




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
ENVIRONMENTAL SCIENCE CENTER  
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SDMS DocID 2022174

DATE : March 19, 2002  
SUBJECT: Region III Data QA Review  
FROM : Fredrick Foreman   
Region III ESAT RPO (3ES20)  
TO : Rom Roman  
Regional Project Manager (3HS22)

Attached is the organic data validation report for the Valmont TCE site (Case #: R31185, SDG#: 31185021101, 31185021322) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III ESD.

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

Attachments

cc: Andrew Frebowitz (TINUS)

TO File: 0001 TDF#: 2303



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**DATE:** March 14, 2002

**SUBJECT:** Level M2 Organic Data Validation for DAS R31185  
SDGs: 31185021101, 31185021322  
Site: Valmont TCE

**FROM:** Hoang Nguyen  Organic Data Reviewer  
Mahboobeh Mecanic  Senior Oversight Chemist

**TO:** Fredrick Foreman  
ESAT Regional Project Officer

### OVERVIEW

Case R31185. Sample Delivery Groups (SDGs) 31185021101, 31185021322, consisted of twenty-six (26) Summa air canister samples submitted to Southwest Laboratories of Oklahoma (SWOK) for volatile analyses. The sample set included two (2) field blanks and two (2) field duplicate pairs. The samples were analyzed following Method TO-14A from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Samples were analyzed through Regional Delivery of Analytical Services (DAS) program.

### SUMMARY

Data were validated according to Innovative Approaches for Validation of Organic Data, Level M2. This level of review includes assessment of action level compounds, laboratory and field blanks, quality control forms, calibration, sample paperwork, retention times and visual inspection of chromatograms. Level M2 review excludes evaluation of sample spectra and raw data. All samples were successfully analyzed for all target compounds.

### NOTES

- The only compound found in the analyses of field and method blanks associated with these samples was acetone in the field blanks. The maximum concentration is listed below. Samples with concentration of this common laboratory contaminant less than ten times ( $\times 10X$ ) highest associated blank concentration have been qualified "B".

<u>Compound</u>	<u>Concentration (ppbv)</u>	<u>Affected samples</u>
acetone *	7 (Field Blank B-02)	All samples except B01, B02

- Volatile analyses results were reported by Laboratory in units of ppbv (volume unit/volume air) and  $\mu\text{g}/\text{m}^3$  (mass/unit volume). Results in both units are reported on DSFs.

- Several compounds were incorrectly rounded off and reported by the laboratory. According to the Statement of Work, if the figure following those to be retained is less than 5, drop it or round down. Correction was made by the reviewer on Form Is to adhere to this rounding rule. Additionally, the concentration values reported in unit of ug/m<sup>3</sup> were incorrectly calculated by using the rounded values in ppbv. These were corrected by the reviewer on Form Is.
- All surrogate recoveries were within laboratory QC limits.
- Laboratory Control Samples/Laboratory Control Sample Duplicates (LCS/LCSD) all reported recoveries and RPDs of spiked compounds within laboratory QC limits.
- The results and dilution factors reported for all samples were based on the laboratory measured vacuum upon canister receipt
- The laboratory reported a 1 ppbv quantitation limit. Although the initial calibration curve did not utilize the 1 ppbv standard to establish the quantitation limit, the laboratory did provide the quantitation report for the 1 ppbv standard which showed the instrument capable of detecting compounds at the reported quantitation limit.
- Compounds detected below Contract Required Quantitation Limits (CRQLs) were qualified "J" unless superseded by "B" on DSFs.

All data for DAS R31185, SDGs No. 31185021101 and 31185021322, 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 Chain of Custody Records
- 4) Appendix D Laboratory Case Narrative

DCN: R31185\_TO14

## **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

Case # R31185

SDG No. 31185021101

Number of SUMMA air canister samples 21

Site

VALMONT TCE

Lab

SWOK

Sample Number	31185021101	31185021102	31185021203	31185021204	31185021205						
Sampling Location	A-26	A-26B	42SR93	42SR93B	A-24						
Field QC											
Matrx	AIR	AIR	AIR	AIR	AIR						
Units	ppbv	ppbv	ppbv	ppbv	ppbv						
Date Sampled	2/11/02	2/11/02	2/12/02	2/12/02	2/12/02						
Time Sampled	13:26	13:26	08:05	08:00	06:35						
Dilution Factor	2.1	1.3	1.8	1.4	1.4						
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	1							0.7	J		
Chloromethane	1									2	
1,2-dichloro-1,1,2,2-tetrafluoroethane	1										
Vinyl Chloride	1										
Bromomethane	1										
Chloroethane	1										
Trichlorofluoromethane	1							0.8	J		
Acetone	1	15	B	5	B	21	B	13	B	14	B
1,1-Dichloroethene	1										
1,1,2-Trichloro-1,2,2-trifluoroethane	1									2	
Methylene Chloride	1										
Carbon Disulfide	1										
trans-1,2-Dichloroethene	1										
1,1-Dichloroethane	1										
2-Butanone	1					2				1	
cis-1,2-Dichloroethene	1										
Chloroform	1										
1,2-Dichloroethane	1										
1,1,1-Trichloroethane	1										
Benzene	1			0.9	J					3	
Carbon Tetrachloride	1										
1,2-Dichloropropane	1										
Trichloroethene	1										
cis-1,3-Dichloropropene	1										
trans-1,3-Dichloropropene	1										
1,1,2-Trichloroethane	1										
2-Hexanone	1										
4-Methyl-2-pentanone	1										
Toluene	1	4		4				1		8	
1,2-Dibromoethane	1										
Tetrachloroethene	1										
Chlorobenzene	1										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised 10/99

Case #: R31185

SDG No.: 31185021101

Site

VALMONT TCE

Lab.:

SWOK

Sample Number	31185021101	31185021102	31185021203	31185021204	31185021205						
Sampling Location	A-26	A-26B	42SR93	42SR93B	A-24						
Field QC:											
Matrix	AIR	AIR	AIR	AIR	AIR						
Units	ppbv	ppbv	ppbv	ppbv	ppbv						
Date Sampled :	2/11/02	2/11/02	2/12/02	2/12/02	2/12/02						
Time Sampled :	13:26	13:26	08:05	08:00	08:35						
Dilution Factor :	2.1	1.3	1.8	1.4	1.4						
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	1			2						0.9	J
m,p-Xylene	1			2						4	
Styrene	1										
o-Xylene	1									1	J
1,1,2,2-Tetrachloroethane	1										
4-Ethyltoluene	1									1	J
1,3,5-Trimethylbenzene	1										
1,2,4-Trimethylbenzene	1									1	J
1,3-Dichlorobenzene	1										
Benzyl Chloride	1										
1,4-Dichlorobenzene	1	1	J								
1,2-Dichlorobenzene	1										
1,2,4-Trichlorobenzene	1										
Hexachlorobutadiene	1										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised 09.99



Case # R31185

SDG No 31185021101

Site :

VALMONT TCE

Lab

SWOK

Sample Number	31185021206	31185021207	31185021208	31185021209	31185021210						
Sampling Location	A-24B	A-54	A-54B	A-34	A-34B						
Field QC											
Matrix	AIR	AIR	AIR	AIR	AIR						
Units	ppbv	ppbv	ppbv	ppbv	ppbv						
Date Sampled :	2/12/02	2/12/02	2/12/02	2/12/02	2/12/02						
Time Sampled :	08:30	08:50	08:45	09:05	09:00						
Dilution Factor :	1.6	2.2	1.4	2.2	1.8						
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	1										
Chloromethane	1					0.9	J				
1,1-dichloro-1,1,2,2-tetrafluoroethane	1										
Vinyl Chloride	1										
Bromomethane	1										
Chloroethane	1										
Trichlorofluoromethane	1										
Acetone	1	16	B	12	B	38	B	15	B	10	B
1,1-Dichloroethene	1										
1,1,2-Trichloro-1,2,2-trifluoroethane	1										
Methylene Chloride	1										
Carbon Disulfide	1										
trans-1,2-Dichloroethene	1										
1,1-Dichloroethane	1										
2-Butanone	1			3		9				2	
cis-1,2-Dichloroethene	1										
Chloroform	1										
1,2-Dichloroethane	1										
1,1,1-Trichloroethane	1	1	J					1	J		
Benzene	1	4		3		5		5		4	
Carbon Tetrachloride	1										
1,2-Dichloropropane	1										
Trichloroethene	1										
cis-1,3-Dichloropropene	1										
trans-1,3-Dichloropropene	1										
1,1,2-Trichloroethane	1										
2-Hexanone	1										
4-Methyl-2-pentanone	1										
Toluene	1	12		20		33		17		15	
1,2-Dibromoethane	1										
Tetrachloroethene	1										
Chlorobenzene	1										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised: 1/14

Case # R31185

SDG No.: 31185021101

Site :

VALMONT TCE

Lab. :

SWOK

Sample Number	31185021206	31185021207	31185021208	31185021209	31185021210						
Sampling Location	A-24B	A-54	A-54B	A-34	A-34B						
Field QC											
Matrix	AIR	AIR	AIR	AIR	AIR						
Units	ppbv	ppbv	ppbv	ppbv	ppbv						
Date Sampled :	2/12/02	2/12/02	2/12/02	2/12/02	2/12/02						
Time Sampled :	08:30	08:50	08:45	09:05	09:00						
Dilution Factor :	1.6	2.2	1.4	2.2	1.8						
Volatiles Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	1	1	J	2		5		2		2	J
m,p-Xylene	1	6		9		15		8		6	
Styrene	1					1	J				
o-Xylene	1	2		3		5		2		2	
1,1,2,2-Tetrachloroethane	1										
4-Ethyltoluene	1	1	J	3		3		2	J	2	J
1,3,5-Trimethylbenzene	1					0.9	J				
1,2,4-Trimethylbenzene	1	1	J	3		3		2	J	2	J
1,3-Dichlorobenzene	1										
Benzyl Chloride	1										
1,4-Dichlorobenzene	1										
1,2-Dichlorobenzene	1										
1,2,4-Trichlorobenzene	1										
Hexachlorobutadiene	1										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised 09/99

DATA SUMMARY FORM: VOLATILES (In PPBV)

Case #: R31185

SDG No: 31185021101

Site:

VALMONT TCE

Lab:

SWOK

Sample Number	3118502121*	31185021212	31185021213	31185021214	31185021215						
Sampling Location	A-4	A-4B	A-48	A-48B	A-38						
Field QC		Dup (D-02)									
Matrx	AIR	AIR	AIR	AIR	AIR						
Units	ppbv	ppbv	ppbv	ppbv	ppbv						
Date Sampled	2/12/02	2/12/02	2/12/02	2/12/02	2/12/02						
Time Sampled	09:20	09:15	09:35	09:30	09:50						
Dilution Factor	2.2	1.8	2.4	1.4	1.4						
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	1									0.9	J
Chloromethane	1					3		3			
1,2-dichloro-1,1,2,2-tetrafluoroethane	1										
Vinyl Chloride	1										
Bromomethane	1										
Chloroethane	1										
Trichlorofluoromethane	1	2	J	2							
Acetone	1	13	B	10	B	41	B	40	B	24	B
1,1-Dichloroethene	1										
1,1,2-Trichloro-1,2,2-trifluoroethane	1										
Methylene Chloride	1										
Carbon Disulfide	1										
trans-1,2-Dichloroethene	1										
1,1-Dichloroethane	1										
2-Butanone	1	3		2		4		3		2	
cis-1,2-Dichloroethene	1										
Chloroform	1										
1,2-Dichloroethane	1										
1,1,1-Trichloroethane	1	3		3						0.9	J
Benzene	1	2		3		4		3		3	
Carbon Tetrachloride	1										
1,2-Dichloropropane	1										
Trichloroethene	1										
cis-1,3-Dichloropropene	1										
trans-1,3-Dichloropropene	1										
1,1,2-Trichloroethane	1										
2-Hexanone	1										
4-Methyl-2-pentanone	1										
Toluene	1	7		6		19		15		18	
1,2-Dibromoethane	1										
Tetrachloroethene	1	1	J								
Chlorobenzene	1										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised: 06/99

DATA SUMMARY FORM: VOLATILES (in PPBV)

Case # R31185

SDG No 31185021101

Site

VALMONT TCE

Lab.

SWOK

Sample Number	31185021211		31185021212		31185021213		31185021214		31185021215		
Sampling Location	A-4		A-4B		A-48		A-48B		A-38		
Field QC			Dup (D-02)								
Matrx	AIR		AIR		AIR		AIR		AIR		
Units	ppbv		ppbv		ppbv		ppbv		ppbv		
Date Sampled :	2/12/02		2/12/02		2/12/02		2/12/02		2/12/02		
Time Sampled	09:20		09:15		09:35		09:30		09:50		
Dilution Factor :	2.2		1.8		2.4		1.4		1.4		
Volatiles Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	1					2	J	1		2	
m,p-Xylene	1	2				8		6		9	
Styrene	1							1	J		
o-Xylene	1					2	J	2		3	
1,1,2,2-Tetrachloroethane	1										
4-Ethyltoluene	1	1	J	1	J	1	J	1	J	2	
1,3,5-Trimethylbenzene	1									0.8	J
1,2,4-Trimethylbenzene	1	1	J	1	J	1	J	1	J	2	
1,3-Dichlorobenzene	1										
Benzyl Chloride	1										
1,4-Dichlorobenzene	1										
1,2-Dichlorobenzene	1										
1,2,4-Trichlorobenzene	1										
Hexachlorobutadiene	1										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised 09/99

DATA SUMMARY FORM: VOLATILES (in PPBV)

Case # R31185

SDG No : 31185021101

Site

VALMONT TCE

Lab

SWOK

Sample Number	31185021216	31185021217	31185021218	31185021219	31185021220						
Sampling Location	A-38B	A-36	A-36B	A-53	A-53B						
Field QC:											
Matrix	AIR	AIR	AIR	AIR	AIR						
Units	ppbv	ppbv	ppbv	ppbv	ppbv						
Date Sampled :	2/12/02	2/12/02	2/12/02	2/12/02	2/12/02						
Time Sampled :	09:45	10:05	10:00	10:15	10:10						
Dilution Factor :	2.0	2.0	3.1	2.2	1.3						
Volatiles Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	1										
Chloromethane	1										
1,2-dichloro-1,1,2,2-tetrafluoroethane	1										
Vinyl Chloride	1										
Bromomethane	1										
Chloroethane	1										
Trichlorofluoromethane	1									0.7	J
Acetone	1	17	B	24	B	36	B	36	B	23	B
1,1-Dichloroethene	1										
1,1,2-Trichloro-1,2,2-trifluoroethane	1										
Methylene Chloride	1					3	J				
Carbon Disulfide	1										
trans-1,2-Dichloroethene	1										
1,1-Dichloroethane	1										
2-Butanone	1	3		1	J					2	
cis-1,2-Dichloroethene	1										
Chloroform	1										
1,2-Dichloroethane	1										
1,1,1-Trichloroethane	1										
Benzene	1	3		4		3		10		9	
Carbon Tetrachloride	1										
1,2-Dichloropropane	1										
Trichloroethene	1										
cis-1,3-Dichloropropene	1										
trans-1,3-Dichloropropene	1										
1,1,2-Trichloroethane	1										
2-Hexanone	1										
4-Methyl-2-pentanone	1										
Toluene	1	16		19		15		37		32	
1,2-Dibromoethane	1										
Tetrachloroethene	1										
Chlorobenzene	1										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Rev Set 1/94

Case # R31185

SDG No. 31185021101

Site

VALMONT TCE

Lab

SWOK

Sample Number	31185021216	31185021217	31185021218	31185021219	31185021220						
Sampling Location	A-38B	A-36	A-36B	A-53	A-53B						
Field QC											
Matrix	AIR	AIR	AIR	AIR	AIR						
Units	ppbv	ppbv	ppbv	ppbv	ppbv						
Date Sampled	2/12/02	2/12/02	2/12/02	2/12/02	2/12/02						
Time Sampled	09:45	10:05	10:00	10:15	10:10						
Dilution Factor	2.0	2.0	3.1	2.2	1.3						
Volatiles Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	1	2	J	2		2	J	5		5	
m,p-Xylene	1	8		10		7		21		18	
Styrene	1										
o-Xylene	1	2		3		2	J	6		5	
1,1,2,2-Tetrachloroethane	1										
4-Ethyltoluene	1	2	J	3		2	J	5		4	
1,3,5-Trimethylbenzene	1							2	J	1	J
1,2,4-Trimethylbenzene	1	1	J	3		2	J	5		3	
1,3-Dichlorobenzene	1										
Benzyl Chloride	1										
1,4-Dichlorobenzene	1										
1,2-Dichlorobenzene	1										
1,2,4-Trichlorobenzene	1										
Hexachlorobutadiene	1										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised 09/99

Case # R31185

SDG No 31185021101

Site

VALMONT TCE

Lab

SWOK

Sample Number	31185021221										
Sampling Location	D-02										
Field QC	Dup (A-4B)										
Matrx	AIR										
Units :	ppbv										
Date Sampled	2/12/02										
Time Sampled :	12 00										
Dilution Factor :	1.8										
Volatle Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	1	1	J								
Chloromethane	1										
1,2-dichloro-1,1,2,2-tetrafluoroethane	1										
Vinyl Chloride	1										
Bromomethane	1										
Chloroethane	1										
Trichlorofluoromethane	1	2									
Acetone	1	21	B								
1,1-Dichloroethene	1										
1,1,2-Trichloro-1,2,2-trifluoroethane	1										
Methylene Chloride	1										
Carbon Disulfide	1										
trans-1,2-Dichloroethene	1										
1,1-Dichloroethane	1										
2-Butanone	1	4									
cis-1,2-Dichloroethene	1										
Chloroform	1										
1,2-Dichloroethane	1										
1,1,1-Trichloroethane	1	3									
Benzene	1	2									
Carbon Tetrachloride	1										
1,2-Dichloropropane	1										
Trichloroethene	1										
cis-1,3-Dichloropropene	1										
trans-1,3-Dichloropropene	1										
1,1,2-Trichloroethane	1										
2-Hexanone	1										
4-Methyl-2-pentanone	1										
Toluene	1	6									
1,2-Dibromoethane	1										
Tetrachloroethene	1										
Chlorobenzene	1										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised 11/01

Case # R31185

SDG No. 31185021101

Site

VALMONT TCE

Lab

SWOK

Sample Number	31185021221										
Sampling Location	D-02										
Field QC	Dup. (A-4B)										
Matrix	AIR										
Units	ppbv										
Date Sampled	2/12/02										
Time Sampled :	12:00										
Dilution Factor :	1.8										
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	1	2									
m,p-Xylene	1										
Styrene	1										
o-Xylene	1										
1,1,2,2-Tetrachloroethane	1										
4-Ethyltoluene	1	1	J								
1,3,5-Trimethylbenzene	1										
1,2,4-Trimethylbenzene	1	1	J								
1,3-Dichlorobenzene	1										
Benzyl Chloride	1										
1,4-Dichlorobenzene	1										
1,2-Dichlorobenzene	1										
1,2,4-Trichlorobenzene	1										
Hexachlorobutadiene	1										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised 09/99



Case # R31185

SDG No 31185021101

Number of SUMMA air canister samples 21

Site

VALMONT TCE

Lab.

SWOK

Sample Number	31185021101	31185021102	31185021203	31185021204	31185021205						
Sampling Location	A-26	A-26B	42SR93	42SR93B	A-24						
Field QC											
Matrix	AIR	AIR	AIR	AIR	AIR						
Units	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3						
Date Sampled	2/11/02	2/11/02	2/12/02	2/12/02	2/12/02						
Time Sampled	13:26	13:26	08:05	08:00	08:35						
Dilution Factor	2.1	1.3	1.8	1.4	1.4						
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	5							4	J		
Chloromethane	2									3	
1,2-dichloro-1,1,2,2-tetrafluoroethane	7										
Vinyl Chloride	3										
Bromomethane	4										
Chloroethane	3										
Trichlorofluoromethane	6							4	J		
Acetone	2	35	B	12	B	50	B	32	B	32	B
1,1-Dichloroethene	4										
1,1,2-Trichloro-1,2,2-trifluoroethane	8										
Methylene Chloride	3									8	
Carbon Disulfide	3										
trans-1,2-Dichloroethene	4										
1,1-Dichloroethane	4										
2-Butanone	3					7				4	
cis-1,2-Dichloroethene	4										
Chloroform	5										
1,2-Dichloroethane	4										
1,1,1-Trichloroethane	6										
Benzene	3			3	J					9	
Carbon Tetrachloride	6										
1,2-Dichloropropane	5										
Trichloroethene	5										
cis-1,3-Dichloropropene	5										
trans-1,3-Dichloropropene	5										
1,1,2-Trichloroethane	6										
2-Hexanone	4										
4-Methyl-2-pentanone	4										
Toluene	4	15		15				5		31	
1,2-Dibromoethane	8										
Tetrachloroethene	7										
Chlorobenzene	5										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantity on limits multiply the CRQL by the Dilution Factor

Rev. 09/99

Case #: R31185

SDG No.: 31185021101

Site:

VALMONT TCE

Lab:

SWOK

Sample Number	31185021101	31185021102	31185021203	31185021204	31185021205						
Sampling Location	A-26	A-26B	42SR93	42SR93B	A-24						
Field QC											
Matrix	AIR	AIR	AIR	AIR	AIR						
Units	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3						
Date Sampled	2/11/02	2/11/02	2/12/02	2/12/02	2/12/02						
Time Sampled	13:26	13:26	08:05	08:00	08:35						
Dilution Factor	2.1	1.3	1.8	1.4	1.4						
Volatiles Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	4			11						4	J
m,p-Xylene	4			7						16	
Styrene	4										
o-Xylene	4									5	J
1,1,2,2-Tetrachloroethane	7										
4-Ethyltoluene	5									6	J
1,3,5-Trimethylbenzene	5										
1,2,4-Trimethylbenzene	5									5	J
1,3-Dichlorobenzene	6										
Benzyl Chloride	5										
1,4-Dichlorobenzene	6	7	J								
1,2-Dichlorobenzene	6										
1,2,4-Trichlorobenzene	8										
Hexachlorobutadiene	11										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Rev sed 09/99

Case # R31185

SDG No. 31185021101

Site

VALMONT TCE

Lab

SWOK

Sample Number	31185021206	31185021207	31185021208	31185021209	31185021210						
Sampling Location	A-24B	A-54	A-54B	A-34	A-34B						
Field QC:											
Matrix	AIR	AIR	AIR	AIR	AIR						
Units	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3						
Date Sampled	2/12/02	2/12/02	2/12/02	2/12/02	2/12/02						
Time Sampled	08:30	08:50	08:45	09:05	09:00						
Dilution Factor	1.6	2.2	1.4	2.2	1.8						
Volatiles Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	5										
Chloromethane	2					2	J				
1,2-dichloro-1,1,2,2-tetrafluoroethane	7										
Vinyl Chloride	3										
Bromomethane	4										
Chloroethane	3										
Trichlorofluoromethane	6										
Acetone	2	37	B	29	B	91	B	35	B	24	B
1,1-Dichloroethene	4										
1,1,2-Trichloro-1,2,2-trifluoroethane	8										
Methylene Chloride	3										
Carbon Disulfide	3										
trans-1,2-Dichloroethene	4										
1,1-Dichloroethane	4										
2-Butanone	3			9		25				5	
cis-1,2-Dichloroethene	4										
Chloroform	5										
1,2-Dichloroethane	4										
1,1,1-Trichloroethane	6	5	J					8	J		
Benzene	3	12		11		15		14		12	
Carbon Tetrachloride	6										
1,2-Dichloropropane	5										
Trichloroethene	5										
cis-1,3-Dichloropropene	5										
trans-1,3-Dichloropropene	5										
1,1,2-Trichloroethane	6										
2-Hexanone	4										
4-Methyl-2-pentanone	4										
Toluene	4	45		74		124		64		55	
1,2-Dibromoethane	8										
Tetrachloroethene	7										
Chlorobenzene	5										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised: 10/19

Case # R31185

SDG No.: 31185021101

Site

VALMONT TCE

Lab

SWOK

Sample Number	31185021206	31185021207	31185021208	31185021209	31185021210						
Sampling Location	A-24B	A-54	A-54B	A-34	A-34B						
Field QC											
Matrix	AIR	AIR	AIR	AIR	AIR						
Units	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3						
Date Sampled	2/12/02	2/12/02	2/12/02	2/12/02	2/12/02						
Time Sampled	08:30	08:50	08:45	09:05	09:00						
Dilution Factor	1.6	2.2	1.4	2.2	1.8						
Volatiles Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	4	6	J	10		22		8		7	J
m,p-Xylene	4	25		39		66		33		28	
Styrene	4					5	J				
o-Xylene	4	8		12		21		10		8	
1,1,2,2-Tetrachloroethane	7										
4-Ethyltoluene	5	6	J	12		15		9	J	8	J
1,3,5-Trimethylbenzene	5					4	J				
1,2,4-Trimethylbenzene	5	6	J	14		15		10	J	8	J
1,3-Dichlorobenzene	6										
Benzyl Chloride	5										
1,4-Dichlorobenzene	6										
1,2-Dichlorobenzene	6										
1,2,4-Trichlorobenzene	8										
Hexachlorobutadiene	11										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised 09/99

Case # R31185

SDG No. 31185021101

Site

VALMONT TCE

Lab

SWOK

Sample Number	31185021211	31185021212	31185021213	31185021214	31185021215						
Sampling Location	A-4	A-4B	A-48	A-48B	A-38						
Field QC		Dup (D-02)									
Matrix	AIR	AIR	AIR	AIR	AIR						
Units	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3						
Date Sampled	2/12/02	2/12/02	2/12/02	2/12/02	2/12/02						
Time Sampled	09:20	09:15	09:35	09:30	09:50						
Dilution Factor	2.2	1.8	2.4	1.4	1.4						
Volatiles Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	5									4	J
Chloromethane	2					6		5			
1,2-dichloro-1,1,2,2-tetrafluoroethane	7										
Vinyl Chloride	3										
Bromomethane	4										
Chloroethane	3										
Trichlorofluoromethane	6	11	J	12							
Acetone	2	31	B	24	B	98	B	96	B	58	B
1,1-Dichloroethene	4										
1,1,2-Trichloro-1,2,2-trifluoroethane	8										
Methylene Chloride	3										
Carbon Disulfide	3										
trans-1,2-Dichloroethene	4										
1,1-Dichloroethane	4										
2-Butanone	3	8		7		11		9		5	
cis-1,2-Dichloroethene	4										
Chloroform	5										
1,2-Dichloroethane	4										
1,1,1-Trichloroethane	6	18		14						5	J
Benzene	3	7		8		13		11		9	
Carbon Tetrachloride	6										
1,2-Dichloropropane	5										
Trichloroethene	5										
cis-1,3-Dichloropropene	5										
trans-1,3-Dichloropropene	5										
1,1,2-Trichloroethane	6										
2-Hexanone	4										
4-Methyl-2-pentanone	4										
Toluene	4	26		21		73		57		66	
1,2-Dibromoethane	8										
Tetrachloroethene	7	9	J								
Chlorobenzene	5										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised 08/99

Case #: R31185

SDG No.: 31185021101

Site

VALMONT TCE

Lab

SWOK

Sample Number	31185021211	31185021212	31185021213	31185021214	31185021215
Sampling Location	A-4	A-4B	A-48	A-48B	A-38
Field QC		Dup (D-02)			
Matrix	AIR	AIR	AIR	AIR	AIR
Units	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Date Sampled	2/12/02	2/12/02	2/12/02	2/12/02	2/12/02
Time Sampled	09:20	09:15	09:35	09:30	09:50
Dilution Factor	2.2	1.8	2.4	1.4	1.4

Volatiles Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	4					8	J	6		9	
m,p-Xylene	4	11				35		28		39	
Styrene	4							4	J		
o-Xylene	4					9	J	8		12	
1,1,2,2-Tetrachloroethane	7										
4-Ethyltoluene	5	6	J	5	J	6	J	6	J	9	
1,3,5-Trimethylbenzene	5									4	J
1,2,4-Trimethylbenzene	5	6	J	5	J	6	J	6	J	9	
1,3-Dichlorobenzene	6										
Benzyl Chloride	5										
1,4-Dichlorobenzene	6										
1,2-Dichlorobenzene	6										
1,2,4-Trichlorobenzene	8										
Hexachlorobutadiene	11										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised 09/99

Case # R31185

SDG No. 31185021101

Site

VALMONT TCE

Lab

SWOK

Sample Number	31185021216	31185021217	31185021218	31185021219	31185021220						
Sampling Location	A-38B	A-36	A-36B	A-53	A-53B						
Field QC											
Matrix	AIR	AIR	AIR	AIR	AIR						
Units	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3						
Date Sampled :	2/12/02	2/12/02	2/12/02	2/12/02	2/12/02						
Time Sampled :	09:45	10:05	10:00	10:15	10:10						
Dilution Factor :	2.0	2.0	3.1	2.2	1.3						
Volatiles Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	5										
Chloromethane	2										
1,2-dichloro-1,1,2,2-tetrafluoroethane	7										
Vinyl Chloride	3										
Bromomethane	4										
Chloroethane	3										
Trichlorofluoromethane	6									4	J
Acetone	2	41	B	24	B	86	B	85	B	55	B
1,1-Dichloroethene	4										
1,1,2-Trichloro-1,2,2-trifluoroethane	8										
Methylene Chloride	3					9	J				
Carbon Disulfide	3										
trans-1,2-Dichloroethene	4										
1,1-Dichloroethane	4										
2-Butanone	3	8		1	J					5	
cis-1,2-Dichloroethene	4										
Chloroform	5										
1,2-Dichloroethane	4										
1,1,1-Trichloroethane	6										
Benzene	3	9		4		11		32		27	
Carbon Tetrachloride	6										
1,2-Dichloropropane	5										
Trichloroethene	5										
cis-1,3-Dichloropropene	5										
trans-1,3-Dichloropropene	5										
1,1,2-Trichloroethane	6										
2-Hexanone	4										
4-Methyl-2-pentanone	4										
Toluene	4	60		19		55		140		120	
1,2-Dibromoethane	8										
Tetrachloroethene	7										
Chlorobenzene	5										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised 10/04

Case # R31185

SDG No.: 31185021101

Site

VALMONT TCE

Lab.

SWOK

Sample Number	31185021216	31185021217	31185021218	31185021219	31185021220						
Sampling Location	A-38B	A-36	A-36B	A-53	A-53B						
Field QC:											
Matrix	AIR	AIR	AIR	AIR	AIR						
Units	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3						
Date Sampled :	2/12/02	2/12/02	2/12/02	2/12/02	2/12/02						
Time Sampled :	09:45	10:05	10:00	10:15	10:10						
Dilution Factor :	2.0	2.0	3.1	2.2	1.3						
Volatiles Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	4	9	J	2		8	J	23		20	
m,p-Xylene	4	35		10		30		91		77	
Styrene	4										
o-Xylene	4	11		3		9	J	26		20	
1,1,2,2-Tetrachloroethane	7										
4-Ethyltoluene	5	8	J	3		10	J	26		20	
1,3,5-Trimethylbenzene	5							9	J	5	J
1,2,4-Trimethylbenzene	5	7	J	3		10	J	26		17	
1,3-Dichlorobenzene	6										
Benzyl Chloride	5										
1,4-Dichlorobenzene	6										
1,2-Dichlorobenzene	6										
1,2,4-Trichlorobenzene	8										
Hexachlorobutadiene	11										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised 09/99



Case # R31185

SDG No.: 31185021101

Site :

VALMONT TCE

Lab

SWOK

Sample Number	31185021221										
Sampling Location	D-02										
Field QC	Dup. (A-4B)										
Matrix	AIR										
Units	ug/m3										
Date Sampled :	2/12/02										
Time Sampled :	12:00										
Dilution Factor :	1.8										
Volatiles Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	5	5	J								
Chloromethane	2										
1,2-dichloro-1,1,2,2-tetrafluoroethane	7										
Vinyl Chloride	3										
Bromomethane	4										
Chloroethane	3										
Trichlorofluoromethane	6	12									
Acetone	2	51	B								
1,1-Dichloroethene	4										
1,1,2-Trichloro-1,2,2-trifluoroethane	8										
Methylene Chloride	3										
Carbon Disulfide	3										
trans-1,2-Dichloroethene	4										
1,1-Dichloroethane	4										
2-Butanone	3	11									
cis-1,2-Dichloroethene	4										
Chloroform	5										
1,2-Dichloroethane	4										
1,1,1-Trichloroethane	6	17									
Benzene	3	6									
Carbon Tetrachloride	6										
1,2-Dichloropropane	5										
Trichloroethene	5										
cis-1,3-Dichloropropene	5										
trans-1,3-Dichloropropene	5										
1,1,2-Trichloroethane	6										
2-Hexanone	4										
4-Methyl-2-pentanone	4										
Toluene	4	21									
1,2-Dibromoethane	8										
Tetrachloroethene	7										
Chlorobenzene	5										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised: 1/99

Case # R31185

SDG No. 31185021101

Site

VALMONT TCE

Lab

SWOK

Sample Number	31185021221										
Sampling Location	D-02										
Field QC	Dup (A-4B)										
Matrix	AIR										
Units	ug/m3										
Date Sampled	2/12/02										
Time Sampled	12:00										
Dilution Factor	1.8										
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	4	9									
m,p-Xylene	4										
Styrene	4										
o-Xylene	4										
1,1,2,2-Tetrachloroethane	7										
4-Ethyltoluene	5	6	J								
1,3,5-Trimethylbenzene	5										
1,2,4-Trimethylbenzene	5	5	J								
1,3-Dichlorobenzene	6										
Benzyl Chloride	5										
1,4-Dichlorobenzene	6										
1,2-Dichlorobenzene	6										
1,2,4-Trichlorobenzene	8										
Hexachlorobutadiene	11										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised 09/99

Case # R31185

SDG No 31185021322

Number of SUMMA air canister samples 5

Site

VALMONT TCE

Lab

SWOK

Sample Number	31185021322	31185021323	31185021324	31185021325	31185021326						
Sampling Location	A-55	A-55B	D-03	B-01	B-02						
Field QC		Dup (D-03)	Dup (A-55B)	Field Blank	Field Blank						
Matrix	AIR	AIR	AIR	AIR	AIR						
Units	ppbv	ppbv	ppbv	ppbv	ppbv						
Date Sampled	2/13/02	2/13/02	2/13/02	2/13/02	2/13/02						
Time Sampled	09:10	09:00	09:15	08:00	08:15						
Dilution Factor	1.6	1.4	1.6	1.7	2.4						
Volatle Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	1										
Chloromethane	1										
1,2-dichloro-1,1,2,2-tetrafluoroethane	1										
Vinyl Chloride	1										
Bromomethane	1										
Chloroethane	1										
Trichlorofluoromethane	1										
Acetone	1	83		33	B	49	B	5		7	
1,1-Dichloroethene	1										
1,1,2-Trichloro-1,2,2-trifluoroethane	1										
Methylene Chloride	1										
Carbon Disulfide	1			0.7	J						
trans-1,2-Dichloroethene	1										
1,1-Dichloroethane	1										
2-Butanone	1	1	J	1	J	9					
cis-1,2-Dichloroethene	1										
Chloroform	1										
1,2-Dichloroethane	1										
1,1,1-Trichloroethane	1										
Benzene	1			10		2	J				
Carbon Tetrachloride	1										
1,2-Dichloropropane	1										
Trichloroethene	1										
cis-1,3-Dichloropropene	1										
trans-1,3-Dichloropropene	1										
1,1,2-Trichloroethane	1										
2-Hexanone	1										
4-Methyl-2-pentanone	1										
Toluene	1	2		37		8					
1,2-Dibromoethane	1										
Tetrachloroethene	1										
Chlorobenzene	1										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised 09/99

Case # R31185

SDG No 31185021322

Site

VALMONT TCE

Lab

SWOK

Sample Number	31185021322	31185021323	31185021324	31185021325	31185021326						
Sampling Location	A-55	A-55B	D-03	B-01	B-02						
Field QC:		Dup (D-03)	Dup (A-55B)	Field Blank	Field Blank						
Matrix	AIR	AIR	AIR	AIR	AIR						
Units	ppbv	ppbv	ppbv	ppbv	ppbv						
Date Sampled :	2/13/02	2/13/02	2/13/02	2/13/02	2/13/02						
Time Sampled :	09:10	09:00	09:15	08:00	08:15						
Dilution Factor :	1.6	1.4	1.6	1.7	2.4						
Volatiles Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	1			6		0.9	J				
m,p-Xylene	1			51		3					
Styrene	1										
o-Xylene	1			14		1	J				
1,1,2,2-Tetrachloroethane	1										
4-Ethyltoluene	1			12		0.9	J				
1,3,5-Trimethylbenzene	1			10							
1,2,4-Trimethylbenzene	1			14		0.9	J				
1,3-Dichlorobenzene	1										
Benzyl Chloride	1										
1,4-Dichlorobenzene	1										
1,2-Dichlorobenzene	1										
1,2,4-Trichlorobenzene	1										
Hexachlorobutadiene	1										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised 09/99

Case #: R31185

SDG No: 31185021322

Number of SUMMA air canister samples: 5

Site

VALMONT TCE

Lab

SWOK

Sample Number	31185021322	31185021323	31185021324	31185021325	31185021326
Sampling Location	A-55	A-55B	D-03	B-01	B-02
Field QC		Dup (D-03)	Dup (A-55B)	Field Blank	Field Blank
Matrx	AIR	AIR	AIR	AIR	AIR
Units	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
Date Sampled:	2/13/02	2/13/02	2/13/02	2/13/02	2/13/02
Time Sampled:	09:10	09:00	09:15	08:00	08:15
Dilution Factor:	1.6	1.4	1.6	1.7	2.4

Volatiles Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Dichlorodifluoromethane	5										
Chloromethane	2										
1,2-dichloro-1,1,2,2-tetrafluoroethane	7										
Vinyl Chloride	3										
Bromomethane	4										
Chloroethane	3										
Trichlorofluoromethane	6										
Acetone	2	200		79	B	120	B	11		17	
1,1-Dichloroethene	4										
1,1,2-Trichloro-1,2,2-trifluoroethane	8										
Methylene Chloride	4										
Carbon Disulfide	3			2	J						
trans-1,2-Dichloroethene	4										
1,1-Dichloroethane	4										
2-Butanone	3	4	J	4	J	25					
cis-1,2-Dichloroethene	4										
Chloroform	5										
1,2-Dichloroethane	4										
1,1,1-Trichloroethane	6										
Benzene	3			31		5	J				
Carbon Tetrachloride	6										
1,2-Dichloropropane	5										
Trichloroethene	5										
cis-1,3-Dichloropropene	5										
trans-1,3-Dichloropropene	5										
1,1,2-Trichloroethane	6										
2-Hexanone	4										
4-Methyl-2-pentanone	4										
Toluene	4	7		140		28					
1,2-Dibromoethane	8										
Tetrachloroethene	7										
Chlorobenzene	5										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Rev. 02/04/99

Case # R31185

SDG No. 31185021322

Site

VALMONT TCE

Lab.

SWOK

Sample Number	31185021322	31185021323	31185021324	31185021325	31185021326						
Sampling Location	A-55	A-55B	D-03	B-01	B-02						
Field QC		Dup. (D-03)	Dup. (A-55B)	Field Blank	Field Blank						
Matrix	AIR	AIR	AIR	AIR	AIR						
Units	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3						
Date Sampled	2/13/02	2/13/02	2/13/02	2/13/02	2/13/02						
Time Sampled :	09:10	09:00	09:15	08:00	08:15						
Dilution Factor :	1.6	1.4	1.6	1.7	2.4						
Volatile Compound	CRQL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylbenzene	4			27		4	J				
m,p-Xylene	4			220		15					
Styrene	4										
o-Xylene	4			59		4	J				
1,1,2,2-Tetrachloroethane	7										
4-Ethyltoluene	5			57		5	J				
1,3,5-Trimethylbenzene	5			50							
1,2,4-Trimethylbenzene	5			71		4	J				
1,3-Dichlorobenzene	6										
Benzyl Chloride	5										
1,4-Dichlorobenzene	6										
1,2-Dichlorobenzene	6										
1,2,4-Trichlorobenzene	8										
Hexachlorobutadiene	11										

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits multiply the CRQL by the Dilution Factor

Revised 09/99

## **Appendix C**

### Chain of Custody Records

CHAIN OF CUSTODY RECORD

PROJ. NO.		PROJECT NAME				NO. OF CON- TAINERS	REMARKS					
R31185		Velmont TCE Site										
SAMPLERS: (Signature) Vince Shickora L.A.S.		Don Westerhoff <i>[Signature]</i>										
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	EPA Sample No.					Tag No.	
A-26	2/11/02	1326		✓	A-26	1	1				31185021101	3-1120243
A-26B	2/11/02	1326		✓	A-26B	1	1				31185021102	3-1120244
425R93	2/12/02	0805		✓	425R93	1	1				31185021203	3-1120245
425R93B	2/12/02	0800		✓	425R93B	1	1				31185021204	3-1120246
A-24	2/12/02	0835		✓	A-24	1	1				31185021205	3-1120247
A-24B	2/12/02	0830 <del>0835</del> (15)		✓	A-24B	1	1				31185021206	3-1120248
A-54	2/12/02	0850		✓	A-54	1	1				31185021207	3-1120249
A-54B	2/12/02	0845		✓	A-54B	1	1				31185021208	3-1120250
A-34	2/12/02	0905		✓	A-34	1	1				31185021209	3-2198530
A-34B	2/12/02	0900		✓	A-34B	1	1				31185021210	3-2198531
A-4	2/12/02	0920		✓	A-4	1	1				31185021211	3-2198532
A-4B	2/12/02	0915		✓	A-4B	1	1				31185021212	3-2198533
A-48	2/12/02	0935		✓	A-48	1	1				31185021213	3-2198534
A-48B	2/12/02	0930		✓	A-48B	1	1				31185021214	3-2198535
A-38	2/12/02	0950		✓	A-38	1	1				31185021215	3-2198536
Relinquished by: (Signature) <i>[Signature]</i>		Date / Time 2-12-02 1600		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)		
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)		
Relinquished by: (Signature)		Date / Time		Received for Laboratory by: (Signature) <i>[Signature]</i>		Date / Time 02/13/02 0845		Remarks Shipped by FEDEX Air bill # 810817874791				

6

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

3 05725



CHAIN OF CUSTODY RECORD

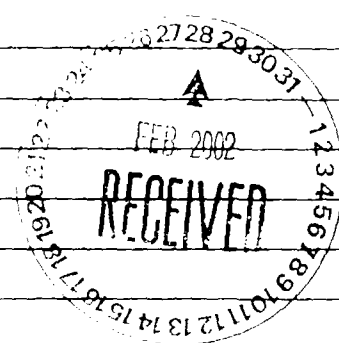
PROJ. NO.		PROJECT NAME				NO. OF CONTAINERS	REMARKS				
R31185		Velmont TCE Site									
SAMPLERS: (Signature) Vince Shickora / Don Westerhoff						SUMMIT 014A - Canister					
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION						EPA Sample No.
A-38B	7/17/02	0945	✓		A-38B	31185021216	3-2198537				
A-36	7/17/02	1005	✓		A-36	31185021217	3-2198538				
A-36B	7/17/02	1000	✓		A-36B	31185021218	3-2198539				
A-53	7/17/02	1015	✓		A-53	31185021219	3-2198540				
A-53B	7/17/02	1010	✓		A-53B	31185021220	3-2198541				
D-02	7/17/02	1200	✓		D-02	31185021221	3-2198542				
3 Empty Canisters → (3)											
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)	
WAS		2-12-02 1600									
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)	
Relinquished by: (Signature)		Date / Time		Received for Laboratory by: (Signature)		Date / Time		Remarks			
				Matt Lopez		2/13/02 0845		Shipped by FED EX Airbill # 810817874791			

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

3 05727

CHAIN OF CUSTODY RECORD

PROJ. NO.		PROJECT NAME				NO. OF CONTAINERS	REMARKS									
R31185		Valmont TCE Site														
SAMPLERS: (Signature) Don Westerhoff						TO14A Summa Containers										
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION											EPA Sample No.
A-55	7/13/02	0910		✓	A-55	31185021322	3-2198543									
A-55B	7/13/02	0900		✓	A-55B	31185021323	3-2198544									
D-03	7/13/02	0915		✓	D-03	31185021324	3-2198545									
B-01	7/13/02	0800		✓	B-01	31185021325	3-2198546									
B-02	7/13/02	0815		✓	B-02	31185021326	3-2198547									
Per Line: Shichiro, T Mus 3-11-02 JTS, ESAT																
D-C1 Sup A-10B 2-5-02																
D-C2 Sup A-4B																
D-C3 Sup A-55B																
Ambient Air Samples																
B-01																
B-02																
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)						
<i>[Signature]</i>		2/14/02 10:00														
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)						
Relinquished by: (Signature)		Date / Time		Received for Laboratory by: (Signature)		Date / Time		Remarks								
<i>[Signature]</i>				<i>Matt Lusk</i>		02/16/02 08:30		Shipped by FED EX Acbill # 810817874780								



## **Appendix D**

### Laboratory Case Narratives

**SOUTHWEST LABORATORY OF OKLAHOMA  
(SWL-TULSA)  
1700 West Albany, Suite A / Broken Arrow, OK 74012  
918-251-2858**

SDG NARRATIVE

February 25, 2002

CASE NO.            R31185

SAMPLE NOS.:    31185021101, 31185021102, 31185021203, 31185021204, 31185021205, 31185021206,  
                         31185021207, 31185021208, 31185021209, 31185021210, 31185021211, 31185021212,  
                         31185021213, 31185021214, 31185021215, 31185021215DUP, 31185021216, 31185021217,  
                         31185021218, 31185011219, 31185021219DUP, 31185021220, 31185021221

SDG NO.:            31185021101 (SWLO episode 48777)

---

**VOLATILE FRACTION**

Twenty-one air samples were submitted for Volatile Organic Analysis. The samples were analyzed by GC/MS referencing EPA Methods TO-14 and TO-15.

No significant problems occurred during the analyses of these samples. Duplicate runs were done on samples 31185021215 and 31185021219. Sample 31185021219DUP was analyzed a few (four) minutes outside the twelve-hour calibration period.

Blanks: No problems.

Surrogates: No problems.

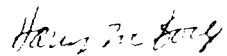
Internal Standards: No problems.

Laboratory Control Standards: No problems.

NOTE: All manual integrations in this data package for GC/MS Volatiles have been performed for one of the following reasons:

- a. Data system missed peak during acquisition.
- b. Data system improperly integrated peak.

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 designee, as verified by the following signature.

  
Harry M. Borg  
Organic Program Manager

February 25, 2002

**SOUTHWEST LABORATORY OF OKLAHOMA  
(SWL-TULSA)  
1700 West Albany, Suite A / Broken Arrow, OK 74012  
918-251-2858**



SDG NARRATIVE

February 27, 2002

CASE NO.: R31185

SAMPLE NOS.: 31185021322, 31185021323, 31185021324, 31185021325, 31185021326

SDG NO.: 31185021322 (SWLO episode 48808)

---

**VOLATILE FRACTION**

Five air samples were submitted for Volatile Organic Analysis. The samples were analyzed by GC/MS referencing EPA Methods TO-14 and TO-15.

No significant problems occurred during the analyses of these samples.

Blanks: No problems.

Surrogates: No problems.

Internal Standards: No problems.

Laboratory Control Standards: No problems.

NOTE: All manual integrations in this data package for GC/MS Volatiles have been performed for one of the following reasons:

- a. Data system missed peak during acquisition.
- b. Data system improperly integrated peak.

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 designee, as verified by the following signature.

Harry M. Borg  
Organic Program Manager

February 27, 2002