATION SAMPLE DATE ES ID LAB ID UNITS	WATER SEAD-26 11/01/93 SW26-1 202939	WATER SEAD-26 11/01/93 SW200 202944 SW26-1DUP
PESTICIDES/PCB	UNITS		54450-1DUF
aloha – BHC	ug/L	0.05 LU	NS
beta-BHC	ug/L	0.05 UJ	NS
delta-BHC	ug/L	0.05 W	NS
gamma-BHC (Lindane)	ug/L	0.05 W	NS
Heptachlor	ug/L	0.05 UJ	NS
Aldrin	ug/L	0.05 W	NS
Heptachlor epoxide	ug/L	0.05 W	NS
Endosulian I	ug/L	0.05 W	NS
Diekhin	ug/L	0.1 W	NS
4,4'-DDE	ug/L	0.1 W	NS
Endrin	ug/L	0.1 W	NS NS
Endosulfan II	ug/L	0.1 W 0.1 W	NS NS
4,4'-DDD Endosulfan sulfate	ug/L ug/L	0.1 W	NS NS
4,4'-DDT	ug/L	0.1 LU	NS
Methoxychlor	ug/L	0.5 UJ	NS
Endrin ketone	ug/L	0.1 W	NS
Endrin aldehyde	ug/L	0.072 J	NS
alpha-Chiordane	ug/L	0.05 W	NS
gamma-Chlordane	ug/L	0.05 WJ	NS
Toxaphene	ug/L	5 W	NS
Arccior-1016	ug/L	1 W	NS
Aroclor-1221	ug/L	2 W	NS
Aroclor-1232	ug/L	1 W	NS
Aroclor-1242	ug/L	1 Ա 1 Ա	NS NS
Aroclor = 1248 Aroclor = 1254	ug/L	1 W	NS NS
Aroclor 1254 Aroclor 1260	ug/L ug/L	1 W	NS
METALS			
Aluminum	ug/L	44.5 U	NS
Antimony	ug/L	52.3 U	NS
Arseric	ug/L	7 J	NS
Barium	ug/L	84.4 J	NS
Beryllium	ug/L	0.3 U	NS
Cadmium	ug/L	3.3 U	NS
Calcium Chromium	ug/L ua/L	61200 2.5 U	NS NS
Cobalt	ug/L ug/L	2.5 U 4.9 U	NS NS
Copper	ug/L	3.7 U	NS
iron	ug/L	2940 J	NS
Lead	ug/L	2.8°J	NS
Magnesium	ug/L	4530 J	NS
Manganese	ug/L	55.5	NS
Mercury	ug/L	0.07 U	NS
Nickel	ug/L	6.3 J	NS
Potassium	ug/L	2510 J	NS
Selerium	ug/L	1.1 U	NS
Silver	ug/L	6.6 UJ 4670 J	NS NS
Sodium Thalium	ug/L ug/L	4670 J 1.2 U	NS NS
Vanadum	ug/L	3.3 U	NS
Zinc	ug/L	7.1 J	NS
Cyanide	ug/L	8.5	NS
OTHER ANALYSES			
Nitrate/Nitrite - Nitrogen	mg/L	0,03	NS
Total Petroleum Hydrocarbons	mg/L	4	4.17
Fluoride	mg/L	NS	NS
pH	standard units	NA NA	NA NA
Specific Conductivity	umhos/cm NTU	NA NA	NA NA
Turbidity	NIU	NA	NA

	MATRIX	SOIL	SOIL
	LOCATION	SEAD-26	SEAD-26
	DEPTH (FEET)	0-0.5	0-0.5
	SAMPLE DATE	11/01/93	11/01/93
	ES ID	SD26-1	SD200
	LAB ID	202995	203000
COMPOUND VOLATILE ORGANICS	UNITS		SD26~1DUP
Chloromethane	ug/Kg	13 U	NS
Bromomethane	ug/Kg	13 U	NS
Vinvi Chloride	ug/Kg	13 U	NS
Chloroethane	ug/Kg	13 U	NS
Methylene Chloride	ug/Kg	13 U	NS
Acatone	ug/Kg	26	NS
Carbon Disutfide	ug/Kg	13 U	NS
1,1-Dichloroethene	ug/Kg	13 U	NS
1,1-Dichloroethane	ug/Kg	13 U	NS
1,2-Dichloroethene (total) Chloroform	ug/Kg	13 U 13 U	NS NS
1.2-Dichloroethane	ug/Kg ug/Kg	13 U	NS NS
2-Butanone	ug/Kg	23	NS NS
1,1,1-Trichloroethane	ug/Kg	13 U	NS
Carbon Tetrachloride	ug/Kg	13 U	NS
Bromodichloromethane	ug/Kg	13 U	NS
1,2-Dichloropropane	ug/Kg	13 U	NS
cis-1,3-Dichloropropene	ug/Kg	13 U	NS
Trichloroethene Dibromochloromethane	ug/Kg	13 U	NS
1.1.2-Trichloroethane	ug/Kg ug/Kg	13 U 13 U	NS NS
Benzene	ug/Kg	13 U	NS .
trans-1,3-Dichloropropene	ug/Kg	13 U	NS
Bromoform	ug/Kg	13 U	NS
4-Methyl-2-Pentanone	ug/Kg	13 U	NS
2-Hexanone	ug/Kg	13 U	NS
Tetrachioroethene	ug/Kg	13 U	NS
1,1,2,2-Tetrachloroethane Toluene	ug/Kg	13 U	NS
Chlorobenzene	ug/Kg ug/Kg	13 U 13 U	NS NS
Ethylberzene	ug/Kg	13 U	NS
Styrene	ug/Kg	13 U	NS
Xylene (total)	ug/Kg	13 U	NS
MTBE	ug/Kg	NA	NS.
LIPPRIORPE			
HERBICIDES 2.4-D	ug/Kg	60 U	NS
2,4-DB	ug/Kg	60 U	NS
2.4.5-T	ug/Kg	21	NS
2,4,5-TP (Sivex)	ug/Kg	6 U	NS
Dalapon	ug/Kg	150'U	NS
Dicamba	ug/Kg	6 U	NS
Dichloroprop	ug/Kg	60 U	NS
Dinoseb MCPA	ug/Kg ug/Ka	30 U	NS NS
MCPP	ug/Kg	6000 U	NS NS
3.0.1		00000	NO.
NITROAROMATICS			
HMX	ug/Kg	72 J	NŞ
RDX	ug/Kg	130 U	NS
1,3,5-Trinitrobergene	ug/Kg	130 U	NS
1,3-Dinitrobenzene Tetryl	ug/Kg	130 U 130 U	NS
2.4.6—Trinitrotokuene	ug/Kg ug/Ka	130 U	NS NS
4-amino-2.6-Dinitrotoluene	ug/Kg	130 U	NS NS
2-artino -4,6-Dinitrotoluene	ug/Kg	130 U	NS
2,6-Dinitrotoluene	ug/Kg	130 U	NS
2,4-Dinitrotoluene	ug/Kg	660 J	NS

NOTES:

NS stands for NOT SAMPLED NA stands for NOT ANALYZED

	MATRIX LOCATION DEPTH (FEET) SAMPLE DATE ES ID	SOIL SEAD-26 0-0.5 11/01/93 SD26-1	SOIL SEAD-26 0-0.5 11/01/93 SD200
	LAB ID	202995	203000
COMPOUND SEMIVOLATILE ORGANICS	UNITS		SD26~1DUP
Phenol	ug/Kg	7800 U	NS
bis(2Chloroethyl) ether	ug/Kg	7800 U	NS
2-Chlorophenol	ug/Kg ug/Kg	7800 U 7800 U	NS NS
1,3-Dichlorobenzene 1,4-Dichlorobenzene	ug/Kg ug/Kg	7800 U	NS
1,2-Dichloroberzene	ug/Kg	7800 U	NS
2-Methylphenol	ug/Kg	7800 U 7800 U	NS NS
2,2'-oxytris (1-Chloropropane) 4-Methylphenol	ug/Kg ug/Kg	7800 U 7800 U	NS NS
N-Nitroso-d-n-propylamine	ug/Kg	7800 U	NS
Hexachloroethane	ug/Kg	7800 U	NS
Nitrobenzene Isophorone	ug/Kg ug/Kg	7800 U 7800 U	NS NS
2-Nitrophenol	ug/Kg	7800 U	NS
2.4-Dimethylphenol	ug/Kg	7800 U	NS
bis(2-Chloroethoxy) methane	ug/Kg	7800 U	NS
2,4-Dichlorophenol 1,2,4-Trichlorobenzene	ug/Kg ug/Kg	7800 U 7800 U	NS NS
Naphihalene	ug/Kgi	7800 U	NS
4-Chloroaniline	ug/Kg	7800 U	NS
Hexachlorobutadiene	ug/Kg	7800 U	NS NS
4-Chloro-3-methylphenol 2-Methylnaphthalene	ug/Kg ug/Kg	7800 U 420 J	NS
Hexachlorocyclopentadiene	ug/Kg	7800 U	NS
2,4,6-Trichlorophenol	ug/Kg	7800 U	NS
2,4,5-Trichlorophenol	ug/Kg	19000 U 7800 U	NS NS
2-Chloronaphthalene 2-Nitroaniline	ug/Kg ug/Kg	19000 U	NS
Dimethylphihalate	ug/Kg	7800 U	NS
Acenaphthylene	ug/Kg	7800 U	NS
2,6 - Dinitrotoluene 3 - Nitroaniline	ug/Kg ug/Kg	7800 U 19000 U	NS NS
Acenaphthene	ug/Kg	7800 U	NS
2,4-Dinitrophenol	ug/Kg	19000 U	NS
4-Nitrophenoi	ug/Kg	19000 U	NS NS
Dibenzoturan 2.4-Dinitrotoluene	ug/Kg ug/Kg	7800 U 7800 U	NS NS
Diethylphthalate	ug/Kg	7800 U	NS
4-Chlorophenyl-phenylether	ug/Kg	7800 U	NS
Fluorene 4Nitroaniline	ug/Kg ug/Kg	7800 U 19000 U	NS NS
4.6-Dinitro-2-methylphenol	ug/Kg	19000 U	NS
N-Nitrosodiphenylamine	ug/Kg	7800 U	NS
4-Bromophenyl-phenylether	ug/Kg	7800 U 7800 U	NS NS
Hexachlorobergene Pentachlorophenol	ug/Kg ug/Kg	19000 U	NS
Phenantrene	ug/Kg	420 J	NS
Anthracene	ug/Kg	7800 U	NS
Carbazole Di –n –butviohthalate	ug/Kg ug/Kg	7800 U 7800 U	NS NS
Fluoranthene	ug/Kg	7800 U	NS
Pyrene	ug/Kg	7800 U	NS
Butylberzylphthalate	ug/Kg	7800 U	NS
3,3' - Dichlorobenzidine Benzo(a) anthracene	ug/Kg ug/Kg	7800 U 7800 U	NS NS
Chrysene	ug/Kg	7800 U	NS
bis (2-Ethylhexyl)phthalate	ug/Kg	7800 U	NS
Di-n-octylphthalate	ug/Kg	7800 U	NS
Berizo(b)fluoranthene Berizo(k)fluoranthene	ug/Kg ug/Kg	7800 U 7800 U	NS NS
Benzo(a)pyrene	ug/Kg ug/Kg	7800 U	NS
Indeno(1,2,3-cd)pyrene	ug/Kg	7800 U	NS
Diberz(a,h)antracene	ug/Kg	7800 U 7800 U	NS
Benzo(g,h,i)perylene	ug/Kg	1800 0	NS

	MATRIX	SOIL	SOIL
I	LOCATION	SEAD-26	SEAD-26
(	DEPTH (FEET)	0-0.5	0-0.5
1	SAMPLE DATE	11/01/93	11/01/93
	ES ID	SD26-1	SD200
	LAB ID	202995	203000
COMPOUND	UNIŢS		SD26-1DU
PESTICIDES/PCB			
alpha-BHC	ug/Kg	2 U	NS
beta-BHC	ug/Kg	2 U	NS
delta-BHC	ug/Kg	2 U	NS
gamma-BHC (Lindane)	ug/Kg	2 U	NS
Heptachlor	ug/Kg	2 U	NS
Aldrin	ug/Kg	20	NS
Heptachior epoxide	ug/Kg	6.4 J	NS
Endosulfan i	ug/Kg	2 U	NS
Dieldrin 4.4'DDE	ug/Kg	3.8 J	NS NS
4,4°DDE Endrin	ug/Kg	13 J 6.5 J	NS NS
Endosulfan II	ug/Kg ug/Kg	6.5 J 4.4 J	NS NS
4.4'-DDD		4.4 J 3.9 U	NS NS
Endosulian sulfate	ug/Kg ug/Kg	3.9 U	NS
4.4'-DDT		3.9 U	NS
Methoxychiar	ug/Kg ug/Kg	20 U	NS NS
Endrin ketone	ug/Kg	3.9 U	NS NS
Endrin aldehyde	ug/Kg	3.9 U	NS
alpha-Chiordane	ug/Kg	2 U	NS
gamma-Chiordane	ug/Kg	20	NS
Toxaphene	ug/Kg	200 U	NS
Arocior-1016	ua/Ka	39 U	NS
Aroclor-1221	ug/Kg	80 U	NS
Aroclor-1232	ug/Kg	39 U	NS
Arocior-1242	ug/Kg	39 U	NS
Aroclor-1248	ug/Ka	39 U	NS
Arocior-1254	ug/Kg	39 U	NS
Arocior-1260	ug/Kg	39 U	NS
A			
METALS Aluminum		!	
	mg/Kg	1270	NS
Antimony Arsenic	mg/Kg	9.6 U	NS
Barlum	mg/Kg mg/Kg	14.6 26 J	NS NS
Beryllium	mg/Kg	0.15 J	NS NS
Cadmium	ma/Ka	0.15U	NS
Calcium	mg/Kg	313000	NS
Chromium	mg/Kg	25	NS
Cobalt	mg/Kg	25J	NS
Copper	mg/Kg	10.9	NS
ron	mg/Kg	3170	NS
Lead	ma/Ka	8.3	NS
Magnesium	ma/Ka	7270	NS
Manganese	mg/Kg	190	NS
Mercury	mg/Kg	0.01 J	NS
Nickel	mg/Kg	10.5	NS
Potassium	mg/Kg	784 J	NS
Selerium	mg/Kg	0.37 J	NS
Silver	mg/Kg	1.2 U	NS
Sodium	mg/Kg	231 J	NS
Thallium	mg/Kg	2.3 U	NS
Vanadum	mg/Kg	7.6 J	NS
Zinc	mg/Kg	34.3	NS
Cyanide	mg/Kg	0.59 U	NS
OTHER ANALYSES			
Nitrate/Nitrite - Nitrogen	ma/Ka	0.02	Ne
Total Solids	mg/kg	0.02 NS	NS NS
Total Petroleum Hydrocarbons	mg/Kg	20000	22000 22000
Fluoride	mg/Kg	NS NS	22000 NS
pH	standard units	NS NS	NS NS
P	TIME COM CO DES	NO	No

SEAD-25
Expanded Site Investigation

Tentatively Identified Compounds

## TENATIVELY IDENTIFIED COMPOUNDS SEAD - 25

		0212	22			
	temp\1E4: 32522	1097 D	ATE:	MATRIX:		
ESID SB2522 SB2522 SB2522 SB2522 SB2522	CAS NO 124-18-5 108-67-8 611-14-3 95-63-6 135-98-8	Benzene, Benzene,	1,3,5-tri 1-ethyl-2 1,2,4-tri (1-methyl	-methyl- methyl-	RESULT 100 20 18 63 w 56	
			NKNOWN TICS	3:	14: 398	
ES: SB	temp\1E43 32523	1097 DA	ATE:	MATRIX:		
LAB: ESID SB2523 SB2523 SB2523 SB2523 SB2523 SB2523	CAS NO 111-84-2 124-18-5 108-67-8 611-14-3 95-63-6 135-98-8	Benzene, Benzene,	1,3,5-tri 1-ethyl-2 1,2,4-tri (1-methyl	-methyl- methyl-	RESULT 56 280 94 65 240 w 110	ŊJ
•		TOTAL UI	NKNOWN TICS TOTAL TICS		31' 1162	
	temp\1E43 2531	L097 D2	ATE:	MATRIX:		
LAB: ESID SB2531 SB2531 SB2531 SB2531	CAS NO 111-84-2 124-18-5 95-63-6 1678-93-9		1,2,4-tri tane, butyl		RESULT 730 2100 1400 580	QUAL. NJ NJ NJ NJ
		TOTAL UI	NKNOWN TICS TOTAL TICS		3750 8560	
	temp\1E4: 22532 CAS NO 124-18-5	COMPOUND Decane	ATE: AB:	MATRIX:	RESULT	QUAL. NJ NJ
SB2532 SB2532 SB2532	108-67-8 611-14-3 95-63-6	Benzene,	1,3,5-tri 1-ethyl-2 1,2,4-tri	-methyl-	19 13 61	NJ

SDG FILE: temp\1E41115 DATE: MATRIX: ES: SB2533 LAB: ESID CAS NO COMPOUND RESULT OUAL. 96-37- CYCLOPENTANE, METHYL-SB2533 36 JX 107-83- PENTANE, 2-METHYL110-54- HEXANE
108-87- CYCLOHEXANE, METHYL589-34- HEXANE, 3-METHYL591-76- HEXANE, 2-METHYL-SB2533 30 JΧ 25 JΧ SB2533 SB2533 32 JX 49 JX SB2533 38 JΧ SB2533 592-27- HEPTANE, 2-METHYL-19 JX SB2533 1678-92- CYCLOHEXANE, PROPYL- W/ UNKN 14 JX SB2533 TOTAL UNKNOWN TICS: 33 TOTAL TICS: 276 SDG FILE: temp\1E41115 DATE: MATRIX: ES: SB2541 LAB: RESULT QUAL. CAS NO COMPOUND 589-81- HEPTANE, 3-METHYL- 1300 592-27- HEPTANE, 2-METHYL- 830 1678-92- CYCLOHEXANE, PROPYL- W/ UNKN 1400 1300 JX SB2541 SB2541 JΧ SB2541 TOTAL UNKNOWN TICS: 2500 TOTAL TICS 6030 SDG FILE: temp\1E41115 DATE: MATRIX: ES: SB2542 LAB: CAS NO COMPOUND RESULT QUAL. ESID CAS NO COMPOUND RESULT QUESTION OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERT SB2542 JΧ SB2542 JX JΧ SB2542 JX JX SB2542 SB2542 589-81- HEPTANE, 3-METHYL-13 JX TOTAL UNKNOWN TICS: 76

TOTAL TICS

138

SDG FILE: temp\1E41115 DATE: MATRIX:

ES: SB2543

LAB:

ESID	CAS NO	COMPOUND	RESULT	QUAL.
SB2543	107-83-	PENTANE, 2-METHYL-	21	JX
SB2543	108-87-	CYCLOHEXANE, METHYL-	18	JX
SB2543	589-34-	HEXANE, 3-METHYL-	28	JX
SB2543	591-76 <i>-</i>	HEXANE, 2-METHYL-	15	JX
SB2543	589-81 <b>-</b>	HEPTANE, 3-METHYL-	30	JN
SB2543	592-27-	HEPTANE, 2-METHYL-	13	JX

TOTAL UNKNOWN TICS: 78
TOTAL TICS 203

SDG FILE: temp\1E41115 DATE: MATRIX:

ES: SB2551

LAB:

ESID	CAS NO	COMPOUND	RESULT	QUAL.
SB2551	110-82-	CYCLOHEXANE	1600	JX
SB2551	96-37 <b>-</b>	CYCLOPENTANE, METHYL-	3600	JX
SB2551	96-14-	PENTANE, 3-METHYL-	3300	JX
SB2551	107-83-	PENTANE, 2-METHYL-	4000	JX
SB2551	110-54-	HEXANE	4100	JX
SB2551	589-34-	HEXANE, 3-METHYL-	4500	JX
SB2551	591-76-	HEXANE, 2-METHYL-	3500	JX
SB2551	1186-53-	PENTANE, 2,2,3,4-TETRAMETHY	2100	JX
SB2551	589-81-	HEPTANE, 3-METHYL- W/ TCL#3!	5 4400	JX
SB2551	592-27-	HEPTANE, 2-METHYL-	3100	JX

TOTAL UNKNOWN TICS: 0
TOTAL TICS 34200

SDG FILE: temp\1E41115 DATE: MATRIX:

ES: SB2552

LAB:

ESID	CAS NO	COMPOUND	RESULT	QUAL.
SB2552	96-37-	CYCLOPENTANE, METHYL-	13000	JX
SB2552	96-14-	PENTANE, 3-METHYL-	14000	JX
SB2552	107-83-	PENTANE, 2-METHYL-	17000	JX
SB2552	110-54-	HEXANE	20000	JX
SB2552	589-34-	HEXANE, 3-METHYL-	21000	JX
SB2552	591-76-	HEXANE, 2-METHYL-	18000	JX
SB2552	142-82-	HEPTANE W/ TCL#33	24000	JX
SB2552	589-81-	HEPTANE, 3-METHYL- W/ T	CL#35 34000	JX
SB2552	592-27-	HEPTANE, 2-METHYL-	19000	JX
SB2552	111-65-	OCTANE W/ SSTD BFB	27000	JX

TOTAL UNKNOWN TICS: 0
TOTAL TICS 207000

SDG FILE: temp\1E41115 DATE: MATRIX: ES: SB2553 LAB: RESULT QUAL. ESID CAS NO COMPOUND 107-83- PENTANE, 2-METHYL-SB2553 740 JX 970 SB2553 110-54- HEXANE JX 589-34- HEXANE, 3-METHYL-591-76- HEXANE, 2-METHYL-589-81- HEPTANE, 3-METHYL- W/ TCL#35 592-27- HEPTANE, 2-METHYL-SB2553 1100 JX SB2553 990 JX SB2553 2200 JX SB2553 1300 JΧ TOTAL UNKNOWN TICS: TOTAL TICS 7300 SDG FILE: temp\1F40197 DATE: MATRIX: ES: SB2511 LAB: CAS NO COMPOUND ESID RESULT OUAL. 2-Pentanone, 4-hydroxy-4-met SB2511 13000
1200
1200
629-62-9 Pentadecane 2200
544-76-3 Hexadecane 3300
629-78-7 Heptadecane 2500
1921-70-6 Pentadecane, 2,6,10,14-tetra 6800
593-45-3 Octadecane 2300
638-36-8 Hexadecane, 2,6,10,14-tetram 3400
629-92-5 Nonadecane 2000
112-95-8 Eicosane
629-94-7 123-42-2 13000 ŊJ SB2511 NJ SB2511 NJ SB2511 ŊJ SB2511 NJ SB2511 NJ SB2511 NJ SB2511 NJ SB2511 ŊJ NJ SB2511 SB2511 NJ SB2511 ŊJ TOTAL UNKNOWN TICS: 18080 TOTAL TICS 60880 SDG FILE: temp\1F40197 DATE: MATRIX: ES: SB2513 LAB: CAS NO RESULT ESID COMPOUND 2-Pentanone, 4-hydroxy-4-met 9200 SB2513 123-42-2

TOTAL UNKNOWN TICS:

TOTAL TICS

4734

13934

SDG FILE: temp\1F40197 DATE: MATRIX:

ES: SB2514

LAB:

ESID CAS NO COMPOUND RESULT QUAL. SB2514 123-42-2 2-Pentanone, 4-hydroxy-4-met 12000 NJ

TOTAL UNKNOWN TICS: 8780 TOTAL TICS 20780

SDG FILE: temp\1F40197 DATE: MATRIX:

ES: SB2521

LAB:

ESID	CAS NO	COMPOUND	RESULT	QUAL.
SB2521	123-42-2	2-Pentanone, 4-hydroxy-4-met	11000	NJ
SB2521	629-50-5	Tridecane	480	NJ
SB2521	629-59-4	Tetradecane	780	J
SB2521	629-62-9	Pentadecane	1000	NJ
SB2521	544-76-3	Hexadecane	1000	NJ
SB2521	629-78-7	Heptadecane	930	NJ
SB2521	1921-70-6	Pentadecane, 2,6,10,14-tetra	a 1400	NJ
SB2521	593-45-3	Octadecane	770	NJ
SB2521	638-36-8	Hexadecane, 2,6,101,4-tetrar	n 720	NJ
SB2521	629-92-5	Nonadecane	700	NJ
SB2521	112-95-8	Eicosane	600	NJ
SB2521	629-94-7	Heneicosane	430	NJ

TOTAL UNKNOWN TICS: 8250
TOTAL TICS 28060

SDG FILE: temp\1F40197 DATE: MATRIX:

ES: SB2522

LAB:

ESID	CAS NO	COMPOUND		RESULT	QUAL.
SB2522	123-42-2	2-Pentanone,	4-hydroxy-4-met	39000	NJ
SB2522	1120-21-4	Undecane		6400	NJ
SB2522	112-40-3	Dodecane		6500	ŊJ
SB2522	629-50-5	Tridecane		6600	NJ
SB2522	90-12-0	Naphthalene,	1-methyl-	4800	NJ
SB2522	629-59-4	Tetradecane		6400	NJ
SB2522	575-41-7	Naphthalene,	1,3-dimethyl-	8000	NJ
SB2522	629-62-9	Pentadecane		7000	ŊJ
SB2522	544-76-3	Hexadecane		4500	NJ
SB2522	629-78-7	Heptadecane		4100	NJ
SB2522	1921-70-6		2,6,10,14-tetra		NJ
SB2522	638-36-8	Hexadecane,	2,6,10,14-tetra	n 7000	ŊJ

TOTAL UNKNOWN TICS: 67400 TOTAL TICS 181700 SDG FILE: temp\1F40197 DATE: MATRIX: ES: SB2523 LAB:

ESID	CAS NO	COMPOUND	RESULT	QUAL.
SB2523	123-42-2	2-Pentanone, 4-hydroxy-4-met	37000	ŊJ
SB2523	1120-21-4	Undecane	4300	NJ
SB2523	112-40-3	Dodecane	4200	NJ
SB2523	629-50-5	Tridecane	3400	NJ
SB2523	90-12-0	Naphthalene, 1-methyl-	3500	NJ
SB2523	575-41-7	Naphthalene, 1,3-dimethyl-	5700	NJ
SB2523	629-62-9	Pentadecane	2900	ŊJ
SB2523	1921-70-6	Pentadecane, 2,6,10,14-tetra	a 13000	NJ
SB2523	638-36-8	Hexadecane, 2,6,10,14-tetrar	n 6300	NJ

TOTAL UNKNOWN TICS: 67300 TOTAL TICS 147600

SDG FILE: temp\1F40197 DATE: MATRIX:

ES: SB2524

LAB:

ESID	CAS NO	COMPOUND	RESULT	QUAL.
SB2524	123-42-2	2-Pentanone, 4-hydroxy-4-met	14000	NJ
SB2524	1120-21-4	Undecane	740	NJ
SB2524	112-40-3	Dodecane	720	NJ
SB2524	629-50-5	Tridecane	1200	NJ
SB2524	629-59-4	Tetradecane	1900	NJ
SB2524	629-62-9	Pentadecane	2600	NJ
SB2524	544-76-3	Hexadecane	2300	NJ
SB2524	629-78-7	Heptadecane	2000	NJ
SB2524	1921-70-6	Pentadecane, 2,6,10,14-tetra	2500	NJ
SB2524	593-45-3	Octadecane	1900	NJ
SB2524	638-36-8	Hexadecane, 2,6,10,14-tetram	1400	NJ
SB2524	629-92-5	Nonadecane	1700	NJ
SB2524	112-95-8	Eicosane	1400	NJ
SB2524	629-94-7	Heneicosane	960	NJ

TOTAL UNKNOWN TICS: 15930 TOTAL TICS . 51250

SDG FIL	E: temp\1F40 SB2531	0197	DATE:	MATRIX:		
LAB: ESID SB2531 SB2531 SB2531 SB2531 SB2531 SB2531 SB2531 SB2531 SB2531 SB2531 SB2531 SB2531 SB2531 SB2531	CAS NO 123-42-2 1120-21-4 112-40-3 629-50-5 629-59-4 629-62-9 544-76-3 629-78-7 1921-70-6 593-45-3 638-636-8 629-92-5 112-95-8 629-94-7	Undecar Dodecar Trideca Tetrade Pentade Hexadea Heptade Pentade	anone, ne ne ane ecane ecane ecane ecane ecane, cane cane, cane	4-hydroxy-4-met 2,6,10,14-tetra	13000 12000 18000 25000 32000 30000 37000 26000 30000	UM UM UM UM UM UM UM UM UM UM
		TOTAL		WN TICS: AL TICS	8870 44770	
ES:	E: temp\1F40 SB2532	0197	D <b>ATE:</b>	MATRIX:		
LAB: ESID SB2532 SB2532		COMPOUND 2-Penta Heptad	anone,	4-hydroxy-4-met	RESULT 12000 89	QUAL. NJ NJ
		TOTAL		WN TICS: AL TICS	820 2028	
SDG FII	E: temp\1F4: SB2533		DATE:	MATRIX:		
ESID SB2533 SB2533 SB2533 SB2533 SB2533 SB2533 SB2533 SB2533 SB2533 SB2533 SB2533 SB2533 SB2533 SB2533	CAS NO 123-42-	COMPOUNI 2-PENTA DODECAL TRIDEC. TETRAD: PENTAD: HEXADE: HEPTAD: OCTADE HEXADE: NONADE EICOSA: HENEIC DOCOSA	ANONE, NE W/ ANE ECANE ECANE ECANE ECANE, CANE CANE CANE OSANE NE	4-HYDROXY-4-ME'DIMETHYLINDAN  2,6,10,14-TETR	1300 1900 2400 2400 3200 4 1900 2700 2700 2300 1900 1300	JX JX JX JX JX JX JX JX JX JX
		TOTAL		WN TICS: AL TICS	900 3910	

SDG FILE: temp\1F41115 DATE: MATRIX: SB2541 ES: LAB: ESID CAS NO COMPOUND RESULT 2-PENTANONE, 4-HYDROXY-4-MET 3600 ВJ SB2541 123-42-JX BENZENE, 1,2,4-TRIMETHYL-12000 SB2541 95-63-124-18-10000 JX SB2541 DECANE 1120-21-11000 JX SB2541 UNDECANE BENZENE, 1,2,3,4-TETRAMETHYL JX SB2541 488-23-9200 SB2541 112-40-DODECANE W/ DIMETHYLINDAN 11000 JX 90-12-NAPHTHALENE, 1-METHYL-11000 JX SB2541 581-42-NAPHTHALENE, 2,6-DIMETHYL-12000 JX SB2541 575-41-544-76-NAPHTHALENE, 1,3-DIMETHYL-15000 JX SB2541 HEXADECANE W/ TRIMETHYLNAPHT JX SB2541 11000 629-78-HEPTADECANE 11000 JX SB2541 PENTADECANE, 2,6,10,14-TETRA 45000 JX 1921-70-SB2541 JX 638-36-HEXADECANE, 2,6,10,14-TETRAM 26000 SB2541 TOTAL UNKNOWN TICS: 115800 TOTAL TICS 303600 temp\1F41115 DATE: MATRIX: SDG FILE: ES: SB2542 LAB: ESID CAS NO COMPOUND RESULT OUAL. 123-42-2-PENTANONE, 4-HYDROXY-4-MET 9500 BJ SB2542 NAPHTHALENE, 1-METHYL-830 JΧ SB2542 90-12-NAPHTHALENE, 2,6,-DIMETHYL-1200 JX SB2542 581-42-NAPHTHALENE, 1,3-DIMETHYL-NAPHTHALENE, 1,6-DIMETHYL-JX 1400 SB2542 575-41-JΧ SB2542 575-43-840 629-78-HEPTADECANE 830 JX SB2542 1921-70-PENTADECANE, 2,6,10,14-TETRA 5700 JΧ SB2542 HEXADECANE, 2,6,10,14-TETRAM JX 638-36-3100 SB2542 629-99- PENTACOSANE 770 JX SB2542 TOTAL UNKNOWN TICS: 22450

TOTAL TICS

46620

SDG FILE: temp\1F41115 DATE: MATRIX:

ES: SB2543

LAB:

ESID	CAS NO	COMPOUND	RESULT	QUAL.
SB2543	123-42-	2-PENTANONE, 4-HYDROXY-4-MET	8000	BJ
SB2543	1120-21-	UNDECANE	660	JX
SB2543	112-40-	DODECANE W/ DIMETHYLINDAN	680	JX
SB2543	90-12-	NAPHTHALENE, 1-METHYL-	620	JX
SB2543	629-59-	TETRADECANE	590	JX
SB2543	581-42-	NAPHTHALENE, 2,6-DIMETHYL-	760	JX
SB2543	575-41-	NAPHTHALENE, 1,3-DIMETHYL-	930	JX
SB2543	629-62-	PENTADECANE	750	JX
SB2543	544-76-	HEXADECANE	860	JX
SB2543	629-78-	HEPTADECANE	920	JX
SB2543	1921-70-	PENTADECANE, 2,6,10,14-TETRA	2500	JX
SB2543	593-45-	OCTADECANE	730	JX
SB2543	638-36-	HEXADECANE, 2,6,10,14-TETRAM	1400	JX
SB2543	629-92-	NONADECANE	710	JX

TOTAL UNKNOWN TICS: 6950 TOTAL TICS 27060

SDG FILE: temp\1F41115 DATE: MATRIX:

ES: SB2551

LAB:

ESID	CAS NO	COMPOUND	RESULT	QUAL.
SB2551	123-42-	2-PENTANONE, 4-HYDROXY-4-MET	3500	BJ
SB2551	112-40-	DODECANE W/ DIMETHYLINDAN	32000	JX
SB2551	629-50-	TRIDECANE	49000	JX
SB2551	629-59-	TETRADECANE	54000	JX
SB2551	629-62-	PENTADECANE	69000	JX
SB2551	544-76-	HEXADECANE	69000	JX
SB25'51	629-78-	HEPTADECANE	82000	JX
SB2551	1921-70-	PENTADECANE, 2,6,10,14-TETRA	4 63000	JX
SB2551	593-45-	OCTADECANE	61000	JX
SB2551	638-36 <b>-</b>	HEXADECANE, 2,6,10,14-TETRAN	1 38000	JX
SB2551	629-92-	NONADECANE	59000	JX
SB2551	112-95-	EICOSANE	52000	JX
SB2551	629-94-	HENEICOSANE .	43000	JX
SB2551	629-97-	DOCOSANE	29000	JX

TOTAL UNKNOWN TICS: 216000 TOTAL TICS 919500

SDG FILE: temp\1F41115 DATE: MATRIX: ES: SB2552 LAB: ESID CAS NO COMPOUND RESULT OUAL. 2-PENTANONE, 4-HYDROXY-4-MET 5300 SB2552 123-42-BJ SB2552 620-14- BENZENE, 1-ETHYL-3-METHYL-1400 JX SB2552 108-67- BENZENE, 1,3,5-TRIMETHYL- W/ 840 JX 95-63- BENZENE, 1,2,4-TRIMETHYL-526-73- BENZENE, 1,2,3-TRIMETHYL-1120-21- UNDECANE SB2552 2400 JX SB2552 730 JX SB2552 1400 JX DODECANE W/ DIMETHYLINDAN SB2552 112-40-1700 JX SB2552 629-50- TRIDECANE 1800 JX SB2552 629-59-TETRADECANE 1400 JX 629-62-SB2552 PENTADECANE JX 1400 544-76- HEXADECANE 629-78- HEPTADECANE SB2552 1300 JX SB2552 1200 JX SB2552 593-45- OCTADECANE 890 JX SB2552 629-92- NONADECANE 920 JX 112-95- EICOSANE SB2552 840 JX 629-94-SB2552 HENEICOSANE 740 JX TOTAL UNKNOWN TICS: 6410 TOTAL TICS 30670 SDG FILE: temp\1F41115 DATE: MATRIX: SB2553 ES: LAB: ESID CAS NO COMPOUND RESULT QUAL. 123-42- 2-PENTANONE, 4-HYDROXY-4-MET BJSB2553 3700 620-14- BENZENE, 1-ETHYL-3-METHYL-108-67- BENZENE, 1,3,5-TRIMETHYL- W/ 95-63- BENZENE, 1,2,4-TRIMETHYL-SB2553 19000 JX SB2553 12000 JX SB2553 35000 JX JX SB2553 124-18-DECANE 10000 526-73- BENZENE, 1,2,3-TRIMETHYL-SB2553 10000 JX 1120-21-SB2553 UNDECANE 17000 JΧ 824-22- 1H-INDENE, 2,3-DIHYDRO-4-M 112-40- DODECANE W/ DIMETHYLINDAN 1H-INDENE, 2,3-DIHYDRO-4-MET SB2553 9500 JX SB2553 20000 JX 629-50-20000 TRIDECANE JX SB2553 629-59- TETRADECANE SB2553 18000 JX 629-62- PENTADECANE SB2553 19000 JΧ 544-76- HEXADECANE 629-78- HEPTADECANE 1921-70- PENTADECANE, 2,6,10,14-TETRA JX SB2553 19000 SB2553 20000 JX 11000 JX SB2553 JX 593-45- OCTADECANE 15000 SB2553 629-92-NONDECANE 15000 JX SB2553 112-95- EICOSANE 13000 JX SB2553 629-94-HENEICOSANE JX 11000 SB2553

TOTAL UNKNOWN TICS:

TOTAL TICS

20600

317800

SDG FILE: temp\1F41115 DATE: MATRIX:

ES: SB2561

LAB:

ESID	CAS NO	COMPOUND	RESULT	QUAL.
SB2561	123-42-	2-PENTANONE, 4-HYDROXY-4-ME	r 2700	$_{ m BJ}$
SB2561	832-71-	PHENANTHRENE, 3-METHYL- W/	H 240	JX
SB2561	2531-84-	PHENANTHRENE, 2-METHYL- W/	H 360	JX
SB2561	832-69-	PHENANTHRENE, 1-METHYL-	99	JX
SB2561	238-84-	11H-BENZO [A] FLUORENE	180	JX
SB2561	239-35-	BENZO[B] NAPHTHO[2,1-D] THIOP	H 100	JX
SB2561	630-03-	NONACOSANE	180	JX
SB2561	192-97-	BENZO [E] PYRENE	330	JX
SB2561	630-04-	HENTRIACONTANE	320	JX
SB2561	630-05-	TRITRIACONTANE	96	JX

TOTAL UNKNOWN TICS: 1667
TOTAL TICS 6272

SDG FILE: temp\1F41115 DATE: MATRIX:

ES: SB2562

LAB:

ESID CAS NO COMPOUND RESULT QUAL.
SB2562 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 3100 BJ
SB2562 74381-40- PROPANOIC ACID, 2-METHYL-, 1 130 JX

TOTAL UNKNOWN TICS: 840
TOTAL TICS 4070

SDG FILE: temp\1E40798 DATE: MATRIX:

ES: MW253

LAB:

ESID	CAS NO	COMPOUND	RESULT	QUAL.
MW253	78-78-	BUTANE, 2-METHYL-	56	JX
MW253	109-66-	PENTANE	36	JX
MW253	96-37-	CYCLOPENTANE, METHYL-	84	JX
MW253	79-29-	BUTANE, 2,3-DIMETHYL-	18	JX
MW253	107-83-	PENTANE, 2-METHYL-	39	JX
MW253	110-54-	HEXANE .	18	JX
MW253	108-87-	CYCLOHEXANE, METHYL-	16	JX
MW253	589-34-	HEXANE, 3-METHYL-	20	JX

TOTAL UNKNOWN TICS: 62
TOTAL TICS 349

SDG FILE: temp\1F40798 DATE: MATRIX: MW253 ES: LAB: CAS NO ESID COMPOUND RESULT QUAL. 123-42-2-PENTANONE, 4-HYDROXY-4-MET 12 ВJ MW253 611-14- BENZENE, 1-ETHYL-2-METHYL-JΧ 8 MW253 108-67- BENZENE, 1,3,5-TRIMETHYL-MW253 4 JX 1462-07-CYCLOPENTENE, 1-(1-METHYLETH 7 JX MW253 95-63- BENZENE, 1,2,4-TRIMETHYL-12 JΧ MW253 496-11- 1H-INDENE, 2,3-DIHYDRO-95-93- BENZENE, 1,2,4,5-TETRAMETHYL 527-53- BENZENE, 1,2,3,5-TETRAMETHYL 5 JΧ MW253 3 JΧ MW253 4 JΧ MW253 6 JΧ 824-22-1H-INDENE, 2,3-DIHYDRO-4-MET MW253 2 JΧ 544-63- TETRADECANOIC ACID MW253 9 57-10- HEXADECANOIC ACID ВJ MW253 3 JΧ 57-11-OCTADECANOIC ACID MW253 TOTAL UNKNOWN TICS: 61 TOTAL TICS 136 MATRIX: SDG FILE: temp $\1F40798$  DATE: ES: MW253RE LAB: CAS NO COMPOUND RESULT QUAL. ESID 2-PENTANONE, 4-HYDROXY-4-MET BJ123-42-MW253RE 1462-07-CYCLOPENTENE, 1-(1-METHYLETH JΧ 10 MW253RE 57-10- HEXADECANOIC ACID 7 JΧ MW253RE 57-11-OCTADECANOIC ACID 3 JX MW253RE TOTAL UNKNOWN TICS: 13

TOTAL TICS

40

# SEAD-26 Expanded Site Inspection

Tentatively Identified Compounds

- SEAD-26

.

#### TENATIVELY IDENTIFIED COMPOUNDS SEAD - 26

SDG FILE: temp\1E40339 DATE: MATRIX:

ES: SS261

LAB:

RESULT QUAL. ESID CAS NO COMPOUND SS261 79-20-9 Acetic a

Acetic acid, methyl ester 10 NJ

TOTAL UNKNOWN TICS: 127

TOTAL TICS 137

SDG FILE: temp\1E40339 DATE: MATRIX:

ES: SS261RE

LAB:

ESID CAS NO COMPOUND SS261RE 79-20-9 Acetic a RESULT QUAL.

Acetic acid, methyl ester 13 NJ

TOTAL UNKNOWN TICS: 114

TOTAL TICS 127

SDG FILE: temp\1E40339 DATE: MATRIX:

ES: SS262

LAB:

ESID CAS NO COMPOUND RESULT QUAL.

TOTAL UNKNOWN TICS:
TOTAL TICS 69

69

SDG FILE: temp\1E40339 DATE: MATRIX:

ES: SS262RE

LAB:

ESID CAS NO COMPOUND RESULT QUAL. SS262RE 75-18-3 Dimethyl sulfide 6 NJ SS262RE 79-20-9 Acetic acid, methyl ester 7 NJ

TOTAL UNKNOWN TICS: 79

TOTAL TICS 92

SDG FILE: temp\1E40339 DATE: MATRIX:

ES: SS263

LAB:

RESULT QUAL. ESID CAS NO COMPOUND

> TOTAL UNKNOWN TICS: 1047

1047 TOTAL TICS

SDG FILE: temp\1E40339 DATE: MATRIX: ES: SS269 LAI ESID CAS NO COMPOUND LAB: RESULT OUAL. TOTAL UNKNOWN TICS: 1161 TOTAL TICS 1161 SDG FILE: temp\1E40339 DATE: MATRIX: ES: SS269DL LAB: RESULT QUAL. ESID CAS NO COMPOUND TOTAL UNKNOWN TICS: TOTAL TICS 2880 2880 SDG FILE: temp\1F40339 DATE: MATRIX: ES: SS261 CAS NO COMPOUND RESULT QUAL.

123-42- 2-PENTANONE, 4-HYDROXY-4-MET 19000 BJ
629-59- TETRADECANE 23000 JX
629-62- PENTADECANE 19000 JX
544-76- HEXADECANE 22000 JX
629-78- HEPTADECANE 23000 JX
1921-70- PENTADECANE, 2,6,10,14-TETRA 90000 JX
593-45- OCTADECANE 21000 JX
638-36- HEXADECANE, 2,6,10,14-TETRAM 50000 JX
629-92- NONADECANE 22000 JX
112-95- EICOSANE 28000 JX
629-94- HENEICOSANE 19000 JX LAB: ESID SS261 SS261 SS261 SS261 SS261 SS261 SS261 SS261 SS261 SS261 SS261 289000 TOTAL UNKNOWN TICS: TOTAL TICS 625000 SDG FILE: temp\1F40339 DATE: MATRIX: ES: SS262 CAS NO COMPOUND RESULT QUAL.

123-42- 2-PENTANONE, 4-HYDROXY-4-MET 38000 BJ
629-50- TRIDECANE 6000 JX LAB: ESID SS262 SS262 SS262 SS262 SS262 

 629-59 TETRADECANE
 8000
 JX

 629-62 PENTADECANE
 7400
 JX

 544-76 HEXADECANE
 10000
 JX

 629-78 HEPTADECANE
 12000
 JX

 1921-70 PENTADECANE, 2,6,10,14-TETRA
 53000
 JX

 593-45 OCTADECANE
 7700
 JX

 638-36 HEXADECANE, 2,6,10,14-TETRAM
 46000
 JX

 629-92 NONADECANE
 8900
 JX

 112-95 EICOSANE
 7800
 JX

 629-94 HENEICOSANE
 6400
 JX

 629-59- TETRADECANE 8000 SS262 SS262 SS262 SS262 SS262 SS262 SS262

TOTAL UNKNOWN TICS: 73300
284500

SDG FILE: temp\1F40339 DATE: MATRIX: ES: SS263 LAB: COMPOUND OUAL. ESID CAS NO RESULT SS263 123-42-2-PENTANONE, 4-HYDROXY-4-MET 11000 ВJ DODECANE 91000 JX SS263 112-40-629-50-TRIDECANE 10000 JX SS263 70000 JX SS263 629-59- TETRADECANE 629-62- PENTADECANE 60000 JX SS263 544-76- HEXADECANE 629-78- HEPTADECANE 1921-70- PENTADECANE, 2,6,10,14-TETRA 593-45- OCTADECANE SS263 70000 JX JX SS263 60000 20000 JΧ SS263 JX 30000 SS263 638-36- HEXADECANE, 2,6,10,14-TETRAM JX 20000 SS263 629-92- NONADECANE 10000 JX SS263 112-95-JX SS263 EICOSANE 78000 SS263 629-94- HENEICOSANE 50000 JX TOTAL UNKNOWN TICS: 463000 TOTAL TICS 1043000 SDG FILE: temp\1F40339 MATRIX: DATE: ES: SS264 LAB: CAS NO COMPOUND RESULT OUAL. ESID 123-42-2-PENTANONE, 4-HYDROXY-4-MET 7200 BJ SS264 280 JX SS264 544-76- HEXADECANE 629-78- HEPTADECANE 480 JX SS264 260 JΧ 1921-70- PENTADECANE, 2,6,10,14-TETRA SS264 593-45- OCTADECANE, 2,0,10,14-TETRA 638-36- HEXADECANE, 2,6,10,14-TETRAM 629-92- NONADECANE 203-64- 4H-CYCLOPENTA [DEF] PHENANTHRE 112-95- EICOSANE 629-94- HENEICOSANE 430 JX SS264 340 JX SS264 JX 460 SS264 SS264 380 JX 420 JX SS264 380 JΧ SS264 629-97- DOCOSANE
638-67- TRICOSANE
238-84- 11H-BENZO[A] FLUORENE
629-99- PENTACOSANE W/ BENZO[C] PHENA
593-49- HEPTACOSANE W/ C19H14 PAH
630-03- NONACOSANE 320 JX SS264 310 JX SS264 JΧ 430 SS264 JX 280 SS264 JX 370 SS264 JX 350 SS264 192-97- BENZO[E] PYRENE 800 JX SS264 198-55- PERYLENE 310 JX SS264 TOTAL UNKNOWN TICS: 910

TOTAL TICS

SDG FILE: temp\1F40339 DATE: MATRIX: ES: SS265 LAB: CAS NO COMPOUND ESTD RESULT QUAL. 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 7600 BJ SS265 130 JΧ SS265 629-78- HEPTADECANE 90 JΧ SS265 629-99- PENTACOSANE 593-49- HEPTACOSANE 270 JΧ SS265 NONACOSANE 630-03-620 JX SS265 160 JX 192-97- BENZO[E] PYRENE SS265 JX 80 SS265 630-04- HENTRIACONTANE TOTAL UNKNOWN TICS: 3644 TOTAL TICS 12594 SDG FILE: temp\1F40339 DATE: MATRIX: ES: SS266 LAB: COMPOUND CAS NO RESULT OUAL. ESID 12000 2-PENTANONE, 4-HYDROXY-4-MET BJ SS266 123-42-2531-84- PHENANTHRENE, 2-METHYL-730 JΧ SS266 203-64- 4H-CYCLOPENTA [DEF] PHENANTHRE
243-42- BENZO [B] NAPHTHO [2, 3-D] FURAN
238-84- 11H-BENZO [A] FLUORENE
243-17- 11H-BENZO [B] FLUORENE SS266 1100 JΧ 680 JΧ SS266 JΧ 1700 SS266 SS266 780 JX 239-35- BENZO[B] NAPHTHO[2,1-D] THIOPH 1000 JX SS266 JX 195-19- BENZO[C] PHENANTHRENE 760 SS266 27208-37- CYCLOPENTA [CD] PYRENE W/ N-AR 790 JX SS266 192-97- BENZO[E]PYRENE 4200 JX SS266 JX SS266 198-55-PERYLENE 1200 TOTAL UNKNOWN TICS: 9190

TOTAL TICS

SDG FILE: temp\1F40339 DATE: MATRIX: ES: SS267 LAB: CAS NO COMPOUND ESID RESULT OUAL. SS267 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 5900 BJ112-40- DODECANE 629-50- TRIDECANE JΧ SS267 220 SS267 330 JX 629-59- TETRADECANE JΧ SS267 500 629-62- PENTADECANE 540 JX SS267 629-62- PENTADECANE
544-76- HEXADECANE
629-78- HEPTADECANE
1921-70- PENTADECANE, 2,6,10,14-TETRA
593-45- OCTADECANE
638-36- HEXADECANE, 2,6,10,14-TETRAM
629-92- NONADECANE
112-95- EICOSANE
629-94- HENEICOSANE
629-97- DOCOSANE
638-67- TRICOSANE
646-31- TETRACOSANE
629-99- PENTACOSANE SS267 650 ıΤΧ SS267 870 JX SS267 590 JX 880 JX SS267 470 JΧ SS267 820 JΧ SS267 730 JX SS267 560 JX SS267 480 JΧ SS267 330 SS267 JX SS267 200 JΧ 629-99- PENTACOSANE 630-03- NONACOSANE SS267 170 JX 190 SS267 JX TOTAL UNKNOWN TICS: 1040 TOTAL TICS 15470 SDG FILE: temp\1F40339 DATE: MATRIX: ES: SS268 LAB: CAS NO COMPOUND RESULT OUAL. ESID SS268 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 4700 ВJ 629-78- HEPTADECANE 160 JΧ SS268 314-40- BROMACIL
638-67- TRICOSANE
629-99- PENTACOSANE W/ BENZO[C] PHENA
593-49- HEPTACOSANE W/ C19H14 PAH 220 JX SS268 89 JX SS268 JX SS268 140 JX SS268 190 630-03- NONACOSANE JX SS268 350 192-97- BENZO[E] PYRENE 630-04- HENTRIACONTANE 190 JΧ SS268 JX 130 SS268 TOTAL UNKNOWN TICS: 280

TOTAL TICS

SDG FILE: temp\1F40339 DATE: MATRIX: ES: SS269 LAB: ESID CAS NO COMPOUND RESULT QUAL.
SS269 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 8700 BJ 112-40- DODECANE 52000 JX
629-50- TRIDECANE 73000 JX
629-59- TETRADECANE 0 JX
629-62- PENTADECANE 20000 JX
544-76- HEXADECANE 10000 JX
629-78- HEPTADECANE 40000 JX
1921-70- PENTADECANE, 2,6,10,14-TETRA 10000 JX
593-45- OCTADECANE 10000 JX
638-36- HEXADECANE, 2,6,10,14-TETRAM 20000 JX
629-92- NONADECANE 10000 JX
112-95- EICOSANE 93000 JX
629-94- HENEICOSANE 93000 JX 112-40- DODECANE 52000 JX SS269 SS269 SS269 SS269 SS269 SS269 SS269 SS269 SS269 SS269 SS269 SS269 TOTAL UNKNOWN TICS: 381000 TOTAL TICS 788700 SDG FILE: temp\1E40878 DATE: MATRIX: ES: SB2621 LAB: ESID CAS NO COMPOUND SB2621 138-86-3 Limonene RESULT QUAL. 11 NJ TOTAL UNKNOWN TICS: 20 TOTAL TICS 31 SDG FILE: temp\1E40878 DATE: MATRIX: ES: SB2644 LAB: ESID CAS NO COMPOUND RESULT QUAL. SB2644 556-67-2 Cyclotetrasiloxane, octameth 8 NJ TOTAL UNKNOWN TICS: TOTAL TICS SDG FILE: temp\1F40654 DATE: MATRIX: ES: SB2611 LAB: ESID CAS NO COMPOUND SB2611 123-42- 2-PENTAN RESULT QUAL. 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 9900 BJ TOTAL UNKNOWN TICS: 9900 TOTAL TICS

SDG FILE: temp\1F40654 DATE: MATRIX: ES: SB2612 LAB: CAS NO COMPOUND RESULT QUAL. ESID 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 11000 BJ SB2612 SB2612 74381-40- PROPANOIC ACID, 2-METHYL-, 1 84 TOTAL UNKNOWN TICS:
TOTAL TICS 11084 SDG FILE: temp\1F40878 DATE: MATRIX: ES: SB2621 LAB: ESID CAS NO COMPOUND RESULT QUASB2621 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 4800 SB2621 143-07- DODECANOIC ACID 510 SB2621 74381-40- PROPANOIC ACID, 2-METHYL-, 1 300 SB2621 629-78- HEPTADECANE 220 SB2621 593-45- OCTADECANE 200 CONTADECANE 210 RESULT QUAL. JX JX JΧ 629-92- NONADECANE 210 SB2621 112-95- EICOSANE 593-49- HEPTACOSANE 630-03- NONACOSANE 630-04- HENTRIACONTANE 220 SB2621 SB2621 260 JX SB2621 630 JX 400 SB2621 TOTAL UNKNOWN TICS: 6390 14140 TOTAL TICS SDG FILE: temp\1F40878 DATE: MATRIX: ES: SB2625 LAB: CAS NO COMPOUND RESULT QUA

123-42- 2-PENTANONE, 4-HYDROXY-4-MET 7600
629-59- TETRADECANE 120
629-62- PENTADECANE 130
143-07- DODECANOIC ACID 220
544-76- HEXADECANE 140
74381-40- PROPANOIC ACID, 2-METHYL-, 1 230
629-78- HEPTADECANE 160
593-45- OCTADECANE 150
629-92- NONADECANE 140
112-95- EICOSANE 110 RESULT QUAL. ESID SB2625  $_{\rm BJ}$ JX SB2625 JX SB2625 BJ SB2625 SB2625 SB2625 SB2625 JX JX SB2625 JX SB2625 112-95- EICOSANE
629-99- PENTACOSANE
593-49- HEPTACOSANE
630-02- OCTACOSANE
630-03- NONACOSANE 110 JX SB2625 SB2625 120 SB2625 220 JΧ 110 JΧ SB2625 630 JX SB2625 290 630-04- HENTRIACONTANE SB2625 4510 TOTAL UNKNOWN TICS:

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TOTAL TICS

SDG FILE: temp\1F40878 DATE: MATRIX: ES: SB2626 LAB:

ESID CAS NO COMPOUND RESULT QUAL.
SB2626 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 5400 BJ
SB2626 143-07- DODECANOIC ACID 400 BJ
SB2626 74381-40- PROPANOIC ACID, 2-METHYL-, 1 210 JX
SB2626 593-49- HEPTACOSANE 140 JX
SB2626 630-03- NONACOSANE 450 JX
SB2626 630-04- HENTRIACONTANE 420 JX
SB2626 630-05- TRITRIACONTANE 120 JX

TOTAL UNKNOWN TICS: 627
TOTAL TICS 7767

SDG FILE: temp\1F40878 DATE: MATRIX:

ES: SB2627

LAB:

 ESID
 CAS NO
 COMPOUND
 RESULT
 QUAL.

 SB2627
 123-42 2-PENTANONE, 4-HYDROXY-4-MET
 5200
 BJ

 SB2627
 143-07 DODECANOIC ACID
 220
 BJ

 SB2627
 74381-40 PROPANOIC ACID, 2-METHYL-, 1
 82
 JX

 SB2627
 630-03 NONACOSANE
 180
 JX

TOTAL UNKNOWN TICS: 730
TOTAL TICS 6412

SDG FILE: temp\1F40878 DATE: MATRIX:

ES: SB2631

LAB:

ESID CAS NO COMPOUND RESULT QUAL.

SB2631 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 8000 BJ

SB2631 143-07- DODECANOIC ACID 260 BJ

SB2631 74381-40- PROPANOIC ACID, 2-METHYL-, 1 160 JX

SB2631 593-49- HEPTACOSANE 140 JX

SB2631 630-03- NONACOSANE 500 JX

SB2631 630-04- HENTRIACONTANE 360 JX

SB2631 630-05- TRITRIACONTANE 110 JX

TOTAL UNKNOWN TICS: 1080
TOTAL TICS 10610

SDG FILE: temp\1F40878 DATE: MATRIX: SB2634 ES: TAR: CAS NO COMPOUND ESID RESULT 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 7000 ВJ SB2634 143-07- DODECANOIC ACID 74381-40- PROPANOIC ACID, 2-METHYL-, 1 ВJ SB2634 640 SB2634 150 JX 593-49- HEPTACOSANE 200 JΧ SB2634 870 JΧ SB2634 630-03- NONACOSANE 638-68- TRIACONTANE 98 JΧ SB2634 630-04- HENTRIACONTANE 630-05- TRITRIACONTANE JX 810 SB2634 TRITRIACONTANE 160 JX SB2634 TOTAL UNKNOWN TICS: 379 TOTAL TICS 10307 SDG FILE: temp\1F40878 DATE: MATRIX: ES: SB2636 LAB: ESID CAS NO COMPOUND RESULT QUAL. 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 74381-40- PROPANOIC ACID, 2-METHYL-, 1 SB2636 5000 ВJ 380 ВJ SB2636 630-03- NONACOSANE 150 JΧ SB2636 130 JΧ 630-04- HENTRIACONTANE SB2636 TOTAL UNKNOWN TICS: 310 5970 TOTAL TICS SDG FILE: temp\1F40878 DATE: MATRIX: ES: SB2641 LAB: RESULT CAS NO COMPOUND REST OUAL. ESID 6100 ВJ SB2641 300 ВJ SB2641 143-07- DODECANOIC ACID 74381-40- PROPANOIC ACID, 2-METHYL-, 1 57-10- HEXADECANOIC ACID 593-49- HEPTACOSANE 630-02- OCTACOSANE 630-03- NONACOSANE JX SB2641 110 JX 160 SB2641 JΧ 280 SB2641 JX 100 SB2641 1700 JX SB2641 JX 630-04- HENTRIACONTANE 840 SB2641 541-01- HEPTASILOXANE, HEXADECAMETHY 170 JX SB2641 630-05- TRITRIACONTANE 180 JΧ SB2641

TOTAL UNKNOWN TICS:

TOTAL TICS

SDG FILE: temp\1F40878 DATE: MATRIX: ES: SB2642 LAB: 
 ESID
 CAS NO
 COMPOUND
 RESULT
 QUAL.

 SB2642
 123-42 2-PENTANONE, 4-HYDROXY-4-MET
 4900
 BJ

 SB2642
 143-07 DODECANOIC ACID
 120
 BJ

 SB2642
 630-03 NONACOSANE
 220
 JX

 SB2642
 630-04 HENTRIACONTANE
 160
 JX
 TOTAL UNKNOWN TICS: 1410 6810 TOTAL TICS SDG FILE: temp\1F40878 DATE: MATRIX: ES: SB2644 LAB:

ESID CAS NO COMPOUND RESULT QUAL.

SB2644 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 3800 BJ

SB2644 143-07- DODECANOIC ACID 270 BJ

SB2644 638-36- HEXADECANE, 2,6,10,14-TETRAM 150 BJ

SB2644 112-95- EICOSANE 120 JX

SB2644 593-49- HEPTACOSANE 120 JX

SB2644 630-03- NONACOSANE 510 JX

SB2644 638-68- TRIACONTANE 85 JX

SB2644 630-04- HENTRIACONTANE 650 JX

SB2644 630-05- TRITRIACONTANE 120 JX

TOTAL UNKNOWN TICS: 3431 9256 TOTAL TICS

SDG FILE: temp\1E40654 DATE: MATRIX:

ES: TP2632

LAB:

ESID CAS NO COMPOUND RESULT OUAL.

TOTAL UNKNOWN TICS: 110 110

TOTAL TICS

SDG FILE: temp\1E40654 DATE: MATRIX:

ES: TP2641

LAB:

RESULT QUAL. ESID TP2641 CAS NO COMPOUND 992-94- SILANE, METHYL-68 JX

> TOTAL UNKNOWN TICS: 0 68 TOTAL TICS

SDG FILE: temp\1E40654 DATE: MATRIX:

ES: TP2642

LAB:

ESID CAS NO COMPOUND RESULT QUAL. TP2642 992-94- SILANE, METHYL- 48 JX

TOTAL UNKNOWN TICS: 0

TOTAL TICS 48

SDG FILE: temp\1F40878 DATE: MATRIX:

ES: TP2611

LAB:

ESID CAS NO COMPOUND RESULT QUAL.
TP2611 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 15000 BJ
TP2611 630-03- NONACOSANE 2900 JX
TP2611 630-04- HENTRIACONTANE 1500 JX

TOTAL UNKNOWN TICS: 14760
TOTAL TICS 34160

SDG FILE: temp\1F40878 DATE: MATRIX:

ES: TP2612

LAB:

CAS NO COMPOUND ESID RESULT OUAL. 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 3100 BJ TP2612 74381-40- PROPANOIC ACID, 2-METHYL-, 1 TP2612 110 JΧ 630-03- NONACOSANE TP2612 130 JΧ HENTRIACONTANE 630-04-95 JХ TP2612

TOTAL UNKNOWN TICS: 453
TOTAL TICS 3888

SDG FILE: temp\1F40878 DATE: MATRIX:

ES: TP2621

LAB:

ESID CAS NO COMPOUND RESULT QUAL.
TP2621 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 22000 BJ
TP2621 192-97- BENZO[E] PYRENE 530 JX

TOTAL UNKNOWN TICS: 13600 TOTAL TICS 36130

ES:	E: temp\1F40 TP2622	)878 DATE:	MATRIX:		
TP2622 TP2622 TP2622 TP2622 TP2622 TP2622 TP2622 TP2622 TP2622 TP2622	544-76-629-78-1921-70-593-45-629-92-593-49-630-02-630-03-506-52-638-68-630-04-	2-PENTANONE, TRIDECANE PENTADECANE HEXADECANE HEPTADECANE PENTADECANE OCTADECANE NONADECANE HEXADECANOIC PENTACOSANE HEPTACOSANE OCTACOSANE NONACOSANE 1-HEXACOSANO TRIACONTANE HENTRIACONTA	4-HYDROXY-4-ME	440 420 A 330 320 240 330 210 510 230 1700 230 210 1900	BJ JX JX JX JX JX JX JX JX JX JX JX JX
TP2622	630-05-	TRITRIACONTA TOTAL ÜNKNOW	NE	320 770	
		TOTA	L TICS	12520	)
ES:	TP2631		MATRIX:		
ESID TP2631 TP2631 TP2631	630-03-	COMPOUND 2-PENTANONE, NONACOSANE HENTRIACONTA	4-HYDROXY-4-ME	RESULT T 6100 340 370	BJ JX
		TOTAL UNKNOWN TOTAL	TICS: TICS	120 6930	
ES:	593-49- 506-51- 630-02- 630-03- 506-52-	LAB: COMPOUND 2-PENTANONE, HEXADECANOIC HEPTACOSANE 1-TETRACOSANE OCTACOSANE NONACOSANE 1-HEXACOSANC HENTRIACONTA TRITRIACONTA PROPANOIC AC	4-HYDROXY-4-ME ACID OL NE NE NE ID, 3,3'-THIOBI	98 110 89 110 580 370 550 110 81	BJ JX
		TOTAL UNKNOWN TOTAL		469 8867	

SDG FILE	: temp\1F4	0654	DATE:	M	ATRIX:		
ES: LAB:	TP2641						
ESID TP2641 TP2641 TP2641 TP2641 TP2641 TP2641 TP2641 TP2641 TP2641	506-52- 630-04-	2-PENT CHRYO 1-DOD HEXAD HEPTA NONAC 1-HEX HENTR	TANONE, PHYLLENE ECANOL ECANOIC COSANE OSANE ACOSANOI	ACID		RESULT 3900 1000 190 890 220 950 210 550 270	BJ JX JX JX JX JX
		TOTAL		TICS:		10130 18310	
	: temp\1F4 TP2642	0654	DATE:	M	ATRIX:		
ESID TP2642 TP2642 TP2642 TP2642 TP2642 TP2642 TP2642 TP2642 TP2642	CAS NO 123-42- 87-44- 57-10- 593-49- 630-02- 630-03- 506-52- 630-04- 83-48-	2-PENT CARYON HEXADI HEPTA OCTACO NONACO 1-HEXI HENTR	TANONE, PHYLLENE ECANOIC COSANE OSANE	ACID		RESULT 5300 1200 670 350 170 1100 230 490 310	JX JX JX JX
		TOTAL		TICS:		8610 18430	
	: temp\1F40 TP2651	0654	DATE:	M	ATRIX:		
ESID TP2651 TP2651 TP2651 TP2651 TP2651 TP2651 TP2651 TP2651	CAS NO 123-42- 74381-40- 57-10- 593-49- 630-02- 630-03- 506-52- 630-04-	2-PENT PROPAN HEXADI HEPTAC OCTACC NONACC 1-HEXA HENTR	CANONE, ANOIC ACI ECANOIC COSANE DSANE	ACID E 'ICS:	Y-4-MET	3300 83 130 130 130 450 91 390	QUAL. BJ JX JX JX JX JX JX JX

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SDG FILE: temp\1F40654 DATE: MATRIX:

ES: TP2652

LAB:

ESID	CAS NO	COMPOUND	RESULT	QUAL.
TP2652	123-42-	2-PENTANONE, 4-HYDROXY-4-MET	3700	ВJ
TP2652	57-10-	HEXADECANOIC ACID	110	JX
TP2652	629-99-	PENTACOSANE W/ 1-DOCOSANOL	98	JX
TP2652	506-51-	1-TETRACOSANOL	130	JX
TP2652	630-03-	NONACOSANE	290	JX
TP2652	506-52 <i>-</i>	1-HEXACOSANOL	150	JX
TP2652	630-04-	HENTRIACONTANE	310	JX

TOTAL UNKNOWN TICS: TOTAL TICS 240 5028

SDG FILE: temp\1F40878 DATE: MATRIX:

ES: TP2661

LAB:

ESID	CAS NO	COMPOUND	RESULT	QUAL.
TP2661	123-42-	2-PENTANONE, 4-HYDROXY-4-ME	T 3300	BJ
TP2661	143-07-	DODECANOIC ACID	130	ВJ
TP2661	593-49-	HEPTACOSANE	210	JX
TP2661	630-02-	OCTACOSANE	120	JX
TP2661	630-03-	NONACOSANE	650	JX
TP2661	506-52-	1-HEXACOSANOL	81	JX
TP2661	192-97-	BENZO [E] PYRENE	140	JX
TP2661	638-68-	TRIACONTANE	74	JX
TP2661	630-04-	HENTRIACONTANE	380	JX
TP2661	630-05-	TRITRIACONTANE	93	JX

TOTAL UNKNOWN TICS: TOTAL TICS 1077 6255

SDG FILE: temp\1F40878 DATE: MATRIX:

ES: TP2662

LAB:				
ESID	CAS NO	COMPOUND	RESULT	QUAL.
TP2662	123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4100	ВJ
TP2662	143-07-	DODECANOIC ACID	120	ВJ
TP2662	74381-40-	PROPANOIC ACID, 2-METHYL-, 1	140	JX
TP2662	638-36-	HEXADECANE, 2,6,10,14-TETRAN	100	ВĴ
TP2662	593-49 <i>-</i>	HEPTACOSANE	160	JX
TP2662	630-02-	OCTACOSANE	110	JX
TP2662	630-03-	NONACOSANE	280	JX
TP2662	638-68-	TRIACONTANE	89	JX
TP2662	630-04-	HENTRIACONTANE	240	JX

TOTAL UNKNOWN TICS: 2824 TOTAL TICS 8163

SDG FILE: temp\1F40878 DATE: MATRIX: ES: TP2671 LAB: CAS NO COMPOUND ESID RESULT QUAL. 123-42- 2-PENTANONE, 4-HYDROXY-4-MET TP2671 3200 BJTP2671 143-07- DODECANOIC ACID 190 BJ 203-64- 4H-CYCLOPENTA [DEF] PHENANTHRE 238-84- 11H-BENZO [A] FLUORENE 593-49- HEPTACOSANE 110 JΧ TP2671 TP2671 140 JΧ 170 JX TP2671 TP2671 630-02- OCTACOSANE 98 JX TP2671 630-03- NONACOSANE 480 JX 192-97- BENZO[E] PYRENE 198-55- PERYLENE 630-04- HENTRIACONTANE TP2671 290 JX TP2671 100 JX TP2671 HENTRIACONTANE 300 JX TOTAL UNKNOWN TICS: 2073 TOTAL TICS 7151 SDG FILE: temp\1F40878 DATE: MATRIX: ES: TP2672 LAB: ESID CAS NO COMPOUND RESULT OUAL. 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 4500 143-07- DODECANOIC ACID 120 TP2672 ВJ TP2672 ВJ 630-03- NONACOSANE 170 JΧ TP2672 TP2672 630-04- HENTRIACONTANE 150 JХ TOTAL UNKNOWN TICS: 390 TOTAL TICS 5330 SDG FILE: temp\1F40878 DATE: MATRIX: ES: TP2681 LAB: COMPOUND CAS NO RESULT OUAL. ESID 123-42-2-PENTANONE, 4-HYDROXY-4-MET 19000  $B_{1}I$ TP2681 2531-84- PHENANTHRENE, 2-METHYL-670 JX TP2681 203-64- 4H-CYCLOPENTA [DEF] PHENANTHRE 2000 JX TP2681 238-84- 11H-BENZO [A] FLUORENE 243-17- 11H-BENZO [B] FLUORENE 239-35- BENZO [B] NAPHTHO [2,1-D] THIOPH 2000 JΧ TP2681 JX 1200 TP2681 1000 JX TP2681 195-19- BENZO [C] PHENANTHRENE 650 JX TP2681 JX 870 27208-37- CYCLOPENTA [CD] PYRENE TP2681 192-97- BENZO[E] PYRENE JX 3500 TP2681 198-55- PERYLENE JX 1400 TP2681 TOTAL UNKNOWN TICS: 9770 TOTAL TICS 42060

SDG FILE: temp\1F40878 DATE: MATRIX: ES: TP2682 LAB: ESID CAS NO COMPOUND RESULT QUAL. 123-42- 2-PENTANONE, 4-HYDROXY-4-MET 6500 ВJ TP2682 74381-40- PROPANOIC ACID, 2-METHYL-, 1 629-99- PENTACOSANE 661-19- 1-DOCOSANOL TP2682 89 JΧ TP2682 98 JX TP2682 89 JX 593-49- HEPTACOSANE 330 JΧ TP2682 506-51- 1-TETRACOSANOL 630-02- OCTACOSANE 630-03- NONACOSANE 506-52- 1-HEXACOSANOL 192-97- BENZO[E] PYRENE 638-68- TRIACONTANE JΧ TP2682 110 TP2682 130 JX TP2682 1400 JX 190 JX TP2682 93 JX TP2682 150 JX TP2682 630-04- HENTRIACONTANE TP2682 1200 JX 544-85- DOTRIACONTANE 630-05- TRITRIACONTANE 85 JX TP2682 220 TP2682 JX TOTAL UNKNOWN TICS:
TOTAL TICS 270 10954 SDG FILE: temp\1E40391 DATE: MATRIX: ES: SD261 LAB: ESID CAS NO COMPOUND RESULT OUAL. 26 JX SD261 75-18- METHANE, THIOBIS-TOTAL UNKNOWN TICS: 1.8 TOTAL TICS 44 SDG FILE: temp\1F40391 DATE: MATRIX: ES: SD261 LAB: CAS NO COMPOUND RESULT QUAL.
123-42-2 2-Pentanone, 4-hydroxy-4-met 34000 NJ ESID 34000 NJ SD261 1120-21-4 Undecane 8300 NJ SD261 ŊJ Dodecane 7800 112-40-3 SD261 SD261 629-50-5 Tridecane 7300 ŊJ 1921-70-6 Pentadecane 638-36-8 Hexadecane, 629-92-5 Nonadecane Pentadecane, 2,6,10,14-tetra 62000 NJ SD261 Hexadecane, 2,6,10,14-tetram 49000 Nonadecane 19000 ŊĴ SD261 NJ SD261 TOTAL UNKNOWN TICS: 155100

TOTAL TICS

ES: SW	261	O4// DAIL:	MAIRIA:		
ESID	CAS NO	COMPOUND	F	RESULT	QUAL.
SW261	123-42-2	2-Pentanone, 4-h	ydroxy-4-met	14	NJ
SW261	85-44-9	Phthalic anhydri	de w/unknown	12	NJ
SW261	271-89-6	Benzofuran w/unk	nown	24	NJ
SW261	5463-50-3	1,3-Isobenzofura	ndione, 4,7-	19	NJ
		TOTAL UNKNOWN TI	ICS:	307	7
		TOTAL TI	CS	376	5

SEAD-25 and SEAD-26 Remedial Investigation

**Tentatively Identified Compounds** 

		Sample Number: LAB BLANK				
1F	ABH1SBLK4L		1			
1F	ABD1 13622-84-2	Benzenesulfonamide, N-butyl-		11.641	2	NJ
		Sample Number: LAB BLANK				
1F	ACH1SBLK4N		2			
1F	ACD1 1	Unknown aliphatic compound		8.717	110	J
1F	ACD1 2	Unknown		23.816	1000	
	110212	Sample Number: LAB BLANK				
1F	ADH1SBLKN4		6		***	
1F	ADD1 1	Unknown aliphatic compound		8.747	270	J
1F	ADD1 2143-07-7	Dodecanoic acid		9.505	200	
1F	ADD1 3	Unknown aliphatic compound		18.4	88	
1F	ADD1 4	Unknown aliphatic compound		19.919	110	
1F	ADD1 5	Unknown aliphatic compound		21.419	79	
1F	ADD1 6	Unknown		23.969	860	
	TIDDI 0	Sample Number: LAB BLANK				
1F	AEH1SBLKN5	Dampie Manier Die Zeit von	14			
1F	AED1 1	Unknown aliphatic compound		8.756	220	T
1F	AED1 2	Unknown alkane	$\overline{}$	14.719	120	
1F	AED13	Unknown alkane		15.431	150	
1F	AED14	Unknown alkane		16.113	130	
1F	AED1 5	Unknown	$\rightarrow$	16.735	180	
1F	AED1 6	Unknown alkane	$\rightarrow$	16.775	100	
1F	AED17	Unknown alkane		17.407	70	
1F	AED1 8	Unknown		17.979	82	
1F	AED1 9	Unknown		18.404	270	
1F	AED110	Unknown		19.918	240	
1F	AED111	Unknown		20.997	72	
1F	AED112	Unknown		21.423	180	
1F	AED113	Unknown		23.401	100	J
1F	AED114	Unknown		23.946	530	J
		Sample Number: SS26-15				
1F	AFH1SS2615		20			
1F	AFD1 1	Unknown aliphatic compound		8.695	560	JB
1F	AFD1 2	Unknown aliphatic compound		12.828	790	
1F	AFD1 357-10-3	Hexadecanoic acid		12.888		NJ
1F	AFD1 4	Unknown		16.689	480	
1F	AFD1 5	Unknown PAH		17.101	370	J
1F	AFD1 7	Unknown alkane w/unknowns		17.969	510	
1F	AFD1 8	Unknown		18.354	530	J
1F	AFD1 9	Unknown alkane		19.133	660	J
1F	AFD110	Unknown aliphatic compound		19.184	710	J
1F	AFD111192-97-2	Benzo[e]pyrene		19.367	750	NJ

1F	AFD112198-55-0	Perylene	19.59	470	NJ
1F	AFD113	Unknown	19.875	620	J
1F	AFD114	Unknown alkane	20.22	740	J
1F	AFD115	Unknown	21.37	750	J
1F	AFD116	Unknown PAH	21.553	460	J
1F	AFD117	Unknown w/PAH	21.808	420	JZ
1F	AFD11883-47-6	.gammaSitosterol w/PAH	21.96	810	NJZ
1F	AFD1191058-61-3	Stigmast-4-en-3-one	23.008	450	NJ
1F	AFD120	Unknown	23.334	490	J
1F	AFD121	Unknown	23.872	1000	JB
			Total:	12120	
		Sample Number: SS26-16		, , , , , , , , , , , , , , , , , , , ,	
1F	AGH1SS2616	20			
1F	AGD1 1	Unknown terpene	8.435	280	J
1F	AGD1 2	Unknown aliphatic compound	8.702	230	J
1F	AGD1 3	Unknown aliphatic compound	10.602	410	J
1F	AGD1 4	Unknown aliphatic compound	12.817	1000	J
1F	AGD1 557-10-3	Hexadecanoic acid	12.877	780	NJ
1F	AGD1 6	Unknown aliphatic acid	14.234	240	
1F	AGD1 7	Unknown aliphatic compound	14.264	220	J
1F	AGD1 8	Unknown	14.294	260	J
1F	AGD1 9	Unknown alkane	16.71	240	
1F	AGD110	Unknown alkane w/PAH	17.957	300	JZ
1F	AGD111	Unknown aliphatic aldehyde	18.814	320	J
1F	AGD112	Unknown alkane	19.126	690	J
1F	AGD113	Unknown	19.177	730	J
1F	AGD114192-97-2	Benzo[e]pyrene	19.349	350	NJ
1F	AGD115	Unknown alkane	20.208	680	J
1F	AGD116	Unknown sterane derivative	21.331	350	J
1F	AGD11783-48-7	Stigmasterol	21.543	280	NJ
1F	AGD11883-47-6	.gammaSitosterol w/PAH	21.948		NJZ
1F	AGD1191058-61-3	Stigmast-4-en-3-one	22.979	320	
1F	AGD120	Unknown	23.847	970	JВ
			Total:	9290	
		Sample Number: SS26-17			
1F	AHH1SS2617	20			
1F	AHD1 1	Unknown terpene	6.105	1000	J
1F	AHD1 2	Unknown terpene	8.431	180	
1F	AHD1 3	Unknown aliphatic compound	10.602	300	J
1F	AHD1 4	Unknown naphthalene derivati	11.036	210	
1F	AHD1 5	Unknown aliphatic compound	12.796	730	J
1F	AHD1 657-10-3	Hexadecanoic acid	12.856	620	
1F	AHD1 7	Unknown alkane	17.95	160	J

1F	AHD1 8	Unknown	18.793	270	J
1F	AHD1 9	Unknown alkane	19.11	710	J
1F	AHD110	Unknown	19.16	520	J
1F	AHD111	Unknown	20.136	250	J
1F	AHD112	Unknown alkane	20.196	660	J
1F	AHD113	Unknown alkane	21.315	300	J
1F	AHD11483-48-7	Stigmasterol	21.525	240	NJ
1F	AHD11583-47-6	.gammaSitosterol	21.916	360	NJ
1F	AHD116	Unknown	22.236	200	J
1F	AHD117	Unknown	22.636	240	J
1F	AHD118	Unknown	22.716	270	<del></del>
1F	AHD1191058-61-3	Stigmast-4-en-3-one	22.955	200	NJ
1F	AHD120	Unknown	23.813	770	JВ
			Total:	8190	
		Sample Number: SS26-18			
1F	AIH1SS2618	20			
1F	AID1 1	Unknown aliphatic compound	8.718	410	JВ
1F	AID1 2	Unknown aliphatic compound	10.628	220	
1F	AID1 3	Unknown aliphatic compound	12.815	500	
1F	AID1 457-10-3	Hexadecanoic acid	12.885	600	
1F	AID1 5	Unknown hexadecenoic acid	14.286	540	
1F	AID1 6	Unknown polycyclic hydrocarb	14.316	340	
1F	AID1 7	Unknown alcohol	16.738	180	J
1F	AID1 8	Unknown alkane	17.985	400	J
1F	AID1 9	Unknown alkane	18.58	250	J
1F	AID110	Unknown	18.827	630	J
1F	AID111	Unknown alkane	19.155	920	J
1F	AID112	Unknown aliphatic alcohol	19.195	1500	J
1F	AID113	Unknown alkane	20.238	1500	J
1F	AID114	Unknown alkane	21.355	880	J
1F	AID11583-48-7	Stigmasterol	21.565	320	NJ
1F	AID11683-47-6	.gammaSitosterol	21.965	660	NJ
1F	AID1171058-61-3	Stigmast-4-en-3-one	23.014	340	NJ
1F	AID118	Unknown	23.333	480	
1F	AID119	Unknown	. 23.732	590	J
1F	AID120	Unknown	23.892	1200	J
			Total:	12460	
		Sample Number: SS26-19			
1F	АЈН1SS2619	20			
1F	AJD1 1	Unknown aliphatic compound	8.704	180	ЈВ
1F	AJD1 2	Unknown aliphatic compound	10.596	380	
1F	AJD13	Unknown aliphatic compound	12.787	880	J
1F	AJD1 457-10-3	Hexadecanoic acid	12.856	710	NJ

1F	AJD1 5	Unknown	13.815	170	J
1F	AJD1 6	Unknown	14.28		
1F	AJD1 7	Unknown aliphatic alcohol	16.708	170	J
1F	AJD1 8	Unknown alkane	17.95		
1F	AJD1 9	Unknown alkane	18.537	210	J
1F	AJD110	Unknown aliphatic aldehyde	18.795	600	J
1F	AJD111	Unknown alkane	19.114	960	
1F	AJD112	Unknown	19.164	980	J
1F	AJD113	Unknown alkane	20,202	1300	
1F	AJD11459-02-9	Vitamin E	20.592	240	NJ
1F	AJD115	Unknown alkane	21.313	450	
1F	AJD11683-47-6	.gammaSitosterol	21.924	480	
1F	AJD1171058-61-3	Stigmast-4-en-3-one	22.965	280	NJ
1F	AJD118	Unknown	23.285	310	J
1F	АЈД119	Unknown	23.385	780	
1F	AJD120	Unknown	23.825	1100	
			Total:	10730	
		Sample Number: SS26-20			
1F	AKH1SS2620	20			
1F	AKD1 1	Unknown aliphatic compound	8.696	200	ЛВ
1F	AKD1 2	Unknown aliphatic compound	10.598	290	
1F	AKD1 3	Unknown aliphatic compound	12.798	680	
1F	AKD1 457-10-3	Hexadecanoic acid	12.858	560	
1F	AKD1 5	Unknown hexadecenoic acid	14.28	270	
1F	AKD1 6	Unknown alkane	17.952	400	
1F	AKD1 7	Unknown alkane	18.537	240	J
1F	AKD1 8	Unknown aliphatic aldehyde	18.796	650	J
1F	AKD19	Unknown alkane	19.124	1100	J
1F	AKD110	Unknown	19.164	1400	J
1F	AKD111	Unknown aliphatic aldehyde	19.93	210	J
1F	AKD112	Unknown alkane	20.2	1100	J
1F	AKD11359-02-9	Vitamin E	20.589	190	NJ
1F	AKD114	Unknown alkane	21.318	480	
1F	AKD11583-48-7	Stigmasterol	21.519	200	NJ
1F	AKD11683-47-6	.gammaSitosterol	. 21.919	540	
1F	AKD117	Unknown	22.64	190	J
1F	AKD1181058-61-3	Stigmast-4-en-3-one	22.97	350	
1F	AKD119	Unknown	23.38	300	J
1F	AKD120	Unknown	23.829	1000	JВ
			Total:	10350	
		Sample Number: SS26-21			
1F	ALH1SS2621	20			V
1F	ALD1 1	Unknown aliphatic compound	8.706	180	JВ

1F	ALD1 2	Unknown aliphatic compound	10.6	280	T
1F	ALD1 3	Unknown aliphatic compound	12.783	420	
1F	ALD1 457-10-3	Hexadecanoic acid w/substitu	12.783		NJZ
1F	ALD1 5	Unknown aliphatic acid	14.248	230	
1F	ALDI 6	Unknown	14.278	330	
1F	ALDI 0	Unknown	15.33	160	
ır 1F	ALDI 7	Unknown alkane w/unknowns	17.956	190	
1F			18.804	270	
1F	ALD19	Unknown aliphatic aldehyde Unknown alkane			
	ALD110		19.114	630	
1F 1F	ALD111	Unknown aliphatic alcohol	19.164	390	
	ALD112192-97-2	Benzo[e]pyrene	19.334	210	
1F	ALD113	Unknown alkane	20.196	450	
1F	ALD114	Unknown sterane derivative	21.321	270	
1F	ALD11583-48-7	Stigmasterol	21.532	250	
1F	ALD11683-47-6	.gammaSitosterol w/PAH	21.935		NJZ
1F	ALD117	Unknown	22.247	220	
1F	ALD118	Unknown	22.719	210	
1F		Stigmast-4-en-3-one	22.971	270	
1F	ALD120	Unknown	23.823	840	JB
			Total:	6910	
		Sample Number: SS26-22			
1F	AMH1SS2622	20			
1F	AMD1 1	Unknown aliphatic compound	8.689	470	JВ
1F	AMD1 2	Unknown aliphatic compound	12.813	900	J
1F	AMD1 357-10-3	Hexadecanoic acid	12.883	830	NJ
1F	AMD1 4	Unknown octadecenoic acid	14.265	420	J
1F	AMD1 5	Unknown octadecenoic acid w/	14.295	410	JZ
1F	AMD1 6	Unknown aliphatic alcohol w/	15.333	300	JZ
1F	AMD1 7	Unknown alkane	19.14	1300	J
1F	AMD1 8	Unknown aliphatic alcohol	19.17	550	J
1F	AMD1 9192-97-2	Benzo[e]pyrene	19.341	670	NJ
1F	AMD110198-55-0	Perylene	19.563	390	NJ
1F	AMD111	Unknown alkane	20.218	720	J
1F	AMD11257-88-5	Cholesterol	20.683	540	NJ
1F	AMD113	Unknown sterane derivative	21.339	700	J
1F	AMD114	Unknown PAH	21.441	320	
1F	AMD11583-48-7	Stigmasterol	21.542	550	
1F	AMD11683-47-6	.gammaSitosterol w/PAH	21.946		NJZ
1F	AMD117	Unknown	22.027	330	
1F	AMD118	Unknown	22.33	310	
1F		Stigmast-4-en-3-one	22.997	790	
1F	AMD120	Unknown	23.855	800	
			Total:	12800	

		Sample Number: SS26-23			
1F	ANH1SS2623	20	10.001	-131	
1F	AND1 1	Unknown aliphatic compound	8.716	330	JВ
1F	AND1 2	Unknown aliphatic compound	10.636	140	J
1F	AND1 3	Unknown aliphatic compound	12.821	660	J
1F	AND1 457-10-3	Hexadecanoic acid	12.881	250	NJ
1F	AND1 5	Unknown	14.31	130	J
1F	AND1 6	Unknown alkane	18.575	110	J
1F	AND1 7	Unknown	18.824	130	J
1F	AND18	Unknown alkane	19.152	140	J
1F	AND19	Unknown aliphatic alcohol	19.192	260	J
1F	AND110	Unknown sterane derivative	21.359	290	J
1F	AND11183-48-7	Stigmasterol	21.559	160	NJ
1F	AND112	Unknown	21.829	130	J
1F	AND11383-47-6	.gammaSitosterol	21.96	420	NJ
1F	AND114	Unknown	22.59	120	J
1F	AND115	Unknown sterane derivative	23.02	180	J
1F	AND116	Unknown	23.06	130	J
1F	AND117	Unknown	23.33	190	J
1F	AND118	Unknown	23.45	220	J
1F	AND119	Unknown	23.73	240	J
1F	AND120	Unknown	23.88	580	JB
			Total:	4810	
		Sample Number: SS26-23RE			
1F	AOH1SS2623RE	20			
1F	AOD1 1	Unknown aliphatic compound	8.689	400	JВ
1F	AOD1 2	Unknown aliphatic compound	10.6	140	J
1F	AOD1 3	Unknown aliphatic compound	12.788	720	J
1F	AOD1 457-10-3	Hexadecanoic acid	12.847	280	NJ
1F	AOD1 5	Unknown aliphatic compound	14.279	140	J
1F	AOD1 6	Unknown	18.793	170	
1F	AOD1 7	Unknown alkane	19.122	170	J
1F	AOD1 8	Unknown aliphatic alcohol	19.162	310	J
1F	AOD1 9	Unknown	19.862	140	J
1F	AOD110	Unknown sterane derivative	21.326	320	J
1F	AOD11183-48-7	Stigmasterol	21.527	180	NJ
1F	AOD112	Unknown	21.798	140	J
1F	AOD11383-47-6	.gammaSitosterol	21.919	460	
1F	AOD114	Unknown	22.541	140	
1F	AOD1151058-61-3	Stigmast-4-en-3-one	22.973	200	
1F	AOD116	Unknown	23.013	140	
1F	AOD117	Unknown	23.284	250	
1F	AOD118	Unknown	23.394	280	J

1F	AOD119	Unknown	23.685	300	J
1F	AOD120	Unknown	23.836	680	JB
			Total:	5560	
		Sample Number: SS26-25			
1F	APH1SS2625	20			
1F	APD1 1	Unknown terpene	8.433	390	J
1F	APD1 2	Unknown aliphatic compound	8.699	270	Љ
1F	APD1 3	Unknown aliphatic compound	9.834	150	J
1F	APD1 4	Unknown .	10.367	190	J
1F	APD1 5	Unknown aliphatic compound	10.605	310	J
1F	APD1 6	Unknown methylbenzothiazolam	10.911	150	J
1F	APD1 7	Unknown methylbenzothiazolam	11.266	140	J
1F	APD1 8	Unknown aliphatic compound	12.809	1300	
1F	APD1 957-10-3	Hexadecanoic acid	12.869	680	NJ
1F	APD110	Unknown aliphatic acid	14.225	200	J
1F	APD111	Unknown hexadecenoic acid	14.295	750	J
1F	APD112	Unknown alkane	19.112	240	J
1F	APD113	Unknown sterane derivative	21.327	190	J
1F	APD11483-48-7	Stigmasterol	21.538	190	NJ
1F	APD115	Unknown	21.789	200	J
1F	APD116	Unknown	21.949	510	J
1F	APD117	Unknown	22.251	250	J
1F	APD118	Unknown	22.722	230	J
1F	APD119	Unknown	23.273	340	J
1F	APD120	Unknown	23.834	980	Љ
			Total:	7660	
		Sample Number: SS26-26			
1F	AQH1SS2626	20			
1F	AQD1 1	Unknown terpene w/diemthylna	8.428	630	JZ
1F	AQD1 2132-65-0	Dibenzothiophene	11.452	630	NJ
1F	AQD1 3832-71-3	Phenanthrene, 3-methyl-	12.638	1100	NJ
1F	AQD1 42531-84-2	Phenanthrene, 2-methyl-	12.688	1300	NJ
1F	AQD1 5	Unknown hexadecenoic acid w/	12.777	640	JZ
1F	AQD1 6203-64-5	4H-Cyclopenta[def]phenanthre	12.857	2000	NJZ
1F	AQD1 7	Unknown methylphenanthrene	12.897	810	
1F	AQD1 835465-71-5	2-Phenylnaphthalene	13.226	800	NJ
1F	AQD1 984-65-1	9,10-Anthracenedione	13.276	1100	
1F	AQD110	Unknown alkane w/unknown	13.915	630	
1F	AQD111243-42-5	Benzo[b]naphtho[2,3-d]furan	14.704	640	
1F	AQD112238-84-6	11H-Benzo[a]fluorene	15.144	1400	
1F	AQD113243-17-4	11H-Benzo[b]fluorene	15.264	680	
1F	AQD114	Unknown PAH	16.434	710	
1F	AQD115	Unknown aromatic ketone	16.574	530	J

1F	AQD116	Unknown PAH	17.074	710	J
1F	AQD117	Unknown C20H12 PAH	19.038	530	J
1F	AQD118192-97-2	Benzo[e]pyrene	19.329	1600	NJ
1F	AQD119198-55-0	Perylene	19.55	720	
1F	AQD120	Unknown	23.821	630	JВ
			Total:	17790	
		Sample Number: SS26-28			
1F	ARH1SS2628	20			
1F	ARD1 1	Unknown alkane	6.976	4100	J
1F	ARD1 2	Unknown alkane	7.841	9500	
1F	ARD1 3	Unknown alkane	8.031	6000	
1F	ARD1 4	Unknown alkane	8.739	5200	
1F	ARD1 5	Unknown alkane	8.899	9800	
1F	ARD1 6	Unknown alkane	9.379	5200	
1F	ARD1 7	Unknown alkane	9.779	7200	J
1F	ARD1 8	Unknown alkane	10.22	16000	
1F	ARD1 9	Unknown alkane	10.661	9200	
1F	ARD110	Unknown alkane	10.721	35000	
1F	ARD111	Unknown alkane	11.053	4300	
1F	ARD112	Unknown alkane	11.123	4300	J
1F	ARD113	Unknown alkane	11.524	10000	J
1F	ARD114	Unknown alkane	11.615	24000	
1F	ARD115	Unknown alkane	12.298	7600	J
1F	ARD116	Unknown alkane	12.359	9400	J
1F	ARD117	Unknown alkane	13.154	7400	J
1F	ARD118	Unknown alkane	13.919	5800	J
1F	ARD119	Unknown alkane	14.665	5500	J
1F	ARD120	Unknown alkane	15.371	4200	J
			Total:	189700	
		Sample Number: SS26-30			
1F	ASH1SS2630	20			
1F	ASD1 1	Unknown terpene	8.46	590	
1F	ASD1 22531-84-2	Phenanthrene, 2-methyl-	12.718	600	
1F	ASD1 3	Unknown aliphatic compound	12.817	1800	J
1F	ASD1 4203-64-5	4H-Cyclopenta[def]phenanthre	. 12.886	2100	NJ
1F	ASD1 5238-84-6	11H-Benzo[a]fluorene	15.173	1600	NJ
1F	ASD1 6243-17-4	11H-Benzo[b]fluorene	15.292	1000	
1F	ASD1 7239-35-0	Benzo[b]naphtho[2,1-d]thioph	16.393	720	
1F	ASD1 8	Unknown PAH	16.473	970	
1F	ASD1 9	Unknown PAH	17.109	1400	
1F	ASD110	Unknown PAH	17.378	630	
1F	ASD112	Unknown C20H12 PAH	19.07	1000	
1F	ASD113192-97-2	Benzo[e]pyrene	19.369	2900	NJ

1F	ASD114198-55-0	Perylene	19.589	1800	NJ
1F	ASD115	Unknown PAH	21.469	570	J
1F	ASD11683-48-7	Stigmasterol	21.569	1100	NJ
1F	ASD117191-24-2	Benzo[ghi]perylene	21.96	1600	NJ
1F	ASD118	Unknown	22.001	1300	J
1F	ASD119	Unknown polycyclic hydrocarb	22.772	930	J
1F	ASD120	Unknown	23.88	820	
1F	ASD121	Unknown PAH	23.971	800	J
			Total:	24230	
		Sample Number: SS26-31			
1F	ATH1SS2631	20			
1F	ATD1 1	Unknown	6.376	300	J
1F	ATD1 2	Unknown	7.117	110	
1F	ATD1 3	Unknown terpene	8.429	410	
1F	ATD1 4	Unknown aliphatic compound	8.715	200	
1F	ATD1 5	Unknown aliphatic alcohol	8.834	98	
1F	ATD1 6	Unknown	8.972	540	
1F	ATD1 7	Unknown aliphatic compound	9.841	120	
1F	ATD1 8	Unknown	10.374	160	
1F	ATD1 9	Unknown aliphatic compound	10.612	110	J
1F	ATD110	Unknown	11.273	120	
1F	ATD111	Unknown aliphatic compound	12.796	640	J
1F	ATD11257-10-3	Hexadecanoic acid	12.856	320	NJ
1F	ATD113	Unknown	14.281	160	J
1F	ATD114	Unknown alkane	19.114	120	J
1F	ATD115	Unknown sterane derivative	21.337	150	J
1F	ATD11683-48-7	Stigmasterol	21.539	150	NJ
1F	ATD11783-46-5	.betaSitosterol	21.963	250	NJ
1F	ATD118	Unknown	22.255	100	J
1F	ATD119	Unknown	22.729	160	J
1F	ATD120	Unknown	23.836	880	JB
			Total:	5098	
		Sample Number: SS26-32			
1F	AUH1SS2632	20			
1F	AUD1 1	Unknown aliphatic compound	. 8.694	320	
1F	AUD1 2	Unknown	12.79	360	
1F	AUD1 3203-64-5	4H-Cyclopenta[def]phenanthre	12.86	780	
1F	AUD1 4238-84-6	11H-Benzo[a]fluorene	15.153	360	
1F	AUD1 5243-17-4	11H-Benzo[b]fluorene	15.273	240	
1F	AUD1 6	Unknown PAH	17.085	280	
1F	AUD1 7	Unknown alkane w/PAH's	17.96	310	
1F	AUD1 8	Unknown aliphatic aldehyde	18.807	320	
1F	AUD1 9	Unknown alkane	19.131	410	J

1F	AUD110	Unknown aliphatic alcohol	19.171	420	J
1F	AUD111192-97-2	Benzo[e]pyrene	19.343	620	NJ
1F	AUD112198-55-0	Perylene	19.565	340	NJ
1F	AUD113	Unknown alkane	20.213	240	J
1F	AUD114	Unknown PAH	21.45	230	J
1F	AUD115	Unknown PAH w/unknown	21.531	430	JZ
1F	AUD116	Unknown PAH w/unknown	21.967	660	
1F	AUD117	Unknown	22.261	260	J
1F	AUD1181058-61-3	Stigmast-4-en-3-one	22.991	290	
1F	AUD119	Unknown	23.284	280	J
1F	AUD120	Unknown	23.841	320	JВ
			Total:	7470	
		Sample Number: SS26-34			
1F	AVH1SS2634	20			
1F	AVD1 1	Unknown alkane	11.543	730	J
1F	AVD1 2	Unknown alkane	12.378	690	
1F	AVD1 357-10-3	Hexadecanoic acid w/substitu	12.901	650	NJZ
1F	AVD1 4	Unknown substituted benzene	13.012	850	J
1F	AVD1 5	Unknown alkane	13.183	920	J
1F	AVD1 6	Unknown alkane	13.96	670	J
1F	AVD1 7	Unknown	14.424	960	J
1F	AVD1 8	Unknown	14.566	1800	J
1F	AVD1 9	Unknown	15.486	1700	J
1F	AVD110	Unknown	16.824	960	J
1F	AVD111	Unknown	17.068	690	J
1F	AVD112	Unknown	20.49	2300	J
1F	AVD113	Unknown	20.715	780	J
1F	AVD114	Unknown	20.806	1200	J
1F	AVD115	Unknown	20.98	2700	
1F	AVD116	Unknown PAH	21.072	1500	J
1F	AVD117	Unknown	21.348	1000	
1F	AVD118	Unknown	21,429	770	
1F	AVD119	Unknown	21.613	1600	
1F	AVD120	Unknown	21.888	1400	J
			Total:	23870	
		Sample Number: SS26-34R			
1F	AWH1SS2634R	1			
1F	AWD1 1	Unknown	22.082	2	J
		Sample Number: SS26-52			
1F	AXH1SS2652	20			
1F	AXD1 1	Unknown alkane	9.776	440	
1F	AXD1 2	Unknown alkane	10.656	660	
1F	AXD1 3	Unknown alkane	10.706	640	J

1F	AXD1 4	Unknown alkane	11.519	910	J
1F	AXD1 5	Unknown alkane	11.6	760	J
1F	AXD1 6	Unknown alkane	12.354	940	J
1F	AXD1 7	Unknown alkane	13.16	830	J
1F	AXD1 8	Unknown alkane	13.937	750	J
1F	AXD1 9	Unknown alkane	14.674	740	J
1F	AXD110	Unknown alkane	15.393	560	J
1F	AXD111	Unknown	15.454	1400	J
1F	AXD112	Unknown	16.315	430	J
1F	AXD113198-55-0	Perylene	19.47	470	NJ
1F	AXD114	Unknown polycyclic hydrocarb	20.431	580	J
1F	AXD115	Unknown	20.471	980	J
1F	AXD116	Unknown	20.789	410	J
1F	AXD117	Unknown	20.952	1200	J
1F	AXD118	Unknown	21.055	690	J
1F	AXD119	Unknown	21.587	740	J
1F	AXD120	Unknown	21.852	870	J
			Total:	15000	

		Sample Number: MSB			
1F	AAH1MSB	0			
		Sample Number: MW26-1			
1F	ABH1MW261	1			
1F	ABD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.68	8	BJXNA
		Sample Number: MW26-10	-		
1F	ACH1MW2610	21			
1F	ACD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.08	28	BJXNA
1F	ACD1 2	UNKNOWN	4.52	3	JX
1F	ACD1 3 556-67-	CYCLOTETRASILOXANE, OCTAMETH	6.12	44	JXN
1F	ACD1 4 541-02-	CYCLOPENTASILOXANE, DECAMETH	8.08	7	BJXN
1F	ACD1 5 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	12.9	11	JXN
1F	ACD1 6 57-10-	HEXADECANOIC ACID	15.88	8	JXN
1F	ACD1 7	UNKNOWN OCTADECENOIC ACID	17.22	3	JX
1F	ACD1 8 57-11-	OCTADECANOIC ACID W/UNKNOWN	17.35	4	JXNZ
1F	ACD1 9	UNKNOWN ALIPHATIC	18.4	4	JX
1F	ACD110	UNKNOWN POLYMETHYLSILOXANE	20.55	4	JX
1F	ACD111	UNKNOWN POLYMETHYLSILOXANE	21.28	7	JX
1F	ACD112	UNKNOWN POLYMETHYLSILOXANE	21.98	9	JX
1F	ACD113	UNKNOWN CHOLESTENE DERIVATIV	22.2	4	JX
1F	ACD114	UNKNOWN POLYMETHYLSILOXANE	22.67	9	JX
1F	ACD115	UNKNOWN POLYMETHYLSILOXANE	23.42	9	JX
1F	ACD116 57-88-	CHOLESTEROL	23.57	25	JXN
1F	ACD117	UNKNOWN POLYMETHYLSILOXANE	24.3	8	JX
1F	ACD118	UNKNOWN	24.83		JX
1F	ACD119	UNKNOWN POLYMETHYLSILOXANE	25.33	7	JX
1F	ACD120	UNKNOWN POLYMETHYLSILOXANE	26.6		JX
1F	ACD121	UNKNOWN POLYMETHYLSILOXANE	28.17		JX
			Total:	205	
		Sample Number: MW26-11			
1F	ADH1MW2611	12			
1F	ADD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.12		BJXNA
1F	ADD1 2 556-67-	CYCLOTETRASILOXANE, OCTAMETH	6.15		JXNZ
1F	ADD1 3 593-45-	OCTADECANE	14.58		JXN
1F	ADD1 4 638-36-	HEXADECANE, 2,6,10,14-TETRAM	. 14.67		JXN
1F	ADD1 5 629-92-	NONADECANE	15.38		JXN
1F	ADD1 6	UNKNOWN ALKANE	16.72		JX
1F	ADD1 7	UNKNOWN POLALKOXYPROPANOL	17.4		JX
1F	ADD1 8	UNKNOWN POLALKOXYPROPANOL	19.2		JX
1F	ADD1 9	UNKNOWN CHOLESTENE DERIVATIV	22.23		JX
1F	ADD110 57-88-	CHOLESTEROL	23.58		JXN
1F	ADD111	UNKNOWN POLYMETHYLSILOXANE	24.62		JX
1F	ADD112	UNKNOWN	24.87	4	JX

		:	Total:	96	
		Sample Number: MW26-4			
1F	AEH1MW264	2			
1F	AED1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.08	4	BJXNA
1F	AED1 2 556-67-	CYCLOTETRASILOXANE, OCTAMETH	6.15	9	BJXN
			Total:	13	
		Sample Number: MW26-7			
1F	AFH1MW267	20			
1F	AFD1 1 108-67-	BENZENE, 1,3,5-TRIMETHYL-	6.53	6	JXN
1F	AFD1 2 611-14-	BENZENE, 1-ETHYL-2-METHYL-	6.7		JXN
1F	AFD1 3 95-63-	BENZENE, 1,2,4-TRIMETHYL-	6.9	7	JXN
1F	AFD1 4 526-73-	BENZENE, 1,2,3-TRIMETHYL-	7.32		JXN
1F	AFD1 5	UNKNOWN DIETHYLBENZENE	7.65		JX
1F	AFD1 6	UNKNOWN c4-ALKYLBENZENE	8.53	11	JX
1F	AFD1 7	UNKNOWN ETHYLDIMETHYLBENZENE	8.58	19	JX
1F	AFD1 8	UNKNOWN C4/C5-SUBSTITUTED BE	8.85	10	JXZ
1F	AFD1 9	UNKNOWN C4-SUBSTITUTED BENZE	9	34	JXZ
1F	AFD110 119-64-	NAPHTALENE, 1,2,3,4-TETRAHYD	9.17	15	JXN
1F	AFD111	UNKNOWN DIMETHYLINDAN W/UNKN	9.58	12	JXZ
1F	AFD112	UNKNOWN DIMETHYLINDAN	10.18	8	JX
1F	AFD113	UNKNOWN C11H14 NAPHTHALENE D	10.38	11	JX
1F	AFD114	UNKNOWN C11H14 NAPHTHALENE D	10.72	14	JX
1F	AFD115 90-12-	NAPHTHALENE, 1-METHYL-	10.97	64	JXN
1F	AFD116 581-42-	NAPHTHALENE, 2,6-DIMETHYL-	11.95	21	JXN
1 <b>F</b>	AFD117 575-41-	NAPHTHALENE, 1,3-DIMETHYL-	12.13	40	JXN
1 <b>F</b>	AFD118 581-40-	NAPHTHALENE, 2,3-DIMETHYL-	12.35	13	JXN
1F	AFD119 571-58-	NAPHTHALENE, 1,4-DIMETHYL-	12.38	11	JXN
lF	AFD120	UNKNOWN ALKANE W/UNKNOWN ARO	14.53	13	JXZ
			Total:	337	
		Sample Number: MW26-70			
1F	AGH1MW2670	20			
1F	AGD1 1 61-14-	BENZENE, 1-ETHYL-2-METHYL-	6.7	11	JXN
1F	AGD1 2 526-73-	BENZENE, 1,2,3-TRIMETHYL-	7.3		JXN
1F	AGD1 3 95-93-	BENZENE, 1,2,4,5-TETRAMETHYL	8.53	13	JXN
1F	AGD1 4 527-53-	BENZENE, 1,2,3,5-TETRAMETHYL	8.58		JXN
1F	AGD1 5	UNKNOWN C4/C5-SUBSTITUTED BE	8.85		JXZ
1F	AGD1 6	UNKNOWN C4-SUBSTITUTED BENZE	9		JXZ
1F	AGD1 7 119-64-	NAPHTHALENE, 1,2,3,4-TETRAHY	9.15		JXN
1F	AGD1 8	UNKNOWN DIMETHYLINDAN W/C5-A	9.57		JXZ
1F	AGD1 9	UNKNOWN DIMETHYLINDAN	10.18		JX
1F	AGD110	UNKNOWN C11H14 NAPHTALENE DE	10.38	12	
1F	AGD111	UNKNOWN C11H14 NAPHTALENE DE	10.72	13	
1F	AGD112 90-12-	NAPHTHALENE, 1-METHYL-	10.97	76	JXN

1 <b>F</b>	AGD113 581-42-	NAPHTHALENE, 2,6,-DIMETHYL-	11.95	24	JXN
1F		NAPHTHALENE, 1,3-DIMETHL-	12.13	43	JXN
1F	AGD115 581-40-	NAPHTHALENE, 2,3-DIMETHYL-	12.35	14	JXN
1 F	AGD116 571-58-	NAPHTHALENE, 1,4-DIMETHYL-	12.38	12	JXN
1F	AGD117 571-61-	NAPHTHALENE, 1,5-DIMETHYL-	12.52	10	JXN
1F	AGD118	UNKNOWN TRIMETHYLNAPHTHALENE	13.23		JX
lF	AGD119	UNKNOWN TRIMETHYLNAPHTHALENE	13.4	10	JX
1F	AGD120	UNKNOWN AROMATIC	15.92	9	JX
			Total:	391	
		Sample Number: MW26-7R			
1F	AHH1MW267R	3			
1F	AHD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.7	19	BJXNA
1F	AHD1 2	UNKNOWN ALIPHATIC AMIDE	22.12	12	JX
1F	AHD13	UNKNOWN POLYMETHYLSILOXANE	22.53		JX
			Total:	36	
		Sample Number: MW26-9			
1F	AIH1MW269	3			
1F	AID1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.67	9	BJXNA
1F	AID1 2 872-50-	2-PYRROLIDINONE, 1-METHYL-	7.55	3	JXN
1F	AID1 3	UNKNOWN BUTOXYETHYOXYETHANO	9.35	10	JX
			Total:	22	
		Sample Number: LAB BLANK			
1F	AJH1SBLKZ8	13			
1F	AJD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.12	4	JXNA
1F	AJD1 2 556-67-	CYCLOTETRASILOXANE, OCTAMETH	6.18	25	JXN
1F	AJD1 3 541-02-	CYCLOPENTASOLXANE DECAMETHYL	8.15	15	JXN
1F	AJD1 4 540-97-	CYCLOHEXASILOXANE, DECAMETHY	10.12	5	JXN
1F	AJD1 5	UNKNOWN POLYMETHYLSILOXANE	20.65		JX
1F	AJD1 6	UNKNOWN POLYMETHYLSILOXANE	21.4	7	JX
1F	AJD1 7	UNKNOWN POLYMETHYLSILOXANE	22.08		JX
1F	AJD1 8	UNKNOWN POLYMETHYLSILOXANE	22.78		JX
1F	AJD1 9	UNKNOWN POLYMETHYLSILOXANE	23.55		JX
1F	АЈD110	UNKNOWN POLYMETHYLSILOXANE	24.47		JX
1F	АЈD111	UNKNOWN POLYMETHYLSILOXANE	25.55		JX
1F	АЛД112	UNKNOWN POLYMETHYLSILOXANE	. 26.85		JX
1F	AJD113	UNKNOWN POLYMETHYLSILOXANE	28.47	5	JX
		Sample Number: LAB BLANK			
1F	AKH1SBLK6L	1			
1F	AKD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.67	12	JXNA
		Sample Number: LAB BLANK			
1F	ALH1SBLK7L	17	<del> </del>		
1F	ALD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	3.9		JXNA
1F	ALD1 2 541-02-	CYCLOPENTASILOXANE, DECAMETH	7.9	10	JXN

lF	ALD1 3 540-97-	CYCLOHEXASILOXANE, DECAMETHY	9.85	3 JXN
1F	ALD1 4	UNKNOWN POLYALKOXYPROPANOL	17.12	4 JX
1F	ALD1 5	UNKNOWN POLYALKOXYPROPANOL	18.88	2 JX
1F	ALD1 6	UNKNOWN POLYALKOXYPROPANOL	18.93	3 JX
1F	ALD1 7	UNKNOWN POLYMETHYLSILOXANE	19.53	3 JX
1F	ALD1 8	UNKNOWN POLYMETHYLSILOXANE	20.32	6 JX
1F	ALD1 9	UNKNOWN POLYMETHYLSILOXANE	21.07	9 <b>JX</b>
1F	ALD110	UNKNOWN POLYMETHYLSILOXANE	21.75	11 JX
1F	ALD111	UNKNOWN POLYMETHYLSILOXANE	22.42	12 JX
1F	ALD112	UNKNOWN POLYMETHYLSILOXANE	23.12	12 JX
1F	ALD113	UNKNOWN DODECANOATE	23.32	2 JX
1F	ALD114	UNKNOWN POLYMETHYLSILOXANE	23.93	10 JX
1F	ALD115	UNKNOWN POLYMETHYLSILOXANE	24.9	8 JX
1F	ALD116	UNKNOWN POLYMETHYLSILOXANE	26.07	6 JX
1F	ALD117	UNKNOWN POLYMETHYLSILOXANE	27.48	4 JX

		Sample Number: MSB			
1F	AAH1MSB	0			
		Sample Number: SS26-45			
1F	ABH1SS2645	21			
1F	ABD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.63	5400	BJXNA
1F	ABD1 2 112-53-	1-DODECANOL	12.28	280	BJXN
1F	ABD1 3	UNKNOWN HEXADECENOIC ACID	16.45	440	JX
1F	ABD1 4 57-10-	HEXADECANOIC ACID	16.5	650	JXN
1F	ABD1 5	UNKNOWN	20.1	390	JX
1F		HEPTACOSANE	21.3	370	JXN
1F	ABD1 7 506-51-	1-TETRACOSANOL W/UNKNOWN	21.35	190	JXNZ
1F	ABD1 8	UNKNOWN	21.67	400	JXB
1F	ABD1 9 630-02-	OCTACOSANE	21.85	190	JXN
1F	ABD110	UNKNOWN	22.12	580	JX
1F	ABD111 630-03-	NONACOSANE	22.4	1700	JXN
1F	ABD112 506-52-	1-HEXACOSANOL	22.48	1200	JXN
1F	ABD113	UNKNOWN	22.77	280	JX
1F	ABD114 638-68-	TRIACONTANE	22.97	240	JXN
1F	ABD115 192-97-	BENZO[E]PYRENE	23.08	260	JXN
1F	ABD116 630-04-	HENTRIACONTANE	23.62	2100	JXN
1F	ABD117 57-88-	CHOLESTEROL	24.6	470	JXN
1F	ABD118 630-05-	TRITRIACONTANE	25.15	570	JXN
1F	ABD119	UNKNOWN	25.23	420	JXB
1F	ABD120	UNKNOWN	28.2	250	
1F	ABD121	UNKNOWN	28.65	250	JX
			Total:	16630	
		Sample Number: SS26-46			
1F	ACH1SS2646	21			
1F	ACD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.65	3900	BJXNA
1F	ACD1 2 112-53-	1-DODECANOL	12.28	410	BJXN
1F	ACD1 3	UNKNOWN ALIPHATIC	14.1	440	JX
1F	ACD1 4	UNKNOWN HEXADECENOIC ACID	16.45	490	JX
1F	ACD1 5 57-10-	HEXADECANOIC ACID	16.52	710	JXN
1F	ACD1 6	UNKNOWN	20.12	400	JX
1F	ACD1 7 593-49-	HEPTACOSANE	. 21.3		JXN
1F	ACD1 8	UNKNOWN	21.68	490	JXB
1F	ACD1 9 630-02-	OCTACOSANE	21.87		JXN
1F	ACD110	UNKNOWN ALKANAL W/UNKNOW			JXZ
1F	ACD111 630-03-	NONACOSANE	22.4	2200	
1F	ACD112 506-52-	1-HEXACOSANOL	22,48	1100	
1F	ACD113 638-68-	TRIACONTANE	22.98		JXN
1F	ACD114	UNKNOWN W/BENZOPYRENE	23.22		JXZB
1F	ACD115 630-04-	HENTRIACONTANE	23.62	2100	JXN

1F	ACD116 57-88-	CHOLESTEROL	24.6	420	JXN
1F	ACD116 37-88- ACD117 630-05-	TRITRIACONTANE	25.17		JXN
1F	ACD117 630-05-	UNKNOWN	25.17		JXN
		The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s			
1F	ACD119	UNKNOWN SITOSTEROL	26.47		·
1F	ACD120 1058-61-	STIGMAST-4-EN-3-ONE	28.13		JXN
1F	ACD121	UNKNOWN	28.2	310	JX
			Total:	17550	
		Sample Number: SS26-47			
1F	ADH1SS2647	. 21			
1F	ADD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.65		BJXNA
1F	ADD1 2 112-53-	1-DODECANOL	12.27		BJXN
1F	ADD1 3	UNKNOWN ALIPHATIC	14.1	510	
1F	ADD1 4	UNKNOWN HEXADECENOIC ACID	16.43	140	JX
1F	ADD1 5 57-10-	HEXADECANOIC ACID	16.48	130	JXN
1F	ADD1 6	UNKNOWN	20.12	220	
1F	ADD1 7 593-49-	HEPTACOSANE	21.3		JXN
1F	ADD18	UNKNOWN	21.68		JXB
1F	ADD19	UNKNOWN	22.12	170	JX
1F	ADD110 630-03-	NONACOSANE	22.4	520	JXN
1F	ADD111 506-52-	1-HEXACOSANOL	22.48	150	JXN
1F	ADD112	UNKNOWN	22.78	140	JX
1F	ADD113	UNKNOWN	23.2	380	JXB
1F	ADD114	UNKNOWN	23.48	190	JX
1F	ADD115 630-04-	HENTRIACONTANE	23.6	290	JXN
1F	ADD116	UNKNOWN	25.22	270	JXB
1F	ADD117	UNKNOWN	25.82	170	JX
1F	ADD118	UNKNOWN	26.57	630	JX
1F	ADD119	UNKNOWN	26.97	230	JX
1F	ADD120	UNKNOWN	27.58	250	JX
1F	ADD121	UNKNOWN	28.07	140	JX
			Total:	9580	
		Sample Number: SS26-53			
1F	AEH1SS2653	21			
1F	AED1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.77	3300	BJXNA
1F	AED1 2 112-53-	1-DODECANOL	. 12.3	350	BJXN
1F	AED1 3	UNKNOWN HEXADECENOIC ACID	16.48	530	JX
1F	AED1 4 57-10-	HEXADECANOIC ACID	16.53	460	JXN
1F	AED1 5 238-84-	11H-BENZO[A]FLUORENE	18.93	260	JXN
1F	AED1 6	UNKNOWN W/BENZONAPHTHOTH	20.15	430	JXZ
1F	AED1 7 195-19-	BENZO[C]PHENANTHRENE	20.83		JXN
1F	AED1 8 593-49-	HEPTACOSANE	21.35	370	JXN
1F	AED19	UNKNOWN	21.73	460	JXB
1F	AED110	UNKNOWN ALKANAL W/UNKNOW		350	JXZ

1F	AED111 6	630-03-	NONACOSANE	22.45	1300	JXN
1F	AED112		UNKNOWN	22.83	280	JX
1F	AED113 6	638-68-	TRIACONTANE	23.03	250	JXN
1F	AED114	192-97-	BENZO[E]PYRENE	23.13	600	JXN
1F	AED115		UNKNOWN	23.28	560	JXB
1F	AED116 6	630-04-	HENTRIACONTANE	23.68	1200	JXN
1F	AED117		UNKNOWN CHOLESTENE DERIVA	24.7	530	JX
1F	AED118 (	630-05-	TRITRIACONTANE	25.25	310	JXN
1F	AED119		UNKNOWN	25.32	400	JXB
1F	AED120		UNKNOWN ALCOHOL	26	280	JX
1F	AED121		UNKNOWN	28.33	250	JX
				Total:	12680	
			Sample Number: LAB BLANK			
1F	AFH1SBL1	KN5	5			
1F	AFD1 1 1	23-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.7	5300	JXNA
1F	AFD1 2 1	12-53-	1-DODECANOL	12.3	150	JXN
1F	AFD1 3		UNKNOWN	21.72	110	JX
1F	AFD14		UNKNOWN	23.25	150	JX
1F	AFD1 5		UNKNOWN	25.28	93	JX

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		Sample Number: LAB BLANK			
1F	AAH1SBLK4L	0			
		Sample Number: SW25-3			
1F	ABH1SW253	0			

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		Sample Number: MSB			
1E	AAH1MSB	0			
		Sample Number: MW25-1			
1E	ABH1MW251	0			
		Sample Number: MW25-10			
1E	ACH1MW2510	0			
	110111111111111111111111111111111111111	Sample Number: MW25-11			
1E	ADH1MW2511	0			
		Sample Number: MW25-13			
1E	AEH1MW2513	0			
		Sample Number: MW25-15			
1E	AFH1MW2515	0			
		Sample Number: MW25-17			
1E	AGH1MW2517	0			
		Sample Number: MW25-18			
1E	AHH1MW2518	0			
		Sample Number: MW25-19			
1E	AIH1MW2519	0			
		Sample Number: MW25-2			
1E	AJH1MW252	10			
1E	AJD1 178-78-4	Butane, 2-methyl-	2.47	200	JN
1E	AJD1 2109-66-0	Pentane, w/unknown cycloalka	2.75	130	JNZ
1E	AJD1 3	Unknown cycloalkane	3.1	200	J
1E	AJD1 4	Unknown ethylmethylbenzene	11.3	420	J
1E	AJD1 5108-67-8	Benzene, 1,3,5-trimethyl-	11.4	220	JN
1E	AJD1 6611-14-3	Benzene, 1-ethyl-2-methyl	11.62	200	JN
1E	AJD1 795-63-6	Benzene, 1,2,4-trimethyl-	11.82	580	JN
1E	AJD1 8526-73-8	Benzene, 1,2,3-trimethyl-	12.3	290	JN
1E	AJD1 9	Unknown c3-substituted benze	12.5	280	
1E	AJD110	Unknown c4-substituted benze	13.77	200	JZ
			Total:	2720	
		Sample Number: MW25-3			
1E	AKH1MW253	1			
1E	AKD1 195-63-6	Benzene, 1,2,4-trimethyl-	11.82	10	JN
		Sample Number: MW25-4D			
1E	ALH1MW254D	0			
		Sample Number: MW25-50			
1E	AMH1MW2550	0			
		Sample Number: MW25-5D			
1E	ANH1MW255D	. 0			
		Sample Number: MW25-6			
1E	AOH1MW256	0			

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		Sample Number: MW25-7D			
1E	APH1MW257D	0			
		Sample Number: MW25-8			
1E	AQH1MW258	0			
		Sample Number: MW25-9			
1E	ARH1MW259	10			
1E	ARD1 1106-97-8	Butane	1.95	9	JN
1E	ARD1 278-78-4	Butane, 2-methyl-	2.45	27	JN
1E	ARD1 3109-66-0	Pentane w/unknown cycloalkan	2.75	12	JNZ
1E	ARD1 4	Unknown cycloalkane	3.1	8	J
1E	ARD1 5	Unknown cycloalkane w/unknov	3.87	9	JZ
1E	ARD1 696-37-3	Cyclopentane, methyl-	5.07	11	JN
1E	ARD1 7	Unknown ethylmethylbenzene	11.32	8	J
1E	ARD1 895-63-6	Benzene, 1,2,4-trimethyl-	11.82	20	JN
1E	ARD1 9526-73-6	Benzene, 1,2,3-trimethyl-	12.3	9	JN
1E	ARD110	Unknown c3-substituted benze	12.52	7	J
			Total:	120	
		Sample Number: TB111995			
1E	ASH1TB111995	. 0			
		Sample Number: TB112895			
1E	ATH1TB112895	0			
		Sample Number: TB112995			
1E	AUH1TB112995	0			
		Sample Number: LAB BLANK	[		
1E	AVH1VBLKA1	0			
		Sample Number: LAB BLANK			
1E	AWH1VBLKB1	0			
		Sample Number: LAB BLANK	<b>T</b>		
1E	AXH1VBLKB2	0			
	· ·	Sample Number: LAB BLANK	<b></b>		
1E	AYH1VBLKB3	0			
		Sample Number: LAB BLANK			
1E	AZH1VBLKB4	0			
		Sample Number: LAB BLANK			
1E	BAH1VBLKC2	0			
		Sample Number: LAB BLANK			
1E	BBH1VBLKC4	0			
		Sample Number: LAB BLANK	<b>S</b>		
1E	BCH1VBLKC7	0			
		Sample Number: MW25-12D			
1E	BDH1W2512D	0			
		Sample Number: MW25-12DM	IS		

# V55106

1E	BEH1W2512DMS	0	
		Sample Number: MW25-12DN	ISD
1E	BFH1W2512DMSD	0	
		Sample Number: MW25-14D	
1E	BGH1W2514D	0	
		Sample Number: MW25-16D	
1E	BHH1W2516D	. 0	
		Sample Number: MW25-5DR	
1E	BIH1W255DR	0	

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	Sample Number: S	ENLAK			
1E AAH1	SENLAK	0			
	Sample Number: LAB BLANK				
1E ABH1	ABH1TB	0			
Sample Number: LAB BLANK					
1E ACH1	ACH1VBLKM4 .	0			

	Sample Number: S	Sample Number: SW25-3		
1E	AAH1SW253	0		
	Sample Number: LAB BLANK			
1E	ABH1VBLKV4	0		

. 

	Sample Number: S	W25-7				
1E	ABH1SW25-7	0				
	Sample Number: SW25-8					
1E	ACH1SW25-8	0				
	Sample Number: S	W25-9				
1E	ADH1SW25-9	0				
	Sample Number: S	W25-1				
1E	AGH1SW251	0				
	Sample Number: S	W25-10				
1E	AHH1SW2510	0				
	Sample Number: S	W25-15				
1E	AIH1SW2515	0				
	Sample Number: S	W25-2				
1E	AJH1SW252	0				
	Sample Number: S	W25-4				
1E	AKH1SW254	0				
	Sample Number: S	W25-5				
1E	ALH1SW255	0				
	Sample Number: S	W25-6				
1E	AMH1SW256	0				
	Sample Number: T	B10695				
1E	ANH1TB10695	0				
	Sample Number: T	B10995				
1E	AOH1TB10995	0				
	Sample Number: LAB BLANK					
1E	APH1VBLKQ1	0				
	Sample Number: LAB BLANK					
1E	AQH1VBLKQ2	0				

		Sample Number: SB26-12-00			
1F	AAH1SB261200	21			
1F	AAD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.58	9400	BJXNA
1F	AAD1 2 112-40-	DODECANE	9.3	2000	JXN
1F	AAD13	UNKNOWN ALKANE	10.13	2600	JX
1F	AAD1 4 629-50-	TRIDECANE	10.45	4300	JXN
1F	AAD1 5	UNKNOWN ALKANE	11.28	2800	JX
1F	AAD1 6 629-59-	TETRADECANE	11.52	5400	JXN
1F	AAD1 7	UNKNOWN SESQUITERPENE	12.05	3200	JX
1F	AAD1 8	UNKNOWN ALKANE	12.15	5200	JX
1F	AAD1 9	UNKNOWN	12.35	1600	JX
1F	AAD110	UNKNOWN SESQUITERPENE	12.43	5400	JX
1F	AAD111 629-62-	PENTADECANE	12.53	7300	JXN
1F	AAD112	UNKNOWN	13.4	2000	JX
1F	AAD113 544-76-	HEXADECANE	13.47	5700	JXN
1F	AAD114	ÙNKNOWN ALKANE	13.92	4800	JX
1F	AAD115 629-78-	HEPTADECANE	14.37	6700	JXN
1F	AAD116 1921-70-	PENTADECANE, 2,6,10,14-TETRA	14.42	11000	JXN
1F	AAD117	UNKNOWN DIMETHYLBIPHENYL	14.83	2300	JXZ
1F	AAD118 593-45-	OCTADECANE	15.22	4100	JXN
1F	AAD119 638-36-	HEXADECANE, 2,6,10,14-TETRAM	15.3	6600	JXN
1F	AAD120 629-92-	NONADECANE	16.03	4300	JXN
1F	AAD121 112-95-	EICOSANE	16.8	2200	JXN
			Total:	98900	
		Sample Number: SB26-12-04			
1F	ABH1SB261204	21			
1F	ABD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.6	5600	BJXNA
1F	ABD1 2	UNKNOWN ALKANE	9.47	2700	JX
1F	ABD1 3	UNKNOWN	9.7	1200	JX
1F	ABD1 4	UNKNOWN ALKYLCYCLOHEXANI	9.85	1200	JX
1F	ABD1 5	UNKNOWN ALKANE	10.13	3300	JX
1F	ABD1 6 90-12-	NAPHTHALENE, 1-METHYL- W/DIN	10.87	3300	JXNZ
1F	ABD1 7	UNKNOWN ALKYLCYCLOHEXANI		1600	
1F	ABD1 8	UNKNOWN ALKANE	11.27	2900	JX
1F	ABD1 9 581-42-	NAPHTHALENE, 2,6-DIMETHYL-	11.85	3200	
1F		NAPHTHALENE, 1,3-DIMETHYL-	12.02	3300	
1F	ABD111 575-43-	NAPHTHALENE, 1,6-DIMETHYL- W			JXNZ
1F	ABD112	UNKNOWN ALKANE	12.13	2800	
1F	ABD113	UNKNOWN C3-ALKYLNAPHTHALI		1500	
1F	ABD114	UNKNOWN C3-ALKYLNAPHTHALI		1600	
1F	ABD115	UNKNOWN C3-ALKYLNAPHTHALI		2200	
1F	ABD116	UNKNOWN C3-ALKYLNAPHTHALI		1200	
1F	ABD117	UNKNOWN C3-ALKYLNAPHTHALI	13.32	1500	JX

1F	ABD118	UNKNOWN ALKANE	13.9	3300	IX
1F			14.4		JXN
		PENTADECANE, 2,6,10,14-TETRA UNKNOWN	14.82	1200	
1F	ABD120	Annual Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the	15.28		JXN
1F	ABD121 638-36-	HEXADECANE, 2,6,10,14-TETRAM	Total:		JYIA
		GI- N	Total:	53700	
		Sample Number: SB26-12-08			
1F	ACH1SB261208	21	1.60	5000	
1F	ACD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME			BJXNA
1F	ACD1 2	UNKNOWN ALKANE	9.47	1100	
1F	ACD1 3	UNKNOWN	9.72	600	
1F	ACD1 4	UNKNOWN ALKANE	10.15	1100	
1F	ACD1 5	UNKNOWN ALKANE	10.65	530	
1F	ACD1 6	UNKNOWN ALKYLCYCLOHEXANI		560	
1F	ACD1 7	UNKNOWN ALKANE	11.28	1400	
1F	ACD1 8	UNKNOWN ALIPHATIC	11.55	640	
1F	ACD1 9	UNKNOWN	11.68	600	
1F	ACD110	UNKNOWN SESQUITERPENE	12.05	690	
1F	ACD111	UNKNOWN ALKANE	12.15	1800	
1F	ACD112	UNKNOWN SESQUITERPENE	12.43	840	
1F	ACD113	UNKNOWN C3-ALKYLNAPHTHALI	13.13		JXZ
1F	ACD114	UNKNOWN C3-ALKYLNAPHTHALI	13.3	650	
1F	ACD115	UNKNOWN	13.73	560	
1F	ACD116	UNKNOWN ALKANE	13.92	1400	
1F	ACD117 1921-70-	PENTADECANE, 2,6,10,14-TETRA	14.42	2800	
1F	ACD118	UNKNOWN AROMATIC	14.62	580	JX
1F	ACD119	UNKNOWN	14.83	980	JX
1F	ACD120 638-36-	HEXADECANE, 2,6,10,14-TETRAM	15.3	2000	JXN
1F	ACD121	UNKNOWN DIMETHYLPHENANTH	17.57	520	JX
			Total:	25240	
		Sample Number: SD26-10			
1F	ADH1SD2610	20			
1F	ADD1 1 1120-21-	UNDECANE	8.1	110000	JXN
1F	ADD1 2 112-40-	DODECANE	9.32	250000	JXN
1F	ADD1 3	UNKNOWN ALKANE	10.15	150000	
1F	ADD1 4 629-50-	TRIDECANE	. 10.45	320000	JXN
1F	ADD1 5	UNKNOWN ALKANE	11.28	200000	JX
1F	ADD1 6 629-59-	TETRADECANE	11.53	390000	JXN
1F	ADD1 7 581-42-	NAPHTHALENE, 2,6-DIMETHYL-	11.87	160000	JXN
1F	ADD1 8 575-41-	NAPHTHALENE, 1,3-DIMETHYL-	12.03	190000	JXN
1F	ADD1 9 575-43-	NAPHTHALENE, 1,6-DIMETHYL- W	12.07	130000	JXNZ
1F	ADD110	UNKNOWN ALKANE	12.15	290000	JX
1F	ADD111 629-62-	PENTADECANE	12.53	480000	JXN
1F	ADD112	UNKNOWN C3-ALKYLNAPHTHALI	13.08	110000	JX

1F	ADD113	UNKNOWN C3-ALKYLNAPHTHALI	13.13	220000	JXZ
1F	ADD114 544-76-	HEXADECANE W/C3-ALKYLNAPH	13.47	340000	JXNZ
1F	ADD115	UNKNOWN ALKANE	13.92	290000	JX
1F	ADD116 629-78-	HEPTADECANE	14.37	270000	JXN
1F	ADD117 1921-70-	PENTADECANE, 2,6,10,14-TETRA	14.42	520000	JXN
1F	ADD118 593-45-	OCTADECANE	15.22	. 170000	JXN
1F	ADD119 638-36-	HEXADECANE, 2,6,10,14-TETRAM	15.3	330000	JXN
1F	ADD120 629-92-	NONADECANE	16.02	140000	JXN
			Total:	5060000	
		Sample Number: LAB BLANK			
1F	AEH1SBLKN2	3			
1F	AED1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.73	2100	JXNA
1F	AED1 2 112-53-	1-DODECANOL	12.32	160	JXN
1F	AED1 3	UNKNOWN	22.17	70	JX

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		Sample Number: SB26-11-00			
1F	AAH1261100	5			
1F	AAD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.65	3400	BJXNA
1F	AAD1 2 112-53-	1-DODECANOL	12.3	130	BJXN
1F	AAD13	UNKNOWN ALIPHATIC	14.13	310	JX
1F	AAD1 4	UNKNOWN ALIPHATIC	14.32	90	JX
1F	AAD1 5	UNKNOWN	14.97	120	JX
			Total:	4050	
		Sample Number: SB26-11-03			
1F	ABH1261103	2			
1F	ABD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.62	2900	BJXNA
1F	ABD1 2 112-53-	1-DODECANOL	12.25	160	BJXN
····			Total:	3060	
		Sample Number: SB26-11-06			
1F	ACH1261106	1	····		
1F	ACD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.62	2500	BJXNA
		Sample Number: MSB			
1F	ADH1MSB	0			
		Sample Number: SD26-11			
1F	AEH1SD2611	20			
1F	AED1 1 1120-21-	UNDECANE	8.07	83000	JXN
1F	AED1 2 112-40-	DODECANE	9.28	130000	
1F	AED1 3	UNKNOWN ALKANE	10.12	84000	
1F	AED1 4 629-50-	TRIDECANE	10.42	180000	
1F	AED1 5	UNKNOWN ALKANE	11.25	130000	
1F	AED1 6 629-59-	TETRADECANE	11.5	260000	
1F	AED1 7 581-42-	NAPHTHALENE, 2,6-DIMETHYL-	11.83	100000	
1F	AED1 8 575-41-	NAPHTHALENE, 1,3-DIMETHYL-	12	120000	
1F	AED1 9 575-43-	NAPHTHALENE, 1,6-DIMETHYL- W	12.03	90000	JXNZ
1F	AED110	UNKNOWN ALKANE	12.12	170000	JX
1F	AED111 629-62-	PENTADECANE	12.5	330000	JXN
1F	AED112	UNKNOWN C3-ALKYLNAPHTHALI	13.05	72000	JX
1F	AED113	UNKNOWN C3-ALKYLNAPHTHALI	13.1	140000	JXZ
1F	AED114 544-76-	HEXADECANE W/UNKNOWN C3-A	13.43	250000	JXNZ
1F	AED115	UNKNOWN ALKANE	· 13.88	190000	JX
1F	AED116 629-78-	HEPTADECANE	14.33	200000	JXN
1F	AED117 1921-70-	PENTADECANE, 2,6,10,14-TETRA	14.38	<del></del>	
1F	AED118 593-45-	OCTADECANE	15.18	130000	JXN
1F	AED119 638-36-	HEXADECANE, 2,6,10,14-TETRAM	15.27		
1F	AED120 629-92-	NONADECANE	15.98	100000	JXN
			Total:	3319000	
		Sample Number: SD26-12			
1F	AFH1SD2612	21			

1F	AFD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.62	7100	BJXNA
1F	AFD1 2 112-53-	1-DODECANOL	12.27	190	BJXN
1F	AFD1 3	UNKNOWN HEXADECENOIC ACID	16.45	460	JX
1F	AFD1 4 57-10-	HEXADECANOIC ACID, W/PHENAI	16.5	520	JXNZ
1F	AFD1 5	UNKNOWN ALIPHATIC	17.83	170	JX
1F	AFD1 6 238-84-	11H-BENZO[A]FLUORENE	18.9	200	JXN
1F	AFD1 7 195-19-	BENZO[C]PHENANTHRENE W/1-D0	20.13	210	JXNZ
1F	AFD1 8	UNKNOWN C18H12 PAH	20.78	260	JX
1F	AFD1 9	UNKNOWN	22.12	260	JX
1F	AFD110 630-03-	NONACOSANE	22.4	520	JXN
1F	AFD111 506-52-	1-HEXACOSANOL	22.47	480	JXN
1F	AFD112 192-97-	BENZO[E]PYRENE	23.05	390	JXN
1F	AFD113 630-04-	HENTRIACONTANE	23.6	760	JXN
1F	AFD114	UNKNOWN	24.2	390	JX
1F	AFD115 630-05-	TRITRIACONTANE	25.15	190	JXN
1F	AFD116	UNKNOWN POLYTERPENE DERIVA	25.52		
1F	AFD117	UNKNOWN ALIPHATIC	25.88	170	JX
1F	AFD118	UNKNOWN SITOSTEROL W/BENZO	26.42		JXZ
1F	AFD119	UNKNOWN	26.68	230	JX
1F	AFD120	UNKNOWN POLYTERPENE DERIVA	26.82		JXZ
1F	AFD121 1058-61-	STIGMAST-4-EN-3-ONE	28.1	870	JXN
			Total:	14540	
		Sample Number: SD26-8			
1F	AGH1SD268	2			
1F	AGD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.63	3600	BJXNA
1F	AGD1 2 112-53-	1-DODECANOL	12.27	160	BJXN
			Total:	3760	
		Sample Number: SS26-24			
1F	AHH1SS2624	13			
1F	AHD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.63	3300	BJXNA
1F	AHD1 2	UNKNOWN SESQUITERPENE	11.97	340	JX
1F	AHD1 3 112-53-	1-DODECANOL W/UNKNOWN	12.27	140	BJXNZ
1F	AHD1 4	UNKNOWN SESQUITERPENE	12.6	480	JX
1F	AHD1 5	UNKNOWN ALIPHATIC	14.12	1400	JX
1F	AHD1 6	UNKNOWN HEXADECENOIC ACID	. 16.45	110	JXZ
1F	AHD1 7	UNKNOWN	22.13	94	JX
1F	AHD1 8 630-03-	NONACOSANE	22.4	72	JXN
1F	AHD1 9 192-97-	BENZO[E]PYRENE	23.05	100	JXN
1F	AHD110	UNKNOWN	26.6	220	JX
1F	AHD111	UNKNOWN	27	87	
1F	AHD112	UNKNOWN	27.62	120	JX
1F	AHD113	UNKNOWN	28.57	240	JX
			Total:	6703	

		Sample Number: SS26-27			
1F	AIH1SS2627	14			
1F	AID1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.67	4100	BJXNA
1F	AID1 2	UNKNOWN SESQUITERPENE	11.98	210	JX
1F	AID1 3 112-53-	1-DODECANOL	12.28	160	BJXN
1F	AID1 4 629-62-	PENTADECANE	12.48	75	JXN
1F	AID1 5	UNKNOWN SESQUITERPENE	12.62	100	JX
1F	AID1 6 544-76-	HEXADECANE	13.43	96	JXN
1F	AID1 7	UNKNOWN ALIPHATIC	14.12	420	JX
1F	AID1 8 629-78-	HEPTADECANE	14.33	93	JXN
1F	AID1 9 1921-70-	PENTADECANE, 2,6,10,14-TETRA	14.38	150	JXN
1F	AID110 593-45-	OCTADECANE	15.18	93	JXN
1F	AID111 638-36-	HEXADECANE, 2,6,10,14-TETRAM	15.27	160	JXN
1F	AID112 629-92-	NONADECANE	16	100	JXN
1F	AID113 112-95-	EICOSANE W/BROMOCOMPOUND	16.77		JXNZ
1F	AID114 629-94-	HENEICOSANE	17.5		JXN
			Total:	5986	
		Sample Number: SS26-29			
1F	AJH1SS2629	21			
1F	AJD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.67	3200	BJXNA
1F	AJD1 2 629-62-	PENTADECANÉ	12.48		JXN
1F	AJD1 3 544-76-	HEXADECANE	13.43		JXN
1F	AJD1 4	UNKNOWN ALKANE	13.87	220	
1F	AJD1 5	UNKNOWN ALIPHATIC	14.12	370	JX
1F	AJD1 6 629-78-	HEPTADECANE	14.32		JXN
1F	AJD1 7 1921-70-	PENTADECANE, 2,6,10,14-TETRA	14.37	510	JXN
1F	AJD1 8 593-45-	OCTADECANE	15.18	640	JXN
1F	AJD1 9 638-36-	HEXADECANE, 2,6,10,14-TETRAM	15.27	430	JXN
1F	AJD110 629-92-	NONADECANE	15.98	770	JXN
1F	AJD111 112-95-	EICOSANE	16.75	580	JXN
1F	AJD112 629-94-	HENEICOSANE	17.5	450	JXN
1F	AJD113 629-97-	DOCOSANE	18.2	350	JXN
1F	AJD114 638-67-	TRICOSANE	18.87	240	JXN
1F	AJD115 238-84-	11H-BENZO[A]FLUORENE	18.92	250	JXN
1F	AJD116 629-99-	PENTACOSANE W/BENZO[C]PHEN	. 20.05	210	JXNZ
1F	AJD117	UNKNOWN	22.1	820	JX
1F	AJD118 630-03-	NONACOSANE W/UNKNOWN	22.42	270	JXNZ
1F	AJD119	UNKNOWN	22.83	220	JX
1F	AJD120 192-97-	BENZO[E]PYRENE	23.07	760	JXN
1F	AJD121 198-55-	PERYLENE	23.33	230	JXN
			Total:	11860	
		Sample Number: SS26-33			
1F	AKH1SS2633	14			

1F	AKD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME			BJXNA
1F	AKD1 2 112-53-	1-DODECANOL	12.27		BJXN
1F	AKD1 3	UNKNOWN SESQUITERPENE	12.6	130	JX
1F	AKD1 4	UNKNOWN ALIPHATIC	14.1	270	JX
1F	AKD1 5	UNKNOWN HEXADECENOIC ACID	16.43	79	JXZ
1F	AKD1 6 57-10-	HEXADECANOIC ACID W/PHENAN	16.48	79	JXNZ
1F	AKD1 7	UNKNOWN	22.13	94	JX
1F	AKD1 8 630-03-	NONACOSANE	22.4	140	JXN
1F	AKD1 9 192-97-	BENZO[E]PYRENE	23.05	140	JXN
1F	AKD110 630-04-	HENTRIACONTANE	23.62	150	JXN
1F	AKD111	UNKNOWN	26.6	250	JX
1F	AKD112	UNKNOWN	27	110	JX
1F	AKD113	UNKNOWN	27.62	79	JX
1F	AKD114 1058-61-	STIGMAST-4-EN-3-ONE	28.08	100	JXN
***************************************			Total:	5111	
		Sample Number: SS26-35		U.N.O	
1F	ALH1SS2635	7			
1F	ALD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.65	3400	BJXNA
1F	ALD1 2 112-53-	1-DODECANOL	12.3	120	BJXN
1F	ALD1 3	UNKNOWN	22.15	130	JX
1F	ALD1 4 630-03-	NONACOSANE	22.43	430	JXN
1F	ALD1 5 506-52-	1-HEXACOSANOL	22.5	110	JXN
1F	ALD1 6 630-04-	HENTRIACONTANE	23.65	910	JXN
1F	ALD1 7 630-05-	TRITRIACONTANE	25.18	160	JXN
			Total:	5260	
		Sample Number: SS26-36			
1F	AMH1SS2636	16			
1F	AMD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.63	2700	BJXNA
1F	AMD1 2	UNKNOWN SESQUITERPENE	11.98	570	JX
1F	AMD1 3 112-53-	1-DODECANOL W/UNKNOWN	12.28	120	BJXNZ
1F	AMD1 4	UNKNOWN SESQUITERPENE	12.62	930	JX
1F	AMD1 5	UNKNOWN ALIPHATIC	14.13	4700	JX
1F	AMD1 6	UNKNOWN	14.65	150	JX
1F	AMD1 7	UNKNOWN HEXADECENOIC ACID	16.47	290	JX
1F	AMD1 8 57-10-	HEXADECANOIC ACID	. 16.52	120	JXN
1F	AMD1 9	UNKNOWN HEXADECANOATE	20.33	82	JX
1F	AMD110	UNKNOWN POLYTERPENE DERIVA	25.53	74	JX
1F	AMD111	UNKNOWN SITOSTEROL	26.42		JX
1F	AMD112	UNKNOWN	26.6	230	JX
1F	AMD113	UNKNOWN	27	97	
1F	AMD114	UNKNOWN	27.62	200	
1F		STIGMAST-4-EN-3-ONE	28.08		JXN
1F	AMD116	UNKNOWN	28.57	270	JX

			Total:	10701	
		Sample Number: SS26-37			
1F	ANH1SS2637	9			
1F	AND1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.6	3500	BJXNA
1F	AND1 2	UNKNOWN SESQUITERPENE	11.97	220	JX
1F	AND1 3 112-53-	1-DODECANOL W/UNKNOWN	12.27		BJXNZ
1F	AND1 4	UNKNOWN SESQUITERPENE	12.6	430	
1F	AND1 5	UNKNOWN ALIPHATIC	14.12	2200	
1F	AND1 6	UNKNOWN	14.63		JX
1F	AND1 7	UNKNOWN	26.58	140	
1F	AND1 8	UNKNOWN	27.6	79	JX
1F	AND1 9	UNKNOWN	28.53		JX
			Total:	6810	
		Sample Number: SS26-38			
1F	AOH1SS2638	13			77
1F	AOD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.6	3400	BJXNA
1F	AOD1 2	UNKNOWN SESQUITERPENE	11.93	290	
1F	AOD1 3 112-53-	1-DODECANOL W/UNKNOWN	12.23		BJXNZ
1F	AOD1 4	UNKNOWN SESQUITERPENE	12.57	410	
1F	AOD1 5	UNKNOWN ALIPHATIC	14.1	4700	JX
1F	AOD1 6	UNKNOWN	14.62	120	JX
1F	AOD1 7	UNKNOWN HEXADECENOIC ACID	16.42	180	JX
1F	AOD1 8 57-10-	HEXADECANOIC ACID	16.47	97	JXN
1F	AOD19	UNKNOWN OCTADECENOIC ACID	17.85	81	JX
1F	AOD110	UNKNOWN	26.55	350	JX
1F	AOD111	UNKNOWN	26.95	150	JX
1F	AOD112	UNKNOWN	27.58	130	JX
1F	AOD113	UNKNOWN	28.52	260	JX
			Total:	10308	
		Sample Number: SS26-39			
1F	APH1SS2639	21			
1F	APD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.65	4900	BJXNA
1F	APD1 2	UNKNOWN SESQUITERPENE	11.98	220	JX
1F	APD1 3 112-53-	1-DODECANOL W/UNKNOWN	12.28	140	BJXNZ
1F	APD1 4	UNKNOWN SESQUITERPENE	12.62	390	JX
1F	APD1 5	UNKNOWN ALIPHATIC	14.13	4600	JX
1F	APD1 6	UNKNOWN	14.65	190	JX
1F	APD1 7	UNKNOWN	15.03	110	JX
1F	APD1 8	UNKNOWN HEXADECENOIC ACID	16.5	850	
1F	APD1 9 57-10-	HEXADECANOIC ACID	16.55		JXN
1F	APD110	UNKNOWN OCTADECENOIC ACID	17.9	180	
1F	APD111	UNKNOWN HEXADECANOATE	20.35	180	JX
1F	APD112 630-03-	NONACOSANE	22.42	84	JXN

1F	APD113 192-97-	BENZO[E]PYRENE	23.07	170	JXN
1F	APD114	UNKNOWN POLYTERPENE DERIV	25.53	130	JX
1F	APD115	UNKNOWN POLYTERPENE DERIV	25.82	130	JX
1F	APD116	UNKNOWN POLYTERPENE DERIV	26.27	84	JX
1F	APD117	UNKNOWN	26.62	570	JX
1F	APD118	UNKNOWN	27.02	350	JX
1F	APD119	UNKNOWN	27.62	160	JX
1F	APD120 1058-61-	STIGMAST-4-EN-3-ONE	28.08	130	JXN
1F	APD121	UNKNOWN	28.55	100	JX
			Total:	13918	
		Sample Number: SS26-40			
1F	AQH1SS2640	8			
1F	AQD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.65	3100	BJXNA
1F	AQD1 2 112-53-	1-DODECANOL	12.28		BJXN
1F	AQD1 3	UNKNOWN ALIPHATIC	14.12	500	
1F	AQD1 4	UNKNOWN HEXADECENOIC ACID	16.47	340	
1F	AQD1 5 57-10-	HEXADECANOIC ACID	16.52	150	JXN
1F	AQD1 6	UNKNOWN	19.6		JX
1F	AQD1 7	UNKNOWN HEXADECANOATE	20.35	130	
1F	AQD1 8 630-03-	NONACOSANE	22.42	130	JXN
			Total:	4534	
		Sample Number: SS26-41			
1F	ARH1SS2641	17			
1F	ARD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.63	2700	BJXNA
1F	ARD1 2 112-53-	1-DODECANOL	12.27	120	BJXN
1F	ARD1 3	UNKNOWN SESQUITERPENE	12.58	210	JX
1F	ARD1 4	UNKNOWN ALIPHATIC	14.1	780	JX
1F	ARD1 5	UNKNOWN HEXADECENOIC ACID	16.45	300	JX
1F	ARD1 6 57-10-	HEXADECANOIC ACID	16.5	170	JXN
1F	ARD1 7	UNKNOWN HEXADECANOATE	20.33	130	JX
1F	ARD1 8 593-49-	HEPTACOSANE	21.3	130	JXN
1F	ARD19	UNKNOWN ALIPHATIC ALDEHYD	22.13		JXZ
1F	ARD110 630-03-		22.4		JXN
1F	ARD111 506-52-	1-HEXACOSANOL	22.47	130	JXN
1F	ARD112 630-04-	HENTRIACONTANE	23.62	170	JXN
1F	ARD113	UNKNOWN POLYTERPENE DERIVA	25.5	83	JX
1F	ARD114	UNKNOWN ALIPHATIC	25.88	120	***************************************
1F	ARD115	UNKNOWN SITOSTEROL W/BENZO			JXZ
1F	ARD116	UNKNOWN	27.6	100	
1F	ARD117 1058-61-	STIGMAST-4-EN-3-ONE	28.08		JXN
			Total:	6013	
		Sample Number: SS26-42			
1F	ASH1SS2642	21			

1F	ATD117	CHRITOWIT	Total:	6828	
1F	ATDIT/	OTTE TO WIT			
		UNKNOWN	28.62	130	JX
1F	ATD116	UNKNOWN	28.1	130	JX
1F	ATD115	UNKNOWN SITOSTEROL W/BENZO	26.4	170	JXZ
1F	ATD114	UNKNOWN	25.88	160	
1F	ATD113 630-05-	TRITRIACONTANE	25.15	130	JXN
1F	ATD112	UNKNOWN	24.2		JX
1F	ATD111 630-04-	HENTRIACONTANE	. 23.62		JXN
1F	ATD110 506-52-	1-HEXACOSANOL	22.48	300	JXN
1F	ATD1 9 630-03-	NONACOSANE	22.4		JXN
1F	ATD1 8	UNKNOWN	22.13		
1F	ATD1 7 593-49-	HEPTACOSANE	21.3		JXN
1F	ATD1 6	UNKNOWN HEXADECANOATE	20.33		JX
1F	ATD1 5 57-10-	HEXADECANOIC ACID	16.52		JXN
1F	ATD1 4	UNKNOWN HEXADECENOIC ACID	16.45	390	
1F	ATD1 3	UNKNOWN	14.05	110	
1F	ATD1 2 112-53-	1-DODECANOL	12.27		BJXN
1F	ATD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.65	3700	BJXNA
1F	ATH1SS2643	17		-	
		Sample Number: SS26-43	-		
. 1111			Total:	11720	
1F	ASD121	UNKNOWN	28.67	190	
1F	ASD120 1058-61-	the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	28.12		JXN
1F	ASD119	UNKNOWN	27.02	230	
1F	ASD118	UNKNOWN	26.62	260	
1F	ASD117 630-04-	HENTRIACONTANE	23.63		JXN
1F	ASD116 198-55-		23.33		JXN
1F		BENZO[E]PYRENE	23.08	·	JXN
1F		1-HEXACOSANOL	22.5		JXN
1F	ASD112 535 43	NONACOSANE	22.43	· · · · · · · · · · · · · · · · · · ·	JXN
1F		HEPTACOSANE W/C19H14 PAH	21.33		JXNZ
1F	ASD111	UNKNOWN C18H12 PAH	20.82	220	
1F		BENZO[C]PHENANTHRENE W/1-D(			JXNZ
1F		11H-BENZO[B]FLUORENE	19.03		JXN
1F		11H-BENZO[A]FLUORENE	18.92		JXN
1F	ASD1 7 203-64-	4H-CYCLOPENTA[DEF]PHENANTH			JXNZ
1F	ASD1 5 57-10-	HEXADECANOIC ACID	16.53		JXN
1F	ASD1 4 344-03-	UNKNOWN HEXADECENOIC ACID			
1F	ASD1 3 ASD1 4 544-63-	TETRADECANOIC ACID	14.12		JXN
lF	ASD1 2 112-33- ASD1 3	UNKNOWN ALIPHATIC	14.12	480	
F   <b>F</b>	ASD1 1 123-42- ASD1 2 112-53-	2-PENTANONE, 4-HYDROXY-4-MET 1-DODECANOL	4.65 12.28		BJXNA BJXN

1F	AUH1SS2644	11			
1F	AUD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.65	4000	BJXNA
1F	AUD1 2 112-53-	1-DODECANOL	12.27	120	BJXN
1F	AUD1 3	UNKNOWN HEXADECENOIC ACID	16.45	140	JX
1F	AUD1 4 57-10-	HEXADECANOIC ACID W/PHENAN	16.5	170	JXNZ
1F	AUD1 5	UNKNOWN ALIPHATIC ALDEHYDI	22.13	120	JXZ
1F	AUD1 6 630-03-	NONACOSANE	22.4	280	JNX
1F	AUD1 7 506-52-	1-HEXACOSANOL	22.47	160	JXN
1F	AUD1 8 192-97-	BENZO[E]PYRENE	23.03	100	JXN
1F	AUD1 9 630-04-	HENTRIACONTANE	23.62	360	JXN
1F	AUD110 630-05-	TRITRIACONTANE	25.15	100	JXN
1F	AUD111 1058-61-	STIGMAST-4-EN-3-ONE	28.07	88	JXN
			Total:	- 5638	
		Sample Number: LAB BLANK			
1F	AVH1SBLKN2	3			
1F	AVD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.73	2100	JXNA
1F	AVD1 2 112-53-	1-DODECANOL	12.32	160	JXN
1F	AVD1 3	UNKNOWN	22.17	70	JX
		Sample Number: LAB BLANK			
1F	AWH1SBLK2N	2			
1F	AWD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.62	2900	JXNA
1F	AWD1 2 112-53-	1-DODECANOL	12.28	90	JXN

		Sample Number: SB25-12-00			
1F	AAH1251200	13			
1F	AAD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.33	6500	BJXNA
1F	AAD1 2 112-53-	1-DODECANOL	12.98	430	BJXN
1F	AAD1 3 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	14.27	340	BJXN
1F	AAD1 4	UNKNOWN HEXADECENOIC ACID	17.22	540	JX
1F	AAD1 5 57-10-	HEXADECANOIC ACID	17.27	620	JXN
1F	AAD1 6	UNKNOWN	23.05	870	JX
1F	AAD1 7 630-03-	NONACOSANE	23.37	810	JXN
1F	AAD1 8 506-52-	1-HEXACOSANOL	23.47	660	JXN
1F	AAD1 9 630-04-	HENTRIACONTANE	24.87	1300	JXN
1F	AAD110 630-05-	TRITRIACONTANE	26.82	600	JXN
1F	AAD111	UNKNOWN ALIPHATIC	31.3	550	JX
1F	AAD112	UNKNOWN POLYTERPENE DERIVAT	31.53	400	
1F	AAD113	UNKNOWN PROPANOATE	31.98	900	JX
			Total:	14520	
		Sample Number: SB25-12-02			-
1F	ABH1251202	5			
1F		2-PENTANONE, 4-HYDROXY-4-MET	5.32	7100	BJXNA
1F	ABD1 2 112-53-	1-DODECANOL	12.98		BJXN
1F		PROPANOIC ACID, 2-METHYL-, 1	14.27	·	BJXN
1F	ABD1 4	UNKNOWN	23.07	370	
1F	ABD1 5	UNKNOWN PROPANOATE	31.98	700	
			Total:	8950	
		Sample Number: SB25-12-03			
1F	ACH1251203	4			
1F	ACD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.33	19000	BJXNA
1F	ACD1 2 112-53-	1-DODECANOL	12.98	570	BJXN
1F	ACD1 3 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	14.27	320	BJXN
1F	ACD1 4	UNKNOWN	23.05	380	JX
			Total:	20270	
		Sample Number: SB25-13-00			
1F	ADH1251300	21			
1F	ADD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.33	3400	BJXNA
1F	ADD1 2 112-53-	1-DODECANOL	12.95	300	BJXN
1F	ADD1 3 74381-40-	PROPNAOIC ACID, 2-METHYL-, 1	14.17	280	JXN
1F	ADD1 4	UNKNOWN HEXADECENOIC ACID	17.13	270	JX
1F	ADD1 5 57-10-	HEXADECANOIC ACID	17.18	530	JXN
1F	ADD1 6	UNKNOWN OCTADECENOIC ACID	18.55	380	JX
1F	ADD1 7 511-15-	2-PHENANTHRENOL, 4B,5,6,7,8,	20.13	230	JXN
1F	ADD1 8 629-99-	PENTACOSANE	20.83	130	BJXN
1F	ADD1 9 661-19-	1-DOCOSANOL	20.9	150	JXN
1F	ADD110 593-49-		22.02	200	BJXN

1F	ADD111 506-51-	1-TETRACOSANOL	22.1	190	JXN
1F	ADD112	UNKNOWN	22.88	530	JX
1F	ADD113	UNKNOWN TERPENOID	22.97	160	JX
1F	ADD114 630-03-	NONACOSANE	23.2	1700	BJXN
1F	ADD115 506-52-	1-HEXACOSANOL	23.33	420	JXN
1F	ADD116 638-68-	TRIACONTANE	23.87	170	JXN
1F	ADD117 630-04-	HENTRIACONTANE	24.63	2600	
1F	ADD118	UNKNOWN ALIPHATIC	26.07	140	JX
1F	ADD119 630-05-	TRITRIACONTANE	26.5	740	JXN
1F	ADD120	UNKNOWN	28.2	260	JX
1F	ADD121	UNKNOWN	28.48	190	JX
			Total:	12970	
		Sample Number: SB25-13-02			
1F	AEH1251302	21			******
1F	AED1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.28	2100	BJXNA
1F	AED1 2 112-53-	1-DODECANOL	12.95	220	BJXN
1F	AED1 3 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	14.15	340	JXN
1F	AED1 4 629-94-	HENEICOSANE	18.13	260	JXN
1F	AED1 5 629-97-	DOCOSANE	18.85		BJXN
1F	AED1 6 638-67-	TRICOSANE	19.53	1800	BJXN
1F	AED1 7 646-31-	TETRACOSANE	20.18	1900	BJXN
1F	AED1 8	UNKNOWN ALKANE	20.58	97	JX
1F	AED1 9 629-99-	PENTACOSANE	20.82	1800	BJXN
1F	AED110 630-01-	HEXACOSANE	21.42	1700	BJXN
1F	AED111	UNKNOWN ALKANE	21.78	130	JX
1F	AED112 593-49-	HEPTACOSANE	21.98	1300	BJXN
1F	AED113 630-02-	OCTACOSANE	22.57	920	BJXN
1F	AED114 630-03-	NONACOSANE	23.18	1200	BJXN
1F	AED115	UNKNOWN	23.35	510	JX
1F	AED116	UNKNOWN	23.58	140	JX
1F	AED117 638-68-	TRIACONTANE	23.85		JXN
1F	AED118 630-04-	HENTRIACONTANE	24.62		JXN
1F	AED119	UNKNOWN	25.32	94	
1F	AED120 544-85-	DOTRIACONTANE	25.47	280	JXN
1F	AED121 630-05-	TRITRIACONTANE	26.48	170	JXN
			Total:	17671	
		Sample Number: SB25-13-04			
1F	AFH1251304	7			
1F	AFD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.37		BJXNA
1F	AFD1 2 112-53-	1-DODECANOL W/UNKNOWN	12.97		BJXNZ
1F	AFD1 3 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	14.17	210	
1F	AFD1 4	UNKNOWN ALIPHATIC	20.82	120	
1F	AFD1 5	UNKNOWN ALIPHATIC	22.4	170	JX

1F	AFD1 6	UNKNOWN ALIPHATIC	24.15	210	JX
1F	AFD1 7	UNKNOWN	26.58	140	JX
			Total:	3590	
		Sample Number: SB25-14-00			
1F	AGH1251400	19			
1F	AGD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.8	2600	BJXNA
1F	AGD1 2 112-53-	1-DODECANOL	12.32	260	BJXN
1F	AGD1 3	UNKNOWN HEXADECENOIC ACID	16.48	110	JX
1F	AGD1 4 57-10-	HEXADECANOIC ACID	16.53	170	JXN
1F	AGD1 5 112-53-	1-DOCOSANOL	20.2	130	BJXN
1F	AGD1 6 629-99-	PENTACOSANE	21.37	150	BJXN
1F	AGD1 7 506-51-	1-TETRACOSANOL	21.4	130	JXN
1F	AGD1 8	UNKNOWN ALKANAL	22.18	740	JX
1F	AGD1 9 630-03-	NONACOSANE	22.47	480	BJXN
1F	AGD110 506-52-	1-HEXACOSANOL	22.53	860	JXN
1F	AGD111	UNKNOWN ALKANAL	23.38	240	JX
1F	AGD112 630-04-	HENTRIACONTANE	23.7	920	JXN
1F	AGD113	UNKNOWN ALIPHATIC	23.8	190	JX
1F	AGD114	UNKNOWN ALKANAL	24.88	120	
1F	AGD115 630-05-	TRITRIACONTANE	25.25	340	JXN
1F	AGD116	UNKNOWN CHOLESTENE DERIVATIV	25.62	150	JX
1F	AGD117	UNKNOWN SITOSTEROL	26.52	300	JX
1F	AGD118	UNKNOWN	26.8	88	JX
1F	AGD119	UNKNOWN	28.23	110	JX
			Total:	8088	
		Sample Number: SB25-14-01			
1F	AHH1251401	21			
1F	AHD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.87	2100	BJXNA
1F	AHD1 2 112-53-	1-DODECANOL	12.32	290	BJXN
1F	AHD1 3	UNKNOWN NONYLPHENOL	14.67	160	JX
1F	AHD1 4	UNKNOWN NONYLPHENOL	14.73	120	JX
1F	AHD1 5	UNKNOWN HEXADECENOIC ACID	16.48	170	JX
1F	AHD1 6 57-10-	HEXADECANOIC ACID	16.53		JXN
1F	AHD1 7 629-94-	HENEICOSANE	17.53	200	JXN
1F	AHD1 8	UNKNOWN OCTADECENOIC ACID	17.88	110	JX
1F	AHD1 9 629-97-	DOCOSANE	18.25	380	BJXN
1F	AHD110 638-67-	TRICOSANE	18.92	470	BJXN
1F	AHD111 646-31-	TETRACOSANE	19.57	440	BJXN
1F	AHD112 629-99-	PENTACOSANE	20.2	450	BJXN
1F		HEXACOSANE	20.78	210	BJXN
1F	AHD114 593-49-	HEPTACOSANE	21.37	170	BJXN
1F	AHD115 506-51-		21.4	320	JXN
1F	AHD116	UNKNOWN ALIPHATIC	21.73	120	JX

1F	AHD117 630-02-	OCTACOSANE	21.92	120 BJXN
1F	AHD118	UNKNOWNA ALIPHATIC	22.18	280 JX
1F	AHD119 630-03-	NONACOSANE	22.47	290 BJXN
1F	AHD120 506-52-	1-HEXACOSANOL	22.53	430 JXN
1F	AHD121 630-04-	HENTRIACONTANE	23.7	240 JXN
			Total:	7220
		Sample Number: SB25-14-02		
1F	AIH1251402	3	3	
1F	AID1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.83	2200 BJXNA
1F	AID1 2 112-53-	1-DODECANOL	12.33	230 BJXN
1F		PROPANOIC ACID, 2-METHYL-, 1	13.57	100 JXN
			Total:	2530
		Sample Number: MSB		
1F	АЛН1MSB		)	
		Sample Number: SB25-11-00		
1F	AKH1SB251100	21		
1F		2-PENTANONE, 4-HYDROXY-4-MET	5.28	5300 BJXNA
1F		1-DODECANOL	12.93	270 BJXN
1F		PROPANOIC ACID, 2-METHYL-, 1	14.22	230 BJXN
1F	AKD1 4	UNKNOWN HEXADECENOIC ACID	17.15	300 JX
1F	AKD1 5 57-10-	HEXADECANOIC ACID	17.22	380 JXN
1F		1-DOCOSANOL	20.92	160 JXN
1F		HEPTACOSANE	22.08	100 JXN
1F		1-TETRACOSANOL	22.13	270 JXN
1F	AKD1 9	UNKNOWN ALIPHATIC ALDEHYDE	22.98	720 JX
1F	AKD110 630-03-		23.3	650 JXN
1F		1-HEXACOSANOL	23.38	1500 JXN
1F	AKD112 630-04-	HENTRIACONTANE	24.77	1000 JXN
1F	AKD113	UNKNOWN ALCOHOL	24.9	360 JX
1F	AKD114	UNKNOWN	25.5	140 JX
1F	AKD115	UNKNOWN	25.98	110 JX
1F	AKD116 630-05-	TRITRIACONTANE	26.67	340 JXN
1F	AKD117	UNKNOWN	27.17	190 JX
1F	AKD118	UNKNOWN	27.53	150 JX
1F	AKD119	UNKNOWN	28.28	340 JX
1F	AKD120	UNKNOWN	30.42	220 JX
1F	AKD121	UNKNOWN PROPANOATE	31.65	750 JX
			Total:	13480
· · · · · · · · · · · · · · · · · · ·		Sample Number: SB25-11-02		
1F	ALH1SB251102	11		
1F	ALD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.28	4300 BJXNA
1F	ALD1 2 112-53-	1-DODECANOL	12.95	370 BJXN
1F		PROPANOIC ACID, 2-METHYL-, 1	14.22	440 BJXN

		Sample Number: SB25-12-00			
1F	AAH1251200	13			
1F	AAD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	5.33	6500	BJXNA
1F	AAD1 2 112-53-	1-DODECANOL	12.98	430	BJXN
1F		PROPANOIC ACID, 2-METHYL-, 1	14.27	340	BJXN
1F	AAD1 4	UNKNOWN HEXADECENOIC ACID	17.22	540	JX
1F	AAD1 5 57-10-	HEXADECANOIC ACID	17.27	620	JXN
1F	AAD1 6	UNKNOWN	23.05	870	JX
1F	AAD1 7 630-03-	NONACOSANE	23.37	810	JXN
1F	AAD1 8 506-52-	1-HEXACOSANOL	23.47	660	JXN
1F	AAD1 9 630-04-	HENTRIACONTANE	24.87	1300	JXN
1F	AAD110 630-05-	TRITRIACONTANE	26.82	600	JXN
1F	AAD111	UNKNOWN ALIPHATIC	31.3	550	JX
1F	AAD112	UNKNOWN POLYTERPENE DERIVA	31.53	400	JX
1F	AAD113	UNKNOWN PROPANOATE	31.98	900	JX
			Total:	14520	
		Sample Number: SB25-12-02			
1F	ABH1251202	5			
1F	ABD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.32	7100	BJXNA
1F	ABD1 2 112-53-	1-DODECANOL	12.98	380	BJXN
1F	ABD1 3 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	14.27	400	BJXN
1F	ABD1 4	UNKNOWN	23.07	370	JX
1F	ABD1 5	UNKNOWN PROPANOATE	31.98	700	JX
			Total:	8950	
		Sample Number: SB25-12-03			
1F	ACH1251203	4			
1F	ACD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	5.33	19000	BJXNA
1F	ACD1 2 112-53-	1-DODECANOL	12.98	570	BJXN
1F	ACD1 3 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	14.27	320	BJXN
1F	ACD1 4	UNKNOWN	23.05	380	JX
			Total:	20270	
		Sample Number: SB25-13-00			
1F	ADH1251300	21			
1F	ADD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.33	3400	BJXNA
1F	ADD1 2 112-53-	1-DODECANOL	12.95	300	BJXN
1F	ADD1 3 74381-40-	PROPNAOIC ACID, 2-METHYL-, 1	14.17		JXN
1F	ADD1 4	UNKNOWN HEXADECENOIC ACID		270	
1F	ADD1 5 57-10-	HEXADECANOIC ACID	17.18		JXN
1F	ADD1 6	UNKNOWN OCTADECENOIC ACID		380	
1F	ADD1 7 511-15-	2-PHENANTHRENOL, 4B,5,6,7,8,	20.13		JXN
1F	ADD1 8 629-99-	PENTACOSANE	20.83		BJXN
1F	ADD1 9 661-19-	1-DOCOSANOL	20.9		JXN
1F	ADD110 593-49-	HEPTACOSANE	22.02	200	BJXN

1F	ADD111 506-51-	1-TETRACOSANOL	22.1	190	JXN
1F	ADD112	UNKNOWN	22.88	530	JX
1F	ADD113	UNKNOWN TERPENOID	22.97	160	JX
1F	ADD114 630-03-	NONACOSANE	23.2	1700	BJXN
1F		1-HEXACOSANOL	23.33	420	JXN
1F	ADD116 638-68-	TRIACONTANE	23.87		JXN
1F	ADD117 630-04-	HENTRIACONTANE	24.63		JXN
1F	ADD118	UNKNOWN ALIPHATIC	26.07	140	JX
1F	ADD119 630-05-	TRITRIACONTANE	26.5	740	JXN
1F	ADD120	UNKNOWN	28.2	260	JX
1F	ADD121	UNKNOWN	28.48	190	JX
			Total:	12970	
		Sample Number: SB25-13-02			
1F	AEH1251302	21			
1F		2-PENTANONE, 4-HYDROXY-4-ME	5.28	2100	BJXNA
1F	AED1 2 112-53-	1-DODECANOL	12.95	220	BJXN
1F		PROPANOIC ACID, 2-METHYL-, 1	14.15	340	JXN
1F	AED1 4 629-94-	HENEICOSANE	18.13	260	JXN
1F	AED1 5 629-97-	DOCOSANE	18.85	1300	BJXN
1F	AED1 6 638-67-	TRICOSANE	19.53	1800	BJXN
1F	AED1 7 646-31-	TETRACOSANE	20.18	1900	BJXN
1F	AED1 8	UNKNOWN ALKANE	20.58	97	JX
1F	AED1 9 629-99-	PENTACOSANE	20.82	1800	BJXN
1F	AED110 630-01-	HEXACOSANE	21.42	1700	BJXN
1F	AED111	UNKNOWN ALKANE	21.78	130	JX
1F	AED112 593-49-	HEPTACOSANE	21.98	1300	BJXN
1F	AED113 630-02-	OCTACOSANE	22.57	920	BJXN
1F	AED114 630-03-	NONACOSANE	23.18	1200	BJXN
1F	AED115	UNKNOWN	23.35	510	JX
1F	AED116	UNKNOWN	23.58	140	JX
1F	AED117 638-68-	TRIACONTANE	23.85		JXN
1F	AED118 630-04-	HENTRIACONTANE	24.62		JXN
1F	AED119	UNKNOWN	25.32		JX
1F	AED120 544-85-	DOTRIACONTANE	25.47		JXN .
1F	AED121 630-05-	TRITRIACONTANE	26.48		JXN
			Total:	17671	
		Sample Number: SB25-13-04			
1F	AFH1251304	7			
1F	AFD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	5.37		BJXNA
1F	AFD1 2 112-53-	1-DODECANOL W/UNKNOWN	12.97		BJXNZ
1F	AFD1 3 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	14.17		JXN
1F	AFD1 4	UNKNOWN ALIPHATIC	20.82	120	
1F	AFD1 5	UNKNOWN ALIPHATIC	22.4	170	JX

1F	AFD1 6	UNKNOWN ALIPHATIC	24.15	210	JX
1F	AFD1 7	UNKNOWN	26.58	140	JX
			Total:	3590	
		Sample Number: SB25-14-00			
1F	AGH1251400	19			
1F	AGD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.8	2600	BJXNA
1F	AGD1 2 112-53-	1-DODECANOL	12.32	260	BJXN
1F	AGD1 3	UNKNOWN HEXADECENOIC ACID	16.48	110	JX
1F	AGD1 4 57-10-	HEXADECANOIC ACID	16.53	170	JXN
1F	AGD1 5 112-53-	1-DOCOSANOL	20.2	130	BJXN
1F	AGD1 6 629-99-	PENTACOSANE	21.37	150	BJXN
1F	AGD1 7 506-51-	1-TETRACOSANOL	21.4	130	JXN
1F	AGD1 8	UNKNOWN ALKANAL	22.18	740	JX
1F	AGD1 9 630-03-	NONACOSANE	22.47	480	BJXN
1F	AGD110 506-52-	1-HEXACOSANOL	22.53	860	JXN
1F	AGD111	UNKNOWN ALKANAL	23.38	240	JX
1F	AGD112 630-04-	HENTRIACONTANE	23.7	920	JXN
1F	AGD113	UNKNOWN ALIPHATIC	23.8	190	JX
1F	AGD114	UNKNOWN ALKANAL	24.88	120	JX
1F	AGD115 630-05-	TRITRIACONTANE	25.25	340	JXN
1F	AGD116	UNKNOWN CHOLESTENE DERIVA	25.62	150	JX
1F	AGD117	UNKNOWN SITOSTEROL	26.52	300	JX
1F	AGD118	UNKNOWN	26.8	88	JX
1F	AGD119	UNKNOWN	28.23	110	JX
			Total:	8088	
		Sample Number: SB25-14-01			
1F	AHH1251401	21			
1F	AHD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.87	2100	BJXNA
1F	AHD1 2 112-53-	1-DODECANOL	12.32	290	BJXN
1F	AHD1 3	UNKNOWN NONYLPHENOL	14.67	160	JX
1F	AHD1 4	UNKNOWN NONYLPHENOL	14.73	120	JX
1F	AHD1 5	UNKNOWN HEXADECENOIC ACID	16.48	170	JX
1F	AHD1 6 57-10-	HEXADECANOIC ACID	16.53	150	JXN
1F	AHD1 7 629-94-	HENEICOSANE	17.53	200	JXN
1F	AHD1 8	UNKNOWN OCTADECENOIC ACID	. 17.88	110	JX
1F	AHD1 9 629-97-	DOCOSANE	18.25	380	BJXN
1F	AHD110 638-67-	TRICOSANE	18.92	470	BJXN
1F	AHD111 646-31-	TETRACOSANE	19.57	440	BJXN
1F	AHD112 629-99-	PENTACOSANE	20.2	450	BJXN
1F		HEXACOSANE	20.78	210	BJXN
1F	AHD114 593-49-	HEPTACOSANE	21.37		BJXN
1F	AHD115 506-51-	1-TETRACOSANOL	21.4	320	JXN
1F	AHD116	UNKNOWN ALIPHATIC	21.73	120	JX

1F	AHD117 630-02-	OCTACOSANE	21.92	120	BJXN
1F	AHD118	UNKNOWNA ALIPHATIC	22.18	280	JX
1F	AHD119 630-03-	NONACOSANE	22.47	290	BJXN
1F	AHD120 506-52-	1-HEXACOSANOL	22.53	430	JXN
1F	AHD121 630-04-	HENTRIACONTANE	23.7		JXN
			Total:	7220	
		Sample Number: SB25-14-02			
1F	AIH1251402	3		· · · · · · · · · · · · · · · · · · ·	
1F	AID1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.83	2200	BJXNA
1F	AID1 2 112-53-	1-DODECANOL	12.33		BJXN
1F	AID1 3 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	13.57		JXN
			Total:	2530	
		Sample Number: MSB			
1F	AJH1MSB	0			
	122111100	Sample Number: SB25-11-00			1
1F	AKH1SB251100	21			
1F	AKD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	5.28	5300	BJXNA
1F	AKD1 2 112-53-	1-DODECANOL	12.93		BJXN
1F		PROPANOIC ACID, 2-METHYL-, 1	14.22		BJXN
1F	AKD1 4	UNKNOWN HEXADECENOIC ACID		300	
1F	AKD1 5 57-10-	HEXADECANOIC ACID	17.22		JXN
1F	AKD1 6 661-19-	1-DOCOSANOL	20.92		JXN
1F		HEPTACOSANE	22.08		JXN
1F	AKD1 8 506-51-	1-TETRACOSANOL	22.13		JXN
1F	AKD1 9	UNKNOWN ALIPHATIC ALDEHYDI		720	
1F		NONACOSANE	23.3		JXN
1F		1-HEXACOSANOL	23.38	1500	
1F	AKD112 630-04-	HENTRIACONTANE	24.77	1000	
1F	AKD113	UNKNOWN ALCOHOL	24.9	360	
1F	AKD114	UNKNOWN	25.5	140	JX
1F	AKD115	UNKNOWN	25.98	110	JX
1F	AKD116 630-05-	TRITRIACONTANE	26.67	340	JXN
1F	AKD117	UNKNOWN	27.17	190	
1F	AKD118	UNKNOWN	27.53	150	JX
1F	AKD119	UNKNOWN	28.28	340	JX
1F	AKD120	UNKNOWN	30.42	220	JX
1F	AKD121	UNKNOWN PROPANOATE	31.65	750	JX
			Total:	13480	
		Sample Number: SB25-11-02			
1F	ALH1SB251102	11			
1F	ALD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	5.28	4300	BJXNA
1F	ALD1 2 112-53-	1-DODECANOL	12.95	370	BJXN
1F		PROPANOIC ACID, 2-METHYL-, 1	14.22	440	BJXN

1F	ALD1 4 661-19-	1-DOCOSANOL	20.92	77	JXN
1F	ALD1 5 506-51-	1-TETRACOSANOL	22.13	180	JXN
1F	ALD1 6	UNKNOWN	22.98	220	JX
1F	ALD1 7	UNKNOWN ALIPHATIC	23.3	100	JX
1F	ALD1 8	UNKNOWN ALIPHATIC	23.38		JX
1F	ALD19	UNKNOWN	24.7	330	
1F	ALD110	UNKNOWN ALIPHATIC	24.75		JX
1F	ALD111	UNKNOWN PROPANOATE	31.67	1500	JX
			Total:	7694	
		Sample Number: SB25-11-03			
1F	AMH1SB251103	21			
1F	AMD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.63	2700	BJXNA
1F	AMD1 2 112-40-	DODECANE	9.28		JXN
1F	AMD1 3	UNKNOWN ALKANE	10.12	310	
1F	AMD1 4 629-50-	TRIDECANE	10.43		JXN
1F		TETRADECANE	11.5		JXN
1F	AMD1 6 629-62-		12.5		JXN
1F		PENTADECANE, 2,6,10,14-TETRA	14.38		JXN
1F	AMD1 8 629-97-		18.22		JXN
1F	AMD1 9 638-67-		18.9		JXN
1F		TETRACOSANE, W/ALKYLCYCLOF			JXNZ
1F		PENTACOSANE	20.17		JXN
1F	AMD112	UNKNOWN ALKANE	20.38	450	
1F	AMD113	UNKNOWN ALKANE	20.77	320	
1F	AMD114	UNKNOWN ALKANE	20.97	440	
1F	AMD115	UNKNOWN ALKANE	21.12	310	JX
1F	AMD116	UNKNOWN ALKANE	21.35	310	~~
1F	AMD117	UNKNOWN ALKANE	21.53	380	JX
1F	AMD118	UNKNOWN ALKANE	21.57	380	JX
1F	AMD119	UNKNOWN ALKANE	22.08	390	JX
1F	AMD120	UNKNOWN ALKANE	22.45	310	JX .
1F	AMD121	UNKNOWN	22.53	350	JX
			Total:	11930	
		Sample Number: SB25-15-00			
1F	ANH1SB251500	20			
1F	AND1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.65	3300	BJXNA
1F	AND1 2 112-40-	DODECANE	9.3	230	JXN
1F	AND1 3	UNKNOWN ALKANE W/DIMETHYI	9.47	99	JXZ
1F	AND1 4	UNKNOWN ALKANE	10.13	95	JX
1F	AND1 5 629-50-	TRIDECANE	10.43	280	JXN
1F	AND1 6 629-59-	TETRADECANE	11.5	120	JXN
1F	AND1 7 112-53-	1-DODECANOL	12.3	120	BJXN
1F	AND1 8 629-62-	PENTADECANE	12.5	99	JXN

1F	AND1 9 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	13.53	91	BJXN
1F	AND110 1921-70-	PENTADECANE, 2,6,10,14-TETRA	14.4	83	JXN
1F	AND111 57-10-	HEXADECANOIC ACID W/PHENAN	16.52	140	JXNZ
1F	AND112 629-99-	PENTACOSANE	20.17	99	JXN
1F	AND113	UNKNOWN ALIPHATIC	20.97	110	JX
1F	AND114	UNKNOWN ALKANE	21.53	100	JX
1F	AND115	UNKNOWN ALKANE	22.43	150	JX
1F	AND116	UNKNOWN	23.53	87	JX
1F	AND117 630-04-	HENTRIACONTANE	23.65	240	JXN
1F	AND118	UNKNOWN ALKANE	25.18	87	JX
1F	AND119	UNKNOWN POLYTERPENE DERIVA	25.57	91	JX
1F	AND120	UNKNOWN POLYTERPENE DERIVA	26.45	100	JX
			Total:	5721	
		Sample Number: SB25-15-01			
1F	AOH1SB251501	8			***************************************
1F	AOD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.73	2000	BJXNA
1F	AOD1 2 112-53-	1-DODECANOL	12.3	190	BJXN
1F	AOD1 3 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	15.48	160	BJXN
1F	AOD1 4	UNKNOWN	22.15	170	JX
1F	AOD1 5 630-03-	NONACOSANE	22.43	93	JXN
1F	AOD1 6 630-04-	HENTRIACONTANE	23.65	190	JXN
1F	AOD1 7 630-05-	TRITRIACONTANE	25.2	120	JXN
1F	AOD1 8	UNKNOWN	28.7	89	JX
			Total:	3012	
		Sample Number: SB25-15-02			
1F	APH1SB251502	8			
1F	APD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	5	3000	BJXNA
1F	APD1 2 112-53-	1-DODECANOL	12.62	160	BJXN
1F	APD1 3 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	13.88	200	BJXN
1F	APD1 4 57-10-	HEXADECANOIC ACID	16.87	90	JXN
1F	APD1 5	UNKNOWN ALIPHATIC	24.27	110	JX
1F	APD1 6	UNKNOWN	25.4	86	JX
1F	APD1 7	UNKNOWN PROPANOATE	30.65	380	JX
1F	APD1 8	UNKNOWN	31.02	75	JX
			Total:	4101	
		Sample Number: SD25-3			
1F	AQH1SD253	21			
1F	AQD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.75	2700	BJXNA
1F	AQD1 2 112-53-	1-DODECANOL	12.32	300	BJXN
1F	AQD1 3 74381-40-		13.57		JXN
1F	AQD1 4 832-71-	PHENANTHRENE, 3-METHYL- W/H			JXNZ
1F	AQD1 5 2531-84-	PHENANTHRENE, 2-METHYL- W/H			JXNZ
1F	AQD1 6 203-64-	4H-CYCLOPENTA[DEF]PHENANTH	16.72	110	JXNZ

	4.67		BJXNA
1			
ample Number: SD25-3R			
	Total:	7007	
JNKNOWN	28.35	120	JX
JNKNOWN	25.33	200	JX
RITRIACONTANE	25.25	130	JXN
IENTRIACONTANE	23.68	360	JXN
JNKNOWN	. 23.57	280	
JNKNOWN	23.28	290	JX
BENZO[E]PYRENE	23.12	260	JXN
INKNOWN	22.83	110	JX
IONACOSANE	22.45	280	JXN
INKNOWN	22.18	100	JX
NKNOWN	21.73	250	JX
IEPTACOSANE	21.35	100	JXN
NKNOWN W/BENZO[B]NAPHTHO	20.15	220	JX
NKNOWN METHYLPYRENE	19.15	97	JX
1H-BENZO[A]FLUORENE	18.95	110	JXN
H-CYCLOPENTA[DEF]PHENANTH	16.7	130	JXNZ
HENANTHRENE, 2-METHYL-, W/F	16.53	210	JXN
HENANTHRENE, 3-METHYL- W/H	16.48	150	JXNZ
ROPANOIC ACID, 2-METHYL-, 1	13.55	100	JXN
-DODECANOL	12.32	310	BJXN
-PENTANONE, 4-HYDROXY-4-ME	4.75	3200	BJXNA
21			
ample Number: SD25-30			
	Total:	6470	
NKNOWN	28.35	110	JX
NKNOWN POLYTERPENE DERIVA			JXZ
NKNOWN	25.33	190	JX
RITRIACONTANE	25.25		JXN
ENTRIACONTANE	23.68	<del></del>	JXN
NKNOWN	23.58	160	
NKNOWN	23.28	230	
ENZO[E]PYRENE	23.12		JXN
IONACOSANE	22.47	240	JXN
NKNOWN	22.18	140	JX
NKNOWN	21.73	250	
NKNOWN 19H14 PAH W/HEPTACO	21.37	130	JXZ
NKNOWN W/BENZO[B]NAPHTHO	20.17	290	JXZ
NKNOWN METHYLPYRENE	19.15	120	JX
1H-BENZO[A]FLUORENE	18.95		JXN

, , , , , ,		Sample Number: SD25-7		-	
1F	ATH1SD257	21			
1F	ATD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.73	68000	BJXNA
1F	ATD1 2	UNKNOWN ALKYLCYCLOHEXANI	11.08	10000	JX
1F	ATD1 3	UNKNOWN ALIPHATICS	11.35	12000	JXZ
1F	ATD1 4	UNKNOWN	11.62	11000	JX
1F	ATD1 5	UNKNOWN SESQUITERPENE	12.13	10000	JX
1F	ATD1 6	UNKNOWN ALKANE	12.22	17000	JX
1F	ATD1 7	UNKNOWN SESQUITERPENE	12.52	17000	JX
1F	ATD1 8	UNKNOWN ALKYLCYCLOHEXANI	13.22	14000	JXZ
1F	ATD1 9	UNKNOWN	13.48	9000	JX
1F	ATD110	UNKNOWN ALKANE	14	19000	JX
1F	ATD111	UNKNOWN ALKANE	14.5	36000	JX
1F	ATD112	UNKNOWN ALKANE	14.9	11000	JX
1F	ATD113	UNKNOWN ALKANE	15.38	31000	JX
1F	ATD114 832-71-	PHENANTHRENE, 3-METHYL-	16.57	8900	JXN
1F	ATD115 2531-84-	PHENANTHRENE, 2-METHYL-	16.62	9500	JXN
1F	ATD116 203-64-	4H-CYCLOPENTA[DEF]PHENANTH	16.8	9900	JNXZ
1F	ATD117	UNKNOWN DIMETHYLPHENANTH	17.43	8900	JXZ
1F	ATD118	UNKNOWN DIMETHYLPHENANTH	17.5	10000	JX
1F	ATD119	UNKNOWN DIMETHYLPHENANTH	17.65	16000	JX
1F	ATD120	UNKNOWN DIMETHYLPHENANTH	17.72	10000	JX
1F	ATD121 192-97-	BENZO[E]PYRENE	23.2	11000	JXN
			Total:	349200	
		Sample Number: SD25-8			
1F	AUH1SD258	21			
1F	AUD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.8	33000	BJXNA
1F	AUD1 2	UNKNOWN SEQUITERPENE	12.47	4400	JX
1F	AUD1 3 1921-70-	PENTADECANE, 2,6,10,14-TETRA	14.45	6500	
1F	AUD1 4 638-36-	HEXADECANE, 2,6,10,14-TETRAM	15.33	4900	JXN
1F	AUD1 5	UNKNOWN HEXADECENOIC ACID	16.48	5100	
1F	AUD1 6 57-10-	HEXADECANOIC ACID	16.6	5200	
1F	AUD1 7 238-84-	11H-BENZO[A]FLUORENE	19	7000	
1F	AUD1 8	UNKNOWN C17H12 PAH	19.22	4600	
1F	AUD1 9	UNKNOWN C17H12 PAH	. 19.45	5200	
1F	AUD110	UNKNOWN ALKANE W/UNKNOWN	20.25	6000	
1F	AUD111	UNKNOWN C19H14 PAH	21.43	4800	
1F	AUD112	UNKNOWN ALKANE	22,53	5300	
1F	AUD113	UNKNOWN BENZOFLUORANTHEN	22.85	5100	
1F	AUD114 192-97-	BENZO[E]PYRENE	23.2	12000	
1F	AUD115	UNKNOWN	23.5	5100	
1F	AUD116	UNKNOWN	23.82	4500	
1F	AUD117	UNKNOWN POLYCYCLIC HYDROC	24.47	7500	JX

1F_	AXH1SBLKN1	4			
		Sample Number: LAB BLANK			
1F	AWD110 630-03-	NONACOSANE	23.2	97	JXN
1F	AWD1 9 630-02-		22.58		JXN
1F	AWD1 8 593-49-	HEPTACOSANE	22		JXN
1F	AWD1 7 630-01-	HEXACOSANE	21.43		JXN
1F	AWD1 6 629-99-	PENTACOSANE	20.83		JXN
1F	AWD1 5 646-31-	TETRACOSANE	20.2	250	JXN
1F	AWD1 4 638-67-	TRICOSANE	19.55	240	JXN
1F	AWD1 3 629-97-	DOCOSANE	18.88	180	JXN
lF	AWD1 2 112-53-	1-DODECANOL	12.92	280	JXN
lF	AWD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	5.38	1600	JXNA
1F	AWH1SBLKM6	10			
		Sample Number: LAB BLANK			
			Total:	87300	
1F	AVD121	UNKNOWN C22H14 PAH	27.4	2100	
1F	AVD120	UNKNOWN POLYCYCLIC HYDROC		4700	
1F	AVD119	UNKNOWN POLYCYCLIC HYDROC	25.2	6400	JXZ
1F	AVD118 630-04-	HENTRIACONTANE	24.38	3000	JXN
1F	AVD117 198-55-	PERYLENE	24.17	4600	JXN
lF	AVD116 192-97-	BENZO[E]PYRENE	23.87	9000	JXN
lF		NONACOSANE	22.98	3200	BJXN
1F	AVD114	UNKNOWN	22.67	2200	
1F	AVD113	UNKNOWN	22.23	1800	
1F	AVD112	UNKNOWN C19H12 PAH	22.2	2800	
1F	AVD111	UNKNOWN C19H14 PAH W/UNKNO		1700	
1F	AVD110	UNKNOWN C19H14 PAH	21.92	2600	
1 F	AVD1 9 593-49-	HEPTACOSANE	21.83	1700	BJXN
1F	AVD1 8 239-35-	BENZO[B]NAPHTHO[2,1-D]THIOPH			JXNZ
1F	AVD1 7	UNKNOWN C17H12 PAH	19.87	4100	
1 F	AVD1 6	UNKNOWN	19.63	2100	
1F	AVD1 5 238-84-	11H-BENZO[A]FLUORENE	19.45	3900	
1F	AVD14	UNKNOWN ALKANAL	18.92	3000	
1F	AVD1 3 57-10-	HEXADECANOIC ACID	17	2600	
1F	AVD1 2	UNKNOWN HEXADECENOIC ACID		2200	
<u>1</u> F	AVD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET		21000	BJXNA
lF	AVH1SD259	21			
		Sample Number: SD25-9			
			Total:	149700	
1F	AUD121 1058-61-	STIGMAST-4-EN-3-ONE	28.45	5900	
l F	AUD120	UNKNOWN C22H12 PAH	27.12	4700	<del> </del>
F	AUD119	UNKNOWN C22H14 PAH	26.32	3800	l
F	AUD118	UNKNOWN POLYCYCLIC HYDROC		9100	
	1.775.446	TRANSPORTED AT TRANSPORTED A STATE OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PARTY OF THE PA			

1F	AXD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	5.32	6300	JXNA
1F	AXD1 2 112-53-	1-DODECANOL	12.98	320	JXN
1F	AXD1 3 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	14.25	130	JXN
1F	AXD1 4	UNKNOWN PROPANOATE	31.98	510	JX
		Sample Number: LAB BLANK			
1F	AYH1SBLK4LS	1			
1F	AYD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.65	8	JXNA
		Sample Number: LAB BLANK			
1F	AZH1SBLK1N	. 4			
1F	AZD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.75	2300	JXNA
1F	AZD1 2 112-53-	1-DODECANOL	12.28	200	JXN
1F	AZD1 3 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	13.53	83	JXN
1F	AZD1 4	UNKNOWN	22.15	100	JX
		Sample Number: LAB BLANK			
1F	BAH1SBLKN5	5			
1F	BAD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-ME	4.7	5300	JXNA
1F	BAD1 2 112-53-	1-DODECANOL	12.3	150	JXN
1F	BAD1 3	UNKNOWN	21.72	110	JX
1F	BAD1 4	UNKNOWN	23.25	150	JX
1F	BAD1 5	UNKNOWN	25.28	93	JX

		Sample Number: SW26-3			
1F	AAH1SW26-3	1			
1F	AAD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.05	6	BJXNA
		Sample Number: SW26-10			
1F	ABH1SW2610	. 5			
1F	ABD1 1	UNKNOWN ALKANE	13.92	7	JX
1F	ABD1 2 1921-70	PENTADECANE, 2,6,10,14-TETRA	14.42	27	JXN
1F	ABD1 3 638-36-	HEXADECANE, 2,6,10,14-TETRAM	15.32	21	JXN
1F	ABD1 4	UNKNOWN ALKANE	15.98	5	JX
1F	ABD1 5 57-10-	HEXADECANOIC ACID	16.67	8	JXN
			Total:	68	
		Sample Number: SW26-10R			
1F	ACH1SW2610R	4			
1F	ACD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.7	15	BJXNA
1F	ACD1 2 98-82-	BENZENE, (1-METHYLETHYL)-	5.87	3	BJXN
1F	ACD1 3 112-34-	ETHANOL, 2-(2-BUTYOXYETHOXY)	9.3	2	JXN
1F	ACD1 4 57-10-	HEXADECANOIC ACID	16.57	2	JXN
			Total:	22	
		Sample Number: SW26-11			
1F	ADH1SW2611	12			
1F	ADD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.68	8	BJXNA
1F	ADD1 2 98-82-	BENZENE, (1-METHYLETHYL)-	5.87	5	BJXN
1F	ADD1 3 629-50-	TRIDECANE	10.47	4	JXN
1F	ADD1 4	UNKNOWN ALKANE	11.3	4	JX
1F	ADD1 5 629-59-	TETRADECANE	11.53	4	JXN
1F	ADD1 6	UNKNOWN ALKANE	12.17	6	JX
1F	ADD1 7 629-62-	PENTADECANE	12.53	3	JXN
1F	ADD1 8	UNKNOWN ALKANE	13.93	7	JX
1F	ADD1 9 1921-70-	PENTADECANE, 2,6,10,14-TETRA	14.45	32	JXN
1F	ADD110 638-36-	HEXADECANE, 2,6,10,14-TETRAM	15.33	27	JXN
1F	ADD111	UNKNOWN ALKANE	16		JX
1F	ADD112 629-92-	NONADECANE	16.07	3	JXN
			Total:	110	
		Sample Number: SW26-12			
1F	AEH1SW2612	3			
1F	AED1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.67	4	BJXNA
1F	AED1 2	UNKNOWN	11.8	2	JX
1F	AED1 3	UNKNOWN	22.18		JX
			Total:	8	
		Sample Number: SW26-2			
1F	AFH1SW262	2			
1F	AFD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.03		BJXNA
1F	AFD1 2 74367-33-	PROPANOIC ACID, 2-METHYL-, 2	11.77	5	BJXN

			Total:	14	
		Sample Number: SW26-4			
1F	AGH1SW264	7			
1F	AGD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.03	5	BJXNA
1F	AGD1 2 74367-33-	PROPANOIC ACID, 2-METHYL-, 2	11.77	3	BJXN
1F	AGD1 3 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	14.13	3	JXN
1F	AGD1 4	UNKNOWN	22.85		JX
1F	AGD1 5	UNKNOWN ALKANE	23.15	3	JX
1F	AGD1 6	UNKNOWN	23.25	5	JX
1F	AGD1 7	UNKNOWN ALKANE	24.57	6	JX
			Total:	31	
		Sample Number: SW26-5			
1F	AHH1SW265	1			
1F	AHD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5	3	BJXNA
		Sample Number: SW26-6			
1F	AIH1SW266	3			
1F	AID1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.05	6	BJXNA
1F	AID1 2 74367-33-	PROPANOIC ACID, 2-METHYL-, 2	11.78	6	BJXN
1F	AID1 3	UNKNOWN	25.93	9	JX
			Total:	21	
		Sample Number: SW26-7			
1F	AJH1SW267	11			
1F	AJD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.05	9	BJXNA
1F	AJD1 2 74367-33-	PROPANOIC ACID, 2-METHYL-, 2	11.77	7	BJXN
1F	AJD1 3 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	14.13	4	JXN
1F	AJD1 4 544-63-	TETRADECANOIC ACID	15.5	10	JXN
1F	AJD1 5 57-10-	HEXADECANOIC ACID	17.13		JXN
1F	AJD1 6	UNKNOWN ALKANAL	22.83		JX
1F	AJD1 7	UNKNOWN ALKANE	23.15		JX
1F	AJD1 8 506-52-	1-HEXACOSANOL	23.23		JXN
1F	AJD1 9	UNKNOWN	24.23		JX
1F	АЈD110	UNKNOWN ALKANE	24.58		JX
1F	АЈD111	UNKNOWN	25.82		JX
			Total:	56	
		Sample Number: SW26-8			
1F	AKH1SW268	3			
1F	AKD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.67		BJXNA
1F	AKD1 2 544-63-	TETRADECANOIC ACID	14.92		JXN
1F	AKD1 3 57-10-	HEXADECANOIC ACID	16.53		JXN
			Total:	10	
		Sample Number: SW26-9			
1F	ALH1SW269	8			
1F	ALD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.05	7	BJXNA

1F	ALD1 2 74367-33-	PROPANOIC ACID, 2-METHYL, 2,	11.78	6	BJXN
1F	ALD1 3	UNKNOWN	22.15	9	JX
1F	ALD1 4	UNKNOWN	22.47	41	JX
1F	ALD1 5	UNKNOWN ALKANE	23.15	7	JX
1F	ALD1 6	UNKNOWN	23.4	6	JX
1F	ALD1 7	UNKNOWN ALKANE	24.58	6	JX
1F	ALD1 8	UNKNOWN ALKANE	26.43	7	JX
			Total:	89	
		Sample Number: LAB BLANK			
1F	AMH1SBLK2L	2			
1F	AMD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.05	8	JXNA
1F	AMD1 2 74367-33-	PROPANOIC ACID, 2-METHYL-, 2	11.8	2	JXN
		Sample Number: LAB BLANK			
1F	ANH1SBLK3L	7			
1F	AND1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.67	19	JXNA
1F	AND1 2 98-82-	BENZENE, (1-METHYLETHYL)-	5.85	5.	JXN
1F	AND1 3 629-97-	DOCOSANE	18.23	3	JXN
1F	AND1 4 638-67-	TRICOSANE	18.92	4	JXN
1F	AND1 5 646-31-	TETRACOSANE	19.57	4	JXN
1F	AND1 6 629-99-	PENTACOSANE	20.18	3	JXN
1F	AND1 7 630-01-	HEPTACOSANE	20.78	2	JXN
		Sample Number: LAB BLANK			
1F	AOH1SBLK4L	1			
1F	AOD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.65	8	JXNA

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		Sample Number: SB26-09-04			
1F	AAH19-04	12			
1F	AAD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.42	2500	BJXNA
1F	AAD1 2 57-15-	2-PROPANOL, 1,1,1-TRICHLORO-	7.17		BJXN
1 <b>F</b>	AAD1 3 112-53-	1-DODECANOL	12.92		BJXN
1 <b>F</b>		PROPANOIC ACID, 2-METHYL-, 1	14.18		JXN
1F	AAD1 5	UNKNOWN ALIPHATIC	14.78	110	
1F	AAD1 6	UNKNOWN ALIPHATIC AMIDE	20.15	120	JX
1F	AAD1 7 506-51-	1-TETRACOSANOL	22.07	160	JXN
1F	AAD1 8	UNKNOWN	22.92		JX
1F	AAD1 9	UNKNOWN C24H14 PAH W/ALKANE	23.22		JXZ
1F	AAD110	UNKNOWN W/BENZO[A]PYRENE	24.17		JXZ
1F	AAD111	UNKNOWN	24.6	320	
1F	AAD112	UNKNOWN	28.48		JX
			Total:	4252	
		Sample Number: SB26-09-05			
1F	ABH19-05	5			
1F	ABD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.43	1900	BJXNA
1F	ABD1 2 57-15-	2-PROPANOL, 1,1,1-TRICHLORO-	7.17		BJXN
1F	ABD1 3 112-53-	1-DODECANOL	12.9		BJXN
1F	ABD1 4 74381-40-		14.18		JXN
1F	ABD1 5	UNKNOWN	24.58		JX
			Total:	2354	
		Sample Number: MSB			
1F	ACH1MSB	0			
		Sample Number: SD26-3			
1F	ADH1SD26-3	12			
1F	ADD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.35	2400	BJXNA
1F	ADD1 2 112-53-	1-DODECANOL	12.92	480	BJXN
1F	ADD1 3 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	14.18	290	JXN
1F	ADD1 4	UNKNOWN ALIPHATIC	14.95	140	JXB
1F	ADD1 5 629-78-	HEPTADECANE	14.98	120	JXN
1F	ADD1 6	UNKNOWN PROPANOATE	15.45	110	
1F	ADD1 7	UNKNOWN HEXADECENOIC ACID	17.05	190	JX.
1F	ADD1 8 57-10-	HEXADECANOIC ACID	17.17	140	JXN
1F	ADD1 9	UNKNOWN	22.9	130	JX
1F	ADD110 630-03-	NONACOSANE	23.2		BJXN
1F	ADD111 192-97-	BENZO[E]PYRENE	24.07		JXN
1F	ADD112 630-04-	HENTRIACONTANE	24.63	120	JXN
			Total:	4400	
		Sample Number: SD26-2		- Marian	
1F	AEH1SD262	21			
1F	AED1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.38	3800	BJXNA

1 F	AED1 2 112-53-	1-DODECANOL	12.9	480	BJXN
1F	AED1 3 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	14.17		JXN
1F	AED1 4	UNKNOWN ALIPHATIC	14.93	250	JXB
1F	AED1 5	UNKNOWN HEXADECENOIC ACID	17.05	270	JX
1F	AED1 6 57-10-	HEXADECANOIC ACID	17.17	420	JXN
1F	AED1 7	UNKNOWN BENZONAPHTHOFURAN	18.97	230	JX
1F	AED1 8 238-84-	11H-BENZO[A]FLUORENE	19.65	270	JXN
1F	AED1 9	UNKNOWN METHYLPYRENE W/C18H	19.87	190	JXZ
1F	AED110	UNKNOWN BENZANTHRACENONE	20.68	240	JX
1F	AED111 661-19-	1-DOCOSANOL W/BENZO[B]NAPTHO	20.85	320	JXNZ
1F	AED112 195-19-	BENZO[C]PHENANTHRENE	20.92	190	JXN
1F	AED113 27208-37-	CYCLOPENTA[CD]PYRENE	20.98	200	JXN
1F	AED114 593-49-	HEPTACOSANE	22	240	BJXN
1F	AED115 630-03-	NONACOSANE	23.18	750	BJXN
1F	AED116	UNKNOWN ALIPHATIC W/C20H12 P	23.68		JXZ
1F	AED117 192-97-	BENZO[E]PYRENE	24.05	760	JXN
1F	AED118 630-04-	HENTRIACONTANE	24.62	680	JXN
1F	AED119	UNKNOWN POLYTERPENE DERIVATI	25.83	280	JX
1F	AED120	UNKNOWN	27.37	250	JX
lF	AED121	UNKNOWN SITOSTEROL W/BENZO[G	28.12	1000	JXZ
			Total:	11260	
		Sample Number: SD26-4			
1F	AFH1SD264	21			
1F	AFD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.4	3400	BJXNA
1F	AFD1 2	UNKNOWN TERPENE	7.85	320	
1F	AFD1 3 112-53-	1-DODECANOL	12.9		BJXN
1F	AFD1 4	UNKNOWN SESQUITERPENE	13.25	570	
1F	AFD1 5	UNKNOWN HEXADECENOIC ACID	17.1	200	
1 F	AFD1 6 57-10-	HEXADECANOIC ACID	17.15		JXN
1F	AFD1 7 629-97-	DOCOSANE	18.87		BJXN
1F	AFD1 8 638-67-	TRICOSANE	19.53		BJXN
1F	AFD1 9 646-31-	TETRACOSANE	20.18		BJXN
1F	AFD110 629-99-	PENTACOSANE	20.82		BJXN
1 <u>F</u>	AFD111 630-01-	HEXACOSANE	21.42		BJXN
1F	AFD112 593-49-	HEPTACOSANE	. 22		BJXN
1F	AFD113 506-51-	1-TETRACOSANOL	22.05		JXN
1F	AFD114 630-02-	OCTACOSANE	22.57		BJXN
1F	AFD115	UNKNOWN	22.87	280	
1F	AFD116 630-03-	NONACOSANE	23.18		BJXN
1F	AFD117 506-52-	1-HEXACOSANOL	23.27		JXN
1F	AFD118 638-68-	TRIACONTANE	23.85	270	
1F	AFD119 630-04-	HENTRIACONTANE	24.62 27.4	590 360	JXN
1F		UNKNOWN ALIPHATIC			

1F	AFD121	UNKNOWN SITOSTEROL	28.1	540	JX
			Total:	12980	
		Sample Number: SD26-5			
1F	AGH1SD265	21			
1F	AGD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.28	11000	BJXNA
1F	AGD1 2 112-53-	1-DODECANOL	12.88	320	BJXN
1F	AGD1 3	UNKNOWN ALIPHATIC	14.92	260	JXB
1F	AGD1 4	UNKNOWN PROPANOATE	15.45	350	JX
1F	AGD1 5 544-63-	TETRADECANOIC ACID	15.5	280	JXN
1F	AGD1 6	UNKNOWN HEXADECENOIC ACID	17.05	950	
1F	AGD1 7	UNKNOWN HEXADECENOIC ACID	17.1	620	JX
1F	AGD1 8 57-10-	HEXADECANOIC ACID	17.17	1000	JXN
1F	AGD1 9	UNKNOWN ALIPHATIC	18	1100	JX
lF	AGD110 239-35-	BENZO[B]NAPHTHO[2,1-D]THIOPH	20.83	250	JXNZ
1F	AGD111 593-49-	HEPTACOSANE	21.98	350	BJXN
1F	AGD112	UNKNOWN	22.87	680	JX
1F	AGD113 630-03-	NONACOSANE	23.17	2000	BJXN
1F	AGD114 506-52-	1-HEXACOSANOL	23.27	520	JXN
1F	AGD115 192-97-	BENZO[E]PYRENE	24.03	1100	JXN
1F	AGD116 630-04-	HENTRIACONTANE	24.6	1500	JXN
lF	AGD117	UNKNOWN	26.3	310	JX
1F	AGD118 630-05-	TRITRIACONTANE	26.47	250	JXN
1F	AGD119	UNKNOWN ALIPHATIC	27.37	420	
lF	AGD120	UNKNOWN SITOSTEROL W/BENZO[G	28.08	1600	JXZ
1F	AGD121	UNKNOWN	29	270	JX
			Total:	25130	
		Sample Number: SD26-6			
1F	AHH1SD266	12			
1F	AHD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.33	4200	BJXNA
1F	AHD1 2 57-15-	2-PROPANOL, 1,1,1-TRICHLORO-	7.13	210	BJXN
1F	AHD1 3 112-53-	1-DODECANOL	12.9	350	BJXN
1F	AHD1 4	UNKNOWN ALIPHATIC	14.92	120	JXB
1F	AHD1 5 629-78-	HEPTADECANE	14.95	110	JXN
1F	AHD1 6 57-10-	HEXADECANOIC ACID	17.15		JXN
1F	AHD1 7	UNKNOWN ALIPHATIC	. 18.02	110	JX
1F	AHD1 8	UNKNOWN	22.87	100	
1F	AHD1 9 630-03-	NONACOSANE	23.17		BJXN
1F	AHD110 506-52-	1-HEXACOSANOL	23.27		JXN
1F	AHD111 192-97-		24.03		JXN
1F	AHD112 630-04-	HENTRIACONTANE	24.6		JXN
			Total:	6280	
		Sample Number: SD26-7			
1F	AIH1SD267	21			

			·		,
1F	AID1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.3		BJXNA
1F	AID1 2 57-15-	2-PROPANOL, 1,1,1-TRICHLORO-	7.13		BJXN
1F	AID1 3 112-53-	1-DODECANOL	12.9		BJXN
1F	AID1 4	UNKNOWN ALIPHATIC	14.93		JXB
1F	AID1 5	UNKNOWN HEXADECENOIC ACID	17.1	140	JX
1F	AID1 6 57-10-	HEXADECANOIC ACID	17.15	270	JXN
1F	AID1 7 661-19-	1-DOCOSANOL W/PENTACOSANE	20.83	97	JXNZ
1F	AID1 8 593-49-	HEPTACOSANE	22	230	BJXN
1F	AID1 9	UNKNOWN	22.87	250	JX
1F	AID110 630-03-	NONACOSANE	23.18	1100	BJXN
1F	AID111 506-52-	1-HEXACOSANOL	23.27	1100	
1F	AID112 630-04-	HENTRIACONTANE	24.62	1300	JXN
1F	AID113	UNKNOWN	25.83	190	
1F	AID114 630-05-	TRITRIACONTANE	26.47	370	JXN
1F	AID115	UNKNOWN	27.35	210	JX
1F	AID116	UNKNOWN	27.55	340	JX
1F	AID117	UNKNOWN SITOSTEROL	28.1	760	JX
1F	AID118	UNKNOWN	28.43	130	JX
1F	AID119	UNKNOWN	28,58	170	JX
1F	AID120	UNKNOWN POLYTERPENE DERIVATI	28.87	240	JX
1F	AID121	UNKNOWN POLYTERPENE DERIVATI	28.97	270	JX
			Total:	12127	
		Sample Number: SD26-9			
1F	AJH1SD269	21			
lF	AJD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.35	5100	BJXNA
1F	AJD1 2 57-15-	2-PROPANOL, 1,1,1-TRICHLORO-	7.13	270	BJXN
1F	AJD1 3 112-53-	1-DODECANOL	12.88		BJXN
1F	AJD1 4 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	14.15	180	JXN
1F	AJD1 5	UNKNOWN HEXADECENOIC ACID	17.08	320	
lF	AJD1 6 57-10-	HEXADECANOIC ACID	17.15		JXN
1F	AJD1 7 593-49-	HEPTACOSANE	21.98		BJXN
1F	AJD1 8	UNKNOWN	22.87	150	
1F	AJD1 9 630-03-	NONACOSANE	23.17		BJXN
1F	AJD110 506-52-	1-HEXACOSANOL	23.27		JXN
1F	AJD111 192-97-	BENZO[E]PYRENE	. 24.03		JXN
1F	AJD112	UNKNOWN ALIPHATIC	24.12	110	
1F	AJD113 630-04-	HENTRIACONTANE	24.6		JXN
1F	AJD114	UNKNOWN	25.33	100	
1F	AJD115	UNKNOWN	25.82	100	
1F	AJD116 630-05-	TRITRIACONTANE	26.45		JXN
1F	AJD117	UNKNOWN	26.97	130	
1F	AJD118	UNKNOWN ALIPHATIC	27.37	280	
1F	AJD119	UNKNOWN SITOSTEROL	28.07	390	T37

1F	AJD120	UNKNOWN	28.55	91	JX
1F	AJD121	UNKNOWN POLYTERPENE DERIVATI	28.95	150	JX
			Total:	9441	
		Sample Number: SS26-10			
1F	AKH1SS2610	21			
1F	AKD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.45	2500	BJXNA
1F	AKD1 2 112-53-	1-DODECANOL	12.9	400	BJXN
1F	AKD1 3 498-02-	ETHANONE, 1-(4-HYDROXY-3-MET	13.25	120	JXN
1F	AKD1 4	UNKNOWN ALIPHATIC	14.92	160	JXB
1F	AKD1 5	UNKNOWN HEXADECENOIC ACID	17.1	280	JX
1F	AKD1 6 57-10-	HEXADECANOIC ACID	17.15	380	JXN
1F	AKD1 7	UNKNOWN OCTADECENOIC ACID	18.52	240	JX
1F	AKD1 8 661-19-	1-DOCOSANOL	20.83	170	JXN
1F	AKD1 9 593-49-	HEPTACOSANE	22	160	JXN
1F	AKD110 506-51-	1-TETRACOSANOL	22.05	170	JXN
1F	AKD111	UNKNOWN ALIPHATIC ALDEHYDE W	22.88	520	JXZ
1F	AKD112 630-03-	NONACOSANE	23.18	1200	JXN
1F	AKD113 506-52-	1-HEXACOSANOL	23.28	1200	JXN
1F	AKD114 630-04-	HENTRIACONTANE	24.62	1300	JXN
1F	AKD115	UNKNOWN C28-ALCOHOL	24.77	200	JX
1F	AKD116	UNKNOWN POLYTERPENE DERIVATI	25.83	150	JX
1F	AKD117 630-05-	TRITRIACONTANE	26.48	440	JXN
1F	AKD118	UNKNOWN ALIPHATIC ALDEHYDE	26.73	120	JX
1F	AKD119	UNKNOWN POLYTERPENE DERIVATI	26.98	130	JX
1F	AKD120	UNKNOWN ALIPHATIC	27.38	120	JX
1F	AKD121	UNKNOWN SITOSTEROL W/BENZO[G	28.08	350	JXZ
			Total:	10310	
		Sample Number: SS26-10RN			
1F	ALH1SS2610RN	5			
1F	ALD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.1	10	BJXNA
1F	ALD1 2	UNKNOWN C3-ALKYLBENZENE	6.33		JXB
1F	ALD1 3 872-50-	2-PYRROLIDINONE, 1-METHYL-	8.03	3	JXN
1F	ALD1 4 112-34-	ETHANOL, 2-(2-BUTOXYETHOXY)-	9.82	15	JXN
1F	ALD1 5 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	14.17	3	JXN
			Total:	33	
		Sample Number: SS26-11			
1F	AMH1SS2611	21			
1F	AMD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.45		BJXNA
1F	AMD1 2 99-93-	ETHANONE, 1-(4-HYDROXYPHENYL	9.63	***************************************	JXN
1F	AMD1 3	UNKNOWN ALIPHATIC ALCOHOL	9.88		JXB
1F		1-DODECANOL	12.88		BJXN
1F		ETHANONE, 1-(4-HYDROXY-3-MET	13.23		JXN
1F	AMD1 6 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	14.15	110	JXN

1F	AND116 630-04-	HENTRIACONTANE	24.6	1200	
1F	AND115 506-52-	1-HEXACOSANOL	23.25	1300	
1F	AND114 630-03-		23.17		JXN
1F	AND113	UNKNOWN ALIPHATIC ALDEHYDE	22.85	530	
1F	AND112 630-02-	OCTACOSANE	22.55		JXN
1F		1-TETRACOSANOL	22.03		JXN
1F	AND110 593-49-		21.98		JXN
1F	AND1 9 661-19-	1-DOCOSANOL	20.82		JXN
1F	AND1 8	UNKNOWN ALIPHATIC AMIDE	20.12	110	
1F	AND1 7	UNKNOWN OCTADECENOIC ACID	18.48		JX
1F	AND1 6 57-10-	HEXADECANOIC ACID	17.13		JXN
1F	AND1 5	UNKNOWN HEXADECENOIC ACID	17.08	190	
1F	AND1 4	UNKNOWN ALIPHATIC	14.13		JXB
1F		PROPANOIC ACID, 2-METHYL-, 1	14.13		JXN
1F	AND1 1 123-42-	1-DODECANOL	12.87		BJXN
1F	AND1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.45	2000	BJXNA
1F	ANH1SS2612	21			
		Sample Number: SS26-12	Total:	12422	
1F	AMD121	UNKNOWN SITOSTEROL W/BENZO[G	28.05		JXZ
1F	AMD120	UNKNOWN C30-ALCOHOL	26.7	110	
lF	AMD119 630-05-		26.45		JXN
1 F	AMD118	UNKNOWN POLYTERPENE DERIVATI		140	
1 F	AMD117	UNKNOWN C28-ALCOHOL	24.73	210	
1F		HENTRIACONTANE	24.6		JXN
1F		1-HEXACOSANOL	23.25	2100	
l F	AMD114 630-03-	NONACOSANE	23.17		JXN
1F	AMD113	UNKNOWN ALIPHATIC ALDEHYDE	22.85	630	
1F	AMD112 506-51-	1-TETRACOSANOL	22.03		JXN
1 <b>F</b>	AMD111 593-49-		21.98		JXN
1F	AMD110 661-19-	1-DOCOSANOL	20.82	110	JXN
1F	AMD1 9 57-10-	HEXADECANOIC ACID	17.13	160	JXN
F	AMD1 8	UNKNOWN HEXADECENOIC ACID	17.08	96	JX
	AMD1 7	UNKNOWN ALIPHATIC	14.92		JXB

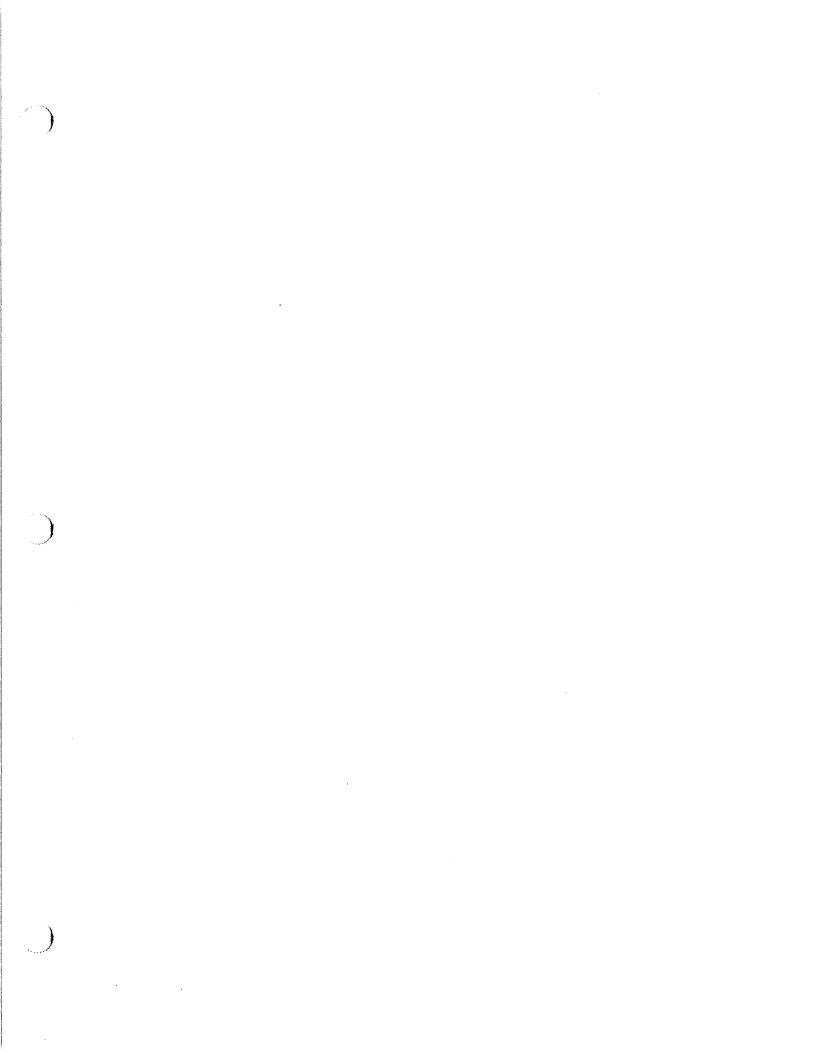
1F	AOD1 2	UNKNOWN ALIPHATIC ALCOHOL	9.88	97	JXB
1F	AOD1 3 112-53-	1-DODECANOL	12.88	170	BJXN
1F	AOD1 4 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	14.15	120	JXN
1F	AOD1 5	UNKNOWN ALIPHATIC	14.75	110	JX
1F	AOD1 6	UNKNOWN ALIPHATIC	14.92	150	JXB
1F	AOD1 7 122-34-	1,3,5-TRIAZINE-2,4-DIAMINE,	15.58	120	JXN
1F	AOD1 8	UNKNOWN HEXADECENOIC ACID	17.08	110	JX
1F	AOD1 9 57-10-	HEXADECANOIC ACID	17.13	130	JXN
1F	AOD110 593-49-	HEPTACOSANE	21.98	120	JXN
1F	AOD111	UNKNOWN	22.12	87	JX
1F	AOD112	UNKNOWN	22.87	130	JX
1F	AOD113 630-03-	NONACOSANE	23.17	240	JXN
1F	AOD114 506-52-	1-HEXACOSANOL	23.25	97	JXN
1F	AOD115 630-04-	HENTRIACONTANE	24.6	220	JXN
1F	AOD116	UNKNOWN POLYTERPENE DERIVATI	25.82		JX
1F	AOD117	UNKNOWN POLYTERPENE DERIVATI	26.97	90	JX
1F	AOD118	UNKNOWN	27.32	140	JX
1F	AOD119	UNKNOWN SITOSTEROL	28.05	190	JX
1F	AOD120	UNKNOWN	28.3	130	JX
1F	AOD121	UNKNOWN	28.68	80	JX
			Total:	4904	
		Sample Number: SS26-14			
1F	APH1SS2614	12			
1F	APD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.2	16000	BJXNA
1F	APD1 2 203-64-	4H-CYCLOPENTA[DEF]PHENANTHRE	17.38	740	JXN
1F	APD1 3	UNKNOWN BENZONAPHTHOFURAN	18.95	540	JX
1F	APD1 4 238-84-	11H-BENZO[A]FLUORENE	19.63	<b>77</b> 0	JXN
1F	APD1 5	UNKNOWN C18H12 PAH	21.55	570	JX
1F	APD1 6	UNKNOWN	22.87	520	
1F	APD1 7 630-03-	NONACOSANE	23.17	1400	JXN
1F	APD1 8 506-52-	1-HEXACOSANOL	23.25	1100	
1F	APD1 9 192-97-	BENZO[E]PYRENE	24	1800	
1F	APD110 198-55-	PERYLENE	24.32		JXN
1F	APD111 630-04-	HENTRIACONTANE	24.58	1700	
1F	APD112 630-05-	TRITRIACONTANE	. 26.45		JXN
			Total:	26580	
		Sample Number: SS26-50			
1F	AQH1SS2650	21			
1F	AQD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.42		BJXNA
1F	AQD1 2 112-53-	1-DODECANOL	12.9	~~~~	BJXN
1F	AQD1 3	UNKNOWN ALIPHATIC	14.93		JXB
1F	AQD1 4	UNKNOWN HEXADECENOIC ACID	17.1	220	
1F	AQD1 5 57-10-	HEXADECANOIC ACID	17.17	300	JXN

1F	AQD1 6	UNKNOWN OCTADECENOIC ACID	18.52	210	JX
1F	AQD1 7	UNKNOWN ALIPHATIC AMIDE	20.13	120	JX
1F	AQD1 8 661-19-	1-DOCOSANOL	20.83	140	JXN
1F	AQD1 9 593-49-	HEPTACOSANE	22	170	JXN
1F	AQD110 506-51-	1-TETRACOSANOL	22.05	170	JXN
1F	AQD111	UNKNOWN ALIPHATIC ALDEHYDE W	22.88	570	JXZ
1F	AQD112 630-03-	NONACOSANE	23.2	1100	JXN
1F	AQD113 506-52-	1-HEXACOSANOL	23.28	1100	JXN
1F	AQD114 638-68-	TRIACONTANE	23.87	110	JXN
1F	AQD115 630-04-	HENTRIACONTANE	24.63	1400	JXN
1F	AQD116	UNKNOWN C28-ALCOHOL	24.77	170	JX
1F	AQD117	UNKNOWN POLYTERPENE DERIVATI	25.83	160	JX
1F	AQD118 630-05-	TRITRIACONTANE	26.48	420	JXN
1F	AQD119	UNKNOWN POLYTERPENE DERIVATI	27	140	JX
1F	AQD120	UNKNOWN	27.35	170	JX
1F	AQD121	UNKNOWN SITOSTEROL W/BENZO[G	28.08	390	JXZ
			Total:	12160	
		Sample Number: SS26-9			
1F	ARH1SS269	15			
1F	ARD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.42	2400	BJXNA
1F	ARD1 2 112-53-	1-DODECANOL	12.9	190	BJXN
1F	ARD1 3 74381-40-	PROPANOIC ACID, 2-METHYL-, 1	14.17	100	JXN
1F	ARD1 4	UNKNOWN ALIPHATIC	14.93	150	JXB
1F	ARD1 5	UNKNOWN HEXADECENOIC ACID	17.1	120	JX
1F	ARD1 6 57-10-	HEXADECANOIC ACID	17.15	190	JXN
1F	ARD1 7 661-19-	1-DOCOSANOL W/PENTACOSANE	20.83	82	JXNZ
1F	ARD1 8 593-49-	HEPTACOSANE	22	170	JXN
1F	ARD19	UNKNOWN ALKANE	22.58	90	JX
1F	ARD110	UNKNOWN ALIPHATIC ALDEHYDE	22.88	310	JX
1F	ARD111 630-03-	NONACOSANE	23.18	510	JXN
1F	ARD112 506-52-	1-HEXACOSANOL	23.28		JXN
1F	ARD113 630-04-	HENTRIACONTANE	24.62	560	JXN
1F	ARD114 630-05-	TRITRIACONTANE	26.48		JXN
1F	ARD115	UNKNOWN SITOSTEROL W/BENZO[G	28.07	130	JXZ
			Total:	5692	
		Sample Number: LAB BLANK			
1F	ASH1SBLKM3	6			
1F	ASD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.33	5100	JXNA
1F	ASD1 2 57-15-	2-PROPANOL, 1,1,1-TRICHLORO-	6.03	87	JXN
1F	ASD1 3 112-53-	1-DODECANOL	11.77	170	JXN
1F	ASD1 4	UNKNOWN ALIPHATIC	13.72	67	JX
1F	ASD1 5	UNKNOWN	20.05	160	JX
1F	ASD1 6	UNKNOWN PROPANOATE	27.47	2400	JX

		Sample Number: LAB BLANK			
1F	ATH1SBLKM5	5			
1F	ATD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.48	1700	JXNA
1F	ATD1 2	UNKNOWN ALIPHATIC ALCOHOL	9.92	120	JX
1F	ATD1 3 112-53-	1-DODECANOL	12.9	280	JXN
1F	ATD1 4	UNKNOWN ALIPHATIC	14.93	83	JX
1F	ATD1 5	UNKNOWN	24.15	67	JX
		Sample Number: LAB BLANK			
1F	AUH1SBLKL1	. 2			
1F	AUD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.07	27	JNXA
1F	AUD1 2	UNKNOWN C3-ALKYLBENZENE	6.33	4	JX
		Sample Number: LAB BLANK			
1F	AVH1SBLKM6	12			
1F	AVD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.38	1600	JXNA
1F	AVD1 2 57-15-	2-PROPANOL, 1,1,1-TRICHLORO-	7.17	110	JXNZ
lF	AVD1 3 112-53-	1-DODECANOL	12.92	280	JXN
1F	AVD1 4	UNKNOWN ALIPHATIC	14.93	93	JX
1F	AVD1 5 629-97-	DOCOSANE	18.88	180	JXN
1F	AVD1 6 638-67-	TRICOSANE	19.55	240	JXN
1F	AVD1 7 646-31-	TETRACOSANE	20.2	250	JXN
1F	AVD1 8 629-99-	PENTACOSANE	20.83	200	JXN
lF	AVD1 9 630-01-	HEXACOSANE	21.43	150	JXN
1F	AVD110 593-49-	HEPTACOSANE	22	110	JXN
1F	AVD111 630-02-	OCTACOSANE	22.58	70	JXN
1F	AVD112 630-03-	NONACOSANE	23.2	97	JXN

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		Sample Number: DIWAT			
1F	AAH1DIWAT	1			
1F	AAD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.1	11	BJXNA
		Sample Number: MSB			
1F	ABH1MSB	0			
		Sample Number: LAB BLANK			
1F	ACH1SBLKL1	. 2			
1F	ACD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	5.07	27	JXNA
1F	ACD1 2	UNKNOWN C3-ALKYLBENZENE	6.33	4	JX



		Sample Number: LAB BLANK	ζ		
1F	AAH1SBLK2L	0			
		Sample Number: SW25-7			
1F	ABH1SW25-7	1			
1F	ABD1 1	Unknown aliphatic compound	7.597	4	J
		Sample Number: SW25-8			
1F	ACH1SW25-8	2			
1F	ACD1 1	Unknown aliphatic compound	6.212	4	J
1F	ACD1 2	Unknown aliphatic compound	7.589	3	J
			Total:	7	
		Sample Number: SW25-9			
1F	ADH1SW25-9	0		•	
	12011101120	Sample Number: SW25-1			
1F	AEH1SW251	20			
1F	AED1 1	Unknown aliphatic acid	6.706	4	J
1F	AED1 2	Unknown aliphatic acid	6.804	3	
1F	AED13	Unknown	7.357		J
1F	AED1 4	Unknown dimethylbenzoic acid	7.495	4	J
1F	AED1 5	Unknown	7.554		J
1F	AED1 6	Unknown aliphatic acid	7.594	5	
1F	AED1 7	Unknown	7.643		J
1F	AED1 8	Unknown	7.802	4	J
1F	AED1 9	Unknown dimethylbenzoic acid	7.96	3	J
1F	AED110	Unknown	8.613	3	J
1F	AED111	Unknown polycyclic compound	9.365	3	J
1F	AED112	Unknown	9.85	3	J
1F	AED113	Unknown naphthalenecarboxyli	10.553	9	
1F	AED114	Unknown naphthalenecarboxyli	10.663	5	J
1F	AED115	Unknown	10.752	3	J
1F	AED116	Unknown	10.772	3	J
1F	AED117	Unknown aliphatic compound	10.89	3	J
1F	AED118544-63-8	Tetradecanoic acid	10.999	3	NJ
1F	AED11957-10-3	Hexadecanoic acid	12.653	6	NJ
1F	AED120	Unknown	18.291	3	J
			Total:	77	
		Sample Number: SW25-10			
1F	AFH1SW2510	1			
1F	AFD1 1	Unknown aliphatic compound	7.587	4	J
		Sample Number: SW25-15			
1F	AGH1SW2515	1		-	
1F	AGD1 1	Unknown aliphatic compound	7.586	3	J
		Sample Number: SW25-2			
1F	AHH1SW252	4			

1F	AHD1 1	Unknown aliphatic acid	7.584	2	J
1F	AHD1 257-10-3	Hexadecanoic acid	12.648	3	NJ
1F	AHD1 3	Unknown aliphatic aldehyde	18.576	17	J
1F	AHD1 4	Unknown aliphatic alcohol	18.951	8	J
			Total:	30	
		Sample Number: SW25-4			
1F	AIH1SW254	4			
1F	AID1 1	Unknown aliphatic acid	7.588	5	J
1F	AID1 2	Unknown	18.574	3	J
1F	AID1 3	Unknown alkane	18.889	3	J
1F	AID1 4	Unknown alkane	19.973	6	J
			Total:	17	
		Sample Number: SW25-5			
1F	AJH1SW255	2			
1F	AJD1 1	Unknown aliphatic compound	7.587	4	J
1F	AJD1 2	Unknown aliphatic compound	9.633	8	J
			Total:	12	
		Sample Number: SW25-6			
1F	AKH1SW256	1			
1F	AKD1 1	Unknown aliphatic compound	7.576	2	J

		Sample Number: SB25-10-00			
1F	AAH110-00	21			
1F	AAD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	5.28	2700	BJXNA
1F	AAD1 2	112-53-1-DODECANOL	12.9	290	BJXN
1F	AAD1 3	143-07-DODECANOIC ACID	13.72	200	BJXN
1F	AAD1 4	UNKNOWN ALIPHATIC	14.92	470	JX
1F	AAD1 5	UNKNOWN HEXADECENOIC ACID	17.1	460	JX
1F	AAD1 6	57-10-HEXADECANOIC ACID	17.15	410	JXN
1F	AAD1 7	UNKNOWN ALIPHATIC AMIDE	20.13	480	JX
1F	AAD1 8	629-99-PENTACOSANE W/1-DOCOSANOL	20.83	200	BJXNZ
1F	AAD1 9	593-49-HEPTACOSANE	22	250	BJXN
1F	AAD110	506-51-1-TETRACOSANOL	22.05	230	JXN
1F	AAD111	630-02-OCTACOSANE	22.57	110	BJXN
1F	AAD112	UNKNOWN ALKANAL W/UNKNOWNS	22.88	470	JXZ
1F	AAD113	630-03-NONACOSANE	23.18	1000	JXN
1F	AAD114	506-52-1-HEXACOSANOL	23.27	770	JXN
1F	AAD115	638-68-TRIACONTANE	23.85	110	JXN
1F	AAD116	630-04-HENTRIACONTANE	24.62	1600	JXN
1F	AAD117	UNKNOWN	24.77	120	JX
1F	AAD118	630-05-TRITRIACONTANE	26.47	470	JXN
1F	AAD119	UNKNOWN ERGOSTENOL	26.98	190	JX
1F	AAD120	UNKNOWN	27.33	120	JX
1F	AAD121	UNKNOWN	28.43	180	JX
			Total:	10830	
		Sample Number: SB25-10-01			
1F	ABH110-01	17			
1F	ABD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	5.4	3300	BJXNA
1F	ABD1 2	112-53-1-DODECANOL	12.9	340	BJXN
1F	ABD1 3	143-07-DODECANOIC ACID	13.72		BJXN
1F	ABD1 4 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	14.17		JXN
1F	ABD1 5	UNKNOWN ALIPHATIC	14.92	150	
1F	ABD1 6	UNKNOWN HEXADECENOIC ACID	17.08	100	
1F	ABD1 7	57-10-HEXADECANOIC ACID	17.15		JXN
1F	ABD1 8	UNKNOWN ALIPHATIC	18.25	130	
1F	ABD1 9	UNKNOWN .	18.77	160	
1F	ABD110	UNKNOWN ALIPHATIC AMIDE	20.13	210	
1F	ABD111	629-99-PENTACOSANE W/1-DOCOSANOL	20.83		BJXNZ
1F	ABD112	506-51-1-TETRACOSANOL	22.03		JXN
1F	ABD113	UNKNOWN	22.88		JX
1F	ABD114	630-03-NONACOSANE	23.18		JXN
1F	ABD115	506-52-1-HEXACOSANOL	23.27		JXN
1F	ABD116	630-04-HENTRIACONTANE	24.62		JXN
1F	ABD117	UNKNOWN	27.37	91	JX

			Total:	5691	
		Sample Number: SB25-10-02			
1F	ACH110-02	21			
1F	ACD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	5.35	1700	BJXNA
1F	ACD1 2	112-53-1-DODECANOL	12.9	310	BJXN
1F	ACD1 3	143-07-DODECANOIC ACID	13.72	84	BJXN
1F	ACD1 4 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	14.17	88	JXN
1F	ACD1 5	UNKNOWN ALIPHATIC	14.3	110	JX
1F	ACD1 6	UNKNOWN	15.23	300	JX
1F	ACD1 7	57-10-HEXADECANOIC ACID	17.15	99	JXN
1F	ACD1 8	112-92-1-OCTADECANOL	18.1	140	JXN
1F	ACD1 9	UNKNOWN ALIPHATIC	18.27	150	JX
1F	ACD110	UNKNOWN	18.8	120	JX
1F	ACD111	629-97-DOCOSANE	18.87	84	BJXN
1F	ACD112	646-31-TETRACOSANE	20.2	120	BJXN
1F	ACD113	629-99-PENTACOSANE	20.83	170	BJXN
1F	ACD114	630-01-HEXACOSANE	21.43	140	BJXN
1F	ACD115	593-49-HEPTACOSANE	22	160	BJXN
1F	ACD116	630-02-OCTACOSANE	22.58	150	BJXN
1F	ACD117	UNKNOWN	22.88	160	JX
1F	ACD118	630-03-NONACOSANE	23.2	210	JXN
1F	ACD119	638-68-TRIACONTANE	23.87	120	JXN
1F	ACD120	630-04-HENTRIACONTANE	24.63	150	JXN
1F	ACD121	57-88-CHOLESTEROL	25.83	370	JXN
			Total:	4935	
		Sample Number: SB25-7-00			
1F	ADH17-00	13			************
1F	ADD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.9	2200	BJXNA
1F	ADD1 2	57-15-2-PROPANOL, 1,1,1-TRICHLORO-	6.65	80	BJXN
1F	ADD1 3	112-53-1-DODECANOL	12.37	280	BJXN
1F	ADD1 4 74	381-40-PROPANOIC AID, 2-METHYL-, 1,	13.6	160	JXN
1F	ADD1 5	UNKNOWN ALIPHATIC	14.37	160	JX
1F	ADD1 6	UNKNOWN HEXADECENOIC ACID	16.52	140	JX
1F	ADD1 7	57-10-HEXADECANOIC ACID	16.58	230	JXN
1F	ADD1 8	661-19-1-DOCOSANOL	20.23	460	JXN
1F	ADD19	UNKNOWN	20.72	80	JX
1F	ADD110	506-51-1-TETRACOSANOL	21.45	640	JXN
1F	ADD111	630-03-NONACOSANE	22.5	88	JXN
1F	ADD112	506-52-1-HEXACOSANOL	22.58	130	JXN
1F	ADD113	630-04-HENTRIACONTANE	23.72	120	JXN
			Total:	4768	
		Sample Number: SB25-7-03			
1F	AEH17-03	6			

1F	AED1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.92	1900	BJXNA
1F	AED1 2	57-15-2-PROPANOL, 1,1,1-TRICHLORO-	6.65	85	BJXN
1F	AED1 3	112-53-1-DODECANOL	12.37	310	BJXN
1F	AED1 4 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	13.6	200	JXN
1F	AED1 5	UNKNOWN ALIPHATIC	14.37	220	
1F	AED1 6	UNKNOWN	20.73		JX
			Total:	2804	
		Sample Number: SB25-7-04			
1F	AFH17-04	. 5			
1F	AFD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.9	1900	BJXNA
1F	AFD1 2	57-15-2-PROPANOL, 1,1,1-TRICHLORO-	6.63		BJXN
1F	AFD1 3	112-53-1-DODECANOL	12.35		BJXN
1F	AFD1 4 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	13.58		JXN
1F	AFD1 5	UNKNOWN ALIPHATIC	14.35	190	
	111212		Total:	2690	
		Sample Number: SB25-7-10	10000		
1F	AGH17-10	14			
1F	AGD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.88	2700	BJXNA
1F	AGD1 2	UNKNOWN ALIPHATIC	5.63		JX
1F	AGD1 3	112-53-1-DODECANOL	12.33		BJXN
1F	AGD1 4 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	13.58		JXN
1F	AGD1 5	UNKNOWN ALIPHATIC	14.35	200	
1F	AGD1 6	UNKNOWN HEXADECENOIC ACID	16.5	200	
1F	AGD1 7	57-10-HEXADECANOIC ACID	16.57		JXN
1F	AGD1 8	UNKNOWN	17.9	150	
1F	AGD1 9	661-19-1-DOCOSANOL	20.22		JXN
1F	AGD110	506-51-1-TETRACOSANOL	21.42		JXN
1F	AGD111	UNKNOWN	22.2	290	
1F	AGD112	630-03-NONACOSANE	22.48		JXN
1F	AGD113	506-52-1-HEXACOSANOL	22.55		JXN
1F	AGD114	630-04-HENTRACONTANE	23.68		JXN
			Total:	6922	
		Sample Number: SB25-7-00RNS			
1F	AHH1700RNS	2			
1F	AHD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.7	4	BJXNA
1F	AHD1 2 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	13.63		JXN
			Total:	7	
		Sample Number: SB25-8-00			
1F	AIH18-00	21			
1F	AID1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.32	4000	BJXNA
1F	AID1 2	112-53-1-DODECANOL	11.72		BJXN
1F	AID13	143-07-DODECANOIC ACID	12.57		BJXN
1F	AID1 4	UNKNOWN ALIPHATIC	13.72	320	

		Sample Number: SB25-8-02			
			Total:	12386	
1F	AJD121	UNKNOWN	28.35	87	JX
1F	AJD120	UNKNOWN	28.03	79	JX
1F	AJD119	UNKNOWN PROPANOATE	27.5	3800	
1F	AJD118	UNKNOWN POLYTERPENE DERIVATI	27.07	110	
1F	AJD117	UNKNOWN POLYTERPENE DERIVATI	26.57	120	
1F	AJD116	UNKNOWN	25.13	110	
1F	AJD115	630-04-HENTRIACONTANE	22.9	170	JXN
1F	AJD114	UNKNOWN	22.7	140	
1F	AJD113	506-52-1-HEXACOSANOL	21.88		JXN
1F	AJD112	630-03-NONACOSANE	21.83	190	JXN
1F	AJD111	UNKNOWN	21.55	270	JX
1F	AJD110	506-51-1-TETRACOSANOL	20.77	310	JXN
1F	AJD1 9	661-19-1-DOCOSANOL	19.57	160	JXN
1F	AJD1 8	57-10-HEXADECANOIC ACID	15.93		JXN
1F	AJD1 7	UNKNOWN HEXADECENOIC ACID	15.88	150	JX
1F	AJD1 6	UNKNOWN ALIPHATIC	13.75	170	JX
1F	AJD1 5 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	12.95		JXN
1F	AJD1 4	143-07-DODECANOIC ACID	12.58	230	BJXN
1F	AJD1 3	112-53-1-DODECANOL	11.75	250	BJXN
1F	AJD1 2	57-15-2-PROPANOL, 1,1,1-TRICHLORO-	6.02		BJXN
1F	AJD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET			BJXNA
1F	АЈН18-01	21			
		Sample Number: SB25-8-01			
			Total:	18140	
1F	AID121	UNKNOWN	28.03	270	JX
1F	AID120	UNKNOWN PROPANOATE	27.48	3100	
1F	AID119	UNKNOWN POLYTERPENE DERIVATI	26.52	330	JX
1F	AID118	UNKNOWN SITOSTEROL	25.13	540	
1F	AID117	UNKNOWN POLYTERPENE DERIVATI	24.63	260	
1F	AID116	UNKNOWN POLYTERPENE DERIVATI	24.38	400	
1F	AID115	630-05-TRITRIACONTANE	24.22		JXN
1F	AID114	UNKNOWN POLYTERPENE DERIVATI	23.58	270	JX
1F	AID113	UNKNOWN ALIPHATIC	23.37	280	
1F	AID112	630-04-HENTRIACONTANE	22.88		JXN
1F	AID111	506-52-1-HEXACOSANOL	21.87	2000	JXN
1F	AID110	630-03-NONACOSANE	21.82		JXN
1F	AID19	UNKNOWN ALIPHATIC ALDEHYDE W	21.53		JXZ
1F	AID1 8	506-51-1-TETRACOSANOL	20.75		JXN
1F	AID1 7	661-19-1-DOCOSANOL	19.55		JXN
1F	AID1 6	57-10-HEXADECANOIC ACID	15.92		JXN
1F	AID1 5	UNKNOWN HEXADECENOIC ACID	15.87		JX
			7 7 7 7 7		T

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1F	AKH18-02	8			
1F	AKD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.35		BJXNA
1F	AKD1 2	57-15-2-PROPANOL, 1,1,1-TRICHLORO-	6.02	130	BJXN
1F	AKD1 3	112-53-1-DODECANOL	11.77	160	BJXN
1F	AKD1 4 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	12.97	220	JXN
1F	AKD1 5	UNKNOWN ALIPHATIC	13.75	150	JX
1F	AKD1 6	57-10-HEXADECANOIC ACID	15.95	80	JXN
1F	AKD1 7	UNKNOWN	21.55	140	JX
1F	AKD1 8	UNKNOWN PROPANOATE	27.52	4500	JX
			Total:	7880	
		Sample Number: SB25-9-00			
1F	ALH19-00	21			
1F	ALD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.32	2700	BJXNA
1F	ALD1 2	112-53-1-DODECANOL	11.73	300	BJXN
1F	ALD1 3	143-07-DODECANOIC ACID	12.58	280	BJXN
1F	ALD1 4	UNKNOWN ALIPHATIC	13.73	350	JX
1F	ALD1 5	UNKNOWN HEXADECENOIC ACID	15.87	600	JX
1F	ALD1 6	57-10-HEXADECANOIC ACID	15.93	470	JXN
1F	ALD1 7	UNKNOWN ALIPHATIC AMIDE	18.83	290	JX
1F	ALD1 8	661-19-1-DOCOSANOL	19.57	370	JXN
1F	ALD1 9 23	470-00-HEXADECANOIC ACID, 2-HYDROX	19.73	220	JXN
1F	ALD110	506-51-1-TETRACOSANOL	20.75	630	JXN
1F	ALD111	UNKNOWN ALIPHATIC ALDEHYDE W	21.53	520	JXZ
1F	ALD112	630-03-NONACOSANE	21.83	790	JXN
1F	ALD113	506-52-1-HEXACOSANOL	21.88	980	JXN
1F	ALD114	630-04-HENTRIACONTANE	22.9	1400	JXN
1F	ALD115	630-05-TRITRIACONTANE	24.22	470	JXN
1F	ALD116	UNKNOWN POLYTERPENE DERIVATI	24.4	310	JX
1F	ALD117	UNKNOWN SITOSTEROL	25.13	520	JX
1F	ALD118	UNKNOWN	26	500	JX
1F	ALD119	UNKNOWN POLYTERPENE DERIVATI	26.52	280	JX
1F	ALD120	UNKNOWN	26.9	450	JX
1F	ALD121	UNKNOWN PROPANOATE	27.48	3400	JX
			Total:	15830	
		Sample Number: SB25-9-01			
1F	AMH19-01	21			
1F	AMD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.33	2700	BJXNA
1F	AMD1 2	57-15-2-PROPANOL, 1,1,1-TRICHLORO-	6.02	140	BJXN
1F	AMD1 3	112-53-1-DODECANOL	11.75	240	BJXN
1F	AMD1 4	143-07-DODECANOIC ACID	12.58	140	BJXN
1F	AMD1 5 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	12.95	180	JXN
1F	AMD1 6	UNKNOWN ALIPHATIC	13.75	200	JX
1F	AMD1 7	UNKNOWN HEXADECENOIC ACID	15.88	280	JX

1F	AMD1 8	57-10-HEXADECANOIC ACID	15.93	340	JXN
1F	AMD19	UNKNOWN	16.9	140	JX
1F	AMD110	661-19-1-DOCOSANOL	19.57	230	JXN
1F	AMD111	506-51-1-TETRACOSANOL	20.77	510	JXN
1F	AMD112	UNKNOWN ALIPHATIC ALDEHYDE W	21.55	250	JXZ
1F	AMD113	630-03-NONACOSANE	21.83	220	JXN
1F	AMD114	506-52-1-HEXACOSANOL	21.88	540	JXN
1F	AMD115	UNKNOWN	22.7	150	JX
1F	AMD116	630-04-HENTRACONTANE	22.9	340	JXN
1F	AMD117	UNKNOWN POLYTERPENE DERIVATI	23.6	690	JX
1F	AMD118	630-05-TRITRIACONTANE	24.22	130	JXN
1F	AMD119	UNKNOWN POLYTERPENE DERIVATI	24.4	140	JX
1F	AMD120	UNKNOWN SITOSTEROL	25.15	150	JX
1F	AMD121	UNKNOWN PROPANOATE	27.52	3500	JX
			Total:	11210	
		Sample Number: SB25-9-02			
1F	ANH19-02	10			
1F	AND1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	5.28	2300	BJXNA
1F	AND1 2	112-53-1-DODECANOL	12.9	230	BJXN
1F	AND1 3 74	381-40-PROPNAOIC ACID, 2-METHYL-, 1	14.17	200	JXN
1F	AND14	UNKNOWN ALIPHATIC	18.25	130	JX
1F	AND1 5	UNKNOWN ALIPHATIC	18.8	110	JX
1F	AND1 6	506-51-1-TETRACOSANOL	22.05	170	JNXZ
1F	AND17	UNKNOWN	22.88	190	JX
1F	AND1 8	506-52-1-HEXACOSANOL	23.28	120	JNX
1F	AND19	UNKNOWN ALIPHATIC	24.55	230	JX
1F	AND110	UNKNOWN	28.42	87	JX
			Total:	3767	
		Sample Number: MSB			
1F	AOH1MSB	0			
		Sample Number: SD25-1			
1F	APH1SD251	21			
1F	APD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	5.15	19000	BJXNA
1F	APD1 2	UNKNOWN ALIPHATIC W/SSTD.	14.93	1400	JXZ
1F	APD1 3	UNKNOWN HEXADECENOIC ACID	17.05	830	JX
1F	APD1 4	832-71-PHENANTHRENE, 3-METHYL-	17.17	2100	JXN
1F	APD1 5 2	531-84-PHENANTHRENE, 2-METHYL-	17.23	1000	JXN
1F	APD1 6	203-64-4H-CYCLOPENTA[DEF]PHENANTH	17.42	1500	JXNZ
1F	APD1 7	832-69-PHENANTHRENE, 1-METHYL-	17.45	1100	JXN
1F	APD1 8	UNKNOWN ALIPHATIC	18.53	1400	JX
1F	APD1 9	UNKNOWN BENZOFLUORENE	19.47	1100	JX
1F	APD110	238-84-11H-BENZO[A]FLUORENE	19.68	2000	JXN
1 <b>F</b>	APD111	UNKNOWN C17H12 PAH	19.88	1500	JX

1F	APD112	UNKNOWN C17H12 PAH	20.07	1200	JX
1F	APD113	UNKNOWN C17H12 PAH	20.13	1100	JX
1F	APD114	UNKNOWN BENZANTHRACENONE	20.7	1200	JX
1F	APD115	239-35-BENZO[B]NAPHTHO[2,1-D]THIOPH	20.9	900	JXN
1F	APD116	195-19-BENZO[C]PHENANTHRENE W/BEN		1000	JXNZ
1F	APD117	UNKNOWN C19H14 PAH	22.13	1200	
1F	APD118	UNKNOWN C19H14 PAH	22.4	690	JX
1F	APD119	UNKNOWN CHOLESTENE DERIVATIV	23.95	880	JX
1F	APD120	192-97-BENZO[E]PYRENE	24.1	3500	JXN
1F	APD121	198-55-PERYLENE	24.4	920	JXN
			Total:	45520	
		Sample Number: SD25-10			
1F	AQH1SD2510	14			
1F	AQD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	5.33	5300	BJXNA
1F	AQD1 2	112-53-1-DODECANOL	12.93	320	BJXN
1F	AQD1 3 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	14.15	230	JXN
1F	AQD1 4	57-10-HEXADECANOIC ACID	17.17		JXN
1F	AQD1 5	UNKNOWN ALIPHATIC	18.52	100	
1F	AQD1 6	UNKNOWN ALIPHATIC	19.03	210	
1F	AQD1 7	629-99-PENTACOSANE W/UNKNOWN	20.8	210	BJXNZ
1F	AQD1 8	593-49-HEPTACOSANE	22	180	BJXN
1F	AQD1 9	UNKNOWN	22.38	200	JX
1F	AQD110	UNKNOWN	22.88	230	JX
1F	AQD111	630-03-NONACOSANE	23.18	880	BJXN
1F	AQD112	506-52-1-HEXACOSANOL	23.35	190	JXN
1F	AQD113	UNKNOWN	24.15	250	JX
1F	AQD114	630-04-HENTRIACONTANE	24.63	610	JXN
			Total:	9120	
		Sample Number: SD25-15			
1F	ARH1SD2515	19			
1F	ARD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	5.08	40000	BJXNA
1F	ARD1 2	UNKNOWN	15.23	5800	JX
1F	ARD1 3	57-10-HEXADECANOIC ACID	17.18	1800	JXN
1F	ARD1 4	UNKNOWN HEXADECANOATE	18.82	18000	JX
1F	ARD1 5	629-97-DOCOSANE	18.88	1900	JXN
1F	ARD1 6	638-67-TRICOSANE	19.57	3000	JXN
1F	ARD1 7	UNKNOWN OCADECANOATE	19.88	2600	JX
1F	ARD1 8	UNKNOWN OCADECANOATE	20.17	24000	
1F	ARD1 9	646-31-TETRACOSANE	20.22	5300	
1F	ARD110	629-99-PENTACOSANE	20.83	6600	
1F	ARD111	630-01-HEXACOSANE	21.43	11000	
1F	ARD112	593-49-HEPTACOSANE	22.02	8700	
1F	ARD113	630-02-OCATCOSANE	22.58	7400	JXN

1F	ARD114	UNKNOWN	22.9	2600	JX
1F	ARD115	630-03-NONACOSANE	23.2	11000	
1F	ARD116	638-68-TRIACONTANE	23.88		JXN
1F	ARD117	192-97-BENZO[E]PYRENE	24.1		JXN
1F	ARD118	630-04-HENTRIACONTANE	24.65	4000	JXN
1F	ARD119	544-85-DOTRIACONTANE	25.52		JXN
			Total:	164400	
		Sample Number: SD25-2			
1F	ASH1SD252	21			
1F	ASD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	5.25	3900	BJXNA
1F	ASD1 2	112-53-1-DODECANOL	12.68	250	BJXN
1F	ASD1 3	UNKNOWN ALIPHATIC	14.72	320	JX
1F	ASD1 4	832-71-PHENANTHRENE, 3-METHYL-	16.92	280	JXN
1F	ASD1 5 2	531-84-PHENANTHRENE, 2-METHYL-	16.97	280	JXN
1F	ASD1 6	203-64-4H-CYCLOPENTA[DEF]PHENANTH	17.15	···	JXNZ
1F	ASD1 7	UNKNOWN BENZOFLUORENE	19.18	210	JX
1F	ASD1 8	238-84-11H-BENZO[A]FLUORENE	19.4	410	JXN
1F	ASD1 9	UNKNOWN C17H12 PAH	19.6	300	JX
1F	ASD110	UNKNOWN C17H12 PAH	19.8	210	
1F	ASD111	UNKNOWN C17H12 PAH	19.85	220	JX
1F	ASD112	UNKNOWN BENZANTHRACENONE	20.42	230	JX
1F	ASD113	239-35-BENZO[B]NAPHTHO[2,1-D]THIOPH	20.62	260	JXN
1F	ASD114	195-19-BENZO[C]PHENANTHRENE	20.67	200	JXN
1F	ASD115	UNKNOWN BENZANTHRACENONE	20.82	190	JX
1F	ASD116	UNKNOWN C19H14 PAH	21.85	250	JX
1F	ASD117	630-03-NONACOSANE	22.92	260	BJXN
1F	ASD118	192-97-BENZO[E]PYRENE	23.72	570	JXN
1F	ASD119	198-55-PERYLENE	24	200	JXN
1F	ASD120	630-04-HENTRIACONTANE	24.27	510	JXN
1F	ASD121	630-05-TRITRIACONTANE	26.02	190	JXN
			Total:	9560	<del></del>
		Sample Number: SD25-4			
1F	ATH1SD254	16			
1F	ATD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	5.28	4700	BJXNA
1F	ATD1 2	112-53-1-DODECANOL	12.93	390	BJXN
1F	ATD1 3 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	14.15		JXN
1F	ATD1 4	UNKNOWN HEXADECENOIC ACID	17.03	120	
1F	ATD1 5	UNKNOWN HEXADECENOIC ACID	17.1	280	
1F	ATD1 6	57-10-HEXADECANOIC ACID	17.15		JXN
1F	ATD1 7	UNKNOWN ALIPHATIC	18.52	180	
1F	ATD1 8	593-49-HEPTACOSANE	21.98		BJXN
1F	ATD1 9	506-51-1-TETRACOSANOL	22.1		JXN
1F	ATD110	UNKNOWN	22.37	120	JX

1F	ATD111	UNKNOWN	22.87	400	JX
1F	ATD112	630-03-NONACOSANE	23.18		BJXN
1F	ATD113	506-52-1-HEXACOSANOL	23.35		JXN
1F	ATD114	630-04-HENTRIACONTANE	24.62	1200	JXN
1F	ATD115	630-05-TRITRIACONTANE	26.5		JXN
1F	ATD116	UNKNOWN	27.4	250	
			Total:	9940	
		Sample Number: SD25-5			
1F	AUH1SD255	20			
1F	AUD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	5.35	5100	BJXNA
1F	AUD1 2	112-53-1-DODECANOL	12.92		BJXN
1F	AUD1 3 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	14.15		JXN
1F	AUD1 4	UNKNOWN ALIPHATIC W/SSTD.	14.93	1400	
1F	AUD1 5	UNKNOWN HEXADECENOIC ACID	17.05	200	JX
1F	AUD1 6	UNKNOWN HEXADECENOIC ACID	17.13	540	
1F	AUD1 7	57-10-HEXADECANOIC ACID	17.18		JXN
1F	AUD1 8	UNKNOWN ALIPHATIC	18.53	350	
1F	AUD1 9	629-99-PENTACOSANE	20.82	260	BJXN
1F	AUD110	593-49-HEPTACOSANE	22	260	BJXN
1F	AUD111	UNKNOWN	22.38	210	JX
1F	AUD112	UNKNOWN	22.88	610	JX
1F	AUD113	630-03-NONACOSANE	23.2	860	BJXN
1F	AUD114	506-52-1-HEXACOSANOL	23.32	1000	JXN
1F	AUD115	630-04-HENTRACONTANE	24.63	1200	JXN
1F	AUD116	UNKNOWN ALIPHATIC	25.37	480	JX
1F	AUD117	630-05-TRITRIACONTANE	26.52	260	JXN
1F	AUD118	UNKNOWN	27.43	780	JX
1F	AUD119	UNKNOWN	28.2	300	JX
1F	AUD120	UNKNOWN	28.5	240	JX
			Total:	15520	
		Sample Number: SD25-6			
1F	AVH1SD256	21			
1F	AVD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-ME	5.03	19000	BJXNA
1F	AVD1 2	832-71-PHENANTHRENE, 3-METHYL-	16.87	2200	
1F	AVD1 3 2	531-84-PHENANTHRENE, 2-METHYL-	16.93	2700	JXN
1F	AVD1 4	203-64-4H-CYCLOPENTA[DEF]PHENANTH	17.12	3900	JXNZ
1F	AVD1 5	832-69-PHENANTHRENE, 1-METHYL- W/A			JXNZ
1F	AVD1 6	UNKNOWN DIMETHYLPHENANTHRENE	17.97	1200	
1F	AVD1 7	UNKNOWN BENZOFLUORENE	19.15	1800	
1F	AVD1 8	238-84-11H-BENZO[A]FLUORENE	19.37		JXN
1F	AVD1 9	243-17-11H-BENZO[B]FLUORENE	19.48		JXN
1F	AVD110	UNKNOWN C17H12 PAH W/UNKNOWN	19.57		JXZ
1F	AVD111	UNKNOWN C17H12 PAH	19.75	1700	JX

1F	AVD112	UNKNOWN C17H12 PAH	19.8	1800	JX
1F	AVD113	239-35-BENZO[B]NAPHTHO[2,1-D]THIOPH	20.57	1500	JXN
1F	AVD114	195-19-BENZO[C]PHENANTHRENE	20.62	1400	JXN
1F	AVD115 27	208-37-CYCLOPENTA[CD]PYRENE	20.68	1100	JXN
1F	AVD116	UNKNOWN PROPANOATE	20.87	2600	JX
1F	AVD117	UNKNOWN C19H14 PAH	21.82	2200	JX
1F	AVD118	UNKNOWN C19H14 PAH W/C19H12	22.08	1300	JXZ
1F	AVD119	UNKNOWN BENZOBLUORANTHENE	23.3	1700	JX
1F	AVD120	192-97-BENZO[E]PYRENE	23.68	4100	JXN
1F	AVD121	198-55-PERYLENE	23.97		JXN
7.4.1			Total:	62900	
		Sample Number: SD25-6R			
1F	AWH1SD256R	2			
1F	AWD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	5.05	6	BJXNA
1F	AWD1 2	UNKNOWN	22.88		JX
			Total:	13	
		Sample Number: LAB BLANK			
1F	AXH1SBLKM3	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s			***************************************
1F	AXD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.87	5000	JXNA
1F	AXD1 2	57-15-2-PROPANOL, 1,1,1-TRICHLORO-	6.63	***************************************	JXN
1F	AXD1 3	112-53-1-DODECANOL	12.35		JXN
1F	AXD1 4	UNKNOWN ALIPHATIC	14.35	150	
1F	AXD1 5	UNKNOWN	20.72	90	
		Sample Number: LAB BLANK			
1F	AYH1SBLKM4				
1F	AYD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.3	2900	JXNA
1F	AYD1 2	57-15-2-PROPANOL, 1,1,1-TRICHLORO-	6	130	JXN
1F	AYD1 3	112-53-1-DODECANOL	11.73		JXN
1F	AYD1 4	143-07-DODECANOIC ACID	12.57	160	JXN
1F	AYD1 5	UNKNOWN ALIPHATIC	13.75	130	JX
1F	AYD1 6	629-94-HENEICOSANE	16.92	80	JXN
1F	AYD1 7	629-97-DOCOSANE	17.63	170	JXN
1F	AYD1 8	638-67-TRICOSANE	18.3		JXN
1F	AYD19	646-31-TETRACOSANE	18.95	210	JXN
1F	AYD110	629-99-PENTACOSANE	19.57	180	JXN
1F	AYD111	630-01-HEXACOSANE	20.17	97	JXN
1F	AYD112	593-49-HEPTACOSANE	20.73	77	JXN
1F	AYD113	630-02-OCTACOSANE	21.3	67	JXN
1F	AYD114	UNKNOWN PROPANOATE	27.52	5300	JX
		Sample Number: LAB BLANK			
1F	AZH1SBLKM6	10			
1F	AZD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	5.38	1600	JXNA
1F	AZD1 2	112-53-1-DODECANOL	12.92	280	JXN

1F	AZD1 3	629-97-DOCOSANE	18.88	180	JXN
1F	AZD1 4	638-67-TRICOSANE	19.55	240	JXN
1F	AZD1 5	646-31-TETRACOSANE	20.2	250	JXN
1F	AZD1 6	629-99-PENTACOSANE	20.83	200	JXN
1F	AZD1 7	630-01-HEXACOSANE	21.43	150	JXN
1F	AZD1 8	593-49-HEPTACOSANE	22	110	JXN
1F	AZD1 9	630-02-OCTACOSANE	22.58	70	JXN
1F	AZD110	630-03-NONACOSANE	23.2	97	JXN
		Sample Number: LAB BLANK			
1F	BAH1SBLKM7	9			
1F	BAD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	5.23	4300	JXNA
1F	BAD1 2	112-53-1-DODECANOL	13	93	JXN
1F	BAD1 3 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	14.17	93	JXN
1F	BAD1 4	UNKNOWN ALIPHATIC	19.05	93	JX
1F	BAD1 5	UNKNOWN ALIPHATIC	20.82	140	JX
1F	BAD1 6	UNKNOWN ALIPHATIC	22.4	150	JX
1F	BAD1 7	UNKNOWN	23.63	120	JX
1F	BAD1 8	UNKNOWN	24.17	170	JX
1F	BAD19	UNKNOWN	26.6	100	JX
		Sample Number: LAB BLANK			
1F	BBH1SBLK2L	2			
1F	BBD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	5.05	8	JXNA
1F	BBD1 2 74	367-33-PROPANOIC ACID, 2-METHYL-, 2	11.8	2	JXN
		Sample Number: LAB BLANK			
1F	BCH1SBLK9K	3			
1F	BCD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.67		JXNA
1F	BCD1 2	98-82-BENZENE, (1-METHYLETHYL)-	5.87		JXN
1F	BCD1 3 3	622-84-BENZENESULFONAMIDE, N-BUTY	15.45	3	JXN

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ļ <del></del>		Sample Number: SB26-10-00			
ıF	AAH110-00	21			
1F	AAD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.88	9400	BJXNA
1F	AAD1 2	112-53-1-DODECANOL	12.28	1100	BJXN
1F	AAD1 3	629-62-PENTADECANE	12.48	700	JXN
1F	AAD1 4	544-76-HEXADECANE	13.43	1100	JXN
1F	AAD1 5	UNKNOWN ALIPHATIC	14.3	3200	JXB
1F	AAD1 6	629-78-HEPTADECANE	14.35	2800	JXN
1F	AAD1 7 1	921-70-PENTADECANE, 2,6,10,14-TETRA	14.38	3100	JXN
1F	AAD1 8	593-45-OCTADECANE	15.2	2900	JXN
1F	AAD1 9	638-36-HEXADECANE, 2,6,10,14-TETRAM	15.28	3400	JXN
1F	AAD110	629-92-NONADECANE	16	3800	JXN
1F	AAD111	UNKNOWN HEXADECENOIC ACID W/	16.52	1500	JXZ
1F	AAD112	112-95-EICOSANE	16.78	3100	JXN
1F	AAD113	UNKNOWN ALKANE	17.35	730	
1F	AAD114	629-94-HENEICOSANE	17.52	2600	JXN
1F	AAD115	629-97-DOCOSANE	18.23	1900	
1F	AAD116	638-67-TRICOSANE	18.9	1200	JXN
1F	AAD117	646-31-TETRACOSANE	19.55	860	JXN
1F	AAD118	629-99-PENTACOSANE W/PAH	20.18	870	JXNZ
1F	AAD119	630-03-NONACOSANE W/UNKNOWN	22.47	1700	JXNZ
1F	AAD120	192-97-BENZO[E]PYRENE	23.13	1300	JXN
F	AAD121	630-04-HENTRIACONTANE	23.72	780	JXN
			Total:	48040	
		Sample Number: SB26-10-03			,,
1F	ABH110-03	11			
1F	ABD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.85	18000	BJXNA
1F	ABD1 2	112-53-1-DODECANOL	12.27	430	BJXN
1F	ABD1 3 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	13.52	85	JXN
1F	ABD1 4	UNKNOWN ALIPHATIC	14.28	590	JXB
1F	ABD1 5	629-92-NONADECANE	15.98	110	JXN
1F	ABD1 6	UNKNOWN HEXADECENOIC ACID	16.37	170	JX
1F	ABD1 7	57-10-HEXADECANOIC ACID	16.5	93	JXN
1F	ABD1 8	112-95-EICOSANE	16.75		JXN
1F	ABD1 9	192-97-BENZO[E]PYRENE	· 23.07	450	JXN
1F	ABD110	UNKNOWN ALKANE	23.67	230	
1F	ABD111	UNKNOWN	26.73	190	JX
			Total:	20468	
		Sample Number: SB26-10-04			
1F	ACH110-04	10			
1F	ACD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.88		BJXNA
1F	ACD1 2	112-53-1-DODECANOL	12.28		BJXN
1F	ACD1 3 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	13.53	91	JXN

1F	ACD1 4	UNKNOWN ALIPHATIC	14.3	440	JXB
1F	ACD1 5	57-10-HEXADECANOIC ACID	16.52	110	JXN
1F	ACD1 6	UNKNOWN HEXANEDIOATE	19.6	190	JX
1F	ACD1 7	UNKNOWN AROMATIC	22.3	91	JX
1F	ACD1 8	630-03-NONACOSANE	22.45	260	JXN
1F	ACD1 9	192-97-BENZO[E]PYRENE	23.08	670	JXN
1F	ACD110	630-04-HENTRIACONTANE	23.68	200	JXN
			Total:	8632	
		Sample Number: SB26-5-00			
1F	ADH15-00	21			
1F	ADD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.32	4100	BJXNA
1F	ADD1 2	629-78-HEPTADECANE	13.73		JXN
1F	ADD1 3 1	921-70-PENTADECANE, 2,6,10,14-TETRA	13.78		JXN
1F	ADD1 4	593-45-OCTADECANE W/DIBENZOTHIOPHEN	14.57		JXNZ
1F	ADD1 5	638-36-HEXADECANE, 2,6,10,14-TETRAM	14.65		JXN
1F	ADD1 6	629-92-NONADECANE	15.38		JXN
1F	ADD1 7	203-64-4H-CYCLOPENTA[DEF]PHENANTHRE	15.95		JXN
1F	ADD1 8	112-95-EICOSANE	16.15		JXN
1F	ADD1 9	629-94-HENEICOSANE	16.88		JXN
1F	ADD110	238-84-11H-BENZO[A]FLUORENE	18.17		JXN
1F	ADD111	243-17-11H-BENZO[B]FLUORENE	18.3	440	JXN
1F	ADD112	UNKNOWN C18H12 PAH	20.05	550	JX
1F	ADD113	UNKNOWN	21.45	2700	JX
1F	ADD114	UNKNOWN C20H12 PAH	21.97	460	JX
1F	ADD115	UNKNOWN AROMATIC	22.15	890	JX
1F	ADD116	192-97-BENZO[E]PYRENE	22.25	1300	JXN
1F	ADD117	UNKNOWN AROMATIC	22.35	1200	JX
1F	ADD118	198-55-PERYLENE	22.47	780	JXN
1F	ADD119	UNKNOWN AROMATIC	23.03	910	JX
1F	ADD120	UNKNOWN	23.32	830	JX
1F	ADD121	UNKNOWN PROPANOATE	27.45	2200	JXB
			Total:	21450	
		Sample Number: SB26-5-03			
1F	AEH15-03	17			
1F	AED1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.35	4200	BJXNA
1F	AED1 2	UNKNOWN ALIPHATIC	5.1	120	JX
1F	AED13	57-15-2-PROPANOL, 1,1,1-TRICHLORO-	6.03	110	BJXN
1F	AED1 4	112-53-1-DODECANOL	11.72		BJXN
1F	AED1 5 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	12.93		JXN
1F	AED1 6	UNKNOWN ALIPHATIC	13.72		JXB
1F	AED1 7	57-10-HEXADECANOIC ACID	15.92		JXN
1F	AED1 8	661-19-1-DOCOSANOL	19.55		JXN
1F	AED1 9	UNKNOWN	20	94	JXB

1F	AED110	506-51-1-TETRACOSANOL	20.75	100	JXN
1F	AED111	UNKNOWN PHTHALATE	21.68	110	JX
1F	AED112	630-03-NONACOSANE W/BENZO[B]FLUORA	21.82	400	JXNZ
1F	AED113	506-52-1-HEXACOSANOL	21.87	120	JXN
1F	AED114	UNKNOWN	22.67	130	JX
1F	AED115	630-04-HENTRIACONTANE	22.88	340	JXN
1F	AED116	630-05-TRITRIACONTANE	24.18	110	JXN
1F	AED117	UNKNOWN PROPANOATE	27.45	2000	JXB
			Total:	8378	
		Sample Number: SB26-5-05			
1F	AFH15-05	14	-		
1F	AFD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.32	4300	BJXNA
1F	AFD1 2	57-15-2-PROPANOL, 1,1,1-TRICHLORO-	6.02	95	BJXN
1F	AFD1 3	112-53-1-DODECANOL	11.72	140	BJXN
1F	AFD1 4 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	12.93	170	JXN
1F	AFD1 5	629-78-HEPTADECANE W/ALIPHATIC	13.73	83	JXNZ
1F	AFD1 6	57-10-HEXADECANOIC ACID	15.92		JXN
1F	AFD1 7	661-19-1-DOCOSANOL	19.55	91	JXN
1F	AFD1 8	506-51-1-TETRACOSANOL	20.75	95	JXN
1F	AFD1 9	UNKNOWN	21.32		JX
1F	AFD110	630-03-NONACOSANE W/BENZO[B]FLUORAI	21.82	580	JXNZ
1F	AFD111	506-52-1-HEXACOSANOL	21.87	190	JXN
1F	AFD112	630-04-HENTRIACONTANE	22.88	310	JXN
1F	AFD113	UNKNOWN	25.13	87	JX
1F	AFD114	UNKNOWN PROPANOATE	27.47	1400	JXB
			Total:	7711	
		Sample Number: SB26-6-00			
1F	AGH16-00	21			
1F	AGD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.4	6200	BJXNA
1F	AGD1 2	629-78-HEPTADECANE	14	2200	JXN
1F	AGD1 3 1	921-70-PENTADECANE, 2,6,10,14-TETRA	14.05	1900	JXN
1F	AGD1 4	593-45-OCTADECANE	14.85	1300	JXN
1F	AGD1 5	638-36-HEXADECANE, 2,6,10,14-TETRAM	14.93	1200	JXN
1F	AGD1 6	629-92-NONADECANE	15.67	1300	JXN
1F	AGD1 7	112-95-EICOSANE	. 16.43	1100	JXN
1F	AGD1 8	UNKNOWN AROMATIC	21.08	2100	JX
1F	AGD1 9	UNKNOWN AROMATIC	21.75	8300	
1F	AGD110	UNKNOWN AROMATIC	21.87	3400	
1F	AGD111	UNKNOWN AROMATIC	22.07	7500	
1F	AGD112	UNKNOWN AROMATIC	22.15	1000	
1F	AGD113	UNKNOWN POLYTERPENE DERIVATI	22.28	1000	
1F	AGD114	UNKNOWN AROMATIC	22.45	5600	
1F	AGD115	UNKNOWN AROMATIC	22,67	6900	JX

1F	AGD116	UNKNOWN AROMATIC	22.78	2300	
1F	AGD117	UNKNOWN AROMATIC	23.02	2000	JX
1F	AGD118	UNKNOWN AROMATIC	23.15	1300	JX
1F	AGD119	UNKNOWN POLYTERPENE DERIVATI	23.22	1100	JX
1F	AGD120	UNKNOWN AROMATIC	23.4	3800	JX
1F	AGD121	UNKNOWN AROMATIC	23.65	2400	JX
			Total:	63900	
		Sample Number: SB26-6-04			
1F	AHH16-04	. 18			
1F	AHD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.5	3100	BJXNA
1F	AHD1 2	112-53-1-DODECANOL	11.92	180	BJXN
1F	AHD1 3 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	13.17	190	JXN
1F	AHD1 4	629-78-HEPTADECANE	13.97	77	JXN
1F	AHD1 5 1	921-70-PENTADECANE, 2,6,10,14-TETRA	14.03	120	JXN
1F	AHD1 6	638-36-HEXADECANE, 2,6,10,14-TETRAM	14.9	97	JXN
1F	AHD1 7	629-92-NONADECANE	15.63	89	JXN
1F	AHD1 8	57-10-HEXADECANOIC ACID	16.13	81	JXN
1F	AHD1 9	661-19-1-DOCOSANOL W/PENTACOSANE	19.78	110	JXNZ
1F	AHD110	506-51-1-TETRACOSANOL	21	93	JXN
1F	AHD111	UNKNOWN	21.03	100	JX
1F	AHD112	UNKNOWN	21.7	220	JX
1F	AHD113	UNKNOWN W/BENZO[B]FLUORANTHE	22.02	250	JXZ
1F	AHD114	UNKNOWN AROMATIC	22.4	140	JX
1F	AHD115	UNKNOWN AROMATIC	22.62	190	JX
1F	AHD116	UNKNOWN	22.98	81	JX
1F	AHD117	UNKNOWN AROMATIC	23.35	85	JX
1F	AHD118	UNKNOWN PROPANOATE	28.07	1100	JXB
			Total:	6303	
		Sample Number: SB26-6-06			
1F	AIH16-06	11			
1F	AID1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.5		BJXNA
1F	AID1 2	112-53-1-DODECANOL	11.93	160	BJXN
1F	AID1 3 74	381-40-PROPANOIC ACID-, 2-METHYL-,1	13.17		JXN
1F	AID1 4	661-19-1-DOCOSANOL	19.8		JXN
1F	AID1 5	506-51-1-TETRACOSANOL	. 21		JXN
1F	AID1 6	UNKNOWN	21.78	110	
1F	AID1 7	630-03-NONACOSANE W/BENZO[K]FLUORA			JXNZ
1 <b>F</b>	AID1 8	506-52-1-HEXACOSANOL	22.12		JXN
1F	AID1 9	UNKNOWN	22.98	270	
1 <b>F</b>	AID110	630-04-HENTRIACONTANE	23.18		JXN
1F	AID111	UNKNOWN PROPANOATE	28.07	1100	JXB
			Total:	6457	
		Sample Number: SB26-7-00			

·F	AJH17-00	21			
1 F	AJD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.48	5300	BJXNA
1F	AJD1 2	112-53-1-DODECANOL	11.92		BJXN
lF	AJD1 3	629-62-PENTADECANE	12.13		JXN
1F	AJD1 4	544-76-HEXADECANE	13.08		JXN
1F	AJD1 5 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	13.15	·····	JXN
1F	AJD1 6	UNKNOWN ALKANE	13.53	270	
1F	AJD1 7	629-78-HEPTADECANE	13.98	1000	
1F	AJD1 8 1	921-70-PENTADECANE, 2,6,10,14-TETRA	14.03		JXN
1F	AJD1 9	593-45-OCTADECANE	14.83		JXN
1F	AJD110	638-36-HEXADECANE, 2,6,10,14-TETRAM	14.92		JXN
1F	AJD111	629-92-NONADECANE	15.65		JXN
1 F	AJD112	112-95-EICOSANE	16.42		JXN
1F	AJD113	629-94-HENEICOSANE	17.15		JXN
1F	AJD114	629-97-DOCOSANE	17.85		JXN
1F	AJD115	638-67-TRICOSANE	18.53		JXN
1F	AJD116	UNKNOWN AROMATIC	21.72	570	
1F	AJD117	UNKNOWN AROMATIC	22.42	290	JX
1F	AJD118	192-97-BENZO[E]PYRENE	22.5	480	JXN
1F	AJD119	198-55-PERYLENE	22.73	240	JXN
1F	AJD120	UNKNOWN AROMATIC	23.35	180	JX
1F	AJD121	UNKNOWN PROPANOATE	28.08	1100	JXB
			Total:	15800	
		Sample Number: SB26-7-03			
1F	AKH17-03	21			
1F	AKD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.13	29000	BJXNA
1F	AKD1 2	UNKNOWN ALKANE	8.97	6700	JX
1F	AKD1 3 4	292-75-CYCLOHEXANE, HEXYL- W/UNKNOV	9.33	3200	JXNZ
1F	AKD1 4	UNKNOWN ALKANE	9.63	8100	
1F	AKD1 5	90-12-NAPHTHALENE, 1-METHYL-	10.28	6400	
1F	AKD1 6	UNKNOWN ALKYLCYCLOHEXANE	10.48	3900	
1F	AKD1 7	UNKNOWN ALKANE	10.77	8000	
1F	AKD1 8	581-42-NAPHTHALENE, 2,6-DIMETHYL-	11.28	8100	
1F	AKD1 9	575-41-NAPHTHALENE, 1,3-DIMETHYL-	11.45	10000	
1F	AKD110	UNKNOWN ALKANE W/NAPHTHALENE	. 11.63	11000	
1F	AKD111	UNKNOWN C3-ALKYLNAPHTHALENE	12.27	3800	
1F	AKD112	UNKNOWN C3-ALKYLNAPHTHALENE	12.5	5900	
1F	AKD113	UNKNOWN C3-ALKYLNAPHTHALENE	12.55	3700	
1F	AKD114	UNKNOWN C3-ALKYLNAPHTHALENE	12.7	3700	
1F	AKD115	UNKNOWN C3-ALKYLNAPHTHALENE	12.73	3800	
1F	AKD116	UNKNOWN C3-ALKYLNAPHTHALENE	12.87	3700	
1F	AKD117	UNKNOWN ALKANE	13.38	8000	
1F	AKD118 1	921-70-PENTADECANE, 2,6,10,14-TETRA	13.88	17000	JXN

1.5	ATZTOLLO	IDIKNOMNI	14.00	4100	IV
1F	AKD119	UNKNOWN	14.22	4100	+
1F	AKD120	638-36-HEXADECANE, 2,6,10,14-TETRAM	14.77		JXN
1F	AKD121	832-71-PHENANTHRENE, 3-METHYL-	15.83		JXN
		and a second	Total:	160300	
		Sample Number: SB26-7-07			
1F	ALH17-07	21			
1F	ALD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.17	<del></del>	BJXNA
1F	ALD1 2	UNKNOWN ALKANE	8.9	5700	
1F	ALD13	UNKNOWN ALKANE	9.57	7800	<del></del>
1F	ALD1 4	90-12-NAPHTHALENE, 1-METHYL-	10.22	4600	
1F	ALD1 5	UNKNOWN ALKYLCYCLOHEXANE	10.4	4200	
1F	ALD1 6	UNKNOWN ALKANE	10.68	8900	
1F	ALD17	939-27-NAPHTHALENE, 2-ETHYL- W/ALKA	11.08		JXNZ
lF	ALD18	581-42-NAPHTHALENE, 2,6-DIMETHYL-	11.2	8200	
1F	ALD19	575-41-NAPHTHALENE, 1,3-DIMETHYL-	11.37	8400	
1F	ALD110	575-43-NAPHTHALENE, 1,6-DIMETHYL- W	11.4		JXNZ
1F	ALD111	UNKNOWN ALKANE W/NAPHTHALENE	11.55	11000	
1F	ALD112	UNKNOWN C3-ALKYLNAPHTHALENE	12.18	4000	JX
ìF	ALD113	UNKNOWN C3-ALKYLNAPHTHALENE	12.42	4600	JXZ
1F	ALD114	UNKNOWN C3-ALKYLNAPHTHALENE	12.47	4600	JX
1F	ALD115	UNKNOWN C3-ALKYLNAPHTHALENE	12.62	3500	JX
1F	ALD116	UNKNOWN C3-ALKYLNAPHTHALENE	12.65	4300	JX
1F	ALD117	UNKNOWN C3-ALKYLNAPHTHALENE	12.78	4000	JXZ
1F	ALD118	UNKNOWN ALKANE	13.3	8600	JX
1F	ALD119 1	921-70-PENTADECANE, 2,6,10,14-TETRA	13.8	17000	JXN
1F	ALD120	UNKNOWN	14.13	4000	JX
1F	ALD121	638-36-HEXADECANE, 2,6,10,14-TETRAM	14.68	9700	JXN
			Total:	154600	
		Sample Number: SB26-8-00			
1F	AMH18-00	21			
1F	AMD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.35	3400	BJXNA
1F	AMD1 2	UNKNOWN ALIPHATIC	14.02	230	JX
1F	AMD1 3	UNKNOWN HEXADECENOIC ACID	15.93	500	JX
1F	AMD1 4	57-10-HEXADECANOIC ACID	15.98	340	JXN
1F	AMD1.5	UNKNOWN ALIPHATIC	. 17.15	380	JX
1F	AMD1 6	UNKNOWN OCTADECENOIC ACID	17.32	240	JX
1F	AMD1 7	UNKNOWN	18.77	220	JX
1F	AMD1 8	593-49-HEPTACOSANE	20.8	280	JXN
1F	AMD1 9	630-02-OCTACOSANE	21.37	230	JXN
1F	AMD110	630-03-NONACOSANE	21.9	940	JXN
1F	AMD111	506-52-1-HEXACOSANOL	21.95	300	JXN
1F	AMD112	630-04-HENTRIACONTANE	23		JXN
1F	AMD112	UNKNOWN POLYTERPENE DERIVATI	24.77	260	

'F	AMD114	UNKNOWN SITOSTEROL	25.28	300	JX
ıF	AMD115	UNKNOWN POLYTERPENE DERIVATI	25.6	230	JX
1F	AMD116	UNKNOWN POLYTERPENE DERIVATI	25.85	370	JX
1F	AMD117	UNKNOWN POLYTERPENE DERIVATI	26.07	300	JX
1F	AMD118	UNKNOWN POLYTERPENE DERIVATI	26.33	310	JX
1F	AMD119	UNKNOWN	27.18	440	JX
1F	AMD120	UNKNOWN	27.48	900	JX
1F	AMD121	UNKNOWN PROPANOATE	27.67	820	JXB
***************************************			Total:	11340	
		Sample Number: SB26-8-04			
1F	ANH18-04	10		(* 11 av n. 15 lb)	
1F	AND1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.38	2700	BJXNA
1F	AND1 2	57-15-2-PROPANOL, 1,1,1-TRICHLORO-	6.05		BJXN
1F	AND1 3	112-53-1-DODECANOL	11.8		BJXN
1F	AND1 4 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	13.02		JXN
1F	AND1 5	UNKNOWN ALIPHATIC	14.02	170	
1F	AND1 6	629-99-PENTACOSANE	19.63		JXN
1F	AND1 7	506-51-1-TETRACOSANOL	20.83		JNX
1F	AND1 8	630-03-NONACOSANE	21.9		JXN
1F	AND19	UNKNOWN	22.8	270	
1F	AND110	UNKNOWN PROPANOATE	27.68	1300	
			Total:	5247	
		Sample Number: SB26-8-05			
1F	AOH18-05	7.			
1F	AOD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.37	3100	BJNXA
1F	AOD1 2	57-15-2-PROPANOL, 1,1,1-TRICHLORO-	6.05		BJXN
1F	AOD13	112-53-1-DODECANOL	11.78	110	BJXN
1F	AOD1 4 74	381-40-PROPANOIC ACID, 2-METHYL-, 1	13	150	JXN
1F	AOD1 5	57-10-HEXADECANOIC ACID	15.98	89	JXN
1F	AOD1 6	630-03-NONACOSANE W/BENZO[B]FLUORAY	21.88	100	JXNZ
1F	AOD17	UNKNOWN PROPANOATE	27.67	820	JXB
			Total:	4509	
		Sample Number: SB26-9-00			
1F	APH19-00	21			
1F	APD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.2	18000	BJXNA
1F	APD1 2	629-78-HEPTADECANE	13.72	560	JXN
1F	APD1 3 1	921-70-PENTADECANE, 2,6,10,14-TETRA	13.77	590	JXN
1F	APD1 4 1	013-08-PHENANTHRENE, 1,2,3,4-TETRAH	14.5	560	JXN
1F	APD1 5	593-45-OCTADECANE W/DIBENZOTHIOPHEN	14.57	880	JXNZ
1F	APD1 6	638-36-HEXADECANE, 2,6,10,14-TETRAM	14.65	600	JXN
1F	APD1 7	629-92-NONADECANE	15.37	590	JXN
1F	APD1 8	203-64-4H-CYCLOPENTA[DEF]PHENANTHRE	15.95	1200	JXN
1F	APD1 9	112-95-EICOSANE	16.15	590	JXN

1F	APD110	629-94-HENEICOSANE	16.88	550	JXN
1F	APD111	UNKNOWN BENZONAPHTHOFURAN	17.5	950	JX
1F	APD112	238-84-11H-BENZO[A]FLUORENE	18.17	1100	JXN
1F	APD113	243-17-11H-BENZO[B]FLUORENE	18.28	770	JXN
1F	APD114 27	208-37-CYCLOPENTA[CD]PYRENE	19.45	490	JXN
1F	APD115	UNKNOWN C18H12 PAH	20.03	880	JX
1F	APD116	UNKNOWN PAH	20.85	490	JX
1F	APD117	UNKNOWN C20H12 PAH	21.95	560	JX
1F	APD118	192-97-BENZO[E]PYRENE	22.23	1800	JXN
1F	APD119	198-55-PERYLENE	22.45	980	JXN
1F	APD120	630-04-HENTRIACONTANE	22.87	650	JXN
1F	APD121	UNKNOWN PROPANOATE	27.42	3900	JXB
			Total:	36690	
		Sample Number: MSB			
1F	AQH1MSB	0			
		Sample Number: LAB BLANK			
1F	ARH1SBLKM				
1F	ARD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.88	5000	JXNA
1F	ARD1 2	112-53-1-DODECANOL	12.23	160	JXN
1F	ARD1 3	UNKNOWN ALIPHATIC	14.25	67	JX
		Sample Number: LAB BLANK			
1F	ASH1SBLKM2	6			
1F	ASD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.47	2800	JXNA
1F	ASD1 2	57-15-2-PROPANOL, 1,1,1-TRICHLORO-	6.17	90	JXN
1F	ASD1 3	112-53-1-DODECANOL	11.9	120	JXN
1F	ASD1 4	UNKNOWN	22.78	70	JX
1F	ASD1 5	UNKNOWN	24.6	77	JX
1F	ASD1 6	UNKNOWN PROPANOATE	28.05	1300	JX
		Sample Number: LAB BLANK			
1F	ATH1SBLKM3	5			
1F	ATD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.87	5000	JXNA
1F	ATD1 2	57-15-2-PROPANOL, 1,1,1-TRICHLORO-	6.63		JXN
1F	ATD1 3	112-53-1-DODECANOL	12.35		JXN
1F	ATD1 4	UNKNOWN ALIPHATIC	14.35	150	
1F	ATD1 5	UNKNOWN	. 20.72	90	JX
		Sample Number: LAB BLANK			
1F	AUH1SBLK3N				
1F	AUD1 1	123-42-2-PENTANONE, 4-HYDROXY-4-MET	4.33		JXNA
1F	AUD1 2	57-15-2-PROPANOL, 1,1,1-TRICHLORO-	6.03		JXN
1F	AUD1 3	112-53-1-DODECANOL	11.77		JXN
1F	AUD1 4	UNKNOWN ALIPHATIC	13.72		JX
1F	AUD1 5	UNKNOWN	20.05	160	
1F	AUD1 6	UNKNOWN PROPANOATE	27.47	2400	JX

		Sample Number: MSB			
1F	AAH1MSB	0			
		Sample Number: SENLAK			
1F	ABH1SENLAK	2			
1F	ABD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.72	110	BJXNA
1F	ABD1 2 98-82-	BENZENE, (1-METHYLETHYL)-	5.83	32	BJXN
		Sample Number: LAB BLANK			
1F	ACH1SBLK7K	9			
1F	ACD1 1 123-42-	2-PENTANONE, 4-HYDROXY-4-MET	4.7	99	JXNA
1F	ACD1 2 98-82-	BENZENE, (1-METHYLETHYL-)-	5.82	20	JXN
1F	ACD1 3 3622-84-	BENZENESULFONAMIDE, N-BUTYL-	15.35	21	JXN
1F	ACD1 4	UNKNOWN POLYALKOXYALCOHOI	17.97	10	JX
1F	ACD1 5	UNKNOWN POLYALKOXYALCOHOL	19.43	5	JX
1F	ACD1 6	UNKNOWN POLYALKOXYALCOHOL	19.8	11	JX
1F	ACD17	UNKNOWN POLYALKOXYALCOHOL	21.03	3	JX
1F	ACD1 8	UNKNOWN POLYALKOXYALCOHOL	21.37	5	JX
1F	ACD1 9	UNKNOWN POLYALKOXYALCOHOL	22.52	5	JX

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·	ĺ	Sample Number: SB26-12-00			
1E	AAH1261200	10			
1E	AAD1 1	Unknown C3-alkylcyclohexane	10.288	22	J
1E	AAD1 2	Unknown	11.153	24	
1E	AAD1 3	Unknown cycloalkane	11.325	24	J
1E	AAD1 4	Unknown C4-alkylcyclohexane	11.516	42	
1E	AAD1 5	Unknown C10-alkane	11.896	180	
1E	AAD1 6	Unknown C4-alkylcyclohexane	12.086	19	
1E	AAD1 7	Unknown C4-alkylcyclohexane	12.433	350	
1E	AAD1 8	Unknown	12.589	84	
1E	AAD1 9	Unknown	12.78	180	
1E	AAD110	Unknown	12.884	84	
			Total:	1009	
		Sample Number: SB26-12-04			
1E	ABH1261204	10			
1E	ABD1 1	Unknown C10-alkane	12.376	4200	J
1E	ABD1 21678-92-8	Cyclohexane, propyl- w/C10-a	12.532	4300	
1E	ABD1 3	Unknown C10-alkane	12.775	2200	·
1E	ABD1 4	Unknown	13.087	3200	
1E	ABD1 5	Unknown	13.277	1500	
1E	ABD1 6	Unknown cycloalkane	13.416	4500	
1E	ABD1 7611-14-3	Benzene, 1-ethyl-2-methyl- w	13.711	3600	
1E	ABD1 8	Unknown C11-alkane	13.832	9900	
1E	ABD1 995-36-3	Benzene, 1,2,4-trimethyl-	13.919	7100	
1E	ABD110	Unknown C11-alkane	14.092	6000	
			Total:	46500	
		Sample Number: SB26-12-08			
1E	AEH1261208	10			
1E	AED1 1	Unknown C3-alkylcyclohexane	10.272	20	J
1E	AED1 2	Unknown C3-alkylcyclohexane	10.514	20	J
1E	AED1 3	Unknown C3-alkylcyclohexane	11.153	30	J
1E	AED1 4	Unknown C3-alkylcyclohexane	11.534	44	JZ
1E	AED1 5	Unknown C10-alkane	11.881	110	J
1E	AED1 6	Unknown	12.071	55	J
1E	AED1 7	Unknown	12.401	110	J
1E	AED1 8	Unknown	12.574	53	J
1E	AED1 9	Unknown cycloalkane	12.678	99	J
1E	AED110	Unknown	12.765	89	J
			Total:	630	
		Sample Number: SD26-10			
1E	AGH1SD2610	10			
1E	AGD1 1111-84-2	Nonane w/C3-alkylcyclohexane	11.723	22000	
1E	AGD1 2	Unknown C10-alkane	12.381	11000	J

1E	AGD1 31678-92-8	Cyclohexane, propyl- w/C10-a	12.537	13000	NJZ
1E	AGD1 4	Unknown C10-alkane	13.023	6800	J
1E	AGD1 5	Unknown	13.092	10000	J
1E	AGD1 6124-18-5	Decane	13.474	78000	NJ
1E	AGD1 7611-14-3	Benzene, 1-ethyl-2-methyl- w	13.717	10000	NJZ
1E	AGD1 8	Unknown C11-alkane	13.838	16000	J
1E	AGD1 995-63-6	Benzene, 1,2,4-trimethyl- w/	13.925	11000	NJZ
1E	AGD110	Unknown C11-alkane	14.099	12000	J
1E	AHH1VBLKDY	.0			
1E	AIH1VBLKDZ	0			
1E	AJH1VBLKT8	0			
1E	AKH1VBLKU3	0			
			Total:	189800	

		Sample Number: SB26-11-00			
1E	AAH1261100	0			
		Sample Number: SB26-11-03			
1E	ABH1261103	0			
		Sample Number: SB26-11-06			
1E	ACH1261106	0			
		Sample Number: SD26-11			
1E	AEH1SD2611	10			
1E	AED1 1111-65-9	Octane	9.813	5500	NJ
1E	AED1 2	Unknown C9-alkane	11.001	8800	J
1E	AED1 3	Unknown C9-alkane	11.138	6400	J
1E	AED1 4111-84-2	Nonane	11.586	27000	NJ
1E	AED1 5	Unknown C3-alkylcyclohexane	12.017	6800	J
1E	AED1 6	Unknown C10-alkane	12.172	11000	J
1E	AED1 7	Unknown C10-alkane w/cycloh	e12.344	19000	JZ
1E	AED1 8	Unknown C10-alkane	12.62	18000	J
1E	AED1 9	Unknown C10-alkane	12.758	13000	J
1E	AED110	Unknown C4-alkylcyclohexane	12.931	9800	J
		Sample Number: SD26-12	Total:	125300	
1E	AHH1SD2612	1			
1E	AHD1 1	Unknown terpene	12.802	10	J
1E	AIH1SD268	0			
1E	АJH1SS2624	0			
1E	AKH1SS2627	0			
1E	ALH1SS2629	0			
1E	AMH1SS2633	0			
1E	ANH1SS2635	2			
1E	AND1 1	Unknown terpene	10.995	10	J
1E	AND1 2	Unknown terpene	12.169	10	J
		Sample Number: SS26-36	Total:	30	
1E	AOH1SS2636	0			
		Sample Number: SS26-37			
1E	APH1SS2637	0			
		Sample Number: SS26-38			
1E	AQH1SS2638	0			
		Sample Number: SS26-39			
1E	ARH1SS2639	0			
		Sample Number: SS26-39RE			
1E	ASH1SS2639RE	2			
1E	ASD1 1	Unknown terpene	11.995	10	
1E	ASD1 2	Unknown terpene	12.496	7	J
1E	ATH1SS2640	2			
1E	ATD1 1	Unknown terpene	10.926	11	J

1E	ATD1 2	Unknown terpene	11.997	11	J
		Sample Number: SS26-41	Total:	39	
1E	AUH1SS2641	0			
		Sample Number: SS26-41RE			
1E	AVH1SS2641RE	0			
		Sample Number: SS26-42			
1E	AWH1SS2642	0			
		Sample Number: SS26-43			
1E	AXH1SS2643	.0			
		Sample Number: SS26-44			
1E	AYH1SS2644	0			
1E	AZH1VBLKDZ	0			
1E	BAH1VBLKU3	0			
1E	BBH1VBLKU9	0			
1E	BCH1VBLKV3	0			
1E	BDH1VBLKV6	0			

		Sample Number: SS26-15			
1E	ABH1SS2615	0			
		Sample Number: SS26-16			
1E	ACH1SS2616	0			
		Sample Number: SS26-17			
1E	ADH1SS2617	0			
		Sample Number: SS26-18			
1E	AEH1SS2618	0			
		Sample Number: SS26-19			
1E	AFH1SS2619	1			
1E	AFD1 1	Unknown polycyclic hydrocarb	12.803	17	J
		Sample Number: SS26-19RE			
1E	AGH1SS2619RE	0			
		Sample Number: SS26-20			
1E	AHH1SS2620	0			
		Sample Number: SS26-21			
1E	AIH1SS2621	0			
		Sample Number: SS26-22			
1E	AJH1SS2622	0			
		Sample Number: SS26-22RE			
1E	AKH1SS2622RE	0			
		Sample Number: SS26-23			
1E	ALH1SS2623	2			
1E	ALD1 1107-87-9	2-Pentanone	7.958	11	NJ
1E	ALD1 2	Unknown polycyclic hydrocarb	12.822	8	J
			Total:	19	
		Sample Number: SS26-23RE			
1E	AMH1SS2623RE	0			
		Sample Number: SS26-25			
1E	ANH1SS2625	2			
1E	AND1 179-20-9	Acetic acid, methyl ester	4.476		NJ
1E	AND1 2107-87-9	2-Pentanone	7.976	10	NJ
1E	AOH1SS2625RE	1			
1E	AOD1 164-17-5	Ethano1	4.235		NJ
			Total:	26	
		Sample Number: SS26-26			
1E	APH1SS2626	0			
		Sample Number: SS26-26RE			
1E	AQH1SS2626RE	0			
		Sample Number: SS26-28			
1E	ARH1SS2628	0			
		Sample Number: SS26-30			
1E	ASH1SS2630	0			L

		Sample Number: SS26-30RE			
1E	ATH1SS2630RE	0			
		Sample Number: SS26-31			
1E	AUH1SS2631	0			
		Sample Number: SS26-32			
1E	AVH1SS2632	2			
1E	AVD1 1	Unknown terpene	12.048	44	J
1E	AVD1 2	Unknown terpene	12.515	7	J
			Total:	51	
		Sample Number: SS26-32RE			
1E	AWH1SS2632RE	0			
		Sample Number: SS26-34			
1E	AXH1SS2634	0			
		Sample Number: SS26-34R			
1 <b>E</b>	AYH1SS2634R	0			
		Sample Number: SS26-45			
1 <b>E</b>	AZH1SS2645	0			
		Sample Number: SS26-46			
1E	BCH1SS2646	0			
		Sample Number: SS26-47			
1E	BDH1SS2647	0			
		Sample Number: SS26-52			
1E	BEH1SS2652	0			
		Sample Number: SS26-53			
1E	BFH1SS2653	. 0			
1E	BGH1VBLKV3	0			
1E	BHH1VBLKV4	0			
1E	BIH1VBLKV6	0			
1E	BJH1VBLKV9	0			
1E	BKH1VBLKW1	0			
1E	BLH1VBLKW4	1			
1E	BLD1 1121-43-7	Boric acid, trimethyl ester	3.617	6	NJX

1F	AAH1SBLK4L	1			
1F	AAD1 13622-84-2	Benzenesulfonamide, N-butyl-	11.641	2	NJ
		Sample Number: SS26-15R			
1F	ABH1SS2615R	0			

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		Sample Number: SB25-16-00			
1F	AAH1251600	20			
1F	AAD1 1	Unknown aliphatic compound	8.758	710	JB
1F	AAD1 2	Unknown	10.667	320	J
1F	AAD13	Unknown phenol derivative	10.905	380	J
1F	AAD1 4	Unknown phenol derivative	10.975	420	J
1F	AAD1 5	Unknown phenol derivative	11.035	420	J
1F	AAD1 6	Unknown phenol derivative	11.314	390	
1F	AAD1 7	Unknown alkane	13.986	450	J
1F	AAD1 8	Unknown	14.368	330	J
1F	AAD1 9	Unknown alkane	14.73	1100	JB
1F	AAD110	Unknown alkane	15.444	1400	JB
1F	AAD111	Unknown alkane	16.129	1400	JB
1F	AAD112	Unknown	16.512	400	J
1F	AAD113	Unknown alkane	16.784	1200	JB
1F	AAD114	Unknown alkane	17.417	920	JB
1F	AAD115	Unknown alkane	18.03	750	J
1F	AAD116	Unknown alkane	18.624	510	J
1F	AAD117	Unknown alkane	19.187	460	J
1F	AAD118	Unknown alkane	19.741	330	J
1F	AAD119	Unknown alkane	20.274	360	J
1F	AAD120	Unknown	23.985	1400	JB
			Total:	13650	
		Sample Number: SB25-16-01			
1F	ABH1251601	10			
1F	ABD1 1	Unknown	4.644	83	J
1F	ABD1 2	Unknown aliphatic compound	8.749	550	JB
1F	ABD1 3	Unknown aliphatic compound	9.911	110	J
1F	ABD1 4	Unknown aliphatic compound	10.669	180	J
1F	ABD1 557-10-3	Hexadecanoic acid	12.914	180	NJ
1F	ABD1 6	Unknown amide	18.598	100	J
1F	ABD1 7	Unknown aliphatic compound	19.917	100	
1F	ABD1 8	Unknown alkane	20.265	79	J
1F	ABD1 9	Unknown	21.419	120	JB
1F	ABD110	Unknown	23.979	1400	JB
		Sample Number: SB25-16-02	Total:	2902	
1F	ACH1251602	6			
1F	ACD1 1	Unknown aliphatic compound	8.749	460	
1F	ACD1 2	Unknown aliphatic compound	9.911	130	
1F	ACD1 3	Unknown aliphatic compound	10.67	88	
1F	ACD1 457-10-3	Hexadecanoic acid	12.913	83	NJ
1F	ACD1 5	Unknown	21.417		JB
1F	ACD1 6	Unknown	23.969	990	JB

		Sample Number: BLANK	Total:	1845	
1F	ADH1SBLKN5	14			
1F	ADD1 1	Unknown aliphatic compound	8.756	220	J
1F	ADD1 2	Unknown alkane	14.719	120	J
1F	ADD1 3	Unknown alkane	15.431	150	J
1F	ADD1 4	Unknown alkane	16.113	130	J
1F	ADD1 5	Unknown	16.735	180	J
1F	ADD1 6	Unknown alkane	16.775	100	J
1F	ADD1 7	Unknown alkane	17.407	70	J
1F	ADD1 8	Unknown	17.979	82	J
1F	ADD1 9	Unknown	18.404	270	J
1F	ADD110	Unknown	19.918	240	J
1F	ADD111	Unknown	20.997	72	J
1F	ADD112	Unknown	21.423	180	J
1F	ADD113	Unknown	23.401	100	J
1F	ADD114	Unknown	23.946	530	J
			Total:	2444	

		Sample Number: MW26-1			
1E	AAH1MW261	0			
		Sample Number: MW26-10			
1E	ABH1MW2610	0			
		Sample Number: MW26-11			
1E	ACH1MW2611	0			
		Sample Number: MW26-3			
1E	ADH1MW263	0	. 37-70-40		
		Sample Number: MW26-4			
1E	AEH1MW264	0			
		Sample Number: MW26-5			
1E	AFH1MW265	0			
		Sample Number: MW26-6			
1E	AGH1MW266	0			
		Sample Number: MW26-7			
1E	AHH1MW267	10			
1E	AHD1 1611-14-3	Benzene, 1-ethyl-2-methyl-	22.525	6	NJ
1E	AHD1 2526-73-8	Benzene, 1,2,3-trimethyl-	23.559	5	NJ
1E	AHD1 3	Unknown C3-alkylbenzene	23.886	8	J
1E	AHD1 4	Unknown C4-alkylbenzene	24.041	6	J
1E	AHD1 5	Unknown C4-alkylbenzene	24.817	8	J
1E	AHD1 6	Unknown C4-alkylbenzene	25.283	6	J
1E	AHD1 7	Unknown C4-alkylbenzene	25.369	9	J
1E	AHD1 8	Unknown benzene derivative w	26.111	15	ZJ
1E	AHD1 9	Unknown naphthalene derivati	26.421	6	J
1E	AHD110	Unknown benzene derivative	27.042	4	J
			Total:	73	
		Sample Number: MW26-70			
1E	AIH1MW2670	10			
1E	AID1 1611-14-3	Benzene, 1-ethyl-2-methyl-	22.525		NJ
1E	AID1 2526-73-8	Benzene, 1,2,3-trimethyl-	23.576		NJ
1E	AID1 3	Unknown C3-alkylbenzene	23.886		
1E	AID1 4	Unknown C4-alkylbenzene	24.335	4	
1E	AID1 5	Unknown C4-alkylbenzene	25.283	6	
1E	AID1 6	Unknown C4-alkylbenzene	25.369	8	
1E	AID1 7	Unknown benzene derivative w	26.111		ZJ
1E	AID1 8	Unknown naphthalene derivati	26.439		J
1E	AID1 9	Unknown C5-alkylbenzene	26.853	4	
1E	AID110	Unknown benzene derivative	27.06	4	
		Sample Number: MW26-7R	Total:	60	
1E	AJH1MW267R	0			
		Sample Number: MW26-8			
1E	AKH1MW268	0			

		Sample Number: MW26-9		
1E	ALH1MW269	0		
		Sample Number: TB111395		
1E	AMH1TB111395	0		
		Sample Number: TB111595		
1E	ANH1TB11595	0		
1E	AOH1VBLKA4	0		
1E	APH1VBLKA8	0		
1E	AQH1VBLKB7	.0		
1E	ARH1VBLKC2	. 0		
1E	ASH1VBLKC9	0		

		Sample Number: MW25-1			
1F	AAH1MW251	1			
1F	AAD1 1	Unknown aliphatic alcohol	6.302	4	J
		Sample Number: MW25-10			
1F	ABH1MW2510	. 1			
1F	ABD1 1	Unknown aliphatic alcohol	6.301	7	J
		Sample Number: MW25-11			
1F	ACH1MW2511	11			
1F	ACD1 1	Unknown siloxane derivative	5.956	3	J
1F	ACD1 2	Unknown polyalkoxy alcohol	14.36	4	JB
1F	ACD1 3	Unknown polyalkoxy alcohol	16.282	5	JB
1F	ACD1 4	Unknown polyalkoxy alcohol w	17.623	2	ZJ
1F	ACD1 5	Unknown siloxane derivative	17.869	2	J
1F	ACD1 6	Unknown polyalkoxy alcohol	17.968	3	J
1F	ACD1 7	Unknown amide	18.492	11	J
1F	ACD1 8	Unknown polyalkoxy alcohol	19.194	2	J
1F	ACD1 9	Unknown siloxane derivative	19.421	3	J
1F	ACD110	Unknown siloxane derivative	20.125	3	J
1F	ACD111	Unknown siloxane derivative	20.81	2	J
			Total:	40	
		Sample Number: MW25-13			
1F	ADH1MW2513	6			
1F	ADD1 1	Unknown aliphatic compound	9.79	7	J
1F	ADD1 2	Unknown	10.433	3	J
1F	ADD1 357-10-3	Hexadecanoic acid	12.806	2	NJ
1F	ADD1 4	Unknown aliphatic compound	13.804	10	J
1F	ADD1 5	Unknown polyalkoxy alcohol w	14.358	3	ZJ
1F	ADD1 6	Unknown amide	18.492	2	J
			Total:	27	
		Sample Number: MW25-15			
1F	AEH1MW2515	3			
1F	AED1 1	Unknown aliphatic compound	4.054	3	J
1F	AED1 2	Unknown chlorinated compound	4.183		JB
1F	AED1 3	Unknown aliphatic compound	9.797	7	J
			Total:	15	
		Sample Number: MW25-17			
1F	AFH1MW2517	4			
1F	AFD1 1	Unknown chlorinated compound	4.192		ЈВ
1F	AFD1 2	Unknown aliphatic compound	9.793		J
1F	AFD1 3544-63-8	Tetradecanoic acid	11.157		NJ
1F	AFD1 457-10-3	Hexadecanoic acid	12.817	3	NJ
			Total:	10	
		Sample Number: MW25-18			

1F	AGH1MW2518	1			
1F	AGD1 1	Unknown aliphatic alcohol	6.292	6	J
		Sample Number: MW25-19		1000	
1F	AHH1MW2519	0			
		Sample Number: MW25-2			
1F	AIH1MW252	20			
1F	AID1 1	Unknown C3-alkylbenzene	4.339	300	J
1F	AID1 2	Unknown C3-alkylbenzene	4.409	210	J
1F	AID1 3	Unknown C3-alkylbenzene	4.537	190	J
1F	AID1 4	Unknown C3-alkylbenzene	4.686	410	J
1F	AID1 5	Unknown C3-alkylbenzene	4.964	230	J
1F	AID1 6	Unknown aromatic hydrocarbon	5.093	200	J
1F	AID1 7	Unknown cyclic ketone	5.142	70	J
1F	AID1 8	Unknown C3-alkylbenzene	5.271	83	J
1F	AID1 9	Unknown C3-alkylbenzene	5.351	22	J
1F	AID110	Unknown C3-alkylbenzene	5.44	69	J
1F	AID111	Unknown C3-alkylbenzene	5.509	90	J
1F	AID112	Unknown C4-alkylbenzene	5.797	23	J
1F	AID113	Unknown aromatic hydrocarbon	5.966	21	J
1F	AID114	Unknown aromatic hydrocarbon	6.056	41	J
1F	AID11583-33-0	1H-Inden-1-one, 2,3-dihydro-	7.15	16	NJ
1F	AID116	Unknown alkylbenzene	7.449	16	J
1F	AID117621-36-3	m-Tolylacetic acid	7.648	26	NJ
1F	AID118	Unknown benzene derivatives	7.738	28	JZ
1F	AID119	Unknown dimethylnaphthalene	8.336	23	JZ
1F	AID120	Unknown	8.785	17	J
			Total:	2085	
		Sample Number: MW25-3			
1F	AJH1MW253	10			
1F	AJD1 1	Unknown C3-alkylbenzene	3.889	2	
1F	AJD1 2	Unknown C3-alkylbenzene	4.383	3	J
1F	AJD1 3	Unknown C3-alkylbenzene	4.58	4	_
1F	AJD1 4	Unknown C3-alkylbenzene	5.006	4	
1F	AJD1 5	Unknown C4-alkylbenzene	5.799	2	
1F	AJD1 6	Unknown aliphatic acid w/alk	5.838		JZ
1F	AJD1 7	Unknown aromatic hydrocarbon	6.106		JZ
1F	AJD1 8	Unknown aliphatic alcohol	6.344	9	
1F	AJD1 957-10-3	Hexadecanoic acid	12.833		NJ
1F	AJD11057-11-4	Octadecanoic acid	14.399		NJ
			Total:	37	
		Sample Number: MW25-4D			
1F	AKH1MW254D	1			
1 <b>F</b>	AKD1 1	Unknown chlorinated compound	4.202	4	JB

		Sample Number: MW25-50			
1F	ALH1MW2550	1			
1F	ALD1 1	Unknown	4.804	3	J
		Sample Number: MW25-5D			
1F	AMH1MW255D	2			
1F	AMD1 157-10-3	Hexadecanoic acid	12.847	3	NJ
1F	AMD1 2	Unknown amide	18.534	4	J
			Total:	7	
		Sample Number: MW25-6	· · · · · · · · · · · · · · · · · · ·		
1F	ANH1MW256	1		****	
1F	AND1 1	Unknown aliphatic alcohol	6.301	3	J
		Sample Number: MW25-7D		-	
1F	AOH1MW257D	0			
		Sample Number: MW25-8			
1F	APH1MW258	3			
1F	APD1 1	Unknown	6.064	7	J
1F	APD1 2	Unknown	6.143	2	J
1F	APD1 3	Unknown polyalkoxy alcohol	16.235	3	
			Total:	12	
		Sample Number: MW25-9			
1F	AQH1MW259	7			
1F	AQD1 1	Unknown C3-alkylbenzene	3.87	2	J
1F	AQD1 2	Unknown C3-alkylbenzene	4.374	7	
1F	AQD1 3	Unknown C3-alkylbenzene	4.571	6	
1F	AQD1 4	Unknown C3-alkylbenzene	5.007	8	
1F	AQD1 5	Unknown aromatic hydrocarbon	6.107	3	
1F	AQD1 6	Unknown aliphatic alcohol	6.345	12	J
1F	AQD1 7	Unknown polyalkoxy alcohol	14.386	2	JB
			Total:	40	
		Sample Number: LAB BLANK			
1F	ARH1SBLK1M	0			
		Sample Number: LAB BLANK			
1F	ASH1SBLK7L	6			
1F	ASD1 1	Unknown	4.075	3	
1F	ASD1 2	Unknown chlorinated compound	4.203	3	
1F	ASD1 3	Unknown cyclohexane derivati	5.061	2	J
1F	ASD1 4	Unknown	5.762	2	
1F	ASD1 5	Unknown polyalkoxy alcohol	14.349	4	
1F	ASD1 6	Unknown polyalkoxy alcohol	16.284	4	J
		Sample Number: LAB BLANK			
1F	ATH1SBLK8L	3			
1F	ATD1 1	Unknown	4.064	4	
1F	ATD1 2	Unknown chlorinated compound	4.193	8	J

1F	ATD1 33622-84-2	Benzenesulfonamide, N-butyl-	11.561	7	NJ
		Sample Number: LAB BLANK	<u> </u>		
1F	AUH1SBLK9L	1			
1F	AUD1 13622-84-2	Benzenesulfonamide, N-butyl-	11.511	35	NJ
		Sample Number: MW25-12D			
1F	AVH1W2512D	5			
1F	AVD1 1	Unknown polyalkoxy alcohol	14.358	4	Љ
1F	AVD1 2	Unknown polyalkoxy alcohol	16.28	5	Љ
1F	AVD1 3	Unknown polyalkoxy alcohol	17.967		J
1F	AVD1 4	Unknown amide	18.49	3	J
1F	AVD1 5	Unknown polyalkoxy alcohol	19.192	2	J
			Total:	16	
		Sample Number: MW25-14D			
1F	AWH1W2514D	7			
1F	AWD1 1	Unknown polyalkoxy alcohol	14.353		Љ
1F	AWD1 2	Unknown polyalkoxy alcohol	15.922	3	J
1F	AWD1 3	Unknown polyalkoxy alcohol	16.278		Љ
1F	AWD1 4	Unknown polyalkoxy alcohol	17.611	3	
1F	AWD1 5	Unknown polyalkoxy alcohol	17.967	3	
1F	AWD16	Unknown polyalkoxy alcohol	19.181	2	
1 <b>F</b>	AWD1 7	Unknown w/ unknown polyalkox	20.627	2	ZJ
			Total:	27	
		Sample Number: MW25-16D			
1F	AXH1W2516D	2			-
1F	AXD1 1	Unknown aliphatic compound	4.063	3	J
1F	AXD1 2	Unknown chlorinated compound	4.192	6	JВ
			Total:	9	
		Sample Number: MW25-5DR			
1F	AYH1W255DR	2			
1F	AYD1 1	Unknown polyalkoxy alcohol	14.368		JВ
1F	AYD1 2	Unknown polyalkoxy alcohol	16.303		JВ
			Total:	8	

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		Sample Number: SB25-16-00		
1E	AAH1251600	1		
1E	AAD1 1121-43-7	Boric acid, trimethyl ester	3.634	9 XNJ
		Sample Number: SB25-16-01		
1E	ABH1251601	1		
1E	ABD1 1121-43-7	Boric acid, trimethyl ester	3.704	6 XNJ
		Sample Number: SB25-16-02		
1E	ACH1251602	1		
1E	ACD1 1121-43-7	Boric acid, trimethyl ester	3.6	7 NXJ
		Sample Number: LAB BLANK		
1E	ADH1VBLKW4	1		
1E	ADD1 1121-43-7	Boric acid, trimethyl ester	3.617	6 NJX

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		Sample Number: SB25-12-00			
1E	AAH1251200	0			
		Sample Number: SB25-12-02			
1E	ABH1251202	0			
		Sample Number: SB25-12-03			
1E	ACH1251203	0			
		Sample Number: SB25-13-00			
1E	ADH1251300	0			
		Sample Number: SB25-13-02			
1E	AEH1251302	0		77.77.77.77	
		Sample Number: SB25-13-04	-		
1E	AFH1251304	0		.,	
		Sample Number: SB25-14-00			
1E	AGH1251400	0			
		Sample Number: SB25-14-01			
1E	AHH1251401	0			
	79.75 3 3 3 3 4 4 4 7 7 7 7 7 7 7 7 7 7 7 7 7	Sample Number: SB25-14-02			
1E	AIH1251402	0			
		Sample Number: SB25-11-00			
1E	AKH1SB251100	0			
		Sample Number: SB25-11-02			
1E	ANH1SB251102	0			
		Sample Number: SB25-11-03			
1E	AOH1SB251103	10			
1E	AOD1 1	Unknown C8-alkane	8.634	160	J
1E	AOD1 2	Unknown C3-alkylcyclopentene	9.706	100	
1E	AOD1 3	Unknown C3-alkylcyclohexane	10.294	120	J
1E	AOD1 4	Unknown C3-alkylcyclohexane	10.553	140	
1E	AOD1 5	Unknown C3-alkylcyclohexane	11.54	130	
1E	AOD1 6	Unknown	11.834	100	
1E	AOD1 7	Unknown alkane	12.198	170	
1E	AOD1 8	Unknown aliphatic compound	12.302	120	
1E	AOD1 9	Unknown	12.424	130	
1E	AOD110	Unknown C10-alkane	12.735	180	J
			Total:	1350	
		Sample Number: SB25-11-03D	L		
1E	APH1SB251103DL				
1E	APD1 1	Unknown C3-alkylcyclohexane	10.274		JZ
1E	APD1 2	Unknown C3-alkylcyclohexane	10.534		JZ
1E	APD1 3	Unknown C3-alkylcyclohexane	10.984		
1E	APD1 4	Unknown	11.105		
1E	APD1 5	Unknown C3-alkylcyclohexane	11.52		
1E	APD1 6	Unknown	11.815	89	J

1E	APD1 7	Unknown C10-alkane	11.884	76	J
1E	APD1 8	Unknown	12.109	99	J
1E	APD1 9	Unknown	12.404	140	J
1E	APD110	Unknown C10-alkane	12.716	140	J
		Sample Number: SB25-15-00	Total:	960	
1E	AQH1SB251500	0			
		Sample Number: SB25-15-01			
1E	ARH1SB251501	0			
		Sample Number: SB25-15-02			
1E	ASH1SB251502	0			
		Sample Number: SD25-3			
1E	ATH1SD253	0			
		Sample Number: SD25-30			
1E	AUH1SD2530	0			
		Sample Number: SD25-3R			
1E	AVH1SD253R	0			
		Sample Number: SD25-7			
1E	AWH1SD257	1			
1E	AWD1 1	Unknown	11.525	52	J
1E	AXH1SD258	1			
1E	AXD1 1	Unknown alkane	12.326	14	J
1E	AYH1SD259	1			
1E	AYD1 1	Unknown	11.496	25	J
1E	AZH1TB101195	0			
1E	BAH1TB101695	0			
1E	BBH1VBLKQ3	0			
1E	BCH1VBLKQ6	0			
1E	BDH1VBLKQ8	0			
1E	BEH1VBLKR9	0			
1E	BFH1VBLKS9	0	4		
1E	BGH1VBLKT4	0			
1E	BHH1VBLKT8	0			
1E	BIH1VBLKU3	0			
1E	BJH1VBLKV4	0			
1E	BKH1VBLKV9	0			
			Total:	91	

# 53906

		Sample Number: SB26-10-00			
1 <b>E</b>	AAH110-00	1			
1 <b>E</b>	AAD1 1556-67-2	Cyclotetrasiloxane, octameth	11.2	31	NJ
1E	ABH110-03	1			
1E	ABD1 1110-54-3	Hexane	5.13	7	NJ
1E	ACH110-04	0	-		
1E	ADH15-00	0			
1E	AEH15-03	1			
1E	AED1 1	Unknown aliphatic compound	13.85	6	J
1E	AFH15-05	0			
1E	AGH15-05MS	0		******	
1E	AHH15-05MSD	0			
1E	AIH16-00	0			
1E	АЈН16-04	0			
1E	AKH16-06	0			
1E	ALH17-00	0			
1E	AMH17-03	10			
1E	AMD1 1	Uknown C11-alkane	12.33	4900	J
1E	AMD1 2	Unknown alkylcyclohexane w/u	12.65	4400	
1E	AMD1 3	Unknown aliphatic compound	13.77	7300	
1E	AMD1 4	Unknown	13.92	5200	
1E	AMD1 5	Unknown substituted benzene	14.2	11000	J
1E	AMD1 6	Unknown aliphatic compound	14.65	5300	J
1E	AMD1 7	Unknown	14.88	5200	J
1E	AMD1 8	Unknown	15.22	5500	J
1E	AMD1 9	Unknown methylnaphthalene w/	15.77	7100	JZ
1E	AMD110	Unknown methylnaphthalene w/	15.97	4900	JZ
1E	ANH17-03MS	0			
1E	AOH17-03MSD	. 0			
1E	APH17-07	10			
1E	APD1 1	Unknown C11-alkane	12.4	4200	J
1E	APD1 2	Unknown alkylcyclohexane w/u	12.72	4600	JZ
1E	APD1 3	Unknown aliphatic compound	13.82	7200	J
1E	APD1 4	Unknown	13.97	4900	J
1E	APD1 5	Unknown substituted benzene	14.25	11000	JZ
1E	APD1 6	Unknown	14.4	4300	J
1E	APD1 7	Unknown substituted benzenes	14.65	4200	JZ
1E	APD1 8	Unknown	14.93	5300	
1E	APD1 9	Unknown	15.28	5200	J
1E	APD110	Unknown methylnaphthalene w/	15.82	5000	JZ
1E	AQH18-00	0			
1E	ARH18-04	0			
1E	ASH18-05	0			

# 53906

1E	ATH19-00	0			
1E	AUH1MSB	0			
		0			
1E	AVH1MSB2	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s			
1E	AWH1TB92395	0			
1E	AXH1VBLKDV	0			
1E	AYH1VBLKDW	0			
1E	AZH1VBLKM5	1			
1E	AZD1 1541-02-6	Cyclopentasiloxane, decameth	13.12	7	NJ_
1E	BAH1VBLKN1	. 0			
1E	BBH1VBLKN5	0			
1E	BCH1VBLKN8	11			
1E	BCD1 1	C002 DICHLORODIFLUOROMETHAN	0	0	NJ
1E	BCD1 2	C052 TETRAHYDROFURAN	0	0	NJ
1E	BCD1 3	C063 FREON TF	0	0	NJ
1E	BCD1 4	C206 1,3-DICHLOROPROPANE	0	0	NJ
1E	BCD1 5	C246 A-METHYLSTYRENE	0	0	NJ
1E	BCD1 6	C005 BROMOTRIFLUOROMETHANE	2.05	0.2	NJ
1E	BCD1 7	C141 METHYL METHACRYLATE	7.833	0.2	NJ
1E	BCD1 8	C227 BUTYL ACETATE	9.65	0.2	NJ
1E	BCD19	C260 1,3-DICHLOROBENZENE	12.817	0.5	NJ
1E	BCD110	C270 1,4-DICHLOROBENZENE	12.817	0.5	NJ
1E	BCD111	C249 1,2-DICHLOROBENZENE	13.2	0.2	NJ
1E	BDH1VBLKP3	0			
1E	BEH1VBLKT3	0			
			Totals:	116752.8	

		Sample Number: SB25-10-00				
1 <b>E</b>	AAH110-00		0			
		Sample Number: SB25-10-01				
1E	ABH110-01		1			
1 <b>E</b>	ABD1 1121-43-7	Boric acid, trimethyl ester		3.217	6	XNJ
		Sample Number: SB25-10-02				
1E	ACH110-02		1			
1E	ACD1 1121-43-7	Boric acid, trimethyl ester		3.234	7	XNJ
	711	Sample Number: SB25-07-00				
1E	ADH17-00		1			
1E	ADD1 1121-43-7	Boric acid, trimethyl ester		3.267	7	XNJ
		Sample Number: SB25-07-03				
1E	AEH17-03		1			
1E	AED1 1121-43-7	Boric acid, trimethyl ester		3.268	7	XNJ
		Sample Number: SB25-07-04		·		
1E	AFH17-04		1			
1E	AFD1 1121-43-7	Boric acid, trimethyl ester		3.286	7	XNJ
		Sample Number: SB25-07-10				
1E	AGH17-10		1			
1E	AGD1 1121-43-7	Boric acid, trimethyl ester		3.234	6	XNJ
		Sample Number: SB25-07-00RN	NS			
1E	AHH1700RNS		0			
		Sample Number: SB25-08-00				
1E	AIH18-00		1			
1E	AID1 1121-43-7	Boric acid, trimethyl ester		3.217	7	XNJ
1E	AJH18-01		0			
1E	AKH18-02		1			
1E	AKD1 1121-43-7	Boric acid, trimethyl ester		3.217	6	XNJ
1E	ALH19-00		0			
1E	AMH19-01		1			
1E	AMD1 1121-43-7	Boric acid, trimethyl ester		3.251	8	XNJ
1E	ANH19-02		0			
1E	AOH1SD251		0			
1E	APH1SD2510		0			
1E	AQH1SD2515		0			
1E	ARH1SD252		0			
1E	ASH1SD254		0			
1E	ATH1SD255		0			
1E	AUH1SD256		1			
1E	AUD1 1629-50-5	Tridecane		11.272	17	NJ
1E	AVH1SD256R		0			
1E	AWH1SD256RE		0			
1E	AXH1TB92695		0			

1E	AYH1TB92795	0			
1E	AZH1VBLKN2	0			
1E	BAH1VBLKN3	0			
1E	BBH1VBLKN5	0			
1E	BCH1VBLKP9	0			
1E	BDH1VBLKQ2	0			
1E	BEH1VBLKR9	0			
1E	BFH1VBLKS8	0			
			^Total:	25	

		Sample Number: SB25-09-04			
1E	AAH19-04	2			
1E	AAD1 1121-43-7	Boric acid, trimethyl ester	3.234	9	NJX
1E	AAD1 2110-54-3	Hexane	5.165	15	NJ
1E	ABH19-04DL	0			
1E	ACH19-05	1			
1E	ACD1 1121-43-7	Boric acid, trimethyl ester	3.355	8	NJX
1E	AEH1SD26-3	0			
1E	AFH1SD262	0			
1E	AGH1SD264	0			
1E	AHH1SD265	0			
1E	AIH1SD266	0			
1E	AJH1SD267	0			
1E	AKH1SD269	0			
1E	ALH1SS2610	0			
1E	AMH1SS2610RN	0			
1E	ANH1SS2611	0		,	
1E	AQH1SS2612	0		•	
1E	ARH1SS2613	0			
1E	ASH1SS2614	0			
1E	ATH1SS2650	0			
1E	AUH1SS269	0			
1E	AVH1TB10495	0			
1E	AWH1TB92495	0			
1E	AXH1TB92595	0			
1E	AYH1VBLKN2	0			
1E	AZH1VBLKN3	0			
1E	BAH1VBLKO5	0			
1E	BBH1VBLKP9	0			
1E	BCH1VBLKQ3	0			
1E	BDH1VBLKR3	0			
			Total:	32	

. 

		Sample Number: DIWAT			
1E	AAH1DIWAT	0			
1E	ABH1TB10395	0			
1E	ACH1VBLKO8	1			
1E	ACD1 1	Unknown siloxane derivative	24.83	1	J

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		Sample N	umber: As Shown
1E	AAH1SW26-3	0	
1E	ABH1SW2610	0	
1E	ACH1SW2610R	0	
1E	ADH1SW2611	0	
1E	AEH1SW2612	0	
1E	AFH1SW262	0	
1E	AGH1SW264	0	
1E	AHH1SW265	0	
1E	AIH1SW266	0	•
1E	AJH1SW267	0	
1E	AKH1SW268	0	
1E	ALH1SW269	0	
1E	AMH1TB10795	0	
1E	ANH1TB10895	0	
1E	AOH1VBLKP1	0	
1E	APH1VBLKQ1	0	
1E	AQH1VBLKS9	0	
1E	ARH1VBLKU6	0	

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APPENDIX I
ODAST MODEL

## Transient Solution to the Advective-Dispersive Equation for One-Dimensional Flow, Type Three Boundary Condition (Decaying Source, Constant Location, Variable Time, Solution of van Genuchten and Alves, 1982) - Checked against Solute ONE3-D by THW 1/5/95

SEAD·25 Benzene

#### Hydrogeologic Data

Hydraulic conductivtiy	$K := 0.53 \cdot \frac{m}{day}$
Hydraune conductivity	K -0.33 day

Hydraulic gradient 
$$I := 0.02 \cdot \frac{ft}{g}$$

Total porosity 
$$n = 0.37$$

Longitudinal dispersivity (EPRI, 1985) 
$$\alpha_x = 3 \text{ m}$$

Concentration of Injected Contaminant 
$$C_s = 60.80 \cdot \frac{mg}{liter}$$

Initial Dissolved Contaminant Concentration 
$$C_0 = 3.04 \cdot \frac{mg}{liter}$$

#### Retardation Coefficient Calculation

Solute Decay Rate 
$$\lambda = 0.002 \cdot \frac{1}{\text{day}}$$

Source Decay Rate 
$$\gamma = 0.0002 \cdot \frac{1}{\text{day}}$$

Soil sorption coefficient (EPA, 1990) 
$$ext{K oc} := 83.\frac{\text{mL}}{\text{gm}}$$

Bulk density (Freeze and Cherry, 1979) 
$$\rho_b := 1.80 \cdot \frac{gm}{cm^3}$$

Retardation coefficient 
$$R = 1 + \frac{\rho_b \cdot K_{oc} \cdot f_{oc}}{n} \qquad R = 3.503$$

#### Groundwater Hydraulics Calculations

Groundwater velocity (pore-water) 
$$v_x = \frac{K \cdot I}{n_e}$$
  $v_x = 0.061 \cdot \frac{m}{day}$ 

Contaminant velocity 
$$v_c = \frac{v_x}{R}$$
  $v_c = 0.017 \cdot \frac{m}{day}$ 

Longitudinal dispersion coefficient 
$$D_x = \alpha_{x^{\vee} x}$$
  $D_x = 1.956 \cdot \frac{ft^2}{day}$ 

#### Initial Plume Distribution Calculation

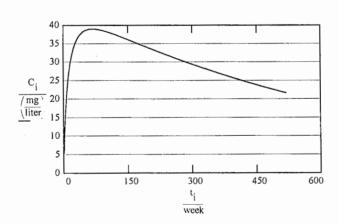
week := 
$$7 \cdot day$$
 i :  $1 ... 520$  x =  $1 \cdot m$ 

$$\Delta t = 1 \cdot week$$

$$t_i = \Delta t \cdot i$$

For Retarded Flow with Biodegradation and a Decaying Source (van Genuchten and Alves, 1982)

$$C_{i} = C_{0} \exp\left(-\lambda \cdot t_{i}\right) \cdot \left[1 - \frac{1}{2} \cdot \left(1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right) - \left(\frac{v_{x}^{2} \cdot t_{i}}{\pi \cdot D_{x} \cdot R}\right) \cdot \exp\left[-\frac{\left(R \cdot x - v_{x} \cdot t_{i}\right)^{2}}{4 \cdot D_{x} \cdot R \cdot t_{i}}\right] + \frac{1}{2} \cdot \left(1 + \frac{v_{x} \cdot x}{D_{x}} + \frac{v_{x}^{2} \cdot t_{i}}{D_{x} \cdot R}\right) \cdot \exp\left[\frac{\left(v_{x} \cdot x + v_{x} \cdot t_{i}\right)}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right] + \frac{1}{2} \cdot \left(1 + \frac{v_{x} \cdot x}{D_{x}} + \frac{v_{x}^{2} \cdot t_{i}}{D_{x} \cdot R}\right) \cdot \exp\left[\frac{\left(v_{x} \cdot x + v_{x} \cdot t_{i}\right)}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right] + \frac{1}{2} \cdot \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{D_{x}}\right) \cdot \exp\left[\frac{\left(v_{x} \cdot x + v_{x} \cdot t_{i}\right)}{2 \cdot D_{x}}\right] \cdot \exp\left[\frac{\left(v_{x} \cdot x + v_{x} \cdot t_{i}\right)}{2 \cdot D_{x}}\right] \cdot \exp\left[\frac{\left(v_{x} \cdot x + v_{x} \cdot t_{i}\right)}{2 \cdot D_{x}}\right] \cdot \exp\left[\frac{\left(v_{x} \cdot x + v_{x} \cdot t_{i}\right)}{2 \cdot D_{x}}\right] \cdot \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right) \cdot \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) \cdot \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) \cdot \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) \cdot \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) \cdot \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) \cdot \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{V_{x}}\right)\right) - \left(1 - er$$



# Transient Solution to the Advective-Dispersive Equation for One-Dimensional Flow, Type Three Boundary Condition (Decaying Source, Constant Location, Variable Time, Solution of van Genuchten and Alves, 1982) - Checked against Solute ONE3-D by THW 1/5/95

#### Hydrogeologic Data

Hydraulic conductivity  $K := 0.53 \cdot \frac{m}{day}$ 

Hydraulic gradient  $1:=0.02 \cdot \frac{ft}{ft}$ 

Effective porosity n<sub>e</sub>:=0.175

Total porosity n := 0.37

Longitudinal dispersivity (EPRI, 1985)  $\alpha_x = 3 \cdot m$ 

Concentration of Injected Contaminant  $C_s := 1.36 \cdot \frac{mg}{liter}$ 

Initial Dissolved Contaminant Concentration C<sub>0</sub>:=0.068. mg/liter

#### Retardation Coefficient Calculation

Solute Decay Rate  $\lambda := 0.0002.\frac{1}{day}$ 

Source Decay Rate  $\gamma := 0.00002 \cdot \frac{1}{\text{day}}$ 

Soil sorption coefficient (EPA, 1990)  $K_{oc} = 126 \cdot \frac{mL}{gm}$ 

Bulk density (Freeze and Cherry, 1979)  $\rho_b := 1.80 \cdot \frac{gm}{cm^3}$ 

Organic carbon content  $f_{oc} = 0.62.\%$ 

Retardation coefficient  $R := 1 + \frac{\rho_b \cdot K_{oc} \cdot f_{oc}}{n} \qquad R = 4.8$ 

#### Groundwater Hydraulics Calculations

Groundwater velocity (pore-water)  $v_x = \frac{K \cdot I}{n_e}$   $v_x = 0.061 \cdot \frac{m}{day}$ 

Contaminant velocity  $v_c = \frac{v_x}{R}$   $v_c = 0.013 \cdot \frac{m}{day}$ 

Longitudinal dispersion coefficient  $D_x = \alpha_{x} v_x$   $D_x = 1.956 \cdot \frac{ft^2}{day}$ 

Transient Solution to the Advective-Dispersive Equation for One-Dimensional Flow, Type Three Boundary Condition (Decaying Source, Constant Location, Variable Time, Solution of van Genuchten and Alves, 1982) - Checked against Solute ONE3-D by THW 1/5/95

SEAD-26 Benzene

#### Hydrogeologic Data

Hydraulic conductivtiy  $K := 2.33 \cdot \frac{m}{day}$ 

Hydraulic gradient  $I := 0.01 \cdot \frac{ft}{ft}$ 

Effective porosity  $n_e := 0.175$ 

Total porosity n := 0.37

Longitudinal dispersivity (EPRI, 1985)  $\alpha_x = 3 \cdot m$ 

Concentration of Injected Contaminant  $c_s = 1.026 \cdot \frac{mg}{liter}$ 

Initial Dissolved Contaminant Concentration  $C_0 := 0.0513 \cdot \frac{mg}{liter}$ 

#### Retardation Coefficient Calculation

Solute Decay Rate  $\lambda = 0.002 \cdot \frac{1}{\text{day}}$ 

Source Decay Rate  $\gamma = 0.0002 \cdot \frac{1}{\text{day}}$ 

Soil sorption coefficient (EPA, 1990)  $K_{oc} := 83 \cdot \frac{mL}{gm}$ 

Bulk density (Freeze and Cherry, 1979)  $\rho_b := 1.80 \cdot \frac{gm}{cm^3}$ 

Organic carbon content f oc = 0.62.%

Retardation coefficient  $R := 1 + \frac{\rho b \cdot K \text{ oc} \cdot f \text{ oc}}{n} \qquad \qquad R = 3.503$ 

#### Groundwater Hydraulics Calculations

Groundwater velocity (pore-water)  $v_x = \frac{K \cdot I}{n_e}$   $v_x = 0.133 \cdot \frac{m}{day}$ 

Contaminant velocity  $v_c = \frac{v_x}{R}$   $v_c = 0.038 \cdot \frac{m}{day}$ 

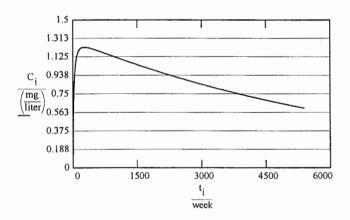
Longitudinal dispersion coefficient  $D_x = \alpha_x \cdot v_x$   $D_x = 4.299 \cdot \frac{ft^2}{day}$ 

#### Initial Plume Distribution Calculation

week :=
$$7 \cdot day$$
 i !=1 ...5400  $x :=1 \cdot m$  
$$\Delta t :=1 \cdot week$$
 
$$t_i :=\Delta t \cdot i$$

For Retarded Flow with Biodegradation and a Decaying Source (van Genuchten and Alves, 1982)

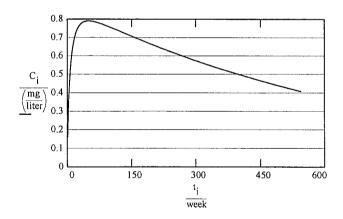
$$C_{i} = C_{o} \cdot exp\left(-\lambda \cdot t_{i}\right) \cdot \left[1 - \frac{1}{2} \cdot \left(1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right) - \left(\frac{v_{x}^{2} \cdot t_{i}}{\pi \cdot D_{x} \cdot R}\right) \cdot exp\left[-\frac{\left(R \cdot x - v_{x} \cdot t_{i}\right)^{2}}{4 \cdot D_{x} \cdot R \cdot t_{i}}\right] + \frac{1}{2} \cdot \left(1 + \frac{v_{x} x}{D_{x}} + \frac{v_{x}^{2} \cdot t_{i}}{D_{x} \cdot R}\right) \cdot exp\left(\frac{v_{x} x}{D_{x}}\right) \cdot \left(1 - erf\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right)\right] + C_{o} \cdot exp\left(-\gamma \cdot t_{i}\right) \cdot \left[1 - erf\left(\frac{v_{x}}{2 \cdot D_{x}} - v_{x} \cdot \sqrt{1 + \frac{4 \cdot D_{x} \cdot R}{v_{x}^{2}} \cdot (\lambda - \gamma)}\right) \cdot x\right] \cdot \left[1 - erf\left(\frac{R \cdot x - t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right) \cdot \left(1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right) \cdot \left(1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right) \cdot \left(1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right) \cdot \left(1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right] \cdot \left[1 - erf\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}$$



#### Initial Plume Distribution Calculation

For Retarded Flow with Biodegradation and a Decaying Source (van Genuchten and Alves, 1982)

$$\begin{aligned} &C_{i} := &C_{0} \cdot \exp\left(-\lambda \cdot t_{i}\right) \cdot \left[1 - \frac{1}{2} \cdot \left(1 - \operatorname{erf}\left(\frac{R \cdot x - v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right) - \left(\frac{v_{x}^{2} \cdot t_{i}}{\pi \cdot D_{x} \cdot R}\right) \cdot \exp\left[-\frac{\left(R \cdot x - v_{x} \cdot t_{i}\right)^{2}}{4 \cdot D_{x} \cdot R \cdot t_{i}}\right] + \frac{1}{2} \cdot \left(1 + \frac{v_{x} \cdot x}{D_{x}} + \frac{v_{x}^{2} \cdot t_{i}}{D_{x}}\right) \cdot \exp\left[\frac{v_{x} \cdot x}{D_{x}}\right) \cdot \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right) \right] \\ &+ &C_{s} \cdot \exp\left(-\gamma \cdot t_{i}\right) \cdot \left[1 - \operatorname{erf}\left(\frac{v_{x} \cdot x}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right) - \left(\frac{v_{x} \cdot x}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right) - \left(\frac{v_{x} \cdot x}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_{i}}}\right)\right) - \left(1 - \operatorname{erf}\left(\frac{R \cdot x + v_{x} \cdot t_{i}}{2 \cdot \sqrt{D_{x} \cdot R \cdot t_$$

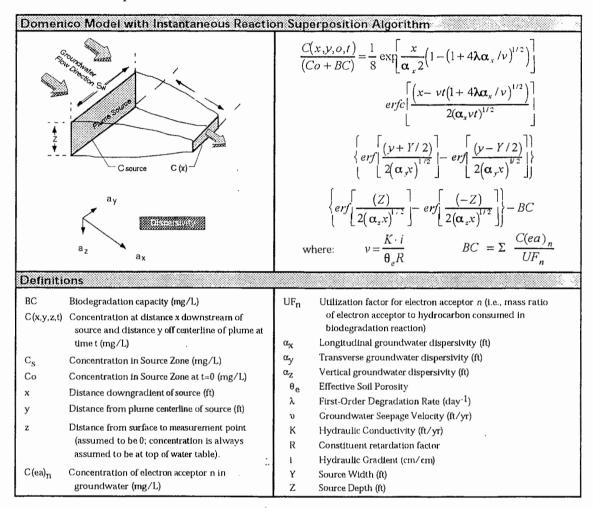


#### APPENDIX I

SCREEN 3 MODEL RUNS SEAD-25 / SEAD-26

#### APPENDIX A.1 DOMENICO ANALYTICAL MODEL

The Domenico (1987) analytical model, used by BIOSCREEN, is designed for the multidimensional transport of a decaying contaminant species. The model equation, boundary conditions, assumptions, and limitations are discussed below.



The initial conditions are:

- 1) c(x, y, z, 0) = 0 (Initial concentration = 0 for x, y, z, > 0)
- 2)  $c(0, Y, Z, 0) = C_0$  (Source concentration for each vertical plane source =  $C_0$  at time 0)

The key assumptions in the model are:

- 1) The aquifer and flow field are homogeneous and isotropic.
- 2) The groundwater velocity is fast enough that molecular diffusion in the dispersion terms can be ignored (may not be appropriate for simulation of transport through clays).
- 3) Adsorption is a reversible process represented by a linear isotherm.

#### The key limitations to the model are:

- 1) The model should not be applied where pumping systems create a complicated flow field.
- 2) The model should not be applied where vertical flow gradients affect contaminant transport.
- 3) The model should not be applied where hydrogeologic conditions change dramatically over the simulation domain.

#### The most important modifications to the original Domenico model are:

- The addition of "layer cake" source terms where three Domenico models are superimposed one on top of another to yield the 5-source term used in BIOSCREEN (see Connor et al., 1994; and the Source Width description in the BIOSCREEN Data Entry Section).
- 2) Addition of the instantaneous reaction term using the superposition algorithm (see Appendix A.2, below). For the instantaneous reaction assumption, the source concentration is assumed to be an "effective source concentration" (Coe) equal to the observed concentration in the source zone plus the biodegradation capacity (see "Source Concentration" on the BIOSCREEN Data Entry section).

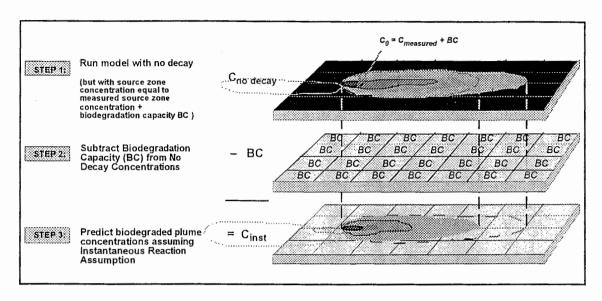
#### APPENDIX A.2 INSTANTANEOUS REACTION - SUPERPOSITION ALGORITHM

Early biodegradation research focused on the role of dissolved oxygen in controlling the rate of biodegradation in the subsurface (Borden et al., 1986; Lee et al, 1987). Because microbial biodegradation kinetics are relatively fast in comparison to the rate of oxygen transport in the groundwater flow system, Borden demonstrated that the biodegradation process can be simulated as an instantaneous reaction between the organic contaminant and oxygen. This simplifying assumption was incorporated into the BIOPLUME I numerical model which calculated organic mass loss by superposition of background oxygen concentrations onto the organic contaminant plume. In BIOPLUME II, a dual-particle mover procedure was incorporated to more accurately simulate the separate transport of oxygen and organic contaminants within the subsurface (Rifai et al, 1987; Rifai, et al, 1988).

In most analytical modeling applications, contaminant biodegradation is estimated using a first-order decay equation with the biodecay half-life values determined from research literature or site data. However, by ignoring oxygen limitation effects such first-order expressions can significantly overestimate the rate and degree of biodegradation, particularly within low-flow regimes where the rate of oxygen exchange in a groundwater plume is very slow (Rifai, 1994). As a more accurate method of analysis, Newell recommended incorporation of the concept of oxygen superposition into an analytical model (Connor et al., 1994) in a manner similar to that employed in the original BIOPLUME model (Borden et al. 1986). By this method, contaminant mass concentrations at any location and time within the flow field are corrected by subtracting 1 mg/L organic mass for each 3 mg/L of background oxygen, in accordance with the instantaneous reaction assumption. Borden et al (1986) concluded this simple superposition technique was an exact replacement for more sophisticated oxygen-limited models, as long as the oxygen and the hydrocarbon had the same transport rates (e.g., retardation factor, R=1).

In their original work, Borden et al. (1986) noted that for highly sorptive contaminants the oxygen-superposition method might erroneously characterize biodegradation due to the differing transport rates of dissolved oxygen and the organic contaminant within the aquifer matrix. However, as demonstrated by Connor et al. (1994), the oxygen superposition method and BIOPLUME II (dual particle transport) are in reasonable agreement for contaminant retardation factors as high as 6. Therefore, the superposition method can be employed as a reasonable approximation in BIOSCREEN regardless of contaminant sorption characteristics.

BIOSCREEN employs the same superposition approach for all of the aerobic and anaerobic biodegradation reactions (based on evaluation of  $O_2$ ,  $NO_3$ ,  $SO_4$ ,  $Fe^{2*}$ , and  $CH_4$ ). Based on work reported by Newell *et al.* (1995), the anaerobic reactions (nitrate, ferric iron, and sulfate reduction and methanogenesis) are amenable to simulation using the instantaneous reaction assumption. The general approach is presented below:



Based on the biodegradation capacity of electron acceptors present in the groundwater system, this algorithm will correct the non-decayed groundwater plume concentrations predicted by the Domenico model (Appendix A.1) for the effects of organic constituent biodegradation.

#### To summarize:

- 1) The original BIOPLUME model (Borden et al. 1986) used a superposition method to simulate the fast or "instantaneous" reaction of dissolved hydrocarbons with dissolved oxygen in groundwater.
- 2) Borden et al. (1986) reported that this version of BIOPLUME was mathematically exact for the case where the retardation factor of the contaminant was 1.0.
- 3) Rifai and Bedient (1990) developed the BIOPLUME II model with a dual-particle tracking routine that expanded the original BIOPLUME model to handle contaminants with retardation factors other than 1.0, in addition to other improvements.
- 4) Connor et al. (1994) compared the superposition method with the more sophisticated BIOPLUME II model and determined that the two approaches yielded very similar results for readily biodegradable contaminants with retardation factors between 1.0 and 6.0.
- 5) BIOSCREEN was developed using the superposition approach to simulate the "instantaneous" reaction of aerobic and anaerobic reactions in groundwater. The biodegradation term in BIOSCREEN is mathematically identical to the approach used in the original BIOPLUME model. This mathematical approach (superposition) matches the more sophisticated BIOPLUME II model 'very closely for readily biodegradable contaminant retardation factors of up to 6.0. BIOSCREEN simulations using the instantaneous reaction assumption at sites with retardation factors greater than 6.0 should be performed with caution and verified using a more sophisticated model such as BIOPLUME III.

#### APPENDIX A.3 DERIVATION OF SOURCE HALF-LIFE

Purpose:

Determine the source half-life relationship used in BIOSCREEN (see Source Half-Life discussion in BIOSCREEN Data Entry Section, pg 30).

Given:

- There is a finite amount of soluble organic compounds in source zone (the area with contaminated soils and either free-phase or residual NAPL.
- These organics dissolve slowly as fresh groundwater passes through source zone. Assume the change in mass due to dissolution can be approximated as a first order process:

$$M(t) = M_0 e^{-k_s t} \tag{1}$$

Procedure:

- Calculate initial mass of dissolvable organics in source zone,  $M_0$
- Determine initial source concentration from monitoring well data,  $C_0$
- Apply conservation of mass to a control surface containing source zone.
- Set the expressions for mass at time  $t \ge 0$  based on dissolution and conservation of mass equal to each other and solve for an expression describing the concentration at time  $t \ge 0$ .
- Apply initial conditions for concentration at time t=0 and solve for the first order decay constant, k ...

- **Assumptions:** 1) Groundwater flowrate is constant,  $Q(t) = Q_0$ 
  - Groundwater flowing through the source zone is free of organic compounds. This implies that no mass is added to the system, only dissolution occurs.

Calculations: 1)

- Calculate initial mass of dissolved/soluble organic compound,  $M_0$  by using procedure described under "Soluble Mass in NAPL, Soil" page in BIOSCREEN Data Input section.
- 2) Determine initial concentration,  $C_0$  of organic compound in groundwater leaving the source zone. This may be a spatial average, maximum value, or other value representative of the groundwater concentration leaving the source area. (Note that for the instantaneous reaction assumption,  $C_0$  equals the concentration observed in monitoring wells plus the biodegradation capacity to account for rapid biodegradation reactions in the source zone. See "Soluble Mass in NAPL, Soil" page in BIOSCREEN Data Input section).

$$C(t=0) = C_0 \tag{2}$$

3) Apply conservation of mass to a control surface that contains the source zone. The mass present in the source zone at time  $t \ge 0$  is the initial mass plus the change in mass.

$$M(t) = M_0 + \iint_{C.S.} \int_t Q(t) C(t) dt dA$$
 (3)

#### DERIVATION OF SOURCE HALF-LIFE, Cont'd

Applying the assumptions equation (3) simplifies to

$$M(t) = M_0 - \int_t Q_0 C(t) dt$$
 (4)

4) Set the two expressions for mass of organic compound in the source zone at time  $t \ge 0$  (equations (1) and (4)) equal to each other and solve for an expression describing the concentration leaving the source zone.

$$M_0 e^{-k_s t} = M_0 - \int_t Q_0 C(t) dt$$
 (5)

$$\frac{d}{dt} \left[ \int_{t} Q_0 C(t) dt = M_0 - M_0 e^{-k_0 t} \right] \tag{6}$$

$$Q_0 C(t) = k_s M_0 e^{-k_s t}$$
(7)

$$C(t) = \frac{kM_0}{Q_0} e^{-kst} \tag{8}$$

5) Apply the initial condition for concentration leaving the source zone at time t=0, eqn (2) to the expression for C(t), eqn (8) and solve for the first order decay coefficient,  $k_s$ 

$$C_0 = \frac{k_{\rm a} M_0}{Q_0} \tag{9}$$

$$k_s = \frac{Q_0 C_0}{M_0} \tag{11}$$

**Summary:** The decay coefficient for the source zone in BIOSCREEN is:

$$k_s = \frac{Q_0 C_0}{M_0}$$

The expression for mass at any time  $t \ge 0$  is:

$$M(t) = M_0 e^{-k_s t}$$

Similarly the expression for source zone concentration any time  $t \ge 0$  is:

$$C(t) = C_0 e^{-k_s t}$$

Acknowledgments: Original derivation developed by C. Newell. Detailed derivation developed by Xiaoming Liu, Anthony Holder, and Thomas Reeves.

#### APPENDIX A.4 DISPERSIVITY ESTIMATES

Dispersion refers to the process whereby a plume will spread out in a longitudinal direction (along the direction of groundwater flow), transversely (perpendicular to groundwater flow), and vertically downwards due to mechanical mixing in the aquifer and chemical diffusion. Selection of dispersivity values is a difficult process, given the impracticability of measuring dispersion in the field. However, dispersivity data from over 50 sites has been compiled by Gelhar et al. (1992) (see figures A.1 and A.2, next page).

The empirical data indicates that longitudinal dispersivity, in units of length, is related to scale (distance between source and measurement point; the plume length; Lp in BIOSCREEN). Gelhar et al. 1992) indicate there is a considerable range of dispersivity values at any given scale (on the order of 2 - 3 orders of magnitude), 2) suggest using values at the low end of the range of possible dispersivity values, and 3) caution against using a single relationship between scale and dispersivity to estimate dispersivity. However, most modeling studies do start with such simple relationships, and BIOSCREEN is programmed with some commonly used relationships representative of typical and low-end dispersivities:

· Longitudinal Dispersivity

Alpha x = 3.28 · 0.83 · 
$$\left[\log_{10}\left(\frac{L_{p}}{3.28}\right)\right]^{2.414}$$
 (Xu and Eckstein, 1995)  
( $L_{p}$  in ft)

· Transverse Dispersivity

Alpha y= 0.10 alpha x (Based on high reliability points from Gelhar et al., 1992)

Vertical Dispersivity

Alpha z = very low (i.e.  $1 \times e-99 \text{ ft}$ ) (Based on conservative estimate

Other commonly used relationships include:

Alpha x = 0.1 Lp (Pickens and Grisak, 1981)

Alpha y = 0.33 alpha x (ASTM, 1995) (EPA, 1986)

Alpha z = 0.05 alpha x (ASTM, 1995)

Alpha z = 0.025 alpha x to 0.1 alpha x . (EPA, 1986)

The BIOSCREEN input screen includes Excel formulas to estimate dispersivities from scale. BIOSCREEN uses the Xu and Eckstein (1995) algorithm for estimating longitudinal dispersivities because 1) it provides lower range estimates of dispersivity, especially for large values of Lp, and 2) it was developed after weighting the reliability of the various field data compiled by Gelhar et al.. (1992) (see Figure A.1). BIOSCREEN also employs low-end estimates for transverse and vertical dispersivity estimates (0.10 alpha x and 0, respectively) because: 1) these relationships better fit observed field data reported by Gelhar et al. to have high reliability (see Figure A.2), 2) Gelhar et al. recommend use of values in the lower range of the observed data, and 3) better results were realized when calibrating BIOSCREEN to actual

field sites using lower dispersivities. The user can override these formulas by directly entering dispersivity values in the input screen cell.

Note that the Domenico model and BIOSCREEN are not formulated to simulate the effects of chemical diffusion. Therefore, contaminant transport through very slow hydrogeologic regimes (e.g., clays and slurry walls) should probably not be modeled using BIOSCREEN unless the effects of chemical diffusion are proven to be insignificant. Domenico and Schwartz (1990) indicate that chemical diffusion is small for Peclet numbers (seepage velocity times median pore size divided by the bulk diffusion coefficient) greater than 100.

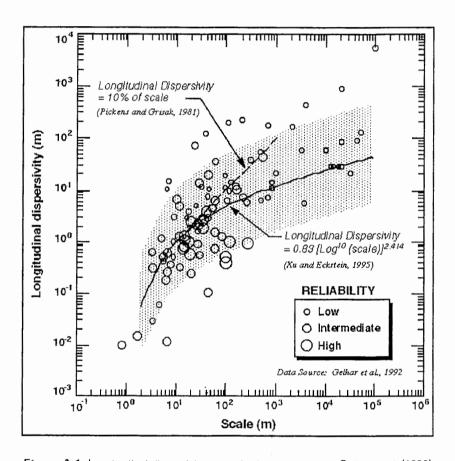
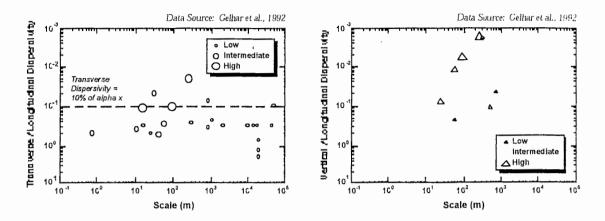


Figure A.1. Longitudinal dispersivity vs. scale data reported by Gelhar et al. (1992). Data includes Gelhar's reanalysis of several dispersivity studies. Size of circle represents general reliability of dispersivity estimates. Location of 10% of scale linear relationship plotted as dashed line (Pickens and Grisak, 1981). Xu and Eckstein's regression (used in BIOSCREEN) shown as solid line. Shaded area defines ± 1 order of magnitude from the Xu and Eckstein regression line and represents general range of acceptable values for dispersivity estimates. Note that BIOSCREEN defines scale as Lp, the plume length or distance to measurement point in ft, and employs the Xu and Eckstein algorithm with a conversion factor (see page 15).



**Figure A.2** Ratio of transverse dispersivity and vertical dispersivity to longitudinal dispersivity data vs. scale reported by Gelhar et al. (1992). Data includes Gelhar's reanalysis of several dispersivity studies. Size of symbol represents general reliability of dispersivity estimates. Location of transverse dispersivity relationship used in BIOSCREEN is plotted as dashed line.

# APPENDIX J SCREEN 2 MODEL RUNS SEAD-25 / SEAD-26

```
*** SCREEN3 MODEL RUN ***

*** VERSION DATED 96043 ***

BASED ON CALCULATED HOT-SPOT "BOX" OF 711 m²

DENECA SEAD-25
```

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	AREA
EMISSION RATE (G/(S-M**2))	=	1.00000
SOURCE HEIGHT (M)	=	.0000
LENGTH OF LARGER SIDE (M)	=	26.6640
LENGTH OF SMALLER SIDE (M)	=	26.6640
RECEPTOR HEIGHT (M)	=	1.7500
TIRBAN/RITRAL OPTION	==	RURAL

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX = .000 M\*\*4/S\*\*3; MOM. FLUX = .000 M\*\*4/S\*\*2.

\*\*\* FULL METEOROLOGY \*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
10.	.2058E+07	5	1.0	1.0	10000.0	.00	45.
100.	.8077E+07	6	1.0	1.0	10000.0	.00	45.
200.	.4539E+07	6	1.0	1.0	10000.0	.00	44.
300.	.2793E+07	6	1.0	1.0	10000.0	.00	45.
400.	.1876E+07	6	1.0	1.0	10000.0	.00	45.
500.	.1347E+07	6	1.0	1.0	10000.0	.00	45.
600.	.1016E+07	6	1.0	1.0	10000.0	.00	38.
700.	.7969E+06	6	1.0	1.0	10000.0	.00	45.
800.	.6513E+06	6	1.0	1.0	10000.0	.00	39.
900.	.5442E+06	6	1.0	1.0	10000.0	.00	32.
1000.	.4629E+06	6	1.0	1.0	10000.0	.00	31.

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 10. M: 68. .9025E+07 6 1.0 1.0 10000.0 .00 45.

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
60.	.8876E+07	6	1.0	1.0	10000.0	.00	45.
70.	.9020E+07	6	1.0	1.0	10000.0	.00	45.
80.	.8836E+07	6	1.0	1.0	10000.0	.00	45.
90.	.8491E+07	6	1.0	1.0	10000.0	.00	45.

CALCULATION	MAX CONC	DIST TO	TERRAIN
PROCEDURE	(UG/M**3)	(M) XAM	HT (M)
SIMPLE TERRAIN	.9025E+07	68.	0.

```
*** SCREEN3 MODEL RUN ***

*** VERSION DATED 96043 ***

BASED ON CALCULATED HOT-SFOT BOX" OF 929 m²

L'NECA SEAD-26
```

#### SIMPLE TERRAIN INPUTS:

SOURCE TYPE AREA EMISSION RATE (G/(S-M\*\*2))1.00000 SOURCE HEIGHT (M) .0000 LENGTH OF LARGER SIDE (M) 30.4800 = LENGTH OF SMALLER SIDE (M) 30.4800 = RECEPTOR HEIGHT (M) 1.7500 URBAN/RURAL OPTION RURAL

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX = .000 M\*\*4/S\*\*3; MOM. FLUX = .000 M\*\*4/S\*\*2.

\*\*\* FULL METEOROLOGY \*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
10.	.2671E+07	5	1.0	1.0	10000.0	.00	45.
100.	.9472E+07	6	1.0	1.0	10000.0	.00	45.
200.	.5496E+07	6	1.0	1.0	10000.0	.00	45.
300.	.3471E+07	6	1.0	1.0	10000.0	.00	45.
400.	.2369E+07	6	1.0	1.0	10000.0	.00	45.
500.	.1718E+07	6	1.0	1.0	10000.0	.00	42.
600.	.1304E+07	6	1.0	1.0	10000.0	.00	44.
700.	.1027E+07	6	1.0	1.0	10000.0	.00	38.
800.	.8417E+06	6	1.0	1.0	10000.0	.00	45.
900.	.7048E+06	6	1.0	1.0	10000.0	.00	37.
1000.	.6003E+06	6	1.0	1.0	10000.0	.00	45.

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 10. M: 70. .1044E+08 6 1.0 1.0 10000.0 .00 45.

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
60.	.1019E+08	6	1.0	1.0	10000.0	.00	45.
70.	.1044E+08	6	1.0	1.0	10000.0	.00	45.
80.	.1028E+08	6	1.0	1.0	10000.0	.00	45.
90.	.9921E+07	6	1.0	1.0	10000.0	.00	45.

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	.1044E+08	70.	0.

### APPENDIX K RESPONSE TO COMMENTS

#### Response to Comments from United States Environmental Protection Agency (US EPA)

## Draft Remedial Investigation (RI) Fire Training and Demonstration Pad (SEAD-25) & Fire Training Pit and Area (SEAD-26) Seneca Army Depot Activity, Romulus, NY

#### Comments Dated March 26, 1998

This is regarding the above referenced document prepared by Parsons Engineering-Science (Parsons ES) for SEDA through the U.S. Army Corps of Engineers New York District and Huntsville Division. While most of the EPA's May 9, 1997 comments were agreed to, a number of agreed-to changes were either not made at all, or not addressed satisfactorily, in the revised report. These are discussed below.

#### **SECTION 3.0**

Comment on Parsons ES's Response 10: It is still inappropriate to construct the 736 foot contour line. There is no basis to determine how far beyond the control point the 736 contour line is extended. This line should be removed from areas where there is no control.

**Response to 10:** Agreed. The 736 foot contour line has been removed from areas where there is no control on Figure 3-6.

Comment on Parsons ES's Response 13: The original response indicated that the request for a hydrogeologic flow section was acknowledged. However, a review of the revised document does not indicate that a hydrogeologic flow section has been completed for either of the sites.

Response to 13: Acknowledged. The hydrogeologic flow section already exists in the text as Section 3.1.6.2 (Groundwater Flow Directions) for the Till/Weathered Shale Aquifer and the Competent Shale Aquifer.

Comment on Parsons ES's Response 22: A review of the text indicates that the text has not been changed as originally requested.

Response to 22: Agreed. The text on page 3-52 para. 2 has been revised to state that monitoring well MW26-1 is located to the east of the site.

Comment on Parsons ES's Response 27: A review of the referenced figure, Figure 3-20, indicates that the requested change has not been made.

**Response to 27:** Agreed. The 744 potentiometric contour line on Figure 3-20 has been changed to pass through monitoring well MW26-10.

Comment on Parsons ES's Response 32: The requested change has not been made as originally requested and indicated in the response.

**Response to 32:** Agreed. Figure 3-24 has been revised to match Figure 3-24.

#### **SECTION 4.0**

Comment on Parsons ES's Response 4: The TAGM value for 1,2-dichloroethene should be used for comparison purposes with 1,2-dichloroethene (trans), as previously requested, since trans and cis commonly are not reported separately and can co-elute.

Response to 4: Acknowledged. As stated in the original EPA Comment #4, there is a TAGM value for 1,2-dichloroethene(trans) of 300 ug/kg. However, studies indicate that cis-1,2-DCE is the primary breakdown product of TCE as a result of the biodegradation process. Parsons ES purposely did not use the referenced TAGM value because it has been shown that over 90% of the DCE produced through the reduction dechlorination process of TCE is cis-1,2-DCE. The TAGM value for 1,2-dichloroethene (trans) will be added to Table 4-7. However, a footnote will also be added stating that this is the TAGM for 1,2-dichloroethene (trans) and that the product reported in the table is most likely the concentration for cis-1,2-DCE.

The USEPA "Symposium on Natural Attenuation of Chlorinated Organics in Ground Water" (EPA/540/R-96/509) was the reference used for this response.

Comment on Parsons ES's Response 13: A review of the text indicates that the text has not been revised as originally requested and indicated in the response.

Response to 13: Disagree. The statement discussing the origin of the inorganics found in the groundwater from Sampling Round 1 was removed from the text on page 4-67, paragraph 1. For this round of comments, the statement has also been removed from the Sampling Round 2 discussion on page 4-67, paragraph 3.

Comment on Parsons ES's Response 14: The text has not been changed, and still indicates that the referenced sample, SW25-6, was not used as a background sample because the contaminants detected were not site-related contaminants. This is not true since the compounds detected were SVOCs and PAHs which are site-related contaminants of concern. The text should be revised as originally requested.

Response to 14: Agreed. The text on page 4-74, paragraph 1, has been revised to state: "Although SW25-6 was intended as the background location at SEAD-25, it was not used because it was found to be impacted by elevated levels of SVOCs, and PAHs, which were detected in the sediment sample at this location. The presence of these constituents are not associated with past site activities but with storm drain discharges."

Comment on Parsons ES's Response 21: Based on a review of the data it does not appear that the requested text has been added as originally requested and indicated in the response to the comment.

Response to 21: Agreed. In response to the initial EPA comment, TPH was added to the list of compounds impacting the site on page 4-85 in the first paragraph of Section 4.1.8. Two sentences were also added relating the soil gas results to the groundwater and soil results on page 4-86. For this round of EPA comments, additional text has been added to summarize the soil gas survey results on page 4-85.

#### **SECTION 5.0**

Significant changes were made to the text, which require the following comments.

GENERAL COMMENT: This modeling effort is based on very limited field data, using data from only a few wells collected at a single point in time to characterize plume fate and transport over a period of 20, 40 or 100 years. Consequently, the limitations on any conclusions drawn from these models must be more clearly stated.

Response to GENERAL COMMENT: A description of the model and model limitations are discussed in the literature in Appendix I. Limitations due to field data will be more clearly discussed in the text. The following paragraph has been added to the Discussion of Model on page 5-45: "BIOSCREEN incorporates a number of simplifying assumptions and was designed primarily as a screening tool. This model was selected to evaluate the effects of natural attenuation on BTEX in groundwater because of the lack of sufficient data to perform more complex modeling efforts. BIOSCREEN is not intended to be a substitute for detailed mathematical models or for

making a final selection of remedial action alternatives. Taking into account these limitations, the model results serve as an initial indicator of the potential for natural attenuation to meet the remedial action objectives established for SEAD-25."

Comment Page 5-45, p4: "Recalcitrant" is not the same as non-degrading. Chloride is not a "recalcitrant" solute.

**Response:** Agreed. This term has been removed from the text.

Comment on Table 5-6: The value used for  $f_{oc}$  appears to be low and consequently provides a low calculated value for the Retardation factor. Please provide the literature source and reason for choosing a low  $f_{oc}$ .

**Response:** The value of  $f_{oc}$  (0.0008) was selected based upon the range of values presented in the BIOSCREEN User's Manual and the till description from SEAD-25 soil boring logs. The till is classified as sand and silty clay till materials. A range of values between 0.0002 and 0.02 was presented in the BIOSCREEN User's Manual. The two sources have been added to the Data Source column in Table 5-6.

Comment Figure 5-1: What is the source of the width and concentration given for the source zones? The information provided in this figure does not match what is presented in the text or figures of actual field data.

**Response:** The source zone widths were determined by measuring the contours of the BTEX isopleths shown in Figure 4-3. The methodology is described in the BIOSCREEN User's Manual. For instance, the width of zone 3 in the model is 64 ft, which corresponds to the width of the 1000 ug/l isopleth.

The source zone concentrations are based on the geometric mean between BTEX concentration isopleth contours as shown in Figure 4-3. These concentrations were adjusted upward to the original source concentrations. Therefore, these numbers are higher than the actual field data concentrations shown in Figure 4-3. This methodology is also presented in the BIOSCREEN User's Manual.

The following footnotes were added to Table 5-6: "Because a decaying source was used, the source concentration on the input screen (representing concentrations 20 years ago) were adjusted so the source concentration on the centerline output screen (representing concentrations now) were equal to 3 mg/L." and

"The source zone widths were determined by measuring the contours of the BTEX isopleths shown in Figure 4-3. Refer to the BIOSCREEN User's Manual for methodology."

#### Comment on Page 5-46, Discussion of Model Results.

First Bullet: To state that the "instantaneous reaction model did not show a good correlation" is misleading, since in fact, the results show no correlation. Further explanation beyond a "probabl(e) overestimat(ion of) the source decay rate" is needed to explain the null result for the instantaneous model.

**Response:** Agreed. The Bullet has been changed to state that the instantaneous model results did not correlate to site data.

**Second Bullet:** This conclusion is not apparent from the text or figures. Figure 5-2 seems to indicate the opposite. The meaning of the statement "This is represented by the upper value shown in the input screen for source half-life of 100 years." is unclear.

**Response:** Agreed. The statement should read ..."decrease"... not "increase." The referenced statement has been removed from the text.

Third Bullet: It is somewhat circular to say that the model indicates a fairly good match with the estimated plume length since the site data was calibrated to fit the first order decay model.

**Response:** Acknowledged. The first order decay model was used as the primary model to try to model the plume. We also tried the instantaneous model to reproduce the plume length and concluded that the first order decay model was a better match.

Fourth Bullet: Please clarify. ("The model results are somewhat conservative estimates." - of what?)

Response: This statement has been expanded to: "The model results are somewhat conservative estimates of solute transport and solute decay rates in the plume.... The Koc value for benzene is lower than either toluene, ethylbenzene, or xylenes and would therefore overestimate the mobility of the other BTEX compounds since theoretically, they have a greater affinity for the organic carbon fraction of the soil. The decay rate or half-life for benzene is greater than the half-lives of the other BTEX compounds and therefore probably over estimates the time for the dissolved BTEX compounds to decay in the aquifer".

**Fifth Bullet:** What is the "actual solute transport" and why would it "lie somewhere between" the first-order reaction model and the instantaneous model since the site data was specifically calibrated to the first-order model, and the instantaneous model gave a null result for reasons that are unknown or were not adequately explained. The results do not appear to support this conclusion.

**Response:** Agreed. The actual solute transport is best represented by the first order decay model as stated in the third bullet, although this model is likely to be conservative because the model does not account for biodegradation of the source. This statement has been revised to the following: "The first-order decay model results are likely to be conservative because the model does not account for decay of the source material and likely biodegradation of the source."

Comment on Page 5-51, para 1: The source for the numbers used, and the reason for their use in this paragraph is unclear. It appears that circular reasoning is being used, since the only mass accurately known is the current mass.

Response: Acknowledged. The paragraph describes the calibration process. The original source mass, shown as 14 kg, was adjusted so that the mass in the source closely matched that observed by the most current sampling data. The following sentence has been added to the beginning of the paragraph to clarify that this is a discussion of the calibration process: "As part of the calibration process, we looked at matching the plume length and mass in the source area with the field data."

Comment on Section 5.4.3 Groundwater Contaminant Transport at SEAD-26: The goals for this modeling effort seem particularly ambitious considering that there is only one field data point with detected VOCs (MW-7) to calibrate the results. The Army could re-evaluate the need to conduct modeling at this SEAD.

**Response:** Agreed. The results of the model are a very preliminary approximation of the effects of natural attenuation on the soluble mass of BTEX in groundwater. However, we feel that the model provides a basis for further discussion of the plume. We realize the limitations of the results as stated in the first sentence of the Discussion of the Model Results.

Comment on Page 5-62: The conclusions stated in this paragraph would seem to result from the initial assumptions and constraints on the model rather than on the characteristics of the site. For example, it is stated that "The 40- and 100-year simulations using the same input parameters indicates that the plume length shows the same decay characteristics [as the 20-year simulation] and that the solute concentrations continue to show non-detectable levels at the nearest

downgradient well." Would it be possible for the 40- and 100-year simulations using the same input parameters to show anything other than the same decay characteristics as the 20-year

simulation? The conclusions should clearly state the limitations of the modeling results caused by

the limited model input data.

In the final sentence, it is stated that the "first-order decay model does not take into account

biodegradation of the soluble mass in soils." This appears to contradict the description of the model on page 5-45, which describes the second of the three model types as "2. Solute transport

with biodegradation modeled as a first-order decay process."

Response: a) Agreed. The limitations of the modeling results due to the lack of site specific data

were stated in the first sentence of the Discussion of Model Results.

b) The first order decay model assumes biodegradation of the dissolved constituents in the plume

and not the soluble mass in the soils (source area). For the first-order decay model, the solute

degradation rate is proportional to the solute concentration. Therefore, theoretically, as the solute

concentration decreases over time (assuming a degrading or finite source term), the degradation

rate should decrease over time. The following phrase has been added to the final sentence: "Although the first-order decay model assumes biodegradation of the dissolved constituents in the

plume, ...".

**SECTION 6.0 and SECTION 7.0** 

Comment on Parsons ES's Response # 2c: No such appendix was located in the revised

Remedial Investigation Report.

Response to #2c:

Agree. Appendix L will be added with toxicity profiles.

Comment on Parsons ES's Response #4e: This discussion should be included in the text.

Response to #4e:

Agree. New text will be added.

Comment on Parsons ES's Response #9: This discussion should be included in the text.

Response to #9:

Agree. New text will be added.

Comment on Parsons ES's Response #11: The text and tables have not been consistently revised to correct the distinction between a 95% UCL concentration (or a 95% confidence interval) and a 95th percentile exposure parameter. See, for example, the text on Page 6-12 and Table 6.3.

**Response to #11:** Agree. The document will be reviewed to make requested corrections.

Comment on Parsons ES's Response #27: The reference or rationale for the "four times the detected value" criteria presented on Page 6-42, 4th Paragraph, third and fourth bullets should be provided. The algorithms are not provided as indicated on Page 6-42, 5th Paragraph. In Table 6.3, Page 4 the data in the "No. of Rejected SQLs" and "No. of Hits" columns appear reversed. Table 6.3 should be checked and corrected as appropriate.

**Response to #27:** Agree. A paragraph will be added that discusses the rationale for the "four times the detected value" criteria. The word "algorithm" on page 6-42 will be changed to "series of steps" to remove confusion. The column headings in Table 6-3 are correct as presented.

Comment on Parsons ES's Response #31: This discussion should be included in the text.

**Response to #31:** Agree. New text will be added.

Comment on Parsons ES's Response #33: The text on Page 6-60 has not been revised.

**Response to #33:** Agree. Text will be revised as requested.

Comment on Parsons ES's Responses #40 through #44 were not provided so the appropriateness of the responses could not be evaluated.

**Response to #40 through #44:** Agree. Responses #40 through #44 were faxed to the USEPA on April 15, 1998. These responses were approved verbally by the USEPA on May 13, 1998. No further changes are required.

Comment on Parsons ES's Response #47: On Page 6-70, the term "exposure interval" is correctly defined as ET x EF x ED, yet the exposure intervals for the resident child and adult (Table 6-5) are based on 365 days/year (versus the assumed 350 days/year exposure) and the exposure interval for the site worker (Table 6-6) is based on 24 hours/day, 365 days/year, 25 years (versus the assumed 8 hours/day, 20 days/year, 25 years exposure). Either the "Exposure Interval" column or the note can be deleted in Table 6-5 and 6-6; they provide redundant and, at the moment, incorrect information. Since the exposure point concentrations in air are dependent on

the exposure interval, separate exposure point concentrations in air should be calculated and presented for both the RME and CT parameters for the site worker, resident child and adult, and construction worker.

Response to #47: Agree. Tables 6-5 and 6-6 will be revised to include calculations of emission rates and air concentrations for each exposure duration corresponding to the RME and CT cases for the resident adult and child, and the site worker (6 different cases and calculations in all). The text will also be modified to reflect this change. The exposure interval, t, used in the model described on page 6-70 should <u>not</u> be defined as ET x EF x ED, and the text will be revised accordingly. Rather, t is the duration of emissions which corresponds with the exposure duration of concern for risk assessment. This distinction is important because passive volatile emissions from the soil surface continue to occur in the absence of an exposed receptor. Therefore, t is correctly defined as the exposure duration of concern, expressed in seconds.

Comment on Parsons ES's Response #51: The body surfaces corresponding to the assumed surface areas for the site worker and construction worker should be provided.

**Response to #51:** Agree. The body surfaces corresponding to the surface areas used in the exposure assessments will be identified in the text.

Comment on Parsons ES's Response # 52: The risk assessment now evaluates the potential for noncarcinogenic health effects for a resident child and a resident adult separately, as appropriate. However, potential carcinogenic risks for a resident adult are still evaluated incorrectly. Such risks should be evaluated based on 6 years at the child's exposure rate and 24 years at the adult's exposure rate, for a total exposure of 30 years prorated over a 70-year lifetime. In Table 6-26 for instance, Adult Intake (Car) is based on the adult exposure rate for 30 years. The "Averaging Time" for Adult (Nc) of 10, 950 days is correct, although it should not be computed as "6 x 365 Child 24 x 365 Adult" as indicated in the notes to the table.

Response to #52: Agree. Carcinogenic risks will be re-calculated based on 6 years of exposure for a child and 24 years of exposure for an adult. In each case, adult and child intakes will be weighted as recommended in RAGS Part B, Section 3.1.2.

Comment on Parsons ES's Response #54: The exposure parameters for both the RME and CT analyses are still not provided consistently. On Page 6-117 for instance, the water ingestion rates for the resident child are not provided.

**Response to #54:** Agree. The requested exposure parameters will be added to the text.

Comment on Parsons ES's Response #55: The USEPA qualification on the dermal exposure methodology has not been provided; the discussion on pages 5-51 and 5-52 of the USEPA' Dermal Exposure Assessment: Principles and Applications should be consulted. The equations for Absorbed Dose and Absorbed Dose per Event have not been corrected for the CW and CF terms.

**Response to #55:** Agree. The USEPA qualification on the dermal exposure methodology will be added to the text and the equations will be corrected.

Comment on Parsons ES's Response #56: It is not clear from the text or the corresponding tables how EPC-Cderm was calculated. In the note on Table 6-38 reference is incorrectly made to Table 6-29. The text should be reviewed for consistency and corrected. For instance, on Page 6-125 it is incorrectly stated that "The same groundwater concentrations that were used in the two previous exposure scenarios were used in this scenario."

Response to #56: Agree. The calculation of EPC-Cderm will be explained in the text and in Tables 6-38 and 6-39. The cross-reference in the footnote will be corrected to Tables 6-40 and 6-41.

Comment on Parsons ES's Response #59: Tables 6-40 and 6-41 still report EPC-Groundwater in mg/l while the model uses concentration in the shower water in ug/l. It is not clear why the "Efficiency of Release" equals 0.00 for a number of chemicals in Tables 6-40 and 6-41. Model input and output should be reviewed and corrected.

**Response to #59:** Agree. The tables will be corrected. The equations in the tables and text will be revised to be consistent with an EPC expressed in mg/l.

Comment on Parsons ES's Response #60: The inhalation rate for the child should be presented and referenced.

Response to #60: Agree.

Comment on Parsons ES's Response #64: The equations have not been corrected to include CF.

**Response to #64:** Agree. The equations for DA will be revised to include the conversion factor (CF).

Comment on Parsons ES's Response #65: The text has not been corrected. On Page 6-121, "Table 5-18" should be corrected to "Table 5-8".

**Response to #65:** Agree. The corrections will be made.

Comment on Parsons ES's Response #66: The USEPA permeability coefficient for water of 1E-03 was not used. The calculations presented in Table 6-45 should be corrected. Use of the permeability coefficient for water as a default for metals without specific permeability coefficients should be indicated on Page 6-132.

Response to #66: Agree. The default permeability coefficient will be used and the appropriate tables corrected.

Comment on Parsons ES's Response #69: The text on Page 6-145, 5th Paragraph has not been revised.

Response to #69: Agree. The paragraph will be revised to include provisional criteria provided by USEPA.

#### Comment on Parsons ES's Response #78:

a. The risk estimates have not been revised to present only one significant figure. See, for example, Table 6-51.

Response to #78 a.: Agree. All risk tables will be revised to express all risk estimates to one significant figure.

b. A consistent presentation of scientific notation is not provided. See, for example, the text on Page 6-158 (where the  $4.7 \times 10^{-10}$  convention is used) and Table 6-51 (where the  $4.7 \times 10^{-10}$  convention is used).

Response to #78 b.: Agree. The text will be amended to discuss the different notations used including an explanation of why the tables use a different form from the text.

d. The text and tables are still misleading. The statements on Page 6-158 that the inhalation pathway (2nd Paragraph) and the dermal exposure pathway (4th Paragraph) ". . . adds no additional risk . . ." is not true. Due to the lack of toxicological criteria, risks from inhalation exposure were not quantified. Due to the lack of chemical-specific dermal

absorption factors, dermal exposure and the risk from dermal exposure were not just quantified. The USEPA's current carcinogen assessment methodology is such that any exposure results in some incremental cancer risk. The 0E+00 entries for Total HQ and Total CR should be deleted from Tables 6-53, 6-54, 6-57 and 6-58. The 0E+00 entries for child hazard index, adult hazard index, and cancer risk should be deleted from Table 6-88.

Response to #78 d.: Agree. Risk tables showing no quantified risks will be deleted. The summary tables will show risks from these pathways as "not quantified" with an explanatory footnote.

g. With the exception of lead, no toxicological information is provided for the other chemicals of concern without toxicity criteria. The list of chemicals on Page 6-206 needs revision.

**Response to #78 g.:** Agree. The list on page 6-206 will be revised. Toxicological profiles will be provided for significant compounds in an appendix.

Comment on Parsons ES's Response #90: The text on Page 6-205, 3rd Paragraph should be corrected.

Response to #90: Agree.

Comment on Parsons ES's Response #91: The 400 mg/kg revised interim soil lead guidance value is not a "clean-up goal"; the USEPA directive should be consulted. Also on Page 6-206, 2nd Paragraph, comparison of surface water and sediment data to NYSDEC ambient water quality criteria and sediment criteria based on the protection of aquatic biota is inappropriate for the evaluation of potential human health risks.

Response to #91: Agree. The phrase "clean-up goal" will be replaced with "residential screening level". The references to aquatic criteria for sediment and NYSDEC ambient water quality criteria will be removed.

Comment on Parsons ES's Response #92: The USEPA guidance should be consulted and the text revised accordingly. The statement that ". . . using oral absorption to estimate dermal absorption . ." indicates a misunderstanding of how dermal exposure is quantified and how toxicity criteria based on oral exposure are adjusted for use in assessing dermal exposure. There is no such term "oral dermal adjustment factors" and no basis for describing them as "conservative". Where available, chemical-specific oral absorption factors reported in the scientific literature were

used to adjust toxicity criteria based on "delivered dose" to "absorbed dose"; in the absence of chemical-specific factors, a non-conservative default factor of 1 was used.

**Response to #92:** Agree. The discussion of the adjustment of oral toxicity factors for use in dermal assessment will be revised.

**Additional comment:** It appears that text should continue past page 7-305, but the document sent to EPA does not include this.

**Response to Additional comment:** Agree. The final pages of Section 7 will be included in the new text.

### Response to Comments New York Department of Environmental Conservation

on

## Draft Remedial Investigation (RI) Fire Training and Demonstration Pad (SEAD-25) & Fire Training Pit and Area (SEAD-26)

#### Seneca Army Depot Activity, Romulus, NY Comments Dated February 9, 1998

Figure 1-9 - General Soil Map: Due to the quality of the reproduction, this figure is nearly illegible.

**Response:** Agreed. Figure 1-9, the soil map, has been reproduced to be more legible.

Figure 1-10 - Surficial Soil Map: Due to the quality of the reproduction, this figure is nearly illegible.

**Response:** Agreed. Figures 1-10 and 1-11, the surficial soil maps, have been reproduced to be more legible.

Section 1.5.4 - Hydrogeology at SEDA: The statement on page 1-36 that data demonstrates a higher amount of precipitation in the spring and relatively lower amounts in the summer is contradicted numerous times throughout the remainder of the text. The following Table 1-3, Figure 1-14, Section 3.1.3, etc..., describe June as the month (and summer as the season) with the highest amounts of precipitation. The discussion in Section 1.5.4 should be changed as necessary.

**Response:** Agreed. The text has been revised on pages 1-35 and 1-36. The reference to decreasing precipitation in the summer has been removed from the last paragraph on page 1-35. On page 1-36, paragraph 1, the text now states that increasing precipitation occurs in the late summer and early fall (August and September).

Section 1.5.5 - Regional Topography: Is it correct that the Depot's land surface generally slopes upwards to the North? Figure 1-6 seems to indicate that the land slopes upwards to the South.

**Response:** Agreed, the text has been revised on page 1-36 (Section 1.5.5) to state that the land slopes upwards to the South.

Section 2.3.7.4 - Groundwater Sampling: The discussion here needs to be updated. Future tense is used when discussing the second round of sampling.

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**Response:** Agreed. The discussion in Section 2.3.7.4 (page 2-52) has been revised and the future tenses removed.

**Section 2.3.8 - Aquifer Testing:** The discussion here needs to be updated. Future tense is used throughout the discussion.

**Response:** Agreed. The disucssion in Section 2.3.8 (page 2-52) has been revised and the future tenses removed.

Figure 4-2 - SEAD-25 Distribution of BTEX in Soils: The data presented needs units of measure.

**Response:** Agreed. The units have been added to the legend on Figure 4-2.

Figure 4-8 - SEAD-26 Total TICs in Surface Soils: The title of this figure should indicate with what analytical parameter these TICs are associated (i.e., SVOCs).

**Response:** Agreed. The title of Figure 4-8 has been revised to SVOC TICs.

Figure 4-12 - SEAD-26 Distribution of TICs in Soil: This figure does not appear to include the data from Figure 4-8 (SEAD-26 Total of All [SVOC] TICs in Surface Soils). The complete data set should be included, or the title of the figure should qualify the information presented. Likewise, Figures 4-10, 4-11, and 4-13 should include surface soil data or the title should qualify the information presented.

Response: Agreed. Figure 4-12 only presents TICs in the subsurface soils and therefore does not include the data from Figure 4-8, which presents surface soil data. The title of Figure 4-12 has been revised to SVOC TICs in Subsurface Soils. Page 4-139, paragraph 2, has been revised to discuss "subsurface" soils. The figures referenced in this paragraph show subsurface soil PAHs (Figure 4-10), TCL SVOCs (Figure 4-11), SVOC TICs (Figure 4-12), and total SVOCs (Figure 4-13). The title of these figures have also been revised to Subsurface Soils.

# Comments for Draft RI for the Fire Training Areas by The United States Environmental Protection Agency (USEPA)

#### **Draft RI for the Fire Training Areas**

#### Section 6.0 and 7.0

#### Comment #1

Because of the volume of comments on 6.0 and the similarity of Sections 6.0 and 7.0, the review of Section 7.0 was cursory; only the site-specific data usage was reviewed in detail. Since the format and methodologies appear consistent between Section 6.0 and 7.0, the specific comments on Section 6.0 generally apply to Section 7.0 and should be corrected as noted in the following comments.

#### Response #1

Agreed. Both Sections 6.0 and 7.0 have been revised in accordance with this set of comments.

#### Comment #2

General Comment: The overall approach and content of the Baseline Risk Assessment was compared to that outlined in the Draft Final Generic Remedial Investigation/Feasibility (RI/FS) Work Plan. To conform to the Work Plan, the following items should be included in the Baseline Risk Assessment:

- a) Evaluation of the potential for inhalation of contaminated respirable particulates by construction workers during intrusive soil activities.
- b) Separate assessments of the potential for adverse, noncarcinogenic health effects in resident children.
- c) "Summary toxicity profiles which summarize pertinent information regarding the chemicals".
- d) "Comparison of exposure concentrations to ARARs" in the Risk Characterization.

#### Response #2

- a) Agreed. This exposure pathway has been included.
- b) Agreed. The Hazard Index for noncancer health effects has been calculated and presented for a future residential child. The Hazard Index has been based upon a 30-year exposure (includes both child and adult exposure periods).
- c) Agreed. Toxicity profiles will be provided in an Appendix to the risk assessment for chemicals that contribute significantly to risk.

d) Disagree. ARARs are appropriately compared with all site chemical measurements in Section 4. Comparison with EPCs in Section 6 is therefore redundant, and unnecessary. In light of this, the ARAR comparison has not been repeated in Section 6.

#### Comment #3

Page 6-3, P1: While not incorrect, on-site surface soil is defined here, and throughout Section 6.0 and Section 7.0 as soil collected from the "0 to 0.5 foot range" or from "0 to 6 inches below grade". However, the Soil Investigation described in Section 2.2.5 indicates that samples "0 to 2 inches below grade for the RI program" or "from 0 to 2 inches below the organic matter" were collected from soil borings at SEAD-25 and SEAD-26 and that "grab samples of surface soils... from 0 to 2 inches below ground surface" were collected at SEAD-26. The text should be revised to better, and more accurately, describe the surface soil and surface/subsurface soil data sets.

#### Response #3.

Disagree. The definition of surface soil as 0 to 6 inches accurately describes the treatment of soil sample data for the risk assessment. Details of the exact depth of each sample can be obtained in earlier sections of this RI.

#### Comment #4

Page 6-3, P1: The text should be revised to include more complete descriptions of the samples included in each data set. Specifically:

- a) Based on the number of surface soil and soil analyses reported in Table 6-3, it appears that data from samples collected to characterize background (i.e., SEAD25-6 and SEAD25-7) were included in the soil data sets.
- b) Information should be provided to account for the 44 groundwater analyses reported in Table 6-3. Based on Section 2.3.7.4 Groundwater Sampling, three monitoring wells were sampled during the ESI and 19 monitoring wells were sampled during the Phase I RI The rationale for combining data from monitoring wells screened in the till/weathered shale and the competent shale should be provided. It also appears that data from samples collected to characterize background (i.e., MW25-1, MW25-6, and MW25-7D) were included in the groundwater data set.
- c) Based on the number of surface water samples reported in Table 6.3, it appears that a duplicate analysis was included as a separate analysis and that samples collected to characterize background were included in the data set.
- d) Based on the number of sediment samples reported in Table 6.3, it appears that two duplicate analyses were included as separate analyses and that samples collected to characterize background were included in the data set.

- e) Since the baseline risk assessment is intended to characterize risks associated with contaminant at or migrating from SEAD-25, surface water and sediment data from upstream locations should be used to distinguish site-related contamination and contamination that could have originated from off-site sources and to select site-related chemicals of potential concern.
- f) A rationale should be provided for the inclusion of data from samples collected to characterize background in the data sets.

#### Response #4

- a) Agreed. Background data have been removed from data sets used to determine EPCs for the risk assessment.
- b) Agreed. A cross-reference to Section 2 has been inserted for details on the sample sets. The following sentence has been added: "Data from the deep (i.e. bedrock) groundwater wells were included with the shallow well data for the risk assessment, since the bedrock wells are no deeper than 15-20 feet from the surface and potentially would be accessible if a drinking water supply well were developed in the future." Background data have been removed from data sets used to determine EPCs for the risk assessment.
- c). Agreed. Background data have been removed from data sets used to determine EPCs for the risk assessment. Results of duplicate analyses have been averaged to yield results for a single sample.
- d). Agreed. Background data have been removed from data sets used to determine EPCs for the risk assessment. Results of duplicate analyses have been averaged to yield results for a single sample that has been included in the estimate of the EPC.
- e) Disagree. Background for drainage ditches throughout SEDA has not been defined. Therefore, to be conservative, all samples found in the drainage ditches have been considered in this risk assessment. It should be noted that the upstream surface water and sediment data for SEAD 25 show similar compounds and concentrations to that at the site. Runoff from non-point sources (e.g.; roadways) are the likely source of conditions in the drainage ditches surrounding SEAD 25.
- f) Agreed. Background data have been removed from data sets used to determine EPCs for the risk assessment.

#### Comment #5

Page 6-5: Toxicity data should be presented in hierarchal order.

Response #5

Agreed.

Comment #6

Page 6-5, P4: " literature-derived calculations..." were not and should not be used in the human health evaluation. The text should be corrected.

Response #6

Agreed. "...literature-derived calculations..." has been replaced with "...EPA Risk Assessment Issue Papers...".

Comment #7

Page 6-7, Sec. 6.2.1.1, P1: "...four sites...." in the last sentence should be corrected as the background data set includes data from "the SEAD-25 RI, 25 ESIs, the Ash Landfill, and the OB Grounds site."

Response #7

Agreed

Comment #8

Page 6-9, P1: While referred to as "replicates", these samples are referred to as "duplicates" in the remainder of Section 6.0. The terminology should be made consistent throughput.

Response #8

Agreed. The word "replicate" in this paragraph has been replaced with "duplicate".

Comment #9

Page 6-9. Section 6.2.2: The results of the split sample analyses are not mentioned in this subsection. A brief discussion of the comparability of the sample data to the split sample data should be presented.

Response #9

Disagree. The results of the split samples analyses have not been provided by the COE laboratory for inclusion in this assessment.

Comment #10

Page 6-11, Sec. 6.2.2.3, P2: As no prior mention is made in Section 6.0, some discussion of Phase I and II samples and results should be provided. The statement regarding "comparison to reference standards" and the term "reference standard" should be clarified. No such comparison is made in Section 6.0.

Response #10

Agreed. A cross-reference to Section 4 for a description of Phase I and Phase II samples has been inserted. The phrases "reference standards" and "reference concentrations" on page 6-11 has been replaced with: "State and Federal groundwater criteria (NYS Class GA and/or federal Maximum Concentration Limits)".

Comment #11

Page 6-11, Sec. 6.2.2.3, P3: There is difference between a 95% upper confidence limit and a 95th percentile value. The USEPA's Supplemental Guidance to RAGS: Calculating the Concentration Term (USEPA, 1992; Publication 9285.7-08I) should be consulted and the text and tables in Section 6.0 should be revised accordingly.

Response #11

Agreed. Page 6-11 has been corrected to use only the 95% upper confidence limit (UCL) of the mean.

Comment #12

Page 6-11, Sec. 6.2.2.3, P3: Clarification should be provided as to how non-detects are treated in each calculation involved with establishing the data sets and estimating the exposure point concentrations. It appears that in selecting chemicals of potential concern non-detects are set equal

to the SQLs, whereas in the derivation of exposure point concentrations non-detects are set equal to one-half of the SQLs.

Response #12

Disagree. Treatment of non-detects as one-half the SQL in calculation of EPCs for the risk assessment is discussed in the first paragraph on page 6-12. Compounds not detected in any sample for a media were eliminated from the risk assessment.

Comment #13

Page 6-12, Sec. 6.2.2.4, P4: The data qualifiers presented are typically used with organic chemical analyses. For completeness, data qualifiers used with the inorganic chemical analyses should also be provided.

Response #13

Disagree. The qualifiers shown on page 6-12 are applied consistently to both organic and inorganic data by the data validators. The 1st sentence of Section 6.2.2.4 has been revised to refer specifically to qualifiers applied by data validators (and not laboratories).

Comment #14

Page 6-13, Sec. 6.2.2.5, P1: Sample handling and sample transportation should be included in the list of possible sources of sample contamination.

Response #14

Agreed.

Comment #15

Page 6-16, Sec. 6.2.3: It appears from the numbers of analyses reported in Table 6-3 that duplicate samples were included in the data sets as separate analyses. Data from duplicate samples should not be treated as separate analyses; data from duplicate samples should be "composited" or averaged. The analyses should be revised accordingly.

Response #15

Agreed. Results of duplicate analyses have been averaged to yield results for a single sample. Table 6-3 and all affected subsequent tables have been revised.

Comment #16

Page 6-26, P1: The discussion of the WRS test should be revised to include (per Gilbert, 1987) that the two data sets need not be drawn from normal distributions and that the test can handle a moderate number of non-detected values by treating them as ties. The methodology for handling ties should also be briefly presented, assuming they were handled as described in Gilbert (1987).

Response #16

Agreed. The points regarding the type of distribution and ties have been added. The method for handling ties recommended by Gilbert (1987) was followed, and this method has been so referenced in the 2nd paragraph on page 6-26.

Comment #17

Page 6-26: The Wilcoxon Rank Sum Test (WRS Test) is employed to compare on-site soil and groundwater data sets to background soil and groundwater data sets. The statistical method is generally appropriate, however the small sample size comprises its results.

Response #17

Agreed. The WRS Test is consistent with recent EPA guidance. The soil background database is comprised of approximately 60 data points. The groundwater database is comprised of approximately 34 data points. This should not compromise the results.

Comment #18

Page 6-27, P1: The text should be revised to indicate that the "four analytes" are in groundwater.

Response #18

Agreed.

Comment #19

Page 6-27, P2: The text should be revised to indicate that the four inorganic analytes (arsenic, cadmium, selenium, and thallium), not "five", "were shown to occur in the SEAD-25 groundwater data set...".

Response #19

Agreed.

Comment #20

Page 6-27: By convention, confidence limits are set at 95%, rather than 97.5%.

Response #20

Agreed. The text will cite only the 95% confidence level.

Comment #21

Figures 6-2 to 6-9: The figures should be revised to include the concentration units.

Response #21

Agreed.

Comment #22

Page 6-37, P1: It is not clear, at this point in the text, what "...among the largest r measurements" means; only later in the text is this term described. The text should be revised accordingly.

Response #22

Agreed. The text has been revised to first define "r".

Comment #23

Page 6-37, P2: "Under normal conditions,..." should be rephrased to avoid confusion with "mormal distribution". It does not seem that "low detection levels" would necessitate the use of "... non-detect values..." in conducting the Quantile test. The text should be revised accordingly.

Response #23

Agreed. "Under normal conditions,..." has been changed to "Typically,...". The phrase "low detection levels and" has been deleted.

Comment #24

Page 6-37: Typo noted: alpha should be .05, not .5.

Response #24

Agreed. Alpha value has been changed from 0.5 to 0.05 in three instances.

Comment #25

Page 6-39, Sec. 6.2.4: USEPA Region II guidance for conducting exposure assessments is to select 90th - 95th percentile exposure parameters for the RME analyses and 50th percentile exposure parameters for the CT analyses, but not vary the exposure point

concentrations in the two analyses. The CT analyses should be revised accordingly.

Response #25

Agreed. All CT analyses and tables have been revised to incorporate the same EPC used in the RME analyses.

Comment #26

Page 6-39, Sec. 6.2.4, P2: The reference "(from Gilbert, 1997)" should be corrected to read "(from Gilbert, 1987)".

Response #26

Agreed. Date has been changed to 1987.

Comment #27

Page 6-39, Sec. 6.2.4, P3: In deriving exposure point concentrations. The underlying distribution of the data for each chemical of potential concern in each data set should be determined statistically and the appropriate equation should be used to calculate the 95% UCL concentration. The USEPA's Supplemental Guidance to RAGS, Calculating the Concentration Term, indicates that it is the USEPA's experience that most large environmental contaminant data sets from soil sampling are lognormally distributed rather than normally distributed and that in most cases it is reasonable to assume that soil sampling data are lognormally distributed. In cases where there is a question about the distribution of the data set, they recommend that a statistical test should be used to identify the best distributional assumption for the data set. The USEPA guidance should be consulted and the analyses should be revised accordingly. Gilbert (1987) should be consulted for the appropriate statistical tests. No basis (e.g., USEPA guidance, statistical validity, etc.) is provided for the use of the "Three RME and CT selection guidelines" or for the statement that these guidelines "... assure the use of conservative (i.e., health-protective) exposure point values...".

Response #27

Agreed. The text has been revised to describe a different method to calculate exposure point concentrations (EPCs) in keeping with USEPA's "Calculating the Concentration Term Guidance". Appropriate statistical tests (i.e., Shapiro-Wilk) have been performed for each chemical in each media-specific data set. These tests have been used to determine if the data distribution is either normal or lognormal. If the data appear to be normally distributed based on these tests, then the 95% UCL of the normal mean has been selected as the EPC. Otherwise, the 95% UCL of the mean based on a lognormal distribution has been calculated (with the H-statistic) and used as the EPC. Frequency of detection is no longer used is a basis to select the EPC.

Comment #28

**Table 6.3:** Aroclor 1232 is incorrectly listed in the table. The table should be revised to list Aroclor 1242. The subheading for "Metals" should be corrected.

Response #28

Agreed.

**Table 6.3:** Maximum values are used as the exposure point concentration. This practice is inappropriate when the 95% UCL is lower than the maximum recorded value, as is the case in this data set.

Response #29

Agreed. Maximum values will no longer be selected as EPCs. See response to Comment #27.

Comment #30

Page 6-56, Sec. 6.3.3.1: Consideration should be given to evaluating exposure of site maintenance workers to contaminants on respirable particulates made airborne during the "regular mowing of the area" indicated on Page 6-54.

Response #30

Agreed. Exposure of Site Maintenance Workers to contaminants on respirable particulates has been calculated and assessed.

Comment #31

Page 6-56, Sec. 6.3.3.2: Acknowledgement should be made of the potential for off-site populations to be exposed to contaminants in groundwater in the future.

Response #31

Disagree. Groundwater is migrating toward the southwest, away from the nearest site boundary. Current plume information, and the long distance to the southwest boundary of the site (over 2 miles away) indicate that offsite migration of contaminants is highly unlikely.

Comment #32

Page 6-57, P4: The text should be revised to clarify the phrase "intended current land use scenario".

Response #32

Agreed. The phrase has been changed to "anticipated future land use".

Comment #33

Page 6-58, top: The term "ideal scenarios" is inappropriate and should be reworded.

Response #33

Agreed. The phrase "ideal scenarios" has been changed to "representative scenarios."

Comment #34

Page 6-58, P1: This text is redundant and somewhat inconsistent with earlier presentations. In general, redundant text should be eliminated so as to not burden the reader and to avoid inconsistencies in presentation.

Response #34

Agreed. The text on pages 6-50 and 6-58 has been revised to remove redundancy and inconsistency.

Comment #35

Page 6-58, Sec. 6.3.4.2.1, P1: The text regarding groundwater transport modeling should be revised to include reference to this analysis in the RI Report and to indicate that the results were used only in the discussion of fate and transport mechanisms.

Response #35

Agreed. The following text has been added to the paragraph in Section 6.3.4.2.1:

"Groundwater modeling is discussed in Section 5. It should be noted that modeling results were not used as the basis for this risk assessment. This risk assessment used only direct on-site measurements to estimate exposure concentrations".

#### Comment #36

### Page 6-60, Sec. 6.3.4.5: Comments on the Integration of Exposure Pathways include:

- a) Both surface and subsurface soil data should be used to evaluate exposure to soil in the future, residential land use scenario as construction, utility repairs, and yardwork could easily bring contaminants detected in deeper soil to the surface. About 75% of the samples were collected at depths of less than or equal to 4 feet and the deepest samples were collected at a depth of 8 feet (i.e., the approximate depth of a basement).
- b) As mentioned previously, consideration should be given to evaluating exposure of site maintenance workers to contaminants on respirable particulates made airborne during the "regular mowing of the area".
- c) Consideration should be given to eliminating surface water ingestion as a pathway of concern as such exposure, during wading activities, seems unlikely.
- d) Consideration should also be given to evaluating the surface water and sediment pathways for an older child or adolescent rather than for the resident child/adult as it seems that these age groups might be more prone to wading acitivities.
- e) For the construction worker, potential exposure to VOCs passively released to the ambient air from soil is not as relevant as VOC release during activities, like digging an excavation, that may enhance VOC release.
- f) Construction workers also have the potential to be exposed to contaminants on respirable particulates made airborne during activities like diggin and excavation. Construction worker exposure to VOCs and contaminated respirable particulates during intrusive activities in the soil should be evaluated.

#### Response #36

a) Disagree. The current assessment includes the most plausible types of residential exposure to surface soil. The type of construction and utility repair activities mentioned in the comment which would penetrate subsurface soils would be performed by a construction worker, and are adequately represented by the construction worker scenario in this risk assessment.

- b) Agreed. See response to Comment No. 29.
- c) Agreed. The surface water ingestion pathway has been eliminated.
- d) Disagree. The child and child/adult analysis covers the possible range of exposures. Noncancer risks for the child have been calculated and presented separately from the child/adult, as requested in an earlier comment. This should provide a reasonable and adequate assessment to protect future residents of all ages from exposures via this pathway.
- e) Agreed. Potential VOC emissions and worker exposures during construction has been modeled and assessed.
- f) Agreed. Potential particulate emissions and worker exposures during construction has been modeled and assessed.

Page 6-62, P1: The belief that biotic intake pathways, such as the ingestion of garden vegetables, ".. would represent a minor incremental increase in uptake..." is unsupported. The text should be revised accordingly.

#### Response #37

Agreed. The 1st paragraph on page 6-62 has been revised as follows:

Cattle are not presently nor are they anticipated to be raised on SEAD 25 land. Therefore, consideration of exposures from ingestion of beef at the site is not appropriate. Similarly, there are no fish in the intermittent surface water at the site. Therefore, ingestion of fish from SEAD 25 is not plausible. The soil at the Fire Demonstration Pad where chemicals were found is extremely gravelly and could not be used to grow vegetables. Therefore, ingestion of garden vegetables grown in this soil is not an exposure pathway of concern.

#### Comment #38

Page 6-62, Sec. 6.3.4.6: The text (here and throughout Section 6.0) should be revised to correct for the distinction between an exposure pathway (e.g., groundwater) and an exposure route (e.g., ingestion).

#### Response #38

Agreed.

#### Comment #39

Page 6-63, Sec. 6.3.4.6.5, P1: Metals should be added to the list of chemical types detected in soil. For the on-site construction worker, the phrase "will come into contact with" should be changed to "could come in contact with".

#### Response #39

Agreed.

#### Comment #40

Page 6-65, P2: The statement that "Short-term (i.e., subchronic) and acute exposures were not evaluated" is incorrect as the exposure

#### Response #45

Agreed. The text has been changed to explain the location of receptors and identify that the nearest receptor is conservatively located within the emission area.

#### Comment #46

Page 6-69, Sec. 6.3.5.1.2, P1: "Current off-site" use was not considered in this anlysis. The text or the analysis should be revised accordingly.

#### Response #46

Agreed. The phrase "off-site" has been removed from the first sentence of Section 6.3.5.1.2 on page 6-69.

#### Comment #47

Page 6-69, Sec. 6.3.4.1.2, P2: The text should be revised to:

- indicate that an inhalation rate of 20 m³/day is appropriate for a construction worker since it corresponds to 2.5 m³/hour over an 8-hour workday;
- indicate that 234 days is the EF for the construction worker in the CT analysis, and
- describe the 9-year ED and 5-year ED in the CT analysis.

#### Response #47

Agreed. Paragraph 2 on page 6-69 has been revised to clarify which values of EF and ED were used for each receptor, and to include the 2.5 m³/hr inhalation rate for site workers and construction workers, based on an 8-hour work day.

#### Comment #48

**Table 6-5:** All parameters (e.g., H,  $K_d$ ,  $K_{oc}$ ) used to derive the ambient air concentrations should be provided so the reader can work through the calculations. One method of data presentation (e.g., scientific notation) should be selected and used consistently. The values for  $E_i$ /area appear incorrect; the calculations should be checked and the values revised accordingly.

#### Response #48

Agreed. Physical property data have been included in Table 5-2. A sentence has been added to this effect. Calculations and formatting have been checked and corrected.

#### Comment #49

**Table 6-7:** The text indicates that chemicals of potential concern without toxicological criteria were not carried through the quantitative risk assessment, yet such chemicals appear in this table and others throughout Section 6.0. The text or the tables should be revised accordingly.

#### Response #49

Agreed. Provisional toxicological criteria have been inserted for chemicals where appropriate. Remaining chemicals without criteria will be deleted from tables. Tables have been footnoted to indicate that some chemicals shown do not have toxicological criteria relevant to the exposure route.

**Tables 6-7 to 6-12:** The values for Intake (Nc) and Intake (Car) appear incorrect. The unit conversion and/or the calculations should be checked and the values revised accordingly.

Response #50

Agreed. The unit conversion error in Tables 6-7 to 6-12 has been corrected.

Comment #51

Page 6-85, Sec. 6.3.5.3: Much of the methodology for assessing dermal exposure to soil is discussed in the corresponding section for sediment that appears later in the text. The methodology should be fully described here, the first time it is presented. The text should be revised to consistently include all parameters for both the RME and CT analyses and descriptions of each parameter. Assigning chemicals without credible ABSs for exposure to soil and ABS of 0% is misleading. It should be stated that USEPA Region II recommends quantifying dermal cadmium, arsenic, PCBs, dioxinx/furans exposure for pentachorophenol (others are under development) only since credible values are not available for the other chemicals of concern. The text and tables should be revised accordingly. Rather than assigning a value of 0% ABS, these chemicals should be evaluated qualitatively in the uncertainty section.

Response #51

Agreed. The dermal assessment methodology discussion has been moved to page 6-85 and later redundancy has been removed, with proper cross-referencing. Text regarding ABS values and Region 2 policy has been revised. Tables have been revised to include only the chemicals recommended by Region 2.

Comment #52

**Page 6-85:** When combining childhood and adult risk estimates a composite 30 year duration (i.e., 6 childhood and 24 adult) should be used rather than individual 6 year (childhood) and 30 year (adult) durations.

Response #52

Agreed. A 6-year child and 30-year total adult/child exposure have been assessed for each pathway.

Comment #53

Page 6-93, Sec. 6.3.5.4.1: The statement that "Antimony, arsenic, cadmium, selenium, and thallium were found to be above background" contradicts the text in Section 6.2.3. The text should be revised accordingly.

Response #53

Agreed. This text has been deleted.

Comment #54

Page 6-93, Sec. 6.3.5.4.2, P2: While the USEPA only recommends that 6-year and 24-year exposure rates be used in estimating soil exposure and the associated cancer risks for an adult residing at a site for 30 years, using this approach consistently throughout the exposure assessment is acceptable. The text should be revised to consistently include all

parameters for both the RME and CT analyses and descriptions of each parameter.

Response #54

Agreed.

Comment #55

Page 6-96, Sec. 6.3.5.5.2: Much of the methodology for assessing dermal exposure to water is discussed in the corresponding section for surface water that appears later in the text. The methodology should be fully described here, the first time it is presented. The text should be revised to include the qualifications on the use of this approach by the USEPA in their Dermal Exposure Assessment: Principles and Applications (USEPA, 1992, EPA/600/8-91/011B). CW and CF are not needed in the equation for absorbed dose and the supporting text. Both parameters should appear in the equation for DA and the supporting text. The units (e.g., hours/day, events/day, etc.) should be checked and revised accordingly so they properly cancel in each equation.

Response #55

Agreed. The complete dermal assessment methodology discussion has been moved to page 6-96 and later redundancy has been removed, with proper cross-referencing.

Comment #56

**Tables 6-27 and 6-28:** The values for absorbed dose/event appear incorrect; the calculations should be checked and the values revised accordingly. The units for absorbed dose/event should be revised to  $mg/cm^2$ -event. The Permeability Coefficient appears as  $K_p$  in the text; the text or table should be revised accordingly. The parameter "B" does not appear to have been used in the calculations and should be deleted.

Response #56

Agreed. All requested changes have been made to Tables 6-27 and 6-28. Calculation and unit conversion errors have been corrected in these Tables.

Comment #57

**Page 6-100, Sec. 6.3.5.6.1, P2:** The equation for  $C_{inf}$  should be revised to indicate that  $[(E)(F_w)(Ct/1000)]$  is divided by  $F_a$ . The description of  $F_w$  should be revised to include the CT value of 8 L/min.

Response #57

Agreed. The equation for  $C_{inf}$  and the description of  $F_{w}$  have been corrected as requested.

Comment #58

**Tables 6-27 - 6-30:** Dermal and inhalation pathways for water-borne contaminants are evaluated concurrently. Such an evaluation dictates the need to apportion the COCs between the water and vapor phases so as to avoid double counting.

Response #58

Agreed. Partitioning of chemicals between air and water has been calculated and the appropriate water concentrations have been used to calculate inhalation and dermal exposures without double counting. Tables 6-27 through 6-30 have been revised accordingly.

**Table 6-29 - 6-30:** The values for EPC-Air are incorrect since EPC-Groundwater was input in mg/L rather than the ug/L called for in the shower model. The columns for Efficiency of Release should be revised so that values do not appear as 0.00.

Response #59

Agreed. Tables 6-29 and 6-30 have been corrected as requested.

Comment #60

**Page 6-106, P1:** The USEPA guidance in RAGS (USEPA, 1989, EPA/540/1-89/002) recommends 20 m<sup>3</sup>/day (or 0.83 m<sup>3</sup>/hour) as the average inhalation rate for adults. The analyses should be revised accordingly.

Response #60

Agreed. The 1st sentence on page 6-106 has been changed to cite an inhalation rate of 0.83 m3/hr and the calculations in Tables 6-31 and 6-32 have been changed accordingly.

Comment #61

Page 6-106, Sec. 6.3.5.7.1: The statement (here and throughout Sec. 6.3.5) that "...current concentrations are likely to be reduced over time" should be revised or eliminated since, in the absence of remedial action, concentrations might not be reduced until the source is depleted.

Response #61

Agreed. This statement has been deleted.

Comment #62

Page 6-106, Sec. 6.3.5.7.2: The text should be revised to include descriptions of the exposure parameters used in the analyses.

Response #62

This exposure pathway, ingestion of surface water, has been deleted as requested (see Comment #36).

Comment #63

Page 6-107, Sec. 6.3.5.8.2, P1: As mentioned previously, consideration should be given to eliminating surface water ingestion as a pathway of concern as such exposure, during wading activities, seems unlikely. "The quantitative assessment of this exposure pathway..." does not include current uses. The text should be revised accordingly. CF is not needed in the equation for absorbed dose and the supporting text. The text should be revised to include both the bases and descriptions of the exposure parameters used in the analyses.

Response #63

The recommended corrections have been made. "Current use" and "CF" have been deleted from the text and equation.

The exposure parameter values used are already described in this section on pages 6-111 and 6-114.

Comment #64

Page 6-110: There is no need to include the equation for  $DA_{event}$  twice; the text should be revised accordingly. The parameter "tau" does not appear in the equation for  $DA_{event}$  in the USEPA's Dermal Exposure Assessment: Principles and Applications. The reason for its inclusion here should be presented or the text, equation, nad analyses should be revised accordingly. Values of the parameter "B" and "tau" are from

Table 5-8 of the USEPA guidance; the text should be revised accordingly. CF should appear in the equations for DA and DA<sub>event</sub> and the supporting text in order for the units to properly cancel.

Response #64

Agreed. The text on pages 6-110 and 6-111 has been revised as requested.

Comment #65

Page 6-110, P3: The text should be revised to read, "...if the exposure time per event (ET) is less than the breakthrough time..."

Response #65

Agreed. The word "than" has been inserted in the sentence.

Comment #66

**Page 6-114, P1:** The USEPA in their Dermal Exposure Assessment: Principles and Applications recommends using a  $K_p$  of 1E-03 as the default for water. The text and analyses should be revised accordingly.

Response #66

Agreed. Kp = 1E-03 has been used as the default value.

Comment #67

**Page 6-114, Sec. 6.3.5.9:** It is not clear what is meant by the phrases "...apparent lack of sediment, ..." and "The sediment points on and around SEAD-25 are seasonal...". The text should be revised accordingly.

Response #67

Agreed. This text has been deleted. This paragraph has been replaced with the following:

The ingestion of on-site sediment is limited to a future resident, since current land use precludes public contact with sediment. Ingestion of sediment is assumed to occur when the drainage ditches are dry, when the sediment could potentially be ingested by children in the same manner as soil. This pathway is assumed to have the same exposure frequency (EF) and exposure duration (ED) used for the surface water pathway, since ingestion of dry sediment is expected to be about as infrequent as wading in the wet drainage ditches.

Comment #68

Page 6-115, Sec. 6.3.5.9.2: The units for IR should be revised to read "(mg sediment/day)". The text should be revised to include descriptions of the exposure parameters used in the analyses.

Response #68

Agreed. Units for IR have been corrected to "mg sediment/day". The following paragraph has been added to Section 6.3.5.9.2:

The values for parameters EF, ED, BW, and AT for both the RME and CT are the same as those used for the surface water exposure pathway. The values used for the sediment ingestion rate (IR) are the same as the EPA default values for residential soil ingestion. For the RME, IR =  $200 \, \text{mg/day}$  for the child and  $100 \, \text{mg/day}$  for an adult. For the CT, IR =  $100 \, \text{mg/day}$  for the child and  $50 \, \text{mg/day}$  for an adult.

Page 6-121, Sec. 6.4: The toxicological criteria should be updated to reflect provisional criteria provided in the USEPA's Health Effects Assessment Summary Tables FY-1995 Annual (USEPA, 1995, EPA 540/R-95-036) and FY-1995 Supplement (USEPA, 1995, EPA/540/R-95/142). As discussed in the Draft Generic RI/FS Work Plan, the USEPA's Superfund Health Risk Technical Support Center should be contracted for provisional criteria for chemicals of concern without toxicological criteria in IRIS or HEAST. Table 6-41 (not Table 6-29 as indicated in P2) and all risk estimates should be revised accordingly.

Response #69

Agreed. Provisional criteria have been obtained from the Superfund Technical Support Center. These and the 1995 HEAST Tables have been reviewed to update Table 6-41 and all risk tables.

Comment #70

Page 6-123, Sec. 6.4.1.2: The USEPA's guidance in RAGS recommends multiplying, not dividing, oral RfDs by oral absorption efficiencies for use in characterizing risks from dermal exposure. The text and all risk estimates should be revised accordingly.

Response #70

Agreed. The oral to dermal RfD conversion error has been corrected in Table 6-41, and all related risk calculations have been corrected.

Comment #71

Page 6-124: There is no reason to assume 100% absorption for the metals not listed here. Besides Owen (1990), there are other readily available literature sources that should be consulted for oral absorption efficiencies, including the ATSDR Toxicity Profiles and Carsons et al's Toxicology and Biological Monitoring of Metals in Humans (Carson, B.L., H.V. Ellis, III and J.L. McCann, 1986, Lewis Publishers, Inc.). The list and the appropriate analyses should be revised accordingly.

Response #71

Agreed. The ATSDR Toxicity Profiles have been reviewed and have been used to update the oral absorption factors. A more appropriate and conservative absorption factor than 1.0 has been assumed for compounds where direct absorption factors are not available.

Comment #72

**Pgae 124:** The discussion regarding the adjustment of oral toxicity factors for dermal exposure is incorrect. Assuming 100% oral absorption when adjusting a toxicity factor to account for the difference between administered and absorbed dose serves to underestimate risk rather than overestimate it. Consequently, many of the adjusted dermal RfDs and Slope Factors in Table 6-41 are calculated incorrectly. This error is most apparent for cadmium.

Response #72

Agreed. The paragraph in question on page 6-124 has been deleted and replaced with a description of more appropriate assumed absorption factors. Table 6-41 and all related risk calculations have been corrected.

Page 6-124, Sec. 6.4.1.3: The text should be revised to include a statement that chronic RfDs and RfCs were used to characterize risks associated with less than chronic exposures.

Response #73

Agreed. The following sentence has been added to the paragraph in Section 6.4.1.3: "For children and construction workers, chronic RfDs and RfCs were used to conservatively assess risks for shorter exposure periods."

Comment #74

Page 6-127, P1: It is unnecessarily conservative to assume that all chromium detected in site samples is the hexavalent species. Consideration should be given to characterizing chromium risks based on the toxicological criteria for trivalent chromium or to assuming that only a percentage of the total chromium is present as the hexavalent species. The USEPA regards all Aroclor mixtures as Group B probable human carcinogens. The text should be revised accordingly.

Response #74

Aroclor-1242 has been added to the list under Group B on page 6-127. Assuming that all chromium is hexavalent does not influence overall risks at this site.

Comment #75

Table 6-41: The toxicological criteria listed in the table should be checked against the most recent IRIS entries and the 1995 HEAST and revised accordingly. The table should be revised to include provisional criteria provided by the Superfund Health Risk Technical Support Center. A few apparent errors (e.g., the inhalation RfD listed for 1,4-dichlorobenzene is the RfC) were noted that should be corrected. As there are two oral RfDs for cadmium, one for water exposure and one for food exposure, both RfDs should be listed and used to characterize risks associated with exposure to the respective media. The values for Dermal RfD and Carc. Slope Dermal should be revised as indicated in other comments.

Response #75

Agreed. Table 6-41 has been revised to include the most recent and correct toxicological criteria, including the correct RfD for 1,4-dichlorobenzene.

Comment #76

Page 6-131, P2: Relative potencies of 0.01 and 0.001 are recommended for benzo[k]fluoranthene and chrysene, respectively, in the USEPA's Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons (USEPA, 1993, EPA/600/R-93/089). The text, the slope factors in Table 6-41, and all corresponding analyses should be revised accordingly.

Response #76

Agreed. The relative potencies for benzo(k)fluoranthene and chrysene have been changed as requested.

Comment #77

Page 6-131, Sec. 6.4.2.2: The USEPA's guidance RAGS recommends dividing, not multiplying, oral slope factors by oral absorption

efficiencies for use in characterizing risks from dermal exposure. The text and all risk estimates should be revised accordingly.

Response #77

Agreed. The text and risk estimates have been corrected as requested.

Comment #78

Page 6-132, Sec. 6.5: Comments on the Risk Characterization include:

- a) Risk estimates should be corrected to one significant figure as more than one significant figure implies a precision that is not possible with the current risk assessment methodologies.
- b) One convention for reporting risk estimates in scientific notation (i.e., 4E-04) should be used. The text or the tables should be revised accordingly. It might help the reader to indicate, for instance, that 4E-04 means either 0.0004 (as a hazard index) or 4 in 10,000 (as an estimated cancer risk).
- c) If the hazard indices or estimated cancer risks are less than or within the USEPA's risk criteria, there is no need to single out which exposure pathways, exposure routes, or chemicals of potential concern are the predominant contributors to the risk estimates. Doing so only brings undo attention to results that are of little significance.
- d) Stating that the risks from dermal exposure to soil or sediment are "zero" or 0.0E+00 is incorrect as absorbed dose was not quantified for most chemicals of potential concern. The text and the corresponding tables should be revised accordingly, if not eliminated altogether.
- e) The presentation of RME and CT risks is inconsistent, as quite often the CT risks are not presented. Similarly, the presentation of medium-specific risks is inconsistent as not all medium-specific risks are presented.
- f) Consistent terminology should be used throughout (e.g., USEPA-defined target range vs. USEPA target range).
- g) The potential for adverse health effects should be addressed qualitatively for all chemicals of concern without at least one toxicological criterion (i.e., an oral RfD, RfC, oral slope factor, or inhalation unit risk). Such a risk characterization could be in the form of a brief toxicological profile and a brief discussion of the extent and magnitude of site-related contamination for each chemical.

Response #78

a) Agreed. All cancer and noncancer risk estimates have been presented to one significant figure in scientific notation.

- b) Agreed. See response to part (a).
- c) Agreed. Where appropriate, text discussing low risk exposures has been deleted.
- d) Agreed. The tables and text have been corrected as requested.
- e) Acknowledged. The revised text will be more consistent, with emphasis only on pathways, routes and chemicals which contribute significantly to potential risk.
- f) Agreed. "USEPA target range" has been used throughout the risk characterization.
- g) Disagree. The group of compounds with no toxicological criteria, after inclusion of provisional criteria, are already discussed in the Uncertainty section (Section 6.5.5.3).

Comment #79 Page 6-134, P3: A reference should be provided for the "National Contingency Plan".

**Response #79** Agreed. The regulatory citation for the Code of Federal Regulations has been added.

Comment #80 Page 6-134, Sec. 6.5.1.3: Since concentrations of TICs are unsupported best-guesses, qualifiers such as "fairly low" and other concentration-related statements should be removed from the text.

Response #80 Agreed. All references to TIC concentrations have been deleted. Two sentences which specify numeric concentrations in soil boring and groundwater samples have been deleted in their entirety.

Comment #81 Page 6-150, P2: "Noncarcinogenic exposures for the Central Tendency scenario" were not "a full order of magnitude lower than the RME scenario". If that was the case, the CT hazard index would have to be 0.31. The text should be revised accordingly.

Response #81 Agreed. The "order of magnitude" language has been revised.

Comment #82 Page 6-166, P4: The chemical-specific hazard indices presented only account for about one-half the RME total hazard index. The text should be revised to include a more complete accounting, if possible.

Response #82 Agreed. All risk estimates will change following revisions of tables and calculations. An appropriate complete accounting of chemical-specific risks has been included in this section in the revised text.

Comment #83 Page 6-167, P1: The total RME pathway risk is 1.8E-06. The text should be revised accordingly.

Response #83 Acknowledged. Risk estimates and text have been changed since the

calculations have been revised.

Comment #84 Page 6-167, P4: The total pathway risk presented is for the CT scenario,

not the RME scenario. The text should be revised accordingly.

Response #84 Acknowledged. Risk estimates and text have been changed since the

calculations have been revised.

Comment #85 Page 6-167, P5: The text should be revised to indicate that the CT risks

were within the "USEPA target range".

Response #85 Acknowledged. Risk estimates and text have been changed since the

calculations have been revised.

Comment #86 Tables 6-70 and 6-71: The tables were not included in the copy of the

draft RI Report.

**Response #86** Acknowledged. Tables have been included in the revised report.

Comment #87 Page 6-179, Sec. 6.5.4.2, P5: A total RME cancer risk below the

USEPA target range should not be regarded as "elevated". The text

should be revised accordingly.

Response #87 Acknowledged. Risk estimates and text have been changed since the

calculations have been revised.

Comment #88 Page 6-182, Sec. 6.5.5.2: There is a certain "double-counting" when

estimating exposure to VOCs in groundwater from both inhalation and dermal contact as VOCs released into the air should not be available for dermal contact. In the inhalation of ambient air analyses, use of maximum 1-hour average concentrations to assess long-term exposure is very conservative. The text should be revised to indicate these

exposures may be overestimated.

**Response #88** Agreed. Double-counting of VOCs in showering exposure routes has been

corrected. The following sentence has been added to the 4th paragraph on page 6-182 after the 2nd sentence: "Use of maximum 1-hour average ambient air concentrations to assess long-term inhalation exposure is

conservative (i.e., tends to overestimate risk)."

Comment #89 Page 6-182, Sec. 6.5.5.2, P4: It does not appear, based on the earlier

text, that "several sources were checked" regarding soil absorption factors. It appears that only the USEPA's Dermal Exposure Assessment: Principles and applications was consulted. The text should

be revised accordingly.

**Response** #89 The sentence in question has been deleted.

Page 6-183, P1: Site-specific exposure frequencies that reflect seasonal conditions could have been used in the CT analysis. The CT analysis should be used to examine the sensitivity of the risk estimates to such parameters.

Response #90

Acknowledged.

Comment #91

Page 6-184: The USEPA soil lead guidance cited is outdated. The USEPA's Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities (USEPA, 1994, EPA/540/F-94/043) should be consulted and the text revised accordingly. The current screening level for lead in residential soils is 400 ppm.

Response #91

Agreed. The cleanup goal has been changed to 400 ppm and the EPA guidance document has been referenced.

Comment #92

Page 6-184, P3: The statement that "Oral toxicity values were used without adjustment to calculate risks from dermal exposure..." is incorrect. The statement that "...carcinogenic risks from dermal exposure to PAH's were summed separately from other compounds" is incorrect as no such analysis was presented. The text should be revised accordingly.

Response #92

Agreed. The 3rd paragraph on page 6-184, 2nd sentence has been revised to reflect new oral-dermal adjustment factors and/or assumptions included in the revised risk analysis. The last sentence of this paragraph has been deleted.

Comment #93

Page 6-185, Sec. 6.5.5.5: As conducted, EPCs were also varied in the CT analysis. The text should be revised accordingly.

Response #93

In the revised calculations, the same EPCs have been used for both the RME and CT analyses, as requested in EPA's earlier comment.

Comment #94

Appendix E: The curves generated by Aquetsolv should be provided in the appendix for review to check the portion of the data was used for the calculations.

Response #94

Agreed. The Aquetsolv curves have been included in Appendix E.

Comment #95

Appendix F: Curves should be presented for the data presented in this Appendix.

Response #95

Agreed. The vertical connection test curves have been included in Appendix F.

Comment #96

Appendix I (ODAST Model): This model should be referred to in the text if it is being used to support the analysis. The equations given in the

text do not correspond to the equations given in the appendix. The output graphs given in the appendix also seem to bear no relation to the information given in the text. The concentration input for BTEX at SEAD-25 given in the Appendix (3.04 mg/l) corresponds to Figure 4-3 but does not correspond to Table 5-6. (See also Model Output comment). As it stands, the information given in the appendix and the text is insufficient to determine if the model results are credible.

It is unclear what simplifications were made to the model for its application to SEAD-26. These should be more clearly stated.

The validity of the modeling effort for predicting the change in concentration with time is questionable since only one true data point is available for each site. For SEAD-25, the concentration versus time graph is generated from this single data point and an initial condition based on the results of a previous model run, and cannot be considered reliable. For SEAD-26 the prediction is based solely on an initial concentration in one well and cannot be considered reliable.

#### Response #96

Acknowledged. Please see Section 5.0 Response #34.

#### **RCRA Programs Branch**

#### Comment #1

In SEAD 25, justify the assumption that natural attenuation of benzene, ethylbenzene, and total xylenes will occur in about 40 years in soil of SEAD-25. How do you demonstrate that VOCs are not migrating to an appreciable extent from soil to groundwater?

The fugacity and groundwater modeling systems should be described in detail.

#### Response #1

Acknowledged. Please see Section 5.0 Response #34.

#### Comment #2

It is anticipated that the following ARARs will be applicable during the remedial activities.

- 40 CFR Part 261 Identification and listing of hazardous waste;
- 40 CFR Part 262 Standards Applicable to Generators of Hazardous Waste;
- 40 CFR Part 264 Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities; and
- 40 CFR Part 265 Groundwater Monitoring
- 40 CFR Part 268 Land Disposal Restrictions.

#### Response #2

Agreed. The Project Scoping Plan (July 1995) presents a preliminary list of ARARs and "to be considered" (TBC) in accordance with 40 CFR Part 300. The Feasibility Study (FS) presents a comprehensive list of chemical-specific, action-specific, and location-specific ARARs. The

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above-mentioned ARARs are identified as action-specific ARARs that must be met as part of the remedial action objectives.

#### Comments for

#### Draft RI for the Fire Training Areas

### by The New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH)

#### **Draft RI for the Fire Training Areas**

#### Comment #1

The report is well over 1,000 pages long, not counting the appendices. We realize this report contains the results of the remedial investigation for two separate sites, but many sections are duplicated and repeated verbatim in the separate discussions of SEADs 25 and 26. Wherever possible the consultant should consolidate these common items in future documents in order to facilitate their timely review. The consultant should also consider that this document will ultimately be part of the public record for the Seneca Army Depot Activity and as such must be manageable with regards to review by the public.

#### Response #1

Agreed. Any suggestions to eliminate, consolidate or reduce the size of the document is appreciated. We recognize that this is a large volume of technical information, however, it does represent the environmental conditions at two (2) independent sites.

#### Comment #2

The RI report should include a remedial action objective for each of these two sites. Without an agreed remedial action objective, it is unclear what the feasibility study report will address.

#### Response #2

**Disagree**. Remedial action objectives are not part of the RI as the need for a remedial action has not been determined until the RI is complete. If site conditions indicate unacceptable risk then remedial action objectives will be developed to reduce site conditions to acceptable levels of risk. The objectives of the RI are to collect a sufficient quantity and quality of data to accurately represent and assess site conditions.

A remedial action objective was established in the Project Scoping Document for SEAD-25 and SEAD-26 (July 1996). Section 1.1, Purpose of Report, in the Draft RI, has been expanded slightly to incorporate text from the Project Scoping Plan describing the purpose and intent of the RI.

#### Comment #3

The document leaves the impression that there is no need for remedial actions at SEAD 25 and 26 from an ecological standpoint. Without going into detailed comment, which would be interminable, given the magnitude of the material presented, we basically disagree with your conclusion that the site presents minimal actual or potential threat to wildlife. We think the actual toxicity of these sites derived through experimentation is the only definitive method for assessing the ecological effects since the site has a host of VOCs, SVOCs, pesticides,

nitroaromatics, herbicides and metals present and there is no way of knowing how these compounds interact toxicologically.

The following areas with potential for or actual exposure to biota are in need of remediation. Additionally, some of these areas need to be remediated to prevent the migration of contamination to now uncompromised media.

- a. SEAD-25; The Fire Training and Demonstration Pad
- i. Perimeter drainage ditches to minimize biota exposure or migration to more valuable habitats.
- ii. Site soils to eliminate source of groundwater contamination.
- b. SEAD-26; The Fire Training Pit and Area
- i. Site perimeter drainage's to prevent migration to other habitats and eliminate exposure.
- ii. Site soils to eliminate exposure and a source of groundwater contamination.
- iii. Fire training pit to eliminate bird exposure to contaminated drinking water and soils. Minute quantities of PAHs (0.002 μg benzo(a)pyrene/egg, Eisler, 1987) are known to cause embryonic growth reduction and increased incidence of abnormal survivors. These quantities could easily be transported on bird feet or feathers to distant nests.

#### Response #3

Disagree. The ecological risk assessments performed for these SEADs followed EPA guidance and used current accepted ecological risk assessment methods. Furthermore, the approach followed in these ecological risk assessments was described in the Work Plan for these sites before the assessments were performed. Serious concerns regarding the assessment methods would have been appropriately raised and resolved during the review of the Work Plan. As to the findings of these assessments, the risks presented in this report were calculated objectively based upon the data collected at the site during the RI.

Please note that the ecological risks have been re-calculated based upon revised exposure point concentrations (EPCs), in consideration of EPA's comments on the handling of background data, duplicates, and concentration term statistics in the draft human health risk assessments. These new EPCs have resulted in a new set of ecological risk estimates which may have affected the overall conclusions. However, no change in overall methodology has been made, nor should it be, since the approach conforms to EPA CERCLA guidance.

Throughout this report there appear to be contradictions in the definitions of a "surface soil" sample. Section 4.1.4, for instance, defines surface soil as "soil that exists from 0 to 6 inches": However, Table 4-5 states that surface soil samples were taken from a depth of 0.17 feet (2.04 inches). A surface soil sample as defined in the Generic Installation Remedial Investigation/Feasibility Study Work Plan for the Seneca Army Depot Activity is one collected from a depth of 0 to 2 inches below any overlying organic matter. Please explain or correct these discrepancies.

#### Response #4

**Acknowledged.** The statement in Section 4.1.4 has been changed to 0-2 inches (0.17 feet).

#### Comment #5

Unlike previous reports from this consultant, the sampling data summary tables in this report lack a "maximum value detected" column. It has been our experience that this column is very helpful in the review of the sampling data. Please replace this column or explain its absence.

#### Response #5

**Disagree.** Maximum values for each compound by media are shown in the summary statistics tables.

#### Comment #6

Discussions of potential future land uses in this and future documents must address the proposal for future uses scheduled to be presented by the Local Redevelopment Authority (LRA) on October 8, 1996. The LRA's reuse plan will represent the first time concrete proposals for reuse of the base have been produced.

#### Response #6

**Acknowledged.** The future uses of the site as proposed by the LRA and by the Seneca Army Depot as presented in their Reuse Plan and Implementation Strategy (December 1996) will be considered during the process of evaluating and selecting the preferred remedial actions for SEAD-25 and SEAD-26.

#### Comment #7

The consultant should include a discussion justifying the use of only the surface soil sample results in the calculation of risk to current site workers and future on-site residents of these sites.

#### Response #7

Agreed. A paragraph explaining this aspect of the soil exposure pathways has been added.

#### Comment #8

The RI report has demonstrated that SEADs 25 and 26 are impacted by considerable levels of polycyclic aromatic hydrocarbons (PAHs). Of greatest concern are those PAHs which are considered carcinogenic. We would like to request that the consultant list separately the results for the individual and total carcinogenic PAHs in the soil and sediment sample summary tables. Furthermore, Figures 4-5, 4-6; and 4-14 should include the total carcinogenic PAH levels for the samples. The following is a list of PAHs considered to be carcinogenic:

benz(a)anthracene
benzo(b)fluoranthene
benzo(j)fluoranthene
benzo(k)fluoranthene
benzo(a)pyrene

chrysene dibenz(a,h)acridine dibenz(a,j)acridine dibenz(a,h)anthracene dibenz(c,g)carbozole dibenz(a,e)pyrene dibenzo(a,h)pyrene dibenzo(a,i)pyrene dibenzo(a,l)pyrene ideno(1,2,3-cd)pyrene 5-methylchrysene

#### Response #8

**Disagree.** Where an exposure scenario poses a significant risk based on EPA cancer risk or non-cancer risk guidelines, the influential chemicals have been highlighted in the Risk Characterization section (Sections 6.5 and 7.5). If carcinogenic PAHs are significant, they have been so noted in the Risk Characterization.

The soil and sediment summary tables have been revised to show individual and total carcinogenic PAHs.

#### **Specific Comments:**

Comment #1

**Figure 3-4 and 3-5:** Symbol for Fill and Weathered Shale appears to be incorrectly shown.

Acknowledged. This discrepancy has been corrected.

Comment #2

Response #1

Figure 4-10 through 4-13: These figures lack units of measurement. Please revise the figures.

Response #2

Acknowledged. The figures have been revised to show units of measurement.

Comment #3

Tables 4-22 and 4-28: These tables also lack units of measurement. Please revise these tables.

Response #3

Acknowledged. These tables have been revised to show units of measurements.

Comment #4

**Table 6-3:** On page 7 of this table the Reasonable Maximum Exposure (RME) concentration for chromium in sediment is listed as 0.000 MG/KG. The actual concentration, as listed in Table 4-13 and Table 6-3 is 76.6 MG/KG. Is this a typographical error or was the RME of 0.000 actually used in risk calculations?

Response #4

**Agreed.** The typographic error in Table 6-3 has been corrected.

Comment #5

Section 6.3.2.1 - Onsite Receptors: It is not completely appropriate to state that "there is no pressure to develop land in this area". It must be kept in mind that the Local Redevelopment Authority is working very hard to develop productive reuses of the base property in order to minimize the negative impact that base closure will have on the

surrounding community. As such, it appears to us that there is indeed a great deal of pressure to develop this area.

Response #5

Agreed. The BRAC process has been developing over the last two years. When this report was first prepared the future land use was as it had always been, i.e., part of the military mission associated with SEDA. The BRAC closure process has now provided directions as to future land use and this has been incorporated into this document where appropriate. The sentence referring to pressure to develop land has been deleted.

Comment #6

**Table 6-7:** According to the footnotes in this table, the average time (AT) in days for the noncarcinogenic effects should be 10950 days. However, the column lists a value of 9125 days. Which figure was actually used in the calculation of non-carcinogenic risk? Please correct the discrepancy.

Response #6

Agreed. The table has been corrected.

Comment #7

Sections 6.5.5.2 and 7.5.5.2 - Uncertainty in Exposure Assessment: These sections must include a discussion of how the lack of dermal absorption factors (ABS), for all the compounds of concern except cadmium and PCBs, seriously underestimates risk. By using an ABS value of zero in the calculation of absorbed dose the result is, naturally, zero absorbed dose and thus zero risk. This result is misleading as many chemicals are indeed known to cause adverse health effects from a dermal exposure pathway. For instance, skin application of benzo(a)anthracene and benzo(a)pyrene are known to cause cancer in animals and are suspected of causing cancer in humans. In order to provide a complete picture of reviewers of this document the consultant must accurately and thoroughly discuss underestimations of risk as well as overestimations of risk.

The consultant may want to consider developing a table which lists on one side factors that will lead to an overestimation of risk (i.e., sampling bias) and on the other side factors which will lead to an underestimation or risk (i.e., lack of ABS values).

Response #7

**Agreed.** A paragraph has been added to the Sections 6.5.5.2 and 7.5.5.2 which discusses the potential underestimation of risk associated with the limitation of dermal exposure assessments to five compounds.

Comment #8

Sections 6.5.5.4 and 7.5.5.4 - Uncertainty in Risk Characterization: These sections seem to be saying that by ignoring possible synergism's between chemicals, risk if overestimated. In truth, by not considering the potential for synergism and potentiation between chemical contaminants, risk is actually underestimated. These sections should also contain definitions of the terms synergism and antagonism.

Response #8

Agreed. The paragraph in Sections 6.5.5.4 and 7.5.5.4 has been expanded to provide a more complete discussion of synergism and antagonism, and the uncertainties associated with ignoring these possible interactions. The discussion of synergism has been corrected to state that ignoring synergism underestimates risk.

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# Comments for Draft RI for the Fire Training Areas by The Army Corps of Engineers

#### **Draft RI for the Fire Training Areas**

#### Comments by Frye

#### Comment #1

Per EPA Guidance, the RI report should discuss, at a minimum, chemical-specific ARARs (scattered references to MCLs and NYS GA groundwater standards are made throughout the text). Also per EPA Guidance, an RI report should contain a conclusion/recommendation section wherein the recommendation for no-further-action or to perform a Feasibility Study is made. This recommendation is based upon the result of the risk assessment and ARARs (note, TAGMs are NOT ARARs). Include a separate section discussing chemical-specific ARARs which includes a listing of all identified chemical-specific ARARs and a comparison of each COC thereto as wells as a conclusion/recommendation section in the report.

#### Response #1

As required by 40 CFR Part 300.430(b)(9), project scoping for remedial investigations/reasibility studies (RI/FS), a preliminary list of ARARs and "To-Be-Considered" (TBCs) was developed and presented in the Project Scoping Plan for SEAD-25 and SEAD-26 (July 1995). These included separate tables for Location Specific ARARs, Action Specific ARARs and Chemical Specific ARARs. The data collected from the RI is compared to applicable chemical specific ARARs. It is the intention of the EPA that ARARs must be attained for any hazardous substances left on site at the completion of remedial actions and that remedial actions should also comply with ARARs. The list of ARARs will be refined and evaluated during the RI/FS process. Each ARAR identified in the Project Scoping Document will be evaluated to determine if they are applicable and relevant and appropriate based upon jurisdictional requirements (in the case of applicability) and appropriate and relevant based on a comparison of the action, location, or chemicals covered by the requirement and related conditions of the site. Only those requirements that are determined to be both relevant and appropriate must be complied with. The detailed analysis of chemical specific, action specific, and location specific ARARs is presented in the feasibility study report. Section 8 of the Draft RI provides a summary section of the results of the RI. Text has been added to provide further discussions of the chemical specific ARARs and recommendations for a feasibility study including a detailed analysis of remedial alternatives.

#### Comments by Bradley

#### Comment #1

Previous comments adequately addressed.

Response #1

Acknowledged.

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# Comments for Draft RI for the Fire Training Areas by The United States Environmental Protection Agency (USEPA)

## **Draft RI for the Fire Training Areas**

## **General Comments**

Comment #1

The report should present a discussion of data validation issues and data usability as it relates to the DQO which have been set for the site. The text should present rationale for the data rejections which are presented in the data tables and how these data rejections may affect the overall usability of the data.

Response #1

**Acknowledged.** Sections 6.2 and 7.2 of the report describe the data usability issues such as data validation, analytical methods, precision, accuracy, representativeness, comparability and completeness.

Comment #2

The results of the grain-size distribution analyses for the sediment samples were not presented in the document as originally discussed in the work plan for these sites. The results of the hardness analyses or TOC analyses were also not presented or discussed in the RI Report. The TOC analyses should be used to correct the site-specific TAGMs based on the TOC results, as is discussed in TAGM-4046.

Response #2

**Acknowledged.** The grain size analysis results for the sediment samples are shown in Appendix A. The average site-wide value for TOC is approximately 1% and therefore the TAGMs for soil were not adjusted.

## **Specific Comments**

#### Section 1.0

Comment #1

Page 1-20, P2: The third sentence of this paragraph appears to be incomplete. The sentence should be reviewed and corrected as needed.

Response #1

**Acknowledged.** The sentence has been reworded to: ".....have been collected from 16 glacial till locations......"

Comment #2

Page 1-35; P1: A figure should be provided showing the potentiometric head changes described in the text. The figure should be combined with the precipitation data for the same period.

Response #2

A potentiometric map was not developed because the precipitation data used was from a station located approximately 10 miles from the site. On-site precipitation data would be needed to accurately assess the local effects on groundwater levels.

#### Section 3.0

Comment #1 Page 3-2, Sec. 3.1.3, P2: It is reasonable to state that rainfall descreases

during January and February, since at this time of the year precipitation would be frozen. It would be more appropriate if the text compared

precipitation amounts throughout the year and not rainfall.

Response #1 Agreed. The text should state that the seasonal variations in

precipitation are shown in Table 1-3. The text has been modified

accordingly.

Comment #2 Page 3-4, Sec. 3.1.4.2, P1: The thickness of the till should be presented

in the text.

**Response #2** Agreed. The text has been modified to include the till thicknesses.

Comment #3 Page 3-4, Sec. 3.1.4.2, P3: Grain size distribution curves should be

provided in the appendices of this document.

**Response #3** Agreed. The grain size distribution curves are included in Appendix A.

Comment #4 Page 3-5, Sec. 3.1.4.3: The locations for the stated ranges of weathered

shale should be presented in the text.

**Response** #4 Agreed. The text has been modified to include the locations of the

weathered shale.

Comment #5 Page 3-36, P2: The locations stated where the competent shale was

encountered should be presented in the document.

**Response #5** Agreed. The text has been revised on Page 3-6 to state the location of

the competent shale.

Comment #6 Figures 3-4 and 3-5: The shading used for the lithological units are

reversed. The screened and open sections of each well should be shown on the geologic cross sections along with a water level mark for both

shallow and deep wells at each cluster.

Response #6 Acknowledged. The shading for the lithological units has been

corrected. Water level elevations have been added for the wells. Well

construction details are provided in Table 2-4.

Comment #7 Page 3-12, Sec. 3.1.5.1, P2: The tense of the text here should be

changed i.e., "..groundwater is expected..." should read, " groundwater

was expected...."

Response #7

**Disagree.** This statement means that the groundwater flow should follow the slope of the bedrock surface. In this context, groundwater flow does not have a past tense, since it reflects the current conditions.

Comment #8

**Table 3-1:** The header should define whether the depths and elevations provided are for competent or weathered bedrock.

Response #8

**Acknowledged.** The travel times used to characterize bedrock surface were between 12,600 and 14,400 ft/sec. These correspond to competent shale formations. A footnote has been added to Table 3-1 clarifying this.

Comment #9

Page 3-14, Sec. 3.1.6.2.1, P1: What is "groundwater topography"? Should this be groundwater potentiometric surface or groundwater water table?

Response #9

**Acknowledged.** This sentence has been reworded from groundwater topography to groundwater contour.

Comment #10

**Figure 3-6:** There is no basis for the construction of the 736 equipotential contour line downgradient of wells MW25-15 and MW25-19.

Response #10

**Disagree.** The 736 contour line shown in this figure is inferred from the countours and the general topography of SEAD-25 and is appropriate for this site.

Comment #11

**Figure 3-7:** See comment above for the 736 contour line and apply to the 737 line in this figure.

Response #11

Disagree. See Response #10.

Comment #12

**Figure 3-8:** The 738 equipotential contour crosses the 738 topographic contour line in the area of well MW25-13. Field notes should be reviewed for indications that this "stream" was flowing at the time of water level measurements. If no water was present at this time the contouring in this figure should be corrected accordingly.

Response #12

**Acknowledged.** The stream was not observed to be flowing during the field investigation. The 738 contour line has been changed to a dashed line to indicate that this elevation is inferred.

Comment #13

**Figures 3-6 through 3-8:** Flow direction arrows should be drawn at 90 degrees to the equipotential contour lines. It is appropriate to construct hydrogeologic flow sections for the site to aid in an understanding of site flow conditions.

Response #13

Acknowledged.

Figures 3-9 and 3-10: The contouring presented should be truncated between control points and should be checked for accuracy (i.e., triangulation between data points).

Response #14

**Disagree.** The contouring shown in these figures represents reasonable extrapolations between the monitoring well elevations shown.

Comment #15

Page 3-19, Sec. 3.1.6.2.2, P1: It is not appropriate to calculate a horizontal flow gradient between MW25-5D and MW25-7D since these wells are parallel to the potentiometric contours shown on the figures. This may account for the large difference between the calculated gradients presented in the text.

Response #15

Agreed. This text has been removed from the section.

Comment #16

**Table 3-3:** Hydraulic conductivities have a logarithmic distribution and thus the average value presented in the table and associated text should be a geometric mean and not an arithmetic mean.

Response #16

**Acknowledged.** Since the data sets were determined to be lognormally distributed, the values for average hydraulic conductivity shown in Table 3-3 were re-calculated using a geometric mean rather than an arithmetic mean.

Comment #17

Page 3-25, P1: The results of the groundwater velocity calculations are incorrect since the values used for the average hydraulic conductivity are miscalculated, as previously commented.

Response #17

**Acknowledged.** The groundwater velocities were re-calculated using the new geometric means.

Comment #18

Page 3-25, Sec. 3.1.6.4.3, P1: See comment above on calculation of flow velocities.

Response #18

**Acknowledged.** See response #17.

Comment #19

**Figures 3-11 and 3-12:** A review of the detailed vegatative cover-type map (Figure 3-12) indicates that the areas mapped are different from those presented on Figure 3-11. This discrepancy should be corrected.

Response #19

**Acknowledged.** The figures have been revised to correct this discrepancy.

Comment #20

Page 3-50, Sec. 3.2.4.2, P2: A description of the Darian silt-loam is presented in the text. However, a review of text and the figure indicates be removed or clarified to state that the description is for the area surrounding the site.

Response #20	<b>Acknowledged.</b> A statement referring to the areas surrounding the site has been added to the text.
Comment #21	Page 3-50, Sec. 3.2.4.2., P3: See previous comment on the presentation of grain-size distribution curves.
Response #21	Acknowledged. See comment #3.
Comment #22	Page 3-52, P2: MW26-1 is located to the east of the site and not west, as stated in the text.
Response #22	Acknowledged. The text has been revised accordingly.
Comment #23	<b>Figure 3-15:</b> The 738 contour line should pass through MW26-7, which has a reported elevation of 738.00.
Response #2	Acknowledged. The figure has been revised accordingly.
Comment #24	Table 3-8: See previous comment presented for Table 3-1.
Response #24	Acknowledged. Please see response #8.
Comment #25	Page 3-57, P1: Profile identifications should be presented on Figure 3-16 for ease of reference.
Response #25	<b>Acknowledged.</b> The location of the GPR profiles are shown in Figure 2-9.
Comment #26	Page 3-61, Sec. 3.2.6.2, P1: The April 4, 1994 data set contains four data points and not three, as stated in the text.
Response #26	Agreed. The text has been revised to state that the data set contains four data points.
Comment #27	<b>Figure 3-20:</b> The 744 potentiometric contour line should pass through MW26-10, which has a reported elevation of 744.00.
Response #27	Agreed. The figure has been revised accordingly.
Comment #28	Figures 3-20 through 3-22: The contour lines shown on these figures should be truncated between data control points.
Response #28 .	<b>Disagree.</b> The contour lines are considered to be reasonable extrapolations based upon the data collected.
Comment #29	Page 3-66, Sec. 3.2.6.3: See previous comment on the presentation of the hydraulic conductivity results.

Response #29 Acknowledged. The average hydraulic conductivity for SEAD-26 was

re-calculated using a geometric mean.

Comment #30 Table 3-10: See previous comment on the calculation of hydraulic

conductivity averages value.

**Response #30 Acknowledged.** Please see response #29.

Comment #31 Page 3-66, Sec. 3.2.6.4: See previous comment on the calculations of

flow velocities.

Response #31 Acknowledged. The groundwater velocities for SEAD-26 were

recalculated using the new hydraulic conductivities based on a

geometric mean.

Comment #32 Figure 3-23 and 3-24: These figures do not match, the discrepancy

should be corrected. The arrow indicating the site in Figure 3-24 is not

pointing to the site boundaries.

**Response #32** Acknowledged. This discrepancy has been corrected.

Section 4.0

Comment #1 Page 4-1, Sec. 4.0: The text should clearly state that both DQO

documents will be referenced in the RI Report.

**Response** #1 Agreed. The text has been modified accordingly.

Comment #2 Figure 4-1: There are locations on this figure which should be

contoured with a 1 ppmv contour line, which have not been identified in

the text as being related to non-contaminant sources.

Response # Disagree. A review of the data did not indicate locations that should be

contoured in addition to those shown on the figure.

Comment #3 Table 4-5: TAGM 4046 lists a concentration or the MDL for several

compounds. In these instances, the lower of the two numbers should be used for determining which samples exceed the TAGM guidance values.

Response #3 Acknowledged. The soil cleanup standards listed in Table 4-5 follow

the guidelines established in TAGM 4046.

Comment #4 • Table 4-7: There is a TAGM value for 1,2-dichloroethene (trans) of

300 ug/kg. It is appropriate to use this value for 1,2-dichloroethene (total) since these compounds typically co-elute and are not differentiated by the laboratory. The use of this value should be

reflected in the associated text. There is also a value for chlordane in TAGM-4046 which should be used for comparison with alphachlordane

results. The heading for the last two pages of this table has been cut-off and should be corrected.

Response #4

**Acknowledged.** The TAGM for chlordane has been added and the corrections to the heading have been made.

Comment #5

**Page 4-38, P2:** A figure showing the distribution of semi-volatile (PAHs) in soils should be presented in the RI Report.

Response #5

**Acknowledged.** A figure (Figure 4-16) showing the distribution of PAHs in soils at SEAD-25 has been added to the report.

Comment #6

Page 4-41, P2: It is not appropriate to discuss health-related issues in the nature and extent section. The text in this section should discuss the exceedances related to guidance values and leave the discussion of health risk to the health risk section.

Reponse #6

**Acknowledged.** This reference has been deleted from the text.

Comment #7

Page 4-41, P4: The text should state the concentrations of the samples discussed.

Response #7

**Acknowledged.** The concentrations of the samples discussed have been added to the text.

Comment #8

Page 4-42, Sec. 4.1.5, P1: The text should present a comparison between all three rounds of sampling, and how the groundwater chemistry has changed through time.

Response #8

Acknowledged. An analysis of changes or trends over time for the groundwater data was not conducted due to the limited data set, and the fact that many of the wells were not installed in earlier sampling rounds. Additionally, the statistical summary table (Table 4-9) shows that there was a 0% frequency of detection for many of the analytes, and a low frequency of detection for the remainder of the organic analytes showing a hit. The metals data may be subjected to a non-parametric type statistical trend analysis after additional sampling rounds are conducted.

Comment #9

**Table 4-9:** Please explain why the "total counts" presented in the groundwater summary table varies from method to method and within each method.

Response #9

The total counts vary under the volatile organics from compound to compound due to the use of either Method 524.1 or TCL volatile organics. The use of both methods was due to the request by EPA to include the 524.1 analysis on certain wells.

Comment #10

**Table 4-10:** The order in which the wells are presented is confusing. The wells should be presented in numerical order.

In addition to NYSDEC GA groundwater standards, Federal MCLs should also be included for each contaminant. The table incorrectly states that there are no standards for Bromoform, Antimony, Beryllium and Thallium, which all have Federal MCLs.

Response #10

**Acknowledged.** The table has been modified to include MCLs if the MCL is lower than the NYSDEC GA groundwater standard or if no GA standard exists for a compound. The order of the wells is due to the manner in which the relational database is queried to create the tables.

Comment #11

Page 4-65, Sec. 4.1.5.2: A figure showing the distribution of total, semi-volatiles (including TICs) should be presented in this report.

Response #11

**Acknowledged.** A figure showing the concentrations of SVOCs and TICs in the shallow groundwater from round 2 (March 1996) has been added as Figure 4-15 to the report.

Comment #12

Page 4-66, P1: A discussion of the TICs found in Round 2 sample analysis results should be presented.

Response #12

**Acknowledged.** A discussion of the SVOC TICs in groundwater has been added to the section

Comment #13

Page 4-67, P1: The text speculates about the origin of the inorganics found in the groundwater. More justification should be given for the conclusions presented here.

Response #13

**Acknowledged.** This statement has been removed from the text. A statistical analysis of background metals concentrations compared to the groundwater sampling concentrations is presented in Section 6.0.

Comment #14

Page 4-74, P1: The text states that SW25-6 was not used as background since it was "... impacted by other constituents, not associated with past site activities...: but the text does not elaborate what these impacts were or what caused them. A discussion of these impacts should be presented in the text.

Response #14

**Agreed.** The impacts referred to in the report are elevated levels of SVOCs, and PAHs detected in the sediment sample at this location; presumably from storm drain discharges.

Comment #15

General Comment: The results of the average and standard deviations should be rounded to reasonable numbers since the analytical methods cannot typically detect these compounds down to the numbers presented here.

Response #15

Acknowledged.

Page 4-78, Sec. 4.1.7.1, P1: Toluene is not considered a common laboratory contaminant and the discussion in the text referring to toluene as such should be removed.

Response #16

**Disagree.** Even though toluene is not as common a lab contaminant as acetone, 2-butanone and carbon disulfide, it has been shown to be an artifact from laboratory cross-contamination. Due to the low concentrations present and the fact that toluene has not been shown to be a contaminant of concern at SEDA, it is reasonable to assume that its presence is due to laboratory contamination. The text has been revised to state that the presence of these compounds may be due to laboratory cross-contamination.

Comment #17

**Table 4-14:** The source listed for Di-n-buthylphthalate is given as "????". What is this source?

Response #17

**Acknowledged.** This has been corrected to show none, meaning there are no current sediment quality criteria for this compound.

Comment #18

**Page 4-78:** Is the drainage ditch discussed here "...north..." the northwest ditch previously discussed?

Response #18

The location of the drainage ditch mentioned in this paragraph can be confirmed by the referenced sample locations.

Comment #19

**Table 4-14:** The abbreviations for the sources listed should be presented as footnotes to this table. What is the "west Effect Le" which is listed as a source? If a compound has been qualified as rejected, the concentrations should be removed from the tables and only the qualifier "R" shown.

Response #19

**Acknowledged.** The source abbreviations have been corrected and identified in the table.

Comment #20

Page 4-86, Sec. 4.1.7.6: The text states that MW25-2 had the maximum TPH concentration. This appears to be incorrect since this section discusses sediment sample results. The previous paragraph identifies surface water samples. Again, this appears to be incorrect in a sediment discussion.

Response #20

**Acknowledged.** The text has been changed to show the sediment location as SD25-8 rather than MW25-2 and the reference to surface water has been changed to sediment.

Comment #21

Page 4-86, Sec. 4.1.8: The text here should state that the site has been impacted by TPH. This section should also summarize the results of the soil gas survey and relate these results to the groundwater and soil sample results.

The text has been revised to include TPH. Response #21 Acknowledged. discussion relating the soil gas survey result to the groundwater and soil sample results has been added to Sec. 4.1.8. Table 4-16 and 4-17: Why do the "total counts" vary between some of Comment #22 the compounds? The asterisks represented on Table 4-17 should be added to the list of notes. Response #22 Please see comment #9 Comment #23 Table 4-22: See previous comments on the variation between total counts. There are not units presented on this table. Response #23 Please see response #9. Units have been added to the table. Table 4-23: The wells are not presented in numeric order, is there a Comment #24 significance in the way the wells are presented? The order that the wells appear in this table is a function of the structure Response #24 of the database and the manner in which the database information is accessed. Comment #25 Page 4-155: The results of all the inorganics should be discussed, especially when analytes exceed their guidance values by as much as 29,900 times, as in the case for calcium. Response #25 Acknowledged. The table incorrectly showed a standard of 50 ug/l for calcium. There is no current groundwater standard for calcium. The table has been corrected to show this. Comment #26 Page 4-156, Sec. 4.2.41: The text here references SEAD-25. This should be corrected to state SEAD-26. Acknowledged. The reference has been changed accordingly. Response #26 Comment #27 **Table 4-24:** See previous comment on total count variations. Please see response #9. Response #27 Table 4-25: See previous comment on the "standard source" as it Comment #28

Acknowledged. The reference has been changed to New York State

Page 4-163, Sec. 4.2.4.2: The standard referenced here for surface

waters is incorrectly given as "... New York State Class GA..."

applies to heptachlor.

Class C Surface Water Standard.

Response #28

Comment #29

Reponse #29 Acknowledged. The text has been changed to New York State Class C

Surface Water Quality standards.

Comment #30 Page 4-164, P1: The text here references groundwater. This text should

be corrected to state surface water.

**Response #30** Acknowledged. The reference has been changed to surface water.

Comment #31 Figure 4-14: The flow direction of the surface water bodies should be

presented to aid in interpretation of results.

Response #31 Acknowledged. A map showing the surface water flow direction for

SEAD 26 is presented in Figure 3-14.

Comment #32 Page 4-173, Sec. 4.2.5.3: The text should state the concentrations of

contaminants detected and not only state the number of times the

contaminants exceeded their respective guidance values.

Response #32 The concentrations of pesticides and PCBs are presented in the

preceding Table 4-27.

Comment #33 Page 4-176, Sec. 4.2.5.6: The text discusses surface soil results in a

section which presents sediment results.

**Response #33** Acknowledged. The text has been revised to sediment results.

Comment #34 Page 4-177, Sec. 4.2.6: Paragraph 3 states that no criteria exceedances

were detected for VOCs in groundwater at SEAD 26. The text should be corrected, as benzene and ethylbenzene were detected above NYSDEC

Class GA standards.

Response #34 Agreed. The text has been changed to state that the NYSDEC GA

standards were exceeded for benzene and ethylbenzene in two wells.

Section 5.0

Comment #1 The Fate and Transport chapter of this RI includes information about the

physical and chemical characteristics of the site and the site contaminants. It also includes three modeling efforts (a water balance, fugacity modeling, and one dimensional transport modeling). It does not, however, provide clear conclusions on the potential fate and transport of contaminants at the two sites. Any conclusions concerning the sites are fragmentary and scattered throughout the section. No overall

conclusions concerning the site are presented.

A number of general observations concerning the section as a whole are as follows. Most of these affect the usability of the section at the end of

the chapter. This section should bring together the physical and chemical characteristics of the site and contaminants and the results from the three models. From this, a unified description of the qualitative and, if the data permit it, quantitative description of the primary fate and transport mechanisms acting on each site should be presented.

Conclusions: The main points of the fate and transport analysis should be summarized in a conclusions section at the end of the chapter. This section should bring together the physical and chemical characteristics of the site and contaminants and the results from the three models. From this, a unified description of the qualitative and, if the data permit it, quantitative description of the primary fate and transport mechanisms acting on each site should be presented.

# Response #1

**Acknowledged.** Section 8.0 presents a summary of the fate and transport analysis and the risk assessment for SEAD-25 and SEAD-26.

#### Comment #2

**Page 5-1, P4:** As shown on Figure 1-3, the elevated pad is <u>not</u> defined by the 742 foot contour.

# Response #2

**Disagree.** The fire training pad is located within the 742 foot elevation contour according to Figure 1-3.

# Comment #3

**Page 5-2, P3:** Figure 1-13 is not rainfall information. Consider restating the information, or a portion of it, in this section since it is fundamental to the analysis.

## Response #3

**Agreed.** The figure reference has been corrected to Figure 1-14 and the references to rainfall have been changed to precipitation.

# Comment #4

Page 5-3, P3: Water Balance: Why are 1975 and 1957 models and information being used? Why not use more recent models such as the HELP model. Also, what is the point of this exercise? The text states that "understanding the water balance of the site is helpful in evaluating the containmant fate and transport at SEAD-25," yet this analysis or its results are not referred to at all in the rest of the chapter.

When presenting an analysis of this type, the general methodology, assumptions and results should be presented and explained as necessary in the text, with the details of the analysis presented in an appendix. This also applies to the modeling given in sections 5.3 and 5.4.

## Response #4

**Acknowledged.** The water balance models presented are standard models that were used to estimate the amount of runoff and evapotranspiration at the site as part of the overall water budget. The results of the water balance are described at the end of section 5.1.1 for

SEAD-25 and section 5.2.1 for SEAD-26. This information is presented to qualitatively and semi-quantitatively assess the potential effects of precipitation on contaminant transport in the vadose zone. Text has been added to indicate that the potential for infiltration of vadose zone contaminants is moderate since most of the water is lost to evapotranspiration or runoff. It also describes the effects on surface water flow and sediment contaminant transport. The HELP model was developed for landfill applications and is therefore not considered appropriate for these sites.

Comment #5

Page 5-5, P4: These assumptions concerning snowfall and snowmelt given here are gross generalizations which appear to be the direct cause of the results presented in para 2, Page 5-7.

Response #5

**Acknowledged.** The assumptions stated for snowmelt and snowfall may be somewhat conservative. The results discussed on page 5-7 merely reflect the assumptions made in the previous section.

Comment #6

Page 5-7, P2: See comment Page 5-5, p4 above.

Response #6

See response #5.

Comment #7

Page 5-7, P3: An explanation of how these results factor into the fate and transport of contaminants at the site should be given in the text.

Response #7

**Acknowledged**. Text has been added to indicate that the BTEX and VOCs in the subsurface at SEAD-25 would not be expected to migrate via this pathway.

Comment #8

Page 5-7, P4-5: Summary tables or figures of the analytical results should be reproduced or referenced.

Response #8

**Acknowledged.** References for the summary tables have been inserted in the text.

Comment #9

Page 5-12, P1: Reference the section with the discussion of the water balance.

Response #9

**Acknowledged.** A reference for the section discussing the water balance for SEAD-25 has been inserted.

Comment #10

Page 5-13, Table 5-2: This table should only include compounds which are relevant to SEAD-25 and SEAD-26. Delete any compounds which are not of concern at the site. Also, the table should not include bioconcentration factors, which are not relevant to this section, or half-life, which is highly dependent on the circumstances under which it is measured.

## Response #10

**Acknowledged.** The table has been revised to show the list of compounds of concern that corresponds to the list of compounds shown in Table 6-4, which are the list of compounds quantified in the human health risk assessment. Bioconcentration factors and half-lifes were included as a point of discussion but were not considered relevant for this site. Therefore they have been removed from the table as requested.

#### Comment #11

Page 5-20, P2: The statement that VOCs degrade or decay over time conflicts with various other statements in this chapter concerning degradation of various compounds. Please clarify.

## Response #11

This paragraph is meant to describe possible mechanisms affecting the fate and transport of organic chemicals in both groundwater and soils at the site. Specific discussions on the biodegradability of BTEX, chlorinated organics, and PAHs are presented later in the section. The statements made concerning the biodegradation of these specific compounds indicate that the available data on the biodegradability of benzene are contradictory and that toluene and ethylbenzene are generally considered to be biodegradable in the subsurface environment. Data concerning the biodegradability of xylenes is not readily available. Biodegradation of chlorinated organics is not considered a significant migration pathway in the subsurface under most environmental conditions, whereas PAHs, especially the lighter molecular weight compounds, are biodegradable under most environmental conditions.

#### Comment #12

Page 5-21, P1: It is irrelevant how many of the compounds listed in Table 5-2 will volatilize. Discussions in the text should be confined to the contaminants of interest at the site. See also the discussion of Table 5-2 at Page 13ff.

### Response #12

The discussion in this paragraph is meant to be a general introduction to the concept of Henry's Law and the factors affecting volatization of organic compounds in the subsurface. More specific discussions related to the chemicals of concern at the site are presented later in the section. The reference to Table 5-2 has been removed.

## Comment #13

Page 5-21, P2: General statements such as those which begin in this paragraph should be left out unless they are related to specific concerns at the site.

## Response #13

As in the above response, this paragraph is a general introduction to residence times. Specific discussions concerning the compounds of concern at the site are discussed later in the section.

#### Comment #14

Page 5-21, P4: How much of the "following information" was obtained from the referenced document? This material should be properly referenced. Also, reproduction of information from a reference should

be limited to that which is directly applicable to the specific site situation.

Response #14

As the paragraph states, the information in the section under aromatic volatile organics was obtained from the referenced document. This information is considered to be relevant to the site.

Comment #15

**Page 5-21, P5:** Equilibrium partitioning assesses distribution of contaminants at steady-state, it does not assess transport pathways.

Response #15

**Acknowledged.** However, the general principles of equilibrium partitioning help to determine how much of the chemical will partition in the water, soil or air phases under equilibrium conditions and thereby what transport pathway will predominate.

Comment #16

Page 5-22, P3: The mass of contaminants which are transported in the vapor phase is generally small compared to other modes of transport. Also, it is only minimally affected by barometric pressure. Please explain how it would be affected by convection currents.

Response #16

Convection currents result from the transfer of heat by fluid motion between regions of unequal density resulting from nonuniform heating. In the subsurface, the mass transfer of vapor phase contaminants at SEAD 25 and 26 could be affected by convection currents from the uneven heating of the ground.

Comment #17

Page 5-22, P5: Is the affect of salinity on the Henry's Law constant relevant to this site? If so, the reason should be stated, if not, reference to it should be deleted here and in the several other places that it occurs in this chapter.

Response #17

Sodium, manganese, and other mineral salts are present in the groundwater at the site. The concentrations present may contribute to elevated Henry's Law constants for some organic compounds. This statement has been added to the text.

Comment #18

Page 5-22, P6: Please explain why releases to the atmosphere and tropospheric lifetime are important factors at these sites.

Response #18

**Acknowledged.** Tropospheric lifetime is not relevent. This paragraph has been removed from the section.

Comment #19

Page 5-23, P2: Please clarify the third and fourth sentences "Volatilization represents...".

Response #19

Volatilization of TCE and 1,2-DCE is considered a significant migration pathway because of the relatively high vapor pressures and Henry's Law constants for these compounds. The partitioning of these compounds from groundwater to the vapor phase is directly proportional to the

concentrations in groundwater. At the concentrations of TCE detected in groundwater at SEAD-25 (10 ppb average), the partitioning of this comound into the vapor phase would not be significant. The text has been revised to show that these pathways may be significant if the groundwater concentrations are sufficiently high.

Comment #20

Page 5-23, P4: Solubility does not "cause impacts to the groundwater". Please restate or delete. Also, what is the relevance of the state of TCE and DCE since no pure product was found?

Response #20

**Acknowledged.** This statement has been removed from the text. The physical state of TCE and DCE at room temperature is not particularly relevant to the site conditions but does provide a relative indicator and has been retained in the text for reference.

Comment #21

Page 5-23, P5: Vapor pressure is not relevant to fate and transport since no pure product was found. Relative humidity and barometric pressure effects on vapor pressure would be negligible in the event that pure product were present.

Response #21

**Acknowledged.** However, the vapor pressure would be relevent to these compounds in the vadose zone.

Comment #22

Page 5-24, P3: Please explain how "soil, sediment, and suspended particulate matter represent an important media for the <u>transport</u> of the chemicals."

Response #22

Soil.and sediment act as transport media through erosion and transport by surface water overland flow, infiltration and percolation of precipitation and stream flow, and suspended particulate matter through airborne transport and groundwater flow transport.

Comment #23

Page 5-24, P5: Provide backup for this paragraph or delete it. Both biodegradation and volatilization are generally insignificant for PAHs.

Response #23

**Acknowledged.** This paragraph has been removed.

Comment #24

Page 5-25: Partitioning Model of Fugacity: See Page 5-3, p 3ff comment.

Response #24

Please see response #4.

Comment #25

Page 5-25, P1: Why is the fugacity model for VOCs being applied to SEAD-26 when 5.2.2, Chemical Characterization, states that various appropriate limits for VOCs in different media were not exceeded.

Response #25

Fugacity modeling for VOCs at SEAD-26 will provide a better understanding of the fate and transport characteristics of the low levels of VOCs detected in soils.

Comment #26

Page 5-39, P2: There is no figure 5-1 showing TCE breakdown products.

Response #26

Acknowledged. The reference to this figure has been deleted.

Comment #27

Page 5-34, 5-39 Fugacity model results: The results were not related to the existing conditions on the sites. How well do the model results represent what is happening at the sites? How can this information be used to predict what will happen on the site?

Response #27

The fugacity modeling results predict the partitioning of BTEX and chlorinated solvents in groundwater and soils based upon the assumptions stated earlier in the section. This information is used to assess the degree to which the site contaminants will be available for degradation processes, the potential for migration and to assess potential exposure pathways for the human health risk assessment.

Comment #28

Page 5-41, P2: How does this relate to conditions at these sites?

Response #28

Based upon the information presented in this section, TCE which was found in soils and groundwater at SEAD-25 and in soils at SEAD-26, are expected to be moderately sorbed to soils (characterized as till with a high percentage of silt and clay); and that the TCE will be relatively persistent due to the absence of any significant degradation mechanisms.

Comment #29

Page 5-42, P2,3: How do the various items mentioned here pertain to the site? Is photochemical oxidation of TCE in air, or the half-life of TCE in water relevant?

Response #29

The paragraphs discussing photoxidation and biodegradation have been deleted from the text since the information presented is not necessarily relevant or conclusive.

Comment #30

Page 5-42, P4: The information in this paragraph is incorrect; there is considerable evidence in the literature to microbial biodegradation of PCE and TCE in both laboratory and field environments. What is the purpose of the statement "Biodegradation should be assumed to be of minimal importance except in landfills with active microbial populations"? This type of statement needs to be related to the conditions at the site and backed up with further technical information.

Response #30

This paragraph has been deleted.

Comment #31

Page 5-42 to 46, Semivolatile Organic Compounds: A considerable amount of space is devoted to discussing the properties and possible fate

and transport pathways of 2,4-dimethylphenol and naphthalene, which are the two most prevalent SVOCs on the two sites. However, there is no attempt made to identify how these properties and pathways are applicable to the sites being examined.

Response #31

Section 8.0 summarizes the fate and transport characteristics at both SEAD-25 and SEAD-26.

Comment #32

**Page 5-45, P2:** Naphthalene does not have a "relatively high aqueous solubility." Also, the conclusion in the closing statement is not supported by the beginning of the paragraph.

Response #32

Agreed. This paragraph has been deleted.

Comment #33

Page 5-46, P5: It is incorrect to say that the vadose zone does not need to be modeled with the transport model because it was already estimated within the fugacity modeling. These are entirely different models, the fugacity model being a simple steady state model of contaminant distribution, and the transport model being a time-dependent dynamic model of contaminant movement.

Response #33

**Acknowledged.** This statement has been deleted from the text.

Comment #34

**Page 5-48, Input Parameters:** The nomenclature listed does not match the formula nomenclature (English and Greek mixed, upper and lower case differences). Also, there is no justification for the values listed in Table 5-6, contrary to what the text states.

Reponse #34

Acknowledged. The model used in the pre-draft RI has been replaced with a more updated solute transport model (BIOSCREEN) that was not available when the pre-draft report was submitted for review. This model simulates natural attenuation and transport of dissolved hydrocarbons based upon the Domenico analytical transport model. This model is considered to be appropriate for evaluating the potential for natural biodegradation of BTEX contaminants at both SEAD-25 and SEAD-26 using some simplifying assumptions. This model is approved by the EPA and has been used at many disposal sites as a tool for determining the no-action alternative and for identifying potential sensitive groundwater receptors.

Comment #35

Page 5-48, P "The graphical...": Figure 5-1 should be given as four separate figures.

Response #35

**Acknowledged.** The figures have been changed to show the results of the BIOSCREEN modeling as described above and are referenced and numbered separately.

**Model Output:** The actual concentration used at distance "0", 3.98 mg/l, does not correspond to Figure 4-3 which gives the concentration at the source as 3.04 mg/l.

Response #36

Please see comment #34.

Comment #37

**Page 5-49, P4:** Why is the model being run for BTEX at SEAD-26? Section 5.2.2 seems to indicate that VOCs (i.e. BTEX) are not a concern at this site.

Response #37

BTEX was detected in 2 out of 23 groundwater samples at SEAD-26. The highest concentrations of total BTEX (15 ppb) were found in MW26-7 which is at the periphery of the source area (the fire training pit). Other VOCs were also detected at low concentrations including trimethylbenzenes. Due to the low hits on VOCs at SEAD-26, the predraft RI stated that VOCs were not of concern. However, the presence of these compounds, even at these concentrations, requires further analysis to determine the migration potential and if they pose a potential threat to human health or the environment. Consequently, a simple solute transport model was used to determine the effects of natural attenuation at the site if no further actions or engineering controls were implemented. The BIOSCREEN model is used as a simple predictive tool to assess the relative effects of biodegradation on the VOCs in groundwater as well as the effects of dipersion and adsorbtion on solute concentrations. These results may be used to estimate the extent of plume migration over time and the time required to naturally degrade contaminant levels to regulatory cleanup requirements.

Comment #38

Page 5-50, P1: As with SEAD-25, it is unlikely that the conditions at SEAD-26 represent one-dimensional flow in a homogeneous, isotropic medium. Note the description of the site on Page 10, P2: "The burning pit and surrounding area is composed mostly of fill that is from 6.0 to 14.0 feet thick. On the basis of excavations performed at SEAD-26, the fill contains non-metallic construction debris and boulders as well as metallic debris (e.g., pipes, bucket, steel fragments)."

Response #38

**Acknowledged.** The site geology at SEAD-26 is composed of a mixture of fill materials and glacial till and weathered shale. The pre-draft RI describes the fill material as having a similar composition to the till and that the contact between the two was not distinct. Hydraulic conductivities were measured in 8 monitoring wells around SEAD-26. The geometric mean of the conductivities was used in the BIOSCREEN model to determine the seepage velocity. The hydraulic conductivities ranged from  $1.5 \times 10^{-3}$  to  $3.9 \times 10^{-3}$ . The conductivities indicate that the geology in SEAD-26 is fairly homogeneous within the confines of the area modeled. However, this geology is not considered to be representative of the geology outside the confines of SEAD-26 or other areas of SEDA as evidenced by the fairly high seepage velocity of 130 ft/yr. A discussion of the modeling for SEAD-26 using the

BIOSCREEN model states that the one of the simplifying assumptions for the model is that the aquifer is homogeneous and isotropic.

#### Comment #39

Tranport Modeling, General Comments (see also p 5-3, p 3ff comment): This modeling effort will require much more support before it can be considered credible for predicting fate and transport on these sites. More background on the model should be provided, including its general methodology, input parameter requirements, assumption made, resulting output, model limitations, and model sensitivity. Appropriate backup should be provided for all of the input values given in Table 5-6. Consider including a generic diagram indicating what the model accomplshes and maps depicting the model output for each site.

Appendix I (ODAST Model), should be referred to in the text if it is being used to support the analysis. The equations given in the text do not correspond to the equations given in the appendix. The output graphs given in the appendix also seem to bear no relation to the information given in the text. The concentration input for BTEX at SEAD-25 given in the Appendix (3.04 mg/l) corresponds to Figure 4-3 but does not correspond to Table 5-6. (See also Model Output comment). As it stands, the information given in the appendix and the text is insufficient to determine if the model results are credible.

It is unclear what simplifications were made to the model for its application to SEAD-26. These should be more clearly stated. The validity of the modeling effort for predicting the change in concentration with time is questionable since only one true data point is available for each site. For SEAD-25, the concentration versus time graph is generated from this single data point and an initial condition based on the results of a previous model run, and cannot be considerable reliable. For SEAD-26 the prediction is based solely on an initial concentration in one well and cannot be considered reliable.

Response #39

See response # 34.

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# Comments for Draft RI for the Fire Training Areas by The United States Environmental Protection Agency (USEPA)

## Draft RI for the Fire Training Areas

# **General Comments**

Comment #1 The report should present a discussion of data validation issues and data

usability as it relates to the DQO which have been set for the site. The text should present rationale for the data rejections which are presented in the data tables and how these data rejections may affect the overall

usability of the data.

Response #1 Acknowledged. Sections 6.2 and 7.2 of the report describe the data

usability issues such as data validation, analytical methods, precision,

accuracy, representativeness, comparability and completeness.

Comment #2 The results of the grain-size distribution analyses for the sediment samples

were not presented in the document as originally discussed in the work plan for these sites. The results of the hardness analyses or TOC analyses were also not presented or discussed in the RI Report. The TOC analyses should be used to correct the site-specific TAGMs based on the TOC

results, as is discussed in TAGM-4046.

Response #2 Acknowledged. The grain size analysis results for the sediment samples

are shown in Appendix A. The average site-wide value for TOC is

approximately 1% and therefore the TAGMs for soil were not adjusted.

### **Specific Comments**

#### Section 1.0

Comment #1 Page 1-20, P2: The third sentence of this paragraph appears to be

incomplete. The sentence should be reviewed and corrected as needed.

Response #1 Acknowledged. The sentence has been reworded to: ".....have been

collected from 16 glacial till locations...... "

Comment #2 Page 1-35; P1: A figure should be provided showing the potentiometric

head changes described in the text. The figure should be combined with

the precipitation data for the same period.

Response #2 A potentiometric map was not developed because the precipitation data

used was from a station located approximately 10 miles from the site. On-site precipitation data would be needed to accurately assess the local

effects on groundwater levels.

# Section 3.0

Comment #1 Page 3-2, Sec. 3.1.3, P2: It is reasonable to state that rainfall descreases during January and February, since at this time of the year precipitation would be frozen. It would be more appropriate if the text compared

precipitation amounts throughout the year and not rainfall.

**Response** #1 **Agreed.** The text should state that the seasonal variations in precipitation are shown in Table 1-3. The text has been modified accordingly.

Comment #2 Page 3-4, Sec. 3.1.4.2, P1: The thickness of the till should be presented in the text.

Response #2 Agreed. The text has been modified to include the till thicknesses.

Comment #3 Page 3-4, Sec. 3.1.4.2, P3: Grain size distribution curves should be provided in the appendices of this document.

Response #3 Agreed. The grain size distribution curves are included in Appendix A.

Comment #4 Page 3-5, Sec. 3.1.4.3: The locations for the stated ranges of weathered shale should be presented in the text.

Response #4 Agreed. The text has been modified to include the locations of the weathered shale.

Comment #5 Page 3-36, P2: The locations stated where the competent shale was encountered should be presented in the document.

Response #5 Agreed. The text has been revised on Page 3-6 to state the location of the competent shale.

Comment #6 Figures 3-4 and 3-5: The shading used for the lithological units are reversed. The screened and open sections of each well should be shown on the geologic cross sections along with a water level mark for both shallow and deep wells at each cluster.

Response #6 Acknowledged. The shading for the lithological units has been corrected. Water level elevations have been added for the wells. Well construction details are provided in Table 2-4.

Comment #7 Page 3-12, Sec. 3.1.5.1, P2: The tense of the text here should be changed i.e., "..groundwater is expected..." should read, "groundwater was expected..."

Response #7

**Disagree.** This statement means that the groundwater flow should follow the slope of the bedrock surface. In this context, groundwater flow does not have a past tense, since it reflects the current conditions.

Comment #8

**Table 3-1:** The header should define whether the depths and elevations provided are for competent or weathered bedrock.

Response #8

Acknowledged. The travel times used to characterize bedrock surface were between 12,600 and 14,400 ft/sec. These correspond to competent shale formations. A footnote has been added to Table 3-1 clarifying this.

Comment #9

Page 3-14, Sec. 3.1.6.2.1, P1: What is "groundwater topography"? Should this be groundwater potentiometric surface or groundwater water table?

Response #9

**Acknowledged.** This sentence has been reworded from groundwater topography to groundwater contour.

Comment #10

**Figure 3-6:** There is no basis for the construction of the 736 equipotential contour line downgradient of wells MW25-15 and MW25-19.

Response #10

**Disagree.** The 736 contour line shown in this figure is inferred from the countours and the general topography of SEAD-25 and is appropriate for this site.

Comment #11

**Figure 3-7:** See comment above for the 736 contour line and apply to the 737 line in this figure.

Response #11

**Disagree.** See Response #10.

Comment #12

**Figure 3-8:** The 738 equipotential contour crosses the 738 topographic contour line in the area of well MW25-13. Field notes should be reviewed for indications that this "stream" was flowing at the time of water level measurements. If no water was present at this time the contouring in this figure should be corrected accordingly.

Response #12

**Acknowledged.** The stream was not observed to be flowing during the field investigation. The 738 contour line has been changed to a dashed line to indicate that this elevation is inferred.

Comment #13

**Figures 3-6 through 3-8:** Flow direction arrows should be drawn at 90 degrees to the equipotential contour lines. It is appropriate to construct hydrogeologic flow sections for the site to aid in an understanding of site flow conditions.

Response #13

Acknowledged.

Figures 3-9 and 3-10: The contouring presented should be truncated between control points and should be checked for accuracy (i.e., triangulation between data points).

Response #14

**Disagree.** The contouring shown in these figures represents reasonable extrapolations between the monitoring well elevations shown.

Comment #15

Page 3-19, Sec. 3.1.6.2.2, P1: It is not appropriate to calculate a horizontal flow gradient between MW25-5D and MW25-7D since these wells are parallel to the potentiometric contours shown on the figures. This may account for the large difference between the calculated gradients presented in the text.

Response #15

**Agreed.** This text has been removed from the section.

Comment #16

**Table 3-3:** Hydraulic conductivities have a logarithmic distribution and thus the average value presented in the table and associated text should be a geometric mean and not an arithmetic mean.

Response #16

**Acknowledged.** Since the data sets were determined to be lognormally distributed, the values for average hydraulic conductivity shown in Table 3-3 were re-calculated using a geometric mean rather than an arithmetic mean.

Comment #17

Page 3-25, P1: The results of the groundwater velocity calculations are incorrect since the values used for the average hydraulic conductivity are miscalculated, as previously commented.

Response #17

**Acknowledged.** The groundwater velocities were re-calculated using the new geometric means.

Comment #18

Page 3-25, Sec. 3.1.6.4.3, P1: See comment above on calculation of flow velocities.

Response #18

Acknowledged. See response #17.

Comment #19

Figures 3-11 and 3-12: A review of the detailed vegatative cover-type map (Figure 3-12) indicates that the areas mapped are different from those presented on Figure 3-11. This discrepancy should be corrected.

Response #19

Acknowledged. The figures have been revised to correct this discrepancy.

Comment #20

Page 3-50, Sec. 3.2.4.2, P2: A description of the Darian silt-loam is presented in the text. However, a review of text and the figure indicates be removed or clarified to state that the description is for the area surrounding the site.

Response #20	<b>Acknowledged.</b> A statement referring to the areas surrounding the site has been added to the text.
Comment #21	Page 3-50, Sec. 3.2.4.2., P3: See previous comment on the presentation of grain-size distribution curves.
Response #21	Acknowledged. See comment #3.
Comment #22	Page 3-52, P2: MW26-1 is located to the east of the site and not west, as stated in the text.
Response #22	Acknowledged. The text has been revised accordingly.
Comment #23	<b>Figure 3-15:</b> The 738 contour line should pass through MW26-7, which has a reported elevation of 738.00.
Response #2	Acknowledged. The figure has been revised accordingly.
Comment #24	Table 3-8: See previous comment presented for Table 3-1.
Response #24	Acknowledged. Please see response #8.
Comment #25	Page 3-57, P1: Profile identifications should be presented on Figure 3-16 for ease of reference.
Response #25	<b>Acknowledged.</b> The location of the GPR profiles are shown in Figure 2-9.
Comment #26	Page 3-61, Sec. 3.2.6.2, P1: The April 4, 1994 data set contains four data points and not three, as stated in the text.
Response #26	Agreed. The text has been revised to state that the data set contains four data points.
Comment #27	<b>Figure 3-20:</b> The 744 potentiometric contour line should pass through MW26-10, which has a reported elevation of 744.00.
Response #27	Agreed. The figure has been revised accordingly.
Comment #28	Figures 3-20 through 3-22: The contour lines shown on these figures should be truncated between data control points.
Response #28	<b>Disagree.</b> The contour lines are considered to be reasonable extrapolations based upon the data collected.
Comment #29	Page 3-66, Sec. 3.2.6.3: See previous comment on the presentation of the hydraulic conductivity results.

Response #29 Acknowledged. The average hydraulic conductivity for SEAD-26 was

re-calculated using a geometric mean.

Comment #30 Table 3-10: See previous comment on the calculation of hydraulic

conductivity averages value.

Response #30 Acknowledged. Please see response #29.

Comment #31 Page 3-66, Sec. 3.2.6.4: See previous comment on the calculations of

flow velocities.

Response #31 Acknowledged. The groundwater velocities for SEAD-26 were

recalculated using the new hydraulic conductivities based on a geometric

mean.

Comment #32 Figure 3-23 and 3-24: These figures do not match, the discrepancy

should be corrected. The arrow indicating the site in Figure 3-24 is not

pointing to the site boundaries.

Response #32 Acknowledged. This discrepancy has been corrected.

Section 4.0

Comment #1 Page 4-1, Sec. 4.0: The text should clearly state that both DQO

documents will be referenced in the RI Report.

Response #1 Agreed. The text has been modified accordingly.

Comment #2 Figure 4-1: There are locations on this figure which should be contoured

with a 1 ppmv contour line, which have not been identified in the text as

being related to non-contaminant sources.

Response # Disagree. A review of the data did not indicate locations that should be

contoured in addition to those shown on the figure.

Comment #3 Table 4-5: TAGM 4046 lists a concentration or the MDL for several compounds. In these instances, the lower of the two numbers should be

used for determining which samples exceed the TAGM guidance values.

Response #3 Acknowledged. The soil cleanup standards listed in Table 4-5 follow the

guidelines established in TAGM 4046.

Comment #4 Table 4-7: There is a TAGM value for 1,2-dichloroethene (trans) of 300

ug/kg. It is appropriate to use this value for 1,2-dichloroethene (total) since these compounds typically co-elute and are not differentiated by the laboratory. The use of this value should be reflected in the associated

text. There is also a value for chlordane in TAGM-4046 which should be

used for comparison with alphachlordane results. The heading for the last two pages of this table has been cut-off and should be corrected.

Response #4

**Acknowledged.** The TAGM for chlordane has been added and the corrections to the heading have been made.

Comment #5

Page 4-38, P2: A figure showing the distribution of semi-volatile (PAHs) in soils should be presented in the RI Report.

Response #5

**Acknowledged.** A figure (Figure 4-16) showing the distribution of PAHs in soils at SEAD-25 has been added to the report.

Comment #6

Page 4-41, P2: It is not appropriate to discuss health-related issues in the nature and extent section. The text in this section should discuss the exceedances related to guidance values and leave the discussion of health risk to the health risk section.

Reponse #6

Acknowledged. This reference has been deleted from the text.

Comment #7

Page 4-41, P4: The text should state the concentrations of the samples discussed.

Response #7

**Acknowledged.** The concentrations of the samples discussed have been added to the text.

Comment #8

Page 4-42, Sec. 4.1.5, P1: The text should present a comparison between all three rounds of sampling, and how the groundwater chemistry has changed through time.

Response #8

Acknowledged. An analysis of changes or trends over time for the groundwater data was not conducted due to the limited data set, and the fact that many of the wells were not installed in earlier sampling rounds. Additionally, the statistical summary table (Table 4-9) shows that there was a 0% frequency of detection for many of the analytes, and a low frequency of detection for the remainder of the organic analytes showing a hit. The metals data may be subjected to a non-parametric type statistical trend analysis after additional sampling rounds are conducted.

Comment #9

**Table 4-9:** Please explain why the "total counts" presented in the groundwater summary table varies from method to method and within each method.

Response #9

The total counts vary under the volatile organics from compound to compound due to the use of either Method 524.1 or TCL volatile organics. The use of both methods was due to the request by EPA to include the 524.1 analysis on certain wells.

**Table 4-10:** The order in which the wells are presented is confusing. The wells should be presented in numerical order.

In addition to NYSDEC GA groundwater standards, Federal MCLs should also be included for each contaminant. The table incorrectly states that there are no standards for Bromoform, Antimony, Beryllium and Thallium, which all have Federal MCLs.

Response #10

**Acknowledged.** The table has been modified to include MCLs if the MCL is lower than the NYSDEC GA groundwater standard or if no GA standard exists for a compound. The order of the wells is due to the manner in which the relational database is queried to create the tables.

Comment #11

Page 4-65, Sec. 4.1.5.2: A figure showing the distribution of total, semi-volatiles (including TICs) should be presented in this report.

Response #11

Acknowledged. A figure showing the concentrations of SVOCs and TICs in the shallow groundwater from round 2 (March 1996) has been added as Figure 4-15 to the report.

Comment #12

Page 4-66, P1: A discussion of the TICs found in Round 2 sample analysis results should be presented.

Response #12

**Acknowledged.** A discussion of the SVOC TICs in groundwater has been added to the section

Comment #13

Page 4-67, P1: The text speculates about the origin of the inorganics found in the groundwater. More justification should be given for the conclusions presented here.

Response #13

**Acknowledged.** This statement has been removed from the text. A statistical analysis of background metals concentrations compared to the groundwater sampling concentrations is presented in Section 6.0.

Comment #14

Page 4-74, P1: The text states that SW25-6 was not used as background since it was "... impacted by other constituents, not associated with past site activities...: but the text does not elaborate what these impacts were or what caused them. A discussion of these impacts should be presented in the text.

Response #14

**Agreed.** The impacts referred to in the report are elevated levels of SVOCs, and PAHs detected in the sediment sample at this location; presumably from storm drain discharges.

Comment #15

General Comment: The results of the average and standard deviations should be rounded to reasonable numbers since the analytical methods cannot typically detect these compounds down to the numbers presented here.

Response #15

Acknowledged.

Comment #16

Page 4-78, Sec. 4.1.7.1, P1: Toluene is not considered a common laboratory contaminant and the discussion in the text referring to toluene as such should be removed.

Response #16

**Disagree.** Even though toluene is not as common a lab contaminant as acetone, 2-butanone and carbon disulfide, it has been shown to be an artifact from laboratory cross-contamination. Due to the low concentrations present and the fact that toluene has not been shown to be a contaminant of concern at SEDA, it is reasonable to assume that its presence is due to laboratory contamination. The text has been revised to state that the presence of these compounds may be due to laboratory cross-contamination.

Comment #17

**Table 4-14:** The source listed for Di-n-buthylphthalate is given as "????". What is this source?

Response #17

Acknowledged. This has been corrected to show none, meaning there are no current sediment quality criteria for this compound.

Comment #18

**Page 4-78:** Is the drainage ditch discussed here "...north..." the northwest ditch previously discussed?

Response #18

The location of the drainage ditch mentioned in this paragraph can be confirmed by the referenced sample locations.

Comment #19

**Table 4-14:** The abbreviations for the sources listed should be presented as footnotes to this table. What is the "west Effect Le" which is listed as a source? If a compound has been qualified as rejected, the concentrations should be removed from the tables and only the qualifier "R" shown.

Response #19

Acknowledged. The source abbreviations have been corrected and identified in the table.

Comment #20

Page 4-86, Sec. 4.1.7.6: The text states that MW25-2 had the maximum TPH concentration. This appears to be incorrect since this section discusses sediment sample results. The previous paragraph identifies surface water samples. Again, this appears to be incorrect in a sediment discussion.

Response #20

Acknowledged. The text has been changed to show the sediment location as SD25-8 rather than MW25-2 and the reference to surface water has been changed to sediment.

Page 4-86, Sec. 4.1.8: The text here should state that the site has been impacted by TPH. This section should also summarize the results of the soil gas survey and relate these results to the groundwater and soil sample results.

Response #21

**Acknowledged.** The text has been revised to include TPH. A discussion relating the soil gas survey result to the groundwater and soil sample results has been added to Sec. 4.1.8.

Comment #22

Table 4-16 and 4-17: Why do the "total counts" vary between some of the compounds? The asterisks represented on Table 4-17 should be added to the list of notes.

Response #22

Please see comment #9

Comment #23

**Table 4-22:** See previous comments on the variation between total counts.

There are not units presented on this table.

Response #23

Please see response #9. Units have been added to the table.

Comment #24

**Table 4-23:** The wells are not presented in numeric order, is there a significance in the way the wells are presented?

Response #24

The order that the wells appear in this table is a function of the structure of the database and the manner in which the database information is accessed.

Comment #25

Page 4-155: The results of all the inorganics should be discussed, especially when analytes exceed their guidance values by as much as 29,900 times, as in the case for calcium.

Response #25

**Acknowledged.** The table incorrectly showed a standard of 50 ug/l for calcium. There is no current groundwater standard for calcium. The table has been corrected to show this.

Comment #26

Page 4-156, Sec. 4.2.41: The text here references SEAD-25. This should be corrected to state SEAD-26.

Response #26

Acknowledged. The reference has been changed accordingly.

Comment #27

Table 4-24: See previous comment on total count variations.

Response #27

Please see response #9.

Comment #28

Table 4-25: See previous comment on the "standard source" as it applies to heptachlor.

Acknowledged. The reference has been changed to New York State Response #28 Class C Surface Water Standard. Comment #29 Page 4-163, Sec. 4.2.4.2: The standard referenced here for surface waters is incorrectly given as "... New York State Class GA..." Acknowledged. The text has been changed to New York State Class C Reponse #29 Surface Water Quality standards. Comment #30 Page 4-164, P1: The text here references groundwater. This text should be corrected to state surface water. Response #30 Acknowledged. The reference has been changed to surface water. Comment #31 Figure 4-14: The flow direction of the surface water bodies should be presented to aid in interpretation of results. Response #31 Acknowledged. A map showing the surface water flow direction for SEAD 26 is presented in Figure 3-14. Comment #32 Page 4-173, Sec. 4.2.5.3: The text should state the concentrations of contaminants detected and not only state the number of times the contaminants exceeded their respective guidance values. Response #32 The concentrations of pesticides and PCBs are presented in the preceding Table 4-27. Comment #33 Page 4-176, Sec. 4.2.5.6: The text discusses surface soil results in a section which presents sediment results. Response #33 Acknowledged. The text has been revised to sediment results. Comment #34 Page 4-177, Sec. 4.2.6: Paragraph 3 states that no criteria exceedances were detected for VOCs in groundwater at SEAD 26. The text should be corrected, as benzene and ethylbenzene were detected above NYSDEC

# Section 5.0

Response #34

Comment #1

The Fate and Transport chapter of this RI includes information about the physical and chemical characteristics of the site and the site contaminants. It also includes three modeling efforts (a water balance, fugacity modeling, and one dimensional transport modeling). It does not, however,

**Agreed.** The text has been changed to state that the NYSDEC GA standards were exceeded for benzene and ethylbenzene in two wells.

Class GA standards.

provide clear conclusions on the potential fate and transport of contaminants at the two sites. Any conclusions concerning the sites are fragmentary and scattered throughout the section. No overall conclusions concerning the site are presented.

A number of general observations concerning the section as a whole are as follows. Most of these affect the usability of the section at the end of the chapter. This section should bring together the physical and chemical characteristics of the site and contaminants and the results from the three models. From this, a unified description of the qualitative and, if the data permit it, quantitative description of the primary fate and transport mechanisms acting on each site should be presented.

Conclusions: The main points of the fate and transport analysis should be summarized in a conclusions section at the end of the chapter. This section should bring together the physical and chemical characteristics of the site and contaminants and the results from the three models. From this, a unified description of the qualitative and, if the data permit it, quantitative description of the primary fate and transport mechanisms acting on each site should be presented.

Response #1

**Acknowledged**. Section 8.0 presents a summary of the fate and transport analysis and the risk assessment for SEAD-25 and SEAD-26.

Comment #2

Page 5-1, P4: As shown on Figure 1-3, the elevated pad is <u>not</u> defined by the 742 foot contour.

Response #2

**Disagree.** The fire training pad is located within the 742 foot elevation contour according to Figure 1-3.

Comment #3

Page 5-2, P3: Figure 1-13 is not rainfall information. Consider restating the information, or a portion of it, in this section since it is fundamental to the analysis.

Response #3

**Agreed.** The figure reference has been corrected to Figure 1-14 and the references to rainfall have been changed to precipitation.

Comment #4

Page 5-3, P3: Water Balance: Why are 1975 and 1957 models and information being used? Why not use more recent models such as the HELP model. Also, what is the point of this exercise? The text states that "understanding the water balance of the site is helpful in evaluating the containment fate and transport at SEAD-25," yet this analysis or its results are not referred to at all in the rest of the chapter.

When presenting an analysis of this type, the general methodology, assumptions and results should be presented and explained as necessary in

the text, with the details of the analysis presented in an appendix. This also applies to the modeling given in sections 5.3 and 5.4.

Response #4

Acknowledged. The water balance models presented are standard models that were used to estimate the amount of runoff and evapotranspiration at the site as part of the overall water budget. The results of the water balance are described at the end of section 5.1.1 for SEAD-25 and section 5.2.1 for SEAD-26. This information is presented to qualitatively and semi-quantitatively assess the potential effects of precipitation on contaminant transport in the vadose zone. Text has been added to indicate that the potential for infiltration of vadose zone contaminants is moderate since most of the water is lost to evapotranspiration or runoff. It also describes the effects on surface water flow and sediment contaminant transport. The HELP model was developed for landfill applications and is therefore not considered appropriate for these sites.

Comment #5

Page 5-5, P4: These assumptions concerning snowfall and snowmelt given here are gross generalizations which appear to be the direct cause of the results presented in para 2, Page 5-7.

Response #5

**Acknowledged.** The assumptions stated for snowmelt and snowfall may be somewhat conservative. The results discussed on page 5-7 merely reflect the assumptions made in the previous section.

Comment #6

Page 5-7, P2: See comment Page 5-5, p4 above.

Response #6

See response #5.

Comment #7

Page 5-7, P3: An explanation of how these results factor into the fate and transport of contaminants at the site should be given in the text.

Response #7

**Acknowledged**. Text has been added to indicate that the BTEX and VOCs in the subsurface at SEAD-25 would not be expected to migrate via this pathway.

Comment #8

Page 5-7, P4-5: Summary tables or figures of the analytical results should be reproduced or referenced.

Response #8

**Acknowledged.** References for the summary tables have been inserted in the text.

Comment #9

Page 5-12, P1: Reference the section with the discussion of the water balance.

Response #9

**Acknowledged.** A reference for the section discussing the water balance for SEAD-25 has been inserted.

Page 5-13, Table 5-2: This table should only include compounds which are relevant to SEAD-25 and SEAD-26. Delete any compounds which are not of concern at the site. Also, the table should not include bioconcentration factors, which are not relevant to this section, or half-life, which is highly dependent on the circumstances under which it is measured.

Response #10

**Acknowledged.** The table has been revised to show the list of compounds of concern that corresponds to the list of compounds shown in Table 6-4, which are the list of compounds quantified in the human health risk assessment. Bioconcentration factors and half-lifes were included as a point of discussion but were not considered relevant for this site. Therefore they have been removed from the table as requested.

Comment #11

Page 5-20, P2: The statement that VOCs degrade or decay over time conflicts with various other statements in this chapter concerning degradation of various compounds. Please clarify.

Response #11

This paragraph is meant to describe possible mechanisms affecting the fate and transport of organic chemicals in both groundwater and soils at the site. Specific discussions on the biodegradability of BTEX, chlorinated organics, and PAHs are presented later in the section. The statements made concerning the biodegradation of these specific compounds indicate that the available data on the biodegradability of benzene are contradictory and that toluene and ethylbenzene are generally considered to be biodegradable in the subsurface environment. Data concerning the biodegradability of xylenes is not readily available. Biodegradation of chlorinated organics is not considered a significant migration pathway in the subsurface under most environmental conditions, whereas PAHs, especially the lighter molecular weight compounds, are biodegradable under most environmental conditions.

Comment #12

Page 5-21, P1: It is irrelevant how many of the compounds listed in Table 5-2 will volatilize. Discussions in the text should be confined to the contaminants of interest at the site. See also the discussion of Table 5-2 at Page 13ff.

Response #12

The discussion in this paragraph is meant to be a general introduction to the concept of Henry's Law and the factors affecting volatization of organic compounds in the subsurface. More specific discussions related to the chemicals of concern at the site are presented later in the section. The reference to Table 5-2 has been removed.

Comment #13

Page 5-21, P2: General statements such as those which begin in this paragraph should be left out unless they are related to specific concerns at the site.

Response #13

As in the above response, this paragraph is a general introduction to residence times. Specific discussions concerning the compounds of concern at the site are discussed later in the section.

Comment #14

Page 5-21, P4: How much of the "following information" was obtained from the referenced document? This material should be properly referenced. Also, reproduction of information from a reference should be limited to that which is directly applicable to the specific site situation.

Response #14

As the paragraph states, the information in the section under aromatic volatile organics was obtained from the referenced document. This information is considered to be relevant to the site.

Comment #15

Page 5-21, P5: Equilibrium partitioning assesses distribution of contaminants at steady-state, it does not assess transport pathways.

Response #15

**Acknowledged.** However, the general principles of equilibrium partitioning help to determine how much of the chemical will partition in the water, soil or air phases under equilibrium conditons and thereby what transport pathway will predominate.

Comment #16

Page 5-22, P3: The mass of contaminants which are transported in the vapor phase is generally small compared to other modes of transport. Also, it is only minimally affected by barometric pressure. Please explain how it would be affected by convection currents.

Response #16

Convection currents result from the transfer of heat by fluid motion between regions of unequal density resulting from nonuniform heating. In the subsurface, the mass transfer of vapor phase contaminants at SEAD 25 and 26 could be affected by convection currents from the uneven heating of the ground.

Comment #17

Page 5-22, P5: Is the affect of salinity on the Henry's Law constant relevant to this site? If so, the reason should be stated, if not, reference to it should be deleted here and in the several other places that it occurs in this chapter.

Response #17

Sodium, manganese, and other mineral salts are present in the groundwater at the site. The concentrations present may contribute to elevated Henry's Law constants for some organic compounds. This statement has been added to the text.

Comment #18

Page 5-22, P6: Please explain why releases to the atmosphere and tropospheric lifetime are important factors at these sites.

Response #18

**Acknowledged.** Tropospheric lifetime is not relevent. This paragraph has been removed from the section.

Page 5-23, P2: Please clarify the third and fourth sentences "Volatilization represents...".

Response #19

Volatilization of TCE and 1,2-DCE is considered a significant migration pathway because of the relatively high vapor pressures and Henry's Law constants for these compounds. The partitioning of these compounds from groundwater to the vapor phase is directly proportional to the concentrations in groundwater. At the concentrations of TCE detected in groundwater at SEAD-25 (10 ppb average), the partitioning of this comound into the vapor phase would not be significant. The text has been revised to show that these pathways may be significant if the groundwater concentrations are sufficiently high.

Comment #20

Page 5-23, P4: Solubility does not "cause impacts to the groundwater". Please restate or delete. Also, what is the relevance of the state of TCE and DCE since no pure product was found?

Response #20

**Acknowledged.** This statement has been removed from the text. The physical state of TCE and DCE at room temperature is not particularly relevant to the site conditions but does provide a relative indicator and has been retained in the text for reference.

Comment #21

Page 5-23, P5: Vapor pressure is not relevant to fate and transport since no pure product was found. Relative humidity and barometric pressure effects on vapor pressure would be negligible in the event that pure product were present.

Response #21

**Acknowledged.** However, the vapor pressure would be relevent to these compounds in the vadose zone.

Comment #22

Page 5-24, P3: Please explain how "soil, sediment, and suspended particulate matter represent an important media for the <u>transport</u> of the chemicals."

Response #22

Soil.and sediment act as transport media through erosion and transport by surface water overland flow, infiltration and percolation of precipitation and stream flow, and suspended particulate matter through airborne transport and groundwater flow transport.

Comment #23

Page 5-24, P5: Provide backup for this paragraph or delete it. Both biodegradation and volatilization are generally insignificant for PAHs.

Response #23

Acknowledged. This paragraph has been removed.

Comment #24

Page 5-25: Partitioning Model of Fugacity: See Page 5-3, p 3ff comment.

Response #24

Please see response #4.

Comment #25

Page 5-25, P1: Why is the fugacity model for VOCs being applied to SEAD-26 when 5.2.2, Chemical Characterization, states that various appropriate limits for VOCs in different media were not exceeded.

Response #25

Fugacity modeling for VOCs at SEAD-26 will provide a better understanding of the fate and transport characteristics of the low levels of VOCs detected in soils.

Comment #26

Page 5-39, P2: There is no figure 5-1 showing TCE breakdown products.

Response #26

Acknowledged. The reference to this figure has been deleted.

Comment #27

Page 5-34, 5-39 Fugacity model results: The results were not related to the existing conditions on the sites. How well do the model results represent what is happening at the sites? How can this information be used to predict what will happen on the site?

Response #27

The fugacity modeling results predict the partitioning of BTEX and chlorinated solvents in groundwater and soils based upon the assumptions stated earlier in the section. This information is used to assess the degree to which the site contaminants will be available for degradation processes, the potential for migration and to assess potential exposure pathways for the human health risk assessment.

Comment #28

Page 5-41, P2: How does this relate to conditions at these sites?

Response #28

Based upon the information presented in this section, TCE which was found in soils and groundwater at SEAD-25 and in soils at SEAD-26, are expected to be moderately sorbed to soils (characterized as till with a high percentage of silt and clay); and that the TCE will be relatively persistent due to the absence of any significant degradation mechanisms.

Comment #29

Page 5-42, P2,3: How do the various items mentioned here pertain to the site? Is photochemical oxidation of TCE in air, or the half-life of TCE in water relevant?

Response #29

The paragraphs discussing photoxidation and biodegradation have been deleted from the text since the information presented is not necessarily relevant or conclusive.

Comment #30

Page 5-42, P4: The information in this paragraph is incorrect; there is considerable evidence in the literature to microbial biodegradation of PCE and TCE in both laboratory and field environments. What is the purpose of the statement "Biodegradation should be assumed to be of minimal importance except in landfills with active microbial populations"? This

type of statement needs to be related to the conditions at the site and backed up with further technical information.

Response #30

This paragraph has been deleted.

Comment #31

Page 5-42 to 46, Semivolatile Organic Compounds: A considerable amount of space is devoted to discussing the properties and possible fate and transport pathways of 2,4-dimethylphenol and naphthalene, which are the two most prevalent SVOCs on the two sites. However, there is no attempt made to identify how these properties and pathways are applicable to the sites being examined.

Response #31

Section 8.0 summarizes the fate and transport characteristics at both SEAD-25 and SEAD-26.

Comment #32

Page 5-45, P2: Naphthalene does not have a "relatively high aqueous solubility." Also, the conclusion in the closing statement is not supported by the beginning of the paragraph.

Response #32

Agreed. This paragraph has been deleted.

Comment #33

Page 5-46, P5: It is incorrect to say that the vadose zone does not need to be modeled with the transport model because it was already estimated within the fugacity modeling. These are entirely different models, the fugacity model being a simple steady state model of contaminant distribution, and the transport model being a time-dependent dynamic model of contaminant movement.

Response #33

**Acknowledged.** This statement has been deleted from the text.

Comment #34

Page 5-48, Input Parameters: The nomenclature listed does not match the formula nomenclature (English and Greek mixed, upper and lower case differences). Also, there is no justification for the values listed in Table 5-6, contrary to what the text states.

Reponse #34

Acknowledged. The model used in the pre-draft RI has been replaced with a more updated solute transport model (BIOSCREEN) that was not available when the pre-draft report was submitted for review. This model simulates natural attenuation and transport of dissolved hydrocarbons based upon the Domenico analytical transport model. This model is considered to be appropriate for evaluating the potential for natural biodegradation of BTEX contaminants at both SEAD-25 and SEAD-26 using some simplifying assumptions. This model is approved by the EPA and has been used at many disposal sites as a tool for determining the no-action alternative and for identifying potential sensitive groundwater receptors.

Comment #35

Page 5-48, P "The graphical...": Figure 5-1 should be given as four separate figures.

Response #35

**Acknowledged.** The figures have been changed to show the results of the BIOSCREEN modeling as described above and are referenced and numbered separately.

Comment #36

Model Output: The actual concentration used at distance "0", 3.98 mg/l, does not correspond to Figure 4-3 which gives the concentration at the source as 3.04 mg/l.

Response #36

Please see comment #34.

Comment #37

**Page 5-49, P4:** Why is the model being run for BTEX at SEAD-26? Section 5.2.2 seems to indicate that VOCs (i.e. BTEX) are not a concern at this site.

Response #37

BTEX was detected in 2 out of 23 groundwater samples at SEAD-26. The highest concentrations of total BTEX (15 ppb) were found in MW26-7 which is at the periphery of the source area (the fire training pit). Other VOCs were also detected at low concentrations including trimethylbenzenes. Due to the low hits on VOCs at SEAD-26, the predraft RI stated that VOCs were not of concern. However, the presence of these compounds, even at these concentrations, requires further analysis to determine the migration potential and if they pose a potential threat to human health or the environment. Consequently, a simple solute transport model was used to determine the effects of natural attenuation at the site if no further actions or engineering controls were implemented. BIOSCREEN model is used as a simple predictive tool to assess the relative effects of biodegradation on the VOCs in groundwater as well as the effects of dipersion and adsorbtion on solute concentrations. These results may be used to estimate the extent of plume migration over time and the time required to naturally degrade contaminant levels to regulatory cleanup requirements.

Comment #38

Page 5-50, P1: As with SEAD-25, it is unlikely that the conditions at SEAD-26 represent one-dimensional flow in a homogeneous, isotropic medium. Note the description of the site on Page 10, P2: "The burning pit and surrounding area is composed mostly of fill that is from 6.0 to 14.0 feet thick. On the basis of excavations performed at SEAD-26, the fill contains non-metallic construction debris and boulders as well as metallic debris (e.g., pipes, bucket, steel fragments)."

Response #38

**Acknowledged.** The site geology at SEAD-26 is composed of a mixture of fill materials and glacial till and weathered shale. The pre-draft RI describes the fill material as having a similar composition to the till and that the contact between the two was not distinct. Hydraulic conductivities were measured in 8 monitoring wells around SEAD-26.

The geometric mean of the conductivities was used in the BIOSCREEN model to determine the seepage velocity. The hydraulic conductivities ranged from 1.5 x 10<sup>-3</sup> to 3.9 x 10<sup>-3</sup>. The conductivities indicate that the geology in SEAD-26 is fairly homogeneous within the confines of the area modeled. However, this geology is not considered to be representative of the geology outside the confines of SEAD-26 or other areas of SEDA as evidenced by the fairly high seepage velocity of 130 ft/yr. A discussion of the modeling for SEAD-26 using the BIOSCREEN model states that the one of the simplifying assumptions for the model is that the aquifer is homogeneous and isotropic.

Comment #39

Tranport Modeling, General Comments (see also p 5-3, p 3ff comment): This modeling effort will require much more support before it can be considered credible for predicting fate and transport on these sites. More background on the model should be provided, including its general methodology, input parameter requirements, assumption made, resulting output, model limitations, and model sensitivity. Appropriate backup should be provided for all of the input values given in Table 5-6. Consider including a generic diagram indicating what the model accomplshes and maps depicting the model output for each site.

Appendix I (ODAST Model), should be referred to in the text if it is being used to support the analysis. The equations given in the text do not correspond to the equations given in the appendix. The output graphs given in the appendix also seem to bear no relation to the information given in the text. The concentration input for BTEX at SEAD-25 given in the Appendix (3.04 mg/l) corresponds to Figure 4-3 but does not correspond to Table 5-6. (See also Model Output comment). As it stands, the information given in the appendix and the text is insufficient to determine if the model results are credible.

It is unclear what simplifications were made to the model for its application to SEAD-26. These should be more clearly stated.

The validity of the modeling effort for predicting the change in concentration with time is questionable since only one true data point is available for each site. For SEAD-25, the concentration versus time graph is generated from this single data point and an initial condition based on the results of a previous model run, and cannot be considerable reliable. For SEAD-26 the prediction is based solely on an initial concentration in one well and cannot be considered reliable.

Response #39

See response # 34.

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# Comments for Draft RI for the Fire Training Areas by The Army Corps of Engineers

# Draft RI for the Fire Training Areas

# Comments by Frye

#### Comment #1

Per EPA Guidance, the RI report should discuss, at a minimum, chemicalspecific ARARs (scattered references to MCLs and NYS GA groundwater standards are made throughout the text). Also per EPA Guidance, an RI report should contain a conclusion/recommendation section wherein the recommendation for no-further-action or to perform a Feasibility Study is made. This recommendation is based upon the result of the risk assessment and ARARs (note, TAGMs are NOT ARARs). Include a separate section discussing chemical-specific ARARs which includes a listing of all identified chemical-specific ARARs and a comparison of each COC thereto wells a conclusion/recommendation section in the report.

# Response #1

As required by 40 CFR Part 300.430(b)(9), project scoping for remedial investigations/reasibility studies (RI/FS), a preliminary list of ARARs and "To-Be-Considered" (TBCs) was developed and presented in the Project Scoping Plan for SEAD-25 and SEAD-26 (July 1995). These included separate tables for Location Specific ARARs, Action Specific ARARs and Chemical Specific ARARs. The data collected from the RI is compared to applicable chemical specific ARARs. It is the intention of the EPA that ARARs must be attained for any hazardous substances left on site at the completion of remedial actions and that remedial actions should also comply with ARARs. The list of ARARs will be refined and evaluated during the RI/FS process. Each ARAR identified in the Project Scoping Document will be evaluated to determine if they are applicable and relevant and appropriate based upon jurisdictional requirements ( in the case of applicability) and appropriate and relevant based on a comparison of the action, location, or chemicals covered by the requirement and related conditions of the site. Only those requirements that are determined to be both relevant and appropriate must be complied with. The detailed analysis of chemical specific, action specific, and location specific ARARs is presented in the feasibility study report. Section 8 of the Draft RI provides a summary section of the results of the RI. Text has been added to provide further discussions of the chemical specific ARARs and recommendations for a feasibility study including a detailed analysis of remedial alternatives.

# Comments by Bradley

#### Comment #1

Previous comments adequately addressed.

#### **Response to Comments**

# United States Environmental Protection Agency (USEPA), December 29, 1998 Revised Draft Remedial Investigation Report for Fire Training and Demonstration Pad (SEAD 25)

# and the Fire Training Pit and Area (SEAD-26) at the Seneca Army Depot Activity, Romulus, NY

Based on our review we believe that the BIOSCREEN model provides an estimate of the plume length and a gross estimate of the remediation time of the dissolved phase plume undergoing natural attenuation. Based on the review of the geochemical data presented it is evident that natural attenuation is occurring at the site. However, several issues concerning the natural attenuation study need to be addressed, or at least more clearly stated, in the <u>Groundwater Contaminant Transport</u> sections of the Remedial Investigation Report to address the uncertainties involved in the predicting the effectiveness of natural attenuation:

#### Comment #1

Based on the calculations provided by the BIOSCREEN model, after a period of 100 years, the source area concentration is still 1,800 ug/L, almost three to four orders of magnitude greater than the compliance concentrations of 0.7 to 5 ug/L. This would suggest that the time to reach cleanup goals by natural attenuation alone, under current site conditions, is unrealistic.

# Response #1:

Agreed. The time to reach the clean-up goals by natural attenuation alone, is not a realistic time frame for the site, because as mentioned above, the compliance concentrations will in all likelihood not be reached, even after 100 years. While this type of a discussion is best suited for the SEAD-25 Feasibility Study, the text has been clarified, and now it includes a statement about the expected lack of compliance under the existing site conditions. Specifically, the text now notes that the source zone concentration in the plume after 100 years (1,800  $\mu$ g/L) is still well above the applicable compliance concentrations of 0.7 to 5  $\mu$ g/L. The new text was added to the end of the first paragraph of the subsection titled, Predictive Simulations of Plume (page 5-54).

# Comment #2

While the modeling effort provides a gross estimate of natural attenuation, the only way to document the natural attenuation process with certainty is through long-term monitoring. After a period of several years of groundwater sampling and analysis, the long-term monitoring results should show decreasing concentrations throughout the plume. To date, this is not true. For example, at SEAD-25 the benzene concentrations have more than double from 3,000 ug/L to 6,220 ug/L between sample Round 1 (Fall of 1995) and sample Round 2 (Spring of 1996). While these changes may represent seasonal fluctuations, they also represent an unstable plume indicating that the plume source area may still be active and require removal in order for the dissolved-phase portion of the plume to naturally attenuate.

# Response #2

Agreed. Long term monitoring provides data that would document the natural attenuation process with relative certainty. We disagree, however, with the statement in the comment that implies that long term monitoring has been

conducted at SEAD-25, and that the existing data (Fall of 1995 and Spring of 1996) constitutes long term monitoring over which a trend in decreasing concentrations would be observed; the concentrations cited in the comment above are from the source zone of the plume. We acknowledge that the source zone concentrations will likely persists for quite some time, and that the concentrations in the source zone of the plume will likely fluctuate with seasonal changes in the water table elevation, as the water table intersects different zones of VOC-impacted soil. We also agree that source control is a necessary, and typical part of implementing monitored natural attenuation for the dissolvedphase portion of the plume. This approach is well documented by many authors, including (Wilson, 1989). Currently, monitored natural attenuation with source control/remediation is an alternative that is being evaluated for the SEAD-25 FS. However, a discussion of source control issues and remedial response alternatives is more appropriate for the SEAD-25 Feasibility Study (FS) and not the RI report. Given this, text has been added to the report that states that long term monitoring provides data that would document the natural attenuation process with relative certainty. This new text was added to the end of the subsection titled, Additional Data Supporting Biodegradation (page 5-58A).

Comment #3

The assumption of a first-order decay model may not be correct. The first-order decay model assumes that sufficient carbon and electron acceptors are available and that the microbial population is the rate limited factor. Perhaps it is likely that the best fit model is a combination of an instantaneous reaction model and a first-order decay model. The instantaneous reaction model is likely applicable to aerobic respiration and can be documented by the lack of dissolved oxygen The instantaneous model may also be applicable to within the plume. nitrification and possible iron reduction, however, as can be seen from Table 1, the role of these two processes in the natural attenuation process is very small. The first-order decay model appears to be applicable for sulfate reduction and methanogenesis, which are by far, the major processes involved with the natural attenuation process at the site. It should be noted that the sulfate and methane concentrations were not based on field data, but on data provided by BIOSCREEN and Ash Landfill Data (Table 5-6 from the RI). Also, sulfate reduction and methanogenesis may not even be occurring, since these processes occur under strongly reducing conditions (-100mV) and the redox conditions within the plume are greater than +50mV.

Response #3:

Agreed. It is possible that a combination of the first-order decay model and an instantaneous reaction model represents the best fit model, given the evidence cited in the comment above. However, the model shows that the first-order decay model fits the actual site data well. For reasons cited in the comment above, it is possible that sulfate reduction and methanogenesis processes have much less impact than was initially considered for the instantaneous reaction model. New Bioscreen instantaneous reaction model runs where sulfate

reduction and methanogenesis processes are not a factor in degradation indicate that the instantaneous reaction model can be better calibrated to the data (compared to the initial model), provided the calibration includes modification of the longitudinal dispersivity value (i.e., it was adjusted up by approximately one order of magnitude). This increased the amount of mixing between hydrocarbons and electron acceptors. However, predictive model runs using this type of instantaneous reaction model input indicate that the source area concentrations would remain well above the applicable compliance concentrations (approximately 500 ug/L) after 100 years. To address this comment, the text has been clarified to include a short discussion of the possibility that the data may support instantaneous reaction model, even though the first order decay model provides the best fit. The text was clarified on page 5-54 of the transport section.

TABLE I
Assimilative capacities for SEAD-25
(Based on Table 5-6 from the RI)

Electron Acceptor/ By-Product	Concentration between background and source (mg/L)	Assimilative Capacity (mg/L)	Comments
O2	3.28	1.0	Based on Field data
N03	0.15	0.0	Based on field data
Fe(II)	4.9	0.2	No background concentration provided
S04	46.3	9.7	No field data. Data extrapolated from Ash Landfill and BIOSCREEN.
CH4	6.6	8.5	No field data. Based on BIOSCREEN data.

#### References

Wilson, John T., 1989, Risk Management of Monitored Natural Attenuation, in Seminars: Monitored Natural Attenuation for Ground Water, EPA/625/K-98/001.

Appendix L

# APPENDIX L

# Toxicity Profiles for Compounds With Significant Contributions to Human Health

# Risk at SEADs 25 and 26

- 1. Arsenic
- 2. Benzene
- 3. 1,1-Dichloroethene
- 4. Ethylbenzene
- 5. PAHs
- 6. Toluene

.

# ARSENIC

#### CAS NUMBER

7440-38-2

#### COMMON SYNONYMS

None.

# ANALYTICAL CLASSIFICATION

Inorganic.

#### PHYSICAL AND CHEMICAL DATA

Water Solubility: insoluble [1]

Vapor Pressure: insignificant at 25°C [1] Henry's Law Constant: Not Applicable Specific Gravity: 5.727 at 25/5°C [2] Organic Carbon Partition Coefficient: NA

# BACKGROUND CONCENTRATIONS

Arsenic is a naturally-occurring element. The concentration of arsenic in minimally disturbed soils varies tremendously. A collection of 1,257 soil samples from across the conterminous U.S. determined that 90 percent were less than or equal to 10 ppm, with a geometric mean of 5.2 ppm, but with a maximum value as high as 100 ppm [3].

# FATE AND TRANSPORT

Elemental arsenic is extremely persistent in both water and soil. Environmental fate processes may transform one arsenic compound to another; however, arsenic itself is not degraded. Soluble forms of arsenic tend to be quite mobile in water, while less soluble species adsorb to clay or soil particles. Microorganisms in soils, sediments, and water can reduce and methylate arsenic to yield methyl arsines, which volatilize and enter the atmosphere. These forms then undergo oxidation to become methyl arsonic acids and are ultimately transformed back to inorganic arsenic [1].

Bioconcentration of arsenic occurs in aquatic organisms, primarily in algae and lower invertebrates. Biomagnification in aquatic food chains does not appear to be significant, although some fish and invertebrates contain high levels of arsenic compounds which are relatively inert toxicologically. Plants may accumulate arsenic, subject to various factors including soil arsenic concentration, plant type, and soil characteristics [1].

# **HUMAN TOXICITY**

General. Arsenic is a long-recognized human poison capable of producing a lethal reaction and cancer. The major targets of arsenic toxicity are the respiratory system, gastrointestinal system, nervous system, hematological system and skin [1]. Studies in animals suggest that low levels of arsenic may be necessary to maintain good health, but this has not been shown in humans [1]. Arsenic is considered a weak mutagen and has been placed in weight-of-evidence cancer Group A, indicating that it is a human carcinogen [4].

Oral Exposure. A chronic oral RfD of 0.0003 mg As/kg/day is based on a NOAEL of 0.0008 mg As/kg/day for hyperpigmentation, keratosis and possible vascular complications in a chronic oral study in humans [4]. Arsenic is readily absorbed following oral exposure. Acute oral LD<sub>50</sub> values of 26 mg/kg for mice and 15 to 110 mg/kg for rats are reported [1]. The fatal dose in humans is estimated to be 2 mg/kg [1]. Low-level oral exposure (> 0.01 mg As/kg/day) may cause irritation of the digestive tract, pain, nausea, vomiting, diarrhea, skin abnormalities, decreased production of blood cells, abnormal heart function, blood-vessel damage, liver damage, kidney damage, and impaired nerve function ("pins and needles" sensation). In animal studies, high doses of arsenic (> 14 mg As/kg/day) have resulted in effects on the developing fetus. These effects have not been observed in humans [1]. In humans, chronic, oral exposure to low doses of arsenic (> 0.01 mg As/kg/day) has been shown to cause cancer of the skin, liver, bladder, and lung. The most characteristic effect of long-term oral exposure to arsenic is a darkening of the torso and the appearance of small "corns" or "warts" on the palms, soles and torso. These "corns" or "warts" may develop into skin cancer [1]. An oral slope factor of 1.5 (mg/kg/day)<sup>-1</sup> has been adopted by the USEPA [4]. The slope factor is based on the increased incidence of skin cancer in humans exposed to arsenic in the drinking water.

Inhalation Exposure. An inhalation RfC is not available for inorganic arsenic [4]. Approximately 40% of an inhaled concentration of arsenic is absorbed [1]. Inhalation of arsenic has not been reported to be fatal in humans, and acute inhalation LC50 values are not available [1]. Inhalation of arsenic at concentrations greater than 0.1 mg As/m³ may result in irritation of the nose and throat, leading to laryngitis, bronchitis or rhinitis [1]. Effects on the skin, nervous system, and gastrointestinal system similar to those found following oral exposure have been observed in humans following inhalation exposure. Of much greater concern, however, is that inhaled arsenic has been found to increase the risk of lung cancer in humans [1]. An inhalation Unit Risk of 0.0043 (ug As/m³)-1 was derived by USEPA [4] based on the increased incidence of lung cancer in occupationally exposed workers. Several epidemiology studies have suggested an association between arsenic inhalation and an increased risk of developmental effects (congenital

malformations, low birth weight, spontaneous abortion) [1]. Studies in animals support the view that arsenic is a developmental toxicant, but only at high doses (20 mg/m<sup>3</sup>) [1].

<u>Dermal Exposure</u>. Arsenic has not been reported to be fatal following dermal contact [1]. Dermal contact with arsenic may result in mild to severe irritation of the skin and mucous membranes and could lead to dermal sensitization [1].

# **ECOLOGICAL TOXICITY**

General. Arsenic is a relatively common element that is present in air, water, soil, plants, and all living tissues. At comparatively low doses, arsenic stimulates growth and development in various species of plants and animals [5]. Arsenic exists in the trivalent (III) and pentavalent (V) states, and its compounds may be either organic or inorganic [6]. Inorganic arsenic compounds are more toxic than organic compounds [5]. Background concentrations of arsenic in unpolluted river waters and soils in the United States are usually <5 μg/L and <15 mg/kg dry weight, respectively [5]. Arsenic is bioconcentrated by organisms, but does not biomagnify in the food chain.

<u>Vegetation</u>. There is no evidence that arsenic is essential for plant growth [7]. Elemental arsenic is considered to be relatively nontoxic to plants [8]. In plants, arsenic concentrations vary between 0.01 and 1.0 ppm. Plants grown in soils contaminated with arsenic do not show higher concentrations of this element than plants grown on uncontaminated soil [7]. In cases of arsenic toxicity, the roots are usually severely affected and plant growth is limited before large amounts of arsenic are absorbed and translocated [8]. Arsenic in soils is most toxic to plants at the seedling stage where it limits germination and reduces viability [7]. The concentration of arsenic that is toxic to plants was determined to be >10 ppm by the National Academy of Sciences [9].

Aquatic Life. Arsenic is toxic to aquatic organisms within the range of 1.0 to 45.0 mg/L arsenite, which is considered more toxic than arsenate [8]. Arsenic is extremely mobile in the aquatic environment, and its fate depends largely on prevailing pH and Eh conditions [10]. Normal arsenic concentrations in fish are 0.52 ppm for bluegill and 0.14 to 1.95 ppm for minnows [9].

Arsenic can bioaccumulate in aquatic vertebrates and invertebrates from water and food, but concentration factors are relatively low [5,11]. The BCF of inorganic arsenic in most invertebrates and fish exposed for 21 to 30 days did not exceed 17 [5]. The biological half-lives of arsenic in green sunfish and bluegills are 7 days and 1 day, respectively [11]. The lethal threshold of arsenic for minnows has been reported to be 234 mg/L [6]. Micromedex, Inc. [12] reported the 36-hour toxic value for minnows was 11.6 ppm and the 16-hour toxic value was 60 ppm.

The USEPA acute freshwater criterion for arsenic (V) is 850  $\mu$ g/L and because there is insufficient data to develop the criteria, the value presented is the LOEL. The acute freshwater criterion for arsenic (III) is 360  $\mu$ g/L, and the chronic freshwater criterion for the trivalent form is 190  $\mu$ g/L [13]. The Ohio chronic aquatic life water quality criterion for arsenic is 190  $\mu$ g/L based on warmwater and modified warmwater habitats [14].

Wildlife. Chronic poisoning is infrequently seen in most animals because detoxication and excretion are rapid [5]. Normal arsenic concentrations in mice are 1.0 ppm, while hawks typically have body burdens of 0.4 ppm [9]. Adverse effects were noted in mammals at single oral doses of 2.5 to 33 mg/kg body weight and at chronic oral doses of 1 to 10 mg/kg body weight [5]. Acute waterfowl toxicity is reported at 0.05 ppm [12]. Median lethal concentrations in the diets of mallards were reported at 5,000 ppm [15]. The oral LD<sub>50</sub> values are 15 mg/kg body weight for rats, 25 to 47 mg/kg body weight for mice, 4 to 19 mg/kg body weight for rabbits, and 6.5 mg/kg body weight for fowl [12]. Arsenic does not accumulate in mammals [8].

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# BENZENE

# **CAS NUMBER**

71-43-2

# **COMMON SYNONYMS**

None.

# ANALYTICAL CLASSIFICATION

Volatile organic.

#### PHYSICAL AND CHEMICAL DATA

Water Solubility: 1,791 mg/L [1]

Vapor Pressure: 95.19 mm Hg at 25°C [1]

Henry's Law Constant: 5.43 x 10<sup>-3</sup> atm-m<sup>3</sup>/mole (temperature not given) [1]

Specific Gravity: 0.879 at 15/5°C [2]

Organic Carbon Partition Coefficient: 31 - 143 [1]

# **FATE DATA: HALF-LIVES**

Soil: 5 - 16 days [3]

Air: 2.09 - 20.9 days [3]

Surface Water: 5 - 16 days [3]

Groundwater: 10 days to 2 years [3]

# **NATURAL SOURCES**

Crude oil, volcanoes, forest fires, plants [1].

#### ARTIFICIAL SOURCES

Gasoline, fuel oils, chemical industry, coke ovens, mining, manufacturing, cigarette smoke [1].

#### FATE AND TRANSPORT

Benzene will rapidly volatilize from surface soil and water. That which does not volatilize from permeable surface and subsurface soils will be highly to very highly mobile, and can be expected to leach to nearby groundwater which is not protected by a confining layer. It is fairly soluble, and will be carried with the groundwater to discharge points. It may be subject to biodegradation in soils, shallow groundwater, and surface water. Benzene will not be expected to significantly adsorb to sediment, bioconcentrate in aquatic organisms, or hydrolyze. Photodegradation may be a

significant removal mechanism in surface waters which are not conducive to microbial degradation. Benzene will undergo significant photodegradation in air, but may be washed out with rain [1].

# **HUMAN TOXICITY**

General. Benzene is absorbed into the body following ingestion, inhalation, and dermal contact, and must undergo metabolic transformation to exert its toxic effects. Metabolism occurs primarily in the liver, and to a lesser extent in the bone marrow [4]. The primary targets of benzene toxicity are the central nervous system and the blood [4,5]. Benzene is genotoxic to humans and the USEPA has placed it in weight-of-evidence cancer Group A, indicating that it is a human carcinogen [6].

Oral Exposure. A chronic oral RfD for benzene is currently under review by the Benzene is readily absorbed following oral exposure. USEPA [6]. reported fatal dose in humans is 50 mg/kg [5]. Acute oral LD<sub>50</sub> values in animals include 930 to 5600 mg/kg in rats, 2000 mg/kg in dogs and 4700 mg/kg in mice [4,5]. Data regarding the ingestion of benzene in humans are limited to acute overexposure. Ingestion of 2 ml (29 mg/kg) has resulted in depression of the central nervous system, while ingestion of 10 ml (143 mg/kg) has been fatal [5]. The cause of death was usually respiratory arrest, central nervous system depression or cardiac collapse [4]. In animals, longer-term oral exposure has resulted in toxic effects on the blood (cytopenia: decrease in various cellular elements of the blood) and the immunological system (decreased white blood cells) [4]. There is no evidence that oral exposure to benzene causes effects on reproduction and development, but studies in animals suggest that benzene may affect fetal development [4]. There is no information regarding carcinogenic effects in humans following oral exposure to benzene, but studies in animals indicate that benzene ingestion causes cancer in various regions of the body An oral Slope Factor of 0.029 (mg/kg/day)-1 is based on an increase in the incidence of leukemia in occupationally-exposed workers [6]. The oral Slope Factor was extrapolated from the inhalation data.

Inhalation Exposure. A chronic inhalation RfC for benzene is currently under review by the USEPA [6]. Benzene is readily absorbed following inhalation exposure. The lowest reported fatal concentration in humans is 6380 mg/m³ for a 5 minute exposure [5]. Acute inhalation LC<sub>50</sub> values in rats ranged from 10,000 ppm for 7 hours to 13,700 ppm for 4 hours [4,5]. Most of the available data regarding benzene exposure involve workers exposed in the workplace. The acute effects of benzene exposure involve the central nervous system. Brief exposure to concentrations of 700 to 3000 ppm can cause drowsiness, dizziness, headaches and unconsciousness, and exposure to

concentrations of 10,000 to 20,000 ppm can result in death [4]. In most cases, the effects will end when exposure ceases. The hematopoietic system is the primary target of toxicity following long-term exposure: exposure for several months to years results in pancytopenia (reduction in red blood cells, platelets and white blood cells), while continued exposure for many years results in anemia or leukemia. The lowest concentration resulting in the hematological effects is approximately 10 to 50 ppm [5]. Benzene has been shown to cause chromosomal aberrations in bone marrow and lymphocytes in workers exposed to concentrations > 100 ppm [5]. Chromosomal damage has been found in animals at concentrations as low as 1 ppm [5]. Benzene is not known to be teratogenic (cause birth defects) in humans, but has been found to cause various problems in the developing fetus of animals (low birth weight, delayed bone formation) [4,5]. Occupational exposure to benzene has resulted in leukemia in exposed workers [4,5]. An inhalation Unit Risk of 8.3 x 10-6 (ug/m³)-1 is based on the incidence of leukemia in occupationally-exposed workers [6].

<u>Dermal Exposure</u>. Dermal exposure to benzene may cause redness and dermatitis [4,5]. Systemic effects have not been reported following dermal exposure to benzene.

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# 1,1-DICHLOROETHENE

#### CAS NUMBER

75-35-4

# COMMON SYNONYMS

1,1-Dichloroethylene, asym-dichloroethylene, vinylidene chloride, DCE.

# ANALYTICAL CLASSIFICATION

Volatile organic.

# PHYSICAL AND CHEMICAL DATA

Water Solubility: approximately 2,500 mg/L at 25°C [1]

Vapor Pressure: 591 mm Hg at 25°C [1]

Henry's Law Constant: 3.01 x 10-2 atm-m3/mole [1]

Specific Gravity: 1.213 at 20/4°C [2]

Organic Carbon Partition Coefficient: 150 [1]

#### **FATE DATA: HALF-LIVES**

Soil: 4 weeks to 6 months [3] Air: 9.9 hours to 4.1 days [3]

Surface Water: 4 weeks to 6 months [3]

Groundwater: 56 to 132 days [3]

# NATURAL SOURCES

None [4].

# ARTIFICIAL SOURCES

Manufacture of plastic wrap, adhesives, and synthetic fibers; metabolism of chlorinated solvents [1].

# FATE AND TRANSPORT

1,1-Dichloroethene is a relatively volatile and soluble compound. Releases of this compound to soils and waters, therefore, will be lost primarily through evaporative processes. Given the low  $K_{oc}$  value, little tendency to adsorb to soils and sediments/suspended solids (in waters) is exhibited, and some percolation through soils to groundwaters can be expected. In the groundwaters, very slow hydrolysis and biodegradation (via anaerobic reductive dechlorination to vinyl chloride) will occur. Released to the atmosphere, 1,1-dichloroethene will degrade by reaction with hydroxyl

radicals. Photooxidative reactions in waters are insignificant. Based on its low octanol/water partition coefficient ( $K_{ow} = 135$ ), no significant bioconcentration is expected [1].

# **HUMAN TOXICITY**

General. High levels of DCE have reportedly caused a variety of adverse health effects in animals, including liver, kidney, heart and lung damage, as well as nervous system disorders and death. Harmful effects on the developing fetus have also been demonstrated [4]. The USEPA has placed DCE in weight-of-evidence Group C, indicating that it is a possible human carcinogen [5].

Oral Exposure. A chronic RfD of 0.009 mg/kg/day is based on a LOAEL of 9 mg/kg/day determined for hepatic lesions following chronic oral administration to rats [5]. Studies in animals have demonstrated that DCE is rapidly and almost completely absorbed from the gastrointestinal tract following oral administration. The oral LD<sub>50</sub> for rats is approximately 1,500 mg/kg. No information on the health effects in humans following oral exposure was located [4]. An oral slope factor of 0.6 (mg/kg/day)-1 is based on adrenal pheochromocytomas observed in male rats following chronic oral exposure [5].

Inhalation Exposure. The RfC is currently under review by the USEPA [5], and no value is provided in HEAST [6]. Studies in animals have demonstrated that DCE is rapidly absorbed following inhalation exposure. The 4-hour LC<sub>50</sub> values in fed male rats range from approximately 6,000 to 8,000 ppm, while the 4-hour LC<sub>50</sub> for male rats fasted for 16 hours is 400 ppm. No information was located regarding human deaths following inhalation exposure. The limited information available indicates that humans exposed via short-term inhalation may experience neurotoxicity. Also in humans, DCE has been implicated in liver and kidney toxicity following repeated, low-level exposure. Symptoms in humans exposed via inhalation to concentrations of about 4,000 ppm include: central nervous system depression, convulsions, spasms, and unconsciousness. Pregnant mice exposed to 15 ppm or greater DCE for an unspecified duration produced offspring with skeletal anomalies [4]. An inhalation unit risk of 5.0 x 10-5 (μg/m³)-1 is based on kidney adenocarcinomas observed in male mice exposed via inhalation for 12 months [5].

<u>Dermal Exposure.</u> DCE is irritating when applied to the skin of humans and animals. It is also an eye irritant in humans. Studies with mice indicate that DCE applied dermally is a tumor initiator. No other information was located regarding the health effects of DCE following dermal exposure [4].

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# **ETHYLBENZENE**

# **CAS NUMBER**

100-41-4

# COMMON SYNONYMS

None noted.

# ANALYTICAL CLASSIFICATION

Volatile organic.

# PHYSICAL AND CHEMICAL DATA

Water Solubility: 161 mg/L at 25°C [1] Vapor Pressure: 9.53 mm Hg at 25°C [1]

Henry's Law Constant: 8.44 x 10-3 atm-m<sup>3</sup>/mole at 25°C [2]

Specific Gravity: 0.87 at 25/25°C [3]

Organic Carbon Partition Coefficient: 871 [1]

#### **FATE DATA: HALF-LIVES**

Soil: 3 to 10 days [4]

Air: 8.56 hours to 3.57 days [4] Surface Water: 3 to 10 days [4] Groundwater: 6 to 228 days [4]

# NATURAL SOURCES

Coal tar and petroleum [2].

# ARTIFICIAL SOURCES

Manufacture of styrene, solvent, petroleum refining, vaporization/spills of gasoline and diesel fuel, auto emissions, paints, inks, insecticides, and cigarette smoke [1,2,3]

# FATE AND TRANSPORT

Ethylbenzene released to surface soils will probably undergo partial volatilization and, given its limited ability to sorb to soils ( $K_{oc} = 871$ ), leaching to groundwater. Evidence suggests that this material undergoes biodegradation in groundwaters, and may do so in soils if the initial loading doesn't prove toxic to soil-based microorganisms. If released to surface waters, ethylbenzene is expected to volatilize fairly readily. As with groundwaters, rapid biodegradation can be predicted after an initial acclimation period. Ethylbenzene shows only a slight to moderate tendency to adsorb to soils and sediments in waters.

Bioconcentration in aquatic organisms is not expected to be significant (BCF for ethylbenzene = 145). Ethylbenzene is expected to exist in the atmosphere primarily as a vapor, based upon its vapor pressure value (9.53 mm Hg). Principally, ethylbenzene will be removed from the atmosphere via reaction with hydroxyl radicals; some washout via rainfall may be expected. [1]

# **HUMAN TOXICITY**

General. Humans exposed to ethylbenzene may experience eye and throat irritation, decreased movement, and dizziness. Studies in animals have shown liver and kidney damage, nervous system changes, and blood changes [2]. The USEPA has placed ethylbenzene in weight-of-evidence Group D, indicating that it is not classifiable as to human carcinogenicity [5].

<u>Oral Exposure.</u> A chronic RfD of 0.1 mg/kg/day is based on a NOEL of 97.1 mg/kg/day and a LOAEL of 291 mg/kg/day determined for liver and kidney toxicity in a rat subchronic to chronic oral bioassay [5]. Studies in animals revealed that ethylbenzene is quickly and effectively absorbed following oral exposure. The oral (gavage)  $LD_{50}$  in rats is reported to be 4,728 mg/kg. No information was located regarding death or health effects in humans following oral exposure [2].

Inhalation Exposure. The RfC of 1 mg/m³ is based on a NOAEL of 434 mg/m³ determined for developmental toxicity in rats and rabbits exposed via inhalation [5]. Ethylbenzene is rapidly and efficiently absorbed via inhalation in humans and animals. A 4-hour  $LC_{50}$  of 4,000 ppm was reported for rats. Exposure-related adverse effects in animals included those to liver and kidney, eye irritation, profuse lacrimation, CNS depression and ataxia. No deaths were reported for humans following inhalation of ethylbenzene. The effects observed in humans included pulmonary and ocular irritation, profuse lacrimation, chest constriction, dizziness, vertigo, and possible hematological alterations. Exposure of pregnant rats to levels above 138 ppm for 24 hours/day for 9 days had adverse developmental effects [2].

<u>Dermal Exposure</u>. Liquid ethylbenzene is rapidly absorbed through the skin; however, absorption of vapors through the skin is minimal. The dermal  $LD_{50}$  in rabbits for liquid ethylbenzene was reportedly 15,415 mg/kg. Ethylbenzene appears to be a slight eye irritant in rabbits [2].

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# POLYCYCLIC AROMATIC HYDROCARBONS

# **GENERAL**

Polycyclic aromatic hydrocarbons (PAHs) are a large group of chemicals formed during the incomplete combustion of organic materials. There are over one hundred PAHs, and they are found throughout the environment in air, water, and soil. Seven of the 15 PAHs addressed in this profile are classified as probable human carcinogens [1,2].

# **CAS NUMBERS**

Acenaphthene	83-32-9	Chrysene	218-01-9
Acenaphthylene	208-96-8	Dibenzo(a,h)anthracene	53-70-3
Anthracene	120-12-7	Fluoranthene	206-44-0
Benzo(a)anthracene	56-55-3	Fluorene	86-73-7
Benzo(a)pyrene	50-32-8	Indeno(1,2,3-cd)pyrene	193-39-5
Benzo(b)fluoranthene	205-99-2	Phenanthrene	85-01-8
Benzo(g,h,i)perylene	191-24-2	Pyrene	129-00-00
Benzo(k)fluoranthene	207-08-9		

#### COMMON SYNONYMS

Polynuclear aromatic hydrocarbons, PNAs, PAHs.

# ANALYTICAL CLASSIFICATION

Semivolatile organic.

# PHYSICAL AND CHEMICAL DATA

Water Solubility: insoluble to 3.93 mg/L [1]

Vapor Pressure: negligible to very low at 25°C [1]

Henry's Law Constant: 6.95 x 10-8 to 1.45 x 10-3 atm-m3/mole [1]

Specific Gravity: approximately 0.9 to 1.4 at 0 to 27°C [1]

Organic Carbon Partition Coefficient (Koc): 2.5 x 103 to 5.5 x 106 [1]

#### FATE DATA: HALF-LIVES

Soil: 12.3 days to 5.86 years [3] Air: 0.191 hours to 2.8 days [3]

Surface Water: 0.37 hours to 1.78 years [3] Groundwater: 24.6 days to 10.4 years [3]

# NATURAL SOURCES

Volcanoes, forest fires, crude oil, and oil shale [1].

 $\mathbf{C}_{i,i}$ **(**): {