UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL SCIENCE CENTER
701 MAPES ROAD
FORT MEADE, MD 20755-5350

SDMS DocID 2209904

DATE : September 4, 2003

SUBJECT: Region III Data QA Review

FROM : Fredrick Foreman
Region III ESAT RPO (3EA20)

TO: Lorie Baker
Regional Program Manager (3HS34)

Attached is the organic data validation report for Elkton Farms Site (Case #:31878;S DG#:C01P0, C01Q7, C01W1) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAID.

If you have any questions regarding this review, please call me at (410) 305-2629.

Attachment

cc: Chris Hartman (MDE)

TO#: 0011, TDF#: 0822

ANALYTICAL SERVICES AND QUALITY ASSURANCE BRANCH

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DATE: August 28, 2003

SUBJECT: Level M3 Organic Data Validation for Case 31878
SDGs: C01P0, C01Q7 and C01W1
Site: Elkton Farm

FROM: Michael Roxbury
Senior Data Reviewer

Mahboobeh Mecanic
Senior Oversight Chemist

TO: Fredrick Foreman
ESAT Region 3 Project Officer

OVERVIEW

Case 31878, Sample Delivery Groups (SDGs) C01P0, C01Q7 and C01W1, consisted of eighteen (18) aqueous samples and thirty eight (38) soil samples submitted to Southwest Laboratories of Oklahoma (SWOK) for volatile, semivolatiule and/or pesticide/PCB analyses. The sample set included three (3) trip blanks, three (3) field blanks, and five (5) field duplicate pairs. Samples were analyzed according to SOW OLM04.3 through the Routine Analysis Services (RAS) program.

SUMMARY

Data were validated according to Region III Modifications to the National Functional Guidelines for Organic Data Review, Level M3. All samples were successfully analyzed for all target compounds.

MINOR PROBLEMS

- Volatile samples C01N1,C01N2, C01N3, C01N4, C01N7 and C01N8 (SDG C01P0) arrived at the laboratory in coolers having internal temperatures of 7.1 °C and 8.6°C which exceeded the SOW requirement of 4°C ± 2°C. The "L" qualifier for positive results in these samples was superseded by "J". Quantitation limits were qualified "UL" unless superseded by "UJ" on DSFs.

- Several volatile and semivolatile target compounds failed precision criteria [Percent Difference (%D)] in continuing calibrations. Positive results for these compounds in affected samples were qualified "J" on DSFs unless superseded by "B". Quantitation limits for compounds with imprecision exceeding the fifty percent (%D>50%) criteria were qualified "UJ" on the DSFs.

- Pesticide/PCB initial calibrations performed 6/29/03, column CLP-PEST11, instrument HP-16B, 7/18/03, column DB-17, instrument HP-06A, and 7/24/03, column DB1701, instrument HP-06B reported %RSDs outside QC limits for one or more target compounds. Positive results associated with these calibration outliers were qualified "J" on DSFs.

- Pesticide/PCB data were qualified "J" on the DSFs when percent difference (%D) between results detected on the two columns exceeded the twenty-five percent (25%) criterion.

NOTES

- Concentrations of target compounds found in the analyses of sample-associated field, trip, storage and method blanks are listed below. Only compounds used to qualify results relative to blank contamination are listed. Samples with concentrations of common laboratory contaminants less than ten times (<10X) associated blank concentration or with concentrations of other contaminants less than five times (<5X) the associated blank concentration have been qualified "B".

	Compound	Concentration				Associated samples
(SDG C01P0)	diethylphthalate*	0.8	J	ug/L	(SBLK2)	C01N8
		2	J	ug/L	(FB-C01P6)	C01P9, C01Q0, C01Q2
		1	J	ug/L	(FB-C01P5)	C01P0, C01P1, C01P2, C01P4
	di-n-butylphthalate*	0.9	J	ug/L	(FB- C01P6)	C00Q0, C01N1, C01N3, C01N8, C01P0, C01P1, C01P3, C01P4
	bis(2-ethylhexyl)phthalate*	0.7	J	ug/L	(SBLK1)	C01P0, C01P1, C01P2, C01P3, C01P4, C01P5, C01P6, C01P9, C01Q2
		2	J	ug/L	(SBLK2)	C01N3, C01N4, C01N8
	heptachlor	0.031	J	ug/L	(PBLKWB)	C01P0, C01P1, C01P3, C01P4, C01P5, C01P6, C01P9, C01Q0, C01Q2
		0.013	J	ug/L	(PBLKWC)	C01N1, C01N2, C01N3, C01N4, C01N8
	alpha-Chlordane	0.011	J	ug/L	(FB-C01P6)	C01Q0
	gamma-Chlordane	0.024	J	ug/L	(FB-C01P6)	C01Q0, C01N1, C01N2, C01N4, C01N8, C01P0, C01P1
(SDG C01Q7)	methylene chloride*	2	J	ug/Kg	(VBLK1)	C01R8, C01R9, C01S0, C01S1, C01S2
		1	J	ug/Kg	(VBLK2)	C01Q7, C01Q8, C01Q9, C01R0, C01R1, C01R3, C01R4
	di-n-butylphthalate*	1	J	ug/L	(FB-C01P5)	C01Q7, C01Q8, C01Q9, C01R0, C01R1, C01R3, C01R4, C01R9, C01S0, C01S1, C01S2, C01S6, C01S8, C01T4, C01T5, C01T6
	bis(2-ethylhexyl)phthalate*	0.7	B	ug/L	(FB-C01P5)	C01Q7, C01Q8, C01Q9, C01R0, C01R1, C01R4, C01R8, C01T3, C01T4

	Compound	Concentration	Associated samples
(SDG C01Q7)	heptachlor	0.76 J ug/Kg (PBLKKSB)	C01Q7, C01Q8, C01Q9, C01R0, C01R1, C01R3, C01R4, C01R8, C01S1, C01S2, C01S6, C01S8, C01S9, C01T5, C01T7
	methoxychlor	1.8 J ug/Kg (PBLKSB)	C01R0, C01R4, C01S1
(SDG C01W1)	methylene chloride*	1 J ug/Kg (VBLK1) 3 J ug/Kg (VBLK2)	C01R7 C01S4, C01S5, C01S7, C01X7, C01X8, C01Y0
	diethylphthalate*	2 J ug/L (FB-C01P6)	C01Y0
	di-n-butylphthalate*	0.9 J ug/L (FB-C01P6)	C01R2, C01R5, C01R6, C01R7, C01S5, C01S7, C01T0, C01T1, C01T2, C01T8, C01T9, C01W0, C01W1, C01X7, C01X8, C01Y0
	bia(2-ethylhexyl)phthalate*	58 J ug/Kg (SBLK2)	C01R2, C01R5, C01R6, C01R7, C01S3, C01S5, C01S7, C01T1, C01T2, C01T8, C01T9, C01W0, C01X7, C01X8, C01Y0
	heptachlor	0.56 J ug/Kg (PBLKSB)	C01R2, C01R5, C01R6, C01R7, C01S3, C01S4, C01S5, C01S7, C01T0, C01T1, C01T2, C01T8, C01T9, C01X7, C01X8, C01Y0
		0.95 J ug/Kg (PBLKSC)	C01W1
	alpha-Chlordane	0.011 J ug/Kg (FB-C01P6)	C01R5
	gamma-Chlordane	0.024 J ug/Kg (FB-C01P6)	C01R2, C01R5, C01R6, C01R7, C01S3, C01S4, C01S5, C01S7, C01T0, C01T1, C01T9, C01W0, C01X8, C01Y0

* common laboratory contaminant

- Volatile Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses of sample C01P0 (SDG C01P0) reported recovery of spike compound trichloroethene outside upper QC limit in both MS and MSD. No data were qualified based on these QC analyses outliers.

- Volatile MS/MSD analyses of sample C01R3 (SDG C01Q7) reported recoveries of spike compounds 1,1-dichloroethene and benzene outside lower QC limits in both MS and MSD. No data were qualified based on these QC analyses outliers.

- Volatile MS/MSD analyses of sample C01S7 (SDG C01W1) reported recoveries of spike compounds 1,1-dichloroethene, trichloroethene and benzene outside lower QC limits in MS and recoveries for 1,1-dichloroethene and benzene outside lower QC limits in MSD. No data were qualified based on these QC analyses outliers.

- Semivolatile MS/MSD analyses of sample C01P0 (SDG C01P0) reported recovery of spike compound 4-nitrophenol outside upper QC limit in MSD. No data were qualified based on this QC analysis outlier.

- Semivolatile MS/MSD analyses of sample C01S7 (SDG C01W1) reported recovery of spike compound pentachlorophenol outside lower QC limit in both MS and MSD. Additionally, the Relative Percent Difference for pyrene was outside QC limits. No data were qualified based on these QC analyses outliers.

- Semivolatile sample C01N2 (SDG C01P0) reported recovery of a single base/neutral fraction surrogate outside lower QC limits. No data were qualified based on this single surrogate recovery outlier.

- Semivolatile and pesticide/PCB samples C01N1,C01N2, C01N3, C01N4, C01N7 and C01N8 (SDG C01P0) arrived at the laboratory in coolers having internal temperatures of 7.1 °C and 8.6°C which exceeded the SOW requirement of 4°C ± 2°C. Due to the stability of semivolatile and pesticide/PCB target compounds, no data in these samples were qualified based on transport temperature criteria.

- Pesticide/PCB continuing calibration verifications performed 7/25/03 after undiluted analyses of samples C01R5, C01R7, C01S5, C01T2, and C01X7 indicated several compounds with precisions outside QC limits. The laboratory identified these samples in the narrative as dark in extract color and associated the failed continuing calibration verifications with the samples matrix. Laboratory reanalyzed samples at dilution with continuing calibration verifications within QC limits. The only positive result reported in any undiluted analysis (4,4'-DDE in sample C01R6) was previously qualified "J" for being less than CRQL. No data were qualified based on failed continuing calibration results associated with the undiluted analyses.

- Non-spiked compounds, other than blank contaminants, were detected in samples, matrix spikes (MS), and matrix spike duplicates (MSD). Results and precision estimates are tabled below. Units are ug/Kg for samples C01R3 and C01S7 and in units of ug/L for sample C01P0.

	C01P0	C01P0MS	C01P0MSD	%RSD
endrin ketone	ND	0.059 J	0.058 J	2*

	C01R3	C01R3MS	C01R3MSD	%RSD
acetone	51 J	40 J	44 J	12
carbon disulfide	2 J	2 J	2 J	0
methyl acetate	ND	5 J	32	146*
2-butanone	11 J	8 J	4 J	46
2,4-dichlorophenol	ND	22 J	ND	IN
bis(2-ethylhexyl)phthalate	2400 J	1700 J	1800 J	19
4,4'-DDD	ND	5.2	5.2	0*
endrin ketone	ND	3.6 J	3.4 J	6*

	C01S7	C01S7MS	C01S7MSD	%RSD
acetone	110 J	110 J	130 J	10
methyl acetate	33 J	70 J	130 J	66
2-butanone	16 J	13 J	16 J	12
dibenzofuran	ND	ND	35 J	IN
fluorene	ND	ND	85 J	IN
phenanthrene	ND	ND	840	IN
anthracene	ND	ND	160 J	IN
carbazole	ND	ND	33 J	IN
fluoranthene	ND	26 J	1000	190*
benzo(a)anthracene	ND	ND	420	IN
chrysene	ND	22 J	460	182*
benzo(b)fluoranthene	22 J	20 J	390	148
benzo(k)fluoranthene	ND	ND	290 J	IN
benzo(a)pyrene	ND	ND	320 J	IN
indeno(1,2,3-cd)pyrene	ND	ND	200 J	IN
dibenzo(a,h)anthracene	ND	ND	110 J	IN
benzo(g,h,i)perylene	ND	ND	150 J	IN

%RSD = Percent Relative Standard Deviation
* Relative Percent Difference reported
ND = Not detected
IN = Indeterminant

- Compounds detected below CRQLs were qualified "J" unless superseded by "B" on DSFs.
- Volatile, semivolatile and pesticide/PCB soil samples were analyzed using analytical or extracted samples mass other than mass prescribed by SOW OLM04.3. Dilution factors reported on DSFs were adjusted to reflect actual sample mass used.
- Volatile soil samples associated with this case were collected using ENCORE sampling equipment.
- Tentatively Identified Compounds (TICs) were reviewed during data validation. Compounds identified as condensation reaction products, laboratory artifacts (siloxanes) or blank contaminants were crossed off TIC Form Is during review. Compound identifications were changed to "unknown" when the same compound was reported as eluting at different retention times. TIC Form Is were included in Appendix C only for samples reporting positive TIC results.

All data for Case 31878, SDGs C01P0, C01Q7 and C01W1, were reviewed in accordance with Region III Modifications to the National Functional Guidelines for Organic Data Review, September 1994.

ATTACHMENTS

1) Appendix A Glossary of Data Qualifier Terms
2) Appendix B Data Summary Forms
3) Appendix C Tentatively Identified Compounds
4) Appendix D Chain of Custody Records
5) Appendix E Laboratory Case Narratives

Appendix A

Glossary of Data Qualifiers

GLOSSARY OF DATA QUALIFIER CODES (ORGANIC)

CODES RELATED TO IDENTIFICATION
(confidence concerning presence or absence of compounds)

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

NO CODE = Confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unusable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

N = Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.

CODES RELATED TO QUANTITATION
(can be used for both positive results and sample quantitation limits):

J = Analyte present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.

L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

NJ = Qualitative identification questionable due to poor resolution. Presumptively present at approximate quantity.

Q = No analytical result.

Appendix B

Data Summary Forms

DATA SUMMARY FORM: VOLATILES

Case #: 31878 SDG : C01P0 Number of Soil Samples : 0
Site : ELKTON FARM Number of Water Samples : 18
Lab. : SWOK

Sample Number :		C01N1		C01N2		C01N3		C01N4		C01N7	
Sampling Location :		GWD1		GWU1		GWU2		GWU3		GWU6	
Field QC:										Trip Blank	
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		06/26/2003		06/26/2003		06/26/2003		06/26/2003		06/26/2003	
Time Sampled :		12:45		10:35		10:00		11:10		11:20	
pH :		<2		<2		<2		<2		<2	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	10		UL		UL		UL		UL		UL
Chloromethane	10		UL		UL	1	J		UL		UL
*Vinyl Chloride	10		UL		UL		UL		UL		UL
Bromomethane	10		UL		UL		UL		UL		UL
Chloroethane	10		UL		UL		UL		UL		UL
Trichlorofluoromethane	10		UL		UL		UL		UL		UL
*1,1-Dichloroethene	10		UL	4	J		UL		UL		UL
1,1,2-Trichloro-1,2,2-trifluoroethane	10		UL		UL		UL		UL		UL
Acetone	10		UL		UL		UL		UL		UL
Carbon Disulfide	10		UL		UL		UL		UL		UL
Methyl Acetate	10		UL		UL		UL		UL		UL
*Methylene Chloride	10		UL		UL		UL		UL		UL
trans-1,2-Dichloroethene	10		UL		UL		UL		UL		UL
Methyl tert-Butyl Ether	10		UJ		UJ		UJ		UJ		UJ
1,1-Dichloroethane	10		UL		UL		UL		UL		UL
cis-1,2-Dichloroethene	10		UL		UL		UL		UL		UL
*2-Butanone	10		UL		UL		UL		UL		UL
Chloroform	10		UL		UL		UL		UL		UL
*1,1,1-Trichloroethane	10		UL		UL		UL		UL		UL
Cyclohexane	10		UL		UL		UL		UL		UL
*Carbon Tetrachloride	10		UL		UL		UL		UL		UL
*Benzene	10		UL		UL		UL		UL		UL
*1,2-Dichloroethane	10		UL		UL		UL		UL		UL
Trichloroethene	10		UL		UL		UL		UL		UL
Methylcyclohexane	10		UL		UL		UL		UL		UL
*1,2-Dichloropropane	10		UL		UL		UL		UL		UL
Bromodichloromethane	10		UL		UL		UL		UL		UL
cis-1,3-Dichloropropene	10		UL		UL		UL		UL		UL
4-Methyl-2-pentanone	10		UL		UL		UL		UL		UL
*Toluene	10		UL		UL		UL		UL		UL
trans-1,3-Dichloropropene	10		UL		UL		UL		UL		UL
1,1,2-Trichloroethane	10		UL		UL		UL		UL		UL
*Tetrachloroethene	10		UL		UL		UL		UL		UL

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

DATA SUMMARY FORM: VOLATILES

Case #: 31878 SDG : C01P0 Number of Soil Samples : 0
Site : ELKTON FARM Number of Water Samples : 18
Lab. : SWOK

Sample Number :		C01N1		C01N2		C01N3		C01N4		C01N7	
Sampling Location :		GWD1		GWU1		GWU2		GWU3		GWU6	
Field QC:										Trip Blank	
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		06/26/2003		06/26/2003		06/26/2003		06/26/2003		06/26/2003	
Time Sampled :		12:45		10:35		10:00		11:10		11:20	
pH :		<2		<2		<2		<2		<2	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2-Hexanone	10		UL		UL		UL		UL		UL
Dibromochloromethane	10		UL		UL		UL		UL		UL
1,2-Dibromoethane	10		UL		UL		UL		UL		UL
*Chlorobenzene	10		UL		UL		UL		UL		UL
*Ethylbenzene	10		UL		UL		UL		UL		UL
Xylenes (total)	10		UL		UL		UL		UL		UL
*Styrene	10		UL		UL		UL		UL		UL
Bromoform	10		UL		UL		UL		UL		UL
Isopropylbenzene	10		UL		UL		UL		UL		UL
1,1,2,2-Tetrachloroethane	10		UL		UL		UL		UL		UL
*1,3-Dichlorobenzene	10		UL		UL		UL		UL		UL
*1,4-Dichlorobenzene	10		UL		UL		UL		UL		UL
1,2-Dichlorobenzene	10		UL		UL		UL		UL		UL
1,2-Dibromo-3-chloropropane	10		UL		UL		UL		UL		UL
1,2,4-Trichlorobenzene	10		UL		UL		UL		UL		UL

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

DATA SUMMARY FORM: VOLATILES

Case #: 31878 SDG : C01P0 Number of Soil Samples : 0
Site : ELKTON FARM Number of Water Samples : 18
Lab. : SWOK

Sample Number :		C01N8		C01P0		C01P1		C01P2		C01P3	
Sampling Location :		GWU7		SWT1		SWT2		SWT3		SWT4	
Field QC:		Field Blank				Dupl. of C01P4					
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		06/26/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		10:30		11:10		10:15		13:10		09:40	
pH :		<2		<2		<2		<2		<2	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	10		UL								
Chloromethane	10		UL								
*Vinyl Chloride	10		UL								
Bromomethane	10		UL								
Chloroethane	10		UL								
Trichlorofluoromethane	10		UL		UJ		UJ		UJ		UJ
*1,1-Dichloroethene	10		UL								
1,1,2-Trichloro-1,2,2-trifluoroethane	10		UL								
Acetone	10		UL								
Carbon Disulfide	10		UL								
Methyl Acetate	10		UL								
*Methylene Chloride	10		UL								
trans-1,2-Dichloroethene	10		UL								
Methyl tert-Butyl Ether	10		UJ		UJ		UJ		UJ		UJ
1,1-Dichloroethane	10		UL								
cis-1,2-Dichloroethene	10		UL								
*2-Butanone	10		UL								
Chloroform	10		UL								
*1,1,1-Trichloroethane	10		UL								
Cyclohexane	10		UL								
*Carbon Tetrachloride	10		UL								
*Benzene	10		UL								
*1,2-Dichloroethane	10		UL								
Trichloroethene	10		UL								
Methylcyclohexane	10		UL								
*1,2-Dichloropropane	10		UL								
Bromodichloromethane	10		UL								
cis-1,3-Dichloropropene	10		UL								
4-Methyl-2-pentanone	10		UL								
*Toluene	10		UL								
trans-1,3-Dichloropropene	10		UL								
1,1,2-Trichloroethane	10		UL								
*Tetrachloroethene	10		UL								

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

DATA SUMMARY FORM: VOLATILES

Case #: 31878
Site :
Lab. :

SDG : C01P0
ELKTON FARM
SWOK

Number of Soil Samples : 0
Number of Water Samples : 18

Sample Number :		C01N8		C01P0		C01P1		C01P2		C01P3	
Sampling Location :		GWU7		SWT1		SWT2		SWT3		SWT4	
Field QC:		Field Blank				Dupl. of C01P4					
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		06/26/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		10:30		11:10		10:15		13:10		09:40	
pH :		<2		<2		<2		<2		<2	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2-Hexanone	10		UL								
Dibromochloromethane	10		UL								
1,2-Dibromoethane	10		UL								
*Chlorobenzene	10		UL								
*Ethylbenzene	10		UL								
Xylenes (total)	10		UL								
*Styrene	10		UL								
Bromoform	10		UL								
Isopropylbenzene	10		UL								
1,1,2,2-Tetrachloroethane	10		UL								
*1,3-Dichlorobenzene	10		UL								
*1,4-Dichlorobenzene	10		UL								
1,2-Dichlorobenzene	10		UL								
1,2-Dibromo-3-chloropropane	10		UL								
1,2,4-Trichlorobenzene	10		UL								

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

DATA SUMMARY FORM: VOLATILES

Case #: 31878 | SDG : C01P0 | Number of Soil Samples : 0
Site : ELKTON FARM | Number of Water Samples : 18
Lab. : SWOK

Sample Number :		C01P4		C01P5		C01P6		C01P7		C01P8	
Sampling Location :		SWT5		SWT6		SWT7		SWT8		SWT9	
Field QC:		Dupl. of C01P1		Field Blank		Field Blank		Trip Blank		Trip Blank	
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		06/24/2003		06/24/2003		06/25/2003		06/24/2003		06/25/2003	
Time Sampled :		10:15		09:30		09:00		10:10		09:00	
pH :		<2		<2		<2		<2		<2	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	10										
Chloromethane	10										
*Vinyl Chloride	10										
Bromomethane	10										
Chloroethane	10										
Trichlorofluoromethane	10		UJ		UJ				UJ		
*1,1-Dichloroethene	10										
1,1,2-Trichloro-1,2,2-trifluoroethane	10										
Acetone	10										
Carbon Disulfide	10										
Methyl Acetate	10										
*Methylene Chloride	10										
trans-1,2-Dichloroethene	10										
Methyl tert-Butyl Ether	10		UJ		UJ		UJ		UJ		UJ
1,1-Dichloroethane	10										
cis-1,2-Dichloroethene	10										
*2-Butanone	10										
Chloroform	10										
*1,1,1-Trichloroethane	10										
Cyclohexane	10										
*Carbon Tetrachloride	10										
*Benzene	10										
*1,2-Dichloroethane	10										
Trichloroethene	10										
Methylcyclohexane	10										
*1,2-Dichloropropane	10										
Bromodichloromethane	10										
cis-1,3-Dichloropropene	10										
4-Methyl-2-pentanone	10										
*Toluene	10										
trans-1,3-Dichloropropene	10										
1,1,2-Trichloroethane	10										
*Tetrachloroethene	10										

CRQL = Contract Required Quantitation Limit | *Action Level Exists | SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) | Revised 09/99

DATA SUMMARY FORM: VOLATILES

Case #: 31878 SDG : C01P0 Number of Soil Samples : 0
Site : ELKTON FARM Number of Water Samples : 18
Lab. : SWOK

Sample Number :		C01P4		C01P5		C01P6		C01P7		C01P8	
Sampling Location :		SWT5		SWT6		SWT7		SWT8		SWT9	
Field QC:		Dupl. of C01P1		Field Blank		Field Blank		Trip Blank		Trip Blank	
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		06/24/2003		06/24/2003		06/25/2003		06/24/2003		06/25/2003	
Time Sampled :		10:15		09:30		09:00		10:10		09:00	
pH :		<2		<2		<2		<2		<2	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2-Hexanone	10										
Dibromochloromethane	10										
1,2-Dibromoethane	10										
*Chlorobenzene	10										
*Ethylbenzene	10										
Xylenes (total)	10										
*Styrene	10										
Bromoform	10										
Isopropylbenzene	10										
1,1,2,2-Tetrachloroethane	10										
*1,3-Dichlorobenzene	10										
*1,4-Dichlorobenzene	10										
1,2-Dichlorobenzene	10										
1,2-Dibromo-3-chloropropane	10										
1,2,4-Trichlorobenzene	10										

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

DATA SUMMARY FORM: VOLATILES

Case #: 31878 | SDG : C01P0 | Number of Soil Samples : 0
Site : | ELKTON FARM | Number of Water Samples : 18
Lab. : | SWOK

Sample Number :		C01P9		C01Q0		C01Q2					
Sampling Location :		SWU1		SWU2		SWU4					
Field QC:											
Matrix :		Water		Water		Water					
Units :		ug/L		ug/L		ug/L					
Date Sampled :		06/25/2003		06/25/2003		06/25/2003					
Time Sampled :		11:20		10:45		10:50					
pH :		<2		<2		<2					
Dilution Factor :		1.0		1.0		1.0					
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	10										
Chloromethane	10										
*Vinyl Chloride	10										
Bromomethane	10										
Chloroethane	10										
Trichlorofluoromethane	10										
*1,1-Dichloroethene	10										
1,1,2-Trichloro-1,2,2-trifluoroethane	10										
Acetone	10										
Carbon Disulfide	10										
Methyl Acetate	10										
*Methylene Chloride	10										
trans-1,2-Dichloroethene	10										
Methyl tert-Butyl Ether	10		UJ		UJ		UJ				
1,1-Dichloroethane	10										
cis-1,2-Dichloroethene	10										
*2-Butanone	10										
Chloroform	10										
*1,1,1-Trichloroethane	10										
Cyclohexane	10										
*Carbon Tetrachloride	10										
*Benzene	10										
*1,2-Dichloroethane	10										
Trichloroethene	10										
Methylcyclohexane	10										
*1,2-Dichloropropane	10										
Bromodichloromethane	10										
cis-1,3-Dichloropropene	10										
4-Methyl-2-pentanone	10										
*Toluene	10										
trans-1,3-Dichloropropene	10										
1,1,2-Trichloroethane	10										
*Tetrachloroethene	10										

CRQL = Contract Required Quantitation Limit | *Action Level Exists | SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) | Revised 09/99

DATA SUMMARY FORM: VOLATILES

Case #: 31878
Site :
Lab. :

SDG : C01P0
ELKTON FARM
SWOK

Number of Soil Samples : 0
Number of Water Samples : 18

Sample Number :		C01P9		C01Q0		C01Q2					
Sampling Location :		SWU1		SWU2		SWU4					
Field QC:											
Matrix :		Water		Water		Water					
Units :		ug/L		ug/L		ug/L					
Date Sampled :		06/25/2003		06/25/2003		06/25/2003					
Time Sampled :		11:20		10:45		10:50					
pH :		<2		<2		<2					
Dilution Factor :		1.0		1.0		1.0					
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2-Hexanone	10										
Dibromochloromethane	10										
1,2-Dibromoethane	10										
*Chlorobenzene	10										
*Ethylbenzene	10										
Xylenes (total)	10										
*Styrene	10										
Bromoform	10										
Isopropylbenzene	10										
1,1,2,2-Tetrachloroethane	10										
*1,3-Dichlorobenzene	10										
*1,4-Dichlorobenzene	10										
1,2-Dichlorobenzene	10										
1,2-Dibromo-3-chloropropane	10										
1,2,4-Trichlorobenzene	10										

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

DATA SUMMARY FORM: VOLATILES

Case #: 31878
Site :
Lab. :

SDG : C01Q7
ELKTON FARM
SWOK

Number of Soil Samples : 13
Number of Water Samples : 0

Sample Number :		C01Q7		C01Q8		C01Q9		C01R0		C01R1	
Sampling Location :		SEDT1		SEDT2		SEDT3		SEDT4		SEDT5	
Field QC:				Dupl. of C01R1						Dupl. of C01Q8	
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		11:10		10:15		13:15		09:40		10:15	
%Moisture :		23		21		23		24		21	
Dilution Factor :		1.00		0.98		0.98		0.94		0.96	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	10										
Chloromethane	10										
Vinyl Chloride	10										
Bromomethane	10										
Chloroethane	10										
Trichlorofluoromethane	10										
1,1-Dichloroethene	10										
1,1,2-Trichloro-1,2,2-trifluoroethane	10										
Acetone	10			9	J						
Carbon Disulfide	10										
Methyl Acetate	10										
Methylene Chloride	10	3	B	4	B	4	B	4	B	4	B
trans-1,2-Dichloroethene	10										
Methyl tert-Butyl Ether	10										
1,1-Dichloroethane	10										
cis-1,2-Dichloroethene	10										
2-Butanone	10										
Chloroform	10										
1,1,1-Trichloroethane	10										
Cyclohexane	10										
Carbon Tetrachloride	10										
Benzene	10										
1,2-Dichloroethane	10										
Trichloroethene	10										
Methylcyclohexane	10										
1,2-Dichloropropane	10										
Bromodichloromethane	10										
cis-1,3-Dichloropropene	10										
4-Methyl-2-pentanone	10										
Toluene	10										
trans-1,3-Dichloropropene	10										
1,1,2-Trichloroethane	10										
Tetrachloroethene	10										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100

Revised 09/99

Case #: 31878 SDG : C01Q7 Number of Soil Samples : 13
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01Q7		C01Q8		C01Q9		C01R0		C01R1	
Sampling Location :		SEDT1		SEDT2		SEDT3		SEDT4		SEDT5	
Field QC:				Dupl. of C01R1						Dupl. of C01Q8	
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		11:10		10:15		13:15		09:40		10:15	
%Moisture :		23		21		23		24		21	
Dilution Factor :		1.00		0.98		0.98		0.94		0.96	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2-Hexanone	10										
Dibromochloromethane	10										
1,2-Dibromoethane	10										
Chlorobenzene	10										
Ethylbenzene	10										
Xylenes (total)	10										
Styrene	10										
Bromoform	10										
Isopropylbenzene	10										
1,1,2,2-Tetrachloroethane	10										
1,3-Dichlorobenzene	10										
1,4-Dichlorobenzene	10										
1,2-Dichlorobenzene	10										
1,2-Dibromo-3-chloropropane	10										
1,2,4-Trichlorobenzene	10										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

Case #: 31878 SDG : C01Q7 Number of Soil Samples : 13
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01R3		C01R4		C01R8		C01R9		C01S0	
Sampling Location :		SST10		SST11		SST15		SST2		SST3	
Field QC:						Dupl. of C01S2					
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		12:26		13:47		11:40		09:44		10:13	
%Moisture :		16		14		15		22		16	
Dilution Factor :		0.93		0.86		0.91		2.27		0.96	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	10										
Chloromethane	10										
Vinyl Chloride	10										
Bromomethane	10										
Chloroethane	10										
Trichlorofluoromethane	10										
1,1-Dichloroethene	10										
1,1,2-Trichloro-1,2,2-trifluoroethane	10										
Acetone	10	51	J	22	J	22	J	33	J	19	J
Carbon Disulfide	10	2	J							4	J
Methyl Acetate	10										
Methylene Chloride	10	5	B	3	B	3	B	9	B	3	B
trans-1,2-Dichloroethene	10										
Methyl tert-Butyl Ether	10										
1,1-Dichloroethane	10										
cis-1,2-Dichloroethene	10										
2-Butanone	10	11	J								
Chloroform	10										
1,1,1-Trichloroethane	10										
Cyclohexane	10										
Carbon Tetrachloride	10										
Benzene	10										
1,2-Dichloroethane	10										
Trichloroethene	10										
Methylcyclohexane	10										
1,2-Dichloropropane	10										
Bromodichloromethane	10										
cis-1,3-Dichloropropene	10										
4-Methyl-2-pentanone	10										
Toluene	10										
trans-1,3-Dichloropropene	10										
1,1,2-Trichloroethane	10										
Tetrachloroethene	10										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

DATA SUMMARY FORM: VOLATILES

Case #: 31878 | SDG : C01Q7 | Number of Soil Samples : 13
Site : | ELKTON FARM | Number of Water Samples : 0
Lab. : | SWOK

Sample Number :		C01R3		C01R4		C01R8		C01R9		C01S0	
Sampling Location :		SST10		SST11		SST15		SST2		SST3	
Field QC:						Dupl. of C01S2					
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		12:26		13:47		11:40		09:44		10:13	
%Moisture :		16		14		15		22		16	
Dilution Factor :		0.93		0.86		0.91		2.27		0.96	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2-Hexanone	10										
Dibromochloromethane	10										
1,2-Dibromoethane	10										
Chlorobenzene	10										
Ethylbenzene	10										
Xylenes (total)	10										
Styrene	10										
Bromoform	10										
Isopropylbenzene	10										
1,1,2,2-Tetrachloroethane	10										
1,3-Dichlorobenzene	10										
1,4-Dichlorobenzene	10										
1,2-Dichlorobenzene	10										
1,2-Dibromo-3-chloropropane	10										
1,2,4-Trichlorobenzene	10										

CRQL = Contract Required Quantitation Limit | SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 | Revised 09/99

DATA SUMMARY FORM: VOLATILES

Case #: 31878
Site :
Lab. :

SDG : C01Q7
ELKTON FARM
SWOK

Number of Soil Samples : 13
Number of Water Samples : 0

Sample Number :		C01S1		C01S2		C01S6					
Sampling Location :		SST4		SST5		SST9					
Field QC:				Dupl. of C01R8							
Matrix :		Soil		Soil		Soil					
Units :		ug/Kg		ug/Kg		ug/Kg					
Date Sampled :		06/24/2003		06/24/2003		06/24/2003					
Time Sampled :		10:52		11:40		14:20					
%Moisture :		7		15		14					
Dilution Factor :		0.81		0.91		0.93					
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	10										
Chloromethane	10										
Vinyl Chloride	10										
Bromomethane	10			5	J						
Chloroethane	10										
Trichlorofluoromethane	10										
1,1-Dichloroethene	10										
1,1,2-Trichloro-1,2,2-trifluoroethane	10										
Acetone	10	20		40		15					
Carbon Disulfide	10					3	J				
Methyl Acetate	10			10	J						
Methylene Chloride	10	2	B	3	B	3	B				
trans-1,2-Dichloroethene	10										
Methyl tert-Butyl Ether	10										
1,1-Dichloroethane	10										
cis-1,2-Dichloroethene	10										
2-Butanone	10			3	J						
Chloroform	10										
1,1,1-Trichloroethane	10										
Cyclohexane	10										
Carbon Tetrachloride	10										
Benzene	10			1	J						
1,2-Dichloroethane	10										
Trichloroethene	10			4	J						
Methylcyclohexane	10										
1,2-Dichloropropane	10										
Bromodichloromethane	10										
cis-1,3-Dichloropropene	10										
4-Methyl-2-pentanone	10										
Toluene	10			1	J						
trans-1,3-Dichloropropene	10										
1,1,2-Trichloroethane	10										
Tetrachloroethene	10										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100

Revised 09/99

Case #: 31878 SDG : C01Q7 Number of Soil Samples : 13

Site : ELKTON FARM Number of Water Samples : 0

Lab. : SWOK

Sample Number :		C01S1		C01S2		C01S6					
Sampling Location :		SST4		SST5		SST9					
Field QC:				Dupl. of C01R8							
Matrix :		Soil		Soil		Soil					
Units :		ug/Kg		ug/Kg		ug/Kg					
Date Sampled :		06/24/2003		06/24/2003		06/24/2003					
Time Sampled :		10:52		11:40		14:20					
%Moisture :		7		15		14					
Dilution Factor :		0.81		0.91		0.93					
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2-Hexanone	10										
Dibromochloromethane	10										
1,2-Dibromoethane	10										
Chlorobenzene	10										
Ethylbenzene	10										
Xylenes (total)	10										
Styrene	10										
Bromoform	10										
Isopropylbenzene	10										
1,1,2,2-Tetrachloroethane	10										
1,3-Dichlorobenzene	10										
1,4-Dichlorobenzene	10										
1,2-Dichlorobenzene	10										
1,2-Dibromo-3-chloropropane	10										
1,2,4-Trichlorobenzene	10										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

DATA SUMMARY FORM: VOLATILES

Case #: 31878 | SDG : C01W1 | Number of Soil Samples : 11
Site : ELKTON FARM | Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01R2		C01R5		C01R6		C01R7		C01S3	
Sampling Location :		SST1		SST12		SST13		SST14		SST6	
Field QC:											
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/25/2003		06/25/2003		06/25/2003		06/25/2003		06/25/2003	
Time Sampled :		13:10		09:40		10:10		11:10		11:32	
%Moisture :		9		13		10		17		9	
Dilution Factor :		0.86		0.94		0.86		0.83		0.96	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	10										
Chloromethane	10										
Vinyl Chloride	10										
Bromomethane	10										
Chloroethane	10										
Trichlorofluoromethane	10										
1,1-Dichloroethene	10										
1,1,2-Trichloro-1,2,2-trifluoroethane	10										
Acetone	10	32	J	38	J	23	J	29	J	29	J
Carbon Disulfide	10									31	
Methyl Acetate	10										
Methylene Chloride	10	15		14		14		12	B	14	
trans-1,2-Dichloroethene	10										
Methyl tert-Butyl Ether	10										
1,1-Dichloroethane	10										
cis-1,2-Dichloroethene	10										
2-Butanone	10										
Chloroform	10										
1,1,1-Trichloroethane	10										
Cyclohexane	10										
Carbon Tetrachloride	10										
Benzene	10										
1,2-Dichloroethane	10										
Trichloroethene	10										
Methylcyclohexane	10										
1,2-Dichloropropane	10										
Bromodichloromethane	10										
cis-1,3-Dichloropropene	10										
4-Methyl-2-pentanone	10										
Toluene	10										
trans-1,3-Dichloropropene	10										
1,1,2-Trichloroethane	10										
Tetrachloroethene	10										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100

Revised 09/99

DATA SUMMARY FORM: VOLATILES

Case #: 31878 SDG : C01W1 Number of Soil Samples : 11
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01R2		C01R5		C01R6		C01R7		C01S3	
Sampling Location :		SST1		SST12		SST13		SST14		SST6	
Field QC:											
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/25/2003		06/25/2003		06/25/2003		06/25/2003		06/25/2003	
Time Sampled :		13:10		09:40		10:10		11:10		11:32	
%Moisture :		9		13		10		17		9	
Dilution Factor :		0.86		0.94		0.86		0.83		0.96	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2-Hexanone	10										
Dibromochloromethane	10										
1,2-Dibromoethane	10										
Chlorobenzene	10										
Ethylbenzene	10										
Xylenes (total)	10										
Styrene	10										
Bromoform	10										
Isopropylbenzene	10										
1,1,2,2-Tetrachloroethane	10										
1,3-Dichlorobenzene	10										
1,4-Dichlorobenzene	10										
1,2-Dichlorobenzene	10										
1,2-Dibromo-3-chloropropane	10										
1,2,4-Trichlorobenzene	10										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

DATA SUMMARY FORM: VOLATILES

Case #: 31878
Site :
Lab. :

SDG : C01W1
ELKTON FARM
SWOK

Number of Soil Samples : 11
Number of Water Samples : 0

Sample Number :		C01S4		C01S5		C01S7		C01X7		C01X8	
Sampling Location :		SST7		SST8		ST1		SEDU1		SEDU2	
Field QC:										DupL. of C01Y0	
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/25/2003		06/25/2003		06/25/2003		06/25/2003		06/25/2003	
Time Sampled :		11:57		10:40		13:05		11:25		10:55	
%Moisture :		18		9		14		25		23	
Dilution Factor :		0.82		0.94		0.93		0.98		0.98	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	10										
Chloromethane	10										
Vinyl Chloride	10										
Bromomethane	10										
Chloroethane	10										
Trichlorofluoromethane	10										
1,1-Dichloroethene	10										
1,1,2-Trichloro-1,2,2-trifluoroethane	10										
Acetone	10	20	J	33	J	110	J	7	J	6	J
Carbon Disulfide	10	1	J								
Methyl Acetate	10					33	J				
Methylene Chloride	10	15	B	23	B	14	B	21	B	19	B
trans-1,2-Dichloroethene	10										
Methyl tert-Butyl Ether	10										
1,1-Dichloroethane	10										
cis-1,2-Dichloroethene	10										
2-Butanone	10			4	J	16	J				
Chloroform	10										
1,1,1-Trichloroethane	10										
Cyclohexane	10										
Carbon Tetrachloride	10										
Benzene	10										
1,2-Dichloroethane	10										
Trichloroethene	10										
Methylcyclohexane	10										
1,2-Dichloropropane	10										
Bromodichloromethane	10										
cis-1,3-Dichloropropene	10										
4-Methyl-2-pentanone	10										
Toluene	10										
trans-1,3-Dichloropropene	10										
1,1,2-Trichloroethane	10										
Tetrachloroethene	10										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100

Revised 09/99

DATA SUMMARY FORM: VOLATILES

Case #: 31878 SDG : C01W1 Number of Soil Samples : 11
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01S4		C01S5		C01S7		C01X7		C01X8	
Sampling Location :		SST7		SST8		ST1		SEDU1		SEDU2	
Field QC:										DupL. of C01Y0	
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/25/2003		06/25/2003		06/25/2003		06/25/2003		06/25/2003	
Time Sampled :		11:57		10:40		13:05		11:25		10:55	
%Moisture :		18		9		14		25		23	
Dilution Factor :		0.82		0.94		0.93		0.98		0.98	
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2-Hexanone	10										
Dibromochloromethane	10										
1,2-Dibromoethane	10										
Chlorobenzene	10										
Ethylbenzene	10										
Xylenes (total)	10										
Styrene	10										
Bromoform	10										
Isopropylbenzene	10										
1,1,2,2-Tetrachloroethane	10										
1,3-Dichlorobenzene	10										
1,4-Dichlorobenzene	10										
1,2-Dichlorobenzene	10										
1,2-Dibromo-3-chloropropane	10										
1,2,4-Trichlorobenzene	10										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

Case #: 31878 | SDG : C01W1 | Number of Soil Samples : 11

Site : | ELKTON FARM | Number of Water Samples : 0

Lab. : | SWOK

Sample Number :		C01Y0									
Sampling Location :		SEDU4									
Field QC:		Dupl. of C01X8									
Matrix :		Soil									
Units :		ug/Kg									
Date Sampled :		06/25/2003									
Time Sampled :		11:00									
%Moisture :		20									
Dilution Factor :		0.98									
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	10										
Chloromethane	10										
Vinyl Chloride	10										
Bromomethane	10										
Chloroethane	10										
Trichlorofluoromethane	10										
1,1-Dichloroethene	10										
1,1,2-Trichloro-1,2,2-trifluoroethane	10										
Acetone	10	6	J								
Carbon Disulfide	10										
Methyl Acetate	10										
Methylene Chloride	10	17	B								
trans-1,2-Dichloroethene	10										
Methyl tert-Butyl Ether	10										
1,1-Dichloroethane	10										
cis-1,2-Dichloroethene	10										
2-Butanone	10										
Chloroform	10										
1,1,1-Trichloroethane	10										
Cyclohexane	10										
Carbon Tetrachloride	10										
Benzene	10										
1,2-Dichloroethane	10										
Trichloroethene	10										
Methylcyclohexane	10										
1,2-Dichloropropane	10										
Bromodichloromethane	10										
cis-1,3-Dichloropropene	10										
4-Methyl-2-pentanone	10										
Toluene	10										
trans-1,3-Dichloropropene	10										
1,1,2-Trichloroethane	10										
Tetrachloroethene	10										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100

Revised 09/99

DATA SUMMARY FORM: VOLATILES

Case #: 31878 | SDG : C01W1 | Number of Soil Samples : 11
Site : | ELKTON FARM | Number of Water Samples : 0
Lab. : | SWOK

Sample Number :		C01Y0									
Sampling Location :		SEDU4									
Field QC:		Dupl. of C01X8									
Matrix :		Soil									
Units :		ug/Kg									
Date Sampled :		06/25/2003									
Time Sampled :		11:00									
%Moisture :		20									
Dilution Factor :		0.98									
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
2-Hexanone	10										
Dibromochloromethane	10										
1,2-Dibromoethane	10										
Chlorobenzene	10										
Ethylbenzene	10										
Xylenes (total)	10										
Styrene	10										
Bromoform	10										
Isopropylbenzene	10										
1,1,2,2-Tetrachloroethane	10										
1,3-Dichlorobenzene	10										
1,4-Dichlorobenzene	10										
1,2-Dichlorobenzene	10										
1,2-Dibromo-3-chloropropane	10										
1,2,4-Trichlorobenzene	10										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100

Revised 09/99

DATA SUMMARY FORM: BNA

Case #: 31878
Site :
Lab. :

SDG : C01P0
ELKTON FARM
SWOK

Number of Soil Samples : 0
Number of Water Samples : 15

Sample Number :		C01N1		C01N2		C01N3		C01N4		C01N8	
Sampling Location :		GWD1		GWU1		GWU2		GWU3		GWU7	
Field QC:										Field Blank	
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		06/26/2003		06/26/2003		06/26/2003		06/26/2003		06/26/2003	
Time Sampled :		12:45		10:35		10:00		11:10		10:30	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	10										
Phenol	10										
bis-(2-Chloroethyl) ether	10										
2-Chlorophenol	10										
2-Methylphenol	10										
2,2'-oxybis(1-Chloropropane)	10										
Acetophenone	10										
4-Methylphenol	10										
N-Nitroso-di-n-propylamine	10										
Hexachloroethane	10										
Nitrobenzene	10										
Isophorone	10										
2-Nitrophenol	10										
2,4-Dimethylphenol	10										
bis(2-Chloroethoxy)methane	10										
2,4-Dichlorophenol	10										
Naphthalene	10										
4-Chloroaniline	10										
Hexachlorobutadiene	10										
Caprolactam	10	0.7	J								
4-Chloro-3-methylphenol	10										
2-Methylnaphthalene	10										
Hexachlorocyclopentadiene	10										
2,4,6-Trichlorophenol	10										
2,4,5-Trichlorophenol	25										
1,1'-Biphenyl	10										
2-Chloronaphthalene	10										
2-Nitroaniline	25										
Dimethylphthalate	10										
2,6-Dinitrotoluene	10										
Acenaphthylene	10										
3-Nitroaniline	25										

CRQL = Contract Required Quantitation Limit
To calculate sample quantitation limits: (CRQL * Dilution Factor)

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

Revised 09/99

DATA SUMMARY FORM: BNA

Case #: 31878
Site :
Lab. :

SDG : C01P0
ELKTON FARM
SWOK

Number of Soil Samples : 0
Number of Water Samples : 15

Sample Number :		C01N1		C01N2		C01N3		C01N4		C01N8	
Sampling Location :		GWD1		GWU1		GWU2		GWU3		GWU7	
Field QC:										Field Blank	
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		06/26/2003		06/26/2003		06/26/2003		06/26/2003		06/26/2003	
Time Sampled :		12:45		10:35		10:00		11:10		10:30	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	10										
2,4-Dinitrophenol	25										
4-Nitrophenol	25										
Dibenzofuran	10										
2,4-Dinitrotoluene	10										
Diethylphthalate	10									2	B
Fluorene	10										
4-Chlorophenyl-phenyl ether	10										
4-Nitroaniline	25										
4,6-Dinitro-2-methylphenol	25										
N-Nitrosodiphenylamine	10										
4-Bromophenyl-phenylether	10										
*Hexachlorobenzene	10										
Atrazine	10										
*Pentachlorophenol	25										
Phenanthrene	10										
Anthracene	10										
Carbazole	10										
Di-n-butylphthalate	10	0.6	B			0.7	B			0.7	B
Fluoranthene	10										
Pyrene	10										
Butylbenzylphthalate	10										
3,3'-Dichlorobenzidine	10										
Benzo(a)anthracene	10										
Chrysene	10										
bis(2-Ethylhexyl)phthalate	10			50		4	B	4	B	2	B
Di-n-octylphthalate	10										
Benzo(b)fluoranthene	10										
Benzo(k)fluoranthene	10										
Benzo(a)pyrene	10										
Indeno(1,2,3-cd)pyrene	10										
Dibenzo(a,h)anthracene	10										
Benzo(g,h,i)perylene	10										

CRQL = Contract Required Quantitation Limit
To calculate sample quantitation limits: (CRQL * Dilution Factor)

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS
Revised 09/99

Case #: 31878 SDG : C01P0 Number of Soil Samples : 0
Site : ELKTON FARM Number of Water Samples : 15
Lab. : SWOK

Sample Number :		C01P0		C01P1		C01P2		C01P3		C01P4	
Sampling Location :		SWT1		SWT2		SWT3		SWT4		SWT5	
Field QC:				Dupl. of C01P4						Dupl. of C01P1	
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		11:10		10:15		13:10		09:40		10:15	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	10										
Phenol	10										
bis-(2-Chloroethyl) ether	10										
2-Chlorophenol	10										
2-Methylphenol	10										
2,2'-oxybis(1-Chloropropane)	10										
Acetophenone	10										
4-Methylphenol	10										
N-Nitroso-di-n-propylamine	10										
Hexachloroethane	10										
Nitrobenzene	10										
Isophorone	10										
2-Nitrophenol	10										
2,4-Dimethylphenol	10										
bis(2-Chloroethoxy)methane	10										
2,4-Dichlorophenol	10										
Naphthalene	10										
4-Chloroaniline	10										
Hexachlorobutadiene	10										
Caprolactam	10			0.8	J	0.7	J				
4-Chloro-3-methylphenol	10										
2-Methylnaphthalene	10										
Hexachlorocyclopentadiene	10										
2,4,6-Trichlorophenol	10										
2,4,5-Trichlorophenol	25										
1,1'-Biphenyl	10										
2-Chloronaphthalene	10										
2-Nitroaniline	25										
Dimethylphthalate	10										
2,6-Dinitrotoluene	10										
Acenaphthylene	10										
3-Nitroaniline	25										

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

Case #: 31878 SDG : C01P0 Number of Soil Samples : 0
Site : ELKTON FARM Number of Water Samples : 15
Lab. : SWOK

Sample Number :		C01P0		C01P1		C01P2		C01P3		C01P4	
Sampling Location :		SWT1		SWT2		SWT3		SWT4		SWT5	
Field QC:				Dupl. of C01P4						Dupl. of C01P1	
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		11:10		10:15		13:10		09:40		10:15	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	10										
2,4-Dinitrophenol	25										
4-Nitrophenol	25										
Dibenzofuran	10										
2,4-Dinitrotoluene	10										
Diethylphthalate	10	0.6	B	2	B	0.6	B			1	B
Fluorene	10										
4-Chlorophenyl-phenyl ether	10										
4-Nitroaniline	25										
4,6-Dinitro-2-methylphenol	25										
N-Nitrosodiphenylamine	10										
4-Bromophenyl-phenylether	10										
*Hexachlorobenzene	10										
Atrazine	10										
*Pentachlorophenol	25										
Phenanthrene	10										
Anthracene	10										
Carbazole	10										
Di-n-butylphthalate	10	0.8	B	0.6	B			0.9	B	1	B
Fluoranthene	10										
Pyrene	10										
Butylbenzylphthalate	10										
3,3'-Dichlorobenzidine	10										
Benzo(a)anthracene	10										
Chrysene	10										
bis(2-Ethylhexyl)phthalate	10	1	B	0.9	B	2	B	0.6	B	1	B
Di-n-octylphthalate	10										
Benzo(b)fluoranthene	10										
Benzo(k)fluoranthene	10										
Benzo(a)pyrene	10										
Indeno(1,2,3-cd)pyrene	10										
Dibenzo(a,h)anthracene	10										
Benzo(g,h,i)perylene	10										

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

Case #: 31878 SDG : C01P0 Number of Soil Samples : 0
Site : ELKTON FARM Number of Water Samples : 15
Lab. : SWOK

Sample Number :		C01P5		C01P6		C01P9		C01Q0		C01Q2	
Sampling Location :		SWT6		SWT7		SWU1		SWU2		SWU4	
Field QC:		Field Blank		Field Blank							
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		06/24/2003		06/25/2003		06/25/2003		06/25/2003		06/25/2003	
Time Sampled :		09:30		09:00		11:20		10:45		10:50	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	10										
Phenol	10										
bis-(2-Chloroethyl) ether	10										
2-Chlorophenol	10										
2-Methylphenol	10										
2,2'-oxybis(1-Chloropropane)	10										
Acetophenone	10			0.5	J						
4-Methylphenol	10										
N-Nitroso-di-n-propylamine	10										
Hexachloroethane	10										
Nitrobenzene	10										
Isophorone	10										
2-Nitrophenol	10										
2,4-Dimethylphenol	10										
bis(2-Chloroethoxy)methane	10										
2,4-Dichlorophenol	10										
Naphthalene	10										
4-Chloroaniline	10										
Hexachlorobutadiene	10										
Caprolactam	10										
4-Chloro-3-methylphenol	10										
2-Methylnaphthalene	10										
Hexachlorocyclopentadiene	10										
2,4,6-Trichlorophenol	10										
2,4,5-Trichlorophenol	25										
1,1'-Biphenyl	10										
2-Chloronaphthalene	10										
2-Nitroaniline	25										
Dimethylphthalate	10										
2,6-Dinitrotoluene	10										
Acenaphthylene	10										
3-Nitroaniline	25										

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

Case #: 31878 SDG : C01P0 Number of Soil Samples : 0
Site : ELKTON FARM Number of Water Samples : 15
Lab. : SWOK

Sample Number :		C01P5		C01P6		C01P9		C01Q0		C01Q2	
Sampling Location :		SWT6		SWT7		SWU1		SWU2		SWU4	
Field QC:		Field Blank		Field Blank							
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		06/24/2003		06/25/2003		06/25/2003		06/25/2003		06/25/2003	
Time Sampled :		09:30		09:00		11:20		10:45		10:50	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	10										
2,4-Dinitrophenol	25										
4-Nitrophenol	25										
Dibenzofuran	10										
2,4-Dinitrotoluene	10										
Diethylphthalate	10	1	J	2	J	0.5	B	0.8	B	0.8	B
Fluorene	10										
4-Chlorophenyl-phenyl ether	10										
4-Nitroaniline	25										
4,6-Dinitro-2-methylphenol	25										
N-Nitrosodiphenylamine	10										
4-Bromophenyl-phenylether	10										
*Hexachlorobenzene	10										
Atrazine	10										
*Pentachlorophenol	25										
Phenanthrene	10										
Anthracene	10										
Carbazole	10										
Di-n-butylphthalate	10	1	J	0.9	J			1	B		
Fluoranthene	10										
Pyrene	10										
Butylbenzylphthalate	10										
3,3'-Dichlorobenzidine	10										
Benzo(a)anthracene	10										
Chrysene	10										
bis(2-Ethylhexyl)phthalate	10	0.7	B	1	B	0.7	B			3	B
Di-n-octylphthalate	10										
Benzo(b)fluoranthene	10										
Benzo(k)fluoranthene	10										
Benzo(a)pyrene	10										
Indeno(1,2,3-cd)pyrene	10										
Dibenzo(a,h)anthracene	10										
Benzo(g,h,i)perylene	10										

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

Case #: 31878 SDG : C01Q7 Number of Soil Samples : 20
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01Q7		C01Q8		C01Q9		C01R0		C01R1	
Sampling Location :		SEDT1		SEDT2		SEDT3		SEDT4		SEDT5	
Field QC:				Dupl. of C01R1						Dupl. of C01Q8	
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		11:10		10:15		13:15		09:40		10:15	
%Moisture :		23		21		23		24		21	
Dilution Factor :		1.00		0.99		0.99		0.99		0.99	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	330										
Phenol	330										
bis-(2-Chloroethyl) ether	330										
2-Chlorophenol	330										
2-Methylphenol	330										
2,2'-oxybis(1-Chloropropane)	330										
Acetophenone	330										
4-Methylphenol	330										
N-Nitroso-di-n-propylamine	330										
Hexachloroethane	330										
Nitrobenzene	330										
Isophorone	330										
2-Nitrophenol	330										
2,4-Dimethylphenol	330										
bis(2-Chloroethoxy)methane	330										
2,4-Dichlorophenol	330										
Naphthalene	330										
4-Chloroaniline	330										
Hexachlorobutadiene	330										
Caprolactam	330										
4-Chloro-3-methylphenol	330										
2-Methylnaphthalene	330										
Hexachlorocyclopentadiene	330										
2,4,6-Trichlorophenol	330										
2,4,5-Trichlorophenol	830										
1,1'-Biphenyl	330										
2-Chloronaphthalene	330										
2-Nitroaniline	830										
Dimethylphthalate	330										
2,6-Dinitrotoluene	330										
Acenaphthylene	330										
3-Nitroaniline	830										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

Case #: 31878 SDG : C01Q7 Number of Soil Samples : 20
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01Q7		C01Q8		C01Q9		C01R0		C01R1	
Sampling Location :		SEDT1		SEDT2		SEDT3		SEDT4		SEDT5	
Field QC:				Dupl. of C01R1						Dupl. of C01Q8	
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		11:10		10:15		13:15		09:40		10:15	
%Moisture :		23		21		23		24		21	
Dilution Factor :		1.00		0.99		0.99		0.99		0.99	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	330										
2,4-Dinitrophenol	830										
4-Nitrophenol	830										
Dibenzofuran	330										
2,4-Dinitrotoluene	330										
Diethylphthalate	330										
Fluorene	330										
4-Chlorophenyl-phenyl ether	330										
4-Nitroaniline	830										
4,6-Dinitro-2-methylphenol	830										
N-Nitrosodiphenylamine	330										
4-Bromophenyl-phenylether	330										
Hexachlorobenzene	330										
Atrazine	330										
Pentachlorophenol	830										
Phenanthrene	330					37	J				
Anthracene	330										
Carbazole	330										
Di-n-butylphthalate	330	29	B	28	B	37	B	39	B	25	B
Fluoranthene	330					65	J				
Pyrene	330					41	J				
Butylbenzylphthalate	330										
3,3'-Dichlorobenzidine	330										
Benzo(a)anthracene	330					32	J				
Chrysene	330					31	J				
bis(2-Ethylhexyl)phthalate	330	36	B	31	B	33	B	41	B	25	B
Di-n-octylphthalate	330										
Benzo(b)fluoranthene	330					24	J				
Benzo(k)fluoranthene	330										
Benzo(a)pyrene	330					23	J				
Indeno(1,2,3-cd)pyrene	330										
Dibenzo(a,h)anthracene	330										
Benzo(g,h,i)perylene	330										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

Case #: 31878
Site :
Lab. :

SDG : C01Q7
ELKTON FARM
SWOK

Number of Soil Samples : 20
Number of Water Samples : 0

Sample Number :		C01R3		C01R4		C01R8		C01R9		C01S0	
Sampling Location :		SST10		SST11		SST15		SST2		SST3	
Field QC:						Dupl. of C01S2					
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		12:26		13:47		11:40		09:44		10:13	
%Moisture :		16		14		15		22		16	
Dilution Factor :		1.00		0.99		1.00		1.00		0.99	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	330										
Phenol	330									1000	
bis-(2-Chloroethyl) ether	330										
2-Chlorophenol	330										
2-Methylphenol	330										
2,2'-oxybis(1-Chloropropane)	330										
Acetophenone	330										
4-Methylphenol	330										
N-Nitroso-di-n-propylamine	330										
Hexachloroethane	330										
Nitrobenzene	330										
Isophorone	330										
2-Nitrophenol	330										
2,4-Dimethylphenol	330										
bis(2-Chloroethoxy)methane	330										
2,4-Dichlorophenol	330										
Naphthalene	330										
4-Chloroaniline	330										
Hexachlorobutadiene	330										
Caprolactam	330										
4-Chloro-3-methylphenol	330										
2-Methylnaphthalene	330										
Hexachlorocyclopentadiene	330										
2,4,6-Trichlorophenol	330										
2,4,5-Trichlorophenol	830										
1,1'-Biphenyl	330										
2-Chloronaphthalene	330										
2-Nitroaniline	830										
Dimethylphthalate	330										
2,6-Dinitrotoluene	330										
Acenaphthylene	330										
3-Nitroaniline	830										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100

Revised 09/99

Case #: 31878 SDG : C01Q7 Number of Soil Samples : 20
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01R3		C01R4		C01R8		C01R9		C01S0	
Sampling Location :		SST10		SST11		SST15		SST2		SST3	
Field QC:						Dupl. of C01S2					
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		12:26		13:47		11:40		09:44		10:13	
%Moisture :		16		14		15		22		16	
Dilution Factor :		1.00		0.99		1.00		1.00		0.99	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	330										
2,4-Dinitrophenol	830										
4-Nitrophenol	830										
Dibenzofuran	330										
2,4-Dinitrotoluene	330										
Diethylphthalate	330										
Fluorene	330										
4-Chlorophenyl-phenyl ether	330										
4-Nitroaniline	830										
4,6-Dinitro-2-methylphenol	830										
N-Nitrosodiphenylamine	330										
4-Bromophenyl-phenylether	330										
Hexachlorobenzene	330										
Atrazine	330										
Pentachlorophenol	830										
Phenanthrene	330										
Anthracene	330										
Carbazole	330										
Di-n-butylphthalate	330	29	B	21	B			21	B	21	B
Fluoranthene	330										
Pyrene	330										
Butylbenzylphthalate	330										
3,3'-Dichlorobenzidine	330										
Benzo(a)anthracene	330										
Chrysene	330										
bis(2-Ethylhexyl)phthalate	330	2400	J	210	B	240	B	3300	J	1600	J
Di-n-octylphthalate	330										
Benzo(b)fluoranthene	330										
Benzo(k)fluoranthene	330										
Benzo(a)pyrene	330										
Indeno(1,2,3-cd)pyrene	330										
Dibenzo(a,h)anthracene	330										
Benzo(g,h,i)perylene	330										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100

Revised 09/99

Case #: 31878 SDG : C01Q7 Number of Soil Samples : 20
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01S1		C01S2		C01S6		C01S8		C01S9	
Sampling Location :		SST4		SST5		SST9		ST10		ST11	
Field QC:				Dupl. of C01R8							
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		10:52		11:40		14:20		12:09		13:42	
%Moisture :		7		15		14		15		20	
Dilution Factor :		0.99		0.98		0.99		1.00		1.00	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	330										
Phenol	330	65	J								
bis-(2-Chloroethyl) ether	330										
2-Chlorophenol	330										
2-Methylphenol	330										
2,2'-oxybis(1-Chloropropane)	330										
Acetophenone	330										
4-Methylphenol	330										
N-Nitroso-di-n-propylamine	330										
Hexachloroethane	330										
Nitrobenzene	330										
Isophorone	330										
2-Nitrophenol	330										
2,4-Dimethylphenol	330										
bis(2-Chloroethoxy)methane	330										
2,4-Dichlorophenol	330										
Naphthalene	330										
4-Chloroaniline	330										
Hexachlorobutadiene	330										
Caprolactam	330										
4-Chloro-3-methylphenol	330										
2-Methylnaphthalene	330										
Hexachlorocyclopentadiene	330										
2,4,6-Trichlorophenol	330										
2,4,5-Trichlorophenol	830										
1,1'-Biphenyl	330										
2-Chloronaphthalene	330										
2-Nitroaniline	830										
Dimethylphthalate	330										
2,6-Dinitrotoluene	330										
Acenaphthylene	330										
3-Nitroaniline	830										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

Case #: 31878 SDG : C01Q7 Number of Soil Samples : 20
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01S1		C01S2		C01S6		C01S8		C01S9	
Sampling Location :		SST4		SST5		SST9		ST10		ST11	
Field QC:				Dupl. of C01R8							
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		10:52		11:40		14:20		12:09		13:42	
%Moisture :		7		15		14		15		20	
Dilution Factor :		0.99		0.98		0.99		1.00		1.00	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	330										
2,4-Dinitrophenol	830										
4-Nitrophenol	830										
Dibenzofuran	330										
2,4-Dinitrotoluene	330										
Diethylphthalate	330										
Fluorene	330										
4-Chlorophenyl-phenyl ether	330										
4-Nitroaniline	830										
4,6-Dinitro-2-methylphenol	830										
N-Nitrosodiphenylamine	330										
4-Bromophenyl-phenylether	330										
Hexachlorobenzene	330										
Atrazine	330										
Pentachlorophenol	830										
Phenanthrene	330										
Anthracene	330										
Carbazole	330										
Di-n-butylphthalate	330	21	B	22	B	21	B	28	B		
Fluoranthene	330										
Pyrene	330										
Butylbenzylphthalate	330										
3,3'-Dichlorobenzidine	330										
Benzo(a)anthracene	330										
Chrysene	330										
bis(2-Ethylhexyl)phthalate	330	580	J	370	J	960	J	1000	J	580	J
Di-n-octylphthalate	330										
Benzo(b)fluoranthene	330										
Benzo(k)fluoranthene	330										
Benzo(a)pyrene	330										
Indeno(1,2,3-cd)pyrene	330										
Dibenzo(a,h)anthracene	330										
Benzo(g,h,i)perylene	330										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

DATA SUMMARY FORM: BNA

Case #: 31878 SDG : C01Q7 Number of Soil Samples : 20
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01T3		C01T4		C01T5		C01T6		C01T7	
Sampling Location :		ST15		ST2		ST3		ST4		ST5	
Field QC:		Dupl. of C01T7								Dupl. of C01T3	
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		11:28		09:33		10:05		10:45		11:28	
%Moisture :		18		13		17		20		17	
Dilution Factor :		0.99		0.98		0.99		0.98		1.00	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	330										
Phenol	330			1000		520		73	J		
bis-(2-Chloroethyl) ether	330										
2-Chlorophenol	330										
2-Methylphenol	330										
2,2'-oxybis(1-Chloropropane)	330										
Acetophenone	330										
4-Methylphenol	330										
N-Nitroso-di-n-propylamine	330										
Hexachloroethane	330										
Nitrobenzene	330										
Isophorone	330										
2-Nitrophenol	330										
2,4-Dimethylphenol	330										
bis(2-Chloroethoxy)methane	330										
2,4-Dichlorophenol	330										
Naphthalene	330										
4-Chloroaniline	330										
Hexachlorobutadiene	330										
Caprolactam	330										
4-Chloro-3-methylphenol	330										
2-Methylnaphthalene	330										
Hexachlorocyclopentadiene	330										
2,4,6-Trichlorophenol	330										
2,4,5-Trichlorophenol	830										
1,1'-Biphenyl	330										
2-Chloronaphthalene	330										
2-Nitroaniline	830										
Dimethylphthalate	330										
2,6-Dinitrotoluene	330			58	J						
Acenaphthylene	330										
3-Nitroaniline	830										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

DATA SUMMARY FORM: BNA

Case #: 31878 SDG : C01Q7 Number of Soil Samples : 20
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01T3		C01T4		C01T5		C01T6		C01T7	
Sampling Location :		ST15		ST2		ST3		ST4		ST5	
Field QC:		Dupl. of C01T7								Dupl. of C01T3	
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		11:28		09:33		10:05		10:45		11:28	
%Moisture :		18		13		17		20		17	
Dilution Factor :		0.99		0.98		0.99		0.98		1.00	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	330										
2,4-Dinitrophenol	830										
4-Nitrophenol	830										
Dibenzofuran	330										
2,4-Dinitrotoluene	330			42	J						
Diethylphthalate	330										
Fluorene	330										
4-Chlorophenyl-phenyl ether	330										
4-Nitroaniline	830										
4,6-Dinitro-2-methylphenol	830										
N-Nitrosodiphenylamine	330	33	J							43	J
4-Bromophenyl-phenylether	330										
Hexachlorobenzene	330										
Atrazine	330										
Pentachlorophenol	830										
Phenanthrene	330										
Anthracene	330										
Carbazole	330										
Di-n-butylphthalate	330			22	B	21	B	30	B		
Fluoranthene	330										
Pyrene	330										
Butylbenzylphthalate	330										
3,3'-Dichlorobenzidine	330										
Benzo(a)anthracene	330										
Chrysene	330										
bis(2-Ethylhexyl)phthalate	330	200	B	220	B	980	J	2600	J	490	J
Di-n-octylphthalate	330										
Benzo(b)fluoranthene	330										
Benzo(k)fluoranthene	330										
Benzo(a)pyrene	330										
Indeno(1,2,3-cd)pyrene	330										
Dibenzo(a,h)anthracene	330										
Benzo(g,h,i)perylene	330										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

DATA SUMMARY FORM: BNA

Case #: 31878 SDG : C01W1 Number of Soil Samples : 18
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01R2		C01R5		C01R6		C01R7		C01S3	
Sampling Location :		SST1		SST12		SST13		SST14		SST6	
Field QC:											
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/25/2003		06/25/2003		06/25/2003		06/25/2003		06/25/2003	
Time Sampled :		13:10		09:40		10:10		11:10		11:32	
%Moisture :		9		13		10		17		9	
Dilution Factor :		0.99		1.00		0.99		0.98		0.98	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	330								UJ		
Phenol	330										
bis-(2-Chloroethyl) ether	330										
2-Chlorophenol	330										
2-Methylphenol	330										
2,2'-oxybis(1-Chloropropane)	330										
Acetophenone	330										
4-Methylphenol	330										
N-Nitroso-di-n-propylamine	330										
Hexachloroethane	330										
Nitrobenzene	330										
Isophorone	330										
2-Nitrophenol	330										
2,4-Dimethylphenol	330										
bis(2-Chloroethoxy)methane	330										
2,4-Dichlorophenol	330										
Naphthalene	330										
4-Chloroaniline	330										
Hexachlorobutadiene	330										
Caprolactam	330										
4-Chloro-3-methylphenol	330										
2-Methylnaphthalene	330										
Hexachlorocyclopentadiene	330										
2,4,6-Trichlorophenol	330										
2,4,5-Trichlorophenol	830										
1,1'-Biphenyl	330										
2-Chloronaphthalene	330										
2-Nitroaniline	830										
Dimethylphthalate	330										
2,6-Dinitrotoluene	330										
Acenaphthylene	330										
3-Nitroaniline	830										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

Case #: 31878 SDG : C01W1 Number of Soil Samples : 18
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01R2		C01R5		C01R6		C01R7		C01S3	
Sampling Location :		SST1		SST12		SST13		SST14		SST6	
Field QC:											
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/25/2003		06/25/2003		06/25/2003		06/25/2003		06/25/2003	
Time Sampled :		13:10		09:40		10:10		11:10		11:32	
%Moisture :		9		13		10		17		9	
Dilution Factor :		0.99		1.00		0.99		0.98		0.98	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	330										
2,4-Dinitrophenol	830										
4-Nitrophenol	830										
Dibenzofuran	330										
2,4-Dinitrotoluene	330										
Diethylphthalate	330										
Fluorene	330										
4-Chlorophenyl-phenyl ether	330										
4-Nitroaniline	830										
4,6-Dinitro-2-methylphenol	830										
N-Nitrosodiphenylamine	330										
4-Bromophenyl-phenylether	330										
Hexachlorobenzene	330										
Atrazine	330										
Pentachlorophenol	830										
Phenanthrene	330										
Anthracene	330										
Carbazole	330								UJ		
Di-n-butylphthalate	330	25	B	21	B	24	B	38	B		
Fluoranthene	330										
Pyrene	330										
Butylbenzylphthalate	330										
3,3'-Dichlorobenzidine	330										
Benzo(a)anthracene	330										
Chrysene	330										
bis(2-Ethylhexyl)phthalate	330	240	B	240	B	230	B	500	B	590	B
Di-n-octylphthalate	330										
Benzo(b)fluoranthene	330										
Benzo(k)fluoranthene	330										
Benzo(a)pyrene	330										
Indeno(1,2,3-cd)pyrene	330										
Dibenzo(a,h)anthracene	330										
Benzo(g,h,i)perylene	330										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

DATA SUMMARY FORM: BNA

Case #: 31878
Site :
Lab. :

SDG : C01W1
ELKTON FARM
SWOK

Number of Soil Samples : 18
Number of Water Samples : 0

Sample Number :		C01S4		C01S5		C01S7		C01T0		C01T1	
Sampling Location :		SST7		SST8		ST1		ST12		ST13	
Field QC:											
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/25/2003		06/25/2003		06/25/2003		06/25/2003		06/25/2003	
Time Sampled :		11:57		10:40		13:05		09:35		10:05	
%Moisture :		18		9		14		20		19	
Dilution Factor :		0.99		1.00		1.00		1.00		0.98	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	330				UJ			30	J		
Phenol	330										
bis-(2-Chloroethyl) ether	330										
2-Chlorophenol	330										
2-Methylphenol	330										
2,2'-oxybis(1-Chloropropane)	330										
Acetophenone	330										
4-Methylphenol	330										
N-Nitroso-di-n-propylamine	330										
Hexachloroethane	330										
Nitrobenzene	330										
Isophorone	330										
2-Nitrophenol	330										
2,4-Dimethylphenol	330										
bis(2-Chloroethoxy)methane	330										
2,4-Dichlorophenol	330										
Naphthalene	330										
4-Chloroaniline	330										
Hexachlorobutadiene	330										
Caprolactam	330	27	J					30	J		
4-Chloro-3-methylphenol	330										
2-Methylnaphthalene	330										
Hexachlorocyclopentadiene	330										
2,4,6-Trichlorophenol	330										
2,4,5-Trichlorophenol	830										
1,1'-Biphenyl	330										
2-Chloronaphthalene	330										
2-Nitroaniline	830										
Dimethylphthalate	330										
2,6-Dinitrotoluene	330										
Acenaphthylene	330										
3-Nitroaniline	830										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100

Revised 09/99

Case #: 31878 SDG : C01W1 Number of Soil Samples : 18
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01S4		C01S5		C01S7		C01T0		C01T1	
Sampling Location :		SST7		SST8		ST1		ST12		ST13	
Field QC:											
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/25/2003		06/25/2003		06/25/2003		06/25/2003		06/25/2003	
Time Sampled :		11:57		10:40		13:05		09:35		10:05	
%Moisture :		18		9		14		20		19	
Dilution Factor :		0.99		1.00		1.00		1.00		0.98	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	330										
2,4-Dinitrophenol	830										
4-Nitrophenol	830										
Dibenzofuran	330										
2,4-Dinitrotoluene	330										
Diethylphthalate	330										
Fluorene	330										
4-Chlorophenyl-phenyl ether	330										
4-Nitroaniline	830										
4,6-Dinitro-2-methylphenol	830										
N-Nitrosodiphenylamine	330										
4-Bromophenyl-phenylether	330										
Hexachlorobenzene	330										
Atrazine	330										
Pentachlorophenol	830										
Phenanthrene	330										
Anthracene	330										
Carbazole	330				UJ						
Di-n-butylphthalate	330			26	B	42	B	29	B	48	B
Fluoranthene	330										
Pyrene	330										
Butylbenzylphthalate	330										
3,3'-Dichlorobenzidine	330										
Benzo(a)anthracene	330										
Chrysene	330										
bis(2-Ethylhexyl)phthalate	330	790		240	B	95	B	2800		290	B
Di-n-octylphthalate	330										
Benzo(b)fluoranthene	330					22	J				
Benzo(k)fluoranthene	330										
Benzo(a)pyrene	330										
Indeno(1,2,3-cd)pyrene	330										
Dibenzo(a,h)anthracene	330										
Benzo(g,h,i)perylene	330										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

Case #: 31878 SDG : C01W1 Number of Soil Samples : 18
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01T2		C01T8		C01T9		C01W0		C01W1	
Sampling Location :		ST14		ST6		ST7		ST8		ST9	
Field QC:											
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/25/2003		06/25/2003		06/25/2003		06/25/2003		06/24/2003	
Time Sampled :		11:05		11:27		11:52		10:35		14:15	
%Moisture :		18		17		20		18		18	
Dilution Factor :		0.98		1.00		0.98		1.00		1.00	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	330										
Phenol	330										
bis-(2-Chloroethyl) ether	330										
2-Chlorophenol	330										
2-Methylphenol	330										
2,2'-oxybis(1-Chloropropane)	330										
Acetophenone	330										
4-Methylphenol	330										
N-Nitroso-di-n-propylamine	330										
Hexachloroethane	330										
Nitrobenzene	330										
Isophorone	330										
2-Nitrophenol	330										
2,4-Dimethylphenol	330										
bis(2-Chloroethoxy)methane	330										
2,4-Dichlorophenol	330										
Naphthalene	330										
4-Chloroaniline	330										
Hexachlorobutadiene	330										
Caprolactam	330	37	J								
4-Chloro-3-methylphenol	330										
2-Methylnaphthalene	330										
Hexachlorocyclopentadiene	330										
2,4,6-Trichlorophenol	330										
2,4,5-Trichlorophenol	830										
1,1'-Biphenyl	330										
2-Chloronaphthalene	330										
2-Nitroaniline	830										
Dimethylphthalate	330										
2,6-Dinitrotoluene	330										
Acenaphthylene	330										
3-Nitroaniline	830										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

DATA SUMMARY FORM: BNA

Case #: 31878 | SDG : C01W1 | Number of Soil Samples : 18
Site : ELKTON FARM | Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01T2		C01T8		C01T9		C01W0		C01W1	
Sampling Location :		ST14		ST6		ST7		ST8		ST9	
Field QC:											
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/25/2003		06/25/2003		06/25/2003		06/25/2003		06/24/2003	
Time Sampled :		11:05		11:27		11:52		10:35		14:15	
%Moisture :		18		17		20		18		18	
Dilution Factor :		0.98		1.00		0.98		1.00		1.00	
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	330										
2,4-Dinitrophenol	830										
4-Nitrophenol	830										
Dibenzofuran	330										
2,4-Dinitrotoluene	330										
Diethylphthalate	330										
Fluorene	330										
4-Chlorophenyl-phenyl ether	330										
4-Nitroaniline	830										
4,6-Dinitro-2-methylphenol	830										
N-Nitrosodiphenylamine	330										
4-Bromophenyl-phenylether	330										
Hexachlorobenzene	330										
Atrazine	330										
Pentachlorophenol	830										
Phenanthrene	330										
Anthracene	330										
Carbazole	330										
Di-n-butylphthalate	330	38	B	23	B	40	B	76	B	35	B
Fluoranthene	330										
Pyrene	330										
Butylbenzylphthalate	330										
3,3'-Dichlorobenzidine	330										
Benzo(a)anthracene	330										
Chrysene	330							33	J		
bis(2-Ethylhexyl)phthalate	330	95	B	50	B	50	B	110	B	670	
Di-n-octylphthalate	330										
Benzo(b)fluoranthene	330										
Benzo(k)fluoranthene	330										
Benzo(a)pyrene	330										
Indeno(1,2,3-cd)pyrene	330										
Dibenzo(a,h)anthracene	330										
Benzo(g,h,i)perylene	330										

CRQL = Contract Required Quantitation Limit
To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100

SEE NARRATIVE FOR CODE DEFINITIONS
Revised 09/99

DATA SUMMARY FORM: BNA

Case #: 31878 | SDG : C01W1 | Number of Soil Samples : 18
Site : ELKTON FARM | Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01X7		C01X8		C01Y0					
Sampling Location :		SEDU1		SEDU2		SEDU4					
Field QC:				Dupl. of C01Y0		Dupl. of C01X8					
Matrix :		Soil		Soil		Soil					
Units :		ug/Kg		ug/Kg		ug/Kg					
Date Sampled :		06/25/2003		06/25/2003		06/25/2003					
Time Sampled :		11:25		10:55		11:00					
%Moisture :		25		23		20					
Dilution Factor :		0.99		0.97		0.99					
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Benzaldehyde	330										
Phenol	330										
bis-(2-Chloroethyl) ether	330										
2-Chlorophenol	330										
2-Methylphenol	330										
2,2'-oxybis(1-Chloropropane)	330										
Acetophenone	330										
4-Methylphenol	330										
N-Nitroso-di-n-propylamine	330										
Hexachloroethane	330										
Nitrobenzene	330										
Isophorone	330										
2-Nitrophenol	330										
2,4-Dimethylphenol	330										
bis(2-Chloroethoxy)methane	330										
2,4-Dichlorophenol	330										
Naphthalene	330										
4-Chloroaniline	330										
Hexachlorobutadiene	330										
Caprolactam	330	28	J			24	J				
4-Chloro-3-methylphenol	330										
2-Methylnaphthalene	330										
Hexachlorocyclopentadiene	330										
2,4,6-Trichlorophenol	330										
2,4,5-Trichlorophenol	830										
1,1'-Biphenyl	330										
2-Chloronaphthalene	330										
2-Nitroaniline	830										
Dimethylphthalate	330										
2,6-Dinitrotoluene	330										
Acenaphthylene	330										
3-Nitroaniline	830										

CRQL = Contract Required Quantitation Limit
To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100

SEE NARRATIVE FOR CODE DEFINITIONS
Revised 09/99

Case #: 31878 SDG : C01W1 Number of Soil Samples : 18
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01X7		C01X8		C01Y0					
Sampling Location :		SEDU1		SEDU2		SEDU4					
Field QC:				Dupl. of C01Y0		Dupl. of C01X8					
Matrix :		Soil		Soil		Soil					
Units :		ug/Kg		ug/Kg		ug/Kg					
Date Sampled :		06/25/2003		06/25/2003		06/25/2003					
Time Sampled :		11:25		10:55		11:00					
%Moisture :		25		23		20					
Dilution Factor :		0.99		0.97		0.99					
Semivolatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	330										
2,4-Dinitrophenol	830										
4-Nitrophenol	830										
Dibenzofuran	330										
2,4-Dinitrotoluene	330										
Diethylphthalate	330					37	B				
Fluorene	330										
4-Chlorophenyl-phenyl ether	330										
4-Nitroaniline	830										
4,6-Dinitro-2-methylphenol	830										
N-Nitrosodiphenylamine	330										
4-Bromophenyl-phenylether	330										
Hexachlorobenzene	330										
Atrazine	330										
Pentachlorophenol	830										
Phenanthrene	330	23	J								
Anthracene	330										
Carbazole	330										
Di-n-butylphthalate	330	74	B	28	B	36	B				
Fluoranthene	330	27	J								
Pyrene	330	42	J								
Butylbenzylphthalate	330										
3,3'-Dichlorobenzidine	330										
Benzo(a)anthracene	330										
Chrysene	330										
bis(2-Ethylhexyl)phthalate	330	87	B	55	B	74	B				
Di-n-octylphthalate	330										
Benzo(b)fluoranthene	330										
Benzo(k)fluoranthene	330										
Benzo(a)pyrene	330										
Indeno(1,2,3-cd)pyrene	330										
Dibenzo(a,h)anthracene	330										
Benzo(g,h,i)perylene	330										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

DATA SUMMARY FORM: PESTICIDES AND PCBS

Case #: 31878
Site :
Lab. :

SDG : C01P0
ELKTON FARM
SWOK

Number of Soil Samples : 0
Number of Water Samples : 15

Sample Number :		C01N1		C01N2		C01N3		C01N4		C01N8	
Sampling Location :		GWD1		GWU1		GWU2		GWU3		GWU7	
Field QC:										Field Blank	
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		06/26/2003		06/26/2003		06/26/2003		06/26/2003		06/26/2003	
Time Sampled :		12:45		10:35		10:00		11:10		10:30	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Pesticide/PCB Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	0.050										
beta-BHC	0.050										
delta-BHC	0.050										
*gamma-BHC (Lindane)	0.050										
*Heptachlor	0.050	0.019	B	0.029	B	0.022	B	0.017	B	0.018	B
Aldrin	0.050	0.011	J	0.017	J	0.0082	J	0.0094	J		
Heptachlor epoxide	0.050			0.017	J						
Endosulfan I	0.050										
Dieldrin	0.10										
4,4'-DDE	0.10										
*Endrin	0.10			0.028	J						
Endosulfan II	0.10										
4,4'-DDD	0.10										
Endosulfan sulfate	0.10										
4,4'-DDT	0.10										
*Methoxychlor	0.50										
Endrin ketone	0.10										
Endrin aldehyde	0.10			0.010	J						
alpha-Chlordane	0.050										
gamma-Chlordane	0.050	0.0086	B	0.0086	B			0.0066	B	0.0094	B
*Toxaphene	5.0										
*Aroclor-1016	1.0										
*Aroclor-1221	2.0										
*Aroclor-1232	1.0										
*Aroclor-1242	1.0										
*Aroclor-1248	1.0										
*Aroclor-1254	1.0										
*Aroclor-1260	1.0										

CRQL = Contract Required Quantitation Limit
*Action Level Exists
SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor)
Revised 09/99

DATA SUMMARY FORM: PESTICIDES AND PCBS

Case #: 31878 SDG : C01P0
Site : ELKTON FARM
Lab. : SWOK

Sample Number :		C01P0		C01P1		C01P2		C01P3		C01P4	
Sampling Location :		SWT1		SWT2		SWT3		SWT4		SWT5	
Field QC:				Dupl. of C01P4						Dupl. of C01P1	
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		11:10		10:15		13:10		09:40		10:15	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Pesticide/PCB Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	0.050										
beta-BHC	0.050										
delta-BHC	0.050										
*gamma-BHC (Lindane)	0.050										
*Heptachlor	0.050	0.035	B	0.033	B			0.025	B	0.026	B
Aldrin	0.050										
Heptachlor epoxide	0.050										
Endosulfan I	0.050										
Dieldrin	0.10										
4,4'-DDE	0.10										
*Endrin	0.10										
Endosulfan II	0.10										
4,4'-DDD	0.10										
Endosulfan sulfate	0.10										
4,4'-DDT	0.10										
*Methoxychlor	0.50										
Endrin ketone	0.10										
Endrin aldehyde	0.10										
alpha-Chlordane	0.050										
gamma-Chlordane	0.050	0.013	B	0.012	B						
*Toxaphene	5.0										
*Aroclor-1016	1.0										
*Aroclor-1221	2.0										
*Aroclor-1232	1.0										
*Aroclor-1242	1.0										
*Aroclor-1248	1.0										
*Aroclor-1254	1.0										
*Aroclor-1260	1.0										

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

DATA SUMMARY FORM: PESTICIDES AND PCBS

Case #: 31878 SDG : C01P0
Site : ELKTON FARM
Lab. : SWOK

Sample Number :		C01P5		C01P6		C01P9		C01Q0		C01Q2	
Sampling Location :		SWT6		SWT7		SWU1		SWU2		SWU4	
Field QC:		Field Blank		Field Blank							
Matrix :		Water		Water		Water		Water		Water	
Units :		ug/L		ug/L		ug/L		ug/L		ug/L	
Date Sampled :		06/24/2003		06/25/2003		06/25/2003		06/25/2003		06/25/2003	
Time Sampled :		09:30		09:00		11:20		10:45		10:50	
Dilution Factor :		1.0		1.0		1.0		1.0		1.0	
Pesticide/PCB Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	0.050										
beta-BHC	0.050										
delta-BHC	0.050										
*gamma-BHC (Lindane)	0.050										
*Heptachlor	0.050	0.030	B	0.073	B	0.024	B	0.028	B	0.022	B
Aldrin	0.050										
Heptachlor epoxide	0.050										
Endosulfan I	0.050										
Dieldrin	0.10										
4,4'-DDE	0.10										
*Endrin	0.10										
Endosulfan II	0.10										
4,4'-DDD	0.10										
Endosulfan sulfate	0.10										
4,4'-DDT	0.10										
*Methoxychlor	0.50										
Endrin ketone	0.10										
Endrin aldehyde	0.10										
alpha-Chlordane	0.050			0.011	J			0.0040	B		
gamma-Chlordane	0.050	0.011	J	0.024	J			0.0091	B		
*Toxaphene	5.0										
*Aroclor-1016	1.0										
*Aroclor-1221	2.0										
*Aroclor-1232	1.0										
*Aroclor-1242	1.0										
*Aroclor-1248	1.0										
*Aroclor-1254	1.0										
*Aroclor-1260	1.0										

CRQL = Contract Required Quantitation Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) Revised 09/99

DATA SUMMARY FORM: PESTICIDES AND PCBS

Case #: 31878 | SDG : C01Q7 | Number of Soil Samples : 20
Site : ELKTON FARM | Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01Q7		C01Q8		C01Q9		C01R0		C01R1	
Sampling Location :		SEDT1		SEDT2		SEDT3		SEDT4		SEDT5	
Field QC:				Dupl. of C01R1						Dupl. of C01Q8	
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		11:10		10:15		13:15		09:40		10:15	
%Moisture :		23		21		23		24		21	
Dilution Factor :		0.99		0.99		1.00		0.99		0.99	
Pesticide/PCB Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	1.7										
beta-BHC	1.7										
delta-BHC	1.7										
gamma-BHC (Lindane)	1.7										
Heptachlor	1.7	1.7	B	1.7	B	2.2	B	1.9	B	1.7	B
Aldrin	1.7	0.35	J					1.7	J		
Heptachlor epoxide	1.7										
Endosulfan I	1.7										
Dieldrin	3.3										
4,4'-DDE	3.3										
Endrin	3.3										
Endosulfan II	3.3										
4,4'-DDD	3.3										
Endosulfan sulfate	3.3										
4,4'-DDT	3.3										
Methoxychlor	17							9.6	B		
Endrin ketone	3.3										
Endrin aldehyde	3.3										
alpha-Chlordane	1.7										
gamma-Chlordane	1.7										
Toxaphene	170										
Aroclor-1016	33										
Aroclor-1221	67										
Aroclor-1232	33										
Aroclor-1242	33										
Aroclor-1248	33										
Aroclor-1254	33										
Aroclor-1260	33										

CRQL = Contract Required Quantitation Limit
SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100
Revised 09/99

DATA SUMMARY FORM: PESTICIDES AND PCBS

Case #: 31878
Site :
Lab. :

SDG : C01Q7
ELKTON FARM
SWOK

Number of Soil Samples : 20
Number of Water Samples : 0

Sample Number :		C01R3		C01R4		C01R8		C01R9		C01S0	
Sampling Location :		SST10		SST11		SST15		SST2		SST3	
Field QC:						Dupl. of C01S2					
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		12:26		13:47		11:40		09:44		10:13	
%Moisture :		16		14		15		22		16	
Dilution Factor :		1.00		0.99		0.99		0.99		0.99	
Pesticide/PCB Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	1.7										
beta-BHC	1.7										
delta-BHC	1.7										
gamma-BHC (Lindane)	1.7										
Heptachlor	1.7	2.0	B	1.7	B	1.5	B				
Aldrin	1.7										
Heptachlor epoxide	1.7										
Endosulfan I	1.7										
Dieldrin	3.3										
4,4'-DDE	3.3										
Endrin	3.3										
Endosulfan II	3.3										
4,4'-DDD	3.3										
Endosulfan sulfate	3.3										
4,4'-DDT	3.3										
Methoxychlor	17			9.7	B						
Endrin ketone	3.3										
Endrin aldehyde	3.3										
alpha-Chlordane	1.7										
gamma-Chlordane	1.7										
Toxaphene	170										
Aroclor-1016	33										
Aroclor-1221	67										
Aroclor-1232	33										
Aroclor-1242	33										
Aroclor-1248	33										
Aroclor-1254	33										
Aroclor-1260	33										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100

Revised 09/99

DATA SUMMARY FORM: PESTICIDES AND PCBS

Case #: 31878 SDG : C01Q7 Number of Soil Samples : 20
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01S1		C01S2		C01S6		C01S8		C01S9	
Sampling Location :		SST4		SST5		SST9		ST10		ST11	
Field QC:				Dupl. of C01R8							
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		10:52		11:40		14:20		12:09		13:42	
%Moisture :		7		15		14		15		20	
Dilution Factor :		1.00		0.99		0.99		0.99		0.99	
Pesticide/PCB Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	1.7										
beta-BHC	1.7										
delta-BHC	1.7										
gamma-BHC (Lindane)	1.7										
Heptachlor	1.7	1.6	B	2.4	B	1.3	B	1.4	B	1.9	B
Aldrin	1.7										
Heptachlor epoxide	1.7										
Endosulfan I	1.7										
Dieldrin	3.3										
4,4'-DDE	3.3										
Endrin	3.3										
Endosulfan II	3.3										
4,4'-DDD	3.3										
Endosulfan sulfate	3.3										
4,4'-DDT	3.3										
Methoxychlor	17	8.5	B								
Endrin ketone	3.3										
Endrin aldehyde	3.3										
alpha-Chlordane	1.7										
gamma-Chlordane	1.7										
Toxaphene	170										
Aroclor-1016	33										
Aroclor-1221	67										
Aroclor-1232	33										
Aroclor-1242	33										
Aroclor-1248	33										
Aroclor-1254	33										
Aroclor-1260	33										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

DATA SUMMARY FORM: PESTICIDES AND PCBS

Case #: 31878 SDG : C01Q7 Number of Soil Samples : 20
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01T3		C01T4		C01T5		C01T6		C01T7	
Sampling Location :		ST15		ST2		ST3		ST4		ST5	
Field QC:		Dupl. of C01T7								Dupl. of C01T3	
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/24/2003		06/24/2003		06/24/2003		06/24/2003		06/24/2003	
Time Sampled :		11:28		09:33		10:05		10:45		11:28	
%Moisture :		18		13		17		20		17	
Dilution Factor :		0.98		0.98		1.00		0.98		0.99	
Pesticide/PCB Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	1.7										
beta-BHC	1.7										
delta-BHC	1.7										
gamma-BHC (Lindane)	1.7										
Heptachlor	1.7					1.6	B			1.8	B
Aldrin	1.7										
Heptachlor epoxide	1.7										
Endosulfan I	1.7										
Dieldrin	3.3										
4,4'-DDE	3.3										
Endrin	3.3										
Endosulfan II	3.3										
4,4'-DDD	3.3										
Endosulfan sulfate	3.3										
4,4'-DDT	3.3			16	J	6.9	J				
Methoxychlor	17										
Endrin ketone	3.3										
Endrin aldehyde	3.3										
alpha-Chlordane	1.7										
gamma-Chlordane	1.7										
Toxaphene	170										
Aroclor-1016	33										
Aroclor-1221	67										
Aroclor-1232	33										
Aroclor-1242	33										
Aroclor-1248	33										
Aroclor-1254	33										
Aroclor-1260	33										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

DATA SUMMARY FORM: PESTICIDES AND PCBS

Case #: 31878 SDG : C01W1 Number of Soil Samples : 18
Site : ELKTON FARM Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01R2		C01R5		C01R6		C01R7		C01S3	
Sampling Location :		SST1		SST12		SST13		SST14		SST6	
Field QC:											
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/25/2003		06/25/2003		06/25/2003		06/25/2003		06/25/2003	
Time Sampled :		13:10		09:40		10:10		11:10		11:32	
%Moisture :		9		13		10		17		9	
Dilution Factor :		0.97		0.99		0.98		0.98		0.97	
Pesticide/PCB Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	1.7										
beta-BHC	1.7										
delta-BHC	1.7										
gamma-BHC (Lindane)	1.7										
Heptachlor	1.7	1.3	B	1.4	B	1.9	B	1.9	B	1.8	B
Aldrin	1.7										
Heptachlor epoxide	1.7										
Endosulfan I	1.7										
Dieldrin	3.3										
4,4'-DDE	3.3					0.39	J				
Endrin	3.3										
Endosulfan II	3.3										
4,4'-DDD	3.3										
Endosulfan sulfate	3.3					0.20	J				
4,4'-DDT	3.3										
Methoxychlor	17	4.4	J	3.0	J					3.9	J
Endrin ketone	3.3										
Endrin aldehyde	3.3										
alpha-Chlordane	1.7			0.18	B						
gamma-Chlordane	1.7	0.49	B	0.54	B	0.47	B	0.47	B	0.71	B
Toxaphene	170										
Aroclor-1016	33										
Aroclor-1221	67										
Aroclor-1232	33										
Aroclor-1242	33										
Aroclor-1248	33										
Aroclor-1254	33										
Aroclor-1260	33										

CRQL = Contract Required Quantitation Limit SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100 Revised 09/99

DATA SUMMARY FORM: PESTICIDES AND PCBS

Case #: 31878
Site :
Lab. :

SDG : C01W1
ELKTON FARM
SWOK

Number of Soil Samples : 18
Number of Water Samples : 0

Sample Number :		C01S4		C01S5		C01S7		C01T0		C01T1	
Sampling Location :		SST7		SST8		ST1		ST12		ST13	
Field QC:											
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/25/2003		06/25/2003		06/25/2003		06/25/2003		06/25/2003	
Time Sampled :		11:57		10:40		13:05		09:35		10:05	
%Moisture :		18		9		14		20		19	
Dilution Factor :		0.97		0.97		0.98		1.00		1.00	
Pesticide/PCB Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	1.7										
beta-BHC	1.7										
delta-BHC	1.7										
gamma-BHC (Lindane)	1.7										
Heptachlor	1.7	2.0	B	1.8	B	1.5	B	2.9	B	2.4	B
Aldrin	1.7										
Heptachlor epoxide	1.7										
Endosulfan I	1.7										
Dieldrin	3.3										
4,4'-DDE	3.3			1.3	J	2.5	J	1.3	J		
Endrin	3.3										
Endosulfan II	3.3										
4,4'-DDD	3.3										
Endosulfan sulfate	3.3										
4,4'-DDT	3.3					1.8	J	0.62	J		
Methoxychlor	17					3.7	J			4.2	J
Endrin ketone	3.3										
Endrin aldehyde	3.3										
alpha-Chlordane	1.7										
gamma-Chlordane	1.7	0.74	B	0.65	B	0.61	B	0.79	B	0.65	B
Toxaphene	170										
Aroclor-1016	33										
Aroclor-1221	67										
Aroclor-1232	33										
Aroclor-1242	33										
Aroclor-1248	33										
Aroclor-1254	33										
Aroclor-1260	33										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100

Revised 09/99

DATA SUMMARY FORM: PESTICIDES AND PCBS

Case #: 31878 | SDG : C01W1 | Number of Soil Samples : 18
Site : ELKTON FARM | Number of Water Samples : 0
Lab. : SWOK

Sample Number :		C01T2		C01T8		C01T9		C01W0		C01W1	
Sampling Location :		ST14		ST6		ST7		ST8		ST9	
Field QC:											
Matrix :		Soil		Soil		Soil		Soil		Soil	
Units :		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Date Sampled :		06/25/2003		06/25/2003		06/25/2003		06/25/2003		06/24/2003	
Time Sampled :		11:05		11:27		11:52		10:35		14:15	
%Moisture :		18		17		20		18		18	
Dilution Factor :		0.98		0.98		0.97		0.98		0.99	
Pesticide/PCB Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	1.7										
beta-BHC	1.7										
delta-BHC	1.7										
gamma-BHC (Lindane)	1.7										
Heptachlor	1.7	1.7	B	2.7	B	1.6	B			1.6	B
Aldrin	1.7										
Heptachlor epoxide	1.7										
Endosulfan I	1.7										
Dieldrin	3.3										
4,4'-DDE	3.3										
Endrin	3.3										
Endosulfan II	3.3										
4,4'-DDD	3.3										
Endosulfan sulfate	3.3							2.6	J		
4,4'-DDT	3.3					1.6	J	5.0			
Methoxychlor	17			3.0	J	7.4	J			7.6	J
Endrin ketone	3.3										
Endrin aldehyde	3.3										
alpha-Chlordane	1.7										
gamma-Chlordane	1.7					0.61	B	0.52	B		
Toxaphene	170										
Aroclor-1016	33										
Aroclor-1221	67										
Aroclor-1232	33										
Aroclor-1242	33										
Aroclor-1248	33										
Aroclor-1254	33										
Aroclor-1260	33										

CRQL = Contract Required Quantitation Limit
SEE NARRATIVE FOR CODE DEFINITIONS
To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100
Revised 09/99

DATA SUMMARY FORM: PESTICIDES AND PCBS

Case #: 31878
Site :
Lab. :

SDG : C01W1
ELKTON FARM
SWOK

Number of Soil Samples : 18
Number of Water Samples : 0

Sample Number :		C01X7		C01X8		C01Y0					
Sampling Location :		SEDU1		SEDU2		SEDU4					
Field QC:				Dupl. of C01Y0		Dupl. of C01X8					
Matrix :		Soil		Soil		Soil					
Units :		ug/Kg		ug/Kg		ug/Kg					
Date Sampled :		06/25/2003		06/25/2003		06/25/2003					
Time Sampled :		11:25		10:55		11:00					
%Moisture :		25		23		20					
Dilution Factor :		0.99		0.98		1.00					
Pesticide/PCB Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
alpha-BHC	1.7										
beta-BHC	1.7										
delta-BHC	1.7										
gamma-BHC (Lindane)	1.7										
Heptachlor	1.7	1.5	B	1.4	B	1.6	B				
Aldrin	1.7										
Heptachlor epoxide	1.7										
Endosulfan I	1.7										
Dieldrin	3.3										
4,4'-DDE	3.3										
Endrin	3.3										
Endosulfan II	3.3										
4,4'-DDD	3.3										
Endosulfan sulfate	3.3										
4,4'-DDT	3.3										
Methoxychlor	17										
Endrin ketone	3.3										
Endrin aldehyde	3.3										
alpha-Chlordane	1.7										
gamma-Chlordane	1.7			0.47	B	0.60	B				
Toxaphene	170										
Aroclor-1016	33										
Aroclor-1221	67										
Aroclor-1232	33										
Aroclor-1242	33										
Aroclor-1248	33										
Aroclor-1254	33										
Aroclor-1260	33										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (CRQL * Dilution Factor) / (100 - %Moisture) / 100

Revised 09/99

Appendix C

Tentatively Identified Compounds

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01N1

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52743.01

Sample wt/vol: 5 (g/mL) ML Lab File ID: R070115.D

Level: (low/med) LOW Date Received: 06/27/03

% Moisture: not dec. _____ Date Analyzed: 07/02/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		~~UNKNOWN~~	~~15.38~~	~~10~~	~~J~~
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

D
8/21/03

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01N3

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52743.03

Sample wt/vol: 5 (g/mL) ML Lab File ID: R070118.D

Level: (low/med) LOW Date Received: 06/27/03

% Moisture: not dec. _____ Date Analyzed: 07/02/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~UNKNOWN~~	~~15.37~~	~~9~~	~~J~~
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

DW 6/24/03

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01N8

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52743.06

Sample wt/vol: 5 (g/mL) ML Lab File ID: R070205.D

Level: (low/med) LOW Date Received: 06/27/03

% Moisture: not dec. _____ Date Analyzed: 07/02/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~UNKNOWN~~	~~15.34~~	~~11~~	~~J~~
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

DU
8/12/03

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01P1

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52718.04

Sample wt/vol: 5 (g/mL) ML Lab File ID: R063008.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: not dec. _____ Date Analyzed: 06/30/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~UNKNOWN~~	~~15.41~~	~~6~~	~~J~~
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

DV
8/22/03

1F
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01P3

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52718.06

Sample wt/vol: 5 (g/mL) ML Lab File ID: R063014.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: not dec. _____ Date Analyzed: 07/01/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~UNKNOWN~~	~~15.41~~	~~6~~	~~J~~
2.				
3.				
4.				
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DJ
8/21/03

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01P4

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52718.07

Sample wt/vol: 5 (g/mL) ML Lab File ID: R063016.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: not dec. _____ Date Analyzed: 07/01/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~UNKNOWN~~	~~15.40~~	~~6~~	~~J~~
2.				
3.				
4.				
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DV
8/21/03

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01P7

TRIP BLANK

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52718.09

Sample wt/vol: 5 (g/mL) ML Lab File ID: R063018.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: not dec. _____ Date Analyzed: 07/01/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	15.40	6	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01P8

TRIP BLANK

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52727.02

Sample wt/vol: 5 (g/mL) ML Lab File ID: R070106.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: not dec. _____ Date Analyzed: 07/01/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	15.38	6	J
2.				
3.				
4.				
5.				
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01R4

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.09

Sample wt/vol: 5.8 (g/mL) G Lab File ID: U062715.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: not dec. 14 Date Analyzed: 06/27/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	11.77	7	J
2.					
3.					
4.					
5.					
6.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01R8

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.10

Sample wt/vol: 5.5 (g/mL) G Lab File ID: U062613.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: not dec. 15 Date Analyzed: 06/26/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	11.81	6	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01S0

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.12

Sample wt/vol: 5.2 (g/mL) G Lab File ID: U062616.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: not dec. 16 Date Analyzed: 06/26/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	16.54	13	J
2.				
3.				
4.				
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01S1

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.13

Sample wt/vol: 6.2 (g/mL) G Lab File ID: U062617.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: not dec. 7 Date Analyzed: 06/26/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	11.79	5	J
2. ~~556-67-2~~	~~CYCLOTETRASILOXANE, OCTAMETHYL~~	~~14.46~~	~~8~~	~~JN~~
3.	UNKNOWN	16.49	10	J
4.				
5.				
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DW 8/21/03

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01S2

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.14

Sample wt/vol: 5.5 (g/mL) G Lab File ID: U062619.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: not dec. 15 Date Analyzed: 06/26/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	74-99-7	1-PROPYNE	1.63	10	JN
2.	74-88-4	METHANE, IODO-	5.52	6	JN
3.		UNKNOWN	7.71	12	J
4.		UNKNOWN	8.08	8	J
5.		UNKNOWN	11.81	9	J
6.	66-25-1	HEXANAL	12.09	12	JN
7.	5989-27-5	D-LIMONENE	15.32	10	JN
8.					
9.					
10.					
11.					
12.					
13.					
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15.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01S6

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.15

Sample wt/vol: 5.4 (g/mL) G Lab File ID: U062620.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: not dec. 14 Date Analyzed: 06/26/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.67	8	J
2.	UNKNOWN	8.08	8	J
3.	UNKNOWN	8.85	7	J
4.	UNKNOWN	11.81	6	J
5.				
6.				
7.				
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01R2

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.01

Sample wt/vol: 5.8 (g/mL) G Lab File ID: U062721.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: not dec. 9 Date Analyzed: 06/27/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	11.79	6	J
2.				
3.				
4.				
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01R5

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.02

Sample wt/vol: 5.3 (g/mL) G Lab File ID: U062722.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: not dec. 13 Date Analyzed: 06/27/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	11.78	6	J
2.				
3.				
4.				
5.				
6.				
7.				
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01R6

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.03

Sample wt/vol: 5.8 (g/mL) G Lab File ID: U062724.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: not dec. 10 Date Analyzed: 06/27/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	11.78	6	J
2.	~~CYCLOTETRASILOXANE~~	~~14.44~~	~~5~~	~~J~~
3.	UNKNOWN	16.47	7	J
4.				
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8/21/03

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01R7

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.04

Sample wt/vol: 6.0 (g/mL) G Lab File ID: U062725.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: not dec. 17 Date Analyzed: 06/27/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	11.78	7	J
2.		UNKNOWN	16.50	6	J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01S3

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.05

Sample wt/vol: 5.2 (g/mL) G Lab File ID: U062727.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: not dec. 9 Date Analyzed: 06/27/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	11.77	7	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01S5

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.07

Sample wt/vol: 5.3 (g/mL) G Lab File ID: U063008.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: not dec. 9 Date Analyzed: 06/30/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	7.27	8	J
2.		UNKNOWN	7.76	32	J
3.		UNKNOWN	8.16	18	J
4.		UNKNOWN	8.92	9	J
5.		UNKNOWN	10.29	6	J
6.		UNKNOWN	11.13	7	J
7.		~~CYCLOTRISILOXANE~~	~~11.92~~	~~12~~	~~J~~
8.	~~556-67-2~~	~~CYCLOTETRASILOXANE, OCTAMETHYL~~	~~14.58~~	~~11~~	~~JN~~
9.	104-76-7	1-HEXANOL, 2-ETHYL-	15.81	7	JN
10.		UNKNOWN	16.62	12	J
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
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DV 8/21/03

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01S7

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.08

Sample wt/vol: 5.4 (g/mL) G Lab File ID: U063014.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: not dec. 14 Date Analyzed: 06/30/03

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

Number TICS found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	7.77	16	J
2.		UNKNOWN	8.15	8	J
3.		UNKNOWN	10.27	7	J
4.		UNKNOWN	11.91	6	J
5.	66-25-1	HEXANAL	12.20	35	JN
6.	111-71-7	HEPTANAL	13.92	8	JN
7.					
8.					
9.					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01N1

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52743.01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: J3070117.D

Level: (low/med) LOW Date Received: 06/27/03

% Moisture: _____ Decanted: (Y/N) N Date Extracted: 06/28/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/01/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Extraction: (Type) CONT

Number TICS found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~UNKNOWN~~	~~3.89~~	~~3~~	~~JB~~
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
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9/2/03

271

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01N4

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52743.04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: J3070120.D

Level: (low/med) LOW Date Received: 06/27/03

% Moisture: _____ Decanted: (Y/N) N Date Extracted: 06/28/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/01/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.1 Extraction: (Type) CONT

Number TICS found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	558-37-2	1-BUTENE, 3,3-DIMETHYL-	5.09	3	JN
2.	120-40-1	DODECANAMIDE, N,N-BIS(2-HYDROXYETHY	10.94	5	JN
3.	134-62-3	DIETHYLTOLUAMIDE	11.21	4	JN
4.	131-57-7	OXYBENZONE	14.71	3	JN
5.					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01N8

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52743.06

Sample wt/vol: 1000 (g/mL) ML Lab File ID: J3070121.D

Level: (low/med) LOW Date Received: 06/27/03

% Moisture: _____ Decanted: (Y/N) N Date Extracted: 06/28/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/01/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.1 Extraction: (Type) CONT

Number TICS found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		~~UNKNOWN~~	~~3.88~~	~~3~~	~~JB~~
2.					
3.					
4.					
5.					
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DV 8/26/03

303

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01P0

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52718.01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: J3063015.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: _____ Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/30/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.9 Extraction: (Type) CONT

Number TICS found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 2896-60-8	1,3-BENZENEDIOL, 4-ETHYL-	3.96	4	JN
2.				
3.				
4.				
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01P1

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52718.04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: J3063016.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: _____ Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/30/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.6 Extraction: (Type) CONT

Number TICS found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		~~UNKNOWN~~	~~3.95~~	~~3~~	~~JB~~
2.	74367-33-2	PROPANOIC ACID, 2-METHYL-, 2,2-DIME	9.15	2	JN
3.					
4.					
5.					
6.					
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DV 8/21/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01P2

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52718.05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: J3063017.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: _____ Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/30/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.1 Extraction: (Type) CONT

Number TICS found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~UNKNOWN~~	~~3.97~~	~~4~~	~~JB~~
2.				
3.				
4.				
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DV 8/21/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01P3

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52718.06

Sample wt/vol: 1000 (g/mL) ML Lab File ID: J3063018.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: _____ Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/30/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.1 Extraction: (Type) CONT

Number TICS found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~UNKNOWN~~	~~3.97~~	~~3~~	~~JB~~
2.				
3.				
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DV 8/21/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01P4

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52718.07

Sample wt/vol: 1000 (g/mL) ML Lab File ID: J3063019.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: _____ Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/30/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.1 Extraction: (Type) CONT

Number TICS found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL~~	~~3.17~~	~~2~~	~~JNA~~
2.		~~UNKNOWN~~	~~3.96~~	~~3~~	~~JB~~
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4.					
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DV 8/21/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01P5

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0 FIELD BLANK

Matrix: (soil/water) WATER Lab Sample ID: 52718.08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: J3063020.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: _____ Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 06/30/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.9 Extraction: (Type) CONT

Number TICS found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL~~	~~3.16~~	~~3~~	~~JNA~~
2.		~~UNKNOWN~~	~~3.96~~	~~3~~	~~JB~~
3.		UNKNOWN	9.16	2	J
4.	110-27-0	ISOPROPYL MYRISTATE	13.15	2	JN
5.					
6.					
7.					
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8/21/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01P6

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0 FIELD BLANK

Matrix: (soil/water) WATER Lab Sample ID: 52727.01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: J3070113.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: _____ Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/01/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.1 Extraction: (Type) CONT

Number TICS found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~UNKNOWN~~	~~3.09~~	~~3~~	~~JB~~
2.				
3.				
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DJ 8/21/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01P9

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52727.03

Sample wt/vol: 1000 (g/mL) ML Lab File ID: J3070114.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: _____ Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/01/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Extraction: (Type) CONT

Number TICS found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~UNKNOWN~~	~~3.90~~	~~2~~	~~JB~~
2.				
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4.				
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6.				
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DV 8/21/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01Q2

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01P0

Matrix: (soil/water) WATER Lab Sample ID: 52727.05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: J3070116.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: _____ Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/01/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Extraction: (Type) CONT

Number TICS found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~UNKNOWN~~	~~3.89~~	~~2~~	~~JB~~
2.				
3.				
4.				
5.				
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DV 8/21/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01Q7

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.01

Sample wt/vol: 30.1 (g/mL) G Lab File ID: J3070220.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 23 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/02/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Extraction: (Type) SONC

Number TICS found: 24 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.08~~	~~12000~~	~~JNBA~~
2.	108-38-3	BENZENE, 1,3-DIMETHYL-	3.38	330	JN
3.		~~UNKNOWN~~	~~3.86~~	~~170~~	~~JB~~
4.		~~UNKNOWN~~	~~4.00~~	~~600~~	~~JB~~
5.		~~UNKNOWN~~	~~4.20~~	~~300~~	~~JB~~
6.		UNKNOWN	5.36	910	J
7.	112-42-5	1-UNDECANOL	10.17	170	JN
8.	139-66-2	DIPHENYL SULFIDE	11.33	87	JN
9.	112-53-8	1-DODECANOL	12.04	350	JN
10.	872-05-9	1-DECENE	12.32	120	JN
11.		UNKNOWN HYDROCARBON	13.47	87	J
12.	57-10-3	HEXADECANOIC ACID	14.01	140	JN
13.		~~UNKNOWN AMIDE~~	~~16.62~~	~~240~~	~~JB~~
14.		UNKNOWN	19.08	100	J
15.		UNKNOWN	20.17	120	J
16.		UNKNOWN	20.42	89	J
17.		UNKNOWN	20.49	290	J
18.		UNKNOWN	20.59	410	J
19.	57-88-5	CHOLESTEROL	20.71	93	JN
20.		UNKNOWN	20.97	100	J
21.		UNKNOWN	21.77	210	J
22.		UNKNOWN	22.66	100	J
23.		UNKNOWN	23.26	230	J
24.		UNKNOWN	23.44	150	J
25.					
26.					
27.					
28.					
29.					
30.					

8/26/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01Q8

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.02

Sample wt/vol: 30.2 (g/mL) G Lab File ID: J3070221.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 21 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/02/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8 Extraction: (Type) SONC

Number TICS found: 20 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.09~~	~~9400~~	~~JNB~~A
2.	~~95-47-6~~	~~BENZENE, 1,2-DIMETHYL~~	~~3.38~~	~~270~~	~~JNB~~
3.		~~UNKNOWN~~	~~3.07~~	~~130~~	~~JB~~
4.		~~UNKNOWN~~	~~4.01~~	~~440~~	~~JB~~
5.		~~UNKNOWN~~	~~4.20~~	~~240~~	~~JB~~
6.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.35	360	JN
7.		UNKNOWN	5.36	890	J
8.		UNKNOWN	7.27	92	J
9.	872-05-9	1-DECENE	10.17	130	JN
10.		UNKNOWN	12.04	160	J
11.		UNKNOWN	12.22	100	J
12.		UNKNOWN ORGANIC ACID	14.00	92	J
13.		~~UNKNOWN AMIDE~~	~~16.62~~	~~310~~	~~JB~~
14.		UNKNOWN	16.87	260	J
15.		UNKNOWN	20.42	110	J
16.		UNKNOWN	20.49	250	J
17.		UNKNOWN	20.59	400	J
18.		UNKNOWN	20.96	110	J
19.		UNKNOWN	21.77	120	J
20.		UNKNOWN	23.26	120	J
21.					
22.					
23.					
24.					
25.					
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27.					
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29.					
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8/21/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01Q9

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.03

Sample wt/vol: 30.3 (g/mL) G Lab File ID: J3070222.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 23 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Extraction: (Type) SONC

Number TICS found: 15 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.09~~	~~10000~~	~~JNBA~~
2.		~~UNKNOWN~~	~~3.88~~	~~110~~	~~JB~~
3.		~~UNKNOWN~~	~~4.00~~	~~440~~	~~JB~~
4.		~~UNKNOWN~~	~~4.20~~	~~300~~	~~JB~~
5.		UNKNOWN	5.36	750	J
6.	112-53-8	1-DODECANOL	10.17	95	JN
7.	112-41-4	1-DODECENE	12.04	110	JN
8.		CIS-2-METHYL-7-OCTADECENE	12.32	89	J
9.	57-10-3	HEXADECANOIC ACID	14.00	100	JN
10.		~~UNKNOWN AMIDE~~	~~16.62~~	~~100~~	~~JB~~
11.		UNKNOWN	20.17	95	J
12.		UNKNOWN	20.49	240	J
13.		UNKNOWN	20.59	320	J
14.		UNKNOWN	20.70	93	J
15.		UNKNOWN	23.27	94	J
16.					
17.					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01R0

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.04

Sample wt/vol: 30.3 (g/mL) G Lab File ID: J3070223.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 24 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Extraction: (Type) SONC

Number TICS found: 21 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL~~	~~3.08~~	~~13000~~	~~JNBA~~
2.		~~UNKNOWN~~	~~3.87~~	~~140~~	~~JB~~
3.		~~UNKNOWN~~	~~4.01~~	~~450~~	~~JB~~
4.		~~UNKNOWN~~	~~4.21~~	~~250~~	~~JB~~
5.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.37	2400	JN
6.		UNKNOWN	5.37	800	J
7.	112-53-8	1-DODECANOL	10.17	140	JN
8.	35507-09-6	7-HEXADECENE, (Z)-	12.04	150	JN
9.		UNKNOWN	12.22	250	J
10.		UNKNOWN	12.32	120	J
11.		UNKNOWN	14.28	190	J
12.		UNKNOWN	15.51	110	J
13.		UNKNOWN	16.86	1200	J
14.		UNKNOWN	18.38	99	J
15.		UNKNOWN	18.49	120	J
16.		UNKNOWN	20.35	91	J
17.		UNKNOWN	20.48	250	J
18.		UNKNOWN	20.59	350	J
19.		UNKNOWN	20.71	120	J
20.		UNKNOWN	20.97	100	J
21.		UNKNOWN	21.78	95	J
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DV 8/21/03

431

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01R1

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.05

Sample wt/vol: 30.4 (g/mL) G Lab File ID: J3070224.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 21 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8 Extraction: (Type) SONC

Number TICS found: 12 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL~~	~~3.08~~	~~13000~~	~~JNBA~~
2.	108-38-3	BENZENE, 1,3-DIMETHYL-	3.38	370	JN
3.		~~UNKNOWN~~	~~3.87~~	~~140~~	~~JB~~
4.		~~UNKNOWN~~	~~4.00~~	~~340~~	~~JB~~
5.		~~UNKNOWN~~	~~4.21~~	~~220~~	~~JB~~
6.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.35	190	JN
7.		UNKNOWN	5.37	410	J
8.		UNKNOWN	7.27	110	J
9.	74630-31-2	2-DECENE, 6-METHYL-, (Z)-	12.32	92	JN
10.		UNKNOWN	20.35	110	J
11.		UNKNOWN	20.50	190	J
12.		UNKNOWN	20.59	310	J
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DU 8/21/03

464

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01R3

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.06

Sample wt/vol: 30.0 (g/mL) G Lab File ID: J3070309.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 16 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Extraction: (Type) SONC

Number TICS found: 15 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.05~~	~~6700~~	~~JNBA~~
2.		~~UNKNOWN~~	~~3.84~~	~~100~~	~~JB~~
3.		~~UNKNOWN~~	~~3.96~~	~~110~~	~~JB~~
4.		~~UNKNOWN~~	~~4.17~~	~~310~~	~~JB~~
5.		UNKNOWN	5.32	290	J
6.	139-66-2	DIPHENYL SULFIDE	11.27	100	JN
7.		UNKNOWN	13.10	85	J
8.		UNKNOWN AMIDE	15.33	180	J
9.		~~UNKNOWN AMIDE~~	~~15.45~~	~~280~~	~~JB~~
10.		~~UNKNOWN AMIDE~~	~~16.57~~	~~3900~~	~~JB~~
11.		~~UNKNOWN AMIDE~~	~~16.70~~	~~190~~	~~JB~~
12.		UNKNOWN	20.24	1500	J
13.		UNKNOWN	20.42	130	J
14.		UNKNOWN	20.52	130	J
15.	~~123-28-4~~	~~PROPANOIC ACID, 3,3'-THIODIS-, DIDO~~	~~23.14~~	~~830~~	~~JN~~
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DW 8/21/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01R4

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.09

Sample wt/vol: 30.2 (g/mL) G Lab File ID: J3070313.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 14 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Extraction: (Type) SONC

Number TICS found: 15 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.05~~	~~11000~~	~~JNBA~~
2.	~~95-47-6~~	~~BENZENE, 1,2-DIMETHYL-~~	~~3.34~~	~~840~~	~~JNB~~
3.		~~UNKNOWN~~	~~3.83~~	~~120~~	~~JB~~
4.	110-13-4	2,5-HEXANEDIONE	3.95	140	JN
5.		~~UNKNOWN~~	~~4.17~~	~~380~~	~~JB~~
6.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.31	80	JN
7.		UNKNOWN	5.24	82	J
8.		UNKNOWN	5.32	93	J
9.		UNKNOWN	11.26	96	J
10.		UNKNOWN PHTHALATE	13.39	85	J
11.		UNKNOWN AMIDE	15.33	190	J
12.		~~UNKNOWN AMIDE~~	~~15.44~~	~~250~~	~~JB~~
13.	301-02-0	9-OCTADECENAMIDE, (Z)-	16.57	3500	JN
14.	124-26-5	OCTADECANAMIDE	16.70	200	JN
15.	~~123-28-4~~	~~PROPANOIC ACID, 3,3'-THIOBIS-, DIDO~~	~~23.15~~	~~800~~	~~JN~~
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8/21/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01R8

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.10

Sample wt/vol: 30.1 (g/mL) G Lab File ID: J3070314.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 15 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Extraction: (Type) SONC

Number TICS found: 14 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.05~~	~~8200~~	~~JNBA~~
2.	108-38-3	BENZENE, 1,3-DIMETHYL-	3.35	240	JN
3.		~~UNKNOWN~~	~~3.83~~	~~79~~	~~JB~~
4.		~~UNKNOWN~~	~~3.97~~	~~310~~	~~JB~~
5.		~~UNKNOWN~~	~~4.17~~	~~130~~	~~JB~~
6.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.33	1400	JN
7.		UNKNOWN	5.32	330	J
8.	872-05-9	1-DECENE	10.12	180	JN
9.	118-96-7	BENZENE, 2-METHYL-1,3,5-TRINITRO-	12.25	160	JN
10.		UNKNOWN	14.23	120	J
11.		UNKNOWN	15.45	100	J
12.		~~UNKNOWN AMIDE~~	~~16.56~~	~~650~~	~~JB~~
13.		UNKNOWN	16.81	1000	J
14.	~~123-20-4~~	~~PROPANOIC ACID, 3,3'-THIOBIS , DIDO~~	~~23.14~~	~~93~~	~~JN~~
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DJ 6/26/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01R9

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.11

Sample wt/vol: 30.1 (g/mL) G Lab File ID: J3070315.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 22 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.4 Extraction: (Type) SONC

Number TICS found: 14 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.06~~	~~11000~~	~~JNBA~~
2.	108-38-3	BENZENE, 1,3-DIMETHYL-	3.34	240	JN
3.		~~UNKNOWN~~	~~3.83~~	~~120~~	~~JB~~
4.		~~UNKNOWN~~	~~3.96~~	~~490~~	~~JB~~
5.		~~UNKNOWN~~	~~4.17~~	~~300~~	~~JB~~
6.		UNKNOWN	5.32	430	J
7.	118-96-7	BENZENE, 2-METHYL-1,3,5-TRINITRO-	12.26	4500	JN
8.		UNKNOWN	13.98	220	J
9.	35572-78-2	BENZENAMINE, 2-METHYL-3,5-DINITRO-	14.37	380	JN
10.		~~UNKNOWN AMIDE~~	~~16.56~~	~~180~~	~~JB~~
11.		UNKNOWN PHTHALATE	19.02	120	J
12.		UNKNOWN PHTHALATE	19.08	140	J
13.		UNKNOWN PHTHALATE	19.15	180	J
14.		UNKNOWN PHTHALATE	19.21	110	J
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DU 8/25/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01S0

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.12

Sample wt/vol: 30.3 (g/mL) G Lab File ID: J3070316.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 16 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.5 Extraction: (Type) SONC

Number TICS found: 17 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.05~~	~~10000~~	~~JNBA~~
2.	108-38-3	BENZENE, 1,3-DIMETHYL-	3.35	210	JN
3.		~~UNKNOWN~~	~~3.83~~	~~120~~	~~JB~~
4.		~~UNKNOWN~~	~~3.97~~	~~440~~	~~JB~~
5.		~~UNKNOWN~~	~~4.17~~	~~200~~	~~JB~~
6.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.32	81	JN
7.		UNKNOWN	5.32	610	J
8.	118-96-7	BENZENE, 2-METHYL-1,3,5-TRINITRO-	12.25	230	JN
9.	57-10-3	HEXADECANOIC ACID	13.96	96	JN
10.	101-68-8	BENZENE, 1,1'-METHYLENEBIS[4-ISOCYA	15.07	340	JN
11.	301-02-0	9-OCTADECENAMIDE, (Z)-	16.57	250	JN
12.	6971-40-0	17-PENTATRIACONTENE	19.02	180	JN
13.	112-92-5	1-OCTADECANOL	20.27	150	JN
14.		UNKNOWN	21.21	100	J
15.	14021-23-9	D-FRIEDOOLEAN-14-ENE, 3-METHOXY-, (	21.34	120	JN
16.	83-47-6	.GAMMA.-SITOSTEROL	21.70	160	JN
17.		UNKNOWN	22.55	120	J
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DV 8/21/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01S1

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.13

Sample wt/vol: 30.4 (g/mL) G Lab File ID: J3070317.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 7 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0 Extraction: (Type) SONC

Number TICS found: 8 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.05~~	~~8000~~	~~JNBA~~
2.	~~95-47-6~~	~~BENZENE, 1,2-DIMETHYL-~~	~~3.34~~	~~360~~	~~JNB~~
3.		~~UNKNOWN~~	~~3.84~~	~~85~~	~~JB~~
4.	110-13-4	2,5-HEXANEDIONE	3.96	77	JN
5.		~~UNKNOWN~~	~~4.17~~	~~250~~	~~JB~~
6.		UNKNOWN	5.33	71	J
7.	10546-70-0	BENZAMIDE, N-PROPYL-	17.29	180	JN
8.		UNKNOWN	20.53	80	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01S2

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.14

Sample wt/vol: 30.5 (g/mL) G Lab File ID: J3070318.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 15 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.4 Extraction: (Type) SONC

Number TICS found: 12 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.06~~	~~13000~~	~~JNBA~~
2.	108-38-3	BENZENE, 1,3-DIMETHYL-	3.35	190	JN
3.	930-60-9	4-CYCLOPENTENE-1,3-DIONE	3.51	100	JN
4.		UNKNOWN	3.77	95	J
5.		~~UNKNOWN~~	~~3.83~~	~~150~~	~~JB~~
6.	110-13-4	2,5-HEXANEDIONE	3.95	320	JN
7.		~~UNKNOWN~~	~~4.17~~	~~330~~	~~JB~~
8.		UNKNOWN	5.32	410	J
9.		UNKNOWN	6.95	87	J
10.	83-47-6	.GAMMA.-SITOSTEROL	21.70	200	JN
11.	1058-61-3	STIGMAST-4-EN-3-ONE	22.56	160	JN
12.		UNKNOWN	22.83	110	J
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DV 8/26/03

639

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01S6

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.15

Sample wt/vol: 30.3 (g/mL) G Lab File ID: J3070319.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 14 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Extraction: (Type) SONC

Number TICS found: 8 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2 PENTANONE, 4 HYDROXY 4 METHYL~~	~~3.06~~	~~11000~~	~~JNBA~~
2.	108-38-3	BENZENE, 1,3-DIMETHYL-	3.34	270	JN
3.		~~UNKNOWN~~	~~3.83~~	~~110~~	~~JB~~
4.		~~UNKNOWN~~	~~3.96~~	~~220~~	~~JB~~
5.		~~UNKNOWN~~	~~4.17~~	~~300~~	~~JB~~
6.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.31	220	JN
7.		UNKNOWN	5.32	450	J
8.	~~123-20-4~~	~~PROPANOIC ACID, 3,3' THIOBIS , DIDO~~	~~23.15~~	~~120~~	~~JN~~
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DW 8/24/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01S8

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.16

Sample wt/vol: 30.0 (g/mL) G Lab File ID: J3070320.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 15 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

Number TICS found: 14 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL~~	~~3.04~~	~~9000~~	~~JNBA~~
2.		~~UNKNOWN~~	~~3.83~~	~~89~~	~~JB~~
3.		~~UNKNOWN~~	~~3.97~~	~~350~~	~~JB~~
4.		~~UNKNOWN~~	~~4.17~~	~~180~~	~~JB~~
5.		UNKNOWN	5.31	490	J
6.		UNKNOWN	11.27	110	J
7.	112-41-4	1-DODECENE	12.00	770	JN
8.		UNKNOWN AMIDE	15.34	230	J
9.		~~UNKNOWN AMIDE~~	~~15.45~~	~~340~~	~~JB~~
10.	301-02-0	9-OCTADECENAMIDE, (Z)-	16.58	4200	JN
11.		~~UNKNOWN AMIDE~~	~~16.69~~	~~230~~	~~JB~~
12.		UNKNOWN	21.48	110	J
13.		UNKNOWN	21.70	160	J
14.	~~123-28-4~~	~~PROPANOIC ACID, 3,3' THIOBIS-, DIDO~~	~~23.15~~	~~360~~	~~JN~~
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5/24/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01S9

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.17

Sample wt/vol: 30.1 (g/mL) G Lab File ID: J3070321.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 20 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Extraction: (Type) SONC

Number TICS found: 12 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.05~~	~~8300~~	~~JNBA~~
2.	~~95-47-6~~	~~BENZENE, 1,2-DIMETHYL-~~	~~3.34~~	~~270~~	~~JNB~~
3.		~~UNKNOWN~~	~~3.96~~	~~310~~	~~JB~~
4.		~~UNKNOWN~~	~~4.17~~	~~370~~	~~JB~~
5.		UNKNOWN	5.32	440	J
6.	301-02-0	9-OCTADECENAMIDE, (Z)-	16.57	390	JN
7.		UNKNOWN	20.53	100	J
8.		UNKNOWN ALDEHYDE	20.90	100	J
9.	83-47-6	.GAMMA.-SITOSTEROL	21.69	300	JN
10.		UNKNOWN	22.19	95	J
11.	638-95-9	.ALPHA.-AMYRIN	22.35	220	JN
12.		UNKNOWN	23.15	100	J
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DV 8/21/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01T3

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.18

Sample wt/vol: 30.3 (g/mL) G Lab File ID: J3070322.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 18 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9 Extraction: (Type) SONC

Number TICS found: 19 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL~~	~~3.05~~	~~8100~~	~~JNBA~~
2.	108-38-3	BENZENE, 1,3-DIMETHYL-	3.34	150	JN
3.		~~UNKNOWN~~	~~3.84~~	~~100~~	~~JB~~
4.		~~UNKNOWN~~	~~3.96~~	~~260~~	~~JB~~
5.		~~UNKNOWN~~	~~4.17~~	~~310~~	~~JB~~
6.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.32	1200	JN
7.		UNKNOWN	5.24	88	J
8.		UNKNOWN	5.33	340	J
9.	7433-56-9	5-DECENE, (E)-	10.13	100	JN
10.		UNKNOWN	12.16	130	J
11.	118-96-7	BENZENE, 2-METHYL-1,3,5-TRINITRO-	12.24	360	JN
12.	16118-22-2	BENZENEMETHANIMINE	13.98	110	JN
13.	35572-78-2	BENZENAMINE, 2-METHYL-3,5-DINITRO-	14.37	120	JN
14.	301-02-0	9-OCTADECENAMIDE, (Z)-	16.57	190	JN
15.	78-51-3	ETHANOL, 2-BUTOXY-, PHOSPHATE (3:1)	16.82	410	JN
16.		UNKNOWN	18.50	83	J
17.		UNKNOWN	19.37	97	J
18.		UNKNOWN	21.70	110	J
19.	~~123-28-4~~	~~PROPANOIC ACID, 3,3'-THIOBIS-, DIDO~~	~~23.16~~	~~160~~	~~JN~~
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DW 8/24/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01T4

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.19

Sample wt/vol: 30.5 (g/mL) G Lab File ID: J3070323.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 13 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Extraction: (Type) SONC

Number TICS found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.05~~	~~7600~~	~~JNBA~~
2.	108-38-3	BENZENE, 1,3-DIMETHYL-	3.34	100	JN
3.		~~UNKNOWN~~	~~3.84~~	~~110~~	~~JB~~
4.		~~UNKNOWN~~	~~3.96~~	~~210~~	~~JB~~
5.		~~UNKNOWN~~	~~4.17~~	~~310~~	~~JB~~
6.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.31	90	JN
7.		UNKNOWN	5.24	76	J
8.		UNKNOWN	5.32	310	J
9.		UNKNOWN	12.18	87	J
10.	118-96-7	BENZENE, 2-METHYL-1,3,5-TRINITRO-	12.30	17000	JN
11.	16607-77-5	1,3,7-OCTATRIEN-5-YNE	13.99	820	JN
12.	35572-78-2	BENZENAMINE, 2-METHYL-3,5-DINITRO-	14.38	1200	JN
13.	301-02-0	9-OCTADECENAMIDE, (Z)-	16.57	120	JN
14.		UNKNOWN HYDROCARBON	18.31	130	J
15.		UNKNOWN	18.35	87	J
16.		UNKNOWN	18.50	150	J
17.		UNKNOWN	18.80	120	J
18.		UNKNOWN	19.17	100	J
19.		UNKNOWN	19.37	150	J
20.		UNKNOWN	20.53	85	J
21.		UNKNOWN	21.49	160	J
22.		UNKNOWN	21.70	83	J
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DV 8/24/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01T5

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.20

Sample wt/vol: 30.3 (g/mL) G Lab File ID: J3070324.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 17 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0 Extraction: (Type) SONC

Number TICS found: 20 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL~~	~~3.06~~	~~9600~~	~~JNBA~~
2.		~~UNKNOWN~~	~~3.83~~	~~110~~	~~JB~~
3.		~~UNKNOWN~~	~~3.97~~	~~300~~	~~JB~~
4.		~~UNKNOWN~~	~~4.17~~	~~300~~	~~JB~~
5.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.33	1300	JN
6.		UNKNOWN	5.32	610	J
7.	139-66-2	DIPHENYL SULFIDE	11.28	82	JN
8.		UNKNOWN	12.04	100	J
9.	57-10-3	HEXADECANOIC ACID	13.96	130	JN
10.		UNKNOWN	14.38	140	J
11.	101-68-8	BENZENE, 1,1'-METHYLENEBIS[4-ISOCYA	15.07	170	JN
12.		UNKNOWN AMIDE	15.34	180	J
13.		~~UNKNOWN AMIDE~~	~~15.45~~	~~300~~	~~JB~~
14.		~~UNKNOWN AMIDE~~	~~16.58~~	~~3300~~	~~JB~~
15.		~~UNKNOWN AMIDE~~	~~16.70~~	~~160~~	~~JB~~
16.		UNKNOWN	16.82	680	J
17.		UNKNOWN	18.44	83	J
18.		UNKNOWN	21.21	86	J
19.	83-47-6	.GAMMA.-SITOSTEROL	21.71	160	JN
20.	~~123-28-4~~	~~PROPANOIC ACID, 3,3'-THIOBIS-, DIDO~~	~~23.18~~	~~11000~~	~~JN~~
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01T6

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.21

Sample wt/vol: 30.5 (g/mL) G Lab File ID: J3070325.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 20 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.7 Extraction: (Type) SONC

Number TICS found: 16

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL~~	~~3.05~~	~~7300~~	~~JNBA~~
2.	~~95-47-6~~	~~BENZENE, 1,2-DIMETHYL-~~	~~3.34~~	~~85~~	~~JNB~~
3.		~~UNKNOWN~~	~~3.84~~	~~92~~	~~JB~~
4.		~~UNKNOWN~~	~~3.96~~	~~220~~	~~JB~~
5.		~~UNKNOWN~~	~~4.18~~	~~200~~	~~JB~~
6.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.32	1300	JN
7.		UNKNOWN	5.33	390	J
8.	872-05-9	1-DECENE	10.13	130	JN
9.	112-41-4	1-DODECENE	11.99	290	JN
10.	57-10-3	HEXADECANOIC ACID	13.97	100	JN
11.		~~UNKNOWN AMIDE~~	~~15.46~~	~~120~~	~~JB~~
12.		~~UNKNOWN AMIDE~~	~~16.57~~	~~790~~	~~JB~~
13.	78-51-3	ETHANOL, 2-BUTOXY-, PHOSPHATE (3:1)	16.82	610	JN
14.	842-07-9	2-NAPHTHALENOL, 1-(PHENYLAZO)-	18.92	760	JN
15.	83-47-6	.GAMMA.-SITOSTEROL	21.70	130	JN
16.	123-28-4	PROPANOIC ACID, 3,3'-THIOBIS-, DIDO	23.16	280	JN
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01T7

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01Q7

Matrix: (soil/water) SOIL Lab Sample ID: 52720.22

Sample wt/vol: 30.1 (g/mL) G Lab File ID: J3070326.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 17 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/03/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.4 Extraction: (Type) SONC

Number TICS found: 21 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.05~~	~~6500~~	~~JNBA~~
2.	~~95-47-6~~	~~BENZENE, 1,2-DIMETHYL~~	~~3.34~~	~~100~~	~~JNB~~
3.		~~UNKNOWN~~	~~3.96~~	~~190~~	~~JB~~
4.		~~UNKNOWN~~	~~4.17~~	~~240~~	~~JB~~
5.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.32	1300	JN
6.		UNKNOWN	5.33	240	J
7.	118-96-7	BENZENE, 2-METHYL-1,3,5-TRINITRO-	12.25	1200	JN
8.	1074-43-7	BENZENE, 1-METHYL-3-PROPYL-	13.98	320	JN
9.		UNKNOWN	14.23	180	J
10.	35572-78-2	BENZENAMINE, 2-METHYL-3,5-DINITRO-	14.37	300	JN
11.		~~UNKNOWN AMIDE~~	~~16.57~~	~~110~~	~~JB~~
12.	78-51-3	ETHANOL, 2-BUTOXY-, PHOSPHATE (3:1)	16.82	510	JN
13.		~~UNKNOWN~~	~~17.71~~	~~100~~	~~JB~~
14.		UNKNOWN	18.79	100	J
15.		UNKNOWN	19.02	87	J
16.		UNKNOWN	19.17	88	J
17.		UNKNOWN	20.43	87	J
18.		UNKNOWN	20.53	93	J
19.		UNKNOWN	21.37	83	J
20.		UNKNOWN	21.69	140	J
21.		UNKNOWN	23.16	150	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01R2

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.01

Sample wt/vol: 30.3 (g/mL) G Lab File ID: J3070811.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: 9 Decanted: (Y/N) N Date Extracted: 06/27/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/08/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8 Extraction: (Type) SONC

Number TICS found: 12 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.02~~	~~5200~~	~~JNA~~
2.	~~95-47-6~~	~~BENZENE, 1,2-DIMETHYL-~~	~~3.31~~	~~610~~	~~JNB~~
3.		UNKNOWN	3.82	93	J
4.	110-13-4	2,5-HEXANEDIONE	3.92	78	JN
5.		UNKNOWN	4.14	230	J
6.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.32	1700	JN
7.		UNKNOWN	12.12	90	J
8.		UNKNOWN	14.18	140	J
9.	57-10-3	HEXADECANOIC ACID	14.36	77	JN
10.		UNKNOWN AMIDE	16.52	190	J
11.	78-51-3	ETHANOL, 2-BUTOXY-, PHOSPHATE (3:1)	16.78	1100	JN
12.		UNKNOWN	18.97	100	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01R5

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.02

Sample wt/vol: 30.1 (g/mL) G Lab File ID: J3070812.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: 13 Decanted: (Y/N) N Date Extracted: 06/27/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/08/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0 Extraction: (Type) SONC

Number TICS found: 15 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	2.97	140	J
2.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.02~~	~~5200~~	~~JNA~~
3.	~~95-47-6~~	~~BENZENE, 1,2-DIMETHYL-~~	~~3.31~~	~~400~~	~~JNB~~
4.		UNKNOWN	3.82	87	J
5.		UNKNOWN	3.93	320	J
6.		UNKNOWN	4.24	190	J
7.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.34	2400	JN
8.		UNKNOWN	5.28	160	J
9.		UNKNOWN	5.54	100	J
10.	~~57-10-3~~	~~HEXADECANOIC ACID~~ UNKNOWN	13.92	98	JN
11.		UNKNOWN	14.18	210	J
12.	~~57-10-3~~	~~HEXADECANOIC ACID~~ UNKNOWN	14.35	90	JN
13.		UNKNOWN	15.41	81	J
14.		UNKNOWN AMIDE	16.53	180	J
15.		UNKNOWN	16.77	1200	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01R6

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.03

Sample wt/vol: 30.2 (g/mL) G Lab File ID: J3070716.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: 10 Decanted: (Y/N) N Date Extracted: 06/27/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/07/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0 Extraction: (Type) SONC

Number TICS found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.00~~	~~4400~~	~~JNA~~
2.		UNKNOWN	3.09	120	J
3.		UNKNOWN	3.91	470	J
4.		UNKNOWN	4.10	290	J
5.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.31	1400	JN
6.		UNKNOWN	5.24	510	J
7.	95-16-9	BENZOTHIAZOLE	7.54	130	JN
8.		UNKNOWN	14.13	130	J
9.	57-11-4	OCTADECANOIC ACID	15.19	110	JN
10.		UNKNOWN	15.81	100	J
11.	78-51-3	ETHANOL, 2-BUTOXY-, PHOSPHATE (3:1)	16.72	890	JN
12.		UNKNOWN	18.77	140	J
13.		UNKNOWN	19.08	110	J
14.		UNKNOWN	19.25	220	J
15.		UNKNOWN	19.62	110	J
16.		UNKNOWN	19.90	110	J
17.		UNKNOWN	19.99	150	J
18.		UNKNOWN	20.20	130	J
19.		UNKNOWN	20.32	240	J
20.		UNKNOWN	20.72	220	J
21.		UNKNOWN	21.21	110	J
22.		UNKNOWN	21.28	110	J
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DW 8/26/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01R7

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.04

Sample wt/vol: 30.7 (g/mL) G Lab File ID: J3072112.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: 17 Decanted: (Y/N) N Date Extracted: 06/27/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/21/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.5 Extraction: (Type) SONC

Number TICS found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~2.93~~	~~8000~~	~~JNA~~
2.		UNKNOWN	3.04	280	J
3.		UNKNOWN	3.85	650	J
4.		UNKNOWN	4.05	740	J
5.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.20	420	JN
6.		UNKNOWN	5.16	680	J
7.	57-10-3	HEXADECANOIC ACID	13.81	270	JN
8.	112-80-1	OLEIC ACID	15.02	410	JN
9.		UNKNOWN	18.14	340	J
10.		UNKNOWN	18.70	200	J
11.		UNKNOWN	19.55	300	J
12.		UNKNOWN	19.64	190	J
13.		UNKNOWN	19.70	260	J
14.		UNKNOWN	19.84	380	J
15.		UNKNOWN	19.93	400	J
16.		UNKNOWN	20.04	250	J
17.		UNKNOWN	20.13	470	J
18.		UNKNOWN	20.25	640	J
19.		UNKNOWN	20.65	290	J
20.		UNKNOWN	21.15	670	J
21.		UNKNOWN	21.20	170	J
22.		UNKNOWN	21.54	300	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01S3

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.05

Sample wt/vol: 30.6 (g/mL) G Lab File ID: J3070718.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: 9 Decanted: (Y/N) N Date Extracted: 06/27/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/07/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Extraction: (Type) SONC

Number TICS found: 15 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.00~~	~~3900~~	~~JNA~~
2.	~~95-47-6~~	~~BENZENE, 1,2-DIMETHYL-~~	~~3.29~~	~~72~~	~~JNB~~
3.		UNKNOWN	3.91	220	J
4.		UNKNOWN	4.11	150	J
5.		UNKNOWN	4.21	89	J
6.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.30	1100	JN
7.		UNKNOWN	5.24	430	J
8.	1120-07-6	NONANAMIDE	13.99	110	JN
9.		UNKNOWN	14.12	76	J
10.		UNKNOWN AMIDE	15.24	170	J
11.		UNKNOWN AMIDE	15.35	290	J
12.	301-02-0	9-OCTADECENAMIDE, (Z)-	16.47	2900	JN
13.		UNKNOWN AMIDE	16.59	99	J
14.		UNKNOWN	16.72	970	J
15.	123-28-4	PROPANOIC ACID, 3,3'-THIOBIS-, DIDO	23.00	9800	JN
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
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8/21/03

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01S4

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.06

Sample wt/vol: 30.2 (g/mL) G Lab File ID: J3070719.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: 18 Decanted: (Y/N) N Date Extracted: 06/27/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/07/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.5 Extraction: (Type) SONC

Number TICS found: 19 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL~~	~~3.01~~	~~5100~~	~~JNA~~
2.	~~95-47-6~~	~~BENZENE, 1,2-DIMETHYL~~	~~3.29~~	~~300~~	~~JNB~~
3.		UNKNOWN	3.78	110	J
4.		UNKNOWN	3.91	270	J
5.		UNKNOWN	4.10	230	J
6.		UNKNOWN	4.22	190	J
7.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.33	2800	JN
8.		UNKNOWN	5.19	100	J
9.		UNKNOWN	5.24	380	J
10.		UNKNOWN	5.99	140	J
11.	95-16-9	BENZOTHIAZOLE	7.55	140	JN
12.		UNKNOWN	12.08	190	J
13.		UNKNOWN	14.13	140	J
14.		UNKNOWN	14.30	180	J
15.		UNKNOWN AMIDE	15.36	190	J
16.		UNKNOWN AMIDE	16.46	1000	J
17.	78-51-3	ETHANOL, 2-BUTOXY-, PHOSPHATE (3:1)	16.72	1400	JN
18.		UNKNOWN	18.34	130	J
19.	123-28-4	PROPANOIC ACID, 3,3'-THIOBIS-, DIDO	22.96	210	JN
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
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DU 8/24/07

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01S5

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.07

Sample wt/vol: 30.0 (g/mL) G Lab File ID: J3072113.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: 9 Decanted: (Y/N) N Date Extracted: 06/27/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/21/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2 Extraction: (Type) SONC

Number TICS found: 23 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL~~	~~2.93~~	~~7800~~	~~JNA~~
2.		UNKNOWN	3.04	240	J
3.		UNKNOWN	3.68	150	J
4.		UNKNOWN	3.85	720	J
5.		UNKNOWN	4.05	570	J
6.		UNKNOWN	5.16	450	J
7.	57-10-3	HEXADECANOIC ACID	13.81	200	JN
8.		UNKNOWN	15.73	180	J
9.		UNKNOWN	16.21	170	J
10.		UNKNOWN AMIDE	16.40	340	J
11.		UNKNOWN	16.80	140	J
12.		UNKNOWN	18.14	170	J
13.		UNKNOWN	18.87	190	J
14.		UNKNOWN	19.19	170	J
15.		UNKNOWN	19.56	230	J
16.		UNKNOWN	19.72	190	J
17.		UNKNOWN	19.83	330	J
18.		UNKNOWN	19.93	340	J
19.		UNKNOWN	20.04	210	J
20.		UNKNOWN	20.13	370	J
21.	36728-72-0	28-NOR-17.BETA.(H)-HOPANE	20.25	410	JN
22.		UNKNOWN	20.64	260	J
23.		UNKNOWN	21.14	160	J
24.					
25.					
26.					
27.					
28.					
29.					
30.					

DV 8/21/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01S7

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.08

Sample wt/vol: 30.0 (g/mL) G Lab File ID: J3070721.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: 14 Decanted: (Y/N) N Date Extracted: 06/27/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/07/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Extraction: (Type) SONC

Number TICS found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL~~	~~3.01~~	~~6200~~	~~JNA~~
2.	108-38-3	BENZENE, 1,3-DIMETHYL-	3.29	170	JN
3.		UNKNOWN	3.77	100	J
4.		UNKNOWN	3.91	380	J
5.		UNKNOWN	4.11	140	J
6.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.29	1600	JN
7.		UNKNOWN	5.24	410	J
8.	95-16-9	BENZOTHIAZOLE	7.55	110	JN
9.	112-41-4	1-DODECENE	11.90	670	JN
10.	~~57-10-3~~	~~HEXADECANOIC ACID~~ UNKNOWN	13.88	310	JN
11.		UNKNOWN	14.13	130	J
12.	~~57-10-3~~	~~HEXADECANOIC ACID~~ UNKNOWN	14.30	280	JN
13.		UNKNOWN AMIDE	15.24	240	J
14.		UNKNOWN AMIDE	15.36	370	J
15.		UNKNOWN AMIDE	16.47	3400	J
16.	124-26-5	OCTADECANAMIDE	16.60	190	JN
17.		UNKNOWN	16.72	1000	J
18.	7773-83-3	1-DOCOSANETHIOL	18.23	190	JN
19.		UNKNOWN	21.06	120	J
20.	83-47-6	.GAMMA.-SITOSTEROL	21.54	200	JN
21.		UNKNOWN	22.38	120	J
22.	123-28-4	PROPANOIC ACID, 3,3'-THIOBIS-, DIDO	22.97	3000	JN
23.					
24.					
25.					
26.					
27.					
28.					
29.					
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DV 8/21/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01T0

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.11

Sample wt/vol: 30.1 (g/mL) G Lab File ID: J3070722.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: 20 Decanted: (Y/N) N Date Extracted: 06/27/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/07/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.7 Extraction: (Type) SONC

Number TICS found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL~~	~~3.02~~	~~7800~~	~~JNA~~
2.		UNKNOWN	3.91	730	J
3.	22323-82-6	1,3-DIOXOLANE-4-METHANOL, 2,2-DIMET	4.00	240	JN
4.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.37	4900	JN
5.		UNKNOWN	5.27	600	J
6.		UNKNOWN	12.07	470	J
7.	57-10-3	HEXADECANOIC ACID	13.88	450	JN
8.		UNKNOWN	14.12	350	J
9.	112-80-1	OLEIC ACID	15.07	600	JN
10.		UNKNOWN AMIDE	15.24	360	J
11.		UNKNOWN AMIDE	15.35	620	J
12.		UNKNOWN AMIDE	16.47	4300	J
13.		UNKNOWN	16.72	2500	J
14.	~~1599-67-3~~	~~1-DOCOSENE~~ UNKNOWN	17.15	360	JN
15.		UNKNOWN	17.82	240	J
16.	~~1599-67-3~~	~~1-DOCOSENE~~ UNKNOWN	18.22	650	JN
17.		UNKNOWN	18.33	400	J
18.		UNKNOWN	21.08	250	J
19.		2-HEPTACOSANONE	21.17	360	JN
20.		UNKNOWN	21.33	220	J
21.	83-47-6	.GAMMA.-SITOSTEROL	21.55	260	JN
22.	123-28-4	PROPANOIC ACID, 3,3'-THIOBIS-, DIDO	22.99	11000	JN
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

DV 8/26/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01T1

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.12

Sample wt/vol: 30.7 (g/mL) G Lab File ID: J3070723.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: 19 Decanted: (Y/N) N Date Extracted: 06/27/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/07/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.1 Extraction: (Type) SONC

Number TICS found: 23 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2 PENTANONE, 4 HYDROXY 4 METHYL~~	~~3.02~~	~~10000~~	~~JNA~~
2.		UNKNOWN	3.10	180	J
3.		UNKNOWN	3.78	150	J
4.		UNKNOWN	3.91	560	J
5.		UNKNOWN	4.22	290	J
6.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.39	7300	JN
7.		UNKNOWN	4.72	240	J
8.		UNKNOWN	5.21	150	J
9.		UNKNOWN	5.28	660	J
10.	95-16-9	BENZOTHIAZOLE	7.55	190	JN
11.	128-37-0	BUTYLATED HYDROXYTOLUENE	10.46	180	JN
12.		UNKNOWN	12.08	610	J
13.	57-10-3	HEXADECANOIC ACID	13.87	300	JN
14.		UNKNOWN	14.13	640	J
15.	2091-29-4	9-HEXADECENOIC ACID	15.07	290	JN
16.		UNKNOWN	15.24	160	J
17.		UNKNOWN	15.36	370	J
18.		UNKNOWN AMIDE	16.46	1400	J
19.	78-51-3	ETHANOL, 2-BUTOXY-, PHOSPHATE (3:1)	16.72	3600	JN
20.		UNKNOWN	18.33	460	J
21.		UNKNOWN	20.21	210	J
22.		UNKNOWN	20.31	170	J
23.	123-28-4	PROPANOIC ACID, 3,3'-THIOBIS-, DIDO	22.96	440	JN
24.					
25.					
26.					
27.					
28.					
29.					
30.					

DU 8/21/03

021A

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01T2

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.13

Sample wt/vol: 30.6 (g/mL) G Lab File ID: J3070724.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: 18 Decanted: (Y/N) N Date Extracted: 06/27/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/07/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Extraction: (Type) SONC

Number TICS found: 23 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.02~~	~~8000~~	~~JNA~~
2.		UNKNOWN	3.10	150	J
3.		UNKNOWN	3.77	160	J
4.		UNKNOWN	3.91	570	J
5.		UNKNOWN	4.10	260	J
6.		UNKNOWN	4.22	210	J
7.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.35	3200	JN
8.		UNKNOWN	4.72	150	J
9.		UNKNOWN	5.20	130	J
10.		UNKNOWN	5.25	810	J
11.		UNKNOWN	6.00	100	J
12.	95-16-9	BENZOTHIAZOLE	7.54	270	JN
13.	~~57-10-3~~	~~HEXADECANOIC ACID~~ UNKNOWN	13.87	200	JN
14.		UNKNOWN	14.12	210	J
15.	~~57-10-3~~	~~HEXADECANOIC ACID~~ UNKNOWN	14.30	98	JN
16.	112-88-9	1-OCTADECENE	15.07	180	JN
17.		UNKNOWN AMIDE	15.35	120	J
18.		UNKNOWN AMIDE	16.47	530	J
19.		UNKNOWN	16.71	1300	J
20.		UNKNOWN	18.33	160	J
21.		UNKNOWN	20.31	110	J
22.		UNKNOWN	20.41	120	J
23.	123-28-4	PROPANOIC ACID, 3,3'-THIOBIS-, DIDO	22.96	130	JN
24.					
25.					
26.					
27.					
28.					
29.					
30.					

DW 8/26/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01T8

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.14

Sample wt/vol: 30.0 (g/mL) G Lab File ID: J3070813.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: 17 Decanted: (Y/N) N Date Extracted: 06/27/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/08/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Extraction: (Type) SONC

Number TICS found: 23 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	2.97	110	J
2.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.03~~	~~7700~~	~~JNA~~
3.		UNKNOWN	3.12	88	J
4.		UNKNOWN	3.94	420	J
5.		UNKNOWN	4.14	220	J
6.		UNKNOWN	4.25	110	J
7.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.35	2700	JN
8.		UNKNOWN	5.22	96	J
9.		UNKNOWN	5.28	370	J
10.		UNKNOWN	5.75	130	J
11.	95-16-9	BENZOTHIAZOLE	7.59	110	JN
12.	57-10-3	HEXADECANOIC ACID	13.92	110	JN
13.		UNKNOWN	14.18	250	J
14.		UNKNOWN	15.41	110	J
15.		UNKNOWN AMIDE	16.53	130	J
16.		UNKNOWN	16.78	1500	J
17.		UNKNOWN	18.39	140	J
18.		UNKNOWN	19.34	110	J
19.		UNKNOWN	20.06	98	J
20.		UNKNOWN	20.27	150	J
21.		UNKNOWN	20.38	120	J
22.		UNKNOWN	20.49	90	J
23.	123-28-4	PROPANOIC ACID, 3,3'-THIOBIS-, DIDO	23.08	140	JN
24.					
25.					
26.					
27.					
28.					
29.					
30.					

DV 8/20/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01T9

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.15

Sample wt/vol: 30.5 (g/mL) G Lab File ID: J3070907.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: 20 Decanted: (Y/N) N Date Extracted: 06/27/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/09/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Extraction: (Type) SONC

Number TICS found: 17 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.01~~	~~12000~~	~~JNA~~
2.	~~95-47-6~~	~~BENZENE, 1,2-DIMETHYL~~	~~3.28~~	~~120~~	~~JNB~~
3.		UNKNOWN	3.77	150	J
4.		UNKNOWN	3.91	610	J
5.		UNKNOWN	4.11	230	J
6.		UNKNOWN	4.21	120	J
7.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.26	370	JN
8.		UNKNOWN	5.23	1000	J
9.	95-16-9	BENZOTHIAZOLE	7.55	120	JN
10.		UNKNOWN	11.17	92	J
11.	57-10-3	HEXADECANOIC ACID	13.88	180	JN
12.	35572-78-2	BENZENAMINE, 2-METHYL-3,5-DINITRO-	14.27	250	JN
13.		UNKNOWN AMIDE	15.24	170	J
14.	1120-07-6	NONANAMIDE	15.35	180	JN
15.		UNKNOWN	15.82	120	J
16.		UNKNOWN AMIDE	16.48	2700	J
17.	123-28-4	PROPANOIC ACID, 3,3'-THIOBIS-, DIDO	23.02	11000	JN
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
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30.					

D 8/26/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01W0

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.16

Sample wt/vol: 30.1 (g/mL) G Lab File ID: J3070815.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: 18 Decanted: (Y/N) N Date Extracted: 06/27/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/08/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2 Extraction: (Type) SONC

Number TICS found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.03~~	~~10000~~	~~JNA~~
2.		UNKNOWN	3.93	590	J
3.		UNKNOWN	4.14	310	J
4.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.30	940	JN
5.		UNKNOWN	5.21	140	J
6.		UNKNOWN	5.28	360	J
7.	57-10-3	HEXADECANOIC ACID	13.93	300	JN
8.	108562-66-9	1,5-HEXADIENE, 2,3,3,4,4,5-HEXACHLO	14.32	210	JN
9.	152-58-9	CORTODOXONE	14.43	140	JN
10.	301-02-0	9-OCTADECENAMIDE, (Z)-	16.53	200	JN
11.		UNKNOWN	16.71	400	J
12.		UNKNOWN	16.78	630	J
13.		UNKNOWN	16.92	460	J
14.		UNKNOWN	17.15	290	J
15.		UNKNOWN	17.85	130	J
16.	481-21-0	CHOLESTANE	19.12	310	JN
17.		UNKNOWN	20.39	130	J
18.		UNKNOWN	20.80	270	J
19.		UNKNOWN	21.30	170	J
20.		UNKNOWN	21.43	170	J
21.		UNKNOWN	23.07	310	J
22.		UNKNOWN	23.24	120	J
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

DV 8/24/03

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01W1

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52720.23

Sample wt/vol: 30.1 (g/mL) G Lab File ID: J3070219.D

Level: (low/med) LOW Date Received: 06/25/03

% Moisture: 18 Decanted: (Y/N) N Date Extracted: 06/26/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/02/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1 Extraction: (Type) SONC

Number TICS found: 23 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.08~~	~~9700~~	~~JNBA~~
2.		UNKNOWN	4.00	300	J
3.		UNKNOWN	4.20	630	J
4.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.35	220	JN
5.		UNKNOWN	5.36	610	J
6.	~~872-05-9~~	~~1-DECENE~~ UNKNOWN	10.17	210	JN
7.	112-41-4	1-DODECENE	12.04	190	JN
8.	~~872-05-9~~	~~1-DECENE~~ UNKNOWN	12.32	140	JN
9.	57-10-3	HEXADECANOIC ACID	14.00	120	JN
10.		UNKNOWN ALDEHYDE	14.44	100	J
11.		UNKNOWN AMIDE	16.62	210	J
12.		UNKNOWN	19.93	120	J
13.		UNKNOWN	20.07	100	J
14.		UNKNOWN	20.17	140	J
15.		UNKNOWN	20.35	110	J
16.		UNKNOWN	20.42	170	J
17.		UNKNOWN	20.49	440	J
18.		UNKNOWN	20.59	510	J
19.		UNKNOWN	20.71	110	J
20.		UNKNOWN	21.29	100	J
21.		UNKNOWN	21.43	120	J
22.	83-47-6	.GAMMA.-SITOSTEROL	21.77	150	JN
23.	13125-44-5	1,2-DITHIOLANE-3-PROPANOIC ACID	23.26	110	JN
24.					
25.					
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DV 8/21/03

1G

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01X7

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.17

Sample wt/vol: 30.2 (g/mL) G Lab File ID: J3070816.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: 25 Decanted: (Y/N) N Date Extracted: 06/27/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/08/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Extraction: (Type) SONC

Number TICS found: 22 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.02~~	~~6900~~	~~JNA~~
2.		UNKNOWN	3.94	660	J
3.		UNKNOWN	4.14	290	J
4.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.32	2200	JN
5.		UNKNOWN	5.21	170	J
6.		UNKNOWN	5.28	430	J
7.		UNKNOWN	13.06	180	J
8.		UNKNOWN	13.38	210	J
9.	2091-29-4	9-HEXADECENOIC ACID	13.82	320	JN
10.	57-10-3	HEXADECANOIC ACID	13.94	640	JN
11.		UNKNOWN	14.18	180	J
12.	60-33-3	9,12-OCTADECADIENOIC ACID (Z,Z)-	15.10	300	JN
13.		UNKNOWN	15.15	480	J
14.		UNKNOWN AMIDE	15.41	220	J
15.		UNKNOWN AMIDE	16.52	760	J
16.	78-51-3	ETHANOL, 2-BUTOXY-, PHOSPHATE (3:1)	16.78	1600	JN
17.	36237-66-8	6,10,14-HEXADECATRIEN-1-OL, 3,7,11,	18.98	150	JN
18.	57-88-5	CHOLESTEROL	20.59	900	JN
19.		UNKNOWN	20.82	220	J
20.		UNKNOWN	21.15	200	J
21.	83-47-6	.GAMMA.-SITOSTEROL	21.63	450	JN
22.	1058-61-3	STIGMAST-4-EN-3-ONE	22.50	200	JN
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01X8

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.18

Sample wt/vol: 30.9 (g/mL) G Lab File ID: J3070908.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: 23 Decanted: (Y/N) N Date Extracted: 06/27/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/09/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Extraction: (Type) SONC

Number TICS found: 11 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL~~	~~2.99~~	~~6400~~	~~JNA~~
2.		UNKNOWN	3.77	100	J
3.		UNKNOWN	3.90	500	J
4.		UNKNOWN	4.11	120	J
5.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.28	1400	JN
6.		UNKNOWN	5.23	770	J
7.		UNKNOWN	7.13	110	J
8.		UNKNOWN	14.12	110	J
9.	301-02-0	9-OCTADECENAMIDE, (Z)-	16.47	150	JN
10.	78-51-3	ETHANOL, 2-BUTOXY-, PHOSPHATE (3:1)	16.72	990	JN
11.	57-88-5	CHOLESTEROL	20.53	110	JN
12.					
13.					
14.					
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8/21/03

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

C01Y0

Lab Name: SWL-TULSA Contract: 68W03024

Lab Code: SWOK Case No.: 31878 SAS No.: SDG No.: C01W1

Matrix: (soil/water) SOIL Lab Sample ID: 52729.19

Sample wt/vol: 30.4 (g/mL) G Lab File ID: J3070818.D

Level: (low/med) LOW Date Received: 06/26/03

% Moisture: 20 Decanted: (Y/N) N Date Extracted: 06/27/03

Concentrated Extract Volume: 500 (uL) Date Analyzed: 07/08/03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Extraction: (Type) SONC

Number TICS found: 10 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	2.97	94	J
2.	~~123-42-2~~	~~2-PENTANONE, 4-HYDROXY-4-METHYL-~~	~~3.02~~	~~7700~~	~~JNA~~
3.		UNKNOWN	3.94	810	J
4.		UNKNOWN	4.14	190	J
5.	111-46-6	ETHANOL, 2,2'-OXYBIS-	4.29	350	JN
6.		UNKNOWN	5.28	250	J
7.		UNKNOWN	7.17	91	J
8.	57-10-3	HEXADECANOIC ACID	13.93	87	JN
9.	78-51-3	ETHANOL, 2-BUTOXY-, PHOSPHATE (3:1)	16.78	93	JN
10.	57-88-5	CHOLESTEROL	20.59	94	JN
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12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
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DV 8/21/03

Appendix D

Chain of Custody Records

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 31878
DAS No: R31657

R

Region:	3	Date Shipped:	6/24/2003
Project Code:		Carrier Name:	FedEx
Account Code:	02T0:N50102D037ZLA00	Airbill:	840878239320
CERCLIS ID:	MDD985407196	Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545
Spill ID:	037Z		
Site Name/State:	Elkton Farm TMRA/MD		
Project Leader:	Alex Cox		
Action:	Expanded Site Investigation/RI		
Sampling Co:	MDE		

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1			
2			
3			
4			

Sampler Signature:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	QC Type
C01P0	Surface Water/ Dixon Wood	L/G	BNA (21), PEST (21), VOA_ (21)	1446 (Ice Only), 1447 (Ice Only), 1448 (Ice Only), 1449 (Ice Only), 1450 (HCL), 1451 (HCL), 1452 (HCL), 1453 (HCL), 1454 (HCL), 1455 (HCL) (10)	SWT1	S: 6/24/2003	11:10	MC01P0	MS/MSD
C01P1	Surface Water/ Dixon Wood	L/G	BNA (21), PEST (21), VOA_ (21)	1461 (Ice Only), 1462 (Ice Only), 1463 (HCL), 1464 (HCL) (4)	SWT2	S: 6/24/2003	10:15	MC01P1	–
C01P2	Surface Water/ Dixon Wood	L/G	BNA (21), PEST (21), VOA_ (21)	1468 (Ice Only), 1469 (Ice Only), 1470 (HCL), 1471 (HCL) (4)	SWT3	S: 6/24/2003	13:10	MC01P2	–
C01P3	Surface Water/ Dixon Wood	L/G	BNA (21), PEST (21), VOA_ (21)	1475 (Ice Only), 1476 (Ice Only), 1477 (HCL), 1478 (HCL) (4)	SWT4	S: 6/24/2003	9:40	MC01P3	–
C01P4	Surface Water/ Phillip Anderson	L/G	BNA (21), PEST (21), VOA_ (21)	1482 (Ice Only), 1483 (Ice Only), 1484 (HCL), 1485 (HCL) (4)	SWT5	S: 6/24/2003	10:15	MC01P4	DUP. OF SWT 2
C01P5	Surface Water/ Chris Hartman	L/G	BNA (21), PEST (21), VOA_ (21)	1489 (Ice Only), 1490 (Ice Only), 1491 (HCL), 1492 (HCL) (4)	SWT6	S: 6/24/2003	9:30	MC01P5	Field Blank
C01P7	Surface Water/ Chris Hartman	L/G	VOA_ (21)	1502 (HCL), 1503 (HCL) (2)	SWT8	S: 6/24/2003	10:10		Trip Blank
C01Q7	Sediment/ Dixon Wood	L/G	BNA/PEST (21), VOA (21)	1540 (Ice Only), 1541 (Ice Only), 1542 (Ice Only) (3)	SEDT1	S: 6/24/2003	11:10	MC01Q7	–
C01Q8	Sediment/ Dixon Wood	L/G	BNA/PEST (21), VOA (21)	1546 (Ice Only), 1547 (Ice Only), 1548 (Ice Only) (3)	SEDT2	S: 6/24/2003	10:15	MC01Q8	–

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: C01P0, C01R3	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

BNA = CLP TCL Semivolatiles, BNA/PEST = CLP TCL Semivolatiles and Pesticides/PC, PEST = CLP TCL Pesticide/PCBs, VOA = CLP TCL Volatiles (SOLIDS), VOA_ = CLP TCL Volatiles (AQUEOUS)

TR Number: 3-592370820-062403-0001

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USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No:	31878
DAS No:	R31657

R

Region:	3	Date Shipped:	6/24/2003	Chain of Custody Record	Sampler Signature:
Project Code:		Carrier Name:	FedEx	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code:	02T03N50102D037ZLA00	Airbill:	840878239320	1	
CERCLIS ID:	MDD985407196	Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545	2	
Spill ID:	037Z			3	
Site Name/State:	Elkton Farm TMRA/MD			4	
Project Leader:	Alex Cox				
Action:	Expanded Site Investigation/RI				
Sampling Co:	MDE				

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	QC Type
C01Q9	Sediment/ Dixon Wood	L/G	BNA/PEST (21), VOA (21)	1552 (Ice Only), 1553 (Ice Only), 1554 (Ice Only) (3)	SEDT3	S: 6/24/2003	13:15	MC01Q9	–
C01R0	Sediment/ Dixon Wood	L/G	BNA/PEST (21), VOA (21)	1558 (Ice Only), 1559 (Ice Only), 1560 (Ice Only) (3)	SEDT4	S: 6/24/2003	9:40	MC01R0	–
C01R1	Sediment/ Phillip Anderson	L/G	BNA/PEST (21), VOA (21)	1564 (Ice Only), 1565 (Ice Only), 1566 (Ice Only) (3)	SEDT5	S: 6/24/2003	10:15	MC01R1	DUP. OF SEDT2
C01R3	Subsurface Soil (>12")/ Andy Zarins	L/G	BNA/PEST (21), VOA (21)	1576 (Ice Only), 1577 (Ice Only), 1667 (Ice Only), 1668 (Ice Only), 1669 (Ice Only), 1670 (Ice Only), 1671 (Ice Only), 1672 (Ice Only), 1673 (Ice Only) (9)	SST10	S: 6/24/2003	12:26	MC01R3	MS/MSD
C01R4	Subsurface Soil (>12")/ Andy Zarins	L/G	BNA/PEST (21), VOA (21)	1590 (Ice Only), 1591 (Ice Only), 1592 (Ice Only) (3)	SST11	S: 6/24/2003	13:47	MC01R4	–
C01R8	Subsurface Soil (>12")/ Andy Zarins	L/G	BNA/PEST (21), VOA (21)	1614 (Ice Only), 1615 (Ice Only), 1616 (Ice Only) (3)	SST15	S: 6/24/2003	11:40	MC01R8	DUP. OF SST5
C01R9	Subsurface Soil (>12")/ Andy Zarins	L/G	BNA/PEST (21), VOA (21)	1620 (Ice Only), 1621 (Ice Only), 1622 (Ice Only) (3)	SST2	S: 6/24/2003	9:44	MC01R9	–
C01S0	Subsurface Soil (>12")/ Andy Zarins	L/G	BNA/PEST (21), VOA (21)	1626 (Ice Only), 1627 (Ice Only), 1628 (Ice Only) (3)	SST3	S: 6/24/2003	10:13	MC01S0	–
C01S1	Subsurface Soil (>12")/ Andy Zarins	L/G	BNA/PEST (21), VOA (21)	1632 (Ice Only), 1633 (Ice Only), 1634 (Ice Only) (3)	SST4	S: 6/24/2003	10:52	MC01S1	–

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: C01P0, C01R3	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

BNA = CLP TCL Semivolatiles, BNA/PEST = CLP TCL Semivolatiles and Pesticides/PC, PEST = CLP TCL Pesticide/PCBs, VOA = CLP TCL Volatiles (SOLIDS), VOA_ = CLP TCL Volatiles (AQUEOUS)

TR Number: 3-592370820-062403-0001

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USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No:	31878
DAS No:	R31657

R

Region:	3	Date Shipped:	6/24/2003	Chain of Custody Record	Sampler Signature:
Project Code:		Carrier Name:	FedEx	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code:	02T03N50102D037ZLA00	Airbill:	840878239320	1	
CERCLIS ID:	MDD985407196	Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545	2	
Spill ID:	037Z			3	
Site Name/State:	Elktor. Farm TMRA/MD			4	
Project Leader:	Alex Cox				
Action:	Expanded Site Investigation/RI				
Sampling Co:	MDE				

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	QC Type
C01S2	Subsurface Soil (>12")/ Andy Zarins	L/G	BNA/PEST (21), VOA (21)	1638 (Ice Only), 1639 (Ice Only), 1640 (Ice Only) (3)	SST5	S: 6/24/2003	11:40	MC01S2	–
C01S6	Subsurface Soil (>12")/ Barbara Brown	L/G	BNA/PEST (21), VOA (21)	1662 (Ice Only), 1663 (Ice Only), 1664 (Ice Only) (3)	SST9	S: 6/24/2003	14:20	MC01S6	–
C01S8	Surface Soil (0"-12")/ Andy Zarins	L/G	BNA/PEST (21)	1689 (Ice Only) (1)	ST10	S: 6/24/2003	12:09	MC01S8	–
C01S9	Surface Soil (0"-12")/ Andy Zarins	L/G	BNA/PEST (21)	1695 (Ice Only) (1)	ST11	S: 6/24/2003	13:42	MC01S9	–
C01T3	Surface Soil (0"-12")/ Andy Zarins	L/G	BNA/PEST (21)	1719 (Ice Only) (1)	ST15	S: 6/24/2003	11:28	MC01T3	DUP. OF ST5
C01T4	Surface Soil (0"-12")/ Andy Zarins	L/G	BNA/PEST (21)	1725 (Ice Only) (1)	ST2	S: 6/24/2003	9:33	MC01T4	–
C01T5	Surface Soil (0"-12")/ Andy Zarins	L/G	BNA/PEST (21)	1731 (Ice Only) (1)	ST3	S: 6/24/2003	10:05	MC01T5	–
C01T6	Surface Soil (0"-12")/ Andy Zarins	L/G	BNA/PEST (21)	1737 (Ice Only) (1)	ST4	S: 6/24/2003	10:45	MC01T6	–
C01T7	Surface Soil (0"-12")/ Andy Zarins	L/G	BNA/PEST (21)	1743 (Ice Only) (1)	ST5	S: 6/24/2003	11:28	MC01T7	–
C01W1	Surface Soil (0"-12")/ Barbara Brown	L/G	BNA/PEST (21)	1767 (Ice Only) (1)	ST9	S: 6/24/2003	14:15	MC01W1	–

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: C01P0, C01R3	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

BNA = CLP TCL Semivolatiles, BNA/PEST = CLP TCL Semivolatiles and Pesticides/PC, PEST = CLP TCL Pesticide/PCBs, VOA = CLP TCL Volatiles (SOLIDS), VOA_ = CLP TCL Volatiles (AQUEOUS)

TR Number: 3-592370820-062403-0001

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USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: 31878
DAS No: R31657

R

Region:	3	**Date Shipped:**	6/25/2003
Project Code:		**Carrier Name:**	FedEx
Account Code:	02T03N50102D037ZLA00	**Airbill:**	840878239504
CERCLIS ID:	MDD985407196	**Shipped to:**	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545
Spill ID:	037Z		
Site Name/State:	Elkton Farm TMRA/MD		
Project Leader:	Alex Cox		
Action:	Expanded Site Investigation/RI		
Sampling Co:	MDE		

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1			
2			
3			
4			

Sampler Signature:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	QC Type
C01P6	Surface Water/ Chris Hartman	L/G	BNA (21), PEST (21), VOA_ (21)	1496 (Ice Only), 1497 (Ice Only), 1498 (HCL), 1499 (HCL) (4)	SWT7	S: 6/25/2003	9:00	MC01P6	Field Blank
C01P8	Surface Water/ Chris Hartman	L/G	VOA_ (21)	1504 (HCL), 1505 (HCL) (2)	SWT9	S: 6/25/2003	9:00		Trip Blank
C01P9	Surface Water/ Dixon Wood	L/G	BNA (21), PEST (21), VOA_ (21)	1507 (Ice Only), 1508 (Ice Only), 1509 (HCL), 1510 (HCL) (4)	SWU1	S: 6/25/2003	11:20	MC01P9	–
C01Q0	Surface Water/ Dixon Wood	L/G	BNA (21), PEST (21), VOA_ (21)	1512 (Ice Only), 1513 (Ice Only), 1514 (HCL), 1515 (HCL) (4)	SWU2	S: 6/25/2003	10:45	MC01Q0	–
C01Q2	Surface Water/ Dixon Wood	L/G	BNA (21), PEST (21), VOA_ (21)	1522 (Ice Only), 1523 (Ice Only), 1524 (HCL), 1525 (HCL) (4)	SWU4	S: 6/25/2003	10:50	MC01Q2	–
C01R2	Subsurface Soil (>12")/ Andy Zarins	L/G	BNA/PEST (21), VOA (21)	1570 (Ice Only), 1571 (Ice Only), 1572 (Ice Only) (3)	SST1	S: 6/25/2003	13:10	MC01R2	–
C01R5	Subsurface Soil (>12")/ Andy Zarins	L/G	BNA/PEST (21), VOA (21)	1596 (Ice Only), 1597 (Ice Only), 1598 (Ice Only) (3)	SST12	S: 6/25/2003	9:40	MC01R5	–
C01R6	Subsurface Soil (>12")/ Andy Zarins	L/G	BNA/PEST (21), VOA (21)	1602 (Ice Only), 1603 (Ice Only), 1604 (Ice Only) (3)	SST13	S: 6/25/2003	10:10	MC01R6	–
C01R7	Subsurface Soil (>12")/ Andy Zarins	L/G	BNA/PEST (21), VOA (21)	1608 (Ice Only), 1609 (Ice Only), 1610 (Ice Only) (3)	SST14	S: 6/25/2003	11:10	MC01R7	–
C01S3	Subsurface Soil (>12")/ Andy Zarins	L/G	BNA/PEST (21), VOA (21)	1644 (Ice Only), 1645 (Ice Only), 1646 (Ice Only) (3)	SST6	S: 6/25/2003	11:32	MC01S3	–

Shipment for Case Complete? N	**Sample(s) to be used for laboratory QC:** C01S7	**Additional Sampler Signature(s):**	**Chain of Custody Seal Number:**
Analysis Key:	**Concentration:** L = Low, M = Low/Medium, H = High	**Type/Designate:** Composite = C, Grab = G	**Shipment Iced?** _____

BNA = CLP TCL Semivolatiles, BNA/PEST = CLP TCL Semivolatiles and Pesticides/PC, PEST = CLP TCL Pesticide/PCBs, VOA = CLP TCL Volatiles (SOLIDS), VOA_ = CLP TCL Volatiles (AQUEOUS)

TR Number: 3-592370820-062503-0003

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USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No:	31878
DAS No:	R31657

R

Region:	3	Date Shipped:	6/25/2003	Chain of Custody Record	Sampler Signature:
Project Code:		Carrier Name:	FedEx	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code:	02T03N50102D037ZLA00	Airbill:	840878239504	1	
CERCLIS ID:	MDD9[illegible]5407196	Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545	2	
Spill ID:	037Z			3	
Site Name/State:	Elkton Farm TMRA/MD			4	
Project Leader:	Alex Cox				
Action:	Expanded Site Investigation/RI				
Sampling Co:	MDE				

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	QC Type
C01S4	Subsurface Soil (>12")/ Andy Zarins	L/G	BNA/PEST (21), VOA (21)	1650 (Ice Only), 1651 (Ice Only), 1652 (Ice Only) (3)	SST7	S: 6/25/2003	11:57	MC01S4	–
C01S5	Subsurface Soil (>12")/ Andy Zarins	L/G	BNA/PEST (21), VOA (21)	1656 (Ice Only), 1657 (Ice Only), 1658 (Ice Only) (3)	SST8	S: 6/25/2003	10:40	MC01S5	–
C01S7	Surface Soil (0"-12")/ Scott Morgan	L/G	BNA/PEST (21), VOA (21)	1675 (Ice Only), 1676 (Ice Only), 1677 (Ice Only), 1678 (Ice Only), 1679 (Ice Only), 1680 (Ice Only), 1681 (Ice Only), 1682 (Ice Only), 1683 (Ice Only) (9)	ST1	S: 6/25/2003	13:05	MC01S7	MS/MSD
C01T0	Surface Soil (0"-12")/ Scott Morgan	L/G	BNA/PEST (21)	1701 (Ice Only) (1)	ST12	S: 6/25/2003	9:35	MC01T0	–
C01T1	Surface Soil (0"-12")/ Scott Morgan	L/G	BNA/PEST (21)	1707 (Ice Only) (1)	ST13	S: 6/25/2003	10:05	MC01T1	–
C01T2	Surface Soil (0"-12")/ Scott Morgan	L/G	BNA/PEST (21)	1713 (Ice Only) (1)	ST14	S: 6/25/2003	11:05	MC01T2	–
C01T8	Surface Soil (0"-12")/ Scott Morgan	L/G	BNA/PEST (21)	1749 (Ice Only) (1)	ST6	S: 6/25/2003	11:27	MC01T8	–
C01T9	Surface Soil (0"-12")/ Scott Morgan	L/G	BNA/PEST (21)	1755 (Ice Only) (1)	ST7	S: 6/25/2003	11:52	MC01T9	–
C01W0	Surface Soil (0"-12")/ Scott Morgan	L/G	BNA/PEST (21)	1761 (Ice Only) (1)	ST8	S: 6/25/2003	10:35	MC01W0	–

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: C01S7	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

BNA = CLP TCL Semivolatiles, BNA/PEST = CLP TCL Semivolatiles and Pesticides/PC, PEST = CLP TCL Pesticide/PCBs, VOA = CLP TCL Volatiles (SOLIDS), VOA_ = CLP TCL Volatiles (AQUEOUS)

TR Number: 3-592370820-062503-0003

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USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No:	31878
DAS No:	R31657

R

Region:	3	Date Shipped:	6/25/2003	Chain of Custody Record	Sampler Signature:
Project Code:		Carrier Name:	FedEx	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code:	02T03N50102D037ZLA00	Airbill:	840878239504	1	
CERCLIS ID:	MDD985407196	Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012 (918) 251-0545	2	
Spill ID:	037Z			3	
Site Name/State:	Elkton Farm TMRA/MD			4	
Project Leader:	Alex Cox				
Action:	Expanded Site Investigation/RI				
Sampling Co:	MDE				

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	QC Type
C01X7	Sediment/ Dixon Wood	L/G	BNA/PEST (21), VOA (21)	1803 (Ice Only), 1804 (Ice Only), 1805 (Ice Only) (3)	SEDU1	S: 6/25/2003	11:25	MC01X7	–
C01X8	Sediment/ Dixon Wood	L/G	BNA/PEST (21), VOA (21)	1807 (Ice Only), 1808 (Ice Only), 1809 (Ice Only) (3)	SEDU2	S: 6/25/2003	10:55	MC01X8	–
C01Y0	Sediment/ Dixon Wood	L/G	BNA/PEST (21), VOA (21)	1815 (Ice Only), 1816 (Ice Only), 1817 (Ice Only) (3)	SEDU4	S: 6/25/2003	11:00	MC01Y0	DUP. OF SEDU2

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: C01S7	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

BNA = CLP TCL Semivolatiles, BNA/PEST = CLP TCL Semivolatiles and Pesticides/PC, PEST = CLP TCL Pesticide/PCBs, VOA = CLP TCL Volatiles (SOLIDS), VOA_ = CLP TCL Volatiles (AQUEOUS)

TR Number: 3-592370820-062503-0003

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USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No:	31878
DAS No:	R31657

R

Region:	3	Date Shipped:	6/26/2003	Chain of Custody Record	Sampler Signature:
Project Code:		Carrier Name:	FedEx	Relinquished By (Date / Time)	Received By (Date / Time)
Account Code:	02T03N50102D037ZLA00	Airbill:	840878239467	1	
CERCLIS ID:	MDD985407196	Shipped to:	Southwest Labs of Oklahoma, Inc. 1700 West Albany Suite C Broken Arrow OK 74012/ (918) 251-0545	2	
Spill ID:	037Z			3	
Site Name/State:	Elkton Farm TMRA/MD			4	
Project Leader:	Alex Cox				
Action:	Expanded Site Investigation/RI				
Sampling Co:	MDE				

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	QC Type
C01N1	Ground Water/ Dixon Wood	L/G	BNA (21), PEST (21), VOA_ (21)	1394 (Ice Only), 1395 (Ice Only), 1396 (Ice Only), 1397 (Ice Only), 1398 (HCL), 1399 (HCL), 1400 (HCL), 1401 (HCL), 1402 (HCL), 1403 (HCL) (10)	GWD1	S: 6/26/2003	12:45	MC01N1	MS/MSD
C01N2	Ground Water/ Dixon Wood	L/G	BNA (21), PEST (21), VOA_ (21)	1405 (Ice Only), 1406 (Ice Only), 1407 (HCL), 1408 (HCL) (4)	GWU1	S: 6/26/2003	10:35	MC01N2	--
C01N3	Ground Water/ Dixon Wood	L/G	BNA (21), PEST (21), VOA_ (21)	1410 (Ice Only), 1411 (Ice Only), 1412 (HCL), 1413 (HCL) (4)	GWU2	S: 6/26/2003	10:00	MC01N3	--
C01N4	Ground Water/ Dixon Wood	L/G	BNA (21), PEST (21), VOA_ (21)	1415 (Ice Only), 1416 (Ice Only), 1417 (HCL), 1418 (HCL) (4)	GWU3	S: 6/26/2003	11:10	MC01N4	--
C01N7	Ground Water/ Chris Hartman	L/G	VOA_ (21)	1432 (HCL), 1433 (HCL) (2)	GWU6	S: 6/26/2003	11:20		Trip Blank
C01N8	Ground Water/ Chris Hartman	L/G	BNA (21), PEST (21), VOA_ (21)	1435 (Ice Only), 1436 (Ice Only), 1437 (HCL), 1438 (HCL) (4)	GWU7	S: 6/26/2003	10:30	MC01N8	Field Blank per memo 8/15/03 DV.

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: C01N1	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced? _____

BNA = CLP TCL Semivolatiles, PEST = CLP TCL Pesticide/PCBs, VOA_ = CLP TCL Volatiles (AQUEOUS)

TR Number: 3-592370820-062603-0002

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U.S. EPA Region III Sample Scheduling Request Form

RAS CASE No: CT1854 /31878		DAS No:	NSF No:
Date: 6/18/03	Data Validation Level: M3, IM2		EPA Lab Reply:
Site Name: Elkton Farm			QAPP/SAP Info :
Address: 183 Zeitler Road		City: Elkton	State: Maryland
Latitude:	Longitude:		Anal +Val Data TAT: 45 DAYS
Program: CERCLA	CERCLIS No: MDD985407196		Activity: SI
Account No: 03T03N50102D037ZLA00	Operable Unit:		Spill ID:
Preparer: Chris Hartman	RPM/PO:Lorie Baker		Site Leader: Alex Cox
Phone: 410-537-3453	Phone: 215-814-3355		Phone: 410-537-3493
FAX: 410-537-3472	FAX:		FAX: 410-537-3472
E-mail: chartman@mde.state.md.us	E-mail:		E-mail: acox@mde.state.md.us
EPA CO:	Contract Type:	Prime: MDE	Sub:
Lab Assignment Date:	Analytical TAT: 21 Days		Ship Date From: 6/23/03
Organic Lab:			Ship Date To: 6/27/03
Inorganic Lab:			Carrier:

SAMPLES	METHOD	PARAMETER	MATRIX
23	OLM04.3	TCL	AQ
4	OLM04.3	VOC	AQ
23	ILM05.2	ICP-AES TM+CN+HG	AQ
9	ILM05.2	ICP-AES TAL (DM)	AQ
55	OLM04.3	TCL	SOLID
55	ILM05.2	ICP-AES TM+CN+HG	SOLID

Notes:
1. Quantitation Limits and Quality Control requirements other than those specified in the method or SOW must be included on separate sheet.
2. QC filed samples must be included as part of the total number of samples.
3. Data validation levels M3 and IM2 require justification.

Special Instructions: ENCORES - 24 SOLIDS SAMPLES. PLEASE SEND THE ELECTRONIC DATA ASAP.

Chris Hartman
<CHartman@mde.state.md.us>

08/15/2003 09:02 AM

To: Lisa Penix/ESC/R3/USEPA/US@EPA
cc: Alex Cox <mcox@mde.state.md.us>
Subject: Re: 31878 - Elkton Farm

Yes, MC01N8 (C01N8) was a field blank. Additionally, MC01M8 was also a field blank and Sample C01N7 was a trip blank.

Chris Hartman, Geologist
Maryland Department of the Environment
Environmental Restoration and Redevelopment Program
Site and Brownfields Assessment Team

>>> <Penix.Lisa@epamail.epa.gov> 08/15/03 07:48AM >>>
Hi Chris,

The validator had a quick question. Is sample MC01N8 a field blank? Please let me know and I will pass that on to the validator.

THANKS!

Lisa D. Penix
ESAT RSCC
Lockheed Martin Environmental Services
EPA Environmental Science Center
701 Mapes Road
Fort Meade, MD 20755
Telephone (410) 305 - 3020
Telefax (410) 305 - 3095
email: Penix.Lisa@epamail.epa.gov

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<<<<GWIASIG 0.07>>>>

Appendix E

Laboratory Case Narratives

SOUTHWEST LABORATORY OF OKLAHOMA
(SWL-TULSA)
1700 West Albany, Suite A / Broken Arrow, OK 74012
918-251-2858

SDG NARRATIVE

July 15, 2003

CONTRACT NO.: 68W03024

CASE NO.: 31878

SAMPLE NOS.: C01P0, C01P0MS, C01P0MSD, C01P1, C01P2, C01P3, C01P4, C01P5, C01P6, C01P7, C01P8, C01P9, C01Q0, C01Q2, C01N1, C01N2, C01N3, C01N4, C01N7, C01N8

SDG NO.: C01P0

VOLATILE FRACTION

Eighteen water samples plus MS/MSD were submitted for Volatile Organic Analysis. The samples were analyzed by GC/MS following the OLM04.3 CLP Statement of Work with a 25ml purge.

Alternate columns used for the analysis of volatile compounds by Method OLM04.3 are the Restek XTI-5 (bonded 5% phenyl-95% dimethyl polysiloxane), 30m, 0.25mm ID, 1um film thickness (Restek #12253) and the DB624, 75m, 0.53mmID Megabore, 3um film thickness (J&W 125-1374).

Alternate traps used for the analysis of volatile compounds by method OLM04.3 are the Supelco Vocarb 3000 (Carbopack B-10cm, Carboxen 1000-6cm, Carboxen 1001-1cm) and the Tekmar #2 (Tenax-15cm, silica gel-7.5cm).

No significant problems occurred during the analyses of these samples.

Blanks: There were no target analytes detected in the blanks.

Surrogates: All surrogates were within QC recovery limits.

Matrix Spikes: Samples C01P0MS and C01P0MSD each contained one compound outside QC recovery limits. All compounds were within their RPD limits.

Internal Standards: All internal standard areas were within QC recovery limits.

A manual integration report is included with each manual integration performed on this data including a before and after picture of the peak, as well as the reason for the integration.

If water samples are contained in this case, their pH data is included on the page accompanying this SDG narrative.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager, or his/her designee, as verified by the following signature.

Samuel B. Alexander Jr.
Volatiles Laboratory Supervisor

July 15, 2003

SOUTHWEST LABORATORY OF OKLAHOMA
(SWL-TULSA)
1700 West Albany, Suite A/ Broken Arrow, OK 74012
918-251-2858

SDG NARRATIVE

July 10, 2003

CONTRACT:	68W03024
CASE NO:	31878
SDG NO:	C01P0
SAMPLES:	C01P0, C01P0MS, C01P0MSD, C01P1, C01P2, C01P3, C01P4, C01P5, C01P6, C01P9, C01Q0, C01Q2, C01N1, C01N2, C01N3, C01N4, and C01N8.

SEMIVOLATILE FRACTION

Fifteen water samples plus MS/MSD were submitted for semivolatile organic analyses. The samples were analyzed by GC/MS following the OLM04.3 CLP Organic Statement of Work.

The following column is used for the semivolatile analysis: Restek XTI-5 (bonded 5% phenyl-95% dimethyl polysiloxane), 30m, 0.25mm ID, 0.25um film thickness (Restek #12223).

No significant problems were encountered during the extraction or analysis of these samples: Multiple QC was designated in this SDG. The lab chose which QC would be used (see e-mail).

Sample coolers arrived at 4.3, 5.1, 5.7, 7.1, 8.6 degrees Celsius. PE arrived in a cardboard box. Note: All cooler temperatures are taken with a ISO 9001 certified RayTek Model # 3MC11 infra-red (IR) temperature detector using the cooler temperature blanks when submitted with the samples. The DC-1 forms indicate which samples if any did not have cooler temperature blanks submitted, in these cases, the temperature is taken from a random sample within the cooler.

The following samples had alkanes reported and the reports are included at the end of this SDG Narrative: C01N4.

Blanks: SBLK1and SBLK2 had low level phthalate contamination detected below CRQL.

Surrogates: All surrogate recoveries were within QC limits with the following exception: Sample C01N2 had low recovery for 2-Fluorobiphenyl at 38%.

Matrix Spike: All matrix spike compounds were within QC recovery limits with one exception: Sample C01P0MSD had high recovery for 4-Nitrophenol at 92%.

Internal standards: All internal standard responses were within QC limits.

NOTE: A manual integration report is included for each manual integration performed on this data including a before and after picture of the peak, as well as the reason for the integration.

If water samples are contained in this case, their pH data is included on the page accompanying this SDG narrative.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager, or his/her designee, as verified by the following signature.

Diana L. Hoke

Diana L. Hoke
Organic Program Manager

July 10, 2003

SOUTHWEST LABORATORY OF OKLAHOMA
(SWL-TULSA)
1700 West Albany, Suite A/ Broken Arrow, OK 74012
918-251-2858

SDG NARRATIVE

July 16, 2003

CONTRACT:	68W03024
CASE NO:	31878
SDG NO:	C01P0
SAMPLES:	C01P0, C01P0MS, C01P0MSD, C01P1, C01P2, C01P3, C01P4, C01P5, C01P6, C01P9, C01Q0, C01Q2, C01N1, C01N2, C01N3, C01N4, and C01N8.
FRACTION:	Pesticide/PCB

Fifteen water samples plus MS/MSD were analyzed for Pesticides/PCBs, by EPA SOW OLM04.3.

Columns: The samples were analyzed on dual analytical columns, DB-17 / DB-1701 (length 30m, id 0.32 mm, film thickness 0.25 um) columns were specifically designed for pesticide/PCB separation as required by the EPA's SOW. All applicable manufacturer's instructions were followed for the analysis of pesticides/PCBs. Manufacturer provided information on the performance characteristics of the columns and they are kept on site. Helium was used as the carrier gas for all sample analyses.

Note: Many environmental samples can cause analysis problems due to interference peaks in the sample chromatograms along with degrading instrument performance. It should be noted that when large numbers of "interference" peaks and/or multi-response targets are present in a sample, false positives of single response compounds are common. Since ECD detection is not a definitive means of detection, single-response analytes in the presence of interference are reported per the method (if a peak is within a target analyte's retention time window on both columns, then it is reported as that target analyte). This lessens the possibility that false negative results will be reported. However, this may lead to false positives. The end data user should be aware of the limitations of the method and take appropriate care.

No major problems occurred with the extraction or analysis of these samples.

GPC Check: No GPC with water samples.

Florisil Check: All recoveries were within QC limits.

Samples were sulfur cleaned.

Retention Times: All retention times were within method acceptance criteria.

Resolution Checks: All Resolution Checks were within method acceptance criteria.

Breakdown Products: All Breakdown products were within method acceptance criteria with the following exceptions: Percent breakdown of Endrin was greater than 20.0% in PEM6C analyzed on 07/05/03 at 0458Hrs and PEM6D analyzed on 07/05/03 at 0532Hrs on one column.

Initial Calibrations: All components within method acceptance criteria.

Calibration Verifications: All components within method acceptance criteria.

Blanks: PBLKWB and PBLKWC had low level target contamination detected below CRQL.

Surrogates: All surrogates were within QC recovery limits.

Matrix Spikes: All matrix spikes were within QC recovery limits.

The following tables list the total nanograms injected on column for each calibration standard based upon amount injected, 0.5µL, 1µL, or 2µL: Note: All calibration and sample analyses are done using 1ul injected and split on to two columns. Therefore amount on each column is 0.5 uL injected.

RESOLUTION CHECK

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
gamma-Chlordane	0.005	0.01	0.02
Endosulfan I	0.005	0.01	0.02
4,4'-DDE	0.01	0.02	0.04
Dieldrin	0.01	0.02	0.04
Endosulfan Sulfate	0.01	0.02	0.04
Endrin Ketone	0.01	0.02	0.04
Methoxychlor	0.5	0.1	0.2
Tetrachloro-m-xylene	0.01	0.02	0.04
Decachlorobiphenyl	0.01	0.02	0.04

PERFORMANCE EVALUATION

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
gamma-BHC	0.005	0.01	0.02
alpha-BHC	0.005	0.01	0.02
4,4'-DDT	0.05	0.1	.02
beta-BHC	0.005	0.01	0.02
Endrin	0.025	0.05	0.1
Methoxychlor	0.125	0.25	0.5
Tetrachloro-m-xylene	0.01	0.02	0.04
Decachlorobiphenyl	0.01	0.02	0.04

INDIVIDUAL STANDARD MIXTURE A – LOW

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
alpha-BHC	0.0025	0.005	0.01
Heptachlor	0.0025	0.005	0.01
gamma-BHC	0.0025	0.005	0.01
Endosulfan I	0.0025	0.005	0.01
Dieldrin	0.005	0.01	0.02
Endrin	0.005	0.01	0.02
4,4'-DDD	0.005	0.01	0.02
4,4'-DDT	0.005	0.01	0.02
Methoxychlor	0.025	0.05	0.1
Tetrachloro-m-xylene	0.0025	0.005	0.01
Decachlorobiphenyl	0.005	0.01	0.02

INDIVIDUAL STANDARD MIXTURE B -- LOW

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
beta-BHC	0.0025	0.005	0.01
delta-BHC	0.0025	0.005	0.01
Aldrin	0.0025	0.005	0.01
Heptachlor epoxide	0.0025	0.005	0.01
alpha-Chlordane	0.0025	0.005	0.01
gamma-Chlordane	0.0025	0.005	0.01
4,4'-DDE	0.005	0.01	0.02
Endosulfan sulfate	0.005	0.01	0.02
Endrin aldehyde	0.005	0.01	0.02
Endrin ketone	0.005	0.01	0.02
Endosulfan II	0.005	0.01	0.02
Tetrachloro-m-xylene	0.0025	0.005	0.01
Decachlorobiphenyl	0.005	0.01	0.02

INDIVIDUAL STANDARD MIXTURE A -- MEDIUM

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
alpha-BHC	0.01	0.02	0.04
Heptachlor	0.01	0.02	0.04
gamma-BHC	0.01	0.02	0.04
Endosulfan I	0.01	0.02	0.04
Dieldrin	0.02	0.04	0.08
Endrin	0.02	0.04	0.08
4,4'-DDD	0.02	0.04	0.08
4,4'-DDT	0.02	0.04	0.08
Methoxychlor	0.1	0.2	0.4
Tetrachloro-m-xylene	0.01	0.02	0.04
Decachlorobiphenyl	0.02	0.04	0.08

INDIVIDUAL STANDARD MIXTURE B -- MEDIUM

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
beta-BHC	0.01	0.02	0.04
delta-BHC	0.01	0.02	0.04
Aldrin	0.01	0.02	0.04
Heptachlor epoxide	0.01	0.02	0.04
alpha-Chlordane	0.01	0.02	0.04
gamma-Chlordane	0.01	0.02	0.04
4,4'-DDE	0.02	0.04	0.08
Endosulfan sulfate	0.02	0.04	0.08
Endrin aldehyde	0.02	0.04	0.08
Endrin ketone	0.02	0.04	0.08
Endosulfan II	0.02	0.04	0.08
Tetrachloro-m-xylene	0.01	0.02	0.04
Decachlorobiphenyl	0.02	0.04	0.08

INDIVIDUAL STANDARD MIXTURE A -- HIGH

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
alpha-BHC	0.04	0.08	0.16
Heptachlor	0.04	0.08	0.16
gamma-BHC	0.04	0.08	0.16
Endosulfan I	0.04	0.08	0.16
Dieldrin	0.08	0.16	0.32
Endrin	0.08	0.16	0.32
4,4'-DDD	0.08	0.16	0.32
4,4'-DDT	0.08	0.16	0.32
Methoxychlor	0.4	0.8	1.6
Tetrachloro-m-xylene	0.04	0.08	0.16
Decachlorobiphenyl	0.08	0.16	0.32

INDIVIDUAL STANDARD MIXTURE B -- HIGH

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
beta-BHC	0.04	0.08	0.16
delta-BHC	0.04	0.08	0.16
Aldrin	0.04	0.08	0.16
Heptachlor epoxide	0.04	0.08	0.16
alpha-Chlordane	0.04	0.08	0.16
gamma-Chlordane	0.04	0.08	0.16
4,4'-DDE	0.08	0.16	0.32
Endosulfan sulfate	0.08	0.16	0.32
Endrin aldehyde	0.08	0.16	0.32
Endrin ketone	0.08	0.16	0.32
Endosulfan II	0.08	0.16	0.32
Tetrachloro-m-xylene	0.04	0.08	0.16
Decachlorobiphenyl	0.08	0.16	0.32

MULTI-RESPONSE STANDARD MIXTURES

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
Aroclor-1016	0.05	0.1	0.2
Aroclor-1221	0.1	0.2	0.4
Aroclor-1232	0.05	0.1	0.2
Aroclor-1242	0.05	0.1	0.2
Aroclor-1248	0.05	0.1	0.2
Aroclor-1254	0.05	0.1	0.2
Aroclor-1260	0.05	0.1	0.2
Toxaphene	0.25	0.5	1.0

Note: A manual integration report is included for each manual integration performed on this data including a before and after picture of the peak, as well as the reason for the integration.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Diana L. Hoke

Diana L. Hoke
Organic Program Manager

July 16, 2003

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE:	07/02/03	DATA FILE:	J3070120.D
SAMPLE ID:	C01N4	MATRIX:	WATER
LAB ID:	52743.04	DATE ANALYZED:	07/01/03

	CAS #	COMPOUND	RT	EST. CONC (ug/L)
1)	001638-26-2	CYCLOPENTANE, 1,1-DIMETHYL-	5.12	2

VOLATILES
GC/MS pH FORM---EPA

Ref: SWL-OV-101, Rev. 2.0
Form ID: OV-101-pHEPA-F
Location/File ID: QCFORMS ON 'SWLO'\ORGANICS\\PHEPA.DOC

CASE _____ **SDG#** _____

LAB ID	CLIENT SAMPLE ID	pH	ANALYST	DATE TESTED
52718.01	~~ASID~~ C01P0	<2	LD	7/07/03
.02MS	C01P0MS	<2		
.03MSD	C01P0MSD	<2		
.04	C01P1	<2		
.05	C01P2	<2		
.06	C01P3	<2		
.07	C01P4	<2		
.08	C01P5	<2		
.09	C01P7	<2		
	LD 7/07/03			

COMMENTS: _____

SOUTHWEST LABORATORY OF OKLAHOMA, INC./AMERICAN ANALYTICAL & TECHNICAL SERVICES, INC.
1700 W. ALBANY, BROKEN ARROW, OK 74012 (918)251-2858

VOLATILES
GC/MS pH FORM---EPA

Ref: SWL-OV-101, Rev. 2.0
Form ID: OV-101-pHEPA-F
Location/File ID: QCFORMS ON 'SWLO'\ORGANICS\\PHEPA.DOC

CASE _____ **SDG#** _____

LAB ID	CLIENT SAMPLE ID	pH	ANALYST	DATE TESTED
52727.01	C01P6	<2	[illegible]	7/07/03
.02	C01P8	<2		
.03	C01P9	<2		
.04	C01Q0	<2		
.05	C01Q2	<2		
	7/07/03			

COMMENTS: _____

SOUTHWEST LABORATORY OF OKLAHOMA, INC./AMERICAN ANALYTICAL & TECHNICAL SERVICES, INC.
1700 W. ALBANY, BROKEN ARROW, OK 74012 (918)251-2858

VOLATILES
GC/MS pH FORM---EPA

Ref: SWL-OV-101, Rev. 2.0
Form ID: OV-101-pHEPA-F
Location/File ID: QCFORMS ON 'SWLO'\ORGANICS\\PHEPA.DOC

CASE _____ **SDG#** _____

LAB ID	CLIENT SAMPLE ID	pH	ANALYST	DATE TESTED
S2743.01	C01N1	<2	LD	7/07/03
.02	C01N2	<2		
.03	C01N3	<2		
.04	C01N4	<2		
.05	C01N7	<2		
.06	C01N8	<2		
	7/07/03	LD		

COMMENTS: _____

SOUTHWEST LABORATORY OF OKLAHOMA, INC./AMERICAN ANALYTICAL & TECHNICAL SERVICES, INC.
1700 W. ALBANY, BROKEN ARROW, OK 74012 (918)251-2858

To: Betty Jeffery/ESC/R3/USEPA/US@EPA, Dan Slizys/ESC/R3/USEPA/US@EPA, John Kwedar/ESC/R3/USEPA/US@EPA, Khin-Cho Thaung/ESC/R3/USEPA/US@EPA
cc:
Subject: NEW ISSUE | Case 31878 | Lab SWOK | Issue Insufficient volume
06/27/2003 10:16 AM

Following is an email from SWOK regarding insufficient sample volume for the ENCORE samples for Case 31878. The lab received 3 vials for sample C01R9. Two of the vials were only half full and the third vial was empty. There was no soil in the ENCORE sampler. The lab states that they ran the first vial at low level, but medium level was required.

Please advise on how the lab should proceed.

Thanks,
Holly

Holly Rogers Sturdavant
CSC
CLP Coordinator for Regions 3, 7, & 9
703-264-9526
holly.sturdavant@dyncorp.com or holly.rogers@dyncorp.com

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

-----Original Message-----

From: DHoke@swlab.com [mailto:DHoke@swlab.com]
Sent: Thursday, June 26, 2003 5:40 PM
To: Sturdavant, Holly
Subject: Region 3| Case 31878| Sample promblem

Hi Holly,

For record of communication:

Sample C01R9 was an Encore sample with three vials. Two of the vials were only ½ the required sample volume (2 grams instead of 4 grams). The third vial was empty, there was no soil in the Encore sampler. The 1st vial was run low level and required medium level.

Thank you,
Diana L. Hoke
Organic Program Manager
Southwest Laboratories of Oklahoma
(918)251-2858 e-mail dhoke@swlab.com

Diana Hoke

From: Sturdavant, Holly [Holly.Sturdavant@dyncorp.com]
Sent: Friday, June 27, 2003 11:04 AM
To: Diana Hoke (E-mail); Steve Markham (E-mail)
Cc: Betty Ann Jeffery (E-mail); Dan Slizys (E-mail); John Kwedar (E-mail); Khin-Cho Thaung (E-mail)
Subject: Region 03 | Case 31878 | Lab SWOK | Issue Insufficient volume | FINAL

Diana,

Following is the resolution from Region 3 regarding the insufficient ENCORE volume for Case 31878, sample C01R9. Per the Region, the lab will document the issue in the Case/SDG Narrative and proceed with the analysis of the samples. The lab will report the estimated results for sample C01R9.

Please let me know if you have any other questions or problems.

Thanks,
Holly

Holly Rogers Sturdavant
CSC
CLP Coordinator for Regions 3, 7, & 9
703-264-9526
holly.sturdavant@dyncorp.com or holly.rogers@dyncorp.com

This is a PRIVATE message. If you are not the intended recipient, please delete without copying and kindly advise us by e-mail of the mistake in delivery. NOTE: Regardless of content, this e-mail shall not operate to bind CSC to any order or other contract unless pursuant to explicit written agreement or government initiative expressly permitting the use of e-mail for such purpose.

-----Original Message-----

From: slizys.dan@epamail.epa.gov [mailto:slizys.dan@epamail.epa.gov]
Sent: Friday, June 27, 2003 11:13 AM
To: Sturdavant, Holly; Baker.Lorie@epamail.epa.gov; chartman@mde.state.md.us; acox@mde.state.md.us
Cc: Betty Ann Jeffery (E-mail); John Kwedar (E-mail); Khin-Cho Thaung (E-mail)
Subject: Re: NEW ISSUE | Case 31878 | Lab SWOK | Issue Insufficient volume

Holly,

The lab should document the issue in the case narrative and report estimated results for sample C01R9.

I will contact the field personnel and report that they did not provide sufficient quantity of sample for complete VOC analysis. I will also send them our regional fact sheet which describes the amount of sample to be sent to the lab.

Chris and Alex,

The lab has reported that insufficient sample was provided for complete analysis for sample C01R9. I will attach a regional fact sheet which describes the amount of sample that should be provided. Will you re-sample this sample site? Please reply to all parties.

From: "Sturdavant, Holly"<Holly.Sturdavant@dyncorp.com>

SOUTHWEST LABORATORY OF OKLAHOMA
(SWL-TULSA)
1700 West Albany, Suite A / Broken Arrow, OK 74012
918-251-2858

SDG NARRATIVE

July 11, 2003

CONTRACT NO.: 68W03024

CASE NO.: 31878

SAMPLE NOS.: C01Q7, C01Q8, C01Q9, C01R0, C01R1, C01R3, C01R3MS, C01R3MSD, C01R4, C01R8, C01R9, C01S0, C01S1, C01S2, C01S6,

SDG NO.: C01Q7

VOLATILE FRACTION

Thirteen soil samples plus MS/MSD were submitted for Volatile Organic Analysis. The samples were analyzed by GC/MS following the OLM04.3 CLP Statement of Work.

Alternate columns used for the analysis of volatile compounds by Method OLM04.3 are the Restek XTI-5 (bonded 5% phenyl-95% dimethyl polysiloxane), 30m, 0.25mm ID, 1um film thickness (Restek #12253) and the DB624, 75m, 0.53mmID Megabore, 3um film thickness (J&W 125-1374).

Alternate traps used for the analysis of volatile compounds by method OLM04.3 are the Supelco Vocarb 3000 (Carbopack B-10cm, Carboxen 1000-6cm, Carboxen 1001-1cm) and the Tekmar #2 (Tenax-15cm, silica gel-7.5cm).

No significant problems occurred during the analyses of these samples.

Blanks: VBLK1 and VBLK2 each contained low level methylene chloride contamination less than the CRQL.

Surrogates: All surrogates were within QC recovery limits.

Matrix Spikes: Samples C01R3MS and C01R3MSD each contained two compounds outside QC recovery limits. All compounds were within their RPD limits.

Internal Standards: All internal standard areas were within QC recovery limits.

A manual integration report is included with each manual integration performed on this data including a before and after picture of the peak, as well as the reason for the integration

If water samples are contained in this case, their pH data is included on the page accompanying this SDG narrative.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager, or his/her designee, as verified by the following signature.

Samuel B. Alexander Jr.
Volatile Department Supervisor

July 11, 2003

SOUTHWEST LABORATORY OF OKLAHOMA
(SWL-TULSA)
1700 West Albany, Suite A/ Broken Arrow, OK 74012
918-251-2858

SDG NARRATIVE

July 11, 2003

CONTRACT:	68W03024
CASE NO:	31878
SDG NO:	C01Q7
SAMPLES:	C01Q7, C01Q8, C01Q9, C01R0, C01R1, C01R3, C01R3MS, C01R3MSD, C01R4, C01R8, C01R9, C01S0, C01S1, C01S2, C01S6, C01S8, C01S9, C01T3, C01T4, C01T5, C01T6, C01T7.

SEMIVOLATILE FRACTION

Twenty soil samples plus MS/MSD were submitted for semivolatile organic analyses. The samples were analyzed by GC/MS following the OLM04.3 CLP Organic Statement of Work.

The following column is used for the semivolatile analysis: Restek XTI-5 (bonded 5% phenyl-95% dimethyl polysiloxane), 30m, 0.25mm ID, 0.25um film thickness (Restek #12223).

No significant problems were encountered during the extraction or analysis of these samples: Sample C01R9 arrived with insufficient Encore volume (see e-mail).

Sample coolers arrived at 4.3 degrees Celsius. Note: All cooler temperatures are taken with a ISO 9001 certified RayTek Model # 3MC11 infra-red (IR) temperature detector using the cooler temperature blanks when submitted with the samples. The DC-1 forms indicate which samples if any did not have cooler temperature blanks submitted, in these cases, the temperature is taken from a random sample within the cooler.

The following samples had alkanes reported and the reports are included at the end of this SDG Narrative: C01Q7, C01Q8, C01Q9, C01R0, C01R1, C01R3, C01R4, C01R8, C01R9, C01S0, C01S1, C01S2, C01S6, C01S8, C01S9, C01T3, C01T4, C01T5, C01T6, C01T7, SBLK1.

Blanks: No target contamination detected.

Surrogates: All surrogate recoveries were within QC limits.

Matrix Spike: All matrix spike compounds were within QC recovery limits.

Internal standards: All internal standard responses were within QC limits.

NOTE: A manual integration report is included for each manual integration performed on this data including a before and after picture of the peak, as well as the reason for the integration.

If water samples are contained in this case, their pH data is included on the page accompanying this SDG narrative.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager, or his/her designee, as verified by the following signature.

Diana L. Hoke

Diana L. Hoke
Organic Program Manager

July 11, 2003

SOUTHWEST LABORATORY OF OKLAHOMA
(SWL-TULSA)
1700 West Albany, Suite A/ Broken Arrow, OK 74012
918-251-2858

SDG NARRATIVE

July 15, 2003

CONTRACT:	68W03024
CASE NO:	31878
SDG NO:	C01Q7
SAMPLES:	C01Q7, C01Q8, C01Q9, C01R0, C01R1, C01R3, C01R3MS, C01R3MSD, C01R4, C01R8, C01R9, C01S0, C01S1, C01S2, C01S6, C01S8, C01S9, C01T3, C01T4, C01T5, C01T6, and C01T7.
FRACTION:	Pesticide/PCB

Twenty soil samples plus MS/MSD were analyzed for Pesticides/PCBs, by EPA SOW OLM04.3.

Columns: The samples were analyzed on dual analytical columns, CLP-PESTI /CLP-PESTII (length 30m, id 0.32 mm, film thickness 0.25 um) columns were specifically designed for pesticide/PCB separation as required by the EPA's SOW. All applicable manufacturer's instructions were followed for the analysis of pesticides/PCBs. Manufacturer provided information on the performance characteristics of the columns and they are kept on site. Helium was used as the carrier gas for all sample analyses.

Note: Many environmental samples can cause analysis problems due to interference peaks in the sample chromatograms along with degrading instrument performance. It should be noted that when large numbers of "interference" peaks and/or multi-response targets are present in a sample, false positives of single response compounds are common. Since ECD detection is not a definitive means of detection, single-response analytes in the presence of interference are reported per the method (if a peak is within a target analyte's retention time window on both columns, then it is reported as that target analyte). This lessens the possibility that false negative results will be reported. However, this may lead to false positives. The end data user should be aware of the limitations of the method and take appropriate care.

No major problems occurred with the extraction or analysis of these samples. Note: Samples C01R8, C01S0, C01S2, C01T5, and C01T7 contained a contamination peak in the Retention time of Heptachlor on the front column resulting in concentrations for Heptachlor ranging from 30.9ug/kg to 2081ug/kg compared to 1.528ug/kg to 2.353ug/kg on the back column. No dilution was analyzed since there was such a large discrepancy between the two columns Heptachlor is not confirmed. A dilution would dilute out Heptachlor and the reported value would be non-detect.

GPC Check: All recoveries within QC limits.

Florisil Check: All recoveries were within QC limits.

Samples were sulfur cleaned.

Retention Times: All retention times were within method acceptance criteria.

Resolution Checks: All Resolution Checks were within method acceptance criteria.

Breakdown Products: All Breakdown products were within method acceptance criteria.

Initial Calibrations: All components within method acceptance criteria.

Calibration Verifications: All components within method acceptance criteria with one slight exception: Percent difference value of 4,4'DDT in PEMCT analyzed on 6/29/03 at 1758Hrs was 26.0%.

Blanks: PBLKSB contained low level Heptachlor contamination above CRQL on one column at 3.3ug/kg and below CRQL on one column at 0.76ug/kg.

Surrogates: All surrogates were within QC recovery limits.

Matrix Spikes: All matrix spikes were within QC recovery limits.

The following tables list the total nanograms injected on column for each calibration standard based upon amount injected, 0.5µL, 1µL, or 2µL: Note: All calibration and sample analyses are done using 1ul injected and split on to two columns. Therefore amount on each column is 0.5 uL injected.

RESOLUTION CHECK

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
gamma-Chlordane	0.005	0.01	0.02
Endosulfan I	0.005	0.01	0.02
4,4'-DDE	0.01	0.02	0.04
Dieldrin	0.01	0.02	0.04
Endosulfan Sulfate	0.01	0.02	0.04
Endrin Ketone	0.01	0.02	0.04
Methoxychlor	0.5	0.1	0.2
Tetrachloro-m-xylene	0.01	0.02	0.04
Decachlorobiphenyl	0.01	0.02	0.04

PERFORMANCE EVALUATION

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
gamma-BHC	0.005	0.01	0.02
alpha-BHC	0.005	0.01	0.02
4,4'-DDT	0.05	0.1	.02
beta-BHC	0.005	0.01	0.02
Endrin	0.025	0.05	0.1
Methoxychlor	0.125	0.25	0.5
Tetrachloro-m-xylene	0.01	0.02	0.04
Decachlorobiphenyl	0.01	0.02	0.04

INDIVIDUAL STANDARD MIXTURE A – LOW

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
alpha-BHC	0.0025	0.005	0.01
Heptachlor	0.0025	0.005	0.01
gamma-BHC	0.0025	0.005	0.01
Endosulfan I	0.0025	0.005	0.01
Dieldrin	0.005	0.01	0.02
Endrin	0.005	0.01	0.02
4,4'-DDD	0.005	0.01	0.02
4,4'-DDT	0.005	0.01	0.02
Methoxychlor	0.025	0.05	0.1
Tetrachloro-m-xylene	0.0025	0.005	0.01
Decachlorobiphenyl	0.005	0.01	0.02

INDIVIDUAL STANDARD MIXTURE B -- LOW

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
beta-BHC	0.0025	0.005	0.01
delta-BHC	0.0025	0.005	0.01
Aldrin	0.0025	0.005	0.01
Heptachlor epoxide	0.0025	0.005	0.01
alpha-Chlordane	0.0025	0.005	0.01
gamma-Chlordane	0.0025	0.005	0.01
4,4'-DDE	0.005	0.01	0.02
Endosulfan sulfate	0.005	0.01	0.02
Endrin aldehyde	0.005	0.01	0.02
Endrin ketone	0.005	0.01	0.02
Endosulfan II	0.005	0.01	0.02
Tetrachloro-m-xylene	0.0025	0.005	0.01
Decachlorobiphenyl	0.005	0.01	0.02

INDIVIDUAL STANDARD MIXTURE A -- MEDIUM

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
alpha-BHC	0.01	0.02	0.04
Heptachlor	0.01	0.02	0.04
gamma-BHC	0.01	0.02	0.04
Endosulfan I	0.01	0.02	0.04
Dieldrin	0.02	0.04	0.08
Endrin	0.02	0.04	0.08
4,4'-DDD	0.02	0.04	0.08
4,4'-DDT	0.02	0.04	0.08
Methoxychlor	0.1	0.2	0.4
Tetrachloro-m-xylene	0.01	0.02	0.04
Decachlorobiphenyl	0.02	0.04	0.08

INDIVIDUAL STANDARD MIXTURE B -- MEDIUM

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
beta-BHC	0.01	0.02	0.04
delta-BHC	0.01	0.02	0.04
Aldrin	0.01	0.02	0.04
Heptachlor epoxide	0.01	0.02	0.04
alpha-Chlordane	0.01	0.02	0.04
gamma-Chlordane	0.01	0.02	0.04
4,4'-DDE	0.02	0.04	0.08
Endosulfan sulfate	0.02	0.04	0.08
Endrin aldehyde	0.02	0.04	0.08
Endrin ketone	0.02	0.04	0.08
Endosulfan II	0.02	0.04	0.08
Tetrachloro-m-xylene	0.01	0.02	0.04
Decachlorobiphenyl	0.02	0.04	0.08

INDIVIDUAL STANDARD MIXTURE A -- HIGH

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
alpha-BHC	0.04	0.08	0.16
Heptachlor	0.04	0.08	0.16
gamma-BHC	0.04	0.08	0.16
Endosulfan I	0.04	0.08	0.16
Dieldrin	0.08	0.16	0.32
Endrin	0.08	0.16	0.32
4,4'-DDD	0.08	0.16	0.32
4,4'-DDT	0.08	0.16	0.32
Methoxychlor	0.4	0.8	1.6
Tetrachloro-m-xylene	0.04	0.08	0.16
Decachlorobiphenyl	0.08	0.16	0.32

INDIVIDUAL STANDARD MIXTURE B -- HIGH

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
beta-BHC	0.04	0.08	0.16
delta-BHC	0.04	0.08	0.16
Aldrin	0.04	0.08	0.16
Heptachlor epoxide	0.04	0.08	0.16
alpha-Chlordane	0.04	0.08	0.16
gamma-Chlordane	0.04	0.08	0.16
4,4'-DDE	0.08	0.16	0.32
Endosulfan sulfate	0.08	0.16	0.32
Endrin aldehyde	0.08	0.16	0.32
Endrin ketone	0.08	0.16	0.32
Endosulfan II	0.08	0.16	0.32
Tetrachloro-m-xylene	0.04	0.08	0.16
Decachlorobiphenyl	0.08	0.16	0.32

MULTI-RESPONSE STANDARD MIXTURES

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
Aroclor-1016	0.05	0.1	0.2
Aroclor-1221	0.1	0.2	0.4
Aroclor-1232	0.05	0.1	0.2
Aroclor-1242	0.05	0.1	0.2
Aroclor-1248	0.05	0.1	0.2
Aroclor-1254	0.05	0.1	0.2
Aroclor-1260	0.05	0.1	0.2
Toxaphene	0.25	0.5	1.0

Note: A manual integration report is included for each manual integration performed on this data including a before and after picture of the peak, as well as the reason for the integration.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Diana L. Hoke

Diana L. Hoke
Organic Program Manager July 15, 2003

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/03/03 DATA FILE: J3070220.D

SAMPLE ID: C01Q7 MATRIX: SOIL
LAB ID: 52720.01 DATE ANALYZED: 07/02/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	002216-30-0	HEPTANE, 2,5-DIMETHYL-	2.99	491
2)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.21	336
3)	003221-61-2	OCTANE, 2-METHYL-	3.30	169
~~4)~~	~~000619-99-8~~	~~HEXANE, 3-ETHYL-~~	~~4.00~~	~~596~~
~~5)~~	~~055521-27-2~~	~~CYCLOHEXANE, 1-(1-TETRADECYLPENTADE~~	~~20.42~~	~~89~~

7/9/03

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE:	07/03/03	DATA FILE:	J3070221.D
SAMPLE ID:	C01Q8	MATRIX:	SOIL
LAB ID:	52720.02	DATE ANALYZED:	07/02/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	002216-30-0	HEPTANE, 2,5-DIMETHYL-	3.00	369
2)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.21	251
3)	001072-05-5	HEPTANE, 2,6-DIMETHYL-	3.30	121
4)	000291-64-5	CYCLOHEPTANE	12.32	92
5)	001560-92-5	HEXADECANE, 2-METHYL-	19.34	96

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/03/03 DATA FILE: J3070222.D

SAMPLE ID: C01Q9 MATRIX: SOIL
LAB ID: 52720.03 DATE ANALYZED: 07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	002216-30-0	HEPTANE, 2,5-DIMETHYL-	3.00	375
2)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.21	250
3)	001072-05-5	HEPTANE, 2,6-DIMETHYL-	3.30	128
~~4)~~	~~000619-99-8~~	~~HEXANE, 3-ETHYL-~~	~~4.00~~	~~439~~ 7/9/03
5)	000629-78-7	HEPTADECANE	18.37	106
6)	000629-94-7	HENEICOSANE	19.34	98
7)	000629-97-0	DOCOSANE	20.25	111

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/11/03 DATA FILE: J3070223.D

SAMPLE ID: C01R0 MATRIX: SOIL
LAB ID: 52720.04 DATE ANALYZED: 07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	002216-30-0	HEPTANE, 2,5-DIMETHYL-	2.99	402
2)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.21	242
3)	003221-61-2	OCTANE, 2-METHYL-	3.30	138
4)	000112-95-8	EICOSANE	19.33	90
5)	000112-95-8	EICOSANE	20.26	98

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/09/03 DATA FILE: J3070224.D

SAMPLE ID: C01R1 MATRIX: SOIL
LAB ID: 52720.05 DATE ANALYZED: 07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	002216-30-0	HEPTANE, 2,5-DIMETHYL-	2.99	488
2)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.21	298
3)	001072-05-5	HEPTANE, 2,6-DIMETHYL-	3.30	151
4)	001472-09-9	CYCLOPROPANE, OCTYL-	10.17	87
5)	000294-62-2	CYCLODODECANE	12.04	155

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/03/03 DATA FILE: J3070309.D

SAMPLE ID: C01R3 MATRIX: SOIL
LAB ID: 52720.06 DATE ANALYZED: 07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.17	222
2)	003221-61-2	OCTANE, 2-METHYL-	3.26	122
3)	074663-85-7	CYCLOPROPANE, NONYL-	10.12	1545
4)	000294-62-2	CYCLODODECANE	11.99	283

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE:	07/03/03	DATA FILE:	J3070313.D
SAMPLE ID:	C01R4	MATRIX:	SOIL
LAB ID:	52720.09	DATE ANALYZED:	07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	001636-43-7	DECANE, 5,6-DIMETHYL-	3.17	245
2)	003221-61-2	OCTANE, 2-METHYL-	3.25	155
3)	000294-62-2	CYCLODODECANE	10.12	2282
4)	000294-62-2	CYCLODODECANE	11.99	549

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE:	07/03/03	DATA FILE:	J3070314.D
SAMPLE ID:	C01R8	MATRIX:	SOIL
LAB ID:	52720.10	DATE ANALYZED:	07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	001636-43-7	DECANE, 5,6-DIMETHYL-	3.18	142
2)	001072-05-5	HEPTANE, 2,6-DIMETHYL-	3.26	95
3)	000293-96-9	CYCLODECANE	11.99	159
4)	006294-39-9	CYCLOHEXANE, 1-BROMO-2-METHYL-	12.17	103
5)	000630-06-8	HEXATRIACONTANE	20.20	86

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/03/03 DATA FILE: J3070315.D

SAMPLE ID: C01R9 MATRIX: SOIL
LAB ID: 52720.11 DATE ANALYZED: 07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.17	286
2)	003221-61-2	OCTANE, 2-METHYL-	3.26	146
3)	000293-96-9	CYCLODECANE	10.13	91
4)	000294-62-2	CYCLODODECANE	11.99	94

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/07/03 DATA FILE: J3070316.D

SAMPLE ID: C01S0 MATRIX: SOIL
LAB ID: 52720.12 DATE ANALYZED: 07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.18	175
2)	003221-61-2	OCTANE, 2-METHYL-	3.26	121
3)	000112-95-8	EICOSANE	19.28	123
4)	000297-03-0	CYCLOTETRACOSANE	19.33	510
5)	000593-45-3	OCTADECANE	20.20	105
~~6)~~	~~000287-13-8~~	~~TRICYCLO[4.1.0.02,7]HEPTANE~~	~~21.21~~	~~103~~

7/9/03
[illegible]

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/07/03 DATA FILE: J3070317.D

SAMPLE ID: C01S1 MATRIX: SOIL
LAB ID: 52720.13 DATE ANALYZED: 07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.17	147
2)	006975-98-0	DECANE, 2-METHYL-	3.26	77
~~3)~~	~~000617-78-7~~	~~PENTANE, 3-ETHYL-~~	~~5.33~~	~~71~~

7/9/03
GP

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/07/03 DATA FILE: J3070318.D

SAMPLE ID: C01S2 MATRIX: SOIL
LAB ID: 52720.14 DATE ANALYZED: 07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.18	212
2)	001072-05-5	HEPTANE, 2,6-DIMETHYL-	3.26	139
3)	000629-92-5	NONADECANE	19.28	85
4)	000629-78-7	HEPTADECANE	20.21	186
5)	000544-85-4	DOTRIACONTANE	21.12	83

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/07/03 DATA FILE: J3070319.D

SAMPLE ID: C01S6 MATRIX: SOIL
LAB ID: 52720.15 DATE ANALYZED: 07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.18	193
2)	001072-05-5	HEPTANE, 2,6-DIMETHYL-	3.27	125
~~3)~~	~~000921-47-1~~	~~HEXANE, 2,3,4-TRIMETHYL~~	~~3.96~~	~~218~~

7/9/03

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/07/03 DATA FILE: J3070320.D

SAMPLE ID: C01S8 MATRIX: SOIL
LAB ID: 52720.16 DATE ANALYZED: 07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.18	147
2)	003221-61-2	OCTANE, 2-METHYL-	3.26	124
~~3)~~	~~000627-08-7~~	~~PROPANE, 1-(1-METHYLETHOXY)-~~	~~3.83~~	~~89~~
4)	000294-62-2	CYCLODODECANE	10.13	2340
5)	032281-85-9	CYCLOPENTANE, 2-ISOPROPYL-1,3-DIMET	19.34	89
6)	001560-89-0	HEPTADECANE, 2-METHYL-	20.20	89

7/9/03 EP

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/07/03 DATA FILE: J3070321.D

SAMPLE ID: C01S9 MATRIX: SOIL
LAB ID: 52720.17 DATE ANALYZED: 07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.17	189
2)	003221-61-2	OCTANE, 2-METHYL-	3.26	94
~~3)~~	~~000619-99-8~~	~~HEXANE, 3-ETHYL-~~	~~3.96~~	~~312~~ 7/9/03
4)	000291-64-5	CYCLOHEPTANE	10.13	121
5)	000294-62-2	CYCLODODECANE	11.99	254
6)	001560-86-7	NONADECANE, 2-METHYL-	19.29	96
7)	000112-95-8	EICOSANE	20.20	84

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/07/03 DATA FILE: J3070322.D

SAMPLE ID: C01T3 MATRIX: SOIL
LAB ID: 52720.18 DATE ANALYZED: 07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.17	159
2)	003221-61-2	OCTANE, 2-METHYL-	3.26	116
3)	000294-62-2	CYCLODODECANE	11.99	96
4)	003891-98-3	DODECANE, 2,6,10-TRIMETHYL-	15.90	97
5)	000112-95-8	EICOSANE	17.26	158
6)	003386-33-2	OCTADECANE, 1-CHLORO-	18.09	121

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/07/03 DATA FILE: J3070323.D

SAMPLE ID: C01T4 MATRIX: SOIL
LAB ID: 52720.19 DATE ANALYZED: 07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.17	181
2)	003221-61-2	OCTANE, 2-METHYL-	3.26	93
3)	000629-92-5	NONADECANE	13.53	92
4)	000112-95-8	EICOSANE	14.23	148
5)	000112-40-3	DODECANE	14.73	106
6)	000112-95-8	EICOSANE	14.88	113
7)	000629-92-5	NONADECANE	15.08	82
8)	000112-95-8	EICOSANE	15.51	112
9)	054833-48-6	HEPTADECANE, 2,6,10,15-TETRAMETHYL-	15.74	133
10)	000544-85-4	DOTRIACONTANE	15.89	166
11)	000638-67-5	TRICOSANE	16.12	87
12)	000629-94-7	HENEICOSANE	16.22	132
13)	013287-23-5	HEPTADECANE, 8-METHYL-	16.36	128
14)	077536-31-3	DOCOSANE, 2,21-DIMETHYL-	16.49	79
15)	000629-78-7	HEPTADECANE	16.70	132
16)	000646-31-1	TETRACOSANE	16.82	98
17)	000112-40-3	DODECANE	17.03	78
18)	000112-95-8	EICOSANE	17.26	273
19)	000629-97-0	DOCOSANE	17.81	176
20)	000630-01-3	HEXACOSANE	18.11	186

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/07/03 DATA FILE: J3070324.D

SAMPLE ID: C01T5 MATRIX: SOIL
LAB ID: 52720.20 DATE ANALYZED: 07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.18	191
2)	003221-61-2	OCTANE, 2-METHYL-	3.26	148
3)	000294-62-2	CYCLODODECANE	10.13	2673
4)	000294-62-2	CYCLODODECANE	12.00	1308
5)	054824-04-3	CYCLOHEXANE, 1-(CYCLOHEXYLMETHYL)-2	12.17	194
~~6)~~	~~002425-54-9~~	~~TETRADECANE, 1-CHLORO-~~	~~14.38~~	~~137~~
7)	000638-36-8	HEXADECANE, 2,6,10,14-TETRAMETHYL-	17.26	158
8)	000593-45-3	OCTADECANE	20.21	81

7/8/03

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE:	07/07/03	DATA FILE:	J3070325.D
SAMPLE ID:	C01T6	MATRIX:	SOIL
LAB ID:	52720.21	DATE ANALYZED:	07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.17	140

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/07/03 DATA FILE: J3070326.D

SAMPLE ID: C01T7 MATRIX: SOIL
LAB ID: 52720.22 DATE ANALYZED: 07/03/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	000619-99-8	HEXANE, 3-ETHYL-	3.17	134
2)	000294-62-2	CYCLODODECANE	11.99	138
3)	004413-21-2	CYCLOPENTANE, 1,1'-ETHYLIDENEBIS-	12.17	157
4)	000630-01-3	HEXACOSANE	14.73	131
5)	001921-70-6	PENTADECANE, 2,6,10,14-TETRAMETHYL-	15.09	86
6)	000629-50-5	TRIDECANE	15.74	85
7)	001560-92-5	HEXADECANE, 2-METHYL-	15.90	129
8)	003386-33-2	OCTADECANE, 1-CHLORO-	16.23	95
9)	000646-31-1	TETRACOSANE	16.36	108
10)	003386-33-2	OCTADECANE, 1-CHLORO-	17.26	209
11)	054105-67-8	HEPTADECANE, 2,6-DIMETHYL-	17.55	186
12)	000930-02-9	OCTADECANE, 1-(ETHENYLOXY)-	17.81	211
13)	000638-36-8	HEXADECANE, 2,6,10,14-TETRAMETHYL-	18.11	181
14)	000629-92-5	NONADECANE	18.31	126
15)	075163-97-2	OCTADECANE, 2,6-DIMETHYL-	18.50	96
~~16)~~	~~069147-03-1~~	~~CYCLOPROPANE, 1,1-DIMETHYL-2-(2-MET~~	~~19.02~~	~~87~~
17)	000629-97-0	DOCOSANE	19.37	357
18)	000646-31-1	TETRACOSANE	20.20	114
~~19)~~	~~054832-82-5~~	~~TRICYCLO[4.3.0.07,9]NONANE, 2,2,5,5~~	~~20.43~~	~~87~~

7/9/03

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/02/03 DATA FILE: J3070208.D

SAMPLE ID: SBLK MATRIX: SOIL
LAB ID: BL0626SD DATE ANALYZED: 07/02/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	002216-30-0	HEPTANE, 2,5-DIMETHYL-	2.99	395
2)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.21	149
3)	001072-05-5	HEPTANE, 2,6-DIMETHYL-	3.29	105
4)	074663-85-7	CYCLOPROPANE, NONYL-	10.16	1819
5)	000294-62-2	CYCLODODECANE	12.03	387

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SOUTHWEST LABORATORY OF OKLAHOMA
(SWL-TULSA)
1700 West Albany, Suite A / Broken Arrow, OK 74012
918-251-2858

SDG NARRATIVE

July 15, 2003

CONTRACT NO.: 68W03024

CASE NO.: 31878

SAMPLE NOS.: C01R2, C01R5, C01R6, C01R7, C01S3, C01S4, C01S5, C01S7, C01S7MS, C01S7MSD, C01X7, C01X8, C01Y0

SDG NO.: C01W1

VOLATILE FRACTION

Eleven soil samples plus MS/MSD were submitted for Volatile Organic Analysis. The samples were analyzed by GC/MS following the OLM04.3 CLP Statement of Work.

Alternate columns used for the analysis of volatile compounds by Method OLM04.3 are the Restek XTI-5 (bonded 5% phenyl-95% dimethyl polysiloxane), 30m, 0.25mm ID, 1um film thickness (Restek #12253) and the DB624, 75m, 0.53mmID Megabore, 3um film thickness (J&W 125-1374).

Alternate traps used for the analysis of volatile compounds by method OLM04.3 are the Supelco Vocarb 3000 (Carbopack B-10cm, Carboxen 1000-6cm, Carboxen 1001-1cm) and the Tekmar #2 (Tenax-15cm, silica gel-7.5cm).

No significant problems occurred during the analyses of these samples.

Blanks: VBLK1 and VBLK2 each contained low level methylene chloride contamination less than the CRQL.

Surrogates: All surrogates were within QC recovery limits.

Matrix Spikes: Sample C01S7MS contained three compounds and C01S7MSD contained two compounds outside QC recovery limits. All compounds were within their RPD limits.

Internal Standards: All internal standard areas were within QC recovery limits.

A manual integration report is included with each manual integration performed on this data including a before and after picture of the peak, as well as the reason for the integration

If water samples are contained in this case, their pH data is included on the page accompanying this SDG narrative.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager, or his/her designee, as verified by the following signature.

Samuel B. Alexander Jr.
Volatile Department Supervisor

July 15, 2003

SOUTHWEST LABORATORY OF OKLAHOMA
(SWL-TULSA)
1700 West Albany, Suite A/ Broken Arrow, OK 74012
918-251-2858
SDG NARRATIVE
July 24, 2003

CONTRACT:	68W03024
CASE NO:	31878
SDG NO:	C01W1
SAMPLES:	C01W1, C01R2, C01R5, C01R6, C01R7, C01S3, C01S4, C01S5, C01S7, C01S7MS, C01S7MSD, C01T0, C01T1, C01T2, C01T8, C01T9, C01W0, C01X7, C01X8, and C01Y0.

SEMIVOLATILE FRACTION

Eighteen soil samples plus MS/MSD were submitted for semivolatile organic analyses. The samples were analyzed by GC/MS following the OLM04.3 CLP Organic Statement of Work.

The following column is used for the semivolatile analysis: Restek XTI-5 (bonded 5% phenyl-95% dimethyl polysiloxane), 30m, 0.25mm ID, 0.25um film thickness (Restek #12223).

No significant problems were encountered during the extraction or analysis of these samples.

Sample coolers arrived at 4.3, 5.7, 5.1 degrees Celsius. PE arrived in a cardboard box. Note: All cooler temperatures are taken with a ISO 9001 certified RayTek Model # 3MC11 infra-red (IR) temperature detector using the cooler temperature blanks when submitted with the samples. The DC-1 forms indicate which samples if any did not have cooler temperature blanks submitted, in these cases, the temperature is taken from a random sample within the cooler.

The following samples had alkanes reported and the reports are included at the end of this SDG Narrative: C01R2, C01R5, C01R6, C01R7, C01S3, C01S4, C01S5, C01S7, C01T0, C01T1, C01T2, C01T8, C01T9, C01W0, C01W1, C01X7, C01X8, C01Y0, and SBLK1.

Blanks: SBLK1and SBLK2 had low level phthalate contamination detected below CRQL.

Surrogates: All surrogate recoveries were within QC limits.

Matrix Spike: All matrix spike compounds were within QC recovery limits with one exception: Sample C01P0MS and MSD had low recovery for Pentachlorophenol at 9% and 14%, respectively. There was one RPD outside QC limits.

Internal standards: All internal standard responses were within QC limits.

NOTE: A manual integration report is included for each manual integration performed on this data including a before and after picture of the peak, as well as the reason for the integration.

If water samples are contained in this case, their pH data is included on the page accompanying this SDG narrative.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager, or his/her designee, as verified by the following signature.

Diana L. Hoke

Diana L. Hoke
Organic Program Manager

July 24, 2003

SOUTHWEST LABORATORY OF OKLAHOMA
(SWL-TULSA)
1700 West Albany, Suite A/ Broken Arrow, OK 74012
918-251-2858

SDG NARRATIVE

July 28, 2003

CONTRACT:	68W03024
CASE NO:	31878
SDG NO:	C01W1
SAMPLES:	C01W1, C01R2, C01R5, C01R6, C01R6DL, C01R7, C0IR7DL, C01S3, C01S4, C01S5, C01S7, C01S7MS, C01S7MSD, C01T0, C01T1, C01T2, C01T2DL, C01T8, C01T9, C01W0, C01X7, C01X7DL, C01X8, and C01Y0.
FRACTION:	Pesticide/PCB

Eighteen soil samples plus MS/MSD were analyzed for Pesticides/PCBs, by EPA SOW OLM04.3.

Columns: The samples were analyzed on dual analytical columns, DB-17 / DB-1701 and CLP-PESTI /CLP-PESTII (length 30m, id 0.32 mm, film thickness 0.25 um) columns were specifically designed for pesticide/PCB separation as required by the EPA's SOW. All applicable manufacturer's instructions were followed for the analysis of pesticides/PCBs. Manufacturer provided information on the performance characteristics of the columns and they are kept on site. Helium was used as the carrier gas for all sample analyses.

Note: Many environmental samples can cause analysis problems due to interference peaks in the sample chromatograms along with degrading instrument performance. It should be noted that when large numbers of "interference" peaks and/or multi-response targets are present in a sample, false positives of single response compounds are common. Since ECD detection is not a definitive means of detection, single-response analytes in the presence of interference are reported per the method (if a peak is within a target analyte's retention time window on both columns, then it is reported as that target analyte). This lessens the possibility that false negative results will be reported. However, this may lead to false positives. The end data user should be aware of the limitations of the method and take appropriate care.

No major problems occurred with the extraction or analysis of these samples. Note: Samples C01R6, C01R7, C01S5, C01T2, C01X7 were analyzed initially with a 10-fold dilution due to the dark color of the sample extracts. This nature of sample extract historically causes system performance degradation resulting in breakdown products and ending calibration failures. The samples were then injected with no dilution as per the SOW. Both sets of data have been reported to show that these samples when injected onto the system straight cause instrument performance degradation and calibration failures but when diluted out do not. These diluted analyses are not considered billable.

GPC Check: All recoveries within QC limits.

Florisil Check: All recoveries were within QC limits.

Samples were sulfur cleaned.

Retention Times: All retention times were within method acceptance criteria.

Resolution Checks: All Resolution Checks were within method acceptance criteria.

Breakdown Products: All Breakdown products were within method acceptance criteria.

Initial Calibrations: All components within method acceptance criteria.

Calibration Verifications: All components within method acceptance criteria with the following exceptions: Percent difference value of each of the single component pesticides and surrogates in several of the INDA, INDB and PEM is greater than 25.0% on one or both columns (see comment above).

Blanks: PBLKSB and PBLKSC contained low level Heptachlor contamination below CRQL.

Surrogates: All surrogates were within QC recovery limits.

Matrix Spikes: All matrix spikes were within QC recovery limits.

The following tables list the total nanograms injected on column for each calibration standard based upon amount injected, 0.5µL, 1µL, or 2µL: Note: All calibration and sample analyses are done using 1ul injected and split on to two columns. Therefore amount on each column is 0.5 uL injected.

RESOLUTION CHECK

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
gamma-Chlordane	0.005	0.01	0.02
Endosulfan I	0.005	0.01	0.02
4,4'-DDE	0.01	0.02	0.04
Dieldrin	0.01	0.02	0.04
Endosulfan Sulfate	0.01	0.02	0.04
Endrin Ketone	0.01	0.02	0.04
Methoxychlor	0.5	0.1	0.2
Tetrachloro-m-xylene	0.01	0.02	0.04
Decachlorobiphenyl	0.01	0.02	0.04

PERFORMANCE EVALUATION

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
gamma-BHC	0.005	0.01	0.02
alpha-BHC	0.005	0.01	0.02
4,4'-DDT	0.05	0.1	.02
beta-BHC	0.005	0.01	0.02
Endrin	0.025	0.05	0.1
Methoxychlor	0.125	0.25	0.5
Tetrachloro-m-xylene	0.01	0.02	0.04
Decachlorobiphenyl	0.01	0.02	0.04

INDIVIDUAL STANDARD MIXTURE A – LOW

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
alpha-BHC	0.0025	0.005	0.01
Heptachlor	0.0025	0.005	0.01
gamma-BHC	0.0025	0.005	0.01
Endosulfan I	0.0025	0.005	0.01
Dieldrin	0.005	0.01	0.02
Endrin	0.005	0.01	0.02
4,4'-DDD	0.005	0.01	0.02
4,4'-DDT	0.005	0.01	0.02
Methoxychlor	0.025	0.05	0.1
Tetrachloro-m-xylene	0.0025	0.005	0.01
Decachlorobiphenyl	0.005	0.01	0.02

INDIVIDUAL STANDARD MIXTURE B -- LOW

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
beta-BHC	0.0025	0.005	0.01
delta-BHC	0.0025	0.005	0.01
Aldrin	0.0025	0.005	0.01
Heptachlor epoxide	0.0025	0.005	0.01
alpha-Chlordane	0.0025	0.005	0.01
gamma-Chlordane	0.0025	0.005	0.01
4,4'-DDE	0.005	0.01	0.02
Endosulfan sulfate	0.005	0.01	0.02
Endrin aldehyde	0.005	0.01	0.02
Endrin ketone	0.005	0.01	0.02
Endosulfan II	0.005	0.01	0.02
Tetrachloro-m-xylene	0.0025	0.005	0.01
Decachlorobiphenyl	0.005	0.01	0.02

INDIVIDUAL STANDARD MIXTURE A -- MEDIUM

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
alpha-BHC	0.01	0.02	0.04
Heptachlor	0.01	0.02	0.04
gamma-BHC	0.01	0.02	0.04
Endosulfan I	0.01	0.02	0.04
Dieldrin	0.02	0.04	0.08
Endrin	0.02	0.04	0.08
4,4'-DDD	0.02	0.04	0.08
4,4'-DDT	0.02	0.04	0.08
Methoxychlor	0.1	0.2	0.4
Tetrachloro-m-xylene	0.01	0.02	0.04
Decachlorobiphenyl	0.02	0.04	0.08

INDIVIDUAL STANDARD MIXTURE B -- MEDIUM

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
beta-BHC	0.01	0.02	0.04
delta-BHC	0.01	0.02	0.04
Aldrin	0.01	0.02	0.04
Heptachlor epoxide	0.01	0.02	0.04
alpha-Chlordane	0.01	0.02	0.04
gamma-Chlordane	0.01	0.02	0.04
4,4'-DDE	0.02	0.04	0.08
Endosulfan sulfate	0.02	0.04	0.08
Endrin aldehyde	0.02	0.04	0.08
Endrin ketone	0.02	0.04	0.08
Endosulfan II	0.02	0.04	0.08
Tetrachloro-m-xylene	0.01	0.02	0.04
Decachlorobiphenyl	0.02	0.04	0.08

INDIVIDUAL STANDARD MIXTURE A -- HIGH

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
alpha-BHC	0.04	0.08	0.16
Heptachlor	0.04	0.08	0.16
gamma-BHC	0.04	0.08	0.16
Endosulfan I	0.04	0.08	0.16
Dieldrin	0.08	0.16	0.32
Endrin	0.08	0.16	0.32
4,4'-DDD	0.08	0.16	0.32
4,4'-DDT	0.08	0.16	0.32
Methoxychlor	0.4	0.8	1.6
Tetrachloro-m-xylene	0.04	0.08	0.16
Decachlorobiphenyl	0.08	0.16	0.32

INDIVIDUAL STANDARD MIXTURE B -- HIGH

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
beta-BHC	0.04	0.08	0.16
delta-BHC	0.04	0.08	0.16
Aldrin	0.04	0.08	0.16
Heptachlor epoxide	0.04	0.08	0.16
alpha-Chlordane	0.04	0.08	0.16
gamma-Chlordane	0.04	0.08	0.16
4,4'-DDE	0.08	0.16	0.32
Endosulfan sulfate	0.08	0.16	0.32
Endrin aldehyde	0.08	0.16	0.32
Endrin ketone	0.08	0.16	0.32
Endosulfan II	0.08	0.16	0.32
Tetrachloro-m-xylene	0.04	0.08	0.16
Decachlorobiphenyl	0.08	0.16	0.32

MULTI-RESPONSE STANDARD MIXTURES

Compounds	Total nanograms (0.5µL)	Total nanograms (1µL)	Total nanograms (2µL)
Aroclor-1016	0.05	0.1	0.2
Aroclor-1221	0.1	0.2	0.4
Aroclor-1232	0.05	0.1	0.2
Aroclor-1242	0.05	0.1	0.2
Aroclor-1248	0.05	0.1	0.2
Aroclor-1254	0.05	0.1	0.2
Aroclor-1260	0.05	0.1	0.2
Toxaphene	0.25	0.5	1.0

Note: A manual integration report is included for each manual integration performed on this data including a before and after picture of the peak, as well as the reason for the integration.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Diana L. Hoke

Diana L. Hoke
Organic Program Manager July 28, 2003

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE:	07/09/03	DATA FILE:	J3070811.D
SAMPLE ID:	C01R2	MATRIX:	SOIL
LAB ID:	52729.01	DATE ANALYZED:	07/08/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	002216-30-0	HEPTANE, 2,5-DIMETHYL-	2.93	320
2)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.15	146
3)	003221-61-2	OCTANE, 2-METHYL-	3.22	96

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SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE:	07/09/03	DATA FILE:	J3070812.D
SAMPLE ID:	C01R5	MATRIX:	SOIL
LAB ID:	52729.02	DATE ANALYZED:	07/08/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	002216-30-0	HEPTANE, 2,5-DIMETHYL-	2.93	319
2)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.15	164
3)	003221-61-2	OCTANE, 2-METHYL-	3.23	110
4)	004413-21-2	CYCLOPENTANE, 1,1'-ETHYLIDENEBIS-	12.12	115

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/08/03 DATA FILE: J3070716.D

SAMPLE ID: C01R6 MATRIX: SOIL
LAB ID: 52729.03 DATE ANALYZED: 07/07/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	002404-35-5	CYCLOHEPTANE, BROMO-	12.07	165
2)	000646-31-1	TETRACOSANE	16.60	121
3)	000112-95-8	EICOSANE	17.15	157
4)	000629-62-9	PENTADECANE	17.69	137
5)	001928-30-9	TRICOSANE, 2-METHYL-	18.20	208
6)	003386-33-2	OCTADECANE, 1-CHLORO-	18.70	108
7)	000630-03-5	NONACOSANE	19.18	123
8)	000629-97-0	DOCOSANE	20.11	189
9)	000629-92-5	NONADECANE	20.54	193

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE:	07/22/03	DATA FILE:	J3072112.D
SAMPLE ID:	C01R7	MATRIX:	SOIL
LAB ID:	52729.04	DATE ANALYZED:	07/21/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	002216-30-0	HEPTANE, 2,5-DIMETHYL-	2.84	377
2)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.06	239

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE:	07/08/03	DATA FILE:	J3070718.D
SAMPLE ID:	C01S3	MATRIX:	SOIL
LAB ID:	52729.05	DATE ANALYZED:	07/07/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.12	193
2)	003221-61-2	OCTANE, 2-METHYL-	3.21	76
3)	074663-85-7	CYCLOPROPANE, NONYL-	10.04	2118
4)	000294-62-2	CYCLODODECANE	11.90	762
5)	054824-04-3	CYCLOHEXANE, 1-(CYCLOHEXYLMETHYL)-2	12.07	81
6)	003386-33-2	OCTADECANE, 1-CHLORO-	14.28	147

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/08/03 DATA FILE: J3070719.D

SAMPLE ID: C01S4 MATRIX: SOIL
LAB ID: 52729.06 DATE ANALYZED: 07/07/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	001636-43-7	DECANE, 5,6-DIMETHYL-	3.12	155
2)	003221-61-2	OCTANE, 2-METHYL-	3.20	102
3)	074663-85-7	CYCLOPROPANE, NONYL-	10.04	142
4)	000294-62-2	CYCLODODECANE	11.91	175
~~5)~~	~~017455-13-9~~	~~1,4,7,10,13,16-HEXAOXACYCLOOCTADECA~~	~~18.34~~	~~128~~

7/24/03

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/22/03 DATA FILE: J3072113.D

SAMPLE ID: C01S5 MATRIX: SOIL
LAB ID: 52729.07 DATE ANALYZED: 07/21/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	002216-30-0	HEPTANE, 2,5-DIMETHYL-	2.84	279
2)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.06	197
~~3)~~	~~000921-47-1~~	~~HEXANE, 2,3,4-TRIMETHYL-~~	~~5.16~~	~~447~~ 7/23/03
4)	017312-81-1	UNDECANE, 3,5-DIMETHYL-	16.54	145
5)	000629-59-4	TETRADECANE	17.09	161

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE:	07/08/03	DATA FILE:	J3070721.D
SAMPLE ID:	C01S7	MATRIX:	SOIL
LAB ID:	52729.08	DATE ANALYZED:	07/07/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.12	162
2)	074663-85-7	CYCLOPROPANE, NONYL-	10.04	2098
3)	054824-04-3	CYCLOHEXANE, 1-(CYCLOHEXYLMETHYL)-2	12.07	184
4)	000112-95-8	EICOSANE	19.18	126
5)	054833-48-6	HEPTADECANE, 2,6,10,15-TETRAMETHYL-	20.09	205

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/08/03 DATA FILE: J3070722.D

SAMPLE ID: C01T0 MATRIX: SOIL
LAB ID: 52729.11 DATE ANALYZED: 07/07/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	074663-85-7	CYCLOPROPANE, NONYL-	10.04	2478
2)	000294-62-2	CYCLODODECANE	11.90	1662
3)	000334-68-9	DODECANE, 1-FLUORO-	14.27	461
4)	055045-10-8	TRIDECANE, 6-PROPYL-	19.18	433
5)	000630-07-9	PENTATRIACONTANE	20.10	601
6)	000638-68-6	TRIACONTANE	20.99	279

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE:	07/08/03	DATA FILE:	J3070723.D
SAMPLE ID:	C01T1	MATRIX:	SOIL
LAB ID:	52729.12	DATE ANALYZED:	07/07/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.12	150
~~2)~~	~~002216-34-4~~	~~OCTANE, 4-METHYL-~~	~~4.72~~	~~237~~
3)	000294-62-2	CYCLODODECANE	10.04	160
4)	000293-96-9	CYCLODECANE	11.90	207
5)	000638-67-5	TRICOSANE	18.21	216

7/18/03 EA

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE:	07/08/03	DATA FILE:	J3070724.D
SAMPLE ID:	C01T2	MATRIX:	SOIL
LAB ID:	52729.13	DATE ANALYZED:	07/07/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	006294-39-9	CYCLOHEXANE, 1-BROMO-2-METHYL-	12.07	151
~~2)~~	~~017455-13-9~~	~~1,4,7,10,13,16-HEXAOXACYCLOOCTADECA~~	~~18.33~~	~~164~~

7/18/03
DR

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE:	07/09/03	DATA FILE:	J3070813.D
SAMPLE ID:	C01T8	MATRIX:	SOIL
LAB ID:	52729.14	DATE ANALYZED:	07/08/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)	
1)	002216-30-0	HEPTANE, 2,5-DIMETHYL-	2.93	264	
~~2)~~	~~056820-01-0~~	~~TRANS-2,3-EPOXYNONANE~~	~~2.97~~	~~106~~	7/18/03 KP
3)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.15	99	
4)	003221-61-2	OCTANE, 2-METHYL-	3.23	82	
5)	004413-21-2	CYCLOPENTANE, 1,1'-ETHYLIDENEBIS-	12.12	154	
~~6)~~	~~017455-13-9~~	~~1,4,7,10,13,16-HEXAOXACYCLOOCTADECA~~	~~18.39~~	~~140~~	7/18/03 KP

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/09/03 DATA FILE: J3070907.D

SAMPLE ID: C01T9 MATRIX: SOIL
LAB ID: 52729.15 DATE ANALYZED: 07/09/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.12	291
2)	003221-61-2	OCTANE, 2-METHYL-	3.20	168
~~3)~~	~~000627-08-7~~	~~PROPANE, 1-(1-METHYLETHOXY)-~~	~~3.77~~	~~151~~ 7/18/03
4)	000294-62-2	CYCLODODECANE	10.04	2687
5)	000294-62-2	CYCLODODECANE	11.90	721
6)	000646-31-1	TETRACOSANE	17.16	174
7)	000646-31-1	TETRACOSANE	18.01	96

000 20

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/09/03 DATA FILE: J3070815.D

SAMPLE ID: C01W0 MATRIX: SOIL
LAB ID: 52729.16 DATE ANALYZED: 07/08/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	002216-30-0	HEPTANE, 2,5-DIMETHYL-	2.93	310
2)	074663-85-7	CYCLOPROPANE, NONYL-	10.08	237
3)	000294-62-2	CYCLODODECANE	11.95	288
4)	000000-00-0	2-METHYLOCTADECANE	14.18	228
5)	006418-46-8	EICOSANE, 3-METHYL-	14.68	458
6)	017312-62-8	DECANE, 5-PROPYL-	15.04	365
7)	000629-50-5	TRIDECANE	15.86	206
8)	007225-64-1	HEPTADECANE, 9-OCTYL-	16.18	204
9)	055045-10-8	TRIDECANE, 6-PROPYL-	16.66	411
10)	003386-33-2	OCTADECANE, 1-CHLORO-	17.00	609
11)	001560-89-0	HEPTADECANE, 2-METHYL-	17.09	291
12)	055429-84-0	TETRACOSANE, 11-DECYL-	17.22	1119
13)	000000-00-0	2-METHYLOCTADECANE	17.51	494
14)	000629-78-7	HEPTADECANE	17.67	255
15)	000638-67-5	TRICOSANE	17.77	367
16)	035599-77-0	TRIDECANE, 1-IODO-	17.95	213
17)	000593-49-7	HEPTACOSANE	18.06	286
18)	000638-36-8	HEXADECANE, 2,6,10,14-TETRAMETHYL-	19.33	524
19)	001928-30-9	TRICOSANE, 2-METHYL-	20.07	257
20)	000630-01-3	HEXACOSANE	20.16	379

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/03/03 DATA FILE: J3070219.D

SAMPLE ID: C01W1 MATRIX: SOIL
LAB ID: 52720.23 DATE ANALYZED: 07/02/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	002216-30-0	HEPTANE, 2,5-DIMETHYL-	2.99	380
2)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.21	264
3)	003221-61-2	OCTANE, 2-METHYL-	3.30	131
~~4)~~	~~000111-65-9~~	~~OCTANE~~	~~4.00~~	~~300~~ 7/8/03
5)	000112-95-8	EICOSANE	17.31	117

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/09/03 DATA FILE: J3070816.D

SAMPLE ID: C01X7 MATRIX: SOIL
LAB ID: 52729.17 DATE ANALYZED: 07/08/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	002216-30-0	HEPTANE, 2,5-DIMETHYL-	2.93	185
2)	001560-96-9	TRIDECANE, 2-METHYL-	15.69	174
3)	000630-01-3	HEXACOSANE	17.21	315
4)	000000-00-0	2-METHYLOCTADECANE	18.27	284
5)	000646-31-1	TETRACOSANE	19.24	229
6)	000646-31-1	TETRACOSANE	20.17	266
7)	000638-68-6	TRIACONTANE	21.08	158

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/09/03 DATA FILE: J3070908.D

SAMPLE ID: C01X8 MATRIX: SOIL
LAB ID: 52729.18 DATE ANALYZED: 07/09/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.11	200
2)	003221-61-2	OCTANE, 2-METHYL-	3.20	100
3)	000294-62-2	CYCLODODECANE	11.90	119
4)	006294-39-9	CYCLOHEXANE, 1-BROMO-2-METHYL-	12.07	99
~~5)~~	~~000000-00-0~~	~~1-METHYL-1-PHENYLSILACYCLOHEXANE~~	~~14.12~~	~~113~~

7/18/03
KP

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE:	07/09/03	DATA FILE:	J3070818.D
SAMPLE ID:	C01Y0	MATRIX:	SOIL
LAB ID:	52729.19	DATE ANALYZED:	07/08/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	002216-30-0	HEPTANE, 2,5-DIMETHYL-	2.93	272
2)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.15	199
3)	003221-61-2	OCTANE, 2-METHYL-	3.24	94

SOUTHWEST LABORATORY OF OKLAHOMA
GC/MS LABORATORY : ALKANE REPORT

REPORT DATE: 07/02/03

DATA FILE: J3070207.D

SAMPLE ID: SBLK1

LAB ID: BL0626SE

MATRIX: SOIL

DATE ANALYZED: 07/02/03

	CAS #	COMPOUND	RT	EST. CONC (ug/Kg)
1)	002216-30-0	HEPTANE, 2,5-DIMETHYL-	2.99	466
2)	003074-71-3	HEPTANE, 2,3-DIMETHYL-	3.21	261
3)	001072-05-5	HEPTANE, 2,6-DIMETHYL-	3.30	136
4)	074663-85-7	CYCLOPROPANE, NONYL-	10.17	1266

File: J3070204.D Acquired: 2 Jul 2003 14:34