406215

ORIGINAL (RED)

Lockheed
Environmental Systems & Technologies Co.

Environmental Services Assistance Teams
Region 3
1419 Forest Drive, Suite 104
Annapolis, Maryland 21403

Phone: (410) 268-7705
Fax: (410) 268-8472

DATE: October 19, 1993

SUBJECT: Volatile Gas Chromatography/Mass Spectrometry Analyses of Samples from Valmont for Superfund Removal/Remedial (TFA03N91M). (09/21/93 to 09/29/93); Samples: 930916-01-13 and 930917-01-02 & 04-08. ESAT TID No.: 03931016; ESAT Task Area: 1L; PWO No.: 233-31-009.

FROM: Sue Raupuk S.R.
ESAT Organic Analytical Chemist

TO: Frederick Dreisch
Chief, Laboratory Branch

THRU: Kenneth W. Curry
ESAT Assistant Team Manager

Enclosed is the volatile organic analysis report for the Valmont site.

Page 14 missing — 4 pages inserted to explain and make up for missing page.

Total pages: cover + (229-1) + 4 = 233

Kevin J. Wood 10/19/93

93128.VOA
Lab

VOA ANALYSIS BY GC/MS

Analyst:

Sue Raupuk
Chemist/Lockheed

TID #: 03931016

Task Area: 1L

Method:

A cumulative total of thirteen (13) aqueous and seven (7) soil samples from Valmont were analyzed for the presence of volatile organic compounds amenable to purge and trap and identifiable by mass spectrometry. Samples were analyzed on September 21, 22, 23, 24, 25, 27 and 29, 1993 following methods from the "USEPA Contract Laboratory Program Statement of Work for Organics Analysis", February, 1988 and EPA Method 624, "Purgeables", Federal Register, October, 1984. Instrumentation utilized consisted of a purge and trap apparatus (Tekmar ALS 2016/LSC 2000) interfaced to a gas chromatograph/mass spectrometer (HP 5890/HP 5970) equipped with a fused silica capillary column (VOCOL 105m x 0.53mm ID x 3.0um film thickness). Concentrations of compounds were determined using the relative response of authentic standards to the closest internal standard. Only detected results are reported. Sample target compound values less than the quantitation limit were labeled with a "J". This indicates that the mass spectrum obtained for the sample met the identification criteria, yet the quantity present was below the level for which the instrument accurately quantitates. All results qualified with a "J" are estimated quantities. The NQLs (nominal quantitation limits) are the quantitation limits that have been determined for each parameter analyzed by this method. The actual quantitation limit is the NQL multiplied by a dilution factor specific for each sample. The dilution factor for all samples is one (1) except for sample 930916-13. The dilution factor for this sample is five (5). The NQL for the 624 method and the heated 624 method was 5ppb, except the ketones, which were 10 ppb.

Soil sample results were uncorrected for % dry weight and reported on a WET weight basis. Percent dry weights for soil samples are given below.

SAMPLE	% DRY WT.	SAMPLE	% DRY WT.
930916-01	91.0	930916-13	52.0
930916-02	91.1	930917-05	85.0
930916-03	85.0	930917-06	61.5
		930917-07	71.0

Tentative identification of compounds was made by comparison of sample spectra to the EPA/NBS54K Mass Spectral Library. Authentic standards were not available to verify these results. Concentrations for these compounds were estimated based on the response of the closest internal standard to the eluting TIC, using the

Method (contd.):

assumption that the instrument response for a given tentatively identified compound (TIC) was the same as for the response for the internal standard. All reported concentrations are estimated and qualified "T".

Quality Control:

Before acquisition of any sample data, the mass spectrometer is calibrated using FC43. The calibration is verified by obtaining the spectrum of a known compound (BFB). All mass assignments and relative abundances are found to be in acceptable ranges or the instrument is adjusted until an acceptable spectrum of the known is obtained. All samples and dilutions for this site were analyzed within the twelve hour BFB time criteria except for a 10X dilution of sample 930916-07. It was analyzed two (2) minutes past the twelve hour BFB clock. One set of Matrix Spike samples and all the internal LCSs were analyzed immediately past the twelve hour BFB time criteria.

Immediately before analysis, each sample is spiked with internal standards obtained from Supelco, Inc. All quantitations or estimates of concentrations are made in comparison to the internal standard nearest to the compound of interest. The last two internal standards for soil sample 930917-05 exhibited depressed areas, however, no target compounds were affected. Soil sample 930916-13 initial analysis was a 5X dilution (1 gram) due to the sample's dry peatmoss matrix. The last two internal standards in this sample also exhibited depressed areas and caused several target results and one surrogate recovery to be biased high, suggesting a matrix interference. These target results were qualified "I" because of this matrix interference and were also below the NQL of 25ppb for a 5X dilution and are therefore estimated. Reanalysis data at 5X and 10X (0.5 gram) confirmed the matrix interference and are included in the support documentation. Medium level analysis was utilized for accurate dilution and quantitation of acetone in this soil sample.

The initial calibration consisted of a five-point calibration curve (10, 20, 50, 100 and 200 ug/L standards for the 624 method and the heated 624 method). Five (5) milliliters of aqueous sample for the 624 method and five (5) grams of soil sample/five (5) milliliters of organic free water for the heated method were purged. The daily calibration check standard was analyzed at a concentration of 50.0 ug/L.

For each day of sample analysis, a method blank (lab reagent blank - LRB) was prepared and examined for laboratory introduced contamination. All compounds which were found in both a LRB, trip or field blank and a sample were qualified "B" if the concentration of the compound in the sample was less than ten times (10X) the compound's concentration in the blank.

The %RSDs for all compounds in the initial calibration standards (September 15, 1993 for the 624 method and September 16, 1993 for the heated 624 method) were below thirty (30) percent except 2-chloroethylvinylether. The %D for all compounds in the continuing calibration standards on September 21, 1993 were below twenty five (25) percent when comparing the daily calibration standards to the initial calibration curve, except for bromomethane, acetone, and 2-chloroethylvinyl ether. On September 22, acetone was greater than twenty-five (25) percent. On September 23, all compounds were within limits. On September

Quality Control (contd.):

24, several compounds were greater than twenty-five (25) percent. On September 25, dichlorodifluoromethane, acetone and 2-chloroethylvinylether were greater than twenty-five (25) percent. On September 27, dichlorodifluoromethane and 2-chloroethylvinylether were greater than twenty-five (25) percent. On September 29, dichlorodifluoromethane, bromomethane and 2-chloroethylvinylether were greater than twenty-five (25) percent. These compounds are qualified "J", estimated, for the positive results and "UJ", undetected estimated, for non-detected results in the affected samples.

The samples were spiked with a mixture of surrogate compounds prior to analysis. Recovery for each was determined to check for matrix interferences. The target limits are those established by the CLP. A total of one hundred ninety-one (191) out of one hundred ninety-two (192) combined soil and water surrogate recoveries were within acceptable recovery limits. Surrogate recoveries outside acceptable limits are qualified with an 'A'.

Two aliquots of soil samples 930916-03 5X and 930916-13 125X (medium level analysis) and two aliquots of aqueous sample 930916-09 were spiked with 5 ul of the target mix containing all spike compounds at a concentration of 50 ug/L. The recovery for each compound was determined to check for matrix effect. Recoveries have been corrected for target compounds present in the sample. The target limits are those established by the CLP. Twenty-eight (28) out of thirty (30) MS/MSD recoveries and fourteen (14) out of fifteen (15) RPDs were within CLP target limits.

Four (4) Laboratory Control Samples (LCS) were analyzed with this sample set and all surrogate and compound recoveries monitored by ESAT were within the Region III CRL Q.C. Limits.

VOLATILE ORGANIC QUALITY CONTROL RESULTS

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

SOIL

SAMPLE: 930916-03 5X

	PERCENT RECOVERY					
COMPOUND	MS	MSD	MEAS. AVG.	QC LIMITS	RPD	RPD LIMITS
1,1-Dichloroethene	104	98	101	59-172	6	22
Benzene	93	90	92	66-142	3	21
Trichloroethene	111	110	110	62-137	1	24
Toluene	249 A	140 A	194	59-139	56 A	21
Chlorobenzene	102	103	102	60-133	1	21

VOLATILE ORGANIC QUALITY CONTROL RESULTS (CONTD.)

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

SOIL

SAMPLE: 930916-13 125X Medium level

	PERCENT RECOVERY					
COMPOUND	MS	MSD	MEAS. AVG.	QC LIMITS	RPD	RPD LIMITS
1,1-Dichloroethene	99	95	97	59-172	4	22
Benzene	101	105	103	66-142	4	21
Trichloroethene	99	96	98	62-137	3	24
Toluene	100	98	99	59-139	2	21
Chlorobenzene	99	102	100	60-133	3	21

WATER

SAMPLE: 930916-09

	PERCENT RECOVERY					
COMPOUND	MS	MSD	MEAS. AVG.	QC LIMITS	RPD	RPD LIMITS
1,1-Dichloroethene	107	107	107	61-145	0	14
Benzene	104	104	104	75-130	0	11
Trichloroethene	101	102	102	71-120	1	14
Toluene	99	100	100	76-125	1	13
Chlorobenzene	99	103	101	76-127	4	13

RPD = RELATIVE PERCENT DIFFERENCE:

|REPLICATE 1-REPLICATE 2|/MEAN OF REPLICATE 1 AND 2 X 100

SURROGATE RECOVERY LIMITS

	WATER	SOIL
COMPOUND	PERCENT RECOVERY	PERCENT RECOVERY
D4-1,2-Dichloroethane	76-114	70-121
Fluorobenzene	80-120	80-120
D8-Toluene	88-110	81-117
Bromofluorobenzene	86-115	74-121

TENTATIVELY IDENTIFIED COMPOUNDS

Site: Valmont
Program: Superfund-Removal/Remedial
Dilution Factor: 1

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/Kg)
930916-01		None Detected		

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/Kg)
930916-02		None Detected		

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/Kg)
930916-03	617787	Pentane, 3-ethyl-	1256	58 T
	142825	Heptane	1337	170 T
	1640897	Cyclopentane, ethyl	1525	29 T
	******	Unknown, m/z = 55	1539	41 T
	592132	Hexane, 2,5-dimethyl-	1551	53 T
	******	Unknown, m/z = 43	1586	18 T
	******	Unknown, m/z = 43	1672	50 T
	620144	Benzene, 1-ethyl-3-methyl-	2371	140 T
	611143	Benzene, 1-ethyl-2-methyl-	2446	29 T
	622968	Benzene, 1-ethyl-4-methyl-	2593	20 T
	1074437	Benzene, 1-methyl-3-propyl-	2622	13 T
	535773	Benzene, 1-methyl-3-(1-methylethyl)-	2640	21 T

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/L)
930916-04		None Detected		

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/L)
930916-05		None Detected		

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/L)
930916-06		None Detected		

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/L)
930916-07	76131	Ethane, 1,1,2-trichloro-1,2,2-trifluoro-	789	71 T
		Unknown, m/z = 94	1494	4400 T

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/L)
930916-08		None Detected		

TENTATIVELY IDENTIFIED COMPOUNDS

Site: Valmont
Program: Superfund-Removal/Remedial
Dilution Factor: 1

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/L)
930916-09		None Detected		

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/L)
930916-10		None Detected		

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/L)
930916-11		None Detected		

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/L)
930916-12		None Detected		

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/Kg)
(5X dil.)				
930916-13	******	Unknown, m/z = 45	727	1100 T
	127004	2-Propanol, 1-chloro-	814	41 T
	******	Unknown, m/z = 43	920	73 T
	******	Unknown, m/z = 54	1822	130 T
	******	Unknown, m/z = 59	2387	150 T
	106683	3-Octanone	2400	1100 T

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/L)
930917-01		None Detected		

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/L)
930917-02		None Detected		

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/L)
930917-04		None Detected		

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/Kg)
930917-05		None Detected		

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/Kg)
930917-06		None Detected		

TENTATIVELY IDENTIFIED COMPOUNDS

Site: Valmont
Program: Superfund-Removal/Remedial
Dilution Factor: 1

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/Kg)
930917-07		None Detected		

SAMPLE NO.	CAS #	TIC NAME	SCAN	CONC. (ug/L)
930917-08		None Detected		

93128.VOA

Region III
Central Regional Laboratory Qualifier Codes

A = *Quality control value outside acceptance limits.*

B = Not detected substantially above (10 times) the level reported in the laboratory or field blanks (includes field, trip, rinsate and equipment blanks).

C = See report narrative for analyst's observations concerning this result.

D = Sample and duplicate value below quantitation limit. Quantitation limit reported.

E = Value exceeds a theoretically equivalent or greater value (e.g. dissolved > total, orthophosphate > total phosphorus). However, the difference is within the expected precision of the analytical *techniques and is not statistically significant.*

I = An interference exists which mask true response. See report narrative for explanation.

J = Analyte present. Reported value is estimated; concentration is below the level for accurate quantitation.

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.

MSA= *Method of Standard Additions.*

N = Presumptive evidence indicates the presence of compound. Special methods and/or method modifications may be needed to confirm its presence or absence in future sampling efforts.

NA = Analysis was not requested.

Q = No analytical results. See report narrative for explanation.

R = Unreliable results. Analyte may or may not be present in the sample. Supporting data is necessary to confirm results.

RPD= Results for method duplicates are expressed as the mean and the relative percent difference.

T = *Tentatively identified compound. Identified as a result of a library search using the EPA/NIH Mass* Spectral Library. Authentic standards were not available to properly identify and quantitate the compound. The reported concentration is an estimate.

TD = Spike recovery too dilute for accurate quantitation.

UJ = Not detected. Quantitation limit is estimated.

UL = Not detected. Quantitation limit probably higher.

-- = Not detected. Actual Quantitation Limit = Nominal Quantitation Limit times the correction factor.

< = Sample value below quantitation limit. Quantitation limit reported.

≤ = *Reported value is estimated. Sample analyzed in duplicate, one value is equal to or above the* quantitation limit and one below. Average of quantitation limit and detected value reported.

Numbers in parentheses are analytical spike recoveries (e.g. post-digestion spikes).

Numbers in brackets are matrix spike recoveries (e.g. pre-digestion spikes).

(QCCODES February 1993)

U.S. EPA Region III
Central Regional Laboratory
Annapolis, Md. 21401
10/19/93

Section: A

DRAFT

Batch ID. REQ93128 Facility: VALMONT

Account No. TFA03N91M Program: SUPERFUND REMOVAL/REMEDIAL

Sample #	Station & Description	Matrix	Collection Dates Beginning	Ending
93091601	STA S-1A, S-1A-N.W. of Plant	Soil	09/15/93	09/15/93
93091602	STA S-11A, S-11A-N.W. of Plant/Dup of S-1A	Soil	09/15/93	09/15/93
93091603	STA S-5A, S-5A S.E. at Plant MS/MSD	Soil	09/15/93	09/15/93
93091604	STA MW-2, MW2/S.W. of Plant	Ground Water/Monitoring Wel	09/15/93	09/15/93
93091605	STA MW-10A, MW-10A/Inter.N. of Plant	Ground Water/Monitoring Wel	09/15/93	09/15/93
93091606	STA MW-10D, MW-10D/Shallow N. of Plant	Ground Water/Monitoring Wel	09/15/93	09/15/9
93091607	STA MW-11, MW-11/E. of Plant	Ground Water/Monitoring Wel	09/15/93	09/15/9
93091608	STA MW-101A, MW-101A/Inter. N. of Plant/Dup of MW-10A	Ground Water/Monitoring Wel	09/15/93	09/15/93
93091609	STA MW-10C, MW-10C/Deep N. of Plant/MS/MSD	Ground Water/Monitoring Wel	09/15/93	09/15/93
93091610	STA HW-1, HW-1/Gosola Well	Ground Water/Monitoring Wel	09/15/93	09/15/93
93091611	STA FB-1, FB-1/Field Blank	Ground Water/Monitoring Wel	09/15/93	09/15/93
93091612	STA TB-1, TB-1/Trip Blank	Ground Water/Monitoring Wel	09/15/93	09/15/93
93091613	STA S-7, S-7/Background	Soil	09/15/93	09/15/93
93091701	STA HW-3, HW3/Gueco Well	Ground Water/Monitoring Wel	09/15/93	09/15/93
93091702	STA HW-2, HW/2Martineck Well	Ground Water/Monitoring Wel	09/15/93	09/15/93
93091704	STA MW-3, MW3/S. of Plant	Ground Water/Monitoring Wel	09/16/93	09/16/93
93091705	STA S-5, S-5/S.E. of Plant	Soil	09/16/93	09/16/93
93091706	STA S-6, S-6/Swale S.E. of Plant	Soil	09/16/93	09/16/93
93091707	STA S-6A, S-6A/Swale S.E. of Plant	Soil	09/16/93	09/16/93
93091708	STA TB-2, TB-2/Trip Blank	Ground Water/Monitoring Wel	09/16/93	09/16/93

Passed Analyst Data Review.

Reviews: _____ _____
Organ. Sec. Chief Date QCO Date

Laboratory Branch Chief Approval For Release: _____
Date

Batch ID. REQ93128 Facility: VALMONT
Passed analyst data review

Analyte:	CAS Number:	Units:	Sample Number:						
			93091601 SAM	93091602 SAM	93091602 LF1	93091602 LF2	93091603 SAM	93091603 LF1	93091603 LF2
>Service Group: VOA									
1,1,1,2-Tetrachloroethane	630-20-6	ug/Kg	< 5	< 5			< 5		
1,1,1-Trichloroethane	71-55-6	ug/Kg	< 5	< 5			150		
1,1,2,2-Tetrachloroethane	79-34-5	ug/Kg	< 5	< 5			< 5		
1,1,2-Trichloroethane	79-00-5	ug/Kg	< 5	< 5			< 5		
1,1-Dichloro-1-Propene	563-58-6	ug/Kg	< 5	< 5			< 5		
1,1-Dichloroethane	75-34-3	ug/Kg	< 5	< 5			92.5		
1,1-Dichloroethene	75-35-4	ug/Kg	< 5	< 5			6.5		
1,2,3-Trichlorobenzene	87-61-6	ug/Kg	< 5	1.3 J			< 5		
1,2,3-Trichloropropane	96-18-4	ug/Kg	< 5	1.1 J			< 5		
1,2,4-Trichlorobenzene	120-82-1	ug/Kg	< 5	< 5			< 5		
1,2,4-Trimethylbenzene	93-63-6	ug/Kg	< 5	< 5			160		
1,2-Dibromo-3-Chloropropane	96-12-8	ug/Kg	< 5	< 5			< 5		
1,2-Dibromoethane	106-93-4	ug/Kg	< 5	< 5			< 5		
1,2-Dichlorobenzene	95-50-1	ug/Kg	< 5	< 5			< 5		
1,2-Dichloroethane	107-06-2	ug/Kg	< 5	< 5			< 5		
1,2-Dichloropropane	78-87-5	ug/Kg	< 5	< 5			< 5		
1,3,5-Trimethylbenzene	108-67-8	ug/Kg	< 5	< 5			58.5		
1,3-Dichlorobenzene	541-73-1	ug/Kg	< 5	< 5			< 5		
1,3-Dichloropropane	142-28-9	ug/Kg	< 5	< 5			< 5		
1,4-Dichlorobenzene	106-46-7	ug/Kg	< 5	< 5			< 5		
2,2-Dichloropropane	594-20-7	ug/Kg	< 5	< 5			< 5		
2-Butanone	78-93-3	ug/Kg	< 5	< 5			3.7 J		
2-Chloroethylvinyl Ether	100-75-8	ug/Kg	UJ	UJ			UJ		
2-Chlorotoluene	95-49-8	ug/Kg	< 5	< 5			< 5		
2-Hexanone	591-78-6	ug/Kg	< 5	< 5			< 5		
4-Chlorotoluene	106-43-4	ug/Kg	< 5	< 5			< 5		
4-Methyl-2-Pentanone	108-10-1	ug/Kg	< 5	< 5			< 5		
Acetone	67-64-1	ug/Kg	UJ	3 J			22.5 J		

These are not necessary and were created by an EPA analyst in error. Denise Buckingham will delete them. S.R.

10

Batch ID. REQ93128 Facility: VALMONT
Passed analyst data review

Analyte:	CAS Number:	Units:	Sample Number:						
			93091601 SAM	93091602 SAM	93091602 LF1	93091602 LF2	93091603 SAM	93091603 LF1	93091603 LF2
Benzene	71-43-2	ug/Kg	< 5	< 5			< 5		
Bromobenzene	108-86-1	ug/Kg	< 5	< 5			< 5		
Bromochloromethane	74-97-5	ug/Kg	< 5	< 5			< 5		
Bromodichloromethane	75-27-4	ug/Kg	< 5	< 5			< 5		
Bromoform	75-25-2	ug/Kg	< 5	< 5			< 5		
Bromomethane	74-83-9	ug/Kg	UJ	UJ			UJ		
Carbon Disulfide	75-15-0	ug/Kg	< 5	< 5			< 5		
Carbon Tetrachloride	56-23-5	ug/Kg	< 5	< 5			< 5		
Chlorobenzene	108-90-7	ug/Kg	< 5	< 5			< 5		
Chloroethane	75-00-3	ug/Kg	< 5	< 5			< 5		
Chloroform	65-66-3	ug/Kg	< 5	1.1 J			< 5		
Chloromethane	74-87-3	ug/Kg	< 5	< 5			< 5		
Cis-1,2-Dichloroethene	156-59-2	ug/Kg	< 5	< 5			197		
Cis-1,3-Dichloropropene	10061-01-5	ug/Kg	< 5	< 5			< 5		
Dibromochloromethane	124-48-1	ug/Kg	< 5	< 5			< 5		
Dibromomethane	74-95-3	ug/Kg	< 5	< 5			< 5		
Dichlorodifluoromethane	75-71-8	ug/Kg	< 5	< 5			< 5		
Ethyl Benzene	100-41-4	ug/Kg	< 5	< 5			< 5		
Hexachlorobutadiene	87-68-3	ug/Kg	< 5	1.3 J			1.3 J		
Isopropylbenzene	98-82-8	ug/Kg	< 5	< 5			15.1		
M&P-Xylene Isomers	MPXYL	ug/Kg	< 5	1.2 J			457		
Methylene Chloride	75-09-2	ug/Kg	1.9 B	2.3 B			2.4 B		
1,1-Dichloroethene Percent Recove	75-35-4	% REC						104	98
Benzene Percent Recovery	71-43-2	% REC						93	90
Chlorobenzene Percent Recovery	108-90-7	% REC						102	103
Toluene Percent Recovery	108-88-3	% REC						249 A	140 A
Trichloroethene Percent Recovery	79-01-6	% REC						104	103
N-Butylbenzene	104-51-8	ug/Kg	< 5	< 5			< 5		
N-Propylbenzene	103-65-1	ug/Kg	< 5	< 5			36.5		
Naphthalene	91-20-3	ug/Kg	< 5	2.4 J			1.4 J		

Batch ID. REQ93128 Facility: VALMONT
Passed analyst data review

Analyte:	CAS Number:	Units:	Sample Number:						
			93091601 SAM	93091602 SAM	93091602 LF1	93091602 LF2	93091603 SAM	93091603 LF1	93091603 LF2
O-Xylene	95-47-6	ug/Kg	< 5	1.7 J			92.9		
P-Isopropyltoluene	99-87-6	ug/Kg	< 5	< 5			4.6 J		
1,1-Dichloroethene Duplicate RPD	75-35-4	RPD							6
Benzene Duplicate RPD	71-43-2	RPD							3
Chlorobenzene Duplicate RPD	108-90-7	RPD							1
Toluene Duplicate RPD	108-88-3	RPD							56 A
Trichloroethene Duplicate RPD	79-01-6	RPD							1
Sec-Butylbenzene	135-98-8	ug/Kg	< 5	1 J			4.3 J		
Styrene	100-42-5	ug/Kg	< 5	1.6 J			< 5		
Bromofluorobenzene (Surrogate)	460-00-4	% REC	99	98			96		
d4-1,2-Dichloroethane (Surrogate)	17060070	% REC	99	101			96		
d8-Toluene (Surrogate)	2037265	% REC	102	101			104		
Tert-Butylbenzene	98-06-6	ug/Kg	< 5	1.4 J			< 5		
Tetrachloroethene	127-18-4	ug/Kg	< 5	< 5			8.3		
Toluene	108-88-3	ug/Kg	< 5	< 5			432		
Trans-1,2-Dichloroethene	156-60-5	ug/Kg	< 5	< 5			1.2 J		
Trans-1,3-Dichloropropene	10061-02-6	ug/Kg	< 5	< 5			< 5		
Trichloroethene	79-01-6	ug/Kg	< 5	< 5			< 5		
Trichlorofluoromethane	75-69-4	ug/Kg	< 5	< 5			< 5		
Vinyl Acetate	108-05-4	ug/Kg	< 5	< 5			< 5		
Vinyl Chloride	75-01-4	ug/Kg	< 5	< 5			< 5		

Batch ID. REQ93128 Facility: VALMONT
Passed analyst data review

Analyte:	CAS Number:	Units:	Sample Number:						
			93091604 SAM	93091605 SAM	93091606 SAM	93091607 SAM	93091608 SAM	93091609 SAM	93091609 LF1
>Service Group: VOA									
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
1,1,1-Trichloroethane	71-55-6	ug/L	69.3	126	14.9	5630	129	2.2 B	
1,1,2,2-Tetrachloroethane	79-34-5	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
1,1,2-Trichloroethane	79-00-5	ug/L	< 5	1.4 J	< 5	7.2	1.6 J	< 5	
1,1-Dichloro-1-Propene	563-58-6	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
1,1-Dichloroethane	75-34-3	ug/L	< 5	23	20.7	166	23.1	< 5	
1,1-Dichloroethene	75-35-4	ug/L	2.9 J	16V1	2.3 J	187	16.4	< 5	
1,2,3-Trichlorobenzene	87-61-6	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
1,2,3-Trichloropropane	96-18-4	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
1,2,4-Trichlorobenzene	120-82-1	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
1,2,4-Trimethylbenzene	93-63-6	ug/L	< 5	< 5	< 5	1.6 J	< 5	< 5	
1,2-Dibromo-3-Chloropropane	96-12-8	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
1,2-Dibromoethane	106-93-4	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
1,2-Dichlorobenzene	95-50-1	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
1,2-Dichloroethane	107-06-2	ug/L	< 5	< 5	< 5	3.4 J	< 5	< 5	
1,2-Dichloropropane	78-87-5	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
1,3,5-Trimethylbenzene	108-67-8	ug/L	< 5	< 5	< 5	1.5 J	< 5	< 5	
1,3-Dichlorobenzene	541-73-1	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
1,3-Dichloropropane	142-28-9	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
1,4-Dichlorobenzene	106-46-7	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
2,2-Dichloropropane	594-20-7	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
2-Butanone	78-93-3	ug/L	< 5	< 5	3.7 J	3.2 J	< 5	< 5	
2-Chloroethylvinyl Ether	100-75-8	ug/L	UJ	UJ	UJ	UJ	UJ	UJ	
2-Chlorotolu[redacted]	95-49-8	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
2-Hexan[redacted]	591-78-6	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
4-Chlo[redacted]	106-43-4	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
4-M[redacted]one	108-10-1	ug/L	< 5	< 5	< 5	10.5	< 5	< 5	
Aceto[redacted]	67-64-1	ug/L	UJ	UJ	UJ	UJ	UJ	< 5	

[redacted]

AR101041

Note:

Page 14 (lab page BG) is missing from this data package. This missing page would cover 1,1,1,2-Tetrachlorethane through Acetone for samples 9309l604 (SAM) through 9309l609 [redacted] (SAM). The following three pages ("14A" through "14C") have been copied from a draft version of this same report and inserted here. This pages include all of the missing information, but have not been subject to the analyst data review.

Kevin J Wood
Site Assessment Manager
EPA Region 3
10/19/2000

| Batch ID. REQ93128 Facility: VALMONT |

Analyte:	CAS Number:	Units:	Sample Number: 93091601 SAM	93091602 SAM	93091603 SAM	93091603 LF1	93091603 LF2	93091604 SAM	93091605 SAM
>Service Group: VOA									
1,1,1,2-Tetrachloroethane	630-20-6	ug/Kg	< 5	< 5	< 5				
1,1,1,2-Tetrachloroethane	630-20-6	ug/L						< 5	< 5
1,1,1-Trichloroethane	71-55-6	ug/Kg	< 5	< 5	150				
1,1,1-Trichloroethane	71-55-6	ug/L						69.3	126
1,1,2,2-Tetrachloroethane	79-34-5	ug/Kg	< 5	< 5	< 5				
1,1,2,2-Tetrachloroethane	79-34-5	ug/L						< 5	< 5
1,1,2-Trichloroethane	79-00-5	ug/Kg	< 5	< 5	< 5				
1,1,2-Trichloroethane	79-00-5	ug/L						< 5	1.4 J
1,1-Dichloro-1-Propene	563-58-6	ug/Kg	< 5	< 5	< 5				
1,1-Dichloro-1-Propene	563-58-6	ug/L						< 5	< 5
1,1-Dichloroethane	75-34-3	ug/Kg	< 5	< 5	92.5				
1,1-Dichloroethane	75-34-3	ug/L						< 5	23.0
1,1-Dichloroethene	75-35-4	ug/Kg	< 5	< 5	6.5				
1,1-Dichloroethene	75-35-4	ug/L						2.9 J	16.1
1,2,3-Trichlorobenzene	87-61-6	ug/Kg	< 5	1.3 J	< 5				
1,2,3-Trichlorobenzene	87-61-6	ug/L						< 5	< 5
1,2,3-Trichloropropane	96-18-4	ug/Kg	< 5	1.1 J	< 5				
1,2,3-Trichloropropane	96-18-4	ug/L						< 5	< 5
1,2,4-Trichlorobenzene	120-82-1	ug/Kg	< 5	< 5	< 5				
1,2,4-Trichlorobenzene	120-82-1	ug/L						< 5	< 5
1,2,4-Trimethylbenzene	93-63-6	ug/Kg	< 5	< 5	160				
1,2,4-Trimethylbenzene	93-63-6	ug/L						< 5	< 5
1,2-Dibromo-3-Chloropropane	96-12-8	ug/Kg	< 5	< 5	< 5				
1,2-Dibromo-3-Chloropropane	96-12-8	ug/L						< 5	< 5
1,2-Dibromoethane	106-93-4	ug/Kg	< 5	< 5	< 5				
1,2-Dibromoethane	106-93-4	ug/L						< 5	< 5
1,2-Dichlorobenzene	95-50-1	ug/Kg	< 5	< 5	< 5				
1,2-Dichlorobenzene	95-50-1	ug/L						< 5	< 5

ORIGINAL (Red)

"14A"

ORIGINAL (Red)

U.S. EPA Region III
Central Regional Laboratory
Annapolis, Md. 21401

DRAFT

| Batch ID. REQ93128 Facility: VALMONT |

Analyte:	CAS Number:	Units:	Sample Number: 93091601 SAM	93091602 SAM	93091603 SAM	93091603 LF1	93091603 LF2	93091604 SAM	93091605 SAM
1,2-Dichloroethane	107-06-2	ug/Kg	< 5	< 5	< 5				
1,2-Dichloroethane	107-06-2	ug/L						< 5	< 5
1,2-Dichloropropane	78-87-5	ug/Kg	< 5	< 5	< 5				
1,2-Dichloropropane	78-87-5	ug/L						< 5	< 5
1,3,5-Trimethylbenzene	108-67-8	ug/Kg	< 5	< 5	58.5				
1,3,5-Trimethylbenzene	108-67-8	ug/L						< 5	< 5
1,3-Dichlorobenzene	541-73-1	ug/Kg	< 5	< 5	< 5				
1,3-Dichlorobenzene	541-73-1	ug/L						< 5	< 5
1,3-Dichloropropane	142-28-9	ug/Kg	< 5	< 5	< 5				
1,3-Dichloropropane	142-28-9	ug/L						< 5	< 5
1,4-Dichlorobenzene	106-46-7	ug/Kg	< 5	< 5	< 5				
1,4-Dichlorobenzene	106-46-7	ug/L						< 5	< 5
2,2-Dichloropropane	594-20-7	ug/Kg	< 5	< 5	< 5				
2,2-Dichloropropane	594-20-7	ug/L						< 5	< 5
2-Butanone	78-93-3	ug/Kg	< 5	< 5	3.7 J				
2-Butanone	78-93-3	ug/L						< 5	< 5
2-Chloroethylvinyl Ether	100-75-8	ug/Kg	UJ	UJ	UJ				
2-Chloroethylvinyl Ether	100-75-8	ug/L						UJ	UJ
2-Chlorotoluene	95-49-8	ug/Kg	< 5	< 5	< 5				
2-Chlorotoluene	95-49-8	ug/L						< 5	< 5
2-Hexanone	591-78-6	ug/Kg	< 5	< 5	< 5				
2-Hexanone	591-78-6	ug/L						< 5	< 5
4-Chlorotoluene	106-43-4	ug/Kg	< 5	< 5	< 5				
4-Chlorotoluene	106-43-4	ug/L						< 5	< 5
4-Methyl-2-Pentanone	108-10-1	ug/Kg	< 5	< 5	< 5				
4-Methyl-2-Pentanone	108-10-1	ug/L						< 5	< 5
Acetone	67-64-1	ug/Kg	UJ	3.0 J	22.5 J				
Acetone	67-64-1	ug/L						UJ	UJ
Benzene	71-43-2	ug/Kg	< 5	< 5	< 5				
Benzene	71-43-2	ug/L						< 5	< 5

"148"

| Batch ID. REQ93128 Facility: VALMONT |

Analyte:	CAS Number:	Units:	Sample Number: 93091606 SAM	93091607 SAM	93091608 SAM	93091609 SAM	93091609 LF1	93091609 LF2	93091610 SAM
>Service Group: VOA									
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	< 5	< 5	< 5	< 5			< 5
1,1,1-Trichloroethane	71-55-6	ug/L	14.9	5630	129	2.2 B			30.1
1,1,2,2-Tetrachloroethane	79-34-5	ug/L	< 5	< 5	< 5	< 5			< 5
1,1,2-Trichloroethane	79-00-5	ug/L	< 5	7.2	1.6 J	< 5			< 5
1,1-Dichloro-1-Propene	563-58-6	ug/L	< 5	< 5	< 5	< 5			< 5
1,1-Dichloroethane	75-34-3	ug/L	20.7	166	23.1	< 5			< 5
1,1-Dichloroethene	75-35-4	ug/L	2.3 J	187	16.4	< 5			< 5
1,2,3-Trichlorobenzene	87-61-6	ug/L	< 5	< 5	< 5	< 5			< 5
1,2,3-Trichloropropane	96-18-4	ug/L	< 5	< 5	< 5	< 5			< 5
1,2,4-Trichlorobenzene	120-82-1	ug/L	< 5	< 5	< 5	< 5			< 5
1,2,4-Trimethylbenzene	93-63-6	ug/L	< 5	1.6 J	< 5	< 5			< 5
1,2-Dibromo-3-Chloropropane	96-12-8	ug/L	< 5	< 5	< 5	< 5			< 5
1,2-Dibromoethane	106-93-4	ug/L	< 5	< 5	< 5	< 5			< 5
1,2-Dichlorobenzene	95-50-1	ug/L	< 5	< 5	< 5	< 5			< 5
1,2-Dichloroethane	107-06-2	ug/L	< 5	3.4 J	< 5	< 5			< 5
1,2-Dichloropropane	78-87-5	ug/L	< 5	< 5	< 5	< 5			< 5
1,3,5-Trimethylbenzene	108-67-8	ug/L	< 5	1.5 J	< 5	< 5			< 5
1,3-Dichlorobenzene	541-73-1	ug/L	< 5	< 5	< 5	< 5			< 5
1,3-Dichloropropane	142-28-9	ug/L	< 5	< 5	< 5	< 5			< 5
1,4-Dichlorobenzene	106-46-7	ug/L	< 5	< 5	< 5	< 5			< 5
2,2-Dichloropropane	594-20-7	ug/L	< 5	< 5	< 5	< 5			< 5
2-Butanone	78-93-3	ug/L	3.7 J	3.2 J	< 5	< 5			< 5
2-Chloroethylvinyl Ether	100-75-8	ug/L	UJ	UJ	UJ	UJ			UJ
2-Chlorotoluene	95-49-8	ug/L	< 5	< 5	< 5	< 5			< 5
2-Hexanone	591-78-6	ug/L	< 5	< 5	< 5	< 5			< 5
4-Chlorotoluene	106-43-4	ug/L	< 5	< 5	< 5	< 5			< 5
4-Methyl-2-Pentanone	108-10-1	ug/L	< 5	10.5	< 5	< 5			< 5
Acetone	67-64-1	ug/L	UJ	UJ	UJ	< 5			UJ

Batch ID. REQ93128 Facility: VALMONT
Passed analyst data review

Analyte:	CAS Number:	Units:	Sample Number:						
			93091604 SAM	93091605 SAM	93091606 SAM	93091607 SAM	93091608 SAM	93091609 SAM	93091609 LF1
O-Xylene	95-47-6	ug/L	< 5	< 5	< 5	8.8	< 5	< 5	
P-Isopropyltoluene	99-87-6	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
Sec-Butylbenzene	135-98-8	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
Styrene	100-42-5	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
Bromofluorobenzene (Surrogate)	460-00-4	% REC	97	98	100	97	101	100	
d4-1,2-Dichloroethane (Surrogate)	17060070	% REC	105	106	105	103	105	106	
d8-Toluene (Surrogate)	2037265	% REC	98	98	99	96	100	99	
Tert-Butylbenzene	98-06-6	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
Tetrachloroethene	127-18-4	ug/L	< 5	< 5	< 5	7.7	< 5	< 5	
Toluene	108-88-3	ug/L	< 5	< 5	< 5	25.2	< 5	< 5	
Trans-1,2-Dichloroethene	156-60-5	ug/L	< 5	1.5 J	< 5	6.4	1.6 J	< 5	
Trans-1,3-Dichloropropene	10061-02-6	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
Trichloroethene	79-01-6	ug/L	167	2600	440	17000	2620	< 5	
Trichlorofluoromethane	75-69-4	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
Vinyl Acetate	108-05-4	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	
Vinyl Chloride	75-01-4	ug/L	< 5	< 5	< 5	< 5	< 5	< 5	

15

Batch ID. REQ93128 Facility: VALMONT
Passed analyst data review

Analyte:	CAS Number:	Units:	Sample Number:						
			93091609 LF2	93091610 SAM	93091611 FRB	93091612 TRP	93091613 SAM	93091613 LF1	93091613 LF2
>Service Group: VOA									
1,1,1,2-Tetrachloroethane	630-20-6	ug/Kg					< 25		
1,1,1,2-Tetrachloroethane	630-20-6	ug/L		< 5	< 5	< 5			
1,1,1-Trichloroethane	71-55-6	ug/Kg					7.2 J		
1,1,1-Trichloroethane	71-55-6	ug/L		30.1	< 5	< 5			
1,1,2,2-Tetrachloroethane	79-34-5	ug/Kg					< 25		
1,1,2,2-Tetrachloroethane	79-34-5	ug/L		< 5	< 5	< 5			
1,1,2-Trichloroethane	79-00-5	ug/Kg					< 25		
1,1,2-Trichloroethane	79-00-5	ug/L		< 5	< 5	< 5			
1,1-Dichloro-1-Propene	563-58-6	ug/Kg					< 25		
1,1-Dichloro-1-Propene	563-58-6	ug/L		< 5	< 5	< 5			
1,1-Dichloroethane	75-34-3	ug/Kg					< 25		
1,1-Dichloroethane	75-34-3	ug/L		< 5	< 5	< 5			
1,1-Dichloroethene	75-35-4	ug/Kg					< 25		
1,1-Dichloroethene	75-35-4	ug/L		< 5	< 5	< 5			
1,2,3-Trichlorobenzene	87-61-6	ug/Kg					< 25		
1,2,3-Trichlorobenzene	87-61-6	ug/L		< 5	< 5	< 5			
1,2,3-Trichloropropane	96-18-4	ug/Kg					< 25		
1,2,3-Trichloropropane	96-18-4	ug/L		< 5	< 5	< 5			
1,2,4-Trichlorobenzene	120-82-1	ug/Kg					< 25		
1,2,4-Trichlorobenzene	120-82-1	ug/L		< 5	< 5	< 5			
1,2,4-Trimethylbenzene	93-63-6	ug/Kg					22 N		
1,2,4-Trimethylbenzene	93-63-6	ug/L		< 5	< 5	< 5			
1,2-Dibromo-3-Chloropropane	96-12-8	ug/Kg					< 25		
1,2-Dibromo-3-Chloropropane	96-12-8	ug/L		< 5	< 5	< 5			
1,2-Dibromoethane	106-93-4	ug/Kg					< 25		
1,2-Dibromoethane	106-93-4	ug/L		< 5	< 5	< 5			
1,2-Dichlorobenzene	95-50-1	ug/Kg					< 25		
1,2-Dichlorobenzene	95-50-1	ug/L		< 5	< 5	< 5			

91

Batch ID. REQ93128 Facility: VALMONT
Passed analyst data review

Analyte:	CAS Number:	Units:	Sample Number:						
			93091609 LF2	93091610 SAM	93091611 FRB	93091612 TRP	93091613 SAM	93091613 LF1	93091613 LF2
1,2-Dichloroethane	107-06-2	ug/Kg					< 25		
1,2-Dichloroethane	107-06-2	ug/L		< 5	< 5	< 5			
1,2-Dichloropropane	78-87-5	ug/Kg					< 25		
1,2-Dichloropropane	78-87-5	ug/L		< 5	< 5	< 5			
1,3,5-Trimethylbenzene	108-67-8	ug/Kg					20.4 I		
1,3,5-Trimethylbenzene	108-67-8	ug/L		< 5	< 5	< 5			
1,3-Dichlorobenzene	541-73-1	ug/Kg					< 25		
1,3-Dichlorobenzene	541-73-1	ug/L		< 5	< 5	< 5			
1,3-Dichloropropane	142-28-9	ug/Kg					< 25		
1,3-Dichloropropane	142-28-9	ug/L		< 5	< 5	< 5			
1,4-Dichlorobenzene	106-46-7	ug/Kg					< 25		
1,4-Dichlorobenzene	106-46-7	ug/L		< 5	< 5	< 5			
2,2-Dichloropropane	594-20-7	ug/Kg					< 25		
2,2-Dichloropropane	594-20-7	ug/L		< 5	< 5	< 5			
2-Butanone	78-93-3	ug/Kg					105		
2-Butanone	78-93-3	ug/L		< 5	< 5	< 5			
2-Chloroethylvinyl Ether	100-75-8	ug/Kg					UJ		
2-Chloroethylvinyl Ether	100-75-8	ug/L		UJ	UJ	UJ			
2-Chlorotoluene	95-49-8	ug/Kg					< 25		
2-Chlorotoluene	95-49-8	ug/L		< 5	< 5	< 5			
2-Hexanone	591-78-6	ug/Kg					< 25		
2-Hexanone	591-78-6	ug/L		< 5	< 5	< 5			
4-Chlorotoluene	106-43-4	ug/Kg					< 25		
4-Chlorotoluene	106-43-4	ug/L		< 5	< 5	< 5			
4-Methyl-2-Pentanone	108-10-1	ug/Kg					< 25		
4-Methyl-2-Pentanone	108-10-1	ug/L		< 5	< 5	< 5			
Acetone	67-64-1	ug/Kg					1410		
Acetone	67-64-1	ug/L		UJ	UJ	UJ			
Benzene	71-43-2	ug/Kg					< 25		
Benzene	71-43-2	ug/L		< 5	< 5	< 5			

Batch ID. REQ93128 Facility: VALMONT
Passed analyst data review

Analyte:	CAS Number:	Units:	Sample Number:						
			93091609 LF2	93091610 SAM	93091611 FRB	93091612 TRP	93091613 SAM	93091613 LF1	93091613 LF2
Bromobenzene	108-86-1	ug/Kg					< 25		
Bromobenzene	108-86-1	ug/L		< 5	< 5	< 5			
Bromochloromethane	74-97-5	ug/Kg					< 25		
Bromochloromethane	74-97-5	ug/L		< 5	< 5	< 5			
Bromodichloromethane	75-27-4	ug/Kg					< 25		
Bromodichloromethane	75-27-4	ug/L		< 5	< 5	< 5			
Bromoform	75-25-2	ug/Kg					< 25		
Bromoform	75-25-2	ug/L		< 5	< 5	< 5			
Bromomethane	74-83-9	ug/Kg					UJ		
Bromomethane	74-83-9	ug/L		< 5	< 5	< 5			
Carbon Disulfide	75-15-0	ug/Kg					< 25		
Carbon Disulfide	75-15-0	ug/L		< 5	< 5	< 5			
Carbon Tetrachloride	56-23-5	ug/Kg					< 25		
Carbon Tetrachloride	56-23-5	ug/L		< 5	< 5	< 5			
Chlorobenzene	108-90-7	ug/Kg					< 25		
Chlorobenzene	108-90-7	ug/L		< 5	< 5	< 5			
Chloroethane	75-00-3	ug/Kg					< 25		
Chloroethane	75-00-3	ug/L		< 5	< 5	< 5			
Chloroform	65-66-3	ug/Kg					< 25		
Chloroform	65-66-3	ug/L		< 5	< 5	< 5			
Chloromethane	74-87-3	ug/Kg					< 25		
Chloromethane	74-87-3	ug/L		< 5	< 5	< 5			
Cis-1,2-Dichloroethene	156-59-2	ug/Kg					33.8		
Cis-1,2-Dichloroethene	156-59-2	ug/L		2.9 J	< 5	< 5			
Cis-1,3-Dichloropropene	10061-01-5	ug/Kg					< 25		
Cis-1,3-Dichloropropene	10061-01-5	ug/L		< 5	< 5	< 5			
Dibromochloromethane	124-48-1	ug/Kg					< 25		
Dibromochloromethane	124-48-1	ug/L		< 5	< 5	< 5			
Dibromomethane	74-95-3	ug/Kg					< 25		
Dibromomethane	74-95-3	ug/L		< 5	< 5	< 5			

Batch ID. REQ93128 Facility: VALMONT
Passed analyst data review

Analyte:	CAS Number:	Units:	Sample Number:						
			93091609 LF2	93091610 SAM	93091611 FRB	93091612 TRP	93091613 SAM	93091613 LF1	93091613 LF2
Dichlorodifluoromethane	75-71-8	ug/Kg					< 25		
Dichlorodifluoromethane	75-71-8	ug/L		UJ	UJ	UJ			
Ethyl Benzene	100-41-4	ug/Kg					< 25		
Ethyl Benzene	100-41-4	ug/L		< 5	< 5	< 5			
Hexachlorobutadiene	87-68-3	ug/Kg					< 25		
Hexachlorobutadiene	87-68-3	ug/L		< 5	< 5	< 5			
Isopropylbenzene	98-82-8	ug/Kg					< 25		
Isopropylbenzene	98-82-8	ug/L		< 5	< 5	< 5			
M&P-Xylene Isomers	MPXYL	ug/Kg					17.9 I		
M&P-Xylene Isomers	MPXYL	ug/L		< 5	< 5	< 5			
Methylene Chloride	75-09-2	ug/Kg					10.8 B		
Methylene Chloride	75-09-2	ug/L		1.8 B	1.3 J	3.5 J			
1,1-Dichloroethene Percent Recove	75-35-4	% REC	107					99	95
Benzene Percent Recovery	71-43-2	% REC	104					101	105
Chlorobenzene Percent Recovery	108-90-7	% REC	103					99	102
Toluene Percent Recovery	108-88-3	% REC	100					100	98
Trichloroethene Percent Recovery	79-01-6	% REC	102					99	96
N-Butylbenzene	104-51-8	ug/Kg					< 25		
N-Butylbenzene	104-51-8	ug/L		< 5	< 5	< 5			
N-Propylbenzene	103-65-1	ug/Kg					< 25		
N-Propylbenzene	103-65-1	ug/L		< 5	< 5	< 5			
Naphthalene	91-20-3	ug/Kg					< 25		
Naphthalene	91-20-3	ug/L		< 5	< 5	< 5			
O-Xylene	95-47-6	ug/Kg					7.2 I		
O-Xylene	95-47-6	ug/L		< 5	< 5	< 5			
P-Isopropyltoluene	99-87-6	ug/Kg					< 25		
P-Isopropyltoluene	99-87-6	ug/L		< 5	< 5	< 5			
1,1-Dichloroethene Duplicate RPD	75-35-4	RPD	0						4
Benzene Duplicate RPD	71-43-2	RPD	0						4
Chlorobenzene Duplicate RPD	108-90-7	RPD	4						3

19

Batch ID. REQ93128 Facility: VALMONT
Passed analyst data review

Analyte:	CAS Number:	Units:	Sample Number:						
			93091609 LF2	93091610 SAM	93091611 FRB	93091612 TRP	93091613 SAM	93091613 LF1	93091613 LF2
Toluene Duplicate RPD	108-88-3	RPD	1						2
Trichloroethene Duplicate RPD	79-01-6	RPD	1						3
Sec-Butylbenzene	135-98-8	ug/Kg					< 25		
Sec-Butylbenzene	135-98-8	ug/L		< 5	< 5	< 5			
Styrene	100-42-5	ug/Kg					< 25		
Styrene	100-42-5	ug/L		< 5	< 5	< 5			
Bromofluorobenzene (Surrogate)	460-00-4	% REC		98	99	98	81		
d4-1,2-Dichloroethane (Surrogate)	17060070	% REC		106	107	104	112		
d8-Toluene (Surrogate)	2037265	% REC		98	100	99	120 A		
Tert-Butylbenzene	98-06-6	ug/Kg					< 25		
Tert-Butylbenzene	98-06-6	ug/L		< 5	< 5	< 5			
Tetrachloroethene	127-18-4	ug/Kg					< 25		
Tetrachloroethene	127-18-4	ug/L		< 5					
Toluene	108-88-3	ug/Kg					20.1 I		
Toluene	108-88-3	ug/L		< 5	< 5	< 5			
Trans-1,2-Dichloroethene	156-60-5	ug/Kg					< 25		
Trans-1,2-Dichloroethene	156-60-5	ug/L		< 5	< 5	< 5			
Trans-1,3-Dichloropropene	10061-02-6	ug/Kg					< 25		
Trans-1,3-Dichloropropene	10061-02-6	ug/L		< 5	< 5	< 5			
Trichloroethene	79-01-6	ug/Kg					< 25		
Trichloroethene	79-01-6	ug/L		182	< 5	< 5			
Trichlorofluoromethane	75-69-4	ug/Kg					< 25		
Trichlorofluoromethane	75-69-4	ug/L		< 5	< 5	< 5			
Vinyl Acetate	108-05-4	ug/Kg					< 25		
Vinyl Acetate	108-05-4	ug/L		< 5	< 5	< 5			
Vinyl Chloride	75-01-4	ug/Kg					< 25		
Vinyl Chloride	75-01-4	ug/L		< 5	< 5	< 5			

20

Batch ID. REQ93128 Facility: VALMONT
Passed analyst data review

Analyte:	CAS Number:	Units:	Sample Number:						
			93091701 SAM	93091702 SAM	93091704 SAM	93091705 SAM	93091706 SAM	93091707 SAM	93091708 TRP
>Service Group: VOA									
1,1,1,2-Tetrachloroethane	630-20-6	ug/Kg				< 5	< 5	< 5	
1,1,1,2-Tetrachloroethane	630-20-6	ug/L	< 5	< 5	< 5				< 5
1,1,1-Trichloroethane	71-55-6	ug/Kg				3.1 J	6	15.4	
1,1,1-Trichloroethane	71-55-6	ug/L	59.2	52.5	2 J				< 5
1,1,2,2-Tetrachloroethane	79-34-5	ug/Kg				< 5	< 5	< 5	
1,1,2,2-Tetrachloroethane	79-34-5	ug/L	< 5	< 5	< 5				< 5
1,1,2-Trichloroethane	79-00-5	ug/Kg				< 5	< 5	< 5	
1,1,2-Trichloroethane	79-00-5	ug/L	< 5	< 5	< 5				< 5
1,1-Dichloro-1-Propene	563-58-6	ug/Kg				< 5	< 5	< 5	
1,1-Dichloro-1-Propene	563-58-6	ug/L	< 5	< 5	< 5				< 5
1,1-Dichloroethane	75-34-3	ug/Kg				< 5	< 5	< 5	
1,1-Dichloroethane	75-34-3	ug/L	1.4 J	1.3 J	< 5				< 5
1,1-Dichloroethene	75-35-4	ug/Kg				< 5	< 5	< 5	
1,1-Dichloroethene	75-35-4	ug/L	2 J	1.9 J	< 5				< 5
1,2,3-Trichlorobenzene	87-61-6	ug/Kg				< 5	< 5	< 5	
1,2,3-Trichlorobenzene	87-61-6	ug/L	< 5	< 5	< 5				< 5
1,2,3-Trichloropropane	96-18-4	ug/Kg				< 5	< 5	< 5	
1,2,3-Trichloropropane	96-18-4	ug/L	< 5	< 5	< 5				< 5
1,2,4-Trichlorobenzene	120-82-1	ug/Kg				< 5	< 5	< 5	
1,2,4-Trichlorobenzene	120-82-1	ug/L	< 5	< 5	< 5				< 5
1,2,4-Trimethylbenzene	93-63-6	ug/Kg				< 5	< 5	< 5	
1,2,4-Trimethylbenzene	93-63-6	ug/L	< 5	< 5	< 5				< 5
1,2-Dibromo-3-Chloropropane	96-12-8	ug/Kg				< 5	< 5	< 5	
1,2-Dibromo-3-Chloropropane	96-12-8	ug/L	< 5	< 5	< 5				< 5
1,2-Dibromoethane	106-93-4	ug/Kg				< 5	< 5	< 5	
1,2-Dibromoethane	106-93-4	ug/L	< 5	< 5	< 5				< 5
1,2-Dichlorobenzene	95-50-1	ug/Kg				< 5	< 5	< 5	
1,2-Dichlorobenzene	95-50-1	ug/L	< 5	< 5	< 5				< 5

Batch ID. REQ93128 Facility: VALMONT
Passed analyst data review

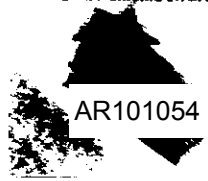
Analyte:	CAS Number:	Units:	Sample Number:						
			93091701 SAM	93091702 SAM	93091704 SAM	93091705 SAM	93091706 SAM	93091707 SAM	93091708 TRP
1,2-Dichloroethane	107-06-2	ug/Kg				< 5	< 5	< 5	
1,2-Dichloroethane	107-06-2	ug/L	< 5	< 5	< 5				< 5
1,2-Dichloropropane	78-87-5	ug/Kg				< 5	< 5	< 5	
1,2-Dichloropropane	78-87-5	ug/L	< 5	< 5	< 5				< 5
1,3,5-Trimethylbenzene	108-67-8	ug/Kg				< 5	< 5	< 5	
1,3,5-Trimethylbenzene	108-67-8	ug/L	< 5	< 5	< 5				< 5
1,3-Dichlorobenzene	541-73-1	ug/Kg				< 5	< 5	< 5	
1,3-Dichlorobenzene	541-73-1	ug/L	< 5	< 5	< 5				< 5
1,3-Dichloropropane	142-28-9	ug/Kg				< 5	< 5	< 5	
1,3-Dichloropropane	142-28-9	ug/L	< 5	< 5	< 5				< 5
1,4-Dichlorobenzene	106-46-7	ug/Kg				< 5	< 5	< 5	
1,4-Dichlorobenzene	106-46-7	ug/L	< 5	< 5	< 5				< 5
2,2-Dichloropropane	594-20-7	ug/Kg				< 5	< 5	< 5	
2,2-Dichloropropane	594-20-7	ug/L	< 5	< 5	< 5				< 5
2-Butanone	78-93-3	ug/Kg				< 5	1.6 J	< 5	
2-Butanone	78-93-3	ug/L	< 5	< 5	< 5				< 5
2-Chloroethylvinyl Ether	100-75-8	ug/Kg				UJ	UJ	UJ	
2-Chloroethylvinyl Ether	100-75-8	ug/L	UJ	UJ	UJ				UJ
2-Chlorotoluene	95-49-8	ug/Kg				< 5	< 5	< 5	
2-Chlorotoluene	95-49-8	ug/L	< 5	< 5	< 5				< 5
2-Hexanone	591-78-6	ug/Kg				< 5	< 5	< 5	
2-Hexanone	591-78-6	ug/L	< 5	< 5	< 5				< 5
4-Chlorotoluene	106-43-4	ug/Kg				< 5	< 5	< 5	
4-Chlorotoluene	106-43-4	ug/L	< 5	< 5	< 5				< 5
4-Methyl-2-Pentanone	108-10-1	ug/Kg				< 5	< 5	< 5	
4-Methyl-2-Pentanone	108-10-1	ug/L	< 5	< 5	< 5				< 5
Acetone	67-64-1	ug/Kg				< 5	13.9	3.9 B	
Acetone	67-64-1	ug/L	UJ	< 5	< 5				UJ
Benzene	71-43-2	ug/Kg				< 5	< 5	< 5	
Benzene	71-43-2	ug/L	< 5	< 5	< 5				< 5

22

Batch ID. REQ93128 Facility: VALMONT
Passed analyst data review

Analyte:	CAS Number:	Units:	Sample Number:						
			93091701 SAM	93091702 SAM	93091704 SAM	93091705 SAM	93091706 SAM	93091707 SAM	93091708 TRP
Bromobenzene	108-86-1	ug/Kg				< 5	< 5	< 5	
Bromobenzene	108-86-1	ug/L	< 5	< 5	< 5				< 5
Bromochloromethane	74-97-5	ug/Kg				< 5	< 5	< 5	
Bromochloromethane	74-97-5	ug/L	< 5	< 5	< 5				< 5
Bromodichloromethane	75-27-4	ug/Kg				< 5	< 5	< 5	
Bromodichloromethane	75-27-4	ug/L	< 5	< 5	< 5				< 5
Bromoform	75-25-2	ug/Kg				< 5	< 5	< 5	
Bromoform	75-25-2	ug/L	< 5	< 5	< 5				< 5
Bromomethane	74-83-9	ug/Kg				< 5	< 5	< 5	
Bromomethane	74-83-9	ug/L	< 5	< 5	< 5				< 5
Carbon Disulfide	75-15-0	ug/Kg				< 5	< 5	< 5	
Carbon Disulfide	75-15-0	ug/L	< 5	< 5	< 5				< 5
Carbon Tetrachloride	56-23-5	ug/Kg				< 5	< 5	< 5	
Carbon Tetrachloride	56-23-5	ug/L	< 5	< 5	< 5				< 5
Chlorobenzene	108-90-7	ug/Kg				< 5	< 5	< 5	
Chlorobenzene	108-90-7	ug/L	< 5	< 5	< 5				< 5
Chloroethane	75-00-3	ug/Kg				< 5	< 5	< 5	
Chloroethane	75-00-3	ug/L	< 5	< 5	< 5				< 5
Chloroform	65-66-3	ug/Kg				< 5	< 5	< 5	
Chloroform	65-66-3	ug/L	< 5	< 5	< 5				< 5
Chloromethane	74-87-3	ug/Kg				< 5	< 5	< 5	
Chloromethane	74-87-3	ug/L	< 5	< 5	< 5				< 5
Cis-1,2-Dichloroethene	156-59-2	ug/Kg				< 5	< 5	2.5 J	
Cis-1,2-Dichloroethene	156-59-2	ug/L	7.8	8.8	< 5				< 5
Cis-1,3-Dichloropropene	10061-01-5	ug/Kg				< 5	< 5	< 5	
Cis-1,3-Dichloropropene	10061-01-5	ug/L	< 5	< 5	< 5				< 5
Dibromochloromethane	124-48-1	ug/Kg				< 5	< 5	< 5	
Dibromochloromethane	124-48-1	ug/L	< 5	< 5	< 5				< 5
Dibromomethane	74-95-3	ug/Kg				< 5	< 5	< 5	
Dibromomethane	74-95-3	ug/L	< 5	< 5	< 5				< 5

23



Batch ID. REQ93128 Facility: VALMONT
Passed analyst data review

Analyte:	CAS Number:	Units:	Sample Number:						
			93091701 SAM	93091702 SAM	93091704 SAM	93091705 SAM	93091706 SAM	93091707 SAM	93091708 TRP
Dichlorodifluoromethane	75-71-8	ug/Kg				13.8	< 5	< 5	
Dichlorodifluoromethane	75-71-8	ug/L	UJ	UJ	UJ				UJ
Ethyl Benzene	100-41-4	ug/Kg				< 5	< 5	< 5	
Ethyl Benzene	100-41-4	ug/L	< 5	< 5	< 5				< 5
Hexachlorobutadiene	87-68-3	ug/Kg				< 5	< 5	< 5	
Hexachlorobutadiene	87-68-3	ug/L	< 5	< 5	< 5				< 5
Isopropylbenzene	98-82-8	ug/Kg				< 5	< 5	< 5	
Isopropylbenzene	98-82-8	ug/L	< 5	< 5	< 5				< 5
M&P-Xylene Isomers	MPXYL	ug/Kg				< 5	< 5	< 5	
M&P-Xylene Isomers	MPXYL	ug/L	< 5	< 5	< 5				< 5
Methylene Chloride	75-09-2	ug/Kg				1.6 B	2.8	< 5	
Methylene Chloride	75-09-2	ug/L	1.1 B	1.4 B	< 5				2.8 J
N-Butylbenzene	104-51-8	ug/Kg				< 5	< 5	< 5	
N-Butylbenzene	104-51-8	ug/L	< 5	< 5	< 5				< 5
N-Propylbenzene	103-65-1	ug/Kg				< 5	< 5	< 5	
N-Propylbenzene	103-65-1	ug/L	< 5	< 5	< 5				< 5
Naphthalene	91-20-3	ug/Kg				< 5	< 5	< 5	
Naphthalene	91-20-3	ug/L	< 5	< 5	< 5				< 5
O-Xylene	95-47-6	ug/Kg				< 5	< 5	< 5	
O-Xylene	95-47-6	ug/L	< 5	< 5	< 5				< 5
P-Isopropyltoluene	99-87-6	ug/Kg				< 5	< 5	< 5	
P-Isopropyltoluene	99-87-6	ug/L	< 5	< 5	< 5				< 5
Sec-Butylbenzene	135-98-8	ug/Kg				< 5	< 5	< 5	
Sec-Butylbenzene	135-98-8	ug/L	< 5	< 5	< 5				< 5
Styrene	100-42-5	ug/Kg				< 5	< 5	< 5	
Styrene	100-42-5	ug/L	< 5	< 5	< 5				< 5
Bromofluorobenzene (Surrogate)	460-00-4	% REC	97	102	100	101	103	98	98
d4-1,2-Dichloroethane (Surrogate)	17060070	% REC	106	108	102	113	102	100	109
d8-Toluene (Surrogate)	2037265	% REC	99	100	99	96	101	97	97
Tert-Butylbenzene	98-06-6	ug/Kg				< 5	< 5	< 5	

Batch ID. REQ93128 Facility: VALMONT
Passed analyst data review

Analyte:	CAS Number:	Units:	Sample Number:						
			93091701 SAM	93091702 SAM	93091704 SAM	93091705 SAM	93091706 SAM	93091707 SAM	93091708 TRP
Tert-Butylbenzene	98-06-6	ug/L	< 5	< 5	< 5				< 5
Tetrachloroethene	127-18-4	ug/Kg				< 5	< 5	< 5	
Tetrachloroethene	127-18-4	ug/L	< 5	< 5	< 5				
Toluene	108-88-3	ug/Kg				< 5	< 5	< 5	
Toluene	108-88-3	ug/L	8	< 5	< 5				< 5
Trans-1,2-Dichloroethene	156-60-5	ug/Kg				< 5	< 5	< 5	
Trans-1,2-Dichloroethene	156-60-5	ug/L	< 5	< 5	< 5				< 5
Trans-1,3-Dichloropropene	10061-02-6	ug/Kg				< 5	< 5	< 5	
Trans-1,3-Dichloropropene	10061-02-6	ug/L	< 5	< 5	< 5				< 5
Trichloroethene	79-01-6	ug/Kg				< 5	< 5	21.8	
Trichloroethene	79-01-6	ug/L	592	330	< 5				< 5
Trichlorofluoromethane	75-69-4	ug/Kg				< 5	< 5	< 5	
Trichlorofluoromethane	75-69-4	ug/L	< 5	< 5	< 5				< 5
Vinyl Acetate	108-05-4	ug/Kg				< 5	< 5	< 5	
Vinyl Acetate	108-05-4	ug/L	< 5	< 5	< 5				< 5
Vinyl Chloride	75-01-4	ug/Kg				< 5	< 5	< 5	
Vinyl Chloride	75-01-4	ug/L	< 5	< 5	< 5				< 5

25

U.S. EPA Region III
Central Regional Laboratory
Annapolis, Md. 21401
10/19/93

DRAFT

CUSTODIAN COUNT REPORT FOR REQUEST REQ93128

Sample	Reported Tests	Assigned Tests
93091601	1	1
93091602	1	1
93091603	1	1
93091604	1	1
93091605	1	1
93091606	1	1
93091607	1	1
93091608	1	1
93091609	1	1
93091610	1	1
93091611	1	1
93091612	1	1
93091613	1	1
93091701	1	1
93091702	1	1
93091704	1	1
93091705	1	1
93091706	1	1
93091707	1	1
93091708	1	1

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA S-1A

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: 930916-01

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ033

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/21/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	UJ
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	10	UJ
75-09-2	Methylene Chloride	1.9	B
75-34-3	1,1-Dichloroethane	5.0	U
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

27

ORIGINAL (Red)

1A-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA S-1A

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: 930916-01

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ033

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/21/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	5.0	U
95-47-6	o-Xylene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

28

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA S-11A

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: 930916-02

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ034

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/21/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	UJ
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	3.0 ~~2.9 3R~~	J
75-09-2	Methylene Chloride	2.3	B
75-34-3	1,1-Dichloroethane	5.0	U
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	1.1	J
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

29

AR101060

FORM I VOA 1/87 Rev.

1A-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA S-11A

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: 930916-02

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ034

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/21/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	1.6	J
	m&p-Xylenes	1.2	J
95-47-6	o-Xylene	1.7	J
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	1.1	J
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	1.4	J
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	1.0	J
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	2.4	J
87-68-3	Hexachlorobutadiene	1.3	J
87-61-6	1,2,3-Trichlorobenzene	1.3	J

30

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA S-5A

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: **930916-03**

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ035

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/21/93

Column: (pack/cap) CAP **Dilution Factor: 1.0**

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	UJ
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	6.5	
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	22.5	J
75-09-2	Methylene Chloride	2.4	B
75-34-3	1,1-Dichloroethane	92.5	
156-60-5	Trans-1,2-Dichloroethene	1.2	J
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	197	*
78-93-3	2-Butanone	3.7	J
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	150	*
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	432	*
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

1A-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA S-5A

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: 930916-03

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ035

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/21/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	Tetrachloroethene	8.3	
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	457	*
95-47-6	o-Xylene	92.9	
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	15.1	
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	36.5	
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	58.5	
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	160	
135-98-8	sec-Butylbenzene	4.3	J
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	4.6	J
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	1.4	J
87-68-3	Hexachlorobutadiene	1.3	J
87-61-6	1,2,3-Trichlorobenzene	5.0	U

32

LE

FORM I VOA-2 1/87 Rev.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA MW-2

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-04

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ090

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not c c. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	UJ
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	2.9	J
75-15-0	Carbon Disulfide	2.3	J
67-64-1	Acetone	10	UJ
75-09-2	Methylene Chloride	1.6	B
75-34-3	1,1-Dichloroethane	5.0	U
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	2.6	J
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	69.3	
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	167	
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

1A-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
STA MW-2

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-04

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ090

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	5.0	U
95-47-6	o-Xylene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA MW-10A

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-05

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ091

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
75-71-8	Dichlorodifluoromethane	5.0	U	J
74-87-3	Chloromethane	5.0	U	
75-01-04	Vinyl Chloride	5.0	U	
74-83-9	Bromomethane	5.0	U	
75-00-3	Chloroethane	5.0	U	
75-69-4	Trichlorofluoromethane	5.0	U	
75-35-4	1,1-Dichloroethene	16.1		
75-15-0	Carbon Disulfide	5.0	U	
67-64-1	Acetone	10	U	J
75-09-2	Methylene Chloride	1.4	B	
75-34-3	1,1-Dichlor hane	23.0		
156-60-5	Trans-1,2-D loroethene	1.5	J	
108-05-4	Vinyl Aceta	5.0	U	
594-20-7	2,2-Dichloropropane	5.0	U	
156-59-2	Cis-1,2-Dichloroethene	167		
78-93-3	2-Butanone	10	U	
74-97-5	Bromochloromethane	5.0	U	
67-66-3	Chloroform	3.1	J	
71-55-6	1,1,1-Trichloroethane	126		
56-23-5	Carbon Tetrachloride	5.0	U	
563-58-6	1,1-Dichloro-1-propene	5.0	U	
71-43-2	Benzene	5.0	U	
107-06-2	1,2-Dichloroethane	5.0	U	
79-01-6	Trichloroethene	2600		*
78-87-5	1,2-Dichloropropane	5.0	U	
74-95-3	Dibromomethane	5.0	U	
75-274	Bromodichloromethane	5.0	U	
110-75-8	2-Chloroethylvinylether	5.0	U	J
10061-01-5	Cis-1,3-Dichloropropene	5.0	U	
108-10-1	4-Methyl-2-pentanone	10	U	
79-00-5	1,1,2-Trichloroethane	1.4	J	
108-88-3	Toluene	5.0	U	
10061-02-6	Trans-1,3-Dichloropropene	5.0	U	
591-78-6	2-Hexanone	10	U	

SAMPLE.

ORIGINAL (Red)

1A-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
STA MW-10A

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-05

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ091

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
127-18-4	Tetrachloroethene	5.0	U	
142-28-9	1,3-Dichloropropane	5.0	U	
124-48-1	Dibromochloromethane	5.0	U	
106-93-4	1,2-Dibromoethane (EDB)	5.0	U	
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	
108-90-7	Chlorobenzene	5.0	U	
100-41-4	Ethylbenzene	5.0	U	
100-42-5	Styrene	5.0	U	
	m&p-Xylenes	5.0	U	
95-47-6	o-Xylene	5.0	U	
75-25-2	Bromoform	5.0	U	
98-82-8	Isopropylbenzene	5.0	U	
108-86-1	Bromobenzene	5.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	
96-18-4	1,2,3-Trichloropropane	5.0	U	
103-65-1	n-Propylbenzene	5.0	U	
95-49-8	2-Chlorotoluene	5.0	U	
106-43-4	4-Chlorotoluene	5.0	U	
108-67-8	1,3,5-Trimethylbenzene	5.0	U	
98-06-6	tert-Butylbenzene	5.0	U	
95-63-6	1,2,4-Trimethylbenzene	5.0	U	
135-98-8	sec-Butylbenzene	5.0	U	
541-73-1	1,3-Dichlorobenzene	5.0	U	
106-46-7	1,4-Dichlorobenzene	5.0	U	
95-50-1	1,2-Dichlorobenzene	5.0	U	
99-87-6	p-Isopropyltoluene	5.0	U	
104-51-8	n-Butylbenzene	5.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U	
120-82-1	1,2,4-Trichlorobenzene	5.0	U	
91-20-3	Naphthalene	5.0	U	
87-68-3	Hexachlorobutadiene	5.0	U	
87-61-6	1,2,3-Trichlorobenzene	5.0	U	

36

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA MW-10D

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-06

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ092

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	UJ
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	2.3	J
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	10	UJ
75-09-2	Methylene Chloride	1.2	B
75-34-3	1,1-Dichloroethane	20.7	
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	137	
78-93-3	2-Butanone	3.7	J
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	1.3	J
71-55-6	1,1,1-Trichloroethane	14.9	
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	440	*
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

37

AR101068

* RESULT FROM 10X DILUTION OF SAMPLE.

1A-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
STA MW-10D

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-06

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ092

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	5.0	U
95-47-6	o-Xylene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

38

FORM I VOA 2 1/87 Rev.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA MW-11

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-07

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ093

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	UJ
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	187	*
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	10	UJ
75-09-2	Methylene Chloride	69.2	
75-34-3	1,1-Dichloroethane	166	*
156-60-5	Trans-1,2-Dichloroethene	6.4	
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	1050	**
78-93-3	2-Butanone	3.2	J
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	1.6	J
71-55-6	1,1,1-Trichloroethane	5630	**
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	3.4	J
79-01-6	Trichloroethene	17000	***
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10.5	
79-00-5	1,1,2-Trichloroethane	7.2	
108-88-3	Toluene	25.2	
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

39

AR101070

* FROM 50XDIL; *** RESULT FROM 500XDIL

FORM 1 VOA

1A-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA MW-11

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-07

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ093

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	7.7	
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	11.0	
95-47-6	o-Xylene	8.8	
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	3.3	J
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	1.5	J
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	1.6	J
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA MW-101A

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-08

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ094

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	UJ
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	16.4	
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	10	UJ
75-09-2	Methylene Chloride	1.8	B
75-34-3	1,1-Dichloroethane	23.1	
156-60-5	Trans-1,2-Dichloroethene	1.6	J
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	170	
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	3.0	J
71-55-6	1,1,1-Trichloroethane	129	
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	2620	*
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	1.6	J
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

OF THE SAMPLE.

1A-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA MW-101A

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-08

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ094

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	5.0	U
95-47-6	o-Xylene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

42

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA MW-10C

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-09

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ105

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/27/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	UJ
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	10	U
75-09-2	Methylene Chloride	1.7	B
75-34-3	1,1-Dichloroethane	5.0	U
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	2.2	B
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

43

AR101074

1A-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA MW-10C

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-09

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ105

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/27/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	5.0	U
95-47-6	o-Xylene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

44

AR101075

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA HW-1

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-10

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ095

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
75-71-8	Dichlorodifluoromethane		5.0	UJ
74-87-3	Chloromethane		5.0	U
75-01-04	Vinyl Chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
75-15-0	Carbon Disulfide		5.0	U
67-64-1	Acetone		10	UJ
75-09-2	Methylene Chloride		1.8	B
75-34-3	1,1-Dichloroethane		5.0	U
156-60-5	Trans-1,2-Dichloroethene		5.0	U
108-05-4	Vinyl Acetate		5.0	U
594-20-7	2,2-Dichloropropane		5.0	U
156-59-2	Cis-1,2-Dichloroethene		2.9	J
78-93-3	2-Butanone		10	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		30.1	
56-23-5	Carbon Tetrachloride		5.0	U
563-58-6	1,1-Dichloro-1-propene		5.0	U
71-43-2	Benzene		5.0	U
107-06-2	1,2-Dichloroethane		5.0	U
79-01-6	Trichloroethene		182	*
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-274	Bromodichloromethane		5.0	U
110-75-8	2-Chloroethylvinylether		5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		10	U
79-00-5	1,1,2-Trichloroethane		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	Trans-1,3-Dichloropropene		5.0	U
591-78-6	2-Hexanone		10	U

45

F THE SAMPLE.

1A-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA HW-1

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-10

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ095

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
127-18-4	Tetrachloroethene	5.0		U
142-28-9	1,3-Dichloropropane	5.0		U
124-48-1	Dibromochloromethane	5.0		U
106-93-4	1,2-Dibromoethane (EDB)	5.0		U
630-20-6	1,1,1,2-Tetrachloroethane	5.0		U
108-90-7	Chlorobenzene	5.0		U
100-41-4	Ethylbenzene	5.0		U
100-42-5	Styrene	5.0		U
	m&p-Xylenes	5.0		U
95-47-6	o-Xylene	5.0		U
75-25-2	Bromoform	5.0		U
98-82-8	Isopropylbenzene	5.0		U
108-86-1	Bromobenzene	5.0		U
79-34-5	1,1,2,2-Tetrachloroethane	5.0		U
96-18-4	1,2,3-Trichloropropane	5.0		U
103-65-1	n-Propylbenzene	5.0		U
95-49-8	2-Chlorotoluene	5.0		U
106-43-4	4-Chlorotoluene	5.0		U
108-67-8	1,3,5-Trimethylbenzene	5.0		U
98-06-6	tert-Butylbenzene	5.0		U
95-63-6	1,2,4-Trimethylbenzene	5.0		U
135-98-8	sec-Butylbenzene	5.0		U
541-73-1	1,3-Dichlorobenzene	5.0		U
106-46-7	1,4-Dichlorobenzene	5.0		U
95-50-1	1,2-Dichlorobenzene	5.0		U
99-87-6	p-Isopropyltoluene	5.0		U
104-51-8	n-Butylbenzene	5.0		U
96-12-8	1,2-Dibromo-3-chloropropane	5.0		U
120-82-1	1,2,4-Trichlorobenzene	5.0		U
91-20-3	Naphthalene	5.0		U
87-68-3	Hexachlorobutadiene	5.0		U
87-61-6	1,2,3-Trichlorobenzene	5.0		U

46

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA FB-1

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-11

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ089

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	UJ
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	10	UJ
75-09-2	Methylene Chloride	1.3	J
75-34-3	1,1-Dichloroethane	5.0	U
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

47

1A-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
STA FB-1

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-11

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ089

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	5.0	U
95-47-6	o-Xylene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA TB-1

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-12

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ087

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	UJ
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	10	UJ
75-09-2	Methylene Chloride	3.5	J
75-34-3	1,1-Dichloroethane	5.0	U
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

49

1A-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
STA TB-1

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930916-12

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ087

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
127-18-4	Tetrachloroethene	5.0	U	
142-28-9	1,3-Dichloropropane	5.0	U	
124-48-1	Dibromochloromethane	5.0	U	
106-93-4	1,2-Dibromoethane (EDB)	5.0	U	
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	
108-90-7	Chlorobenzene	5.0	U	
100-41-4	Ethylbenzene	5.0	U	
100-42-5	Styrene	5.0	U	
	m&p-Xylenes	5.0	U	
95-47-6	o-Xylene	5.0	U	
75-25-2	Bromoform	5.0	U	
98-82-8	Isopropylbenzene	5.0	U	
108-86-1	Bromobenzene	5.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	
96-18-4	1,2,3-Trichloropropane	5.0	U	
103-65-1	n-Propylbenzene	5.0	U	
95-49-8	2-Chlorotoluene	5.0	U	
106-43-4	4-Chlorotoluene	5.0	U	
108-67-8	1,3,5-Trimethylbenzene	5.0	U	
98-06-6	tert-Butylbenzene	5.0	U	
95-63-6	1,2,4-Trimethylbenzene	5.0	U	
135-98-8	sec-Butylbenzene	5.0	U	
541-73-1	1,3-Dichlorobenzene	5.0	U	
106-46-7	1,4-Dichlorobenzene	5.0	U	
95-50-1	1,2-Dichlorobenzene	5.0	U	
99-87-6	p-Isopropyltoluene	5.0	U	
104-51-8	n-Butylbenzene	5.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U	
120-82-1	1,2,4-Trichlorobenzene	5.0	U	
91-20-3	Naphthalene	5.0	U	
87-68-3	Hexachlorobutadiene	5.0	U	
87-61-6	1,2,3-Trichlorobenzene	5.0	U	

50

AR101081

[redacted]

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA S-7 5X

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: 930916-13 5XDIL

Initial analyses

Sample wt/vol: ~~5.0~~ sR 1.0 (g/ml) G Lab File ID: >JJ036

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/21/93

Column: (pack/cap) CAP Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	25	U
74-87-3	Chloromethane	25	U
75-01-04	Vinyl Chloride	25	U
74-83-9	Bromomethane	25	UJ
75-00-3	Chloroethane	25	U
75-69-4	Trichlorofluoromethane	25	U
75-35-4	1,1-Dichloroethene	25	U
75-15-0	Carbon Disulfide	25	U
67-64-1	Acetone	1410	*
75-09-2	Methylene Chloride	10.~~7~~8	B
75-34-3	1,1-Dichloroethane	25 sR	U
156-60-5	Trans-1,2-Dichloroethene	25	U
108-05-4	Vinyl Acetate	25	U
594-20-7	2,2-Dichloropropane	25	U
156-59-2	Cis-1,2-Dichloroethene	33.8	
78-93-3	2-Butanone	105	
74-97-5	Bromochloromethane	25	U
67-66-3	Chloroform	25	U
71-55-6	1,1,1-Trichloroethane	7.2	J
56-23-5	Carbon Tetrachloride	25	U
563-58-6	1,1-Dichloro-1-propene	25	U
71-43-2	Benzene	25	U
107-06-2	1,2-Dichloroethane	25	U
79-01-6	Trichloroethene	25	U
78-87-5	1,2-Dichloropropane	25	U
74-95-3	Dibromomethane	25	U
75-274	Bromodichloromethane	25	U
110-75-8	2-Chloroethylvinylether	25	UJ
10061-01-5	Cis-1,3-Dichloropropene	25	U
108-10-1	4-Methyl-2-pentanone	50	U
79-00-5	1,1,2-Trichloroethane	25	U sR
108-88-3	Toluene	20.1	~~J~~ K I
10061-02-6	Trans-1,3-Dichloropropene	25	U
591-78-6	2-Hexanone	50	U

51

UM LEVEL DILUTION

1A-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA S-7

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: 930916-13

Initial analysis

Sample wt/vol: ~~5.0~~ 1.0 SR (g/ml) G Lab File ID: >JJ036

5X DIL SR

Level: (low/med) LOW Date Received: 09/16/93

% Moisture: not dec. N/A Date Analyzed: 09/21/93

Column: (pack/cap) CAP Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg		Q
127-18-4	Tetrachloroethene	25	U	
142-28-9	1,3-Dichloropropane	25	U	
124-48-1	Dibromochloromethane	25	U	
106-93-4	1,2-Dibromoethane (EDB)	25	U	
630-20-6	1,1,1,2-Tetrachloroethane	25	U	
108-90-7	Chlorobenzene	25	U	
100-41-4	Ethylbenzene	25	U	
100-42-5	Styrene	25	U SR	
	m&p-Xylenes	17.9	~~JK~~ SR	~~I~~
95-47-6	o-Xylene	7.2	~~JK~~	I
75-25-2	Bromoform	25	U	
98-82-8	Isopropylbenzene	25	U	
108-86-1	Bromobenzene	25	U	
79-34-5	1,1,2,2-Tetrachloroethane	25	U	
96-18-4	1,2,3-Trichloropropane	25	U	
103-65-1	n-Propylbenzene	25	U	
95-49-8	2-Chlorotoluene	25	U	
106-43-4	4-Chlorotoluene	25	U	
108-67-8	1,3,5-Trimethylbenzene	20.4	~~JK~~ SR	II
98-06-6	tert-Butylbenzene	25	U	
95-63-6	1,2,4-Trimethylbenzene	22	JK SR	II
135-98-8	sec-Butylbenzene	25	U	
541-73-1	1,3-Dichlorobenzene	25	U	
106-46-7	1,4-Dichlorobenzene	25	U	
95-50-1	1,2-Dichlorobenzene	25	U	
99-87-6	p-Isopropyltoluene	25	U	
104-51-8	n-Butylbenzene	25	U	
96-12-8	1,2-Dibromo-3-chloropropane	25	U	
120-82-1	1,2,4-Trichlorobenzene	25	U	
91-20-3	Naphthalene	25	U	
87-68-3	Hexachlorobutadiene	25	U	
87-61-6	1,2,3-Trichlorobenzene	25	U	

52

AR101083

FORM I VOA-2 1/87 Rev.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA HW-3

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930917-01

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ096

Level: (low/med) LOW Date Received: 09/17/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	UJ
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	2.0	J
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	10	UJ
75-09-2	Methylene Chloride	1.1	B
75-34-3	1,1-Dichloroethane	1.4	J
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	7.8	
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	59.2	
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	592	*
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	8.0	
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

53

1A-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA HW-3

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930917-01

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ096

Level: (low/med) LOW Date Received: 09/17/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	5.0	U
95-47-6	o-Xylene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA HW-2

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930917-02

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ106

Level: (low/med) LOW Date Received: 09/17/93

% Moisture: not dec. N/A Date Analyzed: 09/27/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	UJ
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	1.9	J
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	10	U
75-09-2	Methylene Chloride	1.4	B
75-34-3	1,1-Dichloroethane	1.3	J
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	8.8	
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	52.5	
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	330	*
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

55

SAMPLE.

1A-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA HW-2

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930917-02

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ106

Level: (low/med) LOW Date Received: 09/17/93

% Moisture: not dec. N/A Date Analyzed: 09/27/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
127-18-4	Tetrachloroethene	5.0	U	
142-28-9	1,3-Dichloropropane	5.0	U	
124-48-1	Dibromochloromethane	5.0	U	
106-93-4	1,2-Dibromoethane (EDB)	5.0	U	
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	
108-90-7	Chlorobenzene	5.0	U	
100-41-4	Ethylbenzene	5.0	U	
100-42-5	Styrene	5.0	U	
	m&p-Xylenes	5.0	U	
95-47-6	o-Xylene	5.0	U	
75-25-2	Bromoform	5.0	U	
98-82-8	Isopropylbenzene	5.0	U	
108-86-1	Bromobenzene	5.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	
96-18-4	1,2,3-Trichloropropane	5.0	U	
103-65-1	n-Propylbenzene	5.0	U	
95-49-8	2-Chlorotoluene	5.0	U	
106-43-4	4-Chlorotoluene	5.0	U	
108-67-8	1,3,5-Trimethylbenzene	5.0	U	
98-06-6	tert-Butylbenzene	5.0	U	
95-63-6	1,2,4-Trimethylbenzene	5.0	U	
135-98-8	sec-Butylbenzene	5.0	U	
541-73-1	1,3-Dichlorobenzene	5.0	U	
106-46-7	1,4-Dichlorobenzene	5.0	U	
95-50-1	1,2-Dichlorobenzene	5.0	U	
99-87-6	p-Isopropyltoluene	5.0	U	
104-51-8	n-Butylbenzene	5.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U	
120-82-1	1,2,4-Trichlorobenzene	5.0	U	
91-20-3	Naphthalene	5.0	U	
87-68-3	Hexachlorobutadiene	5.0	U	
87-61-6	1,2,3-Trichlorobenzene	5.0	U	

56

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA MW-3

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930917-04

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ104

Level: (low/med) LOW Date Received: 09/17/93

% Moisture: not dec. N/A Date Analyzed: 09/27/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	UJ
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	10	U
75-09-2	Methylene Chloride	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	2.0	B
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

57

1A-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA MW-3

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930917-04

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ104

Level: (low/med) LOW Date Received: 09/17/93

% Moisture: not dec. N/A Date Analyzed: 09/27/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
127-18-4	Tetrachloroethene	5.0	U	
142-28-9	1,3-Dichloropropane	5.0	U	
124-48-1	Dibromochloromethane	5.0	U	
106-93-4	1,2-Dibromoethane (EDB)	5.0	U	
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	
108-90-7	Chlorobenzene	5.0	U	
100-41-4	Ethylbenzene	5.0	U	
100-42-5	Styrene	5.0	U	
	m&p-Xylenes	5.0	U	
95-47-6	o-Xylene	5.0	U	
75-25-2	Bromoform	5.0	U	
98-82-8	Isopropylbenzene	5.0	U	
108-86-1	Bromobenzene	5.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	
96-18-4	1,2,3-Trichloropropane	5.0	U	
103-65-1	n-Propylbenzene	5.0	U	
95-49-8	2-Chlorotoluene	5.0	U	
106-43-4	4-Chlorotoluene	5.0	U	
108-67-8	1,3,5-Trimethylbenzene	5.0	U	
98-06-6	tert-Butylbenzene	5.0	U	
95-63-6	1,2,4-Trimethylbenzene	5.0	U	
135-98-8	sec-Butylbenzene	5.0	U	
541-73-1	1,3-Dichlorobenzene	5.0	U	
106-46-7	1,4-Dichlorobenzene	5.0	U	
95-50-1	1,2-Dichlorobenzene	5.0	U	
99-87-6	p-Isopropyltoluene	5.0	U	
104-51-8	n-Butylbenzene	5.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U	
120-82-1	1,2,4-Trichlorobenzene	5.0	U	
91-20-3	Naphthalene	5.0	U	
87-68-3	Hexachlorobutadiene	5.0	U	
87-61-6	1,2,3-Trichlorobenzene	5.0	U	

58

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA S-5

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: 930917-05

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ049

Level: (low/med) LOW Date Received: 09/17/93

% Moisture: not dec. N/A Date Analyzed: 09/23/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	13.8	
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	10	U
75-09-2	Methylene Chloride	1.6	B
75-34-3	1,1-Dichloroethane	5.0	U
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	3.1	J
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

59

FORM I VOA 1/87 Rev.

1A-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA S-5

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: 930917-05

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ049

Level: (low/med) LOW Date Received: 09/17/93

% Moisture: not dec. N/A Date Analyzed: 09/23/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	5.0	U
95-47-6	o-Xylene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

60

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA S-6

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: 930917-06

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ050

Level: (low/med) LOW Date Received: 09/17/93

% Moisture: not dec. N/A Date Analyzed: 09/23/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	13.9	
75-09-2	Methylene Chloride	2.0	B
75-34-3	1,1-Dichloroethane	5.0	U
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	1.6	J
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	6.0	
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

6/

AR101092

FORM I VOA 1/87 Rev.

1A-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
STA S-6

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: 930917-06

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ050

Level: (low/med) LOW Date Received: 09/17/93

% Moisture: not dec. N/A Date Analyzed: 09/23/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	5.0	U
95-47-6	o-Xylene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

62

AR101093

FORM I VOA-2 1/87 Rev.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA S-6A

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: 930917-07

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ043

Level: (low/med) LOW Date Received: 09/17/93

% Moisture: not dec. N/A Date Analyzed: 09/22/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	3.9	B
75-09-2	Methylene Chloride	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	2.5	J
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	15.4	
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	21.8	
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

63

AR101094

FORM I VOA 1/87 Rev.

1A-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA S-6A

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: 930917-07-

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ043

Level: (low/med) LOW Date Received: 09/17/93

% Moisture: not dec. N/A Date Analyzed: 09/22/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	5.0	U
95-47-6	o-Xylene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

64

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA TB-2

ab Name: EPA REGION III CRL Contract: LOCKHEED

ab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

atrix: (soil/water) WATER Lab Sample ID: 930917-08

ample wt/vol: 5 (g/ml) ML Lab File ID: >JJ088

evel: (low/med) LOW Date Received: 09/17/93

Moisture: not dec. N/A Date Analyzed: 09/25/93

olumn: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	UJ
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	10	UJ
75-09-2	Methylene Chloride	2.8	J
75-34-3	1,1-Dichloroethane	5.0	U
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

65

AR101096

FORM I VOA 1/87 Re

1A-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STA T8-2

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: 930917-08

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ088

Level: (low/med) LOW Date Received: 09/17/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	5.0	U
95-47-6	o-Xylene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

66

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LRB 9/21/93

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: LRB 9/21/93

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ032

Level: (low/med) LOW Date Received: 09/21/93

% Moisture: not dec. N/A Date Analyzed: 09/21/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	UJ
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	10	UJ
75-09-2	Methylene Chloride	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

67

AR101098

FORM I VOA 1/87 Rev.

1A-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LRB 9/21/93

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: LRB 9/21/93

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ032

Level: (low/med) LOW Date Received: 09/21/93

% Moisture: not dec. N/A Date Analyzed: 09/21/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	5.0	U
95-47-6	o-Xylene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

68

[redacted]

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LRB 9/22/93

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: LRB 9/22/93

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ042

Level: (low/med) LOW Date Received: 09/22/93

% Moisture: not dec. N/A Date Analyzed: 09/22/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	3.8	J
75-09-2	Methylene Chloride	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

69

FORM I VOA 1/87 Rev.

1A-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LRB 9/22/93

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: LRB 9/22/93

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ042

Level: (low/med) LOW Date Received: 09/22/93

% Moisture: not dec. N/A Date Analyzed: 09/22/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	5.0	U
95-47-6	o-Xylene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

70

[redacted]

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LRB 9/23/93

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: LRB 9/23/93

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ047

Level: (low/med) LOW Date Received: 09/23/93

% Moisture: not dec. N/A Date Analyzed: 09/23/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	10	U
75-09-2	Methylene Chloride	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

7/

1A-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LRB 9/23/93

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: LRB 9/23/93

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ047

Level: (low/med) LOW Date Received: 09/23/93

% Moisture: not dec. N/A Date Analyzed: 09/23/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	5.0	U
95-47-6	o-Xylene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

72

[redacted]

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LRB 9/24/93

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: LRB 9/24/93

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ064

Level: (low/med) LOW Date Received: 09/24/93

% Moisture: not dec. N/A Date Analyzed: 09/24/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	UJ
75-35-4	1,1-Dichloroethene	5.0	U
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	10	U
75-09-2	Methylene Chloride	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
156-60	[illegible]ans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	3.7	J
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	UJ
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	UJ
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	UJ

1A-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LRB 9/24/93

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: LRB 9/24/93

Sample wt/vol: 5.0 (g/ml) G Lab File ID: >JJ064

Level: (low/med) LOW Date Received: 09/24/93

% Moisture: not dec. N/A Date Analyzed: 09/24/93

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	5.0	U
95-47-6	o-Xylene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

74

[redacted]

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LRB 9/25/93

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: LRB 9/25/93

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ086

Level: (low/med) LOW Date Received: 09/25/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
75-71-8	Dichlorodifluoromethane		5.0	UJ
74-87-3	Chloromethane		5.0	U
75-01-04	Vinyl Chloride		5.0	U
74-83-9	Bromomethane		5.0	U
75-00-3	Chloroethane		5.0	U
75-69-4	Trichlorofluoromethane		5.0	U
75-35-4	1,1-Dichloroethene		5.0	U
75-15-0	Carbon Disulfide		5.0	U
67-64-1	Acetone		10	UJ
75-09-2	Methylene Chloride		5.0	U
75-34-3	1,1-Dichloroethane		5.0	U
156-60-5	Trans-1,2-Dichloroethene		5.0	U
108-05-4	Vinyl Acetate		5.0	U
594-20-7	2,2-Dichloropropane		5.0	U
156-59-2	Cis-1,2-Dichloroethene		5.0	U
78-93-3	2-Butanone		10	U
74-97-5	Bromochloromethane		5.0	U
67-66-3	Chloroform		5.0	U
71-55-6	1,1,1-Trichloroethane		5.0	U
56-23-5	Carbon Tetrachloride		5.0	U
563-58-6	1,1-Dichloro-1-propene		5.0	U
71-43-2	Benzene		5.0	U
107-06-2	1,2-Dichloroethane		5.0	U
79-01-6	Trichloroethene		5.0	U
78-87-5	1,2-Dichloropropane		5.0	U
74-95-3	Dibromomethane		5.0	U
75-274	Bromodichloromethane		5.0	U
110-75-8	2-Chloroethylvinylether		5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene		5.0	U
108-10-1	4-Methyl-2-pentanone		10	U
79-00-5	1,1,2-Trichloroethane		5.0	U
108-88-3	Toluene		5.0	U
10061-02-6	Trans-1,3-Dichloropropene		5.0	U
591-78-6	2-Hexanone		10	U

75

1A-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LRB 9/25/93

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: LRB 9/25/93sa

Sample wt/vol: 25 (g/ml) ML Lab File ID: >JJ086

Level: (low/med) LOW Date Received: 09/25/93

% Moisture: not dec. N/A Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	5.0	U
95-47-6	o-Xylene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

76

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LRB 9/27/93

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: LRB 9/27/93

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ103

Level: (low/med) LOW Date Received: 09/27/93

% Moisture: not dec. N/A Date Analyzed: 09/27/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
75-71-8	Dichlorodifluoromethane	5.0		UJ
74-87-3	Chloromethane	5.0		U
75-01-04	Vinyl Chloride	5.0		U
74-83-9	Bromomethane	5.0		U
75-00-3	Chloroethane	5.0		U
75-69-4	Trichlorofluoromethane	5.0		U
75-35-4	1,1-Dichloroethene	5.0		U
75-15-0	Carbon Disulfide	5.0		U
67-64-1	Acetone	10		U
75-09-2	Methylene Chloride	1.3		J
75-34-3	1,1-Dichloroethane	5.0		U
156-60-5	Trans-1,2-Dichloroethene	5.0		U
108-05-4	Vinyl Acetate	5.0		U
594-20-7	2,2-Dichloropropane	5.0		U
156-59-2	Cis-1,2-Dichloroethene	5.0		U
78-93-3	2-Butanone	10		U
74-97-5	Bromochloromethane	5.0		U
67-66-3	Chloroform	5.0		U
71-55-6	1,1,1-Trichloroethane	1.6		J
56-23-5	Carbon Tetrachloride	5.0		U
563-58-6	1,1-Dichloro-1-propene	5.0		U
71-43-2	Benzene	5.0		U
107-06-2	1,2-Dichloroethane	5.0		U
79-01-6	Trichloroethene	5.0		U
78-87-5	1,2-Dichloropropane	5.0		U
74-95-3	Dibromomethane	5.0		U
75-274	Bromodichloromethane	5.0		U
110-75-8	2-Chloroethylvinylether	5.0		UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0		U
108-10-1	4-Methyl-2-pentanone	10		U
79-00-5	1,1,2-Trichloroethane	5.0		U
108-88-3	Toluene	5.0		U
10061-02-6	Trans-1,3-Dichloropropene	5.0		U
591-78-6	2-Hexanone	10		U

77

AR101108

1A-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LRB 9/27/93

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: LRB 9/27/93

Sample wt/vol: 5 (g/ml) ML Lab File ID: >JJ103

Level: (low/med) LOW Date Received: 09/17/93

% Moisture: not dec. N/A Date Analyzed: 09/27/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
127-18-4	Tetrachloroethene	5.0	U	
142-28-9	1,3-Dichloropropane	5.0	U	
124-48-1	Dibromochloromethane	5.0	U	
106-93-4	1,2-Dibromoethane (EDB)	5.0	U	
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U	
108-90-7	Chlorobenzene	5.0	U	
100-41-4	Ethylbenzene	5.0	U	
100-42-5	Styrene	5.0	U	
	m&p-Xylenes	5.0	U	
95-47-6	o-Xylene	5.0	U	
75-25-2	Bromoform	5.0	U	
98-82-8	Isopropylbenzene	5.0	U	
108-86-1	Bromobenzene	5.0	U	
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U	
96-18-4	1,2,3-Trichloropropane	5.0	U	
103-65-1	n-Propylbenzene	5.0	U	
95-49-8	2-Chlorotoluene	5.0	U	
106-43-4	4-Chlorotoluene	5.0	U	
108-67-8	1,3,5-Trimethylbenzene	5.0	U	
98-06-6	tert-Butylbenzene	5.0	U	
95-63-6	1,2,4-Trimethylbenzene	5.0	U	
135-98-8	sec-Butylbenzene	5.0	U	
541-73-1	1,3-Dichlorobenzene	5.0	U	
106-46-7	1,4-Dichlorobenzene	5.0	U	
95-50-1	1,2-Dichlorobenzene	5.0	U	
99-87-6	p-Isopropyltoluene	5.0	U	
104-51-8	n-Butylbenzene	5.0	U	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U	
120-82-1	1,2,4-Trichlorobenzene	5.0	U	
91-20-3	Naphthalene	5.0	U	
87-68-3	Hexachlorobutadiene	5.0	U	
87-61-6	1,2,3-Trichlorobenzene	5.0	U	

78

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LRB9/29/93

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: LRB9/29/93

Sample wt/vol: 5 (g/ml) ML Lab File ID: >A1759

Level: (low/med) LOW Date Received: 09/29/93

% Moisture: not dec. N/A Date Analyzed: 09/29/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	UJ
74-87-3	Chloromethane	5.0	U
75-01-04	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	UJ
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	10	U
75-09-2	Methylene Chloride	1.1	J
75-34-3	1,1-Dichloroethane	5.0	U
156-60-5	Trans-1,2-Dichloroethene	5.0	U
108-05-4	Vinyl Acetate	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	Cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	10	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
563-58-6	1,1-Dichloro-1-propene	5.0	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-274	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethylvinylether	5.0	UJ
10061-01-5	Cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	10	U
79-00-5	1,1,2-Trichloroethane	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	Trans-1,3-Dichloropropene	5.0	U
591-78-6	2-Hexanone	10	U

79

AR101110

ORIGINAL (Red)

1A-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LRB9/29/93

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) WATER Lab Sample ID: LRB9/29/93

Sample wt/vol: 5 (g/ml) ML Lab File ID: >A1759

Level: (low/med) LOW Date Received: 09/29/93

% Moisture: not dec. N/A Date Analyzed: 09/29/93

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane (EDB)	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
100-41-4	Ethylbenzene	5.0	U
100-42-5	Styrene	5.0	U
	m&p-Xylenes	5.0	U
95-47-6	o-Xylene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
108-86-1	Bromobenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
99-87-6	p-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

80

J Kaupuk 9/15/93

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: ESAT Case No.: CBVOA3 SAS No.: N/A SDG No.: N/A

Lab File ID: >JJ001 BFB Injection Date: 9/15/93

Instrument ID: EPA ANN1 BFB Injection Time: 16:09

Matrix: (soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.9
75	30.0 - 60.0% of mass 95	51.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	70.3
175	5.0 - 9.0% of mass 174	5.4 (7.7)1
176	95.0 - 101.0% of mass 174	68.5 (97.5)1
177	5.0 - 9.0% of mass 176	4.6 (6.7)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VOA 10 STD	VOA 10 STD	>JJ003	09/15/93	17:56
02	VOA 20 STD	VOA 20 STD	>JJ004	09/15/93	18:49
03	VOA 50 STD	VOA 50 STD	>JJ006	09/15/93	20:36
04	VOA 100STD	VOA 100STD	>JJ007	09/15/93	21:30
05	VOA 200STD	VOA 200STD	>JJ008	09/15/93	22:23
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18			81		
19					
20					
21					

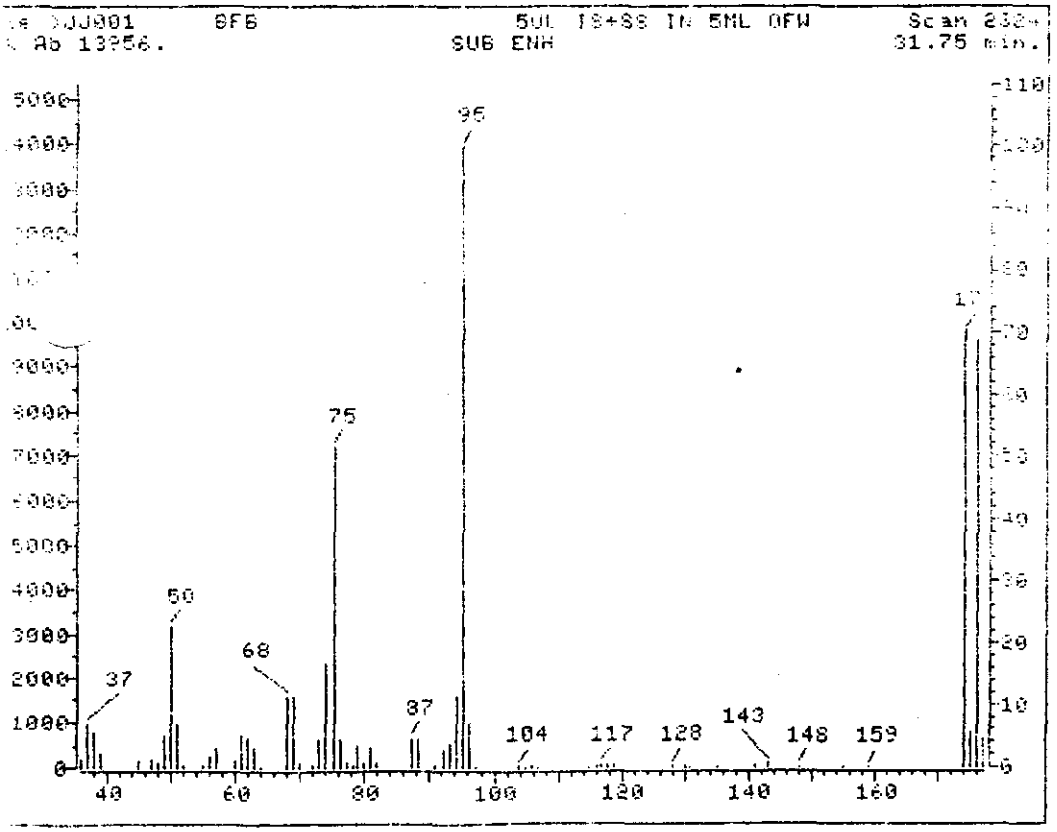
L Kaufman
9/15/93

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	22.86	22.86	Ok
75	30-60% of mass 95	51.58	51.58	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.72	6.72	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	70.27	70.27	Ok
175	5-9% of mass 174	5.39	7.67	Ok
176	95-101% of mass 174	68.54	97.54	Ok
177	5-9% of mass 176	4.60	6.71	Ok

Injection Date: 09/15/93
Injection Time: 16:09
Data File: >JJ001
Scan: 2324



82

S Rampuk 9/16/93

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: Case No.: CBVOA5 SAS No.: N/A SDG No.: N/A

Lab File ID: >JJ010 (Heated) BFB Injection Date: 9/16/93

Instrument ID: EPA ANN1 BFB Injection Time: 15:41

Matrix: (soil/water) SOIL Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.2
75	30.0 - 60.0% of mass 95	54.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	73.7
175	5.0 - 9.0% of mass 174	5.5 (7.5)1
176	95.0 - 101.0% of mass 174	73.7 (100.0)1
177	5.0 - 9.0% of mass 176	4.8 (6.5)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

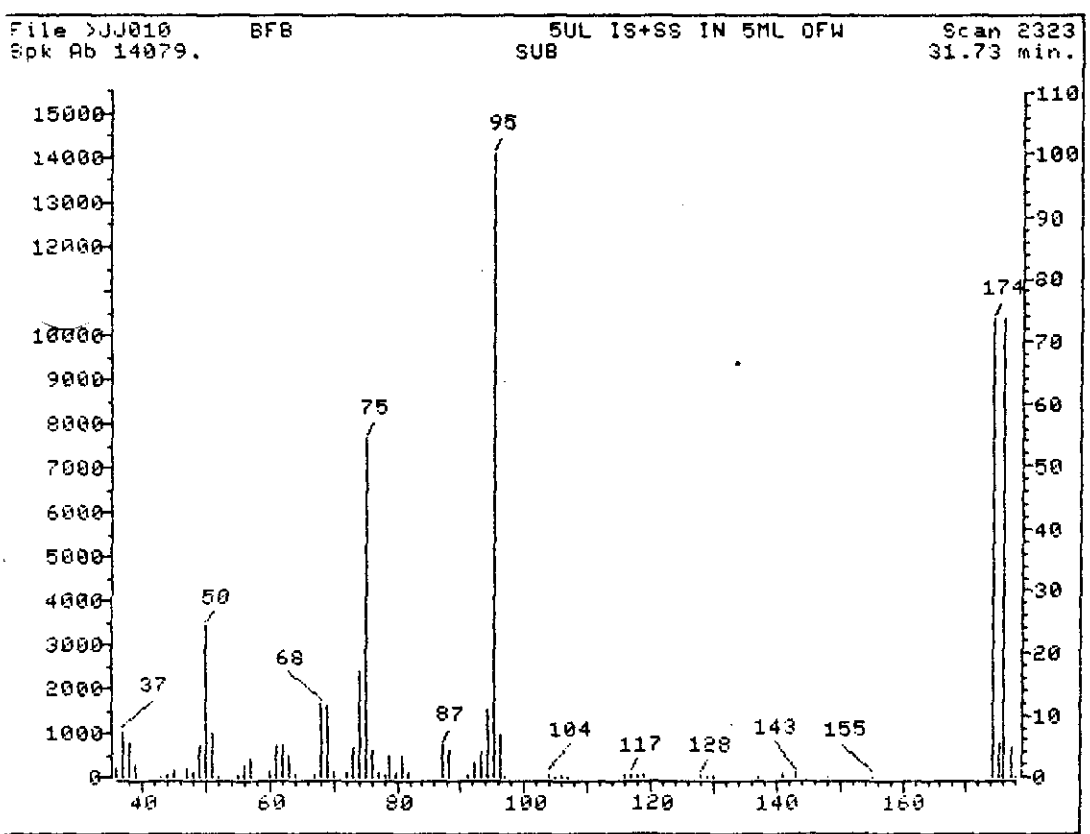
	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VOA 50 STD	VOA 50 STD	>JJ011	09/16/93	16:35
02	VOA 10 STD	VOA 10 STD	>JJ012	09/16/93	17:29
03	VOA 20 STD	VOA 20 STD	>JJ013	09/16/93	18:23
04	VOA 200STD	VOA 200STD	>JJ014	09/16/93	19:17
05	VOA 100STD	VOA 100STD	>JJ015	09/16/93	20:10
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19			83		
20					
21					
22					

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	24.25	24.25	Ok
75	30-60% of mass 95	54.44	54.44	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.88	6.88	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	73.71	73.71	Ok
175	5-9% of mass 174	5.50	7.47	Ok
176	95-101% of mass 174	73.70	99.98	Ok
177	5-9% of mass 176	4.79	6.50	Ok

Injection Date: 09/16/93
Injection Time: 15:41
Data File: >JJ010
Scan: 2323



84

9/21/93
S Rampuk

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: Case No.: CBVOA5 SAS No.: N/A SDG No.: N/A

Lab File ID: >JJ030 BFB Injection Date: 9/21/93

Instrument ID: EPA ANN1 BFB Injection Time: 8:09

Matrix: (soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.3
75	30.0 - 60.0% of mass 95	50.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	70.0
175	5.0 - 9.0% of mass 174	5.7 (8.1)1
176	95.0 - 101.0% of mass 174	70.1 (100.0)1
177	5.0 - 9.0% of mass 176	4.7 (6.7)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VOA 50 STD	VOA 50 STD	>JJ031	09/21/93	09:02
02	LRB 9/21/9	LRB 9/21/93	>JJ032	09/21/93	10:28
03	930916-01	STA S-1A	>JJ033	09/21/93	11:38
04	930916-02	STA S-11A	>JJ034	09/21/93	12:30
05	930916-03	STA S-5A	>JJ035	09/21/93	13:23
06	916-13 5X	STA S-7	>JJ036	09/21/93	14:16
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18			85		
19					
20					
21					

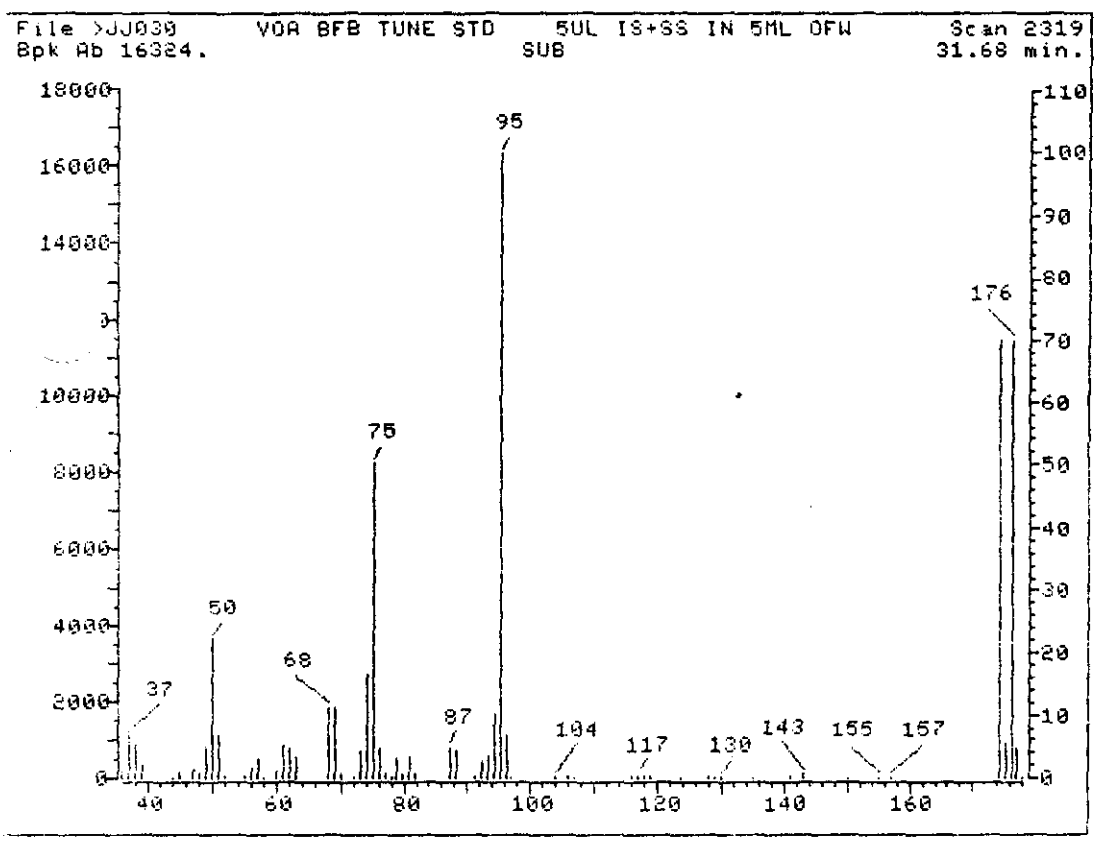
J Rau
9/21/93
Valmont

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	22.28	22.28	Ok
75	30-60% of mass 95	50.28	50.28	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.87	6.87	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	70.03	70.03	Ok
175	5-9% of mass 174	5.65	8.07	Ok
176	95-101% of mass 174	70.06	100.04	Ok
177	5-9% of mass 176	4.66	6.65	Ok

Injection Date: 09/21/93
Injection Time: 08:09
Data File: >JJ030
Scan: 2319



86

[redacted]

J. Rempfer

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Lab File ID: >JJ040 BFB Injection Date: 9/22/93

Instrument ID: EPA ANN1 BFB Injection Time: 6:58

Matrix: (soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.5
75	30.0 - 60.0% of mass 95	51.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	69.8
175	5.0 - 9.0% of mass 174	5.5 (7.8)1
176	95.0 - 101.0% of mass 174	68.7 (98.5)1
177	5.0 - 9.0% of mass 176	4.5 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VOA 50 STD	VOA 50 STD	>JJ041	09/22/93	07:42
02	LRB 9/22/9	LRB 9/22/93	>JJ042	09/22/93	09:09
03	930917-07	STA S-6A	>JJ043	09/22/93	10:11
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19			87		
20					
21					

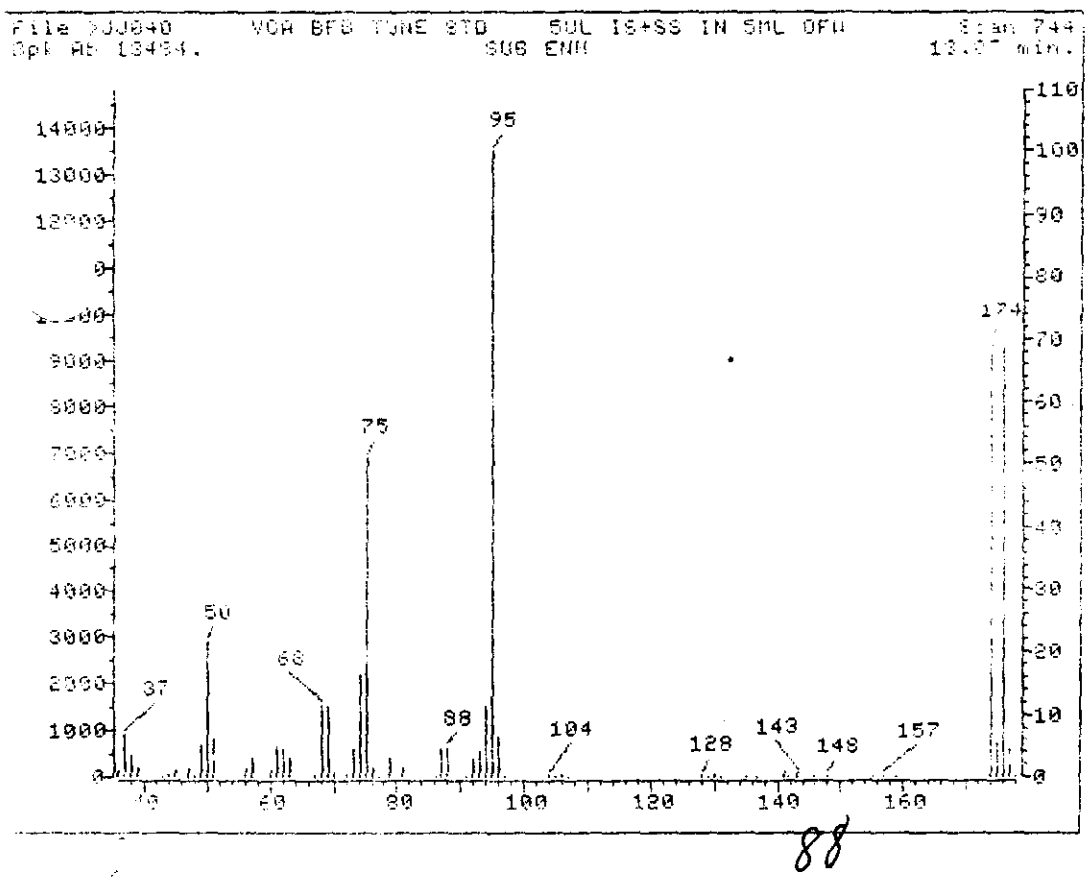
[redacted] 9/22/93

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	21.47	21.47	Ok
75	30-60% of mass 95	51.09	51.09	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.56	6.56	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	69.83	69.83	Ok
175	5-9% of mass 174	5.45	7.81	Ok
176	95-101% of mass 174	68.75	99.46	Ok
177	5-9% of mass 176	4.52	6.57	Ok

Injection Date: 09/22/93
Injection Time: 06:58
Data File: >JJ040
Scan: 744



88

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Lab File ID: >JJ045 BFB Injection Date: 9/23/93

Instrument ID: EPA ANN1 BFB Injection Time: 7:22

Matrix: (soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.2
75	30.0 - 60.0% of mass 95	53.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	72.2
175	5.0 - 9.0% of mass 174	5.6 (7.8)1
176	95.0 - 101.0% of mass 174	70.4 (97.4)1
177	5.0 - 9.0% of mass 176	4.6 (6.5)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VOA 50 STD	VOA 50 STD	>JJ046	09/23/93	08:10
02	LRB 9/23/9	LRB 9/23/93	>JJ047	09/23/93	09:37
03	930917-05	STA S-5	>JJ049	09/23/93	11:21
04	930917-06	STA S-6	>JJ050	09/23/93	12:14
05	916-03 5X	STA S-5A	>JJ056	09/23/93	17:03
06	916-03 5X	MS	>JJ057	09/23/93	17:55
07	916-03 5X	MSD	>JJ058	09/23/93	18:47
08	LCS	LCS	>JJ061	09/23/93	21:23*
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19			89		
20					
21					

AR101120

* Analyzed immediately past 12hr. BFB.

[redacted] 9/23
Valmont

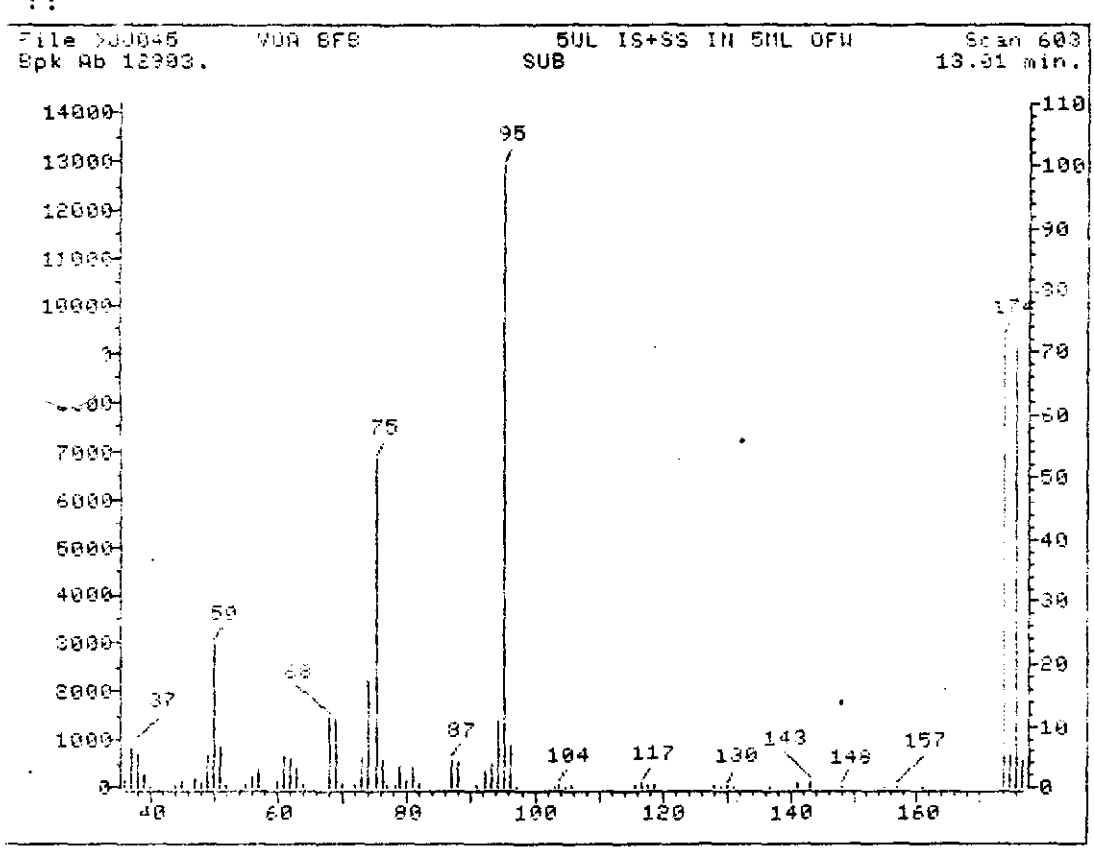
GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	23.18	23.18	Ok
75	30-60% of mass 95	53.08	53.08	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.76	6.76	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	72.24	72.24	Ok
175	5-9% of mass 174	5.65	7.82	Ok
176	95-101% of mass 174	70.36	97.40	Ok
177	5-9% of mass 176	4.60	6.53	Ok

Injection Date: 09/23/93
Injection Time: 07:22
Data File: >JJ045
Scan: 603

::



90

ORIGINAL (Red)

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Lab File ID: >JJ062 BFB Injection Date: 9/24/93

Instrument ID: EPA ANN1 BFB Injection Time: 6:46

Matrix: (soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.7
75	30.0 - 60.0% of mass 95	55.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	74.2
175	5.0 - 9.0% of mass 174	5.6 (7.5)1
176	95.0 - 101.0% of mass 174	72.9 (98.2)1
177	5.0 - 9.0% of mass 176	4.6 (6.3)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VOA 50 STD SR	VOA 50 STD SR	>JJ065	09/24/93	09:44
02	LRB 9/24/93	LRB 9/24/93	>JJ064	09/24/93	11:14
03	-13 125X	930916-13	>JJ067	09/24/93	14:05
04	-13 125XMS	930916-13	>JJ068	09/24/93	15:34
05	-13 125XMS	930916-13	>JJ069	09/24/93	16:36
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18			91		
19					
20					
21					

[redacted]
9/24/93
Valmont

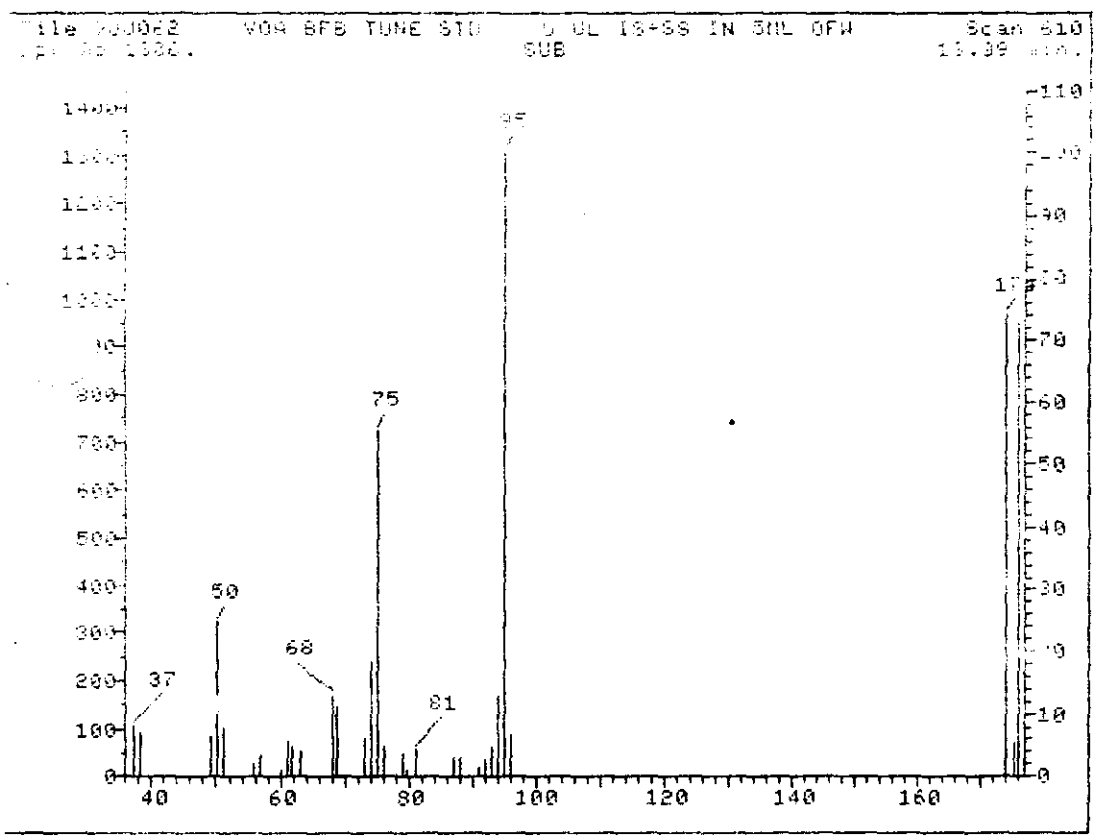
GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	24.73	24.73	Ok
75	30-60% of mass 95	55.44	55.44	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.97	6.97	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	74.20	74.20	Ok
175	5-9% of mass 174	5.59	7.53	Ok
176	95-101% of mass 174	72.89	98.25	Ok
177	5-9% of mass 176	4.59	6.30	Ok

Injection Date: 09/24/93
Injection Time: 06:46
Data File: >JJ062
Scan: 610

::



92

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Lab File ID: >JJ084 BFB Injection Date: 9/25/93

Instrument ID: EPA ANN1 BFB Injection Time: 6:04

Matrix: (soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.6
75	30.0 - 60.0% of mass 95	52.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	70.4
175	5.0 - 9.0% of mass 174	5.6 (7.9)1
176	95.0 - 101.0% of mass 174	70.5 (100.2)1
177	5.0 - 9.0% of mass 176	4.6 (6.6)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VOA 50 STD	VOA 50 STD	>JJ085	09/25/93	07:57
02	LRB 9/25/93	LRB 9/25/93	>JJ086	09/25/93	09:11
03	930916-12	STA TB-1	>JJ087	09/25/93	10:04
04	930917-08	STA TB-2	>JJ088	09/25/93	10:57
05	930916-11	STA FB-1	>JJ089	09/25/93	11:50
06	930916-04	STA MW-2	>JJ090	09/25/93	12:43
07	930916-05	STA MW-10A	>JJ091	09/25/93	13:36
08	930916-06	STA MW-10D	>JJ092	09/25/93	14:29
09	930916-07	STA MW-11	>JJ093	09/25/93	15:22
10	930916-08	STA MW-101A	>JJ094	09/25/93	16:16
11	930916-10	STA HW-1	>JJ095	09/25/93	17:09
12	930917-01	STA HW-3	>JJ096	09/25/93	18:02
13	LCS	LCS	>JJ100	09/25/93	21:35
14					
15					
16					
17			93		
18					
19					
20					

military date, 24-hour clock

9/25/93

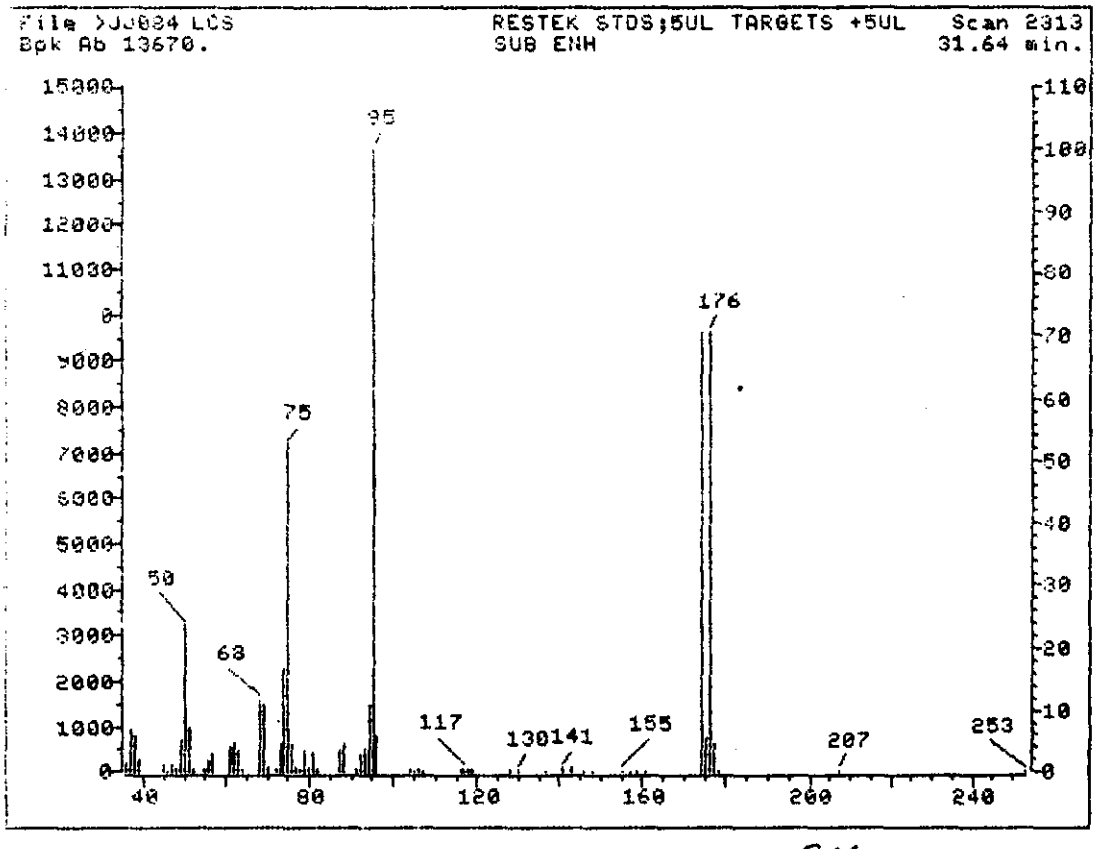
[redacted]

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	23.64	23.64	Ok
75	30-60% of mass 95	52.73	52.73	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	5.84	5.84	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	70.36	70.36	Ok
175	5-9% of mass 174	5.59	7.94	Ok
176	95-101% of mass 174	70.52	100.22	Ok
177	5-9% of mass 176	4.62	6.56	Ok

Injection Date: 09/25/93
Injection Time: 06:04
Data File: >JJ084
Scan: 2313



94

ORIGINAL (FED)

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Lab File ID: >JJ101 BFB Injection Date: 9/27/93

Instrument ID: EPA ANN1 BFB Injection Time: 7:30

Matrix: (soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.2
75	30.0 - 60.0% of mass 95	46.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	72.4
175	5.0 - 9.0% of mass 174	5.1 (7.1)1
176	95.0 - 101.0% of mass 174	70.5 (97.4)1
177	5.0 - 9.0% of mass 176	4.4 (6.2)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED	
01	VOA 50 STD	VOA 50 STD	>JJ102	09/27/93	08:14	
02	LRB 9/27/9	LRB 9/27/93	>JJ103	09/27/93	09:33	
03	930917-04	STA MW-33	>JJ104	09/27/93	10:39	
04	930916-09	STA MW-10C	>JJ105	09/27/93	11:32	
05	930917-02	STA HW-2	>JJ106	09/27/93	12:25	
06	930917-02	10X HW-2	>JJ107	09/27/93	13:18	
07	930916-05	50X MW-10A	>JJ108	09/27/93	14:12	
08	930916-06	10X MW-10D	>JJ109	09/27/93	15:05	
09	930916-07	50X MW-11	>JJ110	09/27/93	15:59	
10	930916-08	50X MW-101A	>JJ111	09/27/93	16:52	
11	930916-10	5X HW-1	>JJ112	09/27/93	17:45	
12	930917-01	10X HW-3	>JJ113	09/27/93	18:39	
13	930916-07	10X HW-11	>JJ114	09/27/93	19:32*	+2 min past
14	930916-09	MS MW-10C	>JJ116	09/27/93	21:18*	All QC within limits.
15	LCS	LCS	>JJ117	09/27/93	22:12*	
16	930916-09	MSD MW-10C	>JJ118	09/27/93	23:05*	
17						
18			95			
19						
20						
21						

AR101126

* Analyzed immediately past 12 hour clock.

L. Ka[redacted]
9/2[redacted]

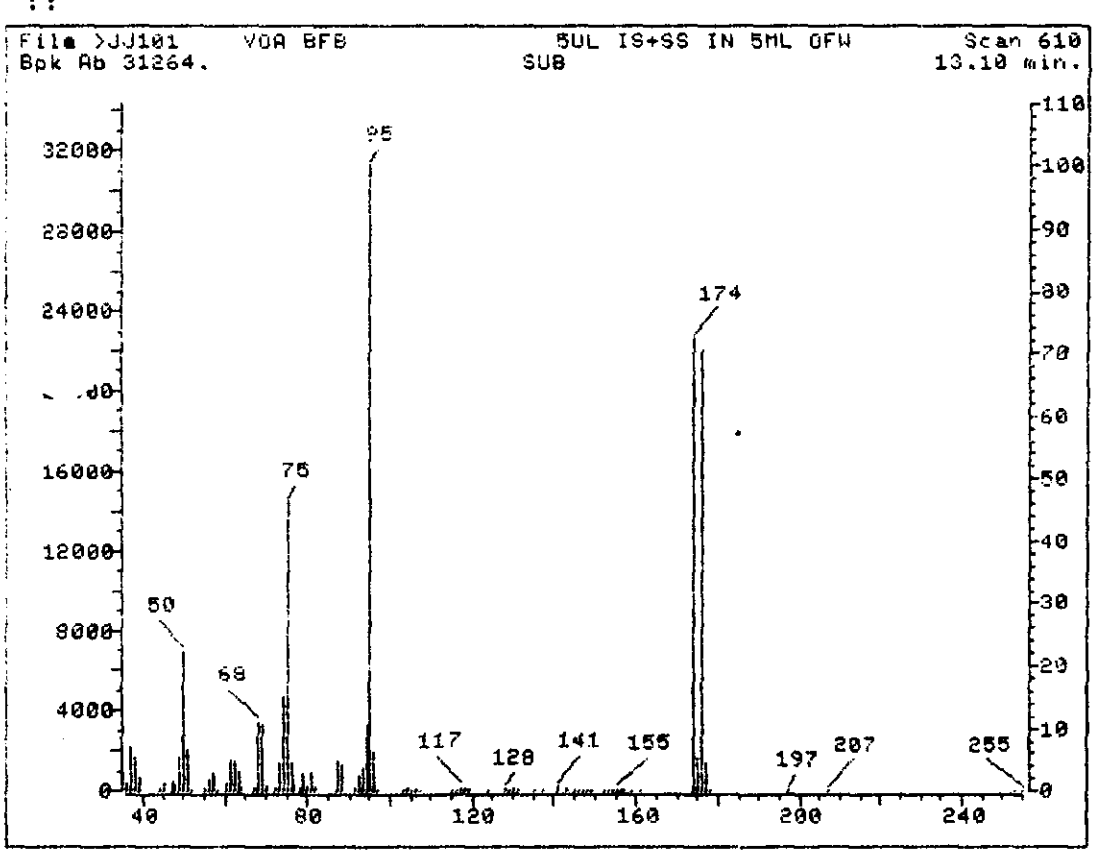
GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	22.20	22.20	Ok
75	30-60% of mass 95	46.34	46.34	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.06	6.06	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	72.39	72.39	Ok
175	5-9% of mass 174	5.13	7.09	Ok
176	95-101% of mass 174	70.50	97.38	Ok
177	5-9% of mass 176	4.40	6.25	Ok

Injection Date: 09/27/93
Injection Time: 07:30
Data File: >JJ101
Scan: 610

::



96

[redacted] ORIGINAL (red)

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Lab File ID: >A1757 BFB Injection Date: 9/29/93

Instrument ID: EPA ANN1 BFB Injection Time: 7:29

Matrix: (soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.7
75	30.0 - 60.0% of mass 95	50.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50% of mass 95	73.4
175	5.0 - 9.0% of mass 174	5.7 (7.8)1
176	95.0 - 101.0% of mass 174	73.5 (100.1)1
177	5.0 - 9.0% of mass 176	4.7 (6.5)2

1-Value is % of mass 174 2-Value is % of mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VOA 50 STD	VOA 50 STD	>A1758	09/29/93	08:07
02	LRB 9/29/9	LRB 9/29/93	>A1759	09/29/93	09:24
03	930916-07	500X MW-11	>A1760	09/29/93	10:17
04	LCS	LCS	>A1771	09/29/93	19:54
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17			97		
18					
19					
20					

AR101128

* Analyzed - 24 hour clock.

[redacted] 9/12/94

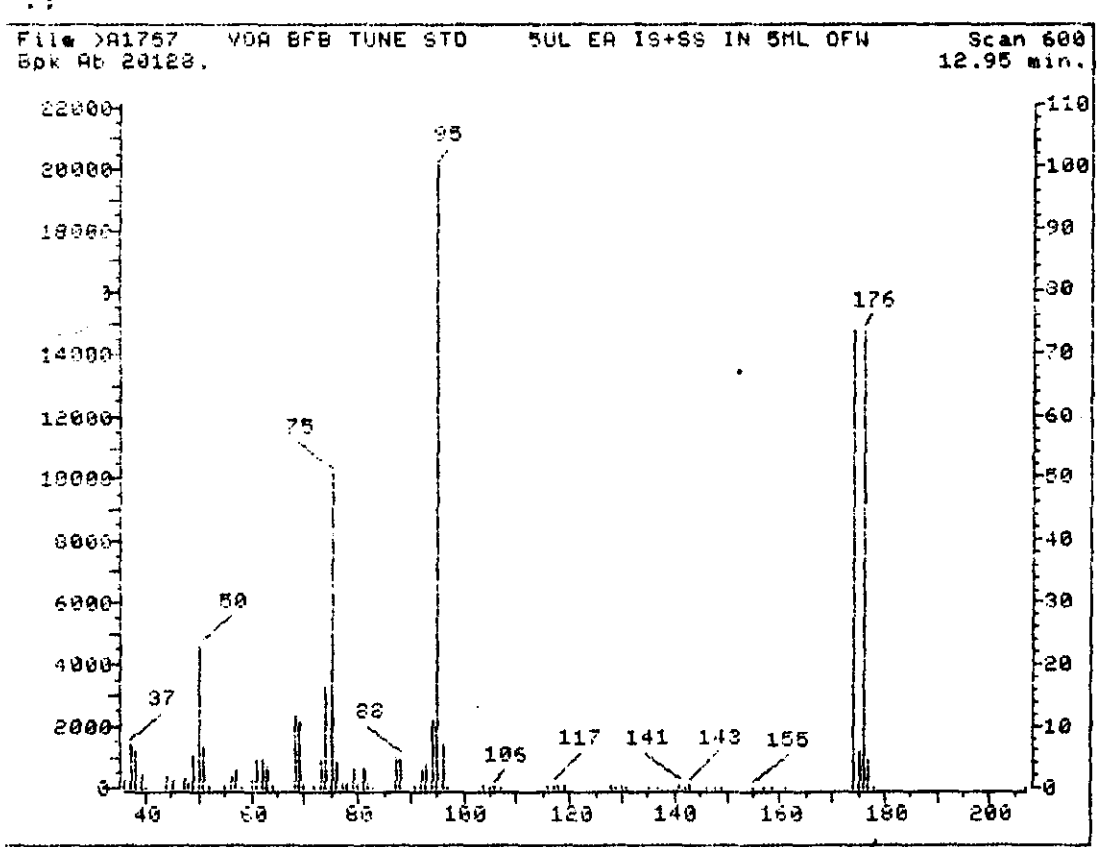
GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	22.72	22.72	Ok
75	30-60% of mass 95	50.54	50.54	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.73	6.73	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	73.43	73.43	Ok
175	5-9% of mass 174	5.72	7.79	Ok
176	95-101% of mass 174	73.52	100.12	Ok
77	5-9% of mass 176	4.75	6.46	Ok

Injection Date: 09/29/93
Injection Time: 07:29
Data File: >A1757
Scan: 600

::



98

ORIGINAL (Red)

Initial Calibration Data
HSL Compounds

Case No: CBV0A3 Instrument ID: HP 5970-MSD

Contractor: REGION III-ESAT Calibration Date: ~~09/16/93~~ 9/15/93 SR

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % RSD for CCC is 30.0%

Laboratory ID: >JJ003 >JJ004 >JJ006 >JJ007 >JJ008

Compound	RF 10.00	RF 20.00	RF 50.00	RF 100.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC	
Dichlorodifluoromethane	.27008	.31953	.36213	.36256	.37642	.276	.33814	12.905			
Chloromethane	.22495	.23548	.24725	.25826	.26455	.388	.24610	6.582		**	RF50.010
Vinyl Chloride	.20158	.22191	.23600	.24534	.24806	.429	.23058	8.313	*		
Bromomethane	.12627	.12603	.12044	.11774	.10473	.533	.11904	7.389			
Chloroethane	.13451	.14367	.15441	.14679	.14535	.554	.14495	4.922			
Trichlorofluoromethane	.55955	.63301	.68104	.71370	.72726	.592	.66291	10.293			
1,1-Dichloroethene	.48334	.46830	.54233	.55901	.59470	.676	.52953	9.976	*		
Carbon Disulfide	.68199	.67129	.77319	.80954	.85401	.731	.75800	10.513			
Acetone	.06060	.05580	.05546	.05401	.05578	.675	.05633	4.432			
Methylene Chloride	.51093	.49556	.49627	.47354	.49477	.737	.49422	2.702			
Trans-1,2-Dichloroethene	.29431	.29291	.32528	.32613	.34192	.766	.31611	6.829			
1,1-Dichloroethane	.58901	.57826	.61385	.63444	.66962	.813	.61704	5.936		**	
Vinyl Acetate	.51898	.51976	.55746	.56982	.61637	.813	.55648	7.255			
2,2-Dichloropropane	.46169	.44578	.48547	.48850	.51722	.868	.47973	5.702			
Cis-1,2-Dichloroethene	.33158	.32425	.35416	.35765	.37260	.876	.34805	5.693			
2-Butanone	.09748	.09027	.09794	.09691	.10025	.858	.09657	3.874			
Bromochloromethane	.23985	.22729	.24826	.25324	.26865	.910	.24746	6.221			
Chloroform	.76621	.73244	.76998	.78598	.82990	.891	.77690	4.564	*		
1,1,1-Trichloroethane	.57162	.54027	.61987	.62625	.65652	.929	.60291	7.695			
Carbon Tetrachloride	.52219	.51178	.59228	.60197	.63997	.955	.57364	9.558			
1,1-Dichloro-1-propene	.43405	.41679	.47602	.48503	.51165	.944	.46471	8.321			
1,2-Dichloroethane-d4(SURR)	.21899	.22720	.22475	.21881	.22117	.965	.22219	1.659			(Conc=50.0,50.0,50)
Benzene	.74034	.71263	.78940	.78649	.82360	.975	.77049	5.691			
1,2-Dichloroethane	.44641	.44805	.45903	.46499	.49251	.975	.46220	4.028			
Fluorobenzene(SURR)	1.06132	1.05365	1.06535	1.06887	1.07040	.995	1.06392	.632			(Conc=50.0,50.0,50.0,50.0
Trichloroethene	.39448	.36880	.40788	.40438	.43540	1.036	.40219	5.961			
1,2-Dichloropropane	.34346	.33491	.35808	.36649	.39025	1.056	.35864	6.004	*		
Dibromomethane	.43295	.43806	.45766	.46889	.48022	1.092	.45555	4.401			
Bromodichloromethane	.73842	.73405	.80505	.83179	.87443	1.083	.79675	7.599			
2-Chloroethylvinylether	.00307	.00875	.01087	.02128	.04634	1.110	.01806	94.833			

RF - Response Factor (Subscript is amount in ug/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

99

Initial Calibration Data
HSL Compounds

Case No: CBV0A3 Instrument ID: HP 5970-MSD

Contractor: REGION III-ESAT Calibration Date: ~~09/16/93~~ 9/15/93

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % RSD for CCC is 30.0%

Laboratory ID:	>JJ003	>JJ004	>JJ006	>JJ007	>JJ008					
Compound	RF 10.00	RF 20.00	RF 50.00	RF 100.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Cis-1,3-Dichloropropene	.49565	.49314	.51709	.54311	.58016	1.139	.52583	6.927		
4-Methyl-2-pentanone	.10441	.09867	.10477	.10891	.11049	.828	.10545	4.367		
Toluene-d8(SURR)	1.08203	1.04440	1.06017	1.05730	1.08815	.868	1.06641	1.706		(Conc=50.0,50.0,50.0,50.0
Toluene	.59272	.55285	.62269	.63807	.68309	.875	.61788	7.906	*	
-1,3-Dichloropropene	.49300	.47319	.50920	.53864	.59217	.889	.52124	8.888		
-Trichloroethane	.38048	.35758	.38718	.39451	.41523	.904	.38700	5.422		
Tetrachloroethene	.56489	.52302	.58584	.58378	.63877	.929	.57926	7.209		
1,3-Dichloropropane	.58117	.56230	.59252	.61067	.64636	.925	.59860	5.339		
2-Hexanone	.09876	.09109	.09874	.10095	.10413	.899	.09873	4.867		
Dibromochloromethane	.77748	.74057	.81885	.86117	.91953	.952	.82352	8.513		
1,2-Dibromoethane (EDB)	.64597	.62041	.67839	.69811	.73853	.969	.67628	6.775		
Chlorobenzene	.86260	.78596	.85522	.87639	.92495	1.004	.86102	5.805		**
1,1,1,2-Tetrachloroethane	.51734	.47313	.52587	.54187	.56396	1.006	.52444	6.432		
Ethylbenzene	1.34543	1.19350	1.33842	1.34121	1.41209	1.005	1.32613	6.048	*	
m&p-Xylenes	.94025	.83664	.91834	.95509	1.00341	1.011	.93075	6.573		
o-Xylene	.92216	.82026	.90796	.92159	.94950	1.052	.90429	5.456		
Styrene	1.63377	1.46081	1.58851	1.67430	1.72356	1.056	1.61619	6.197		
Bromoform	.55761	.55496	.62178	.65196	.70025	1.094	.61731	10.101		** RF 50-250
Isopropylbenzene	1.37952	1.23834	1.38336	1.42327	1.48850	1.083	1.38260	6.638		
Bromofluorobenzene(SURR)	.91773	.87459	.88439	.88354	.87405	1.110	.88686	2.021		(Conc=50.0,50.0,50.0,50.0
Bromobenzene	.85556	.81930	.86870	.91140	.97470	.897	.88593	6.723		
2-Tetrachloroethane	1.07268	1.03930	1.13225	1.17223	1.20975	.875	1.12524	6.212		**
-Trichloropropane	.78331	.72088	.76347	.77515	.79481	.886	.76752	3.710		
n-Propylbenzene	.54082	.50114	.55523	.57004	.59045	.889	.55153	6.098		
2-Chlorotoluene	.56393	.52912	.59102	.61794	.58548	.905	.57750	5.747		
4-Chlorotoluene	.57223	.50616	.58218	.58911	.66117	.908	.58217	9.473		
1,3,5-Trimethylbenzene	1.84751	1.77947	1.93389	2.05290	2.10300	.900	1.94335	6.981		
tert-Butylbenzene	1.83921	1.74139	1.93716	1.82073	2.05361	.927	1.87842	6.399		
1,2,4-Trimethylbenzene	1.90004	1.83398	2.01170	2.02887	2.07864	.930	1.97065	5.100		
sec-Butylbenzene	2.64072	2.46699	2.80392	2.89229	2.96970	.943	2.75473	7.336		

RF - Response Factor (Subscript is amount in ug/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

100

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

ORIGINAL (Red)

Initial Calibration Data
HSL Compounds

Case No: CBUOA3 Instrument ID: HP 5970-MSD

Contractor: REGION III-ESAT Calibration Date: ~~9/16/93~~ 9/15/93SR

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % RSD for CCC is 30.0%

Compound	Laboratory ID: >JJ003 RF 10.00	>JJ004 RF 20.00	>JJ006 RF 50.00	>JJ007 RF 100.00	>JJ008 RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
1,3-Dichlorobenzene	1.42458	1.37364	1.50352	1.53307	1.57902	.965	1.48277	5.594		
1,4-Dichlorobenzene	1.48749	1.40906	1.51552	1.55629	1.61854	.973	1.51738	5.145		
p-Isopropyltoluene	2.07585	1.90838	2.18869	2.23169	2.34458	.953	2.14984	7.710		
1,2-Dichlorobenzene	1.36827	1.30170	1.37386	1.44368	1.50129	1.002	1.39776	5.483		
n-Butylbenzene	2.23666	2.11029	2.39633	2.45617	2.53384	.984	2.34666	7.303		
1,2-Dibromo-3-chloropropane	.27409	.26798	.30111	.31475	.32213	1.067	.29601	8.146		
1,2,4-Trichlorobenzene	1.20822	1.16771	1.24892	1.26237	1.25394	1.146	1.22823	3.236		
Naphthalene	1.72801	1.65367	1.73162	1.87489	1.64608	1.177	1.72685	5.325		
Hexachlorobutadiene	.81085	.75339	.83834	.86266	.85672	1.156	.82439	5.401		
1,2,3-Trichlorobenzene	1.13842	1.06457	1.13071	1.12756	1.10540	1.203	1.11333	2.685		

RF - Response Factor (Subscript is amount in ug/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

101

Initial Calibration Data
HSL Compounds

Case No: heated CBVOA5 Instrument ID: HP5970-MSD

Contractor: REGION III-ESAT Calibration Date: ~~09/20/93~~ 9/16/93SR

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % RSD for CCC is 30.0%

Laboratory ID:	>JJ012	>JJ013	>JJ011	>JJ015	>JJ014					
Compound	RF 10.00	RF 20.00	RF 50.00	RF 100.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Dichlorodifluoromethane	.24459	.23824	.32968	.32035	.33091	.279	.29275	16.088		
Chloromethane	.21638	.19832	.22242	.23308	.23297	.392	.22063	6.514		** RF>0.010
Vinyl Chloride	.19919	.19150	.22563	.22629	.22947	.430	.21442	8.245	*	
Bromomethane	.09035	.07715	.08235	.06787	.05674	.533	.07488	17.400		
[illegible]ethane	.13570	.12668	.13541	.13640	.13979	.554	.13480	3.607		
[illegible]lorofluoromethane	.54758	.51843	.65430	.61957	.63726	.591	.59553	9.855		
1,1-Dichloroethene	.34776	.29359	.31921	.33727	.35874	.676	.29132	17.044	*	
Carbon Disulfide	.47973	.66236	.73900	.76800	.80135	.731	.69009	18.594		
Acetone	.09701	.11016	.10845	.11307	.11617	.675	.10897	6.703		
Methylene Chloride	.37098	.45855	.45718	.47556	.46942	.737	.44634	9.592		
Trans-1,2-Dichloroethene	.21701	.30132	.33577	.32108	.32726	.766	.29449	15.146		
1,1-Dichloroethane	.44747	.59846	.60709	.64179	.63939	.813	.58396	13.642		**
Vinyl Acetate	.56819	.70596	.72137	.79014	.81317	.813	.72377	13.219		
2,2-Dichloropropane	.34583	.44762	.49427	.48778	.49497	.968	.45409	14.007		
Cis-1,2-Dichloroethene	.25206	.33720	.34260	.36613	.36064	.875	.33172	13.908		
2-Butanone	.16972	.19557	.19129	.20714	.21763	.859	.19627	9.202		
Bromochloromethane	.19235	.24637	.25608	.27010	.27157	.910	.24729	13.113		
Chloroform	.58650	.75540	.79123	.78156	.79431	.891	.73380	11.485	*	
1,1,1-Trichloroethane	.41183	.56006	.59856	.61137	.62149	.929	.55866	15.289		
Carbon Tetrachloride	.38772	.53358	.56832	.60571	.61186	.955	.54144	16.903		
[illegible] Dichloro-1-propene	.32193	.43654	.46495	.48305	.47559	.944	.43641	15.212		
[illegible]ichloroethane-d4(SURR)	.23913	.23421	.23515	.23475	.23401	.965	.23545	.894		(Conc=50.0,50.0,50.0,50.0
[illegible]ene	.55640	.76008	.77382	.80714	.80005	.975	.73950	14.080		
1,2-Dichloroethane	.39199	.49014	.48867	.50907	.51919	.975	.47981	10.578		
Fluorobenzene(SURR)	1.05413	1.04935	1.05683	1.06130	1.04137	.995	1.05260	.724		(Conc=50.0,50.0,50.0,50.0
Trichloroethene	.29624	.38818	.39855	.41183	.42262	1.036	.38348	13.165		
1,2-Dichloropropane	.28936	.37280	.37112	.39425	.38753	1.056	.36301	11.658	*	
Dibromomethane	.40450	.52554	.52787	.54661	.54166	1.092	.50924	11.630		
Bromodichloromethane	.59528	.79415	.81448	.86708	.87763	1.083	.78972	14.459		
2-Chloroethylvinylether	.07361	.08514	.10020	.14489	.17848	1.110	.11646	37.761		

RF - Response Factor (Subscript is amount in ug/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

102

ORIGINAL (Red)

Initial Calibration Data
HSL Compounds

Case No: CBVOA5 heated Instrument ID: HP5970-MSD

Contractor: REGION III-ESAT Calibration Date: ~~09/20/93~~ 9/16/93 SR

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % RSD for CCC is 30.0%

Compound	Laboratory ID: >JJ012 RF 10.00	>JJ013 RF 20.00	>JJ011 RF 50.00	>JJ015 RF 100.00	>JJ014 RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC	
Cis-1,3-Dichloropropene	.41795	.55333	.56528	.58931	.59236	1.139	.54365	13.270			
4-Methyl-2-pentanone	.16457	.19280	.18332	.20926	.21561	.828	.19311	10.606			
Toluene-d8(SURR)	1.07038	1.03070	1.05155	1.05716	1.08213	.868	1.05838	1.843			(Conc=50.0,50.0,50.0,50.0
Toluene	.47992	.60931	.62396	.66679	.68059	.874	.61211	12.993	*		
Trans-1,3-Dichloropropene	.45677	.58112	.62318	.64634	.68462	.890	.59841	14.641			
1,1,2-Trichloroethane	.36814	.45726	.45204	.47987	.50192	.904	.45185	11.246			
Tetrachloroethene	.42329	.55595	.58256	.60696	.62878	.929	.55951	14.451			
1,3-Dichloropropane	.55810	.69795	.70109	.73563	.76582	.925	.69171	11.520			
2-Hexanone	.17283	.19757	.19145	.21673	.22300	.899	.20032	10.064			
Dibromochloromethane	.66265	.86005	.90461	.98504	1.03053	.952	.88857	16.071			
1,2-Dibromoethane (EDB)	.64131	.82227	.83972	.90421	.89463	.969	.82043	12.926			
Chlorobenzene	.68606	.83235	.85795	.90930	.92833	1.003	.84280	11.357		**	
1,1,1,2-Tetrachloroethane	.39719	.49359	.51418	.55562	.56024	1.006	.50416	13.100			
Ethylbenzene	1.00836	1.26446	1.30121	1.37019	1.36504	1.005	1.26185	11.768	*		
m&p-Xylenes	.70494	.88430	.91792	.96682	.98339	1.011	.89147	12.500			
o-Xylene	.69203	.86140	.89559	.92857	.91690	1.052	.85890	11.261			
Styrene	1.24914	1.56023	1.61545	1.68462	1.71760	1.056	1.56541	11.948			
Bromoform	.56663	.75155	.78034	.85879	.90592	1.094	.77265	16.891		**	RF 50.250
Isopropylbenzene	1.03686	1.29203	1.33462	1.39660	1.42527	1.083	1.29708	11.912			
Bromofluorobenzene(SURR)	.90508	.86860	.89912	.88469	.90257	1.110	.89191	1.701			(Conc=50.0,50.0,50.0,50.0
Bromobenzene	.72070	.88756	.87208	.94976	.97610	.897	.88124	11.299			
1,1,2,2-Tetrachloroethane	1.28823	1.64068	1.56979	1.73501	1.77257	.875	1.68126	12.003		**	
1,2,3-Trichloropropane	.91852	1.15428	1.05588	1.16545	1.22859	.886	1.10454	10.953			
n-Propylbenzene	.39152	.52047	.52734	.57411	.58329	.889	.51935	14.757			
2-Chlorotoluene	.41255	.54179	.51970	.61356	.58760	.905	.53504	14.541			
4-Chlorotoluene	.43548	.53327	.53530	.58980	.59577	.908	.53792	11.962			
1,3,5-Trimethylbenzene	1.40173	1.86597	1.85082	1.98983	2.00016	.900	1.82170	13.426			
tert-Butylbenzene	1.40998	1.82917	1.81595	1.95044	2.01593	.927	1.80429	13.063			
1,2,4-Trimethylbenzene	1.47454	1.89442	1.87426	2.03358	2.07654	.930	1.87067	12.718			
sec-Butylbenzene	1.95415	2.58274	2.62434	2.81909	2.87974	.943	2.57201	14.290			

RF - Response Factor (Subscript is amount in ug/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

103

Initial Calibration Data
HSL Compounds

Case No: CBV0A5 heated Instrument ID: HP5970-MSD

Contractor: REGION III-ESAT Calibration Date: ~~09/20/93~~ 9/16/93SR

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % RSD for CCC is 30.0%

Laboratory ID:	>JJ012	>JJ013	>JJ011	>JJ015	>JJ014				
	RF	RF	RF	RF	RF				
Compound	10.00	20.00	50.00	100.00	200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
1,3-Dichlorobenzene	1.13351	1.45553	1.42635	1.55330	1.57843	.965	1.42942	12.407		
1,4-Dichlorobenzene	1.17215	1.51963	1.44142	1.60155	1.61238	.973	1.46942	12.249		
p-Isopropyltoluene	1.53919	1.99946	2.01093	2.20532	2.23225	.952	1.99743	13.904		
1,2-Dichlorobenzene	1.12243	1.39790	1.34542	1.47478	1.48119	1.002	1.36435	10.739		
[illegible]ylbenzene	1.68069	2.23144	2.24388	2.41825	2.43824	.984	2.20250	13.938		
[illegible]bromo-3-chloropropane	.41101	.52252	.49568	.58122	.48063	1.066	.49821	12.455		
[illegible],4-Trichlorobenzene	1.02507	1.24157	1.18221	1.30961	1.12390	1.145	1.17647	9.280		
Naphthalene	2.26110	2.49831	2.35250	2.75972	1.10324	1.177	2.19497	29.101		
Hexachlorobutadiene	.60771	.75669	.74765	.79998	.72360	1.156	.72713	9.935		
1,2,3-Trichlorobenzene	1.01228	1.22141	1.14606	1.28763	.68182	1.202	1.06984	22.418		

RF - Response Factor (Subscript is amount in ug/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

104

Valmont

ORIGINAL (Red)

Continuing Calibration Check
HSL Compounds

Case No: CBV0A5 Calibration Date: 09/21/93

Contractor: REGION III-ESAT Time: 09:02

Contract No: Laboratory ID: >JJ031

Instrument ID: HP5970-MSD Initial Calibration Date: ~~09/20/93~~ 9/16/93 SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Dichlorodifluoromethane	.29275	.25713	12.17			
Chloromethane	.22063	.24724	12.06		**	
Vinyl Chloride	.21442	.21202	1.12	*		
Bromomethane	.07488	.05370	28.29			
Chloroethane	.13480	.13594	.85			
Trichlorofluoromethane	.59553	.63357	6.39			
1,1-Dichloroethene	.49132	.51902	5.64	*		
Carbon Disulfide	.69009	.73169	6.03			
Acetone	.10897	.15093	38.51			
Methylene Chloride	.44634	.48399	8.44			
Trans-1,2-Dichloroethene	.29449	.31807	8.01			
1,1-Dichloroethane	.58396	.61378	5.11		**	
Vinyl Acetate	.72377	.74874	3.45			
2,2-Dichloropropane	.45409	.50176	10.50			
Cis-1,2-Dichloroethene	.33172	.35705	7.63			
2-Butanone	.19627	.23302	18.72			
Bromochloromethane	.24729	.26854	8.59			
Chloroform	.73380	.77871	6.12	*		
1,1,1-Trichloroethane	.55866	.59140	5.86			
Carbon Tetrachloride	.54144	.58093	7.29			
1,1-Dichloro-1-propene	.43641	.45934	5.25			
1,2-Dichloroethane-d4(SURR)	.23545	.23791	1.05			(Conc=50.00)
Benzene	.73950	.80447	8.79			
1,2-Dichloroethane	.47981	.51048	6.39			
Fluorobenzene(SURR)	1.05260	1.04957	.29			(Conc=50.00)
Trichloroethene	.38348	.40708	6.15			
1,2-Dichloropropane	.36301	.38572	6.25	*		
Dibromomethane	.50924	.53120	4.31			
Bromodichloromethane	.78972	.86555	9.60			
2-Chloroethylvinylether	.11646	.15416	32.37			
Cis-1,3-Dichloropropene	.54365	.58038	6.76			
4-Methyl-2-pentanone	.19311	.18951	1.87			

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

105

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: CBV0A5 Calibration Date: 09/21/93

Contractor: REGION III-ESAT Time: 09:02

Contract No: Laboratory ID: >JJ031

Instrument ID: HP5970-MSD Initial Calibration Date: ~~09/20/93~~ 9/16/93 SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Toluene-d8(SURR)	1.05838	1.02209	3.43			(Conc=50.00)
Toluene	.61211	.61986	1.27	*		
Trans-1,3-Dichloropropene	.59841	.61393	2.59			
1,1,2-Trichloroethane	.45185	.46049	1.91			
schloroethene	.55951	.57988	3.64			
Dichloropropane	.69171	.69266	.14			
2-Hexanone	.20032	.20473	2.20			
Dibromochloromethane	.88857	.92237	3.80			
1,2-Dibromoethane (EDB)	.82043	.82233	.23			
Chlorobenzene	.84280	.85933	1.96		**	
1,1,1,2-Tetrachloroethane	.50416	.51205	1.56			
Ethylbenzene	1.26185	1.28704	2.00	*		
m&p-Xylenes	.89147	.89451	.34			
o-Xylene	.85890	.85039	.99			
Styrene	1.56541	1.60887	2.78			
Bromoform	.77265	.78897	2.11		**	
Isopropylbenzene	1.29708	1.31845	1.65			
Bromofluorobenzene(SURR)	.89181	.88820	.41			(Conc=50.00)
Bromobenzene	.98124	.90125	2.27			
1,1,2,2-Tetrachloroethane	1.60126	1.58702	.89		**	
1,2,3-Trichloropropane	1.10454	1.09144	1.19			
ipylbenzene	.51935	.51409	1.01			
lorotoluene	.53504	.52928	1.08			
4-Chlorotoluene	.53792	.54254	.86			
1,3,5-Trimethylbenzene	1.82170	1.82079	.05			
tert-Butylbenzene	1.80429	1.78110	1.29			
1,2,4-Trimethylbenzene	1.83167	1.84819	1.20			
sec-Butylbenzene	2.57201	2.58149	.37			
1,3-Dichlorobenzene	1.42942	1.44164	.85			
1,4-Dichlorobenzene	1.46942	1.47114	.12			
p-Isopropyltoluene	1.99743	2.01215	.74			
1,2-Dichlorobenzene	1.36435	1.36314	.09			

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

106

Continuing Calibration Check
HSL Compounds

Case No: CBV0A5 Calibration Date: 09/21/93

Contractor: REGION III-ESAT Time: 09:02

Contract No: Laboratory ID: >JJ031

Instrument ID: HP5970-MSD Initial Calibration Date: ~~09/20/93~~ 9/16/93 SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
n-Butylbenzene	2.20250	2.21200	.43		
1,2-Dibromo-3-chloropropane	.49821	.50603	1.57		
1,2,4-Trichlorobenzene	1.17647	1.21775	3.51		
Naphthalene	2.19497	2.38766	8.78		
Hexachlorobutadiene	.72713	.74032	1.81		
1,2,3-Trichlorobenzene	1.06984	1.18118	10.41		

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

107

Valmont

Continuing Calibration Check
HSL Compounds

Case No: CBV0A5 Calibration Date: 09/22/93

Contractor: REGION III-ESAT Time: 07:42

Contract No: Laboratory ID: >JJ041

Instrument ID: HP5970-MSD Initial Calibration Date: ~~09/20/93~~ 9/16/93SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Dichlorodifluoromethane	.29275	.24982	14.67			RF>0.010
Chloromethane	.22063	.23731	7.56		**	
Vinyl Chloride	.21442	.21705	1.23	*		
Bromomethane	.07488	.08470	13.11			
`oethane	.13480	.14049	4.22			
.lorofluoromethane	.59553	.64906	8.99			
1,1-Dichloroethene	.49132	.51409	4.64	*		
Carbon Disulfide	.69009	.71269	3.28			
Acetone	.10897	.14476	32.84			
Methylene Chloride	.44634	.46519	4.22			
Trans-1,2-Dichloroethene	.29449	.31189	5.91			
1,1-Dichloroethane	.58396	.61157	4.73		**	
Vinyl Acetate	.72377	.73001	.86			
2,2-Dichloropropane	.45409	.49757	9.57			
Cis-1,2-Dichloroethene	.33172	.34711	4.64			
2-Butanone	.19627	.21700	10.56			
Bromochloromethane	.24729	.25960	4.98			
Chloroform	.73380	.75683	3.14	*		
1,1,1-Trichloroethane	.55866	.57921	3.68			
Carbon Tetrachloride	.54144	.57275	5.78			
' ' Dichloro-1-propene	.43641	.45988	5.38			
ichloroethane-d4(SURR)	.23545	.23177	1.56			(Conc=50.00)
~ ~ene	.73950	.77499	4.80			
1,2-Dichloroethane	.47981	.49456	3.07			
Fluorobenzene(SURR)	1.05260	1.04190	1.02			(Conc=50.00)
Trichloroethene	.38348	.40942	6.76			
1,2-Dichloropropane	.36301	.37161	2.37	*		
Dibromomethane	.50924	.52900	3.88			
Bromodichloromethane	.78972	.83396	5.60			
2-Chloroethylvinylether	.11646	.13681	17.47			
Cis-1,3-Dichloropropene	.54365	.58130	6.93			
4-Methyl-2-pentanone	.19311	.18533	4.03			

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve 108

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: CBV0A5 Calibration Date: 09/22/93

Contractor: REGION III-ESAT Time: 07:42

Contract No: Laboratory ID: >JJ041

Instrument ID: HP5970-MSD Initial Calibration Date: ~~09/20/93~~ 9/16/93 SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Toluene-d8(SURR)	1.05838	1.07010	1.11			(Conc=50.00)
Toluene	.61211	.64488	5.35	*		
Trans-1,3-Dichloropropene	.59841	.63706	6.46			
1,1,2-Trichloroethane	.45185	.46274	2.41			
Tetrachloroethene	.55951	.60062	7.35			
1,3-Dichloropropane	.69171	.71404	3.23			
2-Hexanone	.20032	.20492	2.30			
Dibromochloromethane	.88857	.94559	6.42			
1,2-Dibromoethane (EDB)	.82043	.85071	3.69			
Chlorobenzene	.84280	.88599	5.12		**	
1,1,1,2-Tetrachloroethane	.50416	.53006	5.14			
Ethylbenzene	1.26185	1.34575	6.65	*		
m&p-Xylenes	.89147	.93982	5.42			
o-Xylene	.85890	.90614	5.50			
Styrene	1.56541	1.66979	6.41			
Bromoform	.77265	.80147	3.73		**	RF>0.250
Isopropylbenzene	1.29708	1.36937	5.57			
Bromofluorobenzene(SURR)	.89181	.88617	.63			(Conc=50.00)
Bromobenzene	.88124	.93361	5.94			
1,1,2,2-Tetrachloroethane	1.60126	1.61234	.69		**	
1,2,3-Trichloropropane	1.10454	1.10284	.15			
n-Propylbenzene	.51935	.54962	5.83			
2-Chlorotoluene	.53504	.59127	10.51			
4-Chlorotoluene	.53792	.59598	10.79			
1,3,5-Trimethylbenzene	1.82170	1.93157	6.03			
tert-Butylbenzene	1.80429	1.91538	6.16			
1,2,4-Trimethylbenzene	1.87067	1.97415	5.53			
sec-Butylbenzene	2.57201	2.73108	6.18			
1,3-Dichlorobenzene	1.40942	1.50073	6.13			
1,4-Dichlorobenzene	1.46942	1.57556	7.22			
p-Isopropyltoluene	1.99743	2.13339	6.81			
1,2-Dichlorobenzene	1.36435	1.43213	4.97			

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve 10 9

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: CBV0A5 Calibration Date: 09/22/93

Contractor: REGION III-ESAT Time: 07:42

Contract No: Laboratory ID: >JJ041

Instrument ID: HP5970-MSD Initial Calibration Date: ~~09/20/93~~ 9/16/93 SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
n-Butylbenzene	2.20250	2.29834	4.35		
1,2-Dibromo-3-chloropropane	.49821	.50577	1.52		
1,2,4-Trichlorobenzene	1.17647	1.27101	8.04		
Naphthalene	2.19497	2.46341	12.23		
chlorobutadiene	.72713	.79630	9.51		
,3-Trichlorobenzene	1.06984	1.22848	14.83		

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

110

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Valmont

ORIGINAL (Red)

Continuing Calibration Check
HSL Compounds

Case No: heated CBVOA5 Calibration Date: 09/23/93

Contractor: REGION III-ESAT Time: 08:10

Contract No: Laboratory ID: >JJ046

Instrument ID: HP5970-MSD Initial Calibration Date: ~~09/20/93~~ 9/16/93SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Dichlorodifluoromethane	.29275	.23913	18.32			
Chloromethane	.22063	.20821	5.63		**	
Vinyl Chloride	.21442	.19093	10.95	*		
Bromomethane	.07488	.08763	17.02			
Chloroethane	.13480	.12255	9.08			
Trichlorofluoromethane	.59553	.69415	16.56			
1,1-Dichloroethene	.49132	.50735	3.26	*		
Carbon Disulfide	.69009	.73006	5.79			
Acetone	.10897	.11721	7.56			
Methylene Chloride	.44634	.42335	5.15			
Trans-1,2-Dichloroethene	.29449	.31057	5.46			
1,1-Dichloroethane	.58396	.56374	3.46		**	
Vinyl Acetate	.72377	.67006	7.42			
2,2-Dichloropropane	.45409	.53515	17.85			
Cis-1,2-Dichloroethene	.33172	.34228	3.18			
2-Butanone	.19627	.18171	7.42			
Bromochloromethane	.24729	.26371	6.64			
Chloroform	.73380	.77968	6.25	*		
1,1,1-Trichloroethane	.55866	.64637	15.70			
Carbon Tetrachloride	.54144	.65636	21.23			
1,1-Dichloro-1-propene	.43641	.44828	2.72			
1,2-Dichloroethane-d4(SURR)	.23545	.23296	1.06			(Conc=50.00)
Benzene	.73950	.73769	.24			
1,2-Dichloroethane	.47981	.49036	2.20			
Fluorobenzene(SURR)	1.05260	1.03596	1.58		*	(Conc=50.00)
Trichloroethene	.38348	.41360	7.85			
1,2-Dichloropropane	.36301	.32983	9.14	*		
Dibromomethane	.50924	.51326	.79			
Bromodichloromethane	.78972	.87459	10.75			
2-Chloroethylvinylether	.11646	.12156	4.37			
Cis-1,3-Dichloropropene	.54365	.55228	1.59			
4-Methyl-2-pentanone	.19311	.16771	13.15			

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve ///

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: CBV0A5 Calibration Date: 09/23/93

Contractor: REGION III-ESAT Time: 08:10

Contract No: Laboratory ID: >JJ046

Instrument ID: HP5970-MSD Initial Calibration Date: ~~09/20/93~~ 9/16/93SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Toluene-d8(SURR)	1.05838	1.00339	5.20			(Conc=50.00)
Toluene	.61211	.58452	4.51	*		
Trans-1,3-Dichloropropene	.59841	.61618	2.97			
1,1,2-Trichloroethane	.45185	.44465	1.59			
achloroethene	.55951	.60910	8.86			
Dichloropropane	.69171	.65058	5.95			
2-Hexanone	.20032	.17326	13.51			
Dibromochloromethane	.88857	1.00553	13.16			
1,2-Dibromoethane (EDB)	.82043	.83582	1.88			
Chlorobenzene	.84280	.84960	.83		**	
1,1,1,2-Tetrachloroethane	.50416	.54671	8.44			
Ethylbenzene	1.26185	1.25309	.69	*		
m&p-Xylenes	.89147	.87491	1.86			
o-Xylene	.85890	.83108	3.24			
Styrene	1.56541	1.52708	2.44			
Bromoform	.77265	.87388	13.10		**	
Isopropylbenzene	1.11	.97	9			
1,1,2,2-Tetrachloroethane	.89191	.89166	.03			(Conc=50.00)
Bromobenzene	.88124	.90904	3.15			
1,1,2,2-Tetrachloroethane	1.60126	1.48210	7.44		**	
1,2,3-Trichloropropane	1.10454	1.00397	9.11			
n-Butylbenzene	.51935	.50692	2.39			
2-Chlorotoluene	.53504	.52465	1.94			
4-Chlorotoluene	.53792	.55320	2.84			
1,3,5-Trimethylbenzene	1.82170	1.79979	1.42		*	
tert-Butylbenzene	1.80429	1.81239	.45			
1,2,4-Trimethylbenzene	1.87067	1.82679	2.35			
sec-Butylbenzene	2.57201	2.50634	2.55			
1,3-Dichlorobenzene	1.42942	1.41625	.92			
1,4-Dichlorobenzene	1.46942	1.44698	1.53			
p-Isopropyltoluene	1.99743	2.03521	1.89			
1,2-Dichlorobenzene	1.36435	1.36018	.31			

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

112

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: CBVOA5 Calibration Date: 09/23/93

Contractor: REGION III-ESAT Time: 08:10

Contract No: Laboratory ID: >JJ046

Instrument ID: HP5970-MSD Initial Calibration Date: ~~09/20/93~~ 9/16/93 SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
n-Butylbenzene	2.20250	2.11591	3.93		
1,2-Dibromo-3-chloropropane	.49821	.52547	5.47		
1,2,4-Trichlorobenzene	1.17647	1.26176	7.25		
Naphthalene	2.19497	2.24604	2.33		
Hexachlorobutadiene	.72713	.82962	14.10		
1,2,3-Trichlorobenzene	1.06984	1.21325	13.41		

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

113

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: heated CBV0A5 Calibration Date: 09/24/93

Contractor: REGION III-ESAT Time: 09:44

Contract No: Laboratory ID: >JJ065

Instrument ID: HP5970-MSD Initial Calibration Date: ~~09/20/93~~ 9/16/93 SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Dichlorodifluoromethane	.29275	.24931	14.84			
Chloromethane	.22063	.19138	13.26		**	
Vinyl Chloride	.21442	.16778	21.75	*		
Bromomethane	.07488	.07738	3.34			
oethane	.13480	.11484	14.80			
orofluoromethane	.59553	.76822	29.00			
1,1-Dichloroethene	.49132	.47215	3.90	*		
Carbon Disulfide	.69009	.62442	9.52			
Acetone	.10897	.11866	8.89			
Methylene Chloride	.44634	.38798	13.08			
Trans-1,2-Dichloroethene	.29449	.28529	3.12			
1,1-Dichloroethane	.58396	.52507	10.09		**	
Vinyl Acetate	.72377	.61486	15.05			
2,2-Dichloropropane	.45409	.54397	19.79			
Cis-1,2-Dichloroethene	.33172	.31180	6.01			
2-Butanone	.19627	.15930	18.84			
Bromochloromethane	.24729	.26625	7.66			
Chloroform	.73380	.75065	2.30	*		
1,1,1-Trichloroethane	.55866	.66095	18.24			
Carbon Tetrachloride	.54144	.67806	25.23			
1,1-Dichloro-1-propene	.43641	.41259	5.46			
chloroethane-d4(SURR)	.23545	.23959	1.76			(Conc=50.00)
..ne	.73950	.63066	14.72			
1,2-Dichloroethane	.47981	.52552	9.53			
Fluorobenzene(SURR)	1.05260	.97625	7.25		•	(Conc=50.00)
Trichloroethene	.38348	.42029	9.60			
1,2-Dichloropropane	.36301	.29008	20.09	*		
Dibromomethane	.50924	.50009	1.80			
Bromodichloromethane	.78972	.84804	7.38			
2-Chloroethylvinylether	.11646	.13084	12.34			
Cis-1,3-Dichloropropene	.54365	.51594	5.10			
4-Methyl-2-pentanone	.19311	.13870	28.18			

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

114

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

ORIGINAL (Red)

Continuing Calibration Check
HSL Compounds

Case No: CBV0A5 Calibration Date: 09/24/93

Contractor: REGION III-ESAT Time: 09:44

Contract No: Laboratory ID: >JJ065

Instrument ID: HP5970-MSD Initial Calibration Date: ~~09/16/93~~ 9/16/93 SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Toluene-d8(SURR)	1.05838	.96239	9.07			(Conc=50.00)
Toluene	.61211	.54340	11.22	*		
Trans-1,3-Dichloropropene	.53841	.57834	7.39			
1,1,2-Trichloroethane	.45135	.40450	10.40			
Tetrachloroethene	.55951	.64462	15.21			
1,3-Dichloropropane	.69171	.59744	13.63			
2-Hexanone	.20032	.14560	27.32			
Dibromochloromethane	.88857	.98970	11.38			
1,2-Dibromoethane (EDB)	.82043	.80004	2.50			
Chlorobenzene	.84280	.82621	1.97		**	
1,1,1,2-Tetrachloroethane	.50416	.56465	12.00			
Ethylbenzene	1.26185	1.15903	8.15	*		
m&p-Xylenes	.89147	.84593	5.11			
o-Xylene	.85290	.79715	7.19			
Styrene	1.56541	1.46320	7.17			
Bromoform	.77265	.92851	20.17		**	
Isopropylbenzene	1.29708	1.22908	5.24			
Bromofluorobenzene(SURR)	.89181	.91982	3.14			(Conc=50.00)
Bromobenzene	.88124	.90788	3.02			
1,1,2,2-Tetrachloroethane	1.60126	1.20221	24.92		**	
1,2,3-Trichloropropane	1.10454	.87643	20.65			
n-Propylbenzene	.51935	.47220	9.08			
2-Chlorotoluene	.53504	.54281	1.45			
4-Chlorotoluene	.53792	.53063	1.36			
1,3,5-Trimethylbenzene	1.82170	1.65566	9.11			
tert-Butylbenzene	1.80429	1.68428	6.65			
1,2,4-Trimethylbenzene	1.87067	1.68330	10.02			
sec-Butylbenzene	2.57201	2.22578	13.46			
1,3-Dichlorobenzene	1.42942	1.39837	2.17			
1,4-Dichlorobenzene	1.46942	1.44502	1.66			
p-Isopropyltoluene	1.99743	1.86449	6.66			
1,2-Dichlorobenzene	1.36435	1.32923	2.57			

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve 115

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

ORIGINAL (Red)

Continuing Calibration Check
HSL Compounds

Case No: CBV0A5 Calibration Date: 09/24/93

Contractor: REGION III-ESAT Time: 09:44

Contract No: Laboratory ID: >JJ065

Instrument ID: HP5970-MSD Initial Calibration Date: ~~09/20/93~~ 9/16/93 5:12

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
n-Butylbenzene	2.20250	1.87552	14.85		
1,2-Dibromo-3-chloropropane	.49821	.45439	8.79		
1,2,4-Trichlorobenzene	1.17647	1.31257	11.57		
Naphthalene	2.19497	2.13076	2.93		
chlorobutadiene	.72713	.87399	20.20		
,3-Trichlorobenzene	1.06984	1.26999	18.71		

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

116

Continuing Calibration Check
HSL Compounds

Case No: CBV0A3 Calibration Date: 09/25/93

Contractor: REGION III-ESAT Time: 07:57

Contract No: Laboratory ID: >JJ085

Instrument ID: HP 5970-MSD Initial Calibration Date: ~~09/16/93~~ 9/15/93 SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Dichlorodifluoromethane	.33814	.21626	36.05		
Chloromethane	.24610	.20645	16.11		**
Vinyl Chloride	.23058	.19398	15.87	*	
Bromomethane	.11904	.14131	18.71		
Chloroethane	.14495	.14048	3.08		
Trichlorofluoromethane	.66291	.63768	3.81		
1,1-Dichloroethene	.52953	.50971	3.74	*	
Carbon Disulfide	.75800	.72650	4.16		
Acetone	.05633	.07488	32.94		
Methylene Chloride	.49422	.44717	9.52		
Trans-1,2-Dichloroethene	.31611	.32610	3.16		
1,1-Dichloroethane	.61704	.60995	1.15		**
Vinyl Acetate	.55648	.50838	8.64		
2,2-Dichloropropane	.47973	.53349	11.21		
Cis-1,2-Dichloroethene	.34805	.35879	3.09		
2-Butanone	.09657	.09889	2.40		
Bromochloromethane	.24746	.26005	5.09		
Chloroform	.77690	.77260	.55	*	
1,1,1-Trichloroethane	.60291	.61782	2.47		
Carbon Tetrachloride	.57364	.60356	5.22		
1,1-Dichloro-1-propene	.46471	.44994	3.18		
1,2-Dichloroethane-d4(SURR)	.22219	.20605	7.26		
Benzene	.77049	.77711	.86		
1,2-Dichloroethane	.46220	.45117	2.39		
Fluorobenzene(SURR)	1.06392	1.05270	1.05		
Trichloroethene	.40219	.42473	5.60		
1,2-Dichloropropane	.35864	.33631	6.22	*	
Dibromomethane	.45555	.44928	1.38		
Bromodichloromethane	.79675	.81340	2.09		
2-Chloroethylvinylether	.01806	.03244	79.65		
Cis-1,3-Dichloropropene	.52583	.50656	3.66		
4-Methyl-2-pentanone	.10545	.09257	12.21		

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

RF>0.010

117

Continuing Calibration Check
HSL Compounds

Case No: CBUOA3 Calibration Date: 09/25/93

Contractor: REGION III-ESAT Time: 07:57

Contract No: Laboratory ID: >JJ085

Instrument ID: HP 5970-MSD Initial Calibration Date: ~~09/16/93~~ 9/15/93SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Toluene-d8(SURR)	1.06641	1.03788	2.67			
Toluene	.61788	.61493	.48	*		
Trans-1,3-Dichloropropene	.52124	.51174	1.82			
1,1,2-Trichloroethane	.38700	.36584	5.47			
chloroethene	.57926	.60825	5.01			
Dichloropropane	.59860	.57093	4.62			
2-Hexanone	.09873	.09372	5.08			
Dibromochloromethane	.82352	.82401	.06			
1,2-Dibromoethane (EDB)	.67628	.66626	1.48			
Chlorobenzene	.86102	.89136	3.52		**	
1,1,1,2-Tetrachloroethane	.52444	.56306	7.37			
Ethylbenzene	1.32613	1.31336	.96	*		
m&p-Xylenes	.93075	.94484	1.51			
o-Xylene	.90429	.91898	1.62			
Styrene	1.61619	1.65308	2.28			
Bromoform	.61731	.64224	4.04		**	RF 50.250
Isopropylbenzene	1.38260	1.39972	1.24			
Bromofluorobenzene(SURR)	.88686	.91167	2.80			
Bromobenzene	.88593	.90868	2.57			
1,1,2,2-Tetrachloroethane	1.12524	1.02821	8.62		**	
3-Trichloropropane	.76752	.69289	9.72			
pylbenzene	.55153	.55223	.13			
nlorotoluene	.57750	.56697	1.82			
4-Chlorotoluene	.58217	.60129	3.28			
1,3,5-Trimethylbenzene	1.94335	1.94345	.01			
tert-Butylbenzene	1.87842	1.93936	3.24			
1,2,4-Trimethylbenzene	1.97065	1.96563	.25			
sec-Butylbenzene	2.75473	2.66415	3.29			
1,3-Dichlorobenzene	1.48277	1.53503	3.52			
1,4-Dichlorobenzene	1.51738	1.55983	2.80			
p-Isopropyltoluene	2.14984	2.18184	1.49			
1,2-Dichlorobenzene	1.39776	1.41477	1.22			

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

118

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: CBV0A3 Calibration Date: 09/25/93

Contractor: REGION III-ESAT Time: 07:57

Contract No: Laboratory ID: >JJ085

Instrument ID: HP 5970-MSD Initial Calibration Date: ~~09/16/93~~ 9/15/93 R

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
n-Butylbenzene	2.34666	2.30342	1.84		
1,2-Dibromo-3-chloropropane	.29601	.26578	10.21		
1,2,4-Trichlorobenzene	1.22823	1.28981	5.01		
Naphthalene	1.72685	1.70910	1.03		
Hexachlorobutadiene	.82439	.88551	7.41		
1,2,3-Trichlorobenzene	1.11333	1.17003	5.09		

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

119

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: CBV0A3 Calibration Date: 09/27/93

Contractor: REGION III-ESAT Time: 08:14

Contract No: Laboratory ID: >JJ102

Instrument ID: HP 5970-MSD Initial Calibration Date: ~~09/16/93~~ 9/15/93SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Dichlorodifluoromethane	.33814	.19052	43.66		
Chloromethane	.24610	.21395	13.06		**
Vinyl Chloride	.23058	.19622	14.90	*	
Bromomethane	.11904	.11257	5.44		
oethane	.14495	.14050	3.07		
lorofluoromethane	.66291	.62374	5.91		
1,1-Dichloroethene	.52953	.48235	8.91	*	
Carbon Disulfide	.75800	.71857	5.20		
Acetone	.05633	.06212	10.28		
Methylene Chloride	.49422	.42565	13.87		
Trans-1,2-Dichloroethene	.31611	.30401	3.83		
1,1-Dichloroethane	.61704	.57877	6.20		**
Vinyl Acetate	.55648	.52302	6.01		
2,2-Dichloropropane	.47973	.49519	3.22		
Cis-1,2-Dichloroethene	.34805	.33875	2.67		
2-Butanone	.09657	.09792	1.39		
Bromochloromethane	.24746	.24327	1.69		
Chloroform	.77690	.73651	5.20	*	
1,1,1-Trichloroethane	.60291	.58617	2.78		
Carbon Tetrachloride	.57364	.56224	1.99		
' Dichloro-1-propene	.46471	.43478	6.44		
ichloroethane-d4(SURR)	.22219	.20813	6.33		
ene	.77049	.73277	4.90		
1,2-Dichloroethane	.46220	.42795	7.41		
Fluorobenzene(SURR)	1.06392	1.03837	2.40		
Trichloroethene	.40219	.39911	.77		
1,2-Dichloropropane	.35864	.33561	6.42	*	
Dibromomethane	.45555	.42882	5.87		
Bromodichloromethane	.79675	.77674	2.51		
2-Chloroethylvinylether	.01806	.04154	130.04		
Cis-1,3-Dichloropropene	.52583	.51017	2.98		
4-Methyl-2-pentanone	.10545	.10268	2.63		

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

ORIGINAL (Red)

Continuing Calibration Check
HSL Compounds

Case No: CBUGA3 Calibration Date: 09/27/93

Contractor: REGION III-ESAT Time: 08:14

Contract No: Laboratory ID: >JJ102

Instrument ID: HP 5970-MSD Initial Calibration Date: ~~09/16/93~~ 9/15/93SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Toluene-d8(SURR)	1.06641	1.03507	2.94			
Toluene	.61788	.60068	2.78	*		
Trans-1,3-Dichloropropene	.52124	.50955	2.24			
1,1,2-Trichloroethane	.38700	.37401	3.36			
Tetrachloroethene	.57926	.56596	2.30			
1,3-Dichloropropane	.59860	.57238	4.38			
2-Hexanone	.09873	.09884	.11			
Dibromochloromethane	.82352	.80411	2.36			
1,2-Dibromoethane (EDB)	.67628	.65910	2.54			
Chlorobenzene	.86102	.85100	1.16		**	
1,1,1,2-Tetrachloroethane	.52444	.51969	.90			
Ethylbenzene	1.32613	1.26962	4.26	*		
m&p-Xylenes	.93075	.90427	2.84			
o-Xylene	.90429	.87147	3.63			
Styrene	1.61619	1.57808	2.36			
Bromoform	.61731	.61366	.59		**	RF 50.250
Isopropylbenzene	1.38260	1.34115	3.00			
Bromofluorobenzene(SURR)	.88686	.89014	.37			
Bromobenzene	.88593	.87079	1.71			
1,1,2,2-Tetrachloroethane	1.12924	1.10195	2.07		**	
1,2,3-Trichloropropane	.76752	.71775	6.48			
n-Propylbenzene	.55153	.54368	1.42			
2-Chlorotoluene	.57750	.55333	4.19			
4-Chlorotoluene	.58217	.56022	3.77			
1,3,5-Trimethylbenzene	1.94335	1.88842	2.83			
tert-Butylbenzene	1.87842	1.90840	1.60			
1,2,4-Trimethylbenzene	1.97065	1.90068	3.55			
sec-Butylbenzene	2.75473	2.68011	2.71			
1,3-Dichlorobenzene	1.48277	1.47891	.26			
1,4-Dichlorobenzene	1.51733	1.49888	1.22			
p-Isopropyltoluene	2.14984	2.11413	1.66			
1,2-Dichlorobenzene	1.39776	1.33639	4.39			

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

121

Continuing Calibration Check
HSL Compounds

Case No: CBV0A3 Calibration Date: 09/27/93

Contractor: REGION III-ESAT Time: 08:14

Contract No: Laboratory ID: >JJ102

Instrument ID: HP 5970-MSD Initial Calibration Date: ~~09/16/93~~ 9/15/93 SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
n-Butylbenzene	2.34666	2.26812	3.35		
1,2-Dibromo-3-chloropropane	.29601	.28739	2.91		
1,2,4-Trichlorobenzene	1.22823	1.22118	.57		
Naphthalene	1.72685	1.72079	.35		
chlorobutadiene	.82439	.81727	.86		
,3-Trichlorobenzene	1.11333	1.12955	1.46		

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

122

ORIGINAL (Red)

Continuing Calibration Check
HSL Compounds

Case No: C3V0A3 Calibration Date: 09/29/93

Contractor: REGION III-ESAT Time: 08:07

Contract No: Laboratory ID: >A1758

Instrument ID: HP 5970-MSD Initial Calibration Date: ~~09/16/93~~ 9/15/93 SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Dichlorodifluoromethane	.33814	.19589	42.07		
Chloromethane	.24610	.22000	10.61		**
Vinyl Chloride	.23058	.21696	5.91	*	
Bromomethane	.11904	.17627	48.07		
Chloroethane	.14495	.15579	7.48		
Trichlorofluoromethane	.66291	.67688	2.11		
1,1-Dichloroethene	.52953	.47497	10.30	*	
Carbon Disulfide	.75800	.68085	10.18		
Acetone	.05633	.05838	3.64		
Methylene Chloride	.49422	.42575	13.85		
Trans-1,2-Dichloroethene	.31611	.30254	4.29		
1,1-Dichloroethane	.61704	.57461	6.88		**
Vinyl Acetate	.55648	.45919	17.48		
2,2-Dichloropropane	.47973	.49190	2.54		
Cis-1,2-Dichloroethene	.34805	.33979	2.37		
2-Butanone	.09657	.08810	8.77		
Bromochloromethane	.24746	.24338	1.65		
Chloroform	.77690	.74091	4.63	*	
1,1,1-Trichloroethane	.60291	.55919	7.25		
Carbon Tetrachloride	.57364	.55848	2.64		
1,1-Dichloro-1-propene	.46471	.42798	7.90		
1,2-Dichloroethane-d4(SURR)	.22219	.21085	5.10		
Benzene	.77049	.72185	6.31		
1,2-Dichloroethane	.46220	.41633	9.92		
Fluorobenzene(SURR)	1.06392	1.05369	.96		
Trichloroethene	.40219	.39807	1.02		
1,2-Dichloropropane	.35864	.32723	8.76	*	
Dibromomethane	.45555	.41745	8.36		
Bromodichloromethane	.79675	.73694	7.51		
2-Chloroethylvinylether	.01806	.03514	94.61		
Cis-1,3-Dichloropropene	.52583	.48139	8.45		
4-Methyl-2-pentanone	.10545	.08582	18.62		

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

RF 50.010

123

Continuing Calibration Check
HSL Compounds

Case No: CBV0A3 Calibration Date: 09/29/93

Contractor: REGION III-ESAT Time: 08:07

Contract No: Laboratory ID: >A1758

Instrument ID: HP 5970-MSD Initial Calibration Date: ~~09/16/93~~ 9/15/93 SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Toluene-d8(SURR)	1.06641	1.01142	5.16		
Toluene	.61788	.57378	7.14	*	
Trans-1,3-Dichloropropene	.52124	.45957	11.83		
1 1,2-Trichloroethane	.38700	.34200	11.63		
schloroethene	.57926	.55132	4.82		
Dichloropropane	.59860	.52868	11.68		
2-Hexanone	.09873	.08138	17.58		
Dibromochloromethane	.82352	.74804	9.17		
1,2-Dibromoethane (EDB)	.67628	.59880	11.46		
Chlorobenzene	.86102	.81313	5.56		**
1,1,1,2-Tetrachloroethane	.52444	.51934	.97		
Ethylbenzene	1.32613	1.23519	6.86	*	
m&p-Xylenes	.93075	.87227	6.28		
o-Xylene	.90429	.85601	5.34		
Styrene	1.61619	1.55002	4.09		
Bromoform	.61731	.57240	7.28		** RF>0.250
Isopropylbenzene	1.38260	1.30077	5.92		
Bromofluorobenzene(SURR)	.88686	.87305	1.56		
Bromobenzene	.88593	.87102	1.68		
1,1,2,2-Tetrachloroethane	1.12524	1.08698	10.51		**
3-Trichloropropane	.76752	.65647	14.47		
ıpylbenzene	.55153	.53672	2.69		
2-Chlorotoluene	.57750	.55966	3.09		
4-Chlorotoluene	.58217	.59461	2.14		
1,3,5-Trimethylbenzene	1.94335	1.82759	5.96		
tert-Butylbenzene	1.87842	1.86356	.79		
1,2,4-Trimethylbenzene	1.97065	1.87091	5.06		
sec-Butylbenzene	2.75473	2.57257	6.61		
1,3-Dichlorobenzene	1.48277	1.43798	3.02		
1,4-Dichlorobenzene	1.51738	1.47990	2.47		
p-Isopropyltoluene	2.14984	2.04217	5.01		
1,2-Dichlorobenzene	1.39776	1.31708	5.77		

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

124

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

ORIGINAL (Red)

Continuing Calibration Check
HSL Compounds

Case No: CB10A3 Calibration Date: 09/29/93

Contractor: REGION III-ESAT Time: 08:07

Contract No: Laboratory ID: >A1758

Instrument ID: HP 5970-MSD Initial Calibration Date: ~~08/16/93~~ 9/15/93 SR

Minimum $\overline{RF}$ for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
n-Butylbenzene	2.34666	2.17832	7.17		
1,2-Dibromo-3-chloropropane	.29601	.24193	18.27		
1,2,4-Trichlorobenzene	1.22823	1.11526	9.20		
Naphthalene	1.72685	1.39640	19.14		
Hexachlorobutadiene	.82439	.65026	21.12		
1,2,3-Trichlorobenzene	1.11333	.97126	12.76		

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

125

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: Case No.: CBVOA5 SAS No.: N/A SDG No.: N/A

Lab File ID (Standard): >JJ031 Date Analyzed: 09/21/93

Instrument ID: EPA AN Time Analyzed: 09:02

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

	IS1(DFB) AREA	#	RT	IS2(CHL) AREA	#	RT	IS3(DCB) AREA	#	RT	
12 HOUR STD	117661		21.28	100466		28.57	61822		36.02	
UPPER LIMIT	235322		21.78	200932		29.07	123644		36.52	
LOWER LIMIT	58830		20.78	50233		28.07	30911		35.52	
EPA SAMPLE NO.										
1 LRB 9/21/93	119167		21.29	98109		28.59	59213		36.00	
2 930916-01	100505		21.28	83998		28.57	50679		36.02	
3 930916-02	100666		21.30	84409		28.59	50734		36.03	
4 930916-03	91263		21.30	72521		28.60	42018		36.03	
5 916-13 5X	74317		21.30	48908	*	28.60	20219	*	36.04	See narrative SR
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CHL) = Chlorobenzene-d5
IS3 (DCB) = 1,2-Dichlorobenzene-D4

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

126

Column used to flag internal standard area values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Lab File ID (Standard): >JJ041 Date Analyzed: 09/22/93

Instrument ID: EPA AN Time Analyzed: 07:42

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

	IS1(DFB) AREA	#	RT	IS2(CHL) AREA	#	RT	IS3(DCB) AREA	#	RT
12 HOUR STD	119491		21.27	97952		28.57	59274		36.01
UPPER LIMIT	238982		21.77	195904		29.07	118548		36.51
LOWER LIMIT	59745		20.77	48976		28.07	29637		35.51
EPA SAMPLE NO.									
1 LRB 9/22/93	116563		21.26	98584		28.56	59936		36.00
2 930917-07	113042		21.26	91873		28.55	54898		36.00
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CHL) = Chlorobenzene-d5
IS3 (DCB) = 1,2-Dichlorobenzene-D4

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

127

Column used to flag internal standard area values with an asterisk

[redacted]

ORIGINAL (RED)

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Lab File ID (Standard): >JJ046 Date Analyzed: 09/23/93

Instrument ID: EPA AN Time Analyzed: 08:10

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

	IS1(DFB) AREA	#	IS1(DFB) RT	IS2(CHL) AREA	#	IS2(CHL) RT	IS3(DCB) AREA	#	IS3(DCB) RT
12 HOUR STD	103195		21.27	86119		28.56	53626		36.00
UPPER LIMIT	206390		21.77	172238		29.06	107252		36.50
LOWER LIMIT	51598		20.77	43060		28.06	26813		35.50
EPA SAMPLE NO.									
1 LRB 9/23/93	96529		21.27	79350		28.56	51574		36.00
2 1930917-05	57737		21.30	37047	*	28.58	20314	*	36.02
3 1930917-06	87707		21.29	71889		28.59	46247		36.03
4 1916-03 5X	78823		21.31	64707		28.61	41778		36.05
5 1916-03 5X	74045		21.31	59143		28.61	37031		36.06
6 1916-03 5X	78271		21.31	61506		28.61	39118		36.04
7 LCS	80912		21.32	66670		28.62	45757		36.05
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

(No targets were affected SI

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CHL) = Chlorobenzene-d5
IS3 (DCB) = 1,2-Dichlorobenzene-D4

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

128

Column used to flag internal standard area values with an asterisk

ORIGINAL (Red)

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Lab File ID (Standard): >JJ065 Date Analyzed: 09/24/93

Instrument ID: EPA AN Time Analyzed: 09:44

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(DFB) AREA	#	IS1(DFB) RT	IS2(CHL) AREA	#	IS2(CHL) RT	IS3(DCB) AREA	#	IS3(DCB) RT
	12 HOUR STD	55336		21.23	46395		28.52	30720		35.96
	UPPER LIMIT	110672		21.73	92790		29.02	61440		36.46
	LOWER LIMIT	27668		20.73	23198		28.02	15360		35.46
	EPA SAMPLE NO.									
1	LRB 9/~~23~~/93	90318		21.23	74533		28.52	46712		35.95
2	-13 125X	57405		21.23	46146		28.49	31361		35.95
3	-13 125XMS	59050		21.24	49097		28.49	31777		35.94
4	-13 125XMS	53946		21.22	44984		28.51	27442		35.94
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CHL) = Chlorobenzene-d5
IS3 (DCB) = 1,2-Dichlorobenzene-D4

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

129

Column used to flag internal standard area values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Lab File ID (Standard): >JJ085 Date Analyzed: 09/25/93

Instrument ID: EPA AN Time Analyzed: 07:57

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

	IS1(DFB) AREA	#	RT	IS2(CHL) AREA	#	RT	IS3(DCB) AREA	#	RT
12 HOUR STD	111057		21.21	88690		28.51	55971		35.94
UPPER LIMIT	222114		21.71	177380		29.01	111942		36.44
LOWER LIMIT	55529		20.71	44345		28.01	27986		35.44
EPA SAMPLE NO.									
1 LRB 9/25/93	113257		21.23	92787		28.51	58392		35.95
2 930916-12	107682		21.22	89490		28.52	56794		35.94
3 930917-08	106336		21.22	88695		28.52	56139		35.96
4 930916-11	107854		21.23	88206		28.51	56225		35.95
5 930916-04	109367		21.23	89024		28.51	55569		35.95
6 930916-09	108186		21.23	85179		28.53	53227		35.96
7 930916-06	107090		21.23	85087		28.53	53829		35.96
8 930916-07	100717		21.25	72825		28.53	45962		35.97
9 930916-08	106300		21.24	81666		28.51	52009		35.96
10 930916-10	108692		21.23	88008		28.53	55425		35.97
11 930917-01	107537		21.24	86443		28.52	53631		35.96
12 LCS	108075		21.24	85978		28.53	55633		35.97
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CHL) = Chlorobenzene-d5
IS3 (DCB) = 1,2-Dichlorobenzene-D4

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

130

Column used to flag internal standard area values with an asterisk

ORIGINAL (red)

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Lab File ID (Standard): >JJ102 Date Analyzed: 09/27/93

Instrument ID: EPA AN Time Analyzed: 08:14

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

	IS1(DFB) AREA	#	RT	IS2(CHL) AREA	#	RT	IS3(DCB) AREA	#	RT
12 HOUR STD	128059		21.32	101958		28.64	63147		36.09
UPPER LIMIT	256118		21.82	203916		29.14	126294		36.59
LOWER LIMIT	64030		20.82	50979		28.14	31574		35.59
EPA SAMPLE NO.									
1 LRB 9/27/93	124220		21.33	101607		28.64	62787		36.08
2 930917-04	121906		21.32	99899		28.63	61087		36.09
3 930916-09	116233		21.33	95426		28.65	59467		36.10
4 930917-02	116895		21.34	94926		28.65	59869		36.10
5 930917-02 10X	115923		21.34	94240		28.66	59200		36.10
6 930916-05 50X	115198		21.32	95914		28.65	58713		36.10
7 930916-06 10X	115504		21.33	92384		28.64	57436		36.09
8 930916-07 50X	114018		21.33	90533		28.64	57788		36.09
9 930916-08 50X	113363		21.33	91524		28.64	57921		36.08
10 930916-10 5X	111531		21.33	90337		28.63	56180		36.08
11 930917-01 10X	113940		21.32	94178		28.62	58525		36.07
12 930916-07 10X	114178		21.31	89022		28.62	55981		36.06
13 930916-09 MS	110976		21.29	90281		28.59	55890		36.04
14 LCS	109628		21.28	88050		28.59	56250		36.02
15 930916-09 MSD	110657		21.28	90226		28.56	54806		36.00
16									
17									
18									
19									
20									
21									
22									

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CHL) = Chlorobenzene-d5
IS3 (DCB) = 1,2-Dichlorobenzene-D4

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

131

Column used to flag internal standard area values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Lab File ID (Standard): >A1758 Date Analyzed: 09/29/93

Instrument ID: EPA AN Time Analyzed: 08:07

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(DFB) AREA	#	RT	IS2(CHL) AREA	#	RT	IS3(DCB) AREA	#	RT
	12 HOUR STD	128157		21.16	105386		28.45	63605		35.88
	UPPER LIMIT	256314		21.66	210772		28.95	127210		36.38
	LOWER LIMIT	64079		20.66	52693		27.95	31803		35.38
	EPA SAMPLE NO.									
1	LRB 9/29/93	121283		21.16	96899		28.44	55444		35.87
2	930916-07 500X SA	120516		21.17	94504		28.48	58753		35.94
3	LCS	112221		21.14	87533		28.42	53884		35.85
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CHL) = Chlorobenzene-d5
IS3 (DCB) = 1,2-Dichlorobenzene-D4

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

132

Column used to flag internal standard area values with an asterisk

2B

SOIL VOLATILE SURROGATE RECOVERY

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: Case No.: CBVOA5 SAS No.: N/A SDG No.: N/A

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (DCE)#	S2 (FLB)#	S3 (TOL)#	S4 (BFB)#	TOT OUT
01	LRB 9/21/93	99	103	101	98	0
02	930916-01	99	101	102	99	0
03	930916-02	101	100	101	98	0
04	930916-03	96	98	104	96	0
05	916-13 5X	112	104	120 A	81	1
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

S1 (DCE) = 1,2-Dichloroethane-d4((70-121)
S2 (FLB) = Fluorobenzene(SURR) (80-120)
S3 (TOL) = Toluene-d8(SURR) (81-117)
S4 (BFB) = Bromofluorobenzene(SUR(74-121)

Column to be used to flag recovery values
A Values outside of contract required QC limits

Rec: 1 out of 20 outside QC limits.

2B
SOIL VOLATILE SURROGATE RECOVERY

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (DCE)#	S2 (FLB)#	S3 (TOL)#	S4 (BFB)#	TOT OUT
01	LRB 9/22/93	103	104	97	96	0
02	930917-07	100	102	97	98	0
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

S1 (DCE) = 1,2-Dichloroethane-d4 ((70-121)
S2 (FLB) = Fluorobenzene (SURR) (80-120)
S3 (TOL) = Toluene-d8 (SURR) (81-117)
S4 (BFB) = Bromofluorobenzene (SUR (74-121)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

Rec'. 0 out of 8 outside limits.

ORIGINAL (Red)

28

SOIL VOLATILE SURROGATE RECOVERY

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (DCE)#	S2 (FLB)#	S3 (TOL)#	S4 (BFB)#	TOT OUT
01	LRB 9/23/93	103	99	101	101	0
02	930917-05	113	91	96	101	0
03	930917-06	103	94	101	103	0
04	916-03 5X	108	96	96	98	0
05	916-03 5X MS	106	96	100	100	0
06	916-03 5X MSD	106	94	102	103	0
07	LCS	104	95	96	105	0
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

S1 (DCE) = 1,2-Dichloroethane-d4((70-121)
S2 (FLB) = Fluorobenzene(SURR) (80-120)
S3 (TOL) = Toluene-d8(SURR) (81-117)
S4 (BFB) = Bromofluorobenzene(SUR (74-121)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

Rec: 0 out of 28 outside limits.

2B

SOIL VOLATILE SURROGATE RECOVERY

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (DCE)#	S2 (FLB)#	S3 (TOL)#	S4 (BFB)#	TOT OUT
01	LRB 9/24/93	99	100	100	96	0
02	-13 125X	99	100	101	101	0
03	-13 125XMS	98	100	99	98	0
04	-13 125XMS	103	102	100	99	0
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

S1 (DCE) = 1,2-Dichloroethane-d4 (70-121)
S2 (FLB) = Fluorobenzene (SURR) (80-120)
S3 (TOL) = Toluene-d8 (SURR) (81-117)
S4 (BFB) = Bromofluorobenzene (SUR (74-121)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

Rec: 0 out of 16 outside limits.

2A

WATER VOLATILE SURROGATE RECOVERY

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

	EPA SAMPLE NO.	S1 (DCE)#	S2 (FLB)#	S3 (TOL)#	S4 (BFB)#	TOT OUT
01	LRB 9/25/93	101	99	100	97	0
02	930916-12	104	102	99	98	0
03	930917-08	109	102	97	98	0
04	930916-11	107	101	100	99	0
05	930916-04	105	99	98	97	0
06	930916-05	106	100	98	98	0
07	930916-06	105	101	99	100	0
08	930916-07	103	99	96	97	0
09	930916-08	105	101	100	101	0
10	930916-10	106	100	98	98	0
11	930917-01	106	100	99	97	0
12	LCS	107	100	100	101	0
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

S1 (DCE) = 1,2-Dichloroethane-d4 (76-114)
S2 (FLB) = Fluorobenzene (SURR) (80-120)
S3 (TOL) = Toluene-d8 (SURR) (88-110)
S4 (BFB) = Bromofluorobenzene (SUR (86-115)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

Rec'. 0 out of 48 outside limits.

137

2A

WATER VOLATILE SURROGATE RECOVERY

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

	EPA SAMPLE NO.	S1 (DCE)#	S2 (FLB)#	S3 (TOL)#	S4 (BFB)#	TOT OUT
01	LRB 9/27/93	104	103	99	101	0
02	930917-04	102	103	99	100	0
03	930916-09	106	103	99	100	0
04	930917-02	108	104	100	102	0
05	930917-02 10X	106	103	100	102	0
06	930916-05 50X	107	103	99	100	0
07	930916-06 10X	106	102	101	102	0
08	930916-07 50X	108	104	104	105	0
09	930916-08 50X	107	103	101	102	0
10	930916-10 5X	106	101	100	99	0
11	930917-01 10X	108	104	99	101	0
12	930916-07 10X	108	101	100	102	0
13	930916-09MS	108	103	100	101	0
14	LCS	106	102	102	101	0
15	930916-09MSD	104	102	99	100	0
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

		QC LIMITS
S1 (DCE)	= 1,2-Dichloroethane-d4	(76-114)
S2 (FLB)	= Fluorobenzene (SURR)	(80-120)
S3 (TOL)	= Toluene-d8 (SURR)	(88-110)
S4 (BFB)	= Bromofluorobenzene (SUR	(86-115)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

Rec: 0 out of 60 outside limits.

ORIGINAL (Red)

2A

WATER VOLATILE SURROGATE RECOVERY

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

	EPA SAMPLE NO.	S1 (DCE)#	S2 (FLB)#	S3 (TOL)#	S4 (BFB)#	TOT OUT
01	LRB 9/29/93	94	95	104	104	0
02	930916-07 500X SR	103	96	106	109	0
03	LCS	104	97	109	110	0
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

S1 (DCE) = 1,2-Dichloroethane-d4((76-114)
S2 (FLB) = Fluorobenzene(SURR) (80-120)
S3 (TOL) = Toluene-d8(SURR) (88-110)
S4 (BFB) = Bromofluorobenzene(SUR (86-115)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

Rec: 0 out of 12 outside limits.

139

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix Spike - EPA Sample No.: 930916-03 5X Level:(low/med) LOW

1X quant

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	#	QC LIMITS REC.
-Dichloroethene	50	0	51.9	104		59-172
nzene	50	0	46.7	93		66-142
Trichloroethene	50	3.12	55.3	104		62-137
Toluene	50	86.42	211	249	A	59-139
Chlorobenzene	50	0	51.0	102		60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC.
-Dichloroethene	50	49.2	98		6		22	59-172
zene	50	44.9	90		3		21	66-142
Trichloroethene	50	54.8	103		1		24	62-137
Toluene	50	156	140	A	56	A	21	59-139
Chlorobenzene	50	51.5	103		1		21	60-133

column to be used to flag recovery and RPD values with an asterisk

* = Values outside of QC limits

RPD: 1 out of 5 outside limits

Spike Recovery: 2 out of 10 outside limits

COMMENTS: _____

140

FORM III VOA-2 1/87 Rev.

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: ESAT Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix Spike - EPA Sample No.: **930916-09**

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	#	QC LIMITS REC.
1,1-Dichloroethene	50	0	53.7	107		61-145
Trichloroethene	50	0	50.6	101		71-120
Benzene	50	0	52.2	104		75-130
Toluene	50	0	49.4	99		76-125
Chlorobenzene	50	0	49.6	99		76-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50	53.4	107		0		14	61-145
Trichloroethene	50	51.0	102		1		14	71-120
Benzene	50	52.0	104		0		11	75-130
Toluene	50	49.8	100		1		13	76-125
Chlorobenzene	50	51.7	103		4		13	76-127

column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

_____

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab code: Case No.: VALMONT SAS No.: N/A SDG No.: N/A

Matrix Spike - EPA Sample No.: 930916-13 125X Level: (low/med) LOW
MEDIUM LEVEL

1X quant

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
,1-Dichloroethene	50	0	49.3	99	59-172
richloroethene	50	0	49.4	99	62-137
Benzene	50	0	50.6	101	66-142
Toluene	50	0	49.8	100	59-139
Chlorobenzene	50	0	49.4	99	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
-Dichloroethene	50	47.3	95	4	22	59-172
chloroethene	50	48.0	96	3	24	62-137
Benzene	50	52.5	105	4	21	66-142
Toluene	50	48.9	98	2	21	59-139
Chlorobenzene	50	50.8	102	3	21	60-133

column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

142

11A

VOLATILE ORGANICS LAB CONTROL SPIKE

EPA SAMPLE NO.

LCS 9/23/93

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: N/A SAS No.: N/A SDG No.: N/A

Matrix: (soil/water) SOIL Lab Sample ID: LCS 9/23/93

Sample wt/vol: N/A (g/ml)G Lab File ID: >JJ061

Level: (low/med) LOW Date Received: 09/23/93

Date Analyzed: 09/23/93

Column: (pack/cap) CAP Dilution Factor: 1.0

COMPOUND	LCS SPIKE Conc	MEAS. Conc	% Rec	% Rec QC LIMITS
1,1-Dichloroethene	50	34.7	69	59-172
Benzene	50	41.9	84	66-142
Trichloroethene	50	49.6	99	62-137
Toluene	50	45.5	91	59-139
Chlorobenzene	50	50.2	100	60-133

A = Quality Control Value Outside Acceptance Limits.
REC: 0 OUT OF 5 OUTSIDE LIMITS

FORM XI VOA 1/87 Rev

11A
VOLATILE ORGANICS LAB CONTROL SPIKE

EPA SAMPLE NO.

LCS 9/25/93 ✓

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT

Matrix: (soil/water) WATER Lab Sample ID: LCS (9/25/93)

Sample vol: 5ML Units: UG/L Lab File ID: >JJ100

Level: (low/med) LOW Date Analyzed: 09/25/93

Column: (pack/cap) CAP Dilution Factor: 1.0

COMPOUND	LCS SPIKE Conc	MEAS. Conc	% Rec	% Rec QC LIMITS
1,1-Dichloroethene	50	37.4	75	61-145
Benzene	50	46.6	93	76-127
Trichloroethene	50	47.2	94	71-120
Toluene	50	48.6	97	76-125
Chlorobenzene	50	47.9	96	75-130

A = Quality control value outside acceptance limits.
Rec: 0 out of 5 Outside Limits.

144

ORIGINAL (Red)

11A

VOLATILE ORGANICS LAB CONTROL SPIKE

EPA SAMPLE NO.

LCS 9/27/93

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT

Matrix: (soil/water) WATER Lab Sample ID: LCS (9/27/93)

Sample vol: 5ML Units: UG/L Lab File ID: >JJ117

Level: (low/med) LOW Date Analyzed: 09/27/93

Column: (pack/cap) CAP Dilution Factor: 1.0

COMPOUND	LCS SPIKE Conc	MEAS. Conc	% Rec	% Rec QC LIMITS
1,1-Dichloroethene	50	40.2	80	61-145
Benzene	50	49.2	98	76-127
Trichloroethene	50	50.6	101	71-120
Toluene	50	49.6	99	76-125
Chlorobenzene	50	51.9	104	75-130

A = Quality control value outside acceptance limits.
Rec: 0 out of 5 Outside Limits.

145

11A

VOLATILE ORGANICS LAB CONTROL SPIKE

EPA SAMPLE NO.

LCS 9/29/93 ✓

Lab Name: EPA REGION III CRL Contract: LOCKHEED

Lab Code: ESAT Case No.: VALMONT

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

Sample vol: 5ML Units: UG/L Lab File ID: >A1771

Level: (low/med) LOW Date Analyzed: 09/29/93

Column: (pack/cap) CAP Dilution Factor: 1.0

COMPOUND	LCS SPIKE Conc	MEAS. Conc	% Rec	% Rec QC LIMITS
1,1-Dichloroethene	50	58.0	116	61-145
Benzene	50	60.4	121	76-127
Trichloroethene	50	58.0	116	71-120
Toluene	50	59.7	119	76-125
Chlorobenzene	50	61.4	123	75-130

Rec: 0 out of 5 Outside Limits.

Valmont
Support Documentation
VOA

147

QUANT REPORT

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930921 12:24
Output File: ^JJ033::ME Injected at: 930921 11:38
Data File: >JJ033::D4 Dilution Factor: 1.00000
Name: **930916-01** Instrument ID: EPA ANN1
Misc: VALMONT,STA S-1A,5G SOIL+5UL IS+SS/5ML DFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930921 09:02

	Compound	R.T.	Scan#	Area	Conc	Units	q	
1)	*1,4-Difluorobenzene	21.28	1428	100505	50.00	ug/Kg	100	
11)	Methylene Chloride	15.67	946	1806	1.86	ug/Kg B	88	SR
~~19)~~	~~Chloroform~~	~~18.95~~	~~1220~~	~~601~~	~~.435~~	~~ug/Kg~~	80	SR
23)	1,2-Dichloroethane-d4(SURR)	20.53	1364	23637	98.85	ug/Kg	96	
6)	Fluorobenzene(SURR)	21.17	1419	106274	100.75	ug/Kg	89	
43)	*Chlorobenzene-d5	28.57	2055	83998	50.00	ug/Kg	96	
35)	Toluene-d8(SURR)	24.79	1730	87389	101.79	ug/Kg	84	
52)	Bromofluorobenzene(SURR)	31.73	2326	73506	98.52	ug/Kg	100	
53)	*1,2-Dichlorobenzene-D4	36.02	2695	90679	50.00	ug/Kg	92	
~~58)~~	~~n-Butylbenzene~~	~~35.44~~	~~2645~~	~~530~~	~~.236~~	~~ug/Kg~~	84	SR
~~71)~~	~~Naphthalene~~	~~42.40~~	~~3247~~	~~991~~	~~.495~~	~~ug/Kg~~	100	SR

* Compound is ISTD

148

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930921 13:16
Output File: ^JJ034::ME Injected at: 930921 12:30
Data File: >JJ034::D4 Dilution Factor: 1.00000
Name: 930916-02 Instrument ID: EPA ANN1
Misc: VALMONT,STA S-11A,5G SOIL+5UL IS+SS/5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930921 09:02

	Compound	R.T.	Q ion	Area	Conc	Units	q	
1)	*1,4-Difluorobenzene	21.30	114.0	100666	50.00	ug/Kg	100	
10)	Acetone	14.36	43.0	895	2.95	ug/Kg J	96	
11)	Methylene Chloride	15.71	49.0	2222	2.28	ug/Kg [redacted]	92	SR
19)	Chloroform	18.97	83.0	1762	1.12	ug/Kg J	88	
23)	1,2-Dichloroethane-d4(SURR)	20.55	67.0	24254	101.27	ug/Kg	9[illegible]	
26)	Fluorobenzene(SURR)	21.20	96.0	105640	99.98	ug/Kg	9[illegible]	
33)	*Chlorobenzene-d5	28.59	117.0	84409	50.00	ug/Kg	95	
35)	Toluene-d8(SURR)	24.81	98.0	86719	100.52	ug/Kg	81	
47)	m&p-Xylenes	28.90	106.0	946	1.25	ug/Kg J	85	
48)	o-Xylene	30.07	106.0	1206	1.68	ug/Kg J	92	
49)	Styrene	30.19	104.0	2141	1.58	ug/Kg J	75	
52)	Bromofluorobenzene(SURR)	31.75	95.0	73681	98.28	ug/Kg	100	
53)	*1,2-Dichlorobenzene-D4	36.03	152.0	50734	50.00	ug/Kg	92	
56)	1,2,3-Trichloropropane	31.92	75.0	1210	1.09	ug/Kg J	100	
61)	tert-Butylbenzene	33.39	119.0	2570	1.42	ug/Kg J	88	
63)	sec-Butylbenzene	33.97	105.0	2681	1.02	ug/Kg J	88	
~~67)~~	~~1,2-Dichlorobenzene~~	~~36.12~~	~~146.0~~	~~1542~~	~~1.11~~	~~ug/Kg~~	80	SR
71)	Naphthalene	42.41	128.0	5870	2.42	ug/Kg J	100	
72)	Hexachlorobutadiene	41.67	225.0	965	1.28	ug/Kg J	87	
73)	1,2,3-Trichlorobenzene	43.35	180.0	1584	1.32	ug/Kg J	69	

* Compound is ISTD

149

[redacted]

ORIGINAL (Red)

QUANT REPORT

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930921 14:09
Output File: ^JJ035::ME Injected at: 930921 13:23
Data File: >JJ035::D4 Dilution Factor: 1.00000
Name: 930916-03 Instrument ID: EPA ANN1
Misc: VALMONT,STA S-5A,5G SOIL+5UL IS+SS/5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930921 09:02

	Compound	R.T.	Scan#	Area	Conc	Units	q	
1)	*1,4-Difluorobenzene	21.30	1429	91263	50.00	ug/Kg	100	
8)	1,1-Dichloroethene	14.40	837	6138	6.48	ug/Kg	97	OK
~~9)~~	~~Carbon Disulfide~~	~~15.58~~	~~938~~	~~651~~	~~.487~~	~~ug/Kg~~	~~100~~	~~SR~~
10)	Acetone	14.36	833	6193	22.48	ug/Kg	J 80	
11)	Methylene Chloride	15.72	950	2077	2.35	ug/Kg	B 91	SR
12)	Trans-1,2-Dichloroethene	16.31	1001	720	1.24	ug/Kg	J 94	
13)	1,1-Dichloroethane	17.31	1087	103579	92.46	ug/Kg	100	
16)	Cis-1,2-Dichloroethene	18.65	1202	380507	583.86	ug/Kg		Dilute 5X
17)	2-Butanone	18.29	1171	1562	3.67	ug/Kg	J 59	
20)	1,1,1-Trichloroethane	19.78	1299	271137	251.18	ug/Kg		Dilute 5X
23)	1,2-Dichloroethane-d4(SURR)	20.55	1365	20789	95.75	ug/Kg	96	
~~24)~~	~~Benzene~~	~~20.76~~	~~1383~~	~~733~~	~~.499~~	~~ug/Kg~~	~~100~~	~~SR~~
~~25)~~	~~1,2-Dichloroethane~~	~~20.76~~	~~1383~~	~~987~~	~~.973~~	~~ug/Kg~~	~~89~~	~~SR~~
26)	Fluorobenzene(SURR)	21.19	1420	94270	98.42	ug/Kg	91	
~~27)~~	~~Trichloroethene~~	~~22.06~~	~~1494~~	~~19712~~	~~26.53~~	~~ug/Kg~~	~~91~~	~~SR~~
33)	*Chlorobenzene-d5	28.60	2055	72521	50.00	ug/Kg	96	
35)	Toluene-d8(SURR)	24.81	1730	76861	103.69	ug/Kg	97	
36)	Toluene	25.01	1747	323392	359.70	ug/Kg		Dilute 5X
39)	Tetrachloroethene	26.56	1880	6956	8.27	ug/Kg		OK 86
~~43)~~	~~1,2-Dibromoethane (EDB)~~	~~27.72~~	~~1980~~	~~564~~	~~.473~~	~~ug/Kg~~	~~95~~	~~SR~~
	m&p-Xylenes	28.91	2082	162768	250.91	ug/Kg		Dilute 5X
	o-Xylene	30.08	2182	57308	92.93	ug/Kg	92	
51)	Isopropylbenzene	30.96	2257	28926	15.13	ug/Kg	85	
52)	Bromofluorobenzene(SURR)	31.74	2324	62072	96.37	ug/Kg	100	
53)	*1,2-Dichlorobenzene-D4	36.03	2692	42018	50.00	ug/Kg	94	
~~55)~~	~~1,1,2,2-Tetrachloroethane~~	~~31.53~~	~~2306~~	~~964~~	~~.723~~	~~ug/Kg~~	~~100~~	~~SR~~
57)	n-Propylbenzene	32.02	2348	15768	36.50	ug/Kg	80	
60)	1,3,5-Trimethylbenzene	32.42	2382	89530	58.51	ug/Kg	77	
62)	1,2,4-Trimethylbenzene	33.52	2477	248636	160.09	ug/Kg	81	
63)	sec-Butylbenzene	33.97	2515	9410	4.34	ug/Kg	J 87	
~~64)~~	~~1,3-Dichlorobenzene~~	~~35.04~~	~~2607~~	~~774~~	~~.639~~	~~ug/Kg~~	~~83~~	~~SR~~
~~65)~~	~~1,4-Dichlorobenzene~~	~~35.04~~	~~2607~~	~~774~~	~~.626~~	~~ug/Kg~~	~~83~~	~~SR~~
66)	p-Isopropyltoluene	34.31	2544	7826	4.63	ug/Kg	J 55	
71)	Naphthalene	42.41	3239	2834	1.41	ug/Kg	J 100	
72)	Hexachlorobutadiene	41.64	3173	833	1.34	ug/Kg	J 73	

* Compound is ISTD

150

QUANT REPORT

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930923 17:50
Output File: ^JJ056::ME Injected at: 930923 17:03
Data File: >JJ056::04 Dilution Factor: 5.00000
Name: 930916-03 5X Instrument ID: EPA ANN1
Misc: VALMONT,STA S-5A,1G SOIL+5UL IS+SS/5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Date: 930923 08:10

	Compound	R.T.	Scan#	Area	Conc	Units	q	
1)	*1,4-Difluorobenzene	21.31	1427	78823	50.00	ug/Kg	100	
9)	Carbon Disulfide	15.59	936	1552	6.74	ug/Kg	100	
10)	Acetone	14.38	832	1643	44.46	ug/Kg	95	
11)	Methylene Chloride	15.72	947	1557	11.66	ug/Kg	9	
13)	1,1-Dichloroethane	17.33	1085	4343	24.43	ug/Kg	100	
16)	Cis-1,2-Dichloroethene	18.65	1199	21301	197.38	ug/Kg	94	39.4
20)	1,1,1-Trichloroethane	19.80	1297	30656	150.43	ug/Kg	93	30.1
23)	1,2-Dichloroethane-d4(SURR)	20.57	1363	19896	541.76	ug/Kg	93	
26)	Fluorobenzene(SURR)	21.21	1418	78105	478.25	ug/Kg	89	
27)	Trichloroethene	22.06	1491	2033	15.59	ug/Kg	95	
33)	*Chlorobenzene-d5	28.61	2053	64707	50.00	ug/Kg	96	
35)	Toluene-d8(SURR)	24.82	1728	62108	478.30	ug/Kg	83	
36)	Toluene	25.02	1745	65373	432.11	ug/Kg	97	86.4
39)	Tetrachloroethene	26.56	1877	1757	11.14	ug/Kg	79	
47)	m&p-Xylenes	28.92	2080	51791	457.42	ug/Kg	88	91.4
48)	o-Xylene	30.09	2180	19343	179.84	ug/Kg	92	
51)	Isopropylbenzene	30.96	2255	8519	25.25	ug/Kg	86	
52)	Bromofluorobenzene(SURR)	31.79	2323	56682	491.21	ug/Kg	100	
53)	*1,2-Dichlorobenzene-D4	36.05	2691	41778	50.00	ug/Kg	93	
57)	n-Propylbenzene	32.03	2347	4924	58.13	ug/Kg		
60)	1,3,5-Trimethylbenzene	32.43	2381	30397	101.29	ug/Kg		
62)	1,2,4-Trimethylbenzene	33.53	2475	94730	310.31	ug/Kg	82	
63)	sec-Butylbenzene	33.99	2515	2650	6.33	ug/Kg	96	
66)	p-Isopropyltoluene	34.32	2543	2636	7.75	ug/Kg	57	
71)	Naphthalene	42.42	3238	566	1.51	ug/Kg	100	

* Compound is ISTD

151

i. calibr. range OK
also u[redacted]ample

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930923 17:50
Output File: ^JJ056::ME Injected at: 930923 17:03
Data File: >JJ056::D4 Dilution Factor: 1.00000
Name: 930916-03 5X Instrument ID: EPA ANN1
Misc: VALMONT,STA S-5A,1G SOIL+5UL IS+SS/5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Date: 930923 08:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.31	1427	78823	50.00	ug/Kg	100
9)	Carbon Disulfide	15.59	936	1552	1.35	ug/Kg	100
10)	Acetone	14.38	832	1643	8.89	ug/Kg	95
	Methylene Chloride	15.72	947	1557	2.33	ug/Kg	93
	1,1-Dichloroethane	17.33	1085	4343	4.89	ug/Kg	100
16)	Cis-1,2-Dichloroethene	18.65	1199	21301	39.48	ug/Kg	94
20)	1,1,1-Trichloroethane	19.80	1297	30656	30.09	ug/Kg	93
23)	1,2-Dichloroethane-d4(SURR)	20.57	1363	19896	108.35	ug/Kg	93
26)	Fluorobenzene(SURR)	21.21	1418	78105	95.65	ug/Kg	89
27)	Trichloroethene	22.06	1491	2033	[redacted]		
33)	*Chlorobenzene-d5	28.61	2053	64707	50.00	ug/Kg	96
35)	Toluene-d8(SURR)	24.82	1728	62108	95.66	ug/Kg	83
36)	Toluene	25.02	1745	65373	86.42	ug/Kg	97
39)	Tetrachloroethene	26.56	1877	1757	2.23	ug/Kg	79
47)	m&p-Xylenes	28.92	2080	51791	91.48	ug/Kg	88
48)	o-Xylene	30.09	2180	19343	35.97	ug/Kg	92
51)	Isopropylbenzene	30.96	2255	8519	5.05	ug/Kg	86
52)	Bromofluorobenzene(SURR)	31.75	2323	56682	98.24	ug/Kg	100
53)	*1,2-Dichlorobenzene-D4	36.05	2691	41778	50.00	ug/Kg	93
57	n-Propylbenzene	32.03	2347	4924	11.63	ug/Kg	86
	1,3,5-Trimethylbenzene	32.43	2381	30397	20.26	ug/Kg	76
62	1,2,4-Trimethylbenzene	33.53	2475	94730	62.06	ug/Kg	82
63)	sec-Butylbenzene	33.99	2515	2650	1.27	ug/Kg	96
66)	p-Isopropyltoluene	34.32	2543	2636	1.55	ug/Kg	97
71)	Naphthalene	42.42	3238	566	.302	ug/Kg	100

* Compound is ISTD

152

QUANT REPORT

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930925 13:29
Output File: ^JJ090::ME Injected at: 930925 12:43
Data File: >JJ090::D3 Dilution Factor: 1.00000
Name: 930916-04 Instrument ID: EPA ANN1
Misc: VALMONT,STA MW-2;5UL IS+SS/5ML SAMPLE

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930925 07:57

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.23	1424	109367	50.00	ug/L	100
8)	1,1-Dichloroethene	14.35	833	3222	2.89	ug/L J	94
9)	Carbon Disulfide	15.51	933	3645	2.29	ug/L J	100
~~10)~~	~~Acetone~~	~~14.30~~	~~829~~	~~584~~	~~3.57~~	~~ug/L J~~	~~95~~ SR
11)	Methylene Chloride	15.64	944	1551	1.59	ug/L B	9
~~13)~~	~~1,1-Dichloroethane~~	~~17.23~~	~~1081~~	~~729~~	~~.546~~	~~ug/L~~ SR	~~10~~
16)	Cis-1,2-Dichloroethene	18.58	1197	2024	2.58	ug/L J	93
~~19)~~	~~Chloroform~~	~~18.90~~	~~1224~~	~~1169~~	~~.692~~	~~ug/L~~ SR	~~94~~
20)	1,1,1-Trichloroethane	19.72	1295	93672	69.32	ug/L	94
23)	1,2-Dichloroethane-d4(SURR)	20.48	1360	23754	105.41	ug/L	96
26)	Fluorobenzene(SURR)	21.11	1414	113858	98.89	ug/L	90
27)	Trichloroethene	21.97	1488	155483	167.36	ug/L	94
33)	*Chlorobenzene-d5	28.51	2050	89024	50.00	ug/L	96
35)	Toluene-d8(SURR)	24.73	1725	90311	97.74	ug/L	86
52)	Bromofluorobenzene(SURR)	31.66	2320	78903	97.22	ug/L	100
53)	*1,2-Dichlorobenzene-D4	35.95	2689	55569	50.00	ug/L	90

* Compound is ISTD

153

QUANT REPORT (8) part

ORIGINAL (RED)

Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930925 14:22
Output File: ^JJ091::ME Injected at: 930925 13:36
Data File: >JJ091::D3 Dilution Factor: 1.00000
Name: 930916-05 Instrument ID: EPA ANN1
Misc: VALMONT;STA MW-10A;5UL IS+SS/5ML SAMPLE

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930925 07:57

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.23	1423	108186	50.00	ug/L	100
8)	1,1-Dichloroethene	14.35	832	17720	16.07	ug/L	96
11)	Methylene Chloride	15.64	943	1378	1.42	ug/L B	86
12)	Trans-1,2-Dichloroethene	16.25	995	1032	1.46	ug/L J	88
)	1,1-Dichloroethane	17.25	1081	30342	22.99	ug/L	100
)	Cis-1,2-Dichloroethene	18.58	1195	129562	166.89	ug/L	93
19)	Chloroform	18.89	1222	5183	3.10	ug/L J	89
20)	1,1,1-Trichloroethane	19.72	1293	168607	126.13	ug/L	94
23)	1,2-Dichloroethane-d4(SURR)	20.47	1358	23557	105.68	ug/L	96
~~24)~~	~~Benzene~~	~~20.68~~	~~1376~~	~~839~~	~~.499~~	~~ug/L~~	~~150~~ SR
26)	Fluorobenzene(SURR)	21.13	1414	114241	100.31	ug/L	89
27)	Trichloroethene	21.99	1488	2126393	2313.83	ug/L → see 350X dilut	93
33)	*Chlorobenzene-d5	28.53	2049	85179	50.00	ug/L	94
35)	Toluene-d8(SURR)	24.74	1724	86876	98.27	ug/L	86
38)	1,1,2-Trichloroethane	25.78	1813	896	1.44	ug/L J	100
52)	Bromofluorobenzene(SURR)	31.67	2319	76471	98.48	ug/L	100
53)	*1,2-Dichlorobenzene-D4	35.96	2687	53227	50.00	ug/L	91

* Compound is ISTD

154

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 14:58
Output File: ^JJ108::ME Injected at: 930927 14:12
Data File: >JJ108::A8 Dilution Factor: 50.00000
Name: 930916-05 50X Instrument ID: EPA ANN1
Misc: VALMONT;STA MW-10A;2MLSAM/100MLVOL;5UL IS+SS IN 5ML DI

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units		q	
1)	*1,4-Difluorobenzene	21.32	1433	115198	50.00	ug/L		100	
11)	Methylene Chloride	15.71	951	1237	63.07	ug/L		89	
16)	Cis-1,2-Dichloroethene	18.67	1205	2355	150.87	ug/L		92	
20)	1,1,1-Trichloroethane	19.81	1303	2778	102.85	ug/L		9'	
23)	1,2-Dichloroethane-d4(SURR)	20.58	1369	25702	5359.89	ug/L		9%	
26)	Fluorobenzene(SURR)	21.23	1425	123768	5173.45	ug/L		90	
27)	Trichloroethene	22.08	1498	47792	2598.74	ug/L	52	92	OK
33)	*Chlorobenzene-d5	28.65	2062	95914	50.00	ug/L		94	
35)	Toluene-d8(SURR)	24.85	1736	98737	4972.75	ug/L		84	
52)	Bromofluorobenzene(SURR)	31.79	2332	84992	4977.45	ug/L		100	
53)	*1,2-Dichlorobenzene-D4	36.10	2702	58713	50.00	ug/L		92	

* Compound is ISTD

155

(9) port

[redacted] ORIGINAL (red)

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930925 15:15
Output File: ^JJ092::ME Injected at: 930925 14:29
Data File: >JJ092::A8 Dilution Factor: 1.00000
Name: 930916-06 Instrument ID: EPA ANN1
Misc: VALMONT;STA MW-10D;5UL IS+SS/5ML SAMPLE

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930925 07:57

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.23	1423	107090	50.00	ug/L	100
8)	1,1-Dichloroethene	14.35	832	2464	2.26	ug/L J	97
~~9)~~	~~Carbon Disulfide~~	~~15.51~~	~~931~~	~~1336~~	~~.859~~	~~ug/L~~ SR	~~100~~
11)	Methylene Chloride	15.64	943	1105	1.15	ug/L B	94
~~12)~~	~~Trans-1,2-Dichloroethene~~	~~16.24~~	~~994~~	~~658~~	~~.942~~	~~ug/L~~ SR	~~78~~
13)	1,1-Dichloroethane	17.25	1081	27010	20.68	ug/L	100
16)	Cis-1,2-Dichloroethene	18.59	1196	105517	137.31	ug/L	93
17)	2-Butanone	18.22	1164	779	3.68	ug/L J	69
19)	Chloroform	18.90	1223	2157	1.30	ug/L J	88
20)	1,1,1-Trichloroethane	19.74	1295	19769	14.94	ug/L	95
23)	1,2-Dichloroethane-d4(SURR)	20.49	1359	23135	104.85	ug/L	99
~~24)~~	~~Benzene~~	~~20.72~~	~~1379~~	~~744~~	~~.447~~	~~ug/L~~ SR	~~100~~
26)	Fluorobenzene(SURR)	21.13	1414	113811	100.96	ug/L	89
27)	Trichloroethene	21.99	1488	551750	606.53	ug/L	see ~~93~~ 10! diluted
33)	*Chlorobenzene-d5	28.53	2049	85087	50.00	ug/L	95
35)	Toluene-d8(SURR)	24.75	1725	87174	98.71	ug/L	85
52)	Bromofluorobenzene(SURR)	31.67	2319	77324	99.68	ug/L	100
53)	*1,2-Dichlorobenzene-D4	35.96	2688	53829	50.00	ug/L	96

* Compound is ISTD

156

ORIGINAL (Red)

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 15:52
Output File: ^JJ109::ME Injected at: 930927 15:05
Data File: >JJ109::A8 Dilution Factor: 10.00000
Name: 930916-06 10X Instrument ID: EPA ANN1
Misc: VALMONT;STA MW-10D;10MLSAM/100ML VOL;5UL IS+SS/5ML DIL

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.33	1433	115504	50.00	ug/L	100
11)	Methylene Chloride	15.73	952	2409	24.50	ug/L	95
13)	1,1-Dichloroethane	17.35	1091	2147	16.06	ug/L	100
16)	Cis-1,2-Dichloroethene	18.67	1205	8987	114.84	ug/L	9?
19)	Chloroform	19.00	1233	864	5.08	ug/L	91
20)	1,1,1-Trichloroethane	19.83	1304	1744	12.88	ug/L	93
23)	1,2-Dichloroethane-d4(SURR)	20.60	1370	25496	1060.57	ug/L	97
26)	Fluorobenzene(SURR)	21.22	1424	122377	1020.35	ug/L	90
27)	Trichloroethene	22.09	1498	40577	440.11	ug/L 44	93 OK.
33)	*Chlorobenzene-d5	28.64	2061	92384	50.00	ug/L	96
35)	Toluene-d8(SURR)	24.86	1736	96661	1010.84	ug/L	85
52)	Bromofluorobenzene(SURR)	31.78	2331	84255	1024.57	ug/L	100
53)	*1,2-Dichlorobenzene-D4	36.09	2701	57436	50.00	ug/L	92

* Compound is ISTD

157

[redacted]

ORIGINAL (Red)

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930925 16:08
Output File: ^JJ093::ME Injected at: 930925 15:22
Data File: >JJ093::A8 Dilution Factor: 1.00000
Name: 930916-07 Instrument ID: EPA ANN1
Misc: VALMONT;STA MW-11;5UL IS+SS/5ML SAMPLE

ID File: V0A624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930925 07:57

	Compound	R.T.	Scan#	Area	Conc	Units	q	
1)	*1,4-Difluorobenzene	21.25	1421	100717	50.00	ug/L	100	
8)	1,1-Dichloroethene	14.34	828	420583	409.63	ug/L		See 10X dil
~~9)~~	~~Carbon Disulfide~~	~~15.50~~	~~928~~	~~884~~	~~.549~~	~~ug/L~~	100	SR
11)	Methylene Chloride	15.63	939	62339	69.21	ug/L	92	>10
)	Trans-1,2-Dichloroethene	16.25	992	4233	6.44	ug/L	98	Blk
14)	1,1-Dichloroethane	17.25	1078	330783	269.23	ug/L		See 10X dil
16)	Cis-1,2-Dichloroethene	18.57	1191	828388	1146.20	ug/L		See 50X dil
17)	2-Butanone	18.24	1163	633	3.18	ug/L J	78	
19)	Chloroform	18.92	1221	2437	1.57	ug/L J	86	
20)	1,1,1-Trichloroethane	19.70	1288	3641228M	2925.87	ug/L		See 50X
23)	1,2-Dichloroethane-d4(SURR)	20.49	1356	21289	102.59	ug/L	97	
~~24)~~	~~Benzene~~	~~20.72~~	~~1375~~	~~955~~	~~.610~~	~~ug/L~~	100	SR
25)	1,2-Dichloroethane	20.70	1374	3093	3.40	ug/L J	91	
26)	Fluorobenzene(SURR)	21.14	1411	105273	99.29	ug/L	89	
27)	Trichloroethene	22.00	1485	1931327^	2252.42	ug/L		See 500X
33)	*Chlorobenzene-d5	28.53	2044	72825	50.00	ug/L	98	
34)	4-Methyl-2-pentanone	23.60	1622	1413	10.48	ug/L	81	
35)	Toluene-d8(SURR)	24.75	1720	72910	96.46	ug/L	81	
36)	Toluene	24.94	1737	22580	25.21	ug/L	95	
38)	1,1,2-Trichloroethane	25.77	1808	3830	7.19	ug/L	100	
	Tetrachloroethene	26.50	1870	6812	7.69	ug/L	81	
	m&p-Xylenes	28.84	2071	7552	10.98	ug/L	88	
40)	o-Xylene	30.01	2171	5896	8.81	ug/L	93	
51)	Isopropylbenzene	30.88	2246	6654	3.26	ug/L J	92	
52)	Bromofluorobenzene(SURR)	31.68	2314	64492	97.14	ug/L	100	
53)	*1,2-Dichlorobenzene-D4	35.97	2682	45962	50.00	ug/L	91	
60)	1,3,5-Trimethylbenzene	32.21	2360	2655	1.49	ug/L J	98	
62)	1,2,4-Trimethylbenzene	33.46	2467	2894	1.60	ug/L J	100	

* Compound is ISTD

Need serial dilutions

158

ORIGINAL (Red)

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 20:18
Output File: ^JJ114::ME Injected at: 930927 19:32 2 min. past 8PM 12-hr. clock
Data File: >JJ114::A8 Dilution Factor: 10.00000
Name: 930916-07 10X Instrument ID: EPA ANN1
Misc: VALMONT;STA MW-11;10MLSAM/100MLVOL Q OFW;5UL IS+SS/5ML

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units	q	
1)	*1,4-Difluorobenzene	21.31	1428	114178	50.00	ug/L	100	
(8)	1,1-Dichloroethene	14.43	837	20629	187.29	ug/L	97	18.7 OK
11)	Methylene Chloride	15.71	947	8761	90.13	ug/L	95	
(13)	1,1-Dichloroethane	17.33	1086	21960	166.15	ug/L	10	OK
16)	Cis-1,2-Dichloroethene	18.66	1200	61345	793.03	ug/L		See 50X.
19)	Chloroform	18.98	1228	799	4.75	ug/L	92	
20)	1,1,1-Trichloroethane	19.81	1299	515674	3852.49	ug/L	95	
23)	1,2-Dichloroethane-d4(SURR)	20.57	1364	25551	1075.20	ug/L	98	
26)	Fluorobenzene(SURR)	21.21	1419	120199	1013.83	ug/L	90	
27)	Trichloroethene	22.08	1494	1544461	16946.39	ug/L	93	
33)	*Chlorobenzene-d5	28.62	2055	89022	50.00	ug/L	96	
35)	Toluene-d8(SURR)	24.83	1730	91931	997.69	ug/L	86	
36)	Toluene	25.03	1747	1832	17.13	ug/L	92	
47)	m&p-Xylenes	28.94	2082	615	7.64	ug/L	88	
48)	o-Xylene	30.10	2182	518	6.68	ug/L	86	
52)	Bromofluorobenzene(SURR)	31.77	2325	80483	1015.66	ug/L	100	
53)	*1,2-Dichlorobenzene-D4	36.06	2694	55981	50.00	ug/L	94	
71)	Naphthalene	42.46	3243	1655	8.59	ug/L	100	

* Compound is ISTD

159

QUANT REPORT

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 16:45
Output File: ^JJ110::ME Injected at: 930927 15:59
Data File: >JJ110::A8 Dilution Factor: 50.00000
Name: 930916-07 50X Instrument ID: EPA ANN1
Misc: VALMONT;STA MW-11;2MLSAM/100ML VOL Q OFW;5UL IS+SS/5ML

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units		q	
1)	*1,4-Difluorobenzene	21.33	1429	114018	50.00	ug/L		100	
8)	1,1-Dichloroethene	14.43	836	7350	334.11	ug/L		100	
11)	Methylene Chloride	15.73	948	3499	180.24	ug/L		93	
3)	1,1-Dichloroethane	17.34	1086	5763	218.33	ug/L		100	
6)	Cis-1,2-Dichloroethene	18.68	1201	16188	1047.80	ug/L	20.956	94	OK
12)	Chloroform	18.99	1228	811	24.14	ug/L		83	
20)	1,1,1-Trichloroethane	19.82	1299	150642	5634.96	ug/L	113	95	OK
23)	1,2-Dichloroethane-d4(SURR)	20.59	1365	25654	5405.25	ug/L	108	96	
26)	Fluorobenzene(SURR)	21.23	1420	123065	5197.30	ug/L	104	89	
27)	Trichloroethene	22.09	1494	486188	26710.60	ug/L	Need	94	500
33)	*Chlorobenzene-d5	28.64	2056	90533	50.00	ug/L		98	
35)	Toluene-d8(SURR)	24.85	1731	96997	5175.48	ug/L	103	88	
52)	Bromofluorobenzene(SURR)	31.79	2327	84281	5229.18	ug/L	104	100	
53)	*1,2-Dichlorobenzene-D4	36.09	2696	57788	50.00	ug/L		94	

* Compound is ISTD

1050

5630

160

QUANT REPORT Page 1

Operator ID: FREDERICK Quant Rev: 7 Quant Time: 930929 11:03
Output File: ^A1760::ME Injected at: 930929 10:17
Data File: >A1760::A8 Dilution Factor: 500.0000
Name: 930916-07 500X Instrument ID: EPA ANN1
Misc: STA HW-11,VALMONT,5 UL EA IS+SS/5 ML PREPPED SAMPLE

ID File: ID624W::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930929 08:07

	Compound	R.T.	Q ion	Area	Conc	Units		q	
1)	*1,4-Difluorobenzene	21.17	114.0	120516	50.00	ug/L		100	
11)	Methylene Chloride	15.59	49.0	8502	4142.48	ug/L		95	
16)	Cis-1,2-Dichloroethene	18.51	96.0	1094	667.88	ug/L		91	
19)	Chloroform	18.84	83.0	788	220.63	ug/L		83	
20)	1,1,1-Trichloroethane	19.65	97.0	8643	3206.28	ug/L		9	
23)	1,2-Dichloroethane-d4(SURR)	20.42	67.0	26124	51403.16	ug/L		9	
26)	Fluorobenzene(SURR)	21.06	96.0	121737	47932.96	ug/L		90	
27)	Trichloroethene	21.92	130.0	32768	17076.14	ug/L	34.2	89	OK
33)	*Chlorobenzene-d5	28.48	117.0	94504	50.00	ug/L		97	
35)	Toluene-d8(SURR)	24.68	98.0	101701	53199.98	ug/L		81	
52)	Bromofluorobenzene(SURR)	31.63	95.0	90006	54544.80	ug/L		100	
53)	*1,2-Dichlorobenzene-D4	35.94	152.0	58753	50.00	ug/L		91	

* Compound is ISTD

~~17100.~~ SR
17000

161

11 port

[redacted]

ORIGINAL (Red)

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930925 17:02
Output File: ^JJ094::ME Injected at: 930925 16:16
Data File: >JJ094::A8 Dilution Factor: 1.00000
Name: 930916-08 Instrument ID: EPA ANN1
Misc: VALMONT;STA ;5UL IS+SS/5ML SAMPLE

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930925 07:57

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.24	1423	106300	50.00	ug/L	100
8)	1,1-Dichloroethene	14.34	831	17802	16.43	ug/L	90
11)	Methylene Chloride	15.65	943	1679	1.77	ug/L B	96
12)	Trans-1,2-Dichloroethene	16.24	994	1147	1.65	ug/L J	94
3)	1,1-Dichloroethane	17.25	1081	29944	23.09	ug/L	100
6)	Cis-1,2-Dichloroethene	18.57	1194	129791	170.15	ug/L OK	95
19)	Chloroform	18.91	1223	5014	3.05	ug/L J	92
20)	1,1,1-Trichloroethane	19.72	1293	169828	129.30	ug/L	95
23)	1,2-Dichloroethane-d4(SURR)	20.48	1358	22961	104.83	ug/L	97
~~24)~~	~~Benzene~~	~~20.72~~	~~1378~~	~~784~~	~~.475~~	~~ug/L~~ SR	~~100~~
26)	Fluorobenzene(SURR)	21.14	1414	112609	100.63	ug/L	88
27)	Trichloroethene	22.00	1488	2129226	2358.02	ug/L see →	93 50 d.f
33)	*Chlorobenzene-d5	28.51	2047	81666	50.00	ug/L	96
35)	Toluene-d8(SURR)	24.74	1723	84420	99.60	ug/L	87
38)	1,1,2-Trichloroethane	25.76	1811	977	1.64	ug/L J	100
52)	Bromofluorobenzene(SURR)	31.67	2318	74941	100.66	ug/L	100
53)	*1,2-Dichlorobenzene-D4	35.96	2686	52009	50.00	ug/L	93

* Compound is ISTD

162

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 17:38
Output File: ^JJ111::ME Injected at: 930927 16:52
Data File: >JJ111::A8 Dilution Factor: 50.00000
Name: 930916-08 50X Instrument ID: EPA ANN1
Misc: VALMONT;STA ;2MLSAM/100ML VOL Q OFW;5UL IS+SS/5ML

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units	q	
1)	*1,4-Difluorobenzene	21.33	1432	113363	50.00	ug/L	100	
11)	Methylene Chloride	15.73	951	1839	95.28	ug/L	93	
16)	Cis-1,2-Dichloroethene	18.67	1204	2207	143.68	ug/L	96	
19)	Chloroform	19.00	1232	836	25.03	ug/L	89	
20)	1,1,1-Trichloroethane	19.82	1303	2996	112.72	ug/L	92	
23)	1,2-Dichloroethane-d4(SURR)	20.58	1368	25257	5352.35	ug/L	99	
26)	Fluorobenzene(SURR)	21.22	1423	121515	5161.49	ug/L	91	
27)	Trichloroethene	22.08	1497	47468	2622.90	ug/L	92	OK
33)	*Chlorobenzene-d5	28.64	2060	91524	50.00	ug/L	98	
35)	Toluene-d8(SURR)	24.84	1734	95316	5030.71	ug/L	85	
52)	Bromofluorobenzene(SURR)	31.78	2330	83406	5118.86	ug/L	100	
53)	*1,2-Dichlorobenzene-D4	36.08	2699	57921	50.00	ug/L	91	

52.5

* Compound is ISTD

2620.

163

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 12:18
Output File: ^JJ105::ME Injected at: 930927 11:32
Data File: >JJ105::A8 Dilution Factor: 1.00000
Name: 930916-09 Instrument ID: EPA ANN1
Misc: VALMONT; STA MW-10C;5UL IS+SS/5ML SAMPLE

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.33	1427	116233	50.00	ug/L	100
~~9)~~	~~Carbon Disulfide~~	~~15.68~~	~~935~~	~~1054~~	~~.631~~	~~ug/L~~ SM	100
11)	Methylene Chloride	15.73	946	1694	1.71	ug/L B	93
~~19)~~	~~Chloroform~~	~~19.01~~	~~1228~~	~~760~~	~~.444~~	~~ug/L~~ SM	87
)	1,1,1-Trichloroethane	19.81	1297	2941	2.16	ug/L B	92
)	1,2-Dichloroethane-d4(SURR)	20.59	1364	25522	105.50	ug/L ✓	95
26)	Fluorobenzene(SURR)	21.22	1418	124687	103.31	ug/L ✓	91
33)	*Chlorobenzene-d5	28.65	2056	95426	50.00	ug/L	92
35)	Toluene-d8(SURR)	24.89	1730	97608	98.82	ug/L ✓	93
52)	Bromofluorobenzene(SURR)	31.79	2326	84982	100.05	ug/L ✓	100
53)	*1,2-Dichlorobenzene-D4	36.10	2696	59467	50.00	ug/L	91

* Compound is ISTD

164

[redacted]

12 port

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930925 17:55
Output File: ^JJ095::ME Injected at: 930925 17:09
Data File: >JJ095::A8 Dilution Factor: 1.00000
Name: 930916-10 Instrument ID: EPA ANN1
Misc: VALMONT;STA HW-1;5UL IS+SS/5ML SAMPLE

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930925 07:57

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.23	1421	108692	50.00	ug/L	100
~~8)~~	~~1,1-Dichloroethene~~	~~14.34~~	~~829~~	~~635~~	~~.573~~	~~ug/L~~	~~SR78~~
11)	Methylene Chloride	15.64	941	1737	1.79	ug/L B	93
~~13)~~	~~1,1-Dichloroethane~~	~~17.24~~	~~1078~~	~~699~~	~~.527~~	~~ug/L~~	~~SR100~~
16)	Cis-1,2-Dichloroethene	18.57	1193	2281	2.92	ug/L J	9
~~19)~~	~~Chloroform~~	~~18.91~~	~~1228~~	~~1389~~	~~.779~~	~~ug/L~~	~~SR8~~
20)	1,1,1-Trichloroethane	19.73	1292	40470	30.13	ug/L	97
23)	1,2-Dichloroethane-d4(SURR)	20.48	1357	23715	105.89	ug/L	99
26)	Fluorobenzene(SURR)	21.12	1412	114444	100.02	ug/L	89
27)	Trichloroethene	22.00	1487	220284	238.59	ug/L	see 91 5X
33)	*Chlorobenzene-d5	28.53	2048	88008	50.00	ug/L	97
35)	Toluene-d8(SURR)	24.75	1723	89135	97.58	ug/L	85
52)	Bromofluorobenzene(SURR)	31.67	2318	78853	98.28	ug/L	100
53)	*1,2-Dichlorobenzene-D4	35.97	2687	55425	50.00	ug/L	91

* Compound is ISTD

165

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 18:31
Output File: ^JJ112::ME Injected at: 930927 17:45
Data File: >JJ112::A8 Dilution Factor: 5.00000
Name: 930916-10 5X Instrument ID: EPA ANN1
Misc: VALMONT;STA HW-1;10MLSAM/50ML VOL Q OFW;5UL IS+SS/5ML

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.33	1432	111531	50.00	ug/L	100
11)	Methylene Chloride	15.72	950	3637	19.15	ug/L	87
19)	Chloroform	19.00	1232	855	2.60	ug/L	91
1)	1,1,1-Trichloroethane	19.82	1302	6133	23.45	ug/L	92
6)	1,2-Dichloroethane-d4(SURR)	20.59	1368	24616	530.22	ug/L	94
26)	Fluorobenzene(SURR)	21.21	1422	117307	506.46	ug/L	89
27)	Trichloroethene	22.09	1497	32468	182.35 ug/L		36.485 OK
33)	*Chlorobenzene-d5	28.63	2059	90337	50.00	ug/L	95
35)	Toluene-d8(SURR)	24.85	1734	93831	501.74	ug/L	86
52)	Bromofluorobenzene(SURR)	31.79	2331	79646	495.23	ug/L	100
53)	*1,2-Dichlorobenzene-D4	36.08	2699	56180	50.00	ug/L	94

* Compound is ISTD

166

QUANT REPORT Page 1

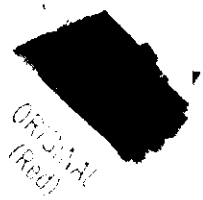
Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930925 12:36
Output File: ^JJ089::ME Injected at: 930925 11:50
Data File: >JJ089::D3 Dilution Factor: 1.00000
Name: 930916-11 Instrument ID: EPA ANN1
Misc: VALMONT,STA FB-1;5UL IS+SS/5ML SAMPLE

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930925 07:57

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.23	1424	107854	50.00	ug/L	100
11)	Methylene Chloride	15.63	943	1279	1.33	ug/L J	86
~~19)~~	~~Chloroform~~	~~18.98~~	~~1224~~	~~740~~	~~.444~~	~~ug/L~~ SR	~~92~~
23)	1,2-Dichloroethane-d4(SURR)	20.47	1359	23792	107.06	ug/L	99
26)	Fluorobenzene(SURR)	21.11	1414	115051	101.33	ug/L	90
33)	*Chlorobenzene-d5	28.51	2050	88206	50.00	ug/L	94
35)	Toluene-d8(SURR)	24.73	1725	91335	99.77	ug/L	87
52)	Bromofluorobenzene(SURR)	31.66	2320	79535	98.91	ug/L	100
53)	*1,2-Dichlorobenzene-D4	35.95	2689	56225	50.00	ug/L	92

* Compound is ISTD

167



Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930925 10:50
Output File: ^JJ087::ME Injected at: 930925 10:04
Data File: >JJ087::D3 Dilution Factor: 1.00000
Name: 930916-12 Instrument ID: EPA ANN1
Misc: VALMONT; STA TB-1;5UL IS+SS/5ML SAMPLE

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930925 07:57

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.22	1419	107682	50.00	ug/L	100
11)	Methylene Chloride	15.64	940	3351	3.48	ug/L J	95
~~19)~~	~~Chloroform~~	~~18.90~~	~~1220~~	~~698~~	~~.419~~	~~ug/L~~ SR	87
3)	1,2-Dichloroethane-d4(SURR)	20.47	1355	23046	103.87	ug/L	98
6)	Fluorobenzene(SURR)	21.11	1410	115619	102.00	ug/L	89
33)	*Chlorobenzene-d5	28.52	2046	89490	50.00	ug/L	96
35)	Toluene-d8(SURR)	24.73	1721	91715	98.75	ug/L	84
52)	Bromofluorobenzene(SURR)	31.66	2316	80357	98.49	ug/L	100
53)	*1,2-Dichlorobenzene-D4	35.94	2684	55794	50.00	ug/L	92
~~21)~~	~~Naphthalene~~	~~42.29~~	~~3229~~	~~687~~	~~.318~~	~~ug/L~~ SR	100

* Compound is ISTD

168

[redacted]

Initial analyses analyzed at 5X sample matrix like dry peat mos SR

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930921 15:02
Output File: ^JJ036::ME Injected at: 930921 14:16
Data File: >JJ036::D4 Dilution Factor: 5.00000
Name: 930916-13 5XDIL. Instrument ID: EPA ANN1
Misc: VALMONT,STA S-7;1.0G SOIL + 5UL IS+SS IN 5ML DFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Date: 930921 09:02

	Compound	R.T.	Scan#	Area	Conc	Units	q	
1)	*1,4-Difluorobenzene	21.30	1425	74317	50.00	ug/Kg	100	
10)	Acetone	14.35	828	90921	2026.42	ug/Kg	see 10X	
11)	Methylene Chloride	15.71	945	1548	10.76	ug/Kg B	95	
~~13)~~	~~1,1-Dichloroethene~~	~~17.32~~	~~1083~~	~~820~~	~~4.49~~	~~ug/Kg~~	~~100~~	SR
16)	Cis-1,2-Dichloroethene	18.67	1199	3587	33.80	ug/Kg	95	
17)	2-Butanone	18.28	1166	7305	105.46	ug/Kg	72	
~~19)~~	~~Chloroform~~	~~18.96~~	~~1224~~	~~540~~	~~2.33~~	~~ug/Kg~~	~~96~~	
20)	1,1,1-Trichloroethane	19.82	1298	1266	7.20	ug/Kg J	98	
23)	1,2-Dichloroethane-d4(SURR)	20.56	1362	19860	561.62	ug/Kg 112%	94	
26)	Fluorobenzene(SURR)	21.19	1416	80820	518.07	ug/Kg 104%	90	
33)	*Chlorobenzene-d5	28.60	2092	48908 low	50.00	ug/Kg	96	
35)	Toluene-d8(SURR)	24.81	1727	59744	597.58	ug/Kg 120%	85	out
36)	Toluene	25.01	1744	2439	20.11	ug/Kg I	96	(JK)
47)	m&p-Xylenes	28.91	2079	1566	17.90	ug/Kg I	90	(JK)
48)	o-Xylene	30.08	2179	595	7.15	ug/Kg I	95	(JK
52)	Bromofluorobenzene(SURR)	31.74	2322	35384	407.27	ug/Kg 81%	100	
53)	*1,2-Dichlorobenzene-D4	36.04	2691	20219 low	50.00	ug/Kg	91	
60)	1,3,5-Trimethylbenzene	32.28	2368	3002	20.39	ug/Kg I	91	(JK
62)	1,2,4-Trimethylbenzene	33.51	2474	3285	21.98	ug/Kg I	79	(JK

* Compound is ISTD

suspect matrix interference SR

See 5X + 10X confirmation analyses

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930923 16:58
Output File: ^JJ055::ME Injected at: 930923 16:11
Data File: >JJ055::04 Dilution Factor: 5.00000
Name: 930916-13 5XDIL Reprep. Instrument ID: EPA ANN1
Misc: VALMONT,STA S-7,1G SOIL+5UL IS+SS/5ML OFW

[redacted] ORIGINAL (COPY)
Forwarded
analyst SR

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Date: 930923 08:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.31	1431	39598 out	50.00	ug/Kg	100
9)	Carbon Disulfide	15.58	939	761	6.58	ug/Kg	100
10)	Acetone	14.37	835	19285	1038.82	ug/Kg	95
11)	Methylene Chloride	15.71	950	3033	45.23	ug/Kg	97
23)	1,2-Dichloroethane-d4(SURR)	20.56	1367	10971	594.66	ug/Kg	96
26)	Fluorobenzene(SURR)	21.20	1422	39586	482.50	ug/Kg	88
33)	*Chlorobenzene-d5	28.60	2056	24743 out	50.00	ug/Kg	94
35)	Toluene-d8(SURR)	24.82	1733	28265	569.24	ug/Kg	89
52)	Bromofluorobenzene(SURR)	31.74	2326	19058	431.91	ug/Kg	100
53)	*1,2-Dichlorobenzene-D4	36.04	2595	10559 out	50.00	ug/Kg	92
55)	1,1,2,2-Tetrachloroethane	31.92	2341	519	8.29	ug/Kg	100
1	Naphthalene	42.41	3242	543	5.72	ug/Kg	100

* Compound is ISTD

All IS areas are out, low.

Matrix Interference SR

170

[redacted]

For ~~Confirmation~~ ~~Analysis~~ SR

QUANT REPORT Page 1

Operator ID: FREDERICK Quant Rev: 7 Quant Time: 930924 12:52
Output File: ^JJ066::ME Injected at: 930924 12:06
Data File: >JJ066::D1 Dilution Factor: ~~10~~ ~~#0000~~
Name: 930916-13 10X Instrument ID: EPA ANN1
Misc: VALMONT 0.49G SAMPLE + 5UL OS+SSI IN 5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Date: 930924 09:44

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.23	1424	51204	~~50.00~~	~~ug/Kg~~	100
10)	Acetone	14.31	830	56757	4670.81	ug/Kg	93
11)	Methylene Chloride	15.64	944	2960	~~74.50~~	~~ug/Kg~~	88
23)	1,2-Dichloroethane-d4(SURR)	20.48	1360	15020	1224.32	ug/Kg out	9(
26)	Fluorobenzene(SURR)	21.13	1416	52427	1048.79	ug/Kg	96
33)	*Chlorobenzene-d5	28.52	2051	31015	50.00	ug/Kg	92
35)	Toluene-d8(SURR)	24.74	1726	36945	1237.75	ug/Kg out	84
52)	Bromofluorobenzene(SURR)	31.65	2320	22169	777.09	ug/Kg	100
53)	*1,2-Dichlorobenzene-D4	35.96	2690	12533 bw	50.00	ug/Kg	88
71)	Naphthalene	42.28	3233	571	10.69	ug/Kg	100

* Compound is ISTD

Need medium level dilution + extraction

IS area out
2 surr out
Matrix interference

171

[redacted] ORIGINAL (RED)

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930924 14:52
Output File: ^JJ067::ME Injected at: 930924 14:05
Data File: >JJ067::D4 Dilution Factor: 125.0000
Name: 930916-13 125X Instrument ID: EPA ANN1
Misc: VALMONT MEDIUM 4G/10ML MEOH 100UL EXT + 5UL IS+SS IN 5

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930924 09:44

	Compound	R.T.	Q ion	Area	Conc	Units	q	1x
1)	*1,4-Difluorobenzene	21.23	114.0	57405	50.00	ug/Kg	100	
10)	Acetone	14.40	43.0	1542	1414.89	ug/Kg	98	11.32
23)	1,2-Dichloroethane-d4(SURR)	20.48	67.0	13639	12395.74	ug/Kg	94	
26)	Fluorobenzene(SURR)	21.12	96.0	55944	12478.17	ug/Kg	88	
3)	*Chlorobenzene-d5	28.49	117.0	46146	50.00	ug/Kg	96	
5)	Toluene-d8(SURR)	24.73	98.0	44760	12598.41	ug/Kg	83	
52)	Bromofluorobenzene(SURR)	31.64	95.0	42992	12660.80	ug/Kg	100	
53)	*1,2-Dichlorobenzene-D4	35.95	152.0	31361	50.00	ug/Kg	91	
71)	Naphthalene	42.30	128.0	594	55.56	ug/Kg	100	

OK

* Compound is ISTD

report 1410.sr

172

[redacted]

(13) part

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930925 18:48
Output File: ^JJ096::ME Injected at: 930925 18:02 ✓ OK
Data File: >JJ096::A8 Dilution Factor: 1.00000
Name: 930917-01 Instrument ID: EPA ANN1
Misc: VALMONT;STA HW-3;5UL IS+SS/5ML SAMPLE

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930925 07:57

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.24	1425	107537	50.00	ug/L	100
8)	1,1-Dichloroethene	14.36	834	2229	2.03	ug/L J	91
~~10)~~	~~Acetone~~	~~14.32~~	~~831~~	~~659~~	~~4.09~~	~~ug/L~~ J → SR	~~99~~
11)	Methylene Chloride	15.64	944	1029	1.07	ug/L B	92
13)	1,1-Dichloroethane	17.26	1083	1812	1.38	ug/L J	100
16)	Cis-1,2-Dichloroethene	18.57	1196	5977	7.75	ug/L	91
~~19)~~	~~Chloroform~~	~~18.98~~	~~1224~~	~~1565~~	~~.942~~	~~ug/L~~ → SR	~~90~~
20)	1,1,1-Trichloroethane	19.73	1295	78695	59.22	ug/L	96
23)	1,2-Dichloroethane-d4(SURR)	20.48	1360	23509	106.10	ug/L	97
26)	Fluorobenzene(SURR)	21.12	1415	113164	99.96	ug/L see	89
27)	Trichloroethene	21.99	1489	705520	772.34	ug/L ×10X dilution	98
33)	*Chlorobenzene-d5	28.52	2050	86443	50.00	ug/L	95
35)	Toluene-d8(SURR)	24.75	1726	89040	99.24	ug/L	81
36)	Toluene	24.93	1742	8517	8.01	ug/L	97
52)	Bromofluorobenzene(SURR)	31.66	2320	76334	96.86	ug/L	100
53)	*1,2-Dichlorobenzene-D4	35.96	2689	53631	50.00	ug/L	93

* Compound is ISTD

173

QUANT REPORT

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 19:25
Output File: ^JJ113::ME Injected at: 930927 18:39
Data File: >JJ113::A8 Dilution Factor: 10.00000
Name: 930917-01 10X Instrument ID: EPA ANN1
Misc: VALMONT;STA HW-3;10MLSAM/100ML VOL Q OFW;5UL IS+SS/5ML

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.32	1429	113940	50.00	ug/L	100
11)	Methylene Chloride	15.72	948	3865	39.85	ug/L	93
19)	Chloroform	19.00	1230	825	4.92	ug/L	88
)	1,1,1-Trichloroethane	19.81	1299	6042	45.23	ug/L	95
)	1,2-Dichloroethane-d4(SURR)	20.57	1365	25544	1077.15	ug/L	97
26)	Fluorobenzene(SURR)	21.22	1420	123479	1043.64	ug/L	90
27)	Trichloroethene	22.08	1494	53817	591.73	ug/L	95
33)	*Chlorobenzene-d5	28.62	2056	94178	50.00	ug/L	95
35)	Toluene-d8(SURR)	24.84	1731	96460	989.52	ug/L	84
52)	Bromofluorobenzene(SURR)	31.77	2327	84384	1006.59	ug/L	100
53)	*1,2-Dichlorobenzene-D4	36.07	2696	58525	50.00	ug/L	93

59.187 OK

* Compound is ISTD

174

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 13:11
Output File: ^JJ106::ME Injected at: 930927 12:25
Data File: >JJ106::A8 Dilution Factor: 1.00000
Name: 930917-02 Instrument ID: EPA ANN1
Misc: VALMONT,STA HW-2;5UL IS+SS/5ML SAMPLE

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.34	1428	116895	50.00	ug/L	100
8)	1,1-Dichloroethene	14.43	835	2098	1.86	ug/L J	90
11)	Methylene Chloride	15.74	947	1366	1.37	ug/L B	92
13)	1,1-Dichloroethane	17.33	1084	1713	1.27	ug/L J	10
16)	Cis-1,2-Dichloroethene	18.67	1199	6966	8.80	ug/L	91
~~19)~~	~~Chloroform~~	~~19.01~~	~~1220~~	~~1227~~	~~.713~~	~~ug/L~~	~~89~~ SR
20)	1,1,1-Trichloroethane	19.82	1298	71960	52.51	ug/L ✓	95
23)	1,2-Dichloroethane-d4(SURR)	20.59	1364	26155	107.50	ug/L ✓	98
26)	Fluorobenzene(SURR)	21.23	1419	126496	104.21	ug/L ✓	91
27)	Trichloroethene	22.09	1493	469580	503.26 ug/L		see 10x dil
33)	*Chlorobenzene-d5	28.65	2056	94926	50.00	ug/L	98
35)	Toluene-d8(SURR)	24.87	1731	98514	100.26	ug/L ✓	85
52)	Bromofluorobenzene(SURR)	31.79	2326	86235	102.06	ug/L ✓	100
53)	*1,2-Dichlorobenzene-D4	36.10	2696	59869	50.00	ug/L	93

* Compound is ISTD

175

[redacted]

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 14:04
Output File: ^JJ107::ME Injected at: 930927 13:18
Data File: >JJ107::A8 Dilution Factor: 10.00000
Name: 930917-02 10X Instrument ID: EPA ANN1
Misc: VALMONT,STAHW-2;10MLSAM/100MLVOL QS OFW;5UL IS+SS/5ML

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units	q		
1)	*1,4-Difluorobenzene	21.34	1428	115923	50.00	ug/L	100		
11)	Methylene Chloride	15.75	948	2840	28.78	ug/L	96		
16)	Cis-1,2-Dichloroethene	18.68	1200	503	6.40	ug/L	90		
?)	Chloroform	19.02	1229	741	4.34	ug/L	91		
J)	1,1,1-Trichloroethane	19.83	1298	5108	37.59	ug/L	94		
23)	1,2-Dichloroethane-d4(SURR)	20.61	1365	25495	1056.69	ug/L	97		
26)	Fluorobenzene(SURR)	21.25	1420	123834	1028.77	ug/L	91		
27)	Trichloroethene	22.10	1493	30569	330.37	ug/L	95	330	OK
33)	*Chlorobenzene-d5	28.66	2057	94240	50.00	ug/L	96		
35)	Toluene-d8(SURR)	24.87	1731	97371	998.21	ug/L	84		
52)	Bromofluorobenzene(SURR)	31.80	2327	85571	1020.08	ug/L	100		
53)	*1,2-Dichlorobenzene-D4	36.10	2696	59200	50.00	ug/L	92		

* Compound is ISTD

176

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 11:25
Output File: ^JJ104::ME Injected at: 930927 10:39
Data File: >JJ104::A8 Dilution Factor: 1.00000
Name: 930917-04 Instrument ID: EPA ANN1
Misc: VALMONT,STA MW-3;5UL IS+SS/5ML SAMPLE

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.32	1432	121906	50.00	ug/L	100
~~11)~~	~~Methylene Chloride~~	~~15.72~~	~~951~~	~~943~~	~~.909~~	~~ug/L~~ SR	89
~~19)~~	~~Chloroform~~	~~18.99~~	~~1232~~	~~849~~	~~.473~~	~~ug/L~~ SR	92
20)	1,1,1-Trichloroethane	19.80	1302	2896	2.03	ug/L B	94
23)	1,2-Dichloroethane-d4(SURR)	20.57	1368	26007	102.50	ug/L	99
26)	Fluorobenzene(SURR)	21.21	1423	130397	103.01	ug/L	89
33)	*Chlorobenzene-d5	28.63	2060	99899	50.00	ug/L	97
35)	Toluene-d8(SURR)	24.83	1734	101867	98.51	ug/L	85
52)	Bromofluorobenzene(SURR)	31.78	2331	89061	100.15	ug/L	100
53)	*1,2-Dichlorobenzene-D4	36.09	2701	61087	50.00	ug/L	93
~~62)~~	~~1,2,4 Trimethylbenzene~~	~~33.55~~	~~2483~~	~~533~~	~~.230~~	~~ug/L~~ SR	100
~~21)~~	~~Naphthalene~~	~~42.50~~	~~3251~~	~~821~~	~~.391~~	~~ug/L~~ SR	100

* Compound is ISTD

177

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930923 12:07
Output File: ^JJ049::ME Injected at: 930923 11:21
Data File: >JJ049::D4 Dilution Factor: 1.00000
Name: 930917-05 Instrument ID: EPA ANN1
Misc: VALMONT,STA S-5,5G SOIL+5UL IS+SS/5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Date: 930923 08:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.30	1425	57737	50.00	ug/Kg	100
2)	Dichlorodifluoromethane	5.91	103	3798	13.75	ug/Kg	97
11)	Methylene Chloride	15.70	944	769	1.57	ug/KgB	98
9)	1,1,1-Trichloroethane	19.77	1294	2281	3.06	ug/KgJ	92
)	1,2-Dichloroethane-d4(SURR)	20.55	1361	15258	113.44	ug/Kg	97
26)	Fluorobenzene(SURR)	21.19	1416	54381	90.92	ug/Kg	89
33)	*Chlorobenzene-d5	28.58	2051	37047Low	50.00	ug/Kg	98
35)	Toluene-d8(SURR)	24.80	1726	35821	96.36	ug/Kg	86
52)	Bromofluorobenzene(SURR)	31.74	2322	33335	100.91	ug/Kg	100
53)	*1,2-Dichlorobenzene-D4	36.02	2690	20314Low	50.00	ug/Kg	92

* Compound is ISTD

No targets affected by depressed IS areas. All surrogates are in SR

178

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930923 13:00
Output File: ^JJ050::ME Injected at: 930923 12:14
Data File: >JJ050::D4 Dilution Factor: 1.00000
Name: 930917-06 Instrument ID: EPA ANN1
Misc: VALMONT,STA S-6,5G SOIL+5UL IS+SS/5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930923 08:10

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.29	114.0	87707	50.00	ug/Kg	100
10)	Acetone	14.34	43.0	2862	13.92	ug/Kg	86
11)	Methylene Chloride	15.71	49.0	1461	1.97	ug/Kg B	85
17)	2-Butanone	18.27	43.0	516	1.62	ug/Kg J	57
20)	1,1,1-Trichloroethane	19.79	97.0	6757	5.96	ug/Kg OK	95
23)	1,2-Dichloroethane-d4(SURR)	20.55	67.0	21008	102.82	ug/Kg	97
26)	Fluorobenzene(SURR)	21.19	96.0	85735	94.36	ug/Kg	88
~~27)~~	~~Trichloroethene~~	~~22.05~~	~~130.0~~	~~702~~	~~.968~~	~~ug/Kg~~ SM	97
33)	*Chlorobenzene-d5	28.59	117.0	71889	50.00	ug/Kg	98
35)	Toluene-d8(SURR)	24.81	98.0	73075	101.31	ug/Kg	88
52)	Bromofluorobenzene(SURR)	31.73	95.0	65787	102.63	ug/Kg	100
53)	*1,2-Dichlorobenzene-D4	36.03	152.0	46247	50.00	ug/Kg	92

* Compound is ISTD

179

QUANT REPORT

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930922 10:58
Output File: ^JJ043::ME Injected at: 930922 10:11
Data File: >JJ043::D4 Dilution Factor: 1.00000
Name: 930917-07 Instrument ID: EPA ANN1
Misc: VALMONT;5GM SOIL + STA S-6A;5GMSOIL + 5UL IS+SS IN

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930922 07:42

	Compound	R.T.	Q ion	Area	Conc	Units	q	
1)	*1,4-Difluorobenzene	21.26	114.0	113042	50.00	ug/Kg	100	
10)	Acetone	14.34	43.0	1274	3.89	ug/Kg B	98	
~~11)~~	~~Methylene Chloride~~	~~15.67~~	~~49.0~~	~~843~~	~~.802~~	~~ug/Kg J~~	90	SR
	Cis-1,2-Dichloroethene	18.61	96.0	1966	2.51	ug/Kg J	92	
	~~Chloroform~~	~~18.95~~	~~83.0~~	~~715~~	~~.410~~	~~ug/Kg J~~	75	SR
~~20)~~	1,1,1-Trichloroethane	19.75	97.0	20175	15.41	ug/Kg	94	
23)	1,2-Dichloroethane-d4(SURR)	20.52	67.0	26328	100.49	ug/Kg	96	
26)	Fluorobenzene(SURR)	21.17	96.0	120541	102.35	ug/Kg	90	
27)	Trichloroethene	22.02	130.0	20137	21.75	ug/Kg	88	
33)	*Chlorobenzene-d5	28.55	117.0	91873	50.00	ug/Kg	96	
35)	Toluene-d8(SURR)	24.78	98.0	95677	97.32	ug/Kg	84	
52)	Bromofluorobenzene(SURR)	31.72	95.0	80024	98.29	ug/Kg	100	
53)	*1,2-Dichlorobenzene-D4	36.00	152.0	54898	50.00	ug/Kg	93	
~~71)~~	~~Naphthalene~~	~~42.36~~	~~128.0~~	~~524~~	~~.194~~	~~ug/Kg~~	100	SR

* Compound is ISTD

180

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930925 11:43
Output File: ^JJ088::ME Injected at: 930925 10:57
Data File: >JJ088::D3 Dilution Factor: 1.00000
Name: 930917-08 Instrument ID: EPA ANN1
Misc: VALMONT,STA TB-2;5UL IS+SS/5ML SAMPLE

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930925 07:57

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.22	1422	106336	50.00	ug/L	100
11)	Methylene Chloride	15.65	943	2624	2.76	ug/L J	97
23)	1,2-Dichloroethane-d4(SURR)	20.48	1358	23858	108.89	ug/L	97
26)	Fluorobenzene(SURR)	21.13	1414	113873	101.73	ug/L	
33)	*Chlorobenzene-d5	28.52	2049	88695	50.00	ug/L	
35)	Toluene-d8(SURR)	24.74	1724	89211	96.91	ug/L	87
52)	Bromofluorobenzene(SURR)	31.66	2319	79483	98.30	ug/L	100
53)	*1,2-Dichlorobenzene-D4	35.96	2688	56139	50.00	ug/L	88
71)	~~Naphthalene~~	~~42.31~~	~~3233~~	~~549~~	~~.286~~	~~ug/L~~ SP	100

* Compound is ISTD

181

QUANT REPORT

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930921 11:14
Output File: ^JJ032::ME Injected at: 930921 10:28
Data File: >JJ032::D1 Dilution Factor: 1.00000
Name: LRB Instrument ID: EPA ANN1
Misc: 5UL IS+SS IN 5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930921 09:02

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.25	114.0	115167	50.00	ug/Kg	100
~~11)~~	~~Methylene Chloride~~	~~15.70~~	~~49.0~~	~~1028~~	~~.922~~	~~ug/Kg~~	94
23)	1,2-Dichloroethane-d4(SURR)	20.51	67.0	27240	99.42	ug/Kg	99
	Fluorobenzene(SURR)	21.15	96.0	124151	102.71	ug/Kg	89
	*Chlorobenzene-d5	28.55	117.0	98109	50.00	ug/Kg	96
35)	Toluene-d8(SURR)	24.77	98.0	101414	101.13	ug/Kg	85
52)	Bromofluorobenzene(SURR)	31.71	95.0	85008	97.55	ug/Kg	100
53)	*1,2-Dichlorobenzene-D4	36.00	152.0	59213	50.00	ug/Kg	93
~~71)~~	~~Naphthalene~~	~~42.30~~	~~128.0~~	~~1010~~	~~.357~~	~~ug/Kg~~	100

* Compound is ISTD

182

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930922 09:55
Output File: ^JJ042::ME Injected at: 930922 09:09
Data File: >JJ042::D4 Dilution Factor: 1.00000
Name: VOA LRB Instrument ID: EPA ANN1
Misc: 5UL IS+SS/5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930922 07:42

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.26	1423	116563	50.00	ug/Kg	100
10)	Acetone	14.35	829	1276	3.78	ug/Kg J	93
23)	1,2-Dichloroethane-d4(SURR)	20.51	1359	27877	103.19	ug/Kg	98
26)	Fluorobenzene(SURR)	21.17	1415	126040	103.78	ug/Kg	
33)	*Chlorobenzene-d5	28.56	2050	98584	50.00	ug/Kg	
35)	Toluene-d8(SURR)	24.77	1725	102276	96.95	ug/Kg	87
52)	Bromofluorobenzene(SURR)	31.71	2321	84125	96.29	ug/Kg	100
53)	*1,2-Dichlorobenzene-D4	36.00	2690	59936	50.00	ug/Kg	89

* Compound is ISTD

183

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930923 10:24
Output File: ^JJ047::ME Injected at: 930923 09:37
Data File: >JJ047::D4 Dilution Factor: 1.00000
Name: LRB Instrument ID: EPA ANN1
Misc: 5UL IS+SS/5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930923 08:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.27	1423	96529	50.00	ug/Kg	100
23)	1,2-Dichloroethane-d4(SURR)	20.53	1359	23233	103.32	ug/Kg	98
26)	Fluorobenzene(SURR)	21.18	1415	99326	99.33	ug/Kg	87
	*Chlorobenzene-d5	28.56	2049	79350	50.00	ug/Kg	98
	Toluene-d8(SURR)	24.79	1725	80292	100.85	ug/Kg	84
52)	Bromofluorobenzene(SURR)	31.70	2319	71494	101.05	ug/Kg	100
53)	*1,2-Dichlorobenzene-D4	36.00	2688	51574	50.00	ug/Kg	91

* Compound is ISTD

184

[redacted]

QUANT REPORT Page 1

Operator ID: FREDERICK Quant Rev: 7 Quant Time: 930924 12:00
Output File: ^JJ064::ME Injected at: 930924 11:14
Data File: >JJ064::D1 Dilution Factor: 1.00000
Name: LRB Instrument ID: EPA ANN1
Misc: 100UL MEOH + 5UL IS+SS IN 5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930924 09:44

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.23	114.0	90318	50.00	ug/Kg	100
17)	2-Butanone	18.24	43.0	1059	3.68	ug/Kg J	72
23)	1,2-Dichloroethane-d4(SURR)	20.49	67.0	21316	98.51	ug/Kg	97
26)	Fluorobenzene(SURR)	21.13	96.0	87747	99.52	ug/Kg	
33)	*Chlorobenzene-d5	28.52	117.0	74533	50.00	ug/Kg	
35)	Toluene-d8(SURR)	24.73	98.0	71457	99.62	ug/Kg	8
52)	Bromofluorobenzene(SURR)	31.66	95.0	66078	96.38	ug/Kg	100
53)	*1,2-Dichlorobenzene-D4	35.99	152.0	46712	50.00	ug/Kg	91

* Compound is ISTD

185

QUANT REPORT

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930925 09:57
Output File: ^JJ086::ME Injected at: 930925 09:11
Data File: >JJ086::D3 Dilution Factor: 1.00000
Name: LRB Instrument ID: EPA ANN1
Misc: 5UL IS+SS/5ML OFW

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930925 07:57

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.23	1425	113257	50.00	ug/L	100
~~11)~~	~~Methylene Chloride~~	~~15.64~~	~~945~~	~~658~~	~~.650~~	~~ug/L~~ SR	~~90~~
	~~Chloroform~~	~~18.90~~	~~1225~~	~~745~~	~~.426~~	~~ug/L~~ SR	~~84~~
	1,2-Dichloroethane-d4(SURR)	20.47	1360	23589	101.08	ug/L	99
26)	Fluorobenzene(SURR)	21.11	1415	117984	98.96	ug/L	92
33)	*Chlorobenzene-d5	28.51	2051	92787	50.00	ug/L	94
35)	Toluene-d8(SURR)	24.73	1726	95975	99.66	ug/L	83
52)	Bromofluorobenzene(SURR)	31.65	2321	82269	97.25	ug/L	100
53)	*1,2-Dichlorobenzene-D4	35.95	2690	58392	50.00	ug/L	92
~~71)~~	~~Naphthalene~~	~~42.28~~	~~3234~~	~~916~~	~~.459~~	~~ug/L~~ SR	~~100~~

* Compound is ISTD

186

ORIGINAL (Red)

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 10:19
Output File: ^JJ103::ME Injected at: 930927 09:33
Data File: >JJ103::A8 Dilution Factor: 1.00000
Name: LRB Instrument ID: EPA ANN1
Misc: 5UL IS+SS IN 5ML OFW

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Date: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.33	1430	124220	50.00	ug/L	100
11)	Methylene Chloride	15.71	948	1405	1.33	ug/LJ	87
20)	1,1,1-Trichloroethane	19.82	1301	2253	1.55	ug/LJ	
23)	1,2-Dichloroethane-d4(SURR)	20.57	1365	26813	103.71	ug/L	
26)	Fluorobenzene(SURR)	21.22	1421	132651	102.84	ug/L	96
33)	*Chlorobenzene-d5	28.64	2058	101607	50.00	ug/L	97
35)	Toluene-d8(SURR)	24.84	1732	103687	98.59	ug/L	82
52)	Bromofluorobenzene(SURR)	31.78	2328	90981	100.59	ug/L	100
53)	*1,2-Dichlorobenzene-D4	36.08	2697	62787	50.00	ug/L	93

* Compound is ISTD

187

Operator ID: FREDERICK Quant Rev: 7 Quant Time: 930929 10:10
Output File: ^A1759::ME Injected at: 930929 09:24
Data File: >A1759::A8 Dilution Factor: 1.00000
Name: VOA L R B Instrument ID: EPA ANN1
Misc: 5 UL EA IS+SS/5 ML OFW

ID File: ID624W::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930929 08:07

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.16	114.0	121283	50.00	ug/L	100
11)	Methylene Chloride	15.58	49.0	1161	1.12	ug/L J	93
23)	1,2-Dichloroethane-d4(SURR)	20.41	67.0	24102	94.25	ug/L	97
	Fluorobenzene(SURR)	21.05	96.0	121247	94.88	ug/L	90
	*Chlorobenzene-d5	28.44	117.0	96899	50.00	ug/L	95
35)	Toluene-d8(SURR)	24.67	98.0	102099	104.18	ug/L	81
52)	Bromofluorobenzene(SURR)	31.59	95.0	88187	104.24	ug/L	100
53)	*1,2-Dichlorobenzene-D4	35.87	152.0	55444	50.00	ug/L	91

* Compound is ISTD

188

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930923 18:41
Output File: ^JJ057::ME Injected at: 930923 17:55
Data File: >JJ057::D4 Dilution Factor: 1.00000
Name: 930916-03 5XMS Instrument ID: EPA ANN1
Misc: VALMONT,STA S-5A,1G SOIL+5UL TARGETS +IS+SS/5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930923 08:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.31	1428	74045	50.00	ug/Kg	100
8)	1,1-Dichloroethene	14.43	838	38976	51.88	ug/Kg	104 98
9)	Carbon Disulfide	15.59	937	48750	45.09	ug/Kg	1
10)	Acetone	14.39	834	8778	50.57	ug/Kg	
11)	Methylene Chloride	15.73	949	30601	48.81	ug/Kg	90
12)	Trans-1,2-Dichloroethene	16.33	1001	22081	48.01	ug/Kg	98
13)	1,1-Dichloroethane	17.33	1087	50444	60.42	ug/Kg	100
14)	Vinyl Acetate	17.33	1087	37851	38.14	ug/Kg	100
15)	2,2-Dichloropropane	18.50	1187	40919	51.63	ug/Kg	88
16)	Cis-1,2-Dichloroethene	18.66	1201	60253	118.87	ug/Kg	91
17)	2-Butanone	18.30	1170	11216	41.68	ug/Kg	66
18)	Bromochloromethane	19.40	1264	20876	53.45	ug/Kg	74
19)	Chloroform	18.99	1229	61041	52.87	ug/Kg	90
20)	1,1,1-Trichloroethane	19.82	1300	107795	112.61	ug/Kg	93
21)	Carbon Tetrachloride	20.36	1347	50386	51.84	ug/Kg	87
22)	1,1-Dichloro-1-propene	20.13	1327	31960	48.14	ug/Kg	95
23)	1,2-Dichloroethane-d4(SURR)	20.57	1365	18348	106.37	ug/Kg	97
24)	Benzene	20.80	1384	50995	46.68	ug/Kg	93 100
25)	1,2-Dichloroethane	20.78	1383	41645	57.35	ug/Kg	9
26)	Fluorobenzene(SURR)	21.22	1420	73778	96.18	ug/Kg	
27)	Trichloroethene	22.08	1494	33889	55.33	ug/Kg	5.1
28)	1,2-Dichloropropane	22.51	1531	23785	48.70	ug/Kg	68
29)	Dibromomethane	23.27	1596	38810	51.06	ug/Kg	100
30)	Bromodichloromethane	23.10	1581	66500	51.34	ug/Kg	91
32)	Cis-1,3-Dichloropropene	24.28	1682	38699	47.32	ug/Kg	97
33)	*Chlorobenzene-d5	28.61	2054	59143	50.00	ug/Kg	94
34)	4-Methyl-2-pentanone	23.68	1631	9172	46.24	ug/Kg	79
35)	Toluene-d8(SURR)	24.84	1730	59067	99.53	ug/Kg	85
36)	Toluene	25.02	1746	145984	211.14	ug/Kg *	97 86
37)	Trans-1,3-Dichloropropene	25.45	1783	36830	50.53	ug/Kg	95 249
38)	1,1,2-Trichloroethane	25.86	1818	26001	49.44	ug/Kg	100
39)	Tetrachloroethene	26.59	1880	41746	57.94	ug/Kg	86
40)	1,3-Dichloropropane	26.48	1871	37602	48.86	ug/Kg	100
41)	2-Hexanone	25.73	1807	9037	44.10	ug/Kg	79
42)	Dibromochloromethane 189	27.23	1935	63661	53.52	ug/Kg	94
43)	1,2-Dibromoethane (EDB)	27.74	1979	51070	51.66	ug/Kg	94
44)	Chlorobenzene	28.71	2062	51224	50.96	ug/Kg	102 93
46)	Ethylbenzene	28.76	2066	128185	86.48	ug/Kg	69
47)	m&p-Xylenes	28.93	2081	139109	248.[illegible]	ug/Kg	[illegible]
		30.10	2181	[illegible]	167.93	ug/Kg	91

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930923 18:41
Output File: ^JJ057::ME Injected at: 930923 17:55
Data File: >JJ057::D4 Dilution Factor: 1.00000
Name: 930916-03 5XMS Instrument ID: EPA ANN1
Misc: VALMONT,STA S-5A,1G SOIL+5UL TARGETS +IS+SS/5ML DFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Cal Time: 930923 08:10

	Compound	R.T.	Stan#	Area	Conc	Units	q
49	Styrene	30.21	2191	89757	99.37	ug/Kg	74
50)	Bromoform	31.29	2283	55451	53.66	ug/Kg	91
	Isopropylbenzene	30.97	2256	89962	58.34	ug/Kg	84
	Bromofluorobenzene(SURR)	31.76	2327	52864	100.24	ug/Kg	100
53)	*1,2-Dichlorobenzene-D4	36.06	2691	37031	50.00	ug/Kg	92
54	Fluorobenzene	32.35	2374	34803	51.69	ug/Kg	90
55	1,1,2,2-Tetrachloroethane	31.56	2306	51309	46.74	ug/Kg	100
56)	1,2,3-Trichloropropane	31.95	2340	36746	49.42	ug/Kg	100
57)	n-Propylbenzene	32.05	2348	27231	72.53	ug/Kg	83
58)	2-Chlorotoluene	32.63	2398	21540	55.43	ug/Kg	83
59)	4-Chlorotoluene	32.74	2407	20352	49.67	ug/Kg	79
60)	1,3,5-Trimethylbenzene	32.32	2371	156991	118.04	ug/Kg	95
61)	tert-Butylbenzene	33.43	2466	58583	43.64	ug/Kg	84
62)	1,2,4-Trimethylbenzene	33.54	2476	212495	157.06	ug/Kg	77
63)	sec-Butylbenzene	33.99	2514	89695	48.32	ug/Kg	94
64)	1,3-Dichlorobenzene	34.77	2581	53128	50.65	ug/Kg	86
65)	1,4-Dichlorobenzene	35.06	2606	54961	51.29	ug/Kg	87
66)	p-Isopropyltoluene	34.34	2544	76523	50.77	ug/Kg	96
67)	1,2-Dichlorobenzene	36.13	2697	51346	50.97	ug/Kg	87
	n-Butylbenzene	35.47	2641	76921	49.09	ug/Kg	86
69)	1,2-Dibromo-3-chloropropane	38.45	2896	19172	49.26	ug/Kg	100
70)	1,2,4-Trichlorobenzene	41.30	3141	45803	49.01	ug/Kg	77
71)	Naphthalene	42.42	3237	76782	46.16	ug/Kg	100
72)	Hexachlorobutadiene	41.67	3172	29708	48.35	ug/Kg	82
73)	1,2,3-Trichlorobenzene	43.36	3317	43580	48.50	ug/Kg	77

* Compound is ISTD

190

QUANT REPORT

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930923 19:34
Output File: ^JJ058::ME Injected at: 930923 18:47
Data File: >JJ058::D4 Dilution Factor: 1.00000
Name: 930916-03 5XMSD Instrument ID: EPA ANN1
Misc: VALMONT,STA S-5A,1G SOIL+5UL + TARGETS +IS+SS/5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930923 08:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.31	1424	78271	50.00	ug/Kg	100
8)	1,1-Dichloroethene	14.43	833	39069	49.19	ug/Kg	95
9)	Carbon Disulfide	15.59	933	49921	43.68	ug/Kg	
10)	Acetone	14.39	830	10078	54.93	ug/Kg	
11)	Methylene Chloride	15.72	944	31033	46.83	ug/Kg	92
12)	Trans-1,2-Dichloroethene	16.32	996	22879	47.06	ug/Kg	93
13)	1,1-Dichloroethane	17.34	1083	50303	57.00	ug/Kg	100
14)	Vinyl Acetate	17.34	1083	37697	35.94	ug/Kg	100
15)	2,2-Dichloropropane	18.51	1184	40543	48.40	ug/Kg	90
16)	Cis-1,2-Dichloroethene	18.67	1197	56111	104.72	ug/Kg	91
17)	2-Butanone	18.29	1165	12459	43.80	ug/Kg	67
18)	Bromochloromethane	19.40	1260	21326	51.66	ug/Kg	74
19)	Chloroform	18.98	1224	61473	50.37	ug/Kg	85
20)	1,1,1-Trichloroethane	19.80	1294	94496	93.39	ug/Kg	92
21)	Carbon Tetrachloride	20.37	1343	52123	50.73	ug/Kg	91
22)	1,1-Dichloro-1-propene	20.12	1322	32739	46.65	ug/Kg	97
23)	1,2-Dichloroethane-d4(SURR)	20.57	1360	19241	105.52	ug/Kg	95
24)	Benzene	20.79	1379	51845	44.90	ug/Kg	90 100
25)	1,2-Dichloroethane	20.78	1378	43076	56.12	ug/Kg	97
26)	Fluorobenzene(SURR)	21.21	1415	76467	94.30	ug/Kg	
27)	Trichloroethene	22.07	1489	35471	54.79	ug/Kg	110
28)	1,2-Dichloropropane	22.52	1527	24355	47.17	ug/Kg	74
29)	Dibromomethane	23.26	1591	40953	50.97	ug/Kg	100
30)	Bromodichloromethane	23.09	1576	67314	49.17	ug/Kg	86
32)	Cis-1,3-Dichloropropene	24.27	1677	40059	46.33	ug/Kg	96
33)	*Chlorobenzene-d5	28.61	2049	61506	50.00	ug/Kg	94
34)	4-Methyl-2-pentanone	23.67	1626	10182	49.35	ug/Kg	78
35)	Toluene-d8(SURR)	24.81	1724	62698	101.59	ug/Kg	86
36)	Toluene	25.01	1741	112414	156.34	ug/Kg	96
37)	Trans-1,3-Dichloropropene	25.43	1777	39281	51.82	ug/Kg	94
38)	1,1,2-Trichloroethane	25.85	1813	27620	50.50	ug/Kg	100
39)	Tetrachloroethene	26.58	1875	41748	55.72	ug/Kg	85
40)	1,3-Dichloropropane	26.47	1866	39880	49.83	ug/Kg	100
41)	2-Hexanone	25.72	1802	10526	49.39	ug/Kg	78
42)	Dibromochloromethane	27.22	1930	65797	53.19	ug/Kg	96
43)	1,2-Dibromoethane (EDB)	27.73	1974	53536	52.07	ug/Kg	95
44)	Chlorobenzene	28.71	2058	53819	51.48	ug/Kg	103 93
46)	Ethylbenzene	28.75	2061	113508	73.64	ug/Kg	78
47)	m&p-Xylenes	28.92	2076	114886	213.50	ug/Kg	88
41		30.09	2176	74338	145.43	ug/Kg	90

191

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930923 19:34
Output File: ^JJ058::ME Injected at: 930923 18:47
Data File: >JJ058::D4 Dilution Factor: 1.00000
Name: 930916-03 5XMSD Instrument ID: EPA ANN1
Misc: VALMONT,STA S-5A,1G SOIL+5UL + TARGETS +IS+SS/5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930923 08:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
49)	Styrene	30.20	2186	95000	101.14	ug/Kg	72
50)	Bromoform	31.29	2279	58873	54.79	ug/Kg	90
)	Isopropylbenzene	30.97	2252	87034	54.27	ug/Kg	86
	Bromofluorobenzene(SURR)	31.76	2319	56415	102.87	ug/Kg	100
53)	*1,2-Dichlorobenzene-D4	36.04	2686	39118	50.00	ug/Kg	88
54)	Bromobenzene	32.34	2369	36990	52.01	ug/Kg	89
55)	1,1,2,2-Tetrachloroethane	31.53	2300	54495	47.00	ug/Kg	100
56)	1,2,3-Trichloropropane	31.94	2335	40183	51.16	ug/Kg	100
57)	n-Propylbenzene	32.04	2343	25464	64.21	ug/Kg	86
58)	2-Chlorotoluene	32.63	2394	21229	51.72	ug/Kg	80
59)	4-Chlorotoluene	32.74	2403	22296	51.52	ug/Kg	77
60)	1,3,5-Trimethylbenzene	32.45	2378	111597	79.43	ug/Kg	76
61)	tert-Butylbenzene	33.42	2461	61925	43.67	ug/Kg	89
62)	1,2,4-Trimethylbenzene	33.54	2472	179277	125.44	ug/Kg	77
63)	sec-Butylbenzene	33.99	2510	89814	45.80	ug/Kg	93
64)	1,3-Dichlorobenzene	34.76	2576	55427	50.02	ug/Kg	86
65)	1,4-Dichlorobenzene	35.06	2602	56898	50.26	ug/Kg	87
66)	p-Isopropyltoluene	34.34	2540	82005	51.50	ug/Kg	56
67)	1,2-Dichlorobenzene	36.13	2693	53509	50.28	ug/Kg	81
	n-Butylbenzene	35.46	2636	75313	45.50	ug/Kg	82
)	1,2-Dibromo-3-chloropropane	38.45	2892	21390	52.03	ug/Kg	100
70)	1,2,4-Trichlorobenzene	41.30	3137	47706	48.33	ug/Kg	76
71)	Naphthalene	42.43	3234	87964	50.06	ug/Kg	100
72)	Hexachlorobutadiene	41.68	3169	30621	47.18	ug/Kg	81
73)	1,2,3-Trichlorobenzene	43.37	3314	45984	48.44	ug/Kg	72

* Compound is ISTD

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 22:04
Output File: ^JJ116::ME Injected at: 930927 21:18
Data File: >JJ116::A8 Dilution Factor: 1.00000
Name: 930916-09 MS Instrument ID: EPA ANN1
Misc: VALMONT;STA MW-10C;5UL TARG + 5UL IS+SS/5ML SAMPLE

ID File: V0A624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units		q
1)	*1,4-Difluorobenzene	21.29	1424	110976	50.00	ug/L		100
8)	1,1-Dichloroethene	14.40	833	57487	53.70	ug/L	107	98
9)	Carbon Disulfide	15.56	933	79381	49.77	ug/L		1[illegible]
10)	Acetone	14.37	830	6416	46.53	ug/L		
11)	Methylene Chloride	15.69	944	49335	52.22	ug/L		94
12)	Trans-1,2-Dichloroethene	16.30	996	34186	50.66	ug/L		97
13)	1,1-Dichloroethane	17.31	1083	66342	51.64	ug/L		100
14)	Vinyl Acetate	17.31	1083	54978	47.36	ug/L		100
15)	2,2-Dichloropropane	18.48	1183	53060	48.28	ug/L		92
16)	Cis-1,2-Dichloroethene	18.63	1196	37789	50.26	ug/L		92
17)	2-Butanone	18.27	1165	9965	45.85	ug/L		72
18)	Bromochloromethane	19.37	1260	26894	49.81	ug/L		93
19)	Chloroform	18.97	1225	84419	51.64	ug/L		91
20)	1,1,1-Trichloroethane	19.78	1295	67350	51.77	ug/L		96
21)	Carbon Tetrachloride	20.34	1343	64544	51.72	ug/L		93
22)	1,1-Dichloro-1-propene	20.11	1323	50487	52.32	ug/L		98
23)	1,2-Dichloroethane-d4(SURR)	20.54	1360	24981	108.15	ug/L		98
24)	Benzene	20.76	1379	84960	52.24	ug/L	104	100
25)	1,2-Dichloroethane	20.75	1378	50334	52.99	ug/L		8[illegible]
26)	Fluorobenzene(SURR)	21.18	1415	119174	103.42	ug/L		
27)	Trichloroethene	22.04	1489	44870	50.65	ug/L	101	[illegible]
28)	1,2-Dichloropropane	22.47	1526	37536	50.39	ug/L		64
29)	Dibromomethane	23.24	1592	50112	52.65	ug/L		100
30)	Bromodichloromethane	23.07	1577	85012	49.31	ug/L		94
32)	Cis-1,3-Dichloropropene	24.26	1679	55131	48.69	ug/L		100
33)	*Chlorobenzene-d5	28.59	2051	90281	50.00	ug/L		96
34)	4-Methyl-2-pentanone	23.65	1627	8957	48.31	ug/L		78
35)	Toluene-d8(SURR)	24.80	1726	93391	99.94	ug/L		86
36)	Toluene	24.99	1742	53597	49.42	ug/L	99	96
37)	Trans-1,3-Dichloropropene	25.43	1780	44355	48.21	ug/L		100
38)	1,1,2-Trichloroethane	25.84	1815	33078	48.98	ug/L		100
39)	Tetrachloroethene	26.55	1876	52480	51.36	ug/L		86
40)	1,3-Dichloropropane	26.46	1868	52496	50.79	ug/L		100
41)	2-Hexanone	25.70	1803	8171	45.78	ug/L		77
42)	Dibromochloromethane	27.22	1933	71733	49.41	ug/L		96
43)	1,2-Dibromoethane (EDB)	27.72	1976	59533	50.02	ug/L		94
44)	Chlorobenzene	28.70	2060	76170	49.57	ug/L	99	91
45)	1,1,1,2-Tetrachloroethane 193	28.76	2065	46282	49.32	ug/L		97
46)	Ethylbenzene	28.73	2063	112881	49.24	ug/L		85
		28.90	2077	80347	98.42	ug/L		88

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 22:04
Output File: ^JJ116::ME Injected at: 930927 21:18
Data File: >JJ116::A8 Dilution Factor: 1.00000
Name: 930916-09 MS Instrument ID: EPA ANN1
Misc: VALMONT;STA MW-10C;5UL TARG + 5UL IS+SS/5ML SAMPLE

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units	q
48)	o-Xylene	30.07	2178	79425	100.95	ug/L	93
49)	Styrene	30.19	2188	138966	97.54	ug/L	76
	Bromoform	31.27	2281	53247	48.05	ug/L	87
	Isopropylbenzene	30.96	2254	119803	49.47	ug/L	86
52)	Bromofluorobenzene(SURR)	31.74	2321	81006	100.80	ug/L	100
53)	*1,2-Dichlorobenzene-D4	36.04	2689	55890	50.00	ug/L	93
54)	Bromobenzene	32.33	2371	48410	49.73	ug/L	89
55)	1,1,2,2-Tetrachloroethane	31.52	2302	61291	49.76	ug/L	100
56)	1,2,3-Trichloropropane	31.93	2337	41201	51.35	ug/L	100
57)	n-Propylbenzene	32.02	2345	30357	49.95	ug/L	81
58)	2-Chlorotoluene	32.61	2395	32134	51.95	ug/L	79
59)	4-Chlorotoluene	32.71	2404	32982	52.67	ug/L	76
60)	1,3,5-Trimethylbenzene	32.42	2379	105115	49.80	ug/L	73
61)	tert-Butylbenzene	33.40	2463	105685	49.54	ug/L	85
62)	1,2,4-Trimethylbenzene	33.52	2473	106189	49.98	ug/L	100
63)	sec-Butylbenzene	33.97	2512	150088	50.10	ug/L	94
64)	1,3-Dichlorobenzene	34.75	2579	82132	49.68	ug/L	83
65)	1,4-Dichlorobenzene	35.05	2604	84312	50.32	ug/L	85
66)	p-Isopropyltoluene	34.32	2542	116104	49.13	ug/L	96
	1,2-Dichlorobenzene	36.12	2696	76579	51.26	ug/L	85
	n-Butylbenzene	35.45	2639	127258	50.19	ug/L	89
69)	1,2-Dibromo-3-chloropropane	38.44	2895	15730	48.97	ug/L	100
70)	1,2,4-Trichlorobenzene	41.28	3139	67398	49.37	ug/L	75
71)	Naphthalene	42.41	3236	87805	45.65	ug/L	100
72)	Hexachlorobutadiene	41.65	3171	45656	49.98	ug/L	100
73)	1,2,3-Trichlorobenzene	43.35	3316	62157	49.23	ug/L	70

* Compound is ISTD

194

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 23:51
Output File: ^JJ118::ME Injected at: 930927 23:05
Data File: >JJ118::A8 Dilution Factor: 1.00000
Name: 930916-09 MSD Instrument ID: EPA ANN1
Misc: VALMONT;STA MW-10C;5UL TARGETS +5UL IS+SS/5ML SSAMPL

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.28	1424	110657	50.00	ug/L	100
8)	1,1-Dichloroethene	14.37	831	57019	53.41	ug/L	99
9)	Carbon Disulfide	15.54	932	79738	50.14	ug/L	
10)	Acetone	14.34	829	6300	45.82	ug/L	
11)	Methylene Chloride	15.67	943	51396	54.56	ug/L	94
12)	Trans-1,2-Dichloroethene	16.28	995	34938	51.93	ug/L	96
13)	1,1-Dichloroethane	17.28	1081	67230	52.49	ug/L	100
14)	Vinyl Acetate	17.29	1082	53639	46.34	ug/L	100
15)	2,2-Dichloropropane	18.45	1182	53687	48.99	ug/L	93
16)	Cis-1,2-Dichloroethene	18.61	1195	39024	52.05	ug/L	96
17)	2-Butanone	18.24	1164	10285	47.46	ug/L	71
18)	Bromochloromethane	19.35	1259	27756	51.55	ug/L	94
19)	Chloroform	18.94	1224	84466	51.82	ug/L	93
20)	1,1,1-Trichloroethane	19.76	1294	67102	51.73	ug/L	94
21)	Carbon Tetrachloride	20.32	1342	65064	52.29	ug/L	94
22)	1,1-Dichloro-1-propene	20.07	1321	50291	52.26	ug/L	97
23)	1,2-Dichloroethane-d4(SURR)	20.52	1359	24003	104.22	ug/L	96
24)	Benzene	20.74	1378	84289	51.97	ug/L	104 100
25)	1,2-Dichloroethane	20.73	1377	51018	53.87	ug/L	89
26)	Fluorobenzene(SURR)	21.16	1414	117758	102.48	ug/L	
27)	Trichloroethene	22.02	1488	45046	51.00	ug/L	102
28)	1,2-Dichloropropane	22.46	1526	39554	53.25	ug/L	67
29)	Dibromomethane	23.22	1591	51209	53.96	ug/L	100
30)	Bromodichloromethane	23.05	1576	87341	50.81	ug/L	84
32)	Cis-1,3-Dichloropropene	24.24	1678	55612	49.25	ug/L	100
33)	*Chlorobenzene-d5	28.56	2049	90226	50.00	ug/L	92
34)	4-Methyl-2-pentanone	23.63	1626	9118	49.21	ug/L	76
35)	Toluene-d8(SURR)	24.77	1724	92124	98.64	ug/L	85
36)	Toluene	24.97	1741	54033	49.85	ug/L	100 97
37)	Trans-1,3-Dichloropropene	25.40	1778	46922	51.03	ug/L	100
38)	1,1,2-Trichloroethane	25.81	1813	34531	51.16	ug/L	100
39)	Tetrachloroethene	26.53	1875	53056	51.95	ug/L	83
40)	1,3-Dichloropropane	26.44	1867	53564	51.86	ug/L	100
41)	2-Hexanone	25.69	1803	8377	46.96	ug/L	76
42)	Dibromochloromethane	27.19	1931	73588	50.71	ug/L	96
43)	1,2-Dibromoethane (EDB)	27.69	1974	60964	51.26	ug/L	91
44)	Chlorobenzene	28.66	2058	79445	51.73	ug/L	103 87
45)	1,1,1,2-Tetrachloroethane	28.74	2064	47991	51.17	ug/L	99
46)	Ethylbenzene	28.71	2062	119820	52.30	ug/L	84
		28.88	2076	81737	100.18	ug/L	87

195

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 23:51
Output File: ^JJ118::ME Injected at: 930927 23:05
Data File: >JJ118::A8 Dilution Factor: 1.00000
Name: 930916-09 MSD Instrument ID: EPA ANN1
Misc: VALMONT;STA MW-10C;5UL TARGETS +5UL IS+SS/5ML SSAMPL

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units	q
48)	o-Xylene	30.05	2177	80484	102.36	ug/L	92
49)	Styrene	30.16	2186	138053	96.96	ug/L	75
	Bromoform	31.24	2279	56422	50.95	ug/L	89
	Isopropylbenzene	30.94	2253	123763	51.14	ug/L	86
52)	Bromofluorobenzene(SURR)	31.72	2320	80218	99.88	ug/L	100
53)	*1,2-Dichlorobenzene-D4	36.00	2687	54806	50.00	ug/L	93
54)	Bromobenzene	32.30	2370	50952	53.38	ug/L	86
55)	1,1,2,2-Tetrachloroethane	31.50	2301	64658	53.53	ug/L	100
56)	1,2,3-Trichloropropane	31.91	2336	43074	54.75	ug/L	100
57)	n-Propylbenzene	32.00	2344	31154	52.28	ug/L	80
58)	2-Chlorotoluene	32.59	2394	30859	50.88	ug/L	75
59)	4-Chlorotoluene	32.69	2403	33269	54.18	ug/L	74
60)	1,3,5-Trimethylbenzene	32.41	2379	102960	49.74	ug/L	77
61)	tert-Butylbenzene	33.37	2461	109459	52.33	ug/L	91
62)	1,2,4-Trimethylbenzene	33.51	2473	107102	51.41	ug/L	100
63)	sec-Butylbenzene	33.95	2511	153325	52.19	ug/L	91
64)	1,3-Dichlorobenzene	34.72	2577	83647	51.60	ug/L	86
65)	1,4-Dichlorobenzene	35.02	2603	86131	52.42	ug/L	85
66)	p-Isopropyltoluene	34.29	2540	119345	51.50	ug/L	56
	1,2-Dichlorobenzene	36.09	2694	78322	53.47	ug/L	84
	n-Butylbenzene	35.43	2638	130937	52.67	ug/L	88
69)	1,2-Dibromo-3-chloropropane	38.41	2893	16966	53.86	ug/L	100
70)	1,2,4-Trichlorobenzene	41.26	3138	70292	52.51	ug/L	76
71)	Naphthalene	42.37	3233	105166	55.76	ug/L	100
72)	Hexachlorobutadiene	41.62	3169	48701	54.36	ug/L	100
73)	1,2,3-Trichlorobenzene	43.30	3313	65532	52.93	ug/L	68

* Compound is ISTD

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930924 16:29
Output File: ^JJ068::ME Injected at: 930924 15:34
Data File: >JJ068::D1 Dilution Factor: 1.00000
Name: 930916-13 125X MS Instrument ID: EPA ANN1
Misc: VALMONT;STA S-7;100UL EXTR.+ 5UL(TARGETS+ IS+SS) IN 5

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930924 09:44

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.24	114.0	59050	50.00	ug/Kg	100
8)	1,1-Dichloroethene	14.26	61.0	27507	49.33	ug/Kg	91
9)	Carbon Disulfide	15.43	76.0	35161	47.68	ug/Kg	100
10)	Acetone	14.40	43.0	6628	47.30	ug/Kg	9
11)	Methylene Chloride	15.61	49.0	22588	49.30	ug/Kg	9
12)	Trans-1,2-Dichloroethene	16.21	96.0	16692	49.54	ug/Kg	99
13)	1,1-Dichloroethane	17.23	63.0	30791	49.65	ug/Kg	100
14)	Vinyl Acetate	17.27	43.0	36205	49.86	ug/Kg	100
15)	2,2-Dichloropropane	18.40	77.0	30968	48.20	ug/Kg	89
16)	Cis-1,2-Dichloroethene	18.58	96.0	18518	50.29	ug/Kg	94
17)	2-Butanone	18.31	43.0	8463	44.98	ug/Kg	69
18)	Bromochloromethane	19.30	128.0	15153	48.19	ug/Kg	77
19)	Chloroform	18.90	83.0	43633	49.22	ug/Kg	90
20)	1,1,1-Trichloroethane	19.70	97.0	37822	48.48	ug/Kg	94
21)	Carbon Tetrachloride	20.24	117.0	37834	47.25	ug/Kg	95
22)	1,1-Dichloro-1-propene	20.02	75.0	24179	49.62	ug/Kg	96
23)	1,2-Dichloroethane-d4(SURR)	20.49	67.0	13844	97.85	ug/Kg	95
24)	Benzene	20.69	78.0	37656	50.56	ug/Kg	101
25)	1,2-Dichloroethane	20.70	62.0	30106	48.51	ug/Kg	94
26)	Fluorobenzene(SURR)	21.12	96.0	57522	99.78	ug/Kg	89
27)	Trichloroethene	21.98	130.0	24529	49.42	ug/Kg	99
28)	1,2-Dichloropropane	22.42	63.0	17207	50.23	ug/Kg	6
29)	Dibromomethane	23.19	93.0	28895	48.92	ug/Kg	100
30)	Bromodichloromethane	23.02	83.0	48508	48.43	ug/Kg	93
32)	Cis-1,3-Dichloropropene	24.17	75.0	29805	48.91	ug/Kg	96
33)	*Chlorobenzene-d5	28.49	117.0	49097	50.00	ug/Kg	97
34)	4-Methyl-2-pentanone	23.60	58.0	6797	49.91	ug/Kg	79
35)	Toluene-d8(SURR)	24.72	98.0	46930	99.32	ug/Kg	82
36)	Toluene	24.93	92.0	26597	49.85	ug/Kg	100
37)	Trans-1,3-Dichloropropene	25.34	75.0	28573	50.31	ug/Kg	93
38)	1,1,2-Trichloroethane	25.74	97.0	19625	49.41	ug/Kg	100
39)	Tetrachloroethene	26.47	166.0	30941	48.88	ug/Kg	85
40)	1,3-Dichloropropane	26.37	76.0	28809	49.11	ug/Kg	100
41)	2-Hexanone	25.62	58.0	6666	46.63	ug/Kg	79
42)	Dibromochloromethane	27.09	129.0	47494	48.87	ug/Kg	97
43)	1,2-Dibromoethane (EDB)	27.62	107.0	37613	47.88	ug/Kg	87
44)	Chlorobenzene	28.60	112.0	40099	49.43	ug/Kg	99
45)	1,1,1,2-Tetrachloroethane	28.67	131.0	27059	48.80	ug/Kg	68
46)	Ethylbenzene	28.63	91.0	57809	50.79	ug/Kg	87
47)	m&p-Xylenes	28.82	106.0	40488	97.48	ug/Kg	87

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930924 16:29
Output File: ^JJ068::ME Injected at: 930924 15:34
Data File: >JJ068::D1 Dilution Factor: 1.00000
Name: 930916-13 125X MS Instrument ID: EPA ANN1
Misc: VALMONT;STA S-7;100UL EXTR.+ 5UL(TARGETS+ IS+SS) IN 5

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930924 09:44

	Compound	R.T.	Q ion	Area	Conc	Units	q
48)	o-Xylene	29.98	106.0	38897	99.38	ug/Kg	92
49)	Styrene	30.09	104.0	70262	98.48	ug/Kg	71
	Bromoform	31.15	173.0	42366	46.47	ug/Kg	90
	Isopropylbenzene	30.87	105.0	60310	49.97	ug/Kg	85
52)	Bromofluorobenzene(SURR)	31.64	95.0	44424	98.37	ug/Kg	100
53)	*1,2-Dichlorobenzene-D4	35.94	152.0	31777	50.00	ug/Kg	91
54)	Bromobenzene	32.22	156.0	28455	49.32	ug/Kg	94
55)	1,1,2,2-Tetrachloroethane	31.42	83.0	38433	50.30	ug/Kg	100
56)	1,2,3-Trichloropropane	31.83	75.0	27257	48.93	ug/Kg	100
57)	n-Propylbenzene	31.93	120.0	15346	51.14	ug/Kg	84
58)	2-Chlorotoluene	32.53	126.0	17374	50.36	ug/Kg	79
59)	4-Chlorotoluene	32.62	126.0	16933	50.21	ug/Kg	76
60)	1,3,5-Trimethylbenzene	32.34	105.0	52446	49.84	ug/Kg	68
61)	tert-Butylbenzene	33.31	119.0	54513	50.93	ug/Kg	88
62)	1,2,4-Trimethylbenzene	33.44	105.0	53847	50.33	ug/Kg	76
63)	sec-Butylbenzene	33.88	105.0	70892	50.12	ug/Kg	95
64)	1,3-Dichlorobenzene	34.66	146.0	44276	49.82	ug/Kg	87
65)	1,4-Dichlorobenzene	34.95	146.0	44798	48.78	ug/Kg	82
66)	p-Isopropyltoluene	34.23	119.0	61006	51.48	ug/Kg	56
	1,2-Dichlorobenzene	36.01	146.0	42514	50.33	ug/Kg	87
68)	n-Butylbenzene	35.36	91.0	59971	50.31	ug/Kg	87
69)	1,2-Dibromo-3-chloropropane	38.34	75.0	14014	48.53	ug/Kg	100
70)	1,2,4-Trichlorobenzene	41.17	180.0	40988	49.14	ug/Kg	74
71)	Naphthalene	42.29	128.0	63173	46.65	ug/Kg	100
72)	Hexachlorobutadiene	41.54	225.0	28712	51.69	ug/Kg	85
73)	1,2,3-Trichlorobenzene	43.23	180.0	38992	48.31	ug/Kg	68

* Compound is ISTD

198

QUANT REPORT

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930930 16:12
Output File: ^JJ069::ME Injected at: 930924 16:36
Data File: >JJ069::D1 Dilution Factor: 1.00000
Name: 930916-13 125X MSD Instrument ID: EPA ANN1
Misc: VALMONT;100UL EXTR +5UL (TARGETS + IS+SS) IN 5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930924 09:44

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.22	114.0	53946	50.00	ug/Kg	100
8)	1,1-Dichloroethene	14.35	61.0	24103	47.32	ug/Kg	95 92
9)	Carbon Disulfide	15.51	76.0	30594	45.41	ug/Kg	1
10)	Acetone	14.34	43.0	6189	48.34	ug/Kg	
11)	Methylene Chloride	15.65	49.0	20542	49.07	ug/Kg	9
12)	Trans-1,2-Dichloroethene	16.25	96.0	14689	47.72	ug/Kg	93
13)	1,1-Dichloroethane	17.25	63.0	27194	48.00	ug/Kg	100
14)	Vinyl Acetate	17.26	43.0	34268	51.66	ug/Kg	100
15)	2,2-Dichloropropane	18.41	77.0	27152	46.26	ug/Kg	91
16)	Cis-1,2-Dichloroethene	18.57	96.0	16792	49.92	ug/Kg	90
17)	2-Butanone	18.22	43.0	8326	48.44	ug/Kg	71
18)	Bromochloromethane	19.31	128.0	14796	51.51	ug/Kg	80
19)	Chloroform	18.90	83.0	41012	50.64	ug/Kg	90
20)	1,1,1-Trichloroethane	19.73	97.0	33770	47.38	ug/Kg	94
21)	Carbon Tetrachloride	20.26	117.0	33748	46.13	ug/Kg	89
22)	1,1-Dichloro-1-propene	20.04	75.0	21234	47.70	ug/Kg	97
23)	1,2-Dichloroethane-d4(SURR)	20.49	67.0	13264	102.62	ug/Kg	97
24)	Benzene	20.71	78.0	35727	52.51	ug/Kg	105 100
25)	1,2-Dichloroethane	20.69	62.0	28736	50.68	ug/Kg	9
26)	Fluorobenzene(SURR)	21.11	96.0	53751	102.06	ug/Kg	
27)	Trichloroethene	21.99	130.0	21752	47.97	ug/Kg	96
28)	1,2-Dichloropropane	22.42	63.0	16575	52.96	ug/Kg	71
29)	Dibromomethane	23.18	93.0	27928	51.76	ug/Kg	100
30)	Bromodichloromethane	23.00	83.0	46496	50.82	ug/Kg	90
32)	Cis-1,3-Dichloropropene	24.19	75.0	28497	51.19	ug/Kg	96
33)	*Chlorobenzene-d5	28.51	117.0	44984	50.00	ug/Kg	92
34)	4-Methyl-2-pentanone	23.60	98.0	6527	52.31	ug/Kg	78
35)	Toluene-d8(SURR)	24.74	98.0	43115	99.59	ug/Kg	84
36)	Toluene	24.92	92.0	23886	48.86	ug/Kg	98 94
37)	Trans-1,3-Dichloropropene	25.35	75.0	27579	53.00	ug/Kg	94
38)	1,1,2-Trichloroethane	25.76	97.0	19547	53.71	ug/Kg	100
39)	Tetrachloroethene	26.47	166.0	27573	47.54	ug/Kg	82
40)	1,3-Dichloropropane	26.39	76.0	28120	52.32	ug/Kg	100
41)	2-Hexanone	25.65	58.0	6087	46.47	ug/Kg	80
42)	Dibromochloromethane	27.14	129.0	45740	51.37	ug/Kg	92
43)	1,2-Dibromoethane (EDB)	27.64	107.0	37507	52.11	ug/Kg	91
44)	Chlorobenzene 199	28.62	112.0	37780	50.83	ug/Kg	102 86
45)	1,1,1,2-Tetrachloroethane	28.69	131.0	25686	50.56	ug/Kg	89
46)	Ethylbenzene	28.65	91.0	52685	50.92	ug/Kg	86
4		28.83	106.0	37539	98.65	ug/Kg	91

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930930 16:12
Output File: ^JJ069::ME Injected at: 930924 16:36
Data File: >JJ069::D1 Dilution Factor: 1.00000
Name: 930916-13 125X MSD Instrument ID: EPA ANN1
Misc: VALMONT;100UL EXTR +5UL (TARGETS + IS+SS) IN 5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930924 09:44

	Compound	R.T.	Q ion	Area	Conc	Units	q
48)	o-Xylene	30.00	106.0	36004	100.40	ug/Kg	93
49)	Styrene	30.11	104.0	66024	101.00	ug/Kg	71
	Bromoform	31.18	173.0	40291	48.23	ug/Kg	89
	Isopropylbenzene	30.88	105.0	55378	50.08	ug/Kg	87
52)	Bromofluorobenzene(SURR)	31.66	95.0	40819	98.65	ug/Kg	100
53)	*1,2-Dichlorobenzene-D4	35.94	152.0	27442	50.00	ug/Kg	93
54)	Bromobenzene	32.24	156.0	26884	53.95	ug/Kg	96
55)	1,1,2,2-Tetrachloroethane	31.45	83.0	34985	53.02	ug/Kg	100
56)	1,2,3-Trichloropropane	31.85	75.0	26125	54.31	ug/Kg	100
57)	n-Propylbenzene	31.94	120.0	14060	54.25	ug/Kg	80
58)	2-Chlorotoluene	32.52	126.0	14409	48.37	ug/Kg	78
59)	4-Chlorotoluene	32.63	126.0	15567	53.45	ug/Kg	76
60)	1,3,5-Trimethylbenzene	32.35	105.0	48170	53.01	ug/Kg	71
61)	tert-Butylbenzene	33.30	119.0	49690	53.75	ug/Kg	90
62)	1,2,4-Trimethylbenzene	33.43	105.0	49707	53.80	ug/Kg	77
63)	sec-Butylbenzene	33.89	105.0	64591	52.84	ug/Kg	94
64)	1,3-Dichlorobenzene	34.66	146.0	40027	52.15	ug/Kg	85
65)	1,4-Dichlorobenzene	34.96	146.0	41476	52.30	ug/Kg	88
	p-Isopropyltoluene	34.24	119.0	54365	53.13	ug/Kg	55
	1,2-Dichlorobenzene	36.02	146.0	37258	51.07	ug/Kg	86
	n-Butylbenzene	35.36	91.0	53893	52.36	ug/Kg	91
69)	1,2-Dibromo-3-chloropropane	38.34	75.0	2276	9.13	ug/Kg	100
70)	1,2,4-Trichlorobenzene	41.15	180.0	2234	3.10	ug/Kg	76
71)	Naphthalene	42.27	128.0	678	.580	ug/Kg	100
72)	Hexachlorobutadiene	41.53	225.0	3336	6.95	ug/Kg	79

* Compound is ISTD

200

ORIGINAL (red)

QUANT REPORT

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930923 22:09
Output File: ^JJ061::ME Injected at: 930923 21:23
Data File: >JJ061::D4 Dilution Factor: 1.00000
Name: LCS D Instrument ID: EPA ANN1
Misc: RESTEK; 5UL + TARGETS +IS+SS/5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930923 08:10

	Compound	R.T.	Scan#	Area	Conc	Units	q	
1)	*1,4-Difluorobenzene	21.32	1427	80912	50.00	ug/Kg	100	
8)	1,1-Dichloroethene	14.42	835	28512	34.73	ug/Kg	97	49
10)	Acetone	14.38	831	846	4.46	ug/Kg		
11)	Methylene Chloride	15.71	946	27997	40.87	ug/Kg	5	
12)	Trans-1,2-Dichloroethene	16.33	999	19324	38.45	ug/Kg	97	
13)	1,1-Dichloroethane	17.33	1085	38272	41.95	ug/Kg	100	
15)	2,2-Dichloropropane	18.51	1186	36270	41.88	ug/Kg	90	
16)	Cis-1,2-Dichloroethene	18.66	1199	23644	42.69	ug/Kg	90	
18)	Bromochloromethane	19.39	1262	22678	53.14	ug/Kg	75	
19)	Chloroform	18.97	1226	61250	48.55	ug/Kg	87	
20)	1,1,1-Trichloroethane	19.80	1297	50484	48.26	ug/Kg	93	
21)	Carbon Tetrachloride	20.37	1346	50999	48.02	ug/Kg	92	
22)	1,1-Dichloro-1-propene	20.13	1325	34404	47.43	ug/Kg	97	
23)	1,2-Dichloroethane-d4(SURR)	20.57	1363	19657	104.29	ug/Kg	95	
24)	Benzene	20.79	1382	50063	41.94	ug/Kg	100	84
25)	1,2-Dichloroethane	20.78	1381	43322	54.59	ug/Kg	95	
26)	Fluorobenzene(SURR)	21.21	1418	79441	94.77	ug/Kg	89	
27)	Trichloroethene	22.07	1492	33214	49.63	ug/Kg	96	99
28)	1,2-Dichloropropane	22.51	1529	25032	46.90	ug/Kg	7	
29)	Dibromomethane	23.27	1595	40825	49.15	ug/Kg	1	
30)	Bromodichloromethane	23.09	1579	66707	47.13	ug/Kg	87	
32)	Cis-1,3-Dichloropropene	24.28	1681	42605	47.67	ug/Kg	97	
33)	*Chlorobenzene-d5	28.62	2054	66670	50.00	ug/Kg	95	
35)	Toluene-d8(SURR)	24.83	1729	63923	95.56	ug/Kg	82	
36)	Toluene	25.02	1745	35454	45.49	ug/Kg	96	91
37)	Trans-1,3-Dichloropropene	25.45	1782	36894	44.90	ug/Kg	92	
38)	1,1,2-Trichloroethane	25.86	1817	28315	47.76	ug/Kg	100	
39)	Tetrachloroethene	26.58	1879	43486	53.54	ug/Kg	87	
40)	1,3-Dichloropropane	26.48	1870	40363	46.53	ug/Kg	100	
42)	Dibromochloromethane	27.22	1934	68439	51.04	ug/Kg	96	
43)	1,2-Dibromoethane (EDB)	27.74	1978	54705	49.09	ug/Kg	93	
44)	Chlorobenzene	28.72	2062	56852	50.17	ug/Kg	87	100
45)	1,1,1,2-Tetrachloroethane	28.80	2069	38435	52.72	ug/Kg	90	
46)	Ethylbenzene	28.76	2066	79951	47.85	ug/Kg	83	
47)	m&p-Xylenes	28.94	2081	57318	98.27	ug/Kg	88	
48)	o-Xylene	30.09	2180	28538	51.50	ug/Kg	89	
49)	Styrene	30.21	2190	49126	48.25	ug/Kg	75	
50)	Bromoform	31.29	2283	60340	51.80	ug/Kg	88	
51)	Isopropylbenzene	30.98	2256	85248	49.04	ug/Kg	85	
		31.76	2323	62139	104.53	ug/Kg	100	

201

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930923 22:09
Output File: ^JJ061::ME Injected at: 930923 21:23
Data File: >JJ061::D4 Dilution Factor: 1.00000
Name: LCS D Instrument ID: EPA ANN1
Misc: RESTEK; 5UL + TARGETS +IS+SS/5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930923 08:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
53)	*1,2-Dichlorobenzene-D4	36.05	2691	45757	50.00	ug/Kg	91
54)	Bromobenzene	32.34	2373	39628	47.64	ug/Kg	93
	1,1,2,2-Tetrachloroethane	31.55	2305	55335	40.80	ug/Kg	100
	1,2,3-Trichloropropane	31.96	2340	40806	44.41	ug/Kg	100
57)	n-Propylbenzene	32.04	2347	21555	46.46	ug/Kg	85
58)	2-Chlorotoluene	32.63	2398	23335	48.60	ug/Kg	75
59)	4-Chlorotoluene	32.74	2407	26341	52.03	ug/Kg	76
60)	1,3,5-Trimethylbenzene	32.45	2382	74134	45.11	ug/Kg	74
61)	tert-Butylbenzene	33.42	2465	77745	46.87	ug/Kg	91
62)	1,2,4-Trimethylbenzene	33.54	2476	72630	43.45	ug/Kg	78
63)	sec-Butylbenzene	33.99	2514	101284	44.16	ug/Kg	95
64)	1,3-Dichlorobenzene	34.77	2581	62857	48.50	ug/Kg	85
65)	1,4-Dichlorobenzene	35.06	2606	66786	50.44	ug/Kg	86
66)	p-Isopropyltoluene	34.34	2544	89524	48.07	ug/Kg	56
67)	1,2-Dichlorobenzene	36.13	2698	63588	51.08	ug/Kg	83
68)	n-Butylbenzene	35.47	2641	84095	43.43	ug/Kg	88
69)	1,2-Dibromo-3-chloropropane	38.45	2897	21722	45.17	ug/Kg	100
70)	1,2,4-Trichlorobenzene	41.31	3142	55261	47.86	ug/Kg	77
	Naphthalene	42.42	3237	100609	48.95	ug/Kg	100
	Hexachlorobutadiene	41.67	3173	40885	53.85	ug/Kg	83
	1,2,3-Trichlorobenzene	43.36	3318	60273	54.29	ug/Kg	68

* Compound is ISTD

[redacted]

Original Hard Copy

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930925 22:21
Output File: ^JJ100::ME Injected at: 930925 21:35
Data File: >JJ100::A8 Dilution Factor: 1.00000
Name: LCS Instrument ID: EPA ANN1
Misc: RESTEK STDS;5UL TARGETS +5UL IS+SS/5ML OFW

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930925 07:57

	Compound	R.T.	Scan#	Area	Conc	Units		q
1)	*1,4-Difluorobenzene	21.24	1420	108075	50.00	ug/L		100
8)	1,1-Dichloroethene	14.35	829	41215	37.41	ug/L	74.8	96=75%
9)	Carbon Disulfide	15.52	929	591	.376	ug/L		100
10)	Acetone	14.33	827	556	3.44	ug/L		
11)	Methylene Chloride	15.64	940	42396	43.86	ug/L		
12)	Trans-1,2-Dichloroethene	16.25	992	28454	40.37	ug/L		90
13)	1,1-Dichloroethane	17.26	1079	58387	44.29	ug/L		100
15)	2,2-Dichloropropane	18.42	1178	47823	41.47	ug/L		92
16)	Cis-1,2-Dichloroethene	18.59	1193	35119	45.28	ug/L		94
18)	Bromochloromethane	19.32	1256	29029	51.64	ug/L		96
19)	Chloroform	18.92	1221	81555	49.84	ug/L		94
20)	1,1,1-Trichloroethane	19.73	1291	62069	46.48	ug/L		96
21)	Carbon Tetrachloride	20.29	1339	60235	46.17	ug/L		91
22)	1,1-Dichloro-1-propene	20.05	1318	50167	51.58	ug/L		98
23)	1,2-Dichloroethane-d4(SURR)	20.50	1357	23777	106.77	ug/L		98
24)	Benzene	20.71	1375	78329	46.63	ug/L	93	100
25)	1,2-Dichloroethane	20.70	1374	49623	50.88	ug/L		90
26)	Fluorobenzene(SURR)	21.13	1411	114236	100.41	ug/L		89
27)	Trichloroethene	21.99	1485	43322	47.19	ug/L	94	91
28)	1,2-Dichloropropane	22.43	1522	37576	51.69	ug/L		
29)	Dibromomethane	23.19	1588	48715	50.16	ug/L		1
30)	Bromodichloromethane	23.02	1573	83183	47.31	ug/L		60
32)	Cis-1,3-Dichloropropene	24.20	1674	56493	51.60	ug/L		100
33)	*Chlorobenzene-d5	28.53	2046	85978	50.00	ug/L		96
35)	Toluene-d8(SURR)	24.74	1721	89514	100.31	ug/L		83
36)	Toluene	24.94	1738	51416	48.62	ug/L	97	98
37)	Trans-1,3-Dichloropropene	25.37	1775	40193	45.68	ug/L		100
38)	1,1,2-Trichloroethane	25.78	1810	32617	51.85	ug/L		100
39)	Tetrachloroethene	26.49	1871	52255	49.96	ug/L		83
40)	1,3-Dichloropropane	26.40	1863	50120	51.05	ug/L		100
42)	Dibromochloromethane	27.16	1928	74114	52.31	ug/L		96
43)	1,2-Dibromoethane (EDB)	27.66	1971	58962	51.46	ug/L		94
44)	Chlorobenzene	28.64	2055	73432	47.91	ug/L	96	91
45)	1,1,1,2-Tetrachloroethane	28.71	2061	47211	48.76	ug/L		81
46)	Ethylbenzene	28.67	2058	108752	48.15	ug/L		85
47)	m&p-Xylenes	28.85	2073	79026	97.28	ug/L		89
48)	o-Xylene	30.02	2174	39945	50.56	ug/L		91
49)	Styrene	30.13	2183	69039	48.57	ug/L		73
50)	Bromoform	31.20	2275	51399	46.54	ug/L		88
51)	Isopropylbenzene	30.89	2248	119139	49.50	ug/L		86

203

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930925 22:21
Output File: ^JJ100::ME Injected at: 930925 21:35
Data File: >JJ100::A8 Dilution Factor: 1.00000
Name: LCS Instrument ID: EPA ANN1
Misc: RESTEK STDS;5UL TARGETS +5UL IS+SS/5ML OFW

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930925 07:57

	Compound	R.T.	Scan#	Area	Conc	Units	q
52)	Bromofluorobenzene(SURR)	31.68	2316	79405	101.30	ug/L	100
53)	*1,2-Dichlorobenzene-D4	35.97	2684	55633	50.00	ug/L	93
	Bromobenzene	32.26	2366	47898	47.37	ug/L	92
	1,1,2,2-Tetrachloroethane	31.47	2298	59186	51.73	ug/L	100
56)	1,2,3-Trichloropropane	31.87	2332	40091	52.00	ug/L	100
57)	n-Propylbenzene	31.96	2340	29721	48.37	ug/L	81
58)	2-Chlorotoluene	32.54	2390	31117	49.33	ug/L	78
59)	4-Chlorotoluene	32.66	2400	33618	50.25	ug/L	76
60)	1,3,5-Trimethylbenzene	32.37	2375	101074	46.74	ug/L	78
61)	tert-Butylbenzene	33.34	2458	103066	47.76	ug/L	88
62)	1,2,4-Trimethylbenzene	33.47	2469	97500	44.58	ug/L	100
63)	sec-Butylbenzene	33.91	2507	144489	48.74	ug/L	92
64)	1,3-Dichlorobenzene	34.69	2574	80483	47.12	ug/L	84
65)	1,4-Dichlorobenzene	34.98	2599	85626	49.34	ug/L	85
66)	p-Isopropyltoluene	34.26	2537	119991	49.43	ug/L	56
67)	1,2-Dichlorobenzene	36.06	2691	78041	49.58	ug/L	85
68)	n-Butylbenzene	35.39	2634	121214	47.30	ug/L	89
69)	1,2-Dibromo-3-chloropropane	38.36	2889	16004	54.12	ug/L	100
70)	1,2,4-Trichlorobenzene	41.21	3133	61396	42.78	ug/L	76
	Naphthalene	42.33	3229	94101	49.48	ug/L	100
72)	Hexachlorobutadiene	41.56	3163	47282	47.99	ug/L	100
73)	1,2,3-Trichlorobenzene	43.26	3309	65319	50.17	ug/L	73

* Compound is ISTD

204

ORIGINAL (Red)

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 22:58
Output File: ^JJ117::ME Injected at: 930927 22:12
Data File: >JJ117::A8 Dilution Factor: 1.00000
Name: LCS Instrument ID: EPA ANN1
Misc: RESTEK STDS;5UL TARGETS +5UL IS+SS/5ML SAMPLE

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units		q
1)	*1,4-Difluorobenzene	21.28	1424	109628	50.00	ug/L		100
8)	1,1-Dichloroethene	14.39	832	42496	40.18	ug/L	80	94
11)	Methylene Chloride	15.69	944	44023	47.17	ug/L		
12)	Trans-1,2-Dichloroethene	16.29	996	29013	43.53	ug/L		
13)	1,1-Dichloroethane	17.30	1082	60999	48.07	ug/L		100
15)	2,2-Dichloropropane	18.47	1183	49097	45.22	ug/L		91
16)	Cis-1,2-Dichloroethene	18.63	1197	36203	48.74	ug/L		92
18)	Bromochloromethane	19.37	1260	29277	54.89	ug/L		95
19)	Chloroform	18.95	1224	83236	51.54	ug/L		90
20)	1,1,1-Trichloroethane	19.78	1295	62710	48.79	ug/L		96
21)	Carbon Tetrachloride	20.33	1342	61655	50.01	ug/L		92
22)	1,1-Dichloro-1-propene	20.10	1323	51069	53.57	ug/L		97
23)	1,2-Dichloroethane-d4(SURR)	20.55	1361	24099	105.62	ug/L		97
24)	Benzene	20.76	1379	79054	49.20	ug/L	98	100
25)	1,2-Dichloroethane	20.74	1378	51187	54.55	ug/L		87
26)	Fluorobenzene(SURR)	21.18	1415	116068	101.96	ug/L		89
27)	Trichloroethene	22.04	1489	44297	50.62	ug/L	101	90
28)	1,2-Dichloropropane	22.47	1526	38823	52.76	ug/L		70
29)	Dibromomethane	23.24	1592	50176	53.37	ug/L		10^
30)	Bromodichloromethane	23.05	1576	85657	50.30	ug/L		
32)	Cis-1,3-Dichloropropene	24.25	1679	58878	52.64	ug/L		1
33)	*Chlorobenzene-d5	28.59	2051	88050	50.00	ug/L		97
35)	Toluene-d8(SURR)	24.80	1726	92799	101.82	ug/L		87
36)	Toluene	24.99	1742	52497	49.63	ug/L	99	97
37)	Trans-1,3-Dichloropropene	25.42	1779	42272	47.11	ug/L		100
38)	1,1,2-Trichloroethane	25.84	1815	34234	51.98	ug/L		100
39)	Tetrachloroethene	26.55	1876	52348	52.52	ug/L		86
40)	1,3-Dichloropropane	26.46	1868	51623	51.22	ug/L		100
42)	Dibromochloromethane	27.20	1932	75930	53.62	ug/L		93
43)	1,2-Dibromoethane (EDB)	27.71	1976	61976	53.40	ug/L		91
44)	Chlorobenzene	28.69	2060	77796	51.91	ug/L	104	94
45)	1,1,1,2-Tetrachloroethane	28.76	2066	48127	52.59	ug/L		72
46)	Ethylbenzene	28.73	2063	114894	51.39	ug/L		84
47)	m&p-Xylenes	28.89	2077	80911	101.62	ug/L		88
48)	o-Xylene	30.08	2179	40785	53.15	ug/L		91
49)	Styrene	30.19	2188	70856	50.99	ug/L		76
50)	Bromoform	31.26	2280	54495	50.43	ug/L		86
51)	Isopropylbenzene	30.95	2254	124089	52.54	ug/L		88
52)	Bromofluorobenzene(SURR)	31.73	2320	79344	101.23	ug/L		100
5		36.02	2688	56250	50.00	ug/L		91

205

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 22:58
Output File: ^JJ117::ME Injected at: 930927 22:12
Data File: >JJ117::A8 Dilution Factor: 1.00000
Name: LCS Instrument ID: EPA ANN1
Misc: RESTEK STDS;5UL TARGETS +5UL IS+SS/5ML SAMPLE

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930927 08:14

	Compound	R.T.	Scan#	Area	Conc	Units	q
54)	Bromobenzene	32.32	2371	49124	50.14	ug/L	91
55)	1,1,2,2-Tetrachloroethane	31.51	2302	62828	50.68	ug/L	100
	1,2,3-Trichloropropane	31.92	2337	42312	52.40	ug/L	100
	n-Propylbenzene	32.02	2345	30957	50.61	ug/L	83
58)	2-Chlorotoluene	32.61	2396	33329	53.54	ug/L	74
59)	4-Chlorotoluene	32.71	2404	34211	54.28	ug/L	76
60)	1,3,5-Trimethylbenzene	32.41	2379	104141	49.02	ug/L	72
61)	tert-Butylbenzene	33.38	2462	105837	49.30	ug/L	88
62)	1,2,4-Trimethylbenzene	33.52	2474	100478	46.99	ug/L	100
63)	sec-Butylbenzene	33.97	2512	150160	49.80	ug/L	92
64)	1,3-Dichlorobenzene	34.75	2579	82978	49.87	ug/L	86
65)	1,4-Dichlorobenzene	35.04	2604	88561	52.52	ug/L	87
66)	p-Isopropyltoluene	34.32	2542	122544	51.52	ug/L	56
67)	1,2-Dichlorobenzene	36.11	2696	79959	53.18	ug/L	84
68)	n-Butylbenzene	35.45	2639	127235	49.86	ug/L	89
69)	1,2-Dibromo-3-chloropropane	38.42	2894	16817	52.01	ug/L	100
70)	1,2,4-Trichlorobenzene	41.28	3139	64217	46.74	ug/L	74
71)	Naphthalene	42.39	3234	101899	52.64	ug/L	100
	Hexachlorobutadiene	41.65	3171	49210	53.52	ug/L	100
	1,2,3-Trichlorobenzene	43.33	3315	67456	53.08	ug/L	69

* Compound is ISTD

Palmont

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930921 09:54
Output File: ^JJ031::ME Injected at: 930921 09:02
Data File: >JJ031::D1 Dilution Factor: 1.00000
Name: VOA 50 STD HEATED Instrument ID: EPA ANN1
Misc: 5UL TARGETS + 5UL GASES + 5UL IS+SS IN 5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOMLS
Last Calibration: : Last Qcal Time: 930920 13:58

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.28	114.0	117661	50.00	ug/Kg	100
2)	Dichlorodifluoromethane	5.98	85.0	30254	45.84	ug/Kg	96
3)	Chloromethane	8.29	50.0	29091M	53.00	ug/Kg	100
4)	Vinyl Chloride	9.16	62.0	24946	49.54	ug/Kg	10
5)	Bromomethane	11.36	94.0	6318	46.50	ug/Kg	
6)	Chloroethane	11.79	64.0	15995	50.42	ug/Kg	97
7)	Trichlorofluoromethane	12.58	101.0	74546	49.44	ug/Kg	94
8)	1,1-Dichloroethene	14.39	61.0	61069	51.57	ug/Kg	96
9)	Carbon Disulfide	15.56	76.0	86091	51.31	ug/Kg	100
10)	Acetone	14.38	43.0	17759	56.93	ug/Kg	85
11)	Methylene Chloride	15.70	49.0	56947	54.49	ug/Kg	93
12)	Trans-1,2-Dichloroethene	16.30	96.0	37424	51.66	ug/Kg	90
13)	1,1-Dichloroethane	17.31	63.0	72218	51.70	ug/Kg	100
14)	Vinyl Acetate	17.31	43.0	88097	51.66	ug/Kg	100
15)	2,2-Dichloropropane	18.49	77.0	59038	50.15	ug/Kg	91
16)	Cis-1,2-Dichloroethene	18.64	96.0	42011	52.43	ug/Kg	92
17)	2-Butanone	18.28	43.0	27417	55.04	ug/Kg	72
18)	Bromochloromethane	19.37	128.0	31597	53.17	ug/Kg	97
19)	Chloroform	18.96	83.0	91624	53.36	ug/Kg	90
20)	1,1,1-Trichloroethane	19.78	97.0	69585	51.49	ug/Kg	94
21)	Carbon Tetrachloride	20.34	117.0	68353	51.10	ug/Kg	
22)	1,1-Dichloro-1-propene	20.09	75.0	54046	50.66	ug/Kg	9
23)	1,2-Dichloroethane-d4(SURR)	20.54	67.0	27993	104.54	ug/Kg	97
24)	Benzene	20.76	78.0	94655	53.02	ug/Kg	100
25)	1,2-Dichloroethane	20.75	62.0	60064	54.69	ug/Kg	90
26)	Fluorobenzene(SURR)	21.18	96.0	123494	100.53	ug/Kg	91
27)	Trichloroethene	22.04	130.0	47898	52.66	ug/Kg	90
28)	1,2-Dichloropropane	22.47	63.0	45384	54.48	ug/Kg	70
29)	Dibromomethane	23.23	93.0	62501	51.65	ug/Kg	100
30)	Bromodichloromethane	23.06	83.0	101842	53.88	ug/Kg	87
31)	2-Chloroethylvinylether	23.62	63.0	18139	47.93	ug/Kg	85
32)	Cis-1,3-Dichloropropene	24.24	75.0	68288	51.90	ug/Kg	96
33)	*Chlorobenzene-d5	28.57	117.0	100466	50.00	ug/Kg	95
34)	4-Methyl-2-pentanone	23.65	58.0	19039	50.85	ug/Kg	73
35)	Toluene-d8(SURR)	24.80	98.0	102685	96.41	ug/Kg	87
36)	Toluene	24.98	92.0	62275	50.38	ug/Kg	95
37)	Trans-1,3-Dichloropropene	25.41	75.0	61679	49.17	ug/Kg	94
38)	1,1,2-Trichloroethane	25.82	97.0	46264	51.43	ug/Kg	100
39)	Tetrachloroethene	26.54	166.0	58258	49.90	ug/Kg	79
40)	1,3-Dichloropropane	26.44	76.0	69589	50.22	ug/Kg	100

207

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930921 09:54
Output File: ^JJ031::ME Injected at: 930921 09:02
Data File: >JJ031::D1 Dilution Factor: 1.00000
Name: VOA 50 STD HEATED Instrument ID: EPA ANN1
Misc: 5UL TARGETS + 5UL GASES + 5UL IS+SS IN 5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930920 13:58

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	2-Hexanone	25.70	58.0	20568	51.55	ug/Kg	76
42)	Dibromochloromethane	27.19	129.0	92667	50.46	ug/Kg	94
	1,2-Dibromoethane (EDB)	27.69	107.0	82616	49.28	ug/Kg	93
	Chlorobenzene	28.67	112.0	86333	49.15	ug/Kg	90
45)	1,1,1,2-Tetrachloroethane	28.75	131.0	51444	50.46	ug/Kg	86
46)	Ethylbenzene	28.71	91.0	129304	50.30	ug/Kg	88
47)	m&p-Xylenes	28.89	106.0	89868	98.98	ug/Kg	90
48)	o-Xylene	30.06	106.0	85435	97.27	ug/Kg	91
49)	Styrene	30.18	104.0	161637	100.75	ug/Kg	73
50)	Bromoform	31.26	173.0	79265	50.89	ug/Kg	87
51)	Isopropylbenzene	30.93	105.0	132459	49.53	ug/Kg	88
52)	Bromofluorobenzene(SURR)	31.72	95.0	89234	101.06	ug/Kg	100
53)	*1,2-Dichlorobenzene-D4	36.02	152.0	61822	50.00	ug/Kg	92
54)	Bromobenzene	32.30	156.0	55717	50.31	ug/Kg	93
55)	1,1,2,2-Tetrachloroethane	31.51	83.0	98113	50.10	ug/Kg	100
56)	1,2,3-Trichloropropane	31.91	75.0	67475	50.99	ug/Kg	100
57)	n-Propylbenzene	32.01	120.0	31782	47.79	ug/Kg	79
58)	2-Chlorotoluene	32.59	126.0	32721	47.78	ug/Kg	77
	4-Chlorotoluene	32.70	126.0	33541	48.36	ug/Kg	75
	1,3,5-Trimethylbenzene	32.40	105.0	112564	49.33	ug/Kg	73
61)	tert-Butylbenzene	33.39	119.0	110111	48.48	ug/Kg	87
62)	1,2,4-Trimethylbenzene	33.50	105.0	114259	49.42	ug/Kg	80
63)	sec-Butylbenzene	33.95	105.0	159593	49.21	ug/Kg	93
64)	1,3-Dichlorobenzene	34.73	146.0	89125	49.94	ug/Kg	86
65)	1,4-Dichlorobenzene	35.03	146.0	90949	50.13	ug/Kg	86
66)	p-Isopropyltoluene	34.30	119.0	124395	49.09	ug/Kg	55
67)	1,2-Dichlorobenzene	36.09	146.0	84272	49.54	ug/Kg	84
68)	n-Butylbenzene	35.43	91.0	136750	49.60	ug/Kg	87
69)	1,2-Dibromo-3-chloropropane	38.42	75.0	31284	51.23	ug/Kg	100
70)	1,2,4-Trichlorobenzene	41.25	180.0	75284	50.17	ug/Kg	76
71)	Naphthalene	42.37	128.0	147610	50.92	ug/Kg	100
72)	Hexachlorobutadiene	41.61	225.0	45768	48.66	ug/Kg	85
73)	1,2,3-Trichlorobenzene	43.32	180.0	73023	50.86	ug/Kg	71

* Compound is ISTD

208

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930922 08:28
Output File: ^JJ041::ME Injected [illegible] 07:42
Data File: >JJ041::D4 Dilution Factor: 1.00000
Name: VOA-50+CHK*STD* Instrument ID: EPA ANN1
Misc: 5UL IS+SS+TARGETS+GASES IN 5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930921 09:02

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.27	114.0	119491	50.00	ug/Kg	100
2)	Dichlorodifluoromethane	5.97	85.0	29851	48.58	ug/Kg	94
3)	Chloromethane	8.28	50.0	28357M	47.99	ug/Kg	1
4)	Vinyl Chloride	9.16	62.0	25936	51.19	ug/Kg	1
5)	Bromomethane	11.36	94.0	10121	78.87	ug/Kg	82
6)	Chloroethane	11.78	64.0	16787	51.67	ug/Kg	94
7)	Trichlorofluoromethane	12.60	101.0	77557	51.22	ug/Kg	99
8)	1,1-Dichloroethene	14.39	61.0	61429	49.52	ug/Kg	99
9)	Carbon Disulfide	15.57	76.0	85160	48.70	ug/Kg	100
10)	Acetone	14.37	43.0	17297	47.95	ug/Kg	85
11)	Methylene Chloride	15.69	49.0	55586	48.06	ug/Kg	97
12)	Trans-1,2-Dichloroethene	16.30	96.0	37268	49.03	ug/Kg	94
13)	1,1-Dichloroethane	17.30	63.0	73077	49.82	ug/Kg	100
14)	Vinyl Acetate	17.31	43.0	87230	48.75	ug/Kg	100
15)	2,2-Dichloropropane	18.48	77.0	59455	49.58	ug/Kg	92
16)	Cis-1,2-Dichloroethene	18.63	96.0	41476	48.61	ug/Kg	92
17)	2-Butanone	18.27	43.0	25929	46.56	ug/Kg	70
18)	Bromochloromethane	19.36	128.0	31020	48.34	ug/Kg	93
19)	Chloroform	18.97	83.0	90434	48.59	ug/Kg	c
20)	1,1,1-Trichloroethane	19.78	97.0	69210	48.97	ug/Kg	
21)	Carbon Tetrachloride	20.33	117.0	68438	49.30	ug/Kg	96
22)	1,1-Dichloro-1-propene	20.10	75.0	54951	50.06	ug/Kg	97
23)	1,2-Dichloroethane-d4(SURR)	20.54	67.0	27694	97.42	ug/Kg	97
24)	Benzene	20.76	78.0	92604	48.17	ug/Kg	100
25)	1,2-Dichloroethane	20.75	62.0	59096	48.44	ug/Kg	89
26)	Fluorobenzene(SURR)	21.18	96.0	124498	99.27	ug/Kg	89
27)	Trichloroethene	22.04	130.0	48922	50.29	ug/Kg	89
28)	1,2-Dichloropropane	22.47	63.0	44404	48.17	ug/Kg	67
29)	Dibromomethane	23.23	93.0	63211	49.79	ug/Kg	100
30)	Bromodichloromethane	23.06	83.0	99651	48.18	ug/Kg	88
31)	2-Chloroethylvinylether	23.60	63.0	16348	44.37	ug/Kg	77
32)	Cis-1,3-Dichloropropene	24.23	75.0	69460	50.08	ug/Kg	95
33)	*Chlorobenzene-d5	28.57	117.0	97952	50.00	ug/Kg	98
34)	4-Methyl-2-pentanone	23.64	58.0	18153	48.90	ug/Kg	73
35)	Toluene-d8(SURR)	24.79	98.0	104818	104.70	ug/Kg	86
36)	Toluene	24.98	92.0	63167	52.02	ug/Kg	97
37)	Trans-1,3-Dichloropropene	25.41	75.0	62401	51.88	ug/Kg	93
38)	1,1,2-Trichloroethane	25.82	97.0	45326	50.24	ug/Kg	100
39)	Tetrachloroethene	26.54	166.0	58832	51.79	ug/Kg	84
40)		.44	76.0	69942	51.54	ug/Kg	100

209

QUANT REPORT

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930922 08:28
Output File: ^JJ041::ME Injected at: 930922 07:42
Data File: >JJ041::D4 Dilution Factor: 1.00000
Name: VOA 50 CHK STD
Misc: 5UL IS+SS+TARGETS+GASES IN 5ML DFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930921 09:02

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	2-Hexanone	25.69	58.0	20072	50.05	ug/Kg	77
42)	Dibromochloromethane	27.18	129.0	92622	51.26	ug/Kg	95
	1,2-Dibromoethane (EDB)	27.69	107.0	83329	51.73	ug/Kg	92
	Chlorobenzene	28.67	112.0	86784	51.55	ug/Kg	93
45)	1,1,1,2-Tetrachloroethane	28.74	131.0	51920	51.76	ug/Kg	80
46)	Ethylbenzene	28.71	91.0	131819	52.28	ug/Kg	83
47)	m&p-Xylenes	28.88	106.0	92057	105.06	ug/Kg	90
48)	o-Xylene	30.05	106.0	88758	106.56	ug/Kg	90
49)	Styrene	30.17	104.0	163167	103.54	ug/Kg	75
50)	Bromoform	31.25	173.0	78506	50.79	ug/Kg	85
51)	Isopropylbenzene	30.93	105.0	134133	51.93	ug/Kg	86
52)	Bromofluorobenzene(SURR)	31.72	95.0	86802	99.77	ug/Kg	100
53)	*1,2-Dichlorobenzene-D4	36.01	152.0	59274	50.00	ug/Kg	91
54)	Bromobenzene	32.31	156.0	55339	51.80	ug/Kg	90
55)	1,1,2,2-Tetrachloroethane	31.49	83.0	95570	50.80	ug/Kg	100
56)	1,2,3-Trichloropropane	31.92	75.0	65370	50.52	ug/Kg	100
57)	n-Propylbenzene	31.99	120.0	32578	53.46	ug/Kg	82
58)	2-Chlorotoluene	32.59	126.0	35047	55.86	ug/Kg	74
59)	4-Chlorotoluene	32.69	126.0	35326	54.92	ug/Kg	74
	1,3,5-Trimethylbenzene	32.41	105.0	114492	53.04	ug/Kg	74
61)	tert-Butylbenzene	33.37	119.0	113532	53.77	ug/Kg	85
62)	1,2,4-Trimethylbenzene	33.49	105.0	117016	53.41	ug/Kg	80
63)	sec-Butylbenzene	33.93	105.0	161877	52.90	ug/Kg	91
64)	1,3-Dichlorobenzene	34.73	146.0	89073	52.12	ug/Kg	85
65)	1,4-Dichlorobenzene	35.02	146.0	93390	53.55	ug/Kg	84
66)	p-Isopropyltoluene	34.29	119.0	126454	53.01	ug/Kg	55
67)	1,2-Dichlorobenzene	36.08	146.0	84888	52.53	ug/Kg	85
68)	n-Butylbenzene	35.43	91.0	136232	51.95	ug/Kg	91
69)	1,2-Dibromo-3-chloropropane	38.40	75.0	29979	49.97	ug/Kg	100
70)	1,2,4-Trichlorobenzene	41.24	180.0	75338	52.19	ug/Kg	74
71)	Naphthalene	42.36	128.0	146016	51.59	ug/Kg	100
72)	Hexachlorobutadiene	41.61	225.0	47200	53.78	ug/Kg	86
73)	1,2,3-Trichlorobenzene	43.30	180.0	72817	52.00	ug/Kg	74

* Compound is ISTD

210

QUANT REPORT Page 1

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930923 08:56
Output File: ^JJ046::ME Injected at: 930923 08:10
Data File: >JJ046::D4 Dilution Factor: 1.00000
Name: VOA 50 STD Instrument ID: EPA ANN1
Misc: 5UL TARGETS + 5UL GASES + 5UL IS+SS IN 5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930922 07:42

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.27	114.0	103195	50.00	ug/Kg	100
2)	Dichlorodifluoromethane	5.90	85.0	24677	47.86	ug/Kg	98
3)	Chloromethane	8.24	50.0	21486M	43.87	ug/Kg	100
4)	Vinyl Chloride	9.13	62.0	19703	43.98	ug/Kg	1[illegible]
5)	Bromomethane	11.34	94.0	9043	51.73	ug/Kg	[illegible]
6)	Chloroethane	11.77	64.0	12647	43.62	ug/Kg	98
7)	Trichlorofluoromethane	12.59	101.0	71633	53.47	ug/Kg	96
8)	1,1-Dichloroethene	14.38	61.0	52356	49.34	ug/Kg	95
9)	Carbon Disulfide	15.55	76.0	75339	51.22	ug/Kg	100
10)	Acetone	14.37	43.0	12095	40.48	ug/Kg	85
11)	Methylene Chloride	15.69	49.0	43688	45.50	ug/Kg	91
12)	Trans-1,2-Dichloroethene	16.28	96.0	32049	49.79	ug/Kg	91
13)	1,1-Dichloroethane	17.28	63.0	58175	46.09	ug/Kg	100
14)	Vinyl Acetate	17.29	43.0	69147	45.89	ug/Kg	100
15)	2,2-Dichloropropane	18.46	77.0	55225	53.78	ug/Kg	90
16)	Cis-1,2-Dichloroethene	18.61	96.0	35322	49.31	ug/Kg	95
17)	2-Butanone	18.25	43.0	18752	41.87	ug/Kg	72
18)	Bromochloromethane	19.34	128.0	27214	50.79	ug/Kg	85
19)	Chloroform	18.94	83.0	80459	51.51	ug/Kg	92
20)	1,1,1-Trichloroethane	19.76	97.0	66702	55.80	ug/Kg	9[illegible]
21)	Carbon Tetrachloride	20.30	117.0	67733	57.30	ug/Kg	[illegible]
22)	1,1-Dichloro-1-propene	20.08	75.0	46260	48:74	ug/Kg	9[illegible]
23)	1,2-Dichloroethane-d4(SURR)	20.52	67.0	24040	100.51	ug/Kg	98
24)	Benzene	20.74	78.0	76126	47.59	ug/Kg	100
25)	1,2-Dichloroethane	20.73	62.0	50603	49.58	ug/Kg	92
26)	Fluorobenzene(SURR)	21.16	96.0	106906	99.43	ug/Kg	89
27)	Trichloroethene	22.03	130.0	42681	50.51	ug/Kg	86
28)	1,2-Dichloropropane	22.46	63.0	34037	44.38	ug/Kg	62
29)	Dibromomethane	23.22	93.0	52966	48.51	ug/Kg	100
30)	Bromodichloromethane	23.04	83.0	90253	52.44	ug/Kg	89
31)	2-Chloroethylvinylether	23.60	63.0	12544	44.42	ug/Kg	88
32)	Cis-1,3-Dichloropropene	24.23	75.0	56993	47.50	ug/Kg	97
33)	*Chlorobenzene-d5	28.56	117.0	86119	50.00	ug/Kg	96
34)	4-Methyl-2-pentanone	23.62	58.0	14443	45.25	ug/Kg	73
35)	Toluene-d8(SURR)	24.78	98.0	86411	93.77	ug/Kg	84
36)	Toluene	24.98	92.0	50338	45.32	ug/Kg	96
37)	Trans-1,3-Dichloropropene	25.40	75.0	53065	48.36	ug/Kg	94
38)	1,1,2-Trichloroethane	25.81	97.0	38293	48.05	ug/Kg	100
39)	Tetrachloroethene	26.52	166.0	52455	50.71	ug/Kg	83
40)	1,3-Dichloropropane	26.42	76.0	56027	45.56	ug/Kg	100

211

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930923 08:56
Output File: ^JJ046::ME Injected at: 930923 08:10
Data File: >JJ046::D4 Dilution Factor: 1.00000
Name: VOA 50 STD Instrument ID: EPA ANN1
Misc: 5UL TARGETS + 5UL GASES + 5UL IS+SS IN 5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930922 07:42

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	2-Hexanone	25.68	58.0	14921	42.28	ug/Kg	75
42)	Dibromochloromethane	27.17	129.0	86595	53.17	ug/Kg	97
	1,2-Dibromoethane (EDB)	27.69	107.0	71980	49.12	ug/Kg	93
	Chlorobenzene	28.66	112.0	73184	47.96	ug/Kg	90
45)	1,1,1,2-Tetrachloroethane	28.73	131.0	47082	51.57	ug/Kg	85
46)	Ethylbenzene	28.70	91.0	107915	46.56	ug/Kg	83
47)	m&p-Xylenes	28.87	106.0	75346	93.09	ug/Kg	89
48)	o-Xylene	30.04	106.0	71572	91.72	ug/Kg	92
49)	Styrene	30.14	104.0	131521	91.68	ug/Kg	75
50)	Bromoform	31.24	173.0	75232	54.50	ug/Kg	88
51)	Isopropylbenzene	30.91	105.0	112269	47.60	ug/Kg	86
52)	Bromofluorobenzene(SURR)	31.71	95.0	76789	100.62	ug/Kg	100
53)	*1,2-Dichlorobenzene-D4	36.00	152.0	53626	50.00	ug/Kg	93
54)	Bromobenzene	32.29	156.0	48748	48.68	ug/Kg	95
55)	1,1,2,2-Tetrachloroethane	31.50	83.0	79479	45.96	ug/Kg	100
56)	1,2,3-Trichloropropane	31.89	75.0	53839	45.52	ug/Kg	100
57)	n-Propylbenzene	31.99	120.0	27184	46.12	ug/Kg	80
58)	2-Chlorotoluene	32.58	126.0	28135	44.37	ug/Kg	77
[illegible])	4-Chlorotoluene	32.68	126.0	29666	46.41	ug/Kg	75
	1,3,5-Trimethylbenzene	32.40	105.0	96301	46.49	ug/Kg	73
[illegible])	tert-Butylbenzene	33.35	119.0	97191	47.31	ug/Kg	83
62)	1,2,4-Trimethylbenzene	33.47	105.0	97963	46.27	ug/Kg	81
63)	sec-Butylbenzene	33.94	105.0	134405	45.89	ug/Kg	93
64)	1,3-Dichlorobenzene	34.71	146.0	75948	47.12	ug/Kg	81
65)	1,4-Dichlorobenzene	35.00	146.0	77596	45.92	ug/Kg	87
66)	p-Isopropyltoluene	34.28	119.0	109140	47.70	ug/Kg	56
67)	1,2-Dichlorobenzene	36.07	146.0	72941	47.49	ug/Kg	85
68)	n-Butylbenzene	35.41	91.0	113468	46.03	ug/Kg	89
69)	1,2-Dibromo-3-chloropropane	38.39	75.0	28179	51.95	ug/Kg	100
70)	1,2,4-Trichlorobenzene	41.24	180.0	67663	49.64	ug/Kg	75
71)	Naphthalene	42.36	128.0	120446	45.59	ug/Kg	100
72)	Hexachlorobutadiene	41.59	225.0	44489	52.09	ug/Kg	84
73)	1,2,3-Trichlorobenzene	43.29	180.0	65062M	49.38	ug/Kg	

* Compound is ISTD

212

QUANT REPORT

Operator ID: FREDERICK Quant Rev: 7 Quant Time: 930924 10:31
Output File: ^JJ065::ME Injected at: 930924 09:44
Data File: >JJ065::D4 Dilution Factor: 1.00000
Name: VOA 50 STD Instrument ID: EPA ANN1
Misc: 5UL TARGETS + 5UL IS+SS + 5UL GASES N 5ML DFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930923 08:10

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.23	114.0	55336	50.00	ug/Kg	100
2)	Dichlorodifluoromethane	5.89	85.0	13796	52.13	ug/Kg	95
3)	Chloromethane	8.26	50.0	10590M	45.96	ug/Kg	100
4)	Vinyl Chloride	9.11	62.0	9284	43.94	ug/Kg	1
5)	Bromomethane	11.32	94.0	4282	44.15	ug/Kg	
6)	Chloroethane	11.76	64.0	6355	46.85	ug/Kg	97
7)	Trichlorofluoromethane	12.56	101.0	42510	55.33	ug/Kg	99
8)	1,1-Dichloroethene	14.36	61.0	26127	46.53	ug/Kg	95
9)	Carbon Disulfide	15.52	76.0	34553	42.76	ug/Kg	100
10)	Acetone	14.32	43.0	6566	50.62	ug/Kg	94
11)	Methylene Chloride	15.65	49.0	21469	45.82	ug/Kg	89
12)	Trans-1,2-Dichloroethene	16.25	96.0	15787	45.93	ug/Kg	95
13)	1,1-Dichloroethane	17.25	63.0	29055	46.57	ug/Kg	100
14)	Vinyl Acetate	17.25	43.0	34024	45.88	ug/Kg	100
15)	2,2-Dichloropropane	18.42	77.0	30101	50.82	ug/Kg	90
16)	Cis-1,2-Dichloroethene	18.58	96.0	17254	45.55	ug/Kg	89
17)	2-Butanone	18.21	43.0	8815	43.83	ug/Kg	71
18)	Bromochloromethane	19.30	128.0	14733	50.48	ug/Kg	70
19)	Chloroform	18.91	83.0	41538	48.14	ug/Kg	94
20)	1,1,1-Trichloroethane	19.72	97.0	36552	51.10	ug/Kg	97
21)	Carbon Tetrachloride	20.28	117.0	37521	51.65	ug/Kg	
22)	1,1-Dichloro-1-propene	20.04	75.0	22831	46.02	ug/Kg	
23)	1,2-Dichloroethane-d4(SURR)	20.48	67.0	13258	102.85	ug/Kg	95
24)	Benzene	20.71	78.0	34898	42.75	ug/Kg	100
25)	1,2-Dichloroethane	20.69	62.0	29080	53.58	ug/Kg	93
26)	Fluorobenzene(SURR)	21.12	96.0	54022	94.24	ug/Kg	89
27)	Trichloroethene	21.99	130.0	23257	50.81	ug/Kg	97
28)	1,2-Dichloropropane	22.43	63.0	16052	43.97	ug/Kg	69
29)	Dibromomethane	23.17	93.0	27673	48.72	ug/Kg	100
30)	Bromodichloromethane	23.00	83.0	46927	48.48	ug/Kg	86
31)	2-Chloroethylvinylether	23.56	63.0	7240	53.82	ug/Kg	73
32)	Cis-1,3-Dichloropropene	24.18	75.0	28550	46.71	ug/Kg	97
33)	*Chlorobenzene-d5	28.52	117.0	46395	50.00	ug/Kg	93
34)	4-Methyl-2-pentanone	23.60	58.0	6435	41.35	ug/Kg	72
35)	Toluene-d8(SURR)	24.73	98.0	44650	95.91	ug/Kg	85
36)	Toluene	24.93	92.0	25211	46.48	ug/Kg	97
37)	Trans-1,3-Dichloropropene	25.35	75.0	26832	46.93	ug/Kg	91
38)	1,1,2-Trichloroethane	25.77	97.0	18767	45.49	ug/Kg	100
39)	Tetrachloroethene	26.48	166.0	29907	52.92	ug/Kg	88
40)	1,3-Dichloropropane	26.39	76.0	27718	45.92	ug/Kg	100

213

Operator ID: FREDERICK Quant Rev: 7 Quant Time: 930924 10:31
Output File: ^JJ065::ME Injected at: 930924 09:44
Data File: >JJ065::D4 Dilution Factor: 1.00000
Name: VOA 50 STD Instrument ID: EPA ANN1
Misc: 5UL TARGETS + 5UL IS+SS + 5UL GASES N 5ML OFW

ID File: VOASOL::QT
Title: VOLATILES-624//105M VOCOL FOR SOILS
Last Calibration: : Last Qcal Time: 930923 08:10

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	2-Hexanone	25.64	58.0	6755	42.02	ug/Kg	81
42)	Dibromochloromethane	27.14	129.0	45917	49.21	ug/Kg	95
)	1,2-Dibromoethane (EDB)	27.64	107.0	37114	47.85	ug/Kg	91
)	Chlorobenzene	28.62	112.0	38332	48.61	ug/Kg	89
45)	1,1,1,2-Tetrachloroethane	28.69	131.0	26197	51.64	ug/Kg	93
46)	Ethylbenzene	28.66	91.0	53773	46.25	ug/Kg	85
47)	m&p-Xylenes	28.83	106.0	39247	96.69	ug/Kg	90
48)	o-Xylene	30.00	106.0	36984	95.92	ug/Kg	93
49)	Styrene	30.11	104.0	67421	99.19	ug/Kg	77
50)	Bromoform	31.19	173.0	43078	53.14	ug/Kg	90
51)	Isopropylbenzene	30.88	105.0	57003	47.14	ug/Kg	85
52)	Bromofluorobenzene(SURR)	31.66	95.0	42679	103.16	ug/Kg	100
53)	*1,2-Dichlorobenzene-D4	35.96	152.0	30720	50.00	ug/Kg	92
54)	Bromobenzene	32.25	156.0	27890	49.94	ug/Kg	96
55)	1,1,2,2-Tetrachloroethane	31.44	83.0	36932	40.56	ug/Kg	100
56)	1,2,3-Trichloropropane	31.85	75.0	26924	43.65	ug/Kg	100
57)	n-Propylbenzene	31.94	120.0	14506	46.58	ug/Kg	81
58)	2-Chlorotoluene	32.54	126.0	16675	51.73	ug/Kg	80
)	4-Chlorotoluene	32.63	126.0	16301	47.96	ug/Kg	75
	1,3,5-Trimethylbenzene	32.35	105.0	50862	46.10	ug/Kg	75
)	tert-Butylbenzene	33.32	119.0	51741	46.47	ug/Kg	87
62)	1,2,4-Trimethylbenzene	33.44	105.0	51711	46.07	ug/Kg	74
63)	sec-Butylbenzene	33.89	105.0	68376	44.40	ug/Kg	94
64)	1,3-Dichlorobenzene	34.67	146.0	42958	49.37	ug/Kg	87
65)	1,4-Dichlorobenzene	34.97	146.0	44391	49.93	ug/Kg	88
66)	p-Isopropyltoluene	34.24	119.0	57277	45.81	ug/Kg	56
67)	1,2-Dichlorobenzene	36.03	146.0	40834	48.86	ug/Kg	86
68)	n-Butylbenzene	35.39	91.0	57616	44.32	ug/Kg	87
69)	1,2-Dibromo-3-chloropropane	38.34	75.0	13959	43.24	ug/Kg	100
70)	1,2,4-Trichlorobenzene	41.17	180.0	40322	52.01	ug/Kg	76
71)	Naphthalene	42.29	128.0	65457	47.43	ug/Kg	100
72)	Hexachlorobutadiene	41.55	225.0	26849	52.67	ug/Kg	81
73)	1,2,3-Trichlorobenzene	43.22	180.0	39014	52.34	ug/Kg	70

* Compound is ISTD

214

QUANT REPORT

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930925 08:43
Output File: ^JJ085::ME Injected at: 930925 07:57
Data File: >JJ085::A8 Dilution Factor: 1.00000
Name: VOA 50 STD Instrument ID: EPA ANN1
Misc: 5UL TARGETS + GASES + 5UL IS+SS IN 5ML OFW

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930924 17:29

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.21	114.0	111057	50.00	ug/L	100
2)	Dichlorodifluoromethane	5.83	85.0	24017M	42.26	ug/L	95
3)	Chloromethane	8.22	50.0	22928	53.24	ug/L	1
4)	Vinyl Chloride	9.08	62.0	21543	53.98	ug/L	1
5)	Bromomethane	11.29	94.0	15694	61.36	ug/L	93
6)	Chloroethane	11.75	64.0	15601	56.07	ug/L	94
7)	Trichlorofluoromethane	12.55	101.0	70819	40.19	ug/L	97
8)	1,1-Dichloroethene	14.33	61.0	56607	50.81	ug/L	95
9)	Carbon Disulfide	15.50	76.0	80683	54.01	ug/L	100
10)	Acetone	14.31	43.0	8316	64.86	ug/L	82
11)	Methylene Chloride	15.64	49.0	49661	55.36	ug/L	94
12)	Trans-1,2-Dichloroethene	16.24	96.0	36216	54.56	ug/L	94
13)	1,1-Dichloroethane	17.23	63.0	67739	54.37	ug/L	100
14)	Vinyl Acetate	17.24	43.0	56459	49.87	ug/L	100
15)	2,2-Dichloropropane	18.41	77.0	59248	48.49	ug/L	88
16)	Cis-1,2-Dichloroethene	18.56	96.0	39846	54.27	ug/L	93
17)	2-Butanone	18.21	43.0	10982	54.26	ug/L	72
18)	Bromochloromethane	19.29	128.0	28880	48.60	ug/L	88
19)	Chloroform	18.90	83.0	85803	46.79	ug/L	
20)	1,1,1-Trichloroethane	19.70	97.0	68613	44.59	ug/L	
21)	Carbon Tetrachloride	20.26	117.0	67030	42.51	ug/L	
22)	1,1-Dichloro-1-propene	20.03	75.0	49969	50.55	ug/L	96
23)	1,2-Dichloroethane-d4(SURR)	20.47	67.0	22883	90.10	ug/L	99
24)	Benzene	20.68	78.0	86303	55.73	ug/L	100
25)	1,2-Dichloroethane	20.68	62.0	50106	44.37	ug/L	90
26)	Fluorobenzene(SURR)	21.10	96.0	116910	106.37	ug/L	90
27)	Trichloroethene	21.98	130.0	47169	48.28	ug/L	90
28)	1,2-Dichloropropane	22.41	63.0	37350	54.21	ug/L	69
29)	Dibromomethane	23.17	93.0	49896	46.77	ug/L	100
30)	Bromodichloromethane	22.99	83.0	90334	46.89	ug/L	91
31)	2-Chloroethylvinylether	23.54	63.0	3603^	24.95	ug/L	51
32)	Cis-1,3-Dichloropropene	24.17	75.0	56257	49.56	ug/L	100
33)	*Chlorobenzene-d5	28.51	117.0	88690	50.00	ug/L	97
34)	4-Methyl-2-pentanone	23.60	58.0	8210	47.98	ug/L	79
35)	Toluene-d8(SURR)	24.73	98.0	92050	108.76	ug/L	86
36)	Toluene	24.91	92.0	54538	54.12	ug/L	97
37)	Trans-1,3-Dichloropropene	25.35	75.0	45386	47.18	ug/L	100
38)	1,1,2-Trichloroethane	25.76	97.0	32446	47.47	ug/L	100
39)	Tetrachloroethene	26.46	166.0	53946	45.76	ug/L	87
		26.37	76.0	50636	52.69	ug/L	100

215

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930925 08:43
Output File: ^JJ085::ME Injected at: 930925 07:57
Data File: >JJ085::A8 Dilution Factor: 1.00000
Name: VOA 50 STD Instrument ID: EPA ANN1
Misc: 5UL TARGETS + GASES + 5UL IS+SS IN 5ML OFW

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930924 17:29

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	2-Hexanone	25.64	58.0	8312	50.05	ug/L	76
42)	Dibromochloromethane	27.13	129.0	73081	43.87	ug/L	91
	1,2-Dibromoethane (EDB)	27.63	107.0	59091	46.75	ug/L	91
	Chlorobenzene	28.61	112.0	79055	51.41	ug/L	90
45)	1,1,1,2-Tetrachloroethane	28.68	131.0	49938	48.14	ug/L	76
46)	Ethylbenzene	28.64	91.0	116482	51.90	ug/L	86
47)	m&p-Xylenes	28.82	106.0	83798	104.86	ug/L	87
48)	o-Xylene	29.98	106.0	81504	105.36	ug/L	92
49)	Styrene	30.10	104.0	146612	107.32	ug/L	75
50)	Bromoform	31.19	173.0	56960	41.16	ug/L	89
51)	Isopropylbenzene	30.87	105.0	124141	51.70	ug/L	84
52)	Bromofluorobenzene(SURR)	31.65	95.0	80856	100.07	ug/L	100
53)	*1,2-Dichlorobenzene-D4	35.94	152.0	55971	50.00	ug/L	92
54)	Bromobenzene	32.24	156.0	50860	49.96	ug/L	95
55)	1,1,2,2-Tetrachloroethane	31.43	83.0	57550	51.28	ug/L	100
56)	1,2,3-Trichloropropane	31.84	75.0	38782	49.79	ug/L	100
57)	n-Propylbenzene	31.93	120.0	30909	53.06	ug/L	79
58)	2-Chlorotoluene	32.53	126.0	31734	51.83	ug/L	78
[illegible]	4-Chlorotoluene	32.62	126.0	33655	51.14	ug/L	75
	1,3,5-Trimethylbenzene	32.33	105.0	108777	53.57	ug/L	68
[illegible]	tert-Butylbenzene	33.30	119.0	108548	52.32	ug/L	86
62)	1,2,4-Trimethylbenzene	33.43	105.0	110018	53.32	ug/L	100
63)	sec-Butylbenzene	33.88	105.0	149115	54.74	ug/L	91
64)	1,3-Dichlorobenzene	34.65	146.0	85917	52.58	ug/L	87
65)	1,4-Dichlorobenzene	34.95	146.0	87305	51.36	ug/L	85
66)	p-Isopropyltoluene	34.22	119.0	122120	52.60	ug/L	56
67)	1,2-Dichlorobenzene	36.02	146.0	79186	50.57	ug/L	86
68)	n-Butylbenzene	35.35	91.0	128925	55.83	ug/L	89
69)	1,2-Dibromo-3-chloropropane	38.33	75.0	14876	41.29	ug/L	100
70)	1,2,4-Trichlorobenzene	41.17	180.0	72192	48.07	ug/L	75
71)	Naphthalene	42.27	128.0	95660	47.22	ug/L	100
72)	Hexachlorobutadiene	41.52	225.0	49563	47.06	ug/L	100
73)	1,2,3-Trichlorobenzene	43.20	180.0	65488	46.41	ug/L	69

* Compound is ISTD

216

QUANT REPORT

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 09:00
Output File: ^JJ102::ME Injected at: 930927 08:14
Data File: >JJ102::A8 Dilution Factor: 1.00000
Name: VOA 50 STD Instrument ID: EPA ANN1
Misc: 5UL TARGETS + 5UL GASES +5UL IS+SS IN 5ML OFW

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930925 07:57

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.32	114.0	128059	50.00	ug/L	100
2)	Dichlorodifluoromethane	5.91	85.0	24398	44.05	ug/L	98
3)	Chloromethane	8.27	50.0	27398	51.82	ug/L	100
4)	Vinyl Chloride	9.13	62.0	25128	50.58	ug/L	10
5)	Bromomethane	11.37	94.0	14415	39.83	ug/L	
6)	Chloroethane	11.81	64.0	17992	50.01	ug/L	98
7)	Trichlorofluoromethane	12.63	101.0	79876	48.91	ug/L	98
8)	1,1-Dichloroethene	14.42	61.0	61769	47.32	ug/L	97
9)	Carbon Disulfide	15.60	76.0	92019	49.45	ug/L	100
10)	Acetone	14.37	43.0	7955	41.48	ug/L	86
11)	Methylene Chloride	15.72	49.0	54508	47.59	ug/L	90
12)	Trans-1,2-Dichloroethene	16.32	96.0	38931	46.61	ug/L	93
13)	1,1-Dichloroethane	17.33	63.0	74117	47.44	ug/L	100
14)	Vinyl Acetate	17.33	43.0	66977	51.44	ug/L	100
15)	2,2-Dichloropropane	18.51	77.0	63413	46.41	ug/L	89
16)	Cis-1,2-Dichloroethene	18.67	96.0	43380	47.21	ug/L	92
17)	2-Butanone	18.30	43.0	12539	49.51	ug/L	73
18)	Bromochloromethane	19.40	128.0	31153	46.77	ug/L	92
19)	Chloroform	18.99	83.0	94317	47.66	ug/L	90
20)	1,1,1-Trichloroethane	19.81	97.0	75064	47.44	ug/L	94
21)	Carbon Tetrachloride	20.36	117.0	72000	46.58	ug/L	
22)	1,1-Dichloro-1-propene	20.13	75.0	55678	48.32	ug/L	
23)	1,2-Dichloroethane-d4(SURR)	20.57	67.0	26653	101.01	ug/L	97
24)	Benzene	20.79	78.0	93838	47.15	ug/L	100
25)	1,2-Dichloroethane	20.78	62.0	54803	47.43	ug/L	89
26)	Fluorobenzene(SURR)	21.21	96.0	132973	98.64	ug/L	90
27)	Trichloroethene	22.08	130.0	51109	46.98	ug/L	92
28)	1,2-Dichloropropane	22.52	63.0	42978	49.90	ug/L	68
29)	Dibromomethane	23.29	93.0	54914	47.72	ug/L	100
30)	Bromodichloromethane	23.10	83.0	99468	47.75	ug/L	91
31)	2-Chloroethylvinylether	23.67	63.0	5320	64.03	ug/L	70
32)	Cis-1,3-Dichloropropene	24.29	75.0	65332	50.36	ug/L	100
33)	*Chlorobenzene-d5	28.64	117.0	101958	50.00	ug/L	93
34)	4-Methyl-2-pentanone	23.70	58.0	10469	55.46	ug/L	73
35)	Toluene-d8(SURR)	24.84	98.0	105534	99.73	ug/L	85
36)	Toluene	25.04	92.0	61244	48.84	ug/L	97
37)	Trans-1,3-Dichloropropene	25.46	75.0	51953	49.79	ug/L	100
38)	1,1,2-Trichloroethane	25.88	97.0	38133	51.12	ug/L	100
39)	Tetrachloroethene	26.60	166.0	57704	46.52	ug/L	83
40)	1,3-Dichloropropane	26.49	76.0	58359	50.13	ug/L	100

217

Operator ID: SUERAUPUK Quant Rev: 7 Quant Time: 930927 09:00
Output File: ^JJ102::ME Injected at: 930927 08:14
Data File: >JJ102::A8 Dilution Factor: 1.00000
Name: VOA 50 STD Instrument ID: EPA ANN1
Misc: 5UL TARGETS + 5UL GASES +5UL IS+SS IN 5ML OFW

ID File: VOA624::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930925 07:57

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	2-Hexanone	25.75	58.0	10078	52.73	ug/L	75
42)	Dibromochloromethane	27.24	129.0	81985	48.79	ug/L	95
	1,2-Dibromoethane (EDB)	27.75	107.0	67201	49.46	ug/L	92
	Chlorobenzene	28.72	112.0	86766	47.74	ug/L	86
45)	1,1,1,2-Tetrachloroethane	28.80	131.0	52987	46.15	ug/L	83
46)	Ethylbenzene	28.77	91.0	129448	48.33	ug/L	88
47)	m&p-Xylenes	28.94	106.0	92198	95.71	ug/L	86
48)	o-Xylene	30.12	106.0	88853	94.83	ug/L	90
49)	Styrene	30.23	104.0	160898	95.46	ug/L	75
50)	Bromoform	31.31	173.0	62568	47.78	ug/L	89
51)	Isopropylbenzene	30.99	105.0	136741	47.91	ug/L	86
52)	Bromofluorobenzene(SURR)	31.78	95.0	90757	97.64	ug/L	100
53)	*1,2-Dichlorobenzene-D4	36.09	152.0	63147	50.00	ug/L	93
54)	Bromobenzene	32.37	156.0	54988	47.92	ug/L	93
55)	1,1,2,2-Tetrachloroethane	31.55	83.0	69585	53.59	ug/L	100
56)	1,2,3-Trichloropropane	31.98	75.0	45324	51.79	ug/L	100
57)	n-Propylbenzene	32.06	120.0	34332	49.23	ug/L	82
58)	2-Chlorotoluene	32.65	126.0	34941	48.80	ug/L	77
[illegible]	4-Chlorotoluene	32.76	126.0	35376	46.58	ug/L	79
	1,3,5-Trimethylbenzene	32.47	105.0	119248	48.58	ug/L	74
[illegible]	tert-Butylbenzene	33.44	119.0	120510	49.20	ug/L	87
62)	1,2,4-Trimethylbenzene	33.56	105.0	120022	48.35	ug/L	100
63)	sec-Butylbenzene	34.01	105.0	169241	50.30	ug/L	94
64)	1,3-Dichlorobenzene	34.79	146.0	93389	48.17	ug/L	84
65)	1,4-Dichlorobenzene	35.09	146.0	94650	48.05	ug/L	87
66)	p-Isopropyltoluene	34.36	119.0	133501	48.45	ug/L	55
67)	1,2-Dichlorobenzene	36.16	146.0	84389	47.23	ug/L	84
68)	n-Butylbenzene	35.49	91.0	143225	49.23	ug/L	89
69)	1,2-Dibromo-3-chloropropane	38.47	75.0	18148	54.07	ug/L	100
70)	1,2,4-Trichlorobenzene	41.35	180.0	77114	47.34	ug/L	75
71)	Naphthalene	42.47	128.0	108663	50.34	ug/L	100
72)	Hexachlorobutadiene	41.72	225.0	51608	46.15	ug/L	100
73)	1,2,3-Trichlorobenzene	43.42	180.0	71328	48.27	ug/L	66

* Compound is ISTD

218

QUANT REPORT Page 1

Operator ID: FREDERICK Quant Rev: 7 Quant Time: 930929 08:53
Output File: ^A1758::ME Injected at: 930929 08:07
Data File: >A1758::D2 Dilution Factor: 1.00000
Name: VOA 50 CHK STD Instrument ID: EPA ANN1
Misc: 5UL EA IS+SS+TARGETS+GASES IN 5ML OFW

ID File: ID624W::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930928 07:27

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Difluorobenzene	21.16	114.0	128157	50.00	ug/L	100
2)	Dichlorodifluoromethane	5.83	85.0	25105	22.05	ug/L	97
3)	Chloromethane	8.16	50.0	28194	40.67	ug/L	100
4)	Vinyl Chloride	9.05	62.0	27805	44.09	ug/L	1
5)	Bromomethane	11.25	94.0	22590	49.31	ug/L	
6)	Chloroethane	11.70	64.0	19966	50.26	ug/L	95
7)	Trichlorofluoromethane	12.52	101.0	86747	49.41	ug/L	97
8)	1,1-Dichloroethene	14.29	61.0	60871	43.38	ug/L	90
9)	Carbon Disulfide	15.44	76.0	87256	44.30	ug/L	100
10)	Acetone	14.27	43.0	7482	51.93	ug/L	77
11)	Methylene Chloride	15.58	49.0	54563	43.51	ug/L	93
12)	Trans-1,2-Dichloroethene	16.19	96.0	38772	44.28	ug/L	96
13)	1,1-Dichloroethane	17.19	63.0	73640	39.52	ug/L	100
14)	Vinyl Acetate	17.19	43.0	58848	49.03	ug/L	100
15)	2,2-Dichloropropane	18.35	77.0	63040	40.09	ug/L	90
16)	Cis-1,2-Dichloroethene	18.50	96.0	43547	46.81	ug/L	95
17)	2-Butanone	18.15	43.0	11291	52.70	ug/L	70
18)	Bromochloromethane	19.24	128.0	31191	41.82	ug/L	90
19)	Chloroform	18.84	83.0	94953	41.76	ug/L	89
20)	1,1,1-Trichloroethane	19.65	97.0	71664	38.99	ug/L	97
21)	Carbon Tetrachloride	20.21	117.0	71573	39.04	ug/L	
22)	1,1-Dichloro-1-propene	19.98	75.0	54848	44.96	ug/L	
23)	1,2-Dichloroethane-d4(SURR)	20.42	67.0	27022	100.07	ug/L	96
24)	Benzene	20.64	78.0	92510	46.02	ug/L	100
25)	1,2-Dichloroethane	20.63	62.0	53355	49.05	ug/L	89
26)	Fluorobenzene(SURR)	21.06	96.0	135038	102.52	ug/L	90
27)	Trichloroethene	21.91	130.0	51015	45.34	ug/L	91
28)	1,2-Dichloropropane	22.35	63.0	41937	47.85	ug/L	66
29)	Dibromomethane	23.11	93.0	53499	42.18	ug/L	100
30)	Bromodichloromethane	22.92	83.0	94444	46.11	ug/L	90
31)	2-Chloroethylvinylether	23.50	63.0	4504	51.68	ug/L	86
32)	Cis-1,3-Dichloropropene	24.11	75.0	61693	45.80	ug/L	100
33)	*Chlorobenzene-d5	28.45	117.0	105386	50.00	ug/L	95
34)	4-Methyl-2-pentanone	23.53	58.0	9044	49.76	ug/L	72
35)	Toluene-d8(SURR)	24.67	98.0	106590	93.86	ug/L	84
36)	Toluene	24.87	92.0	60468	46.66	ug/L	96
37)	Trans-1,3-Dichloropropene	25.29	75.0	48432	49.72	ug/L	100
38)	1,1,2-Trichloroethane	25.71	97.0	36042	47.95	ug/L	100
39)	Tetrachloroethene	26.42	166.0	58101	37.96	ug/L	85
40)	1,3-Dichloropropane	26.32	76.0	55716	47.15	ug/L	100

219

Operator ID: FREDERICK Quant Rev: 7 Quant Time: 930929 08:53
Output File: ^A1758::ME Injected at: 930929 08:07
Data File: >A1758::D2 Dilution Factor: 1.00000
Name: VOA 50 CHK STD Instrument ID: EPA ANN1
Misc: 5UL EA IS+SS+TARGETS+GASES IN 5ML OFW

ID File: ID624W::QT
Title: VOLATILES-624//105M VOCOL FOR WATER
Last Calibration: : Last Qcal Time: 930928 07:27

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	2-Hexanone	25.57	58.0	8576	49.94	ug/L	75
42)	Dibromochloromethane	27.06	129.0	78833	45.25	ug/L	96
	1,2-Dibromoethane (EDB)	27.58	107.0	63105	47.29	ug/L	90
	Chlorobenzene	28.55	112.0	85692	43.85	ug/L	93
45)	1,1,1,2-Tetrachloroethane	28.62	131.0	54731	47.78	ug/L	68
46)	Ethylbenzene	28.59	91.0	130171	45.96	ug/L	82
47)	m&p-Xylenes	28.75	106.0	91925	89.86	ug/L	87
48)	o-Xylene	29.93	106.0	90212	92.42	ug/L	92
49)	Styrene	30.05	104.0	163350	97.60	ug/L	75
50)	Bromoform	31.12	173.0	60323	40.52	ug/L	89
51)	Isopropylbenzene	30.81	105.0	137083	43.33	ug/L	84
52)	Bromofluorobenzene(SURR)	31.59	95.0	92007	94.22	ug/L	100
53)	*1,2-Dichlorobenzene-D4	35.88	152.0	63605	50.00	ug/L	94
54)	Bromobenzene	32.17	156.0	95401	46.80	ug/L	92
55)	1,1,2,2-Tetrachloroethane	31.38	83.0	64049	48.50	ug/L	100
56)	1,2,3-Trichloropropane	31.79	75.0	41755	47.57	ug/L	100
57)	n-Propylbenzene	31.87	120.0	34138	43.31	ug/L	83
58)	2-Chlorotoluene	32.46	126.0	35597	45.42	ug/L	76
	4-Chlorotoluene	32.56	126.0	37820	45.43	ug/L	75
	1,3,5-Trimethylbenzene	32.28	105.0	116244	45.83	ug/L	68
61)	tert-Butylbenzene	33.25	119.0	118532	43.63	ug/L	88
62)	1,2,4-Trimethylbenzene	33.36	105.0	118999	46.37	ug/L	100
63)	sec-Butylbenzene	33.81	105.0	163628	42.77	ug/L	94
64)	1,3-Dichlorobenzene	34.60	146.0	91463	43.27	ug/L	83
65)	1,4-Dichlorobenzene	34.89	146.0	94129	44.60	ug/L	87
66)	p-Isopropyltoluene	34.17	119.0	129892	45.38	ug/L	55
67)	1,2-Dichlorobenzene	35.95	146.0	83773	43.21	ug/L	88
68)	n-Butylbenzene	35.30	91.0	138552	44.11	ug/L	90
69)	1,2-Dibromo-3-chloropropane	38.26	75.0	15388	46.98	ug/L	100
70)	1,2,4-Trichlorobenzene	41.08	180.0	70936	44.20	ug/L	76
71)	Naphthalene	42.19	128.0	88818	44.02	ug/L	100
72)	Hexachlorobutadiene	41.43	225.0	41360	35.86	ug/L	100
73)	1,2,3-Trichlorobenzene	43.11	180.0	61777	42.73	ug/L	71

* Compound is ISTD

220

VOA-50

Diagnostic Quant Report

Data File: J0031::01 Injected at: 09:02 09/21/93
Quant'd : 09:54 09/21/93
ID File : VOASOL::QT Calibrated : : / /

Compound	- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1) *1,4-Difluorobenzene	21.20	21.28	.09	114.0	117661	1.0000	50.00
2) Dichlorodifluoromethane	5.89	5.98	.10	85.0	30254	.2805	45.84
3) Chloromethane	8.26	8.29	.03	50.0	29091	.2333	53.00
4) Vinyl Chloride	9.13	9.16	.03	62.0	24946	.2140	49.54
5) Bromomethane	11.33	11.36	.03	94.0	6318	.0577	46.50
6) Chloroethane	11.78	11.79	.01	64.0	15995	.1348	50.42
7) Trichlorofluoromethane	12.57	12.58	.01	101.0	74546	.6408	49.44
8) 1,1-Dichloroethene	14.37	14.39	.02	61.0	61069	.5032	51.57
9) Carbon Disulfide	15.54	15.56	.02	76.0	86091	.7130	51.31
10) Acetone	14.37	14.38	.00	43.0	17759	.1326	56.93
11) Methylene Chloride	15.68	15.70	.02	49.0	56947	.4441	54.49
12) Trans-1,2-Dichloroethene	16.28	16.30	.02	96.0	37424	.3079	51.66
13) 1,1-Dichloroethane	17.29	17.31	.02	63.0	72218	.5936	51.70
14) Vinyl Acetate	17.31	17.31	.00	43.0	88097	.7247	51.66
15) 2,2-Dichloropropane	18.47	18.49	.01	77.0	59038	.5002	50.15
16) Cis-1,2-Dichloroethene	18.63	18.64	.01	96.0	42011	.3405	52.[illegible]
17) 2-Butanone	18.26	18.28	.01	43.0	27417	.2117	55.
18) Bromochloromethane	19.36	19.37	.01	128.0	31597	.2525	53.1[illegible]
19) Chloroform	18.97	18.96	.00	83.0	91624	.7296	53.36
20) 1,1,1-Trichloroethane	19.77	19.78	.01	97.0	69585	.5742	51.49
21) Carbon Tetrachloride	20.32	20.34	.02	117.0	68353	.5684	51.10
22) 1,1-Dichloro-1-propene	20.10	20.09	.01	75.0	54046	.4533	50.66
23) 1,2-Dichloroethane-d4(SUR	20.54	20.54	.00	67.0	27993	.1138	104.54
24) Benzene	20.76	20.76	.00	78.0	94655	.7587	53.02
25) 1,2-Dichloroethane	20.76	20.79	.01	62.0	60064	.4667	54.69
26) Fluorobenzene(SURR)	21.18	21.18	.00	96.0	123494	.5220	100.53
27) Trichloroethene	22.06	22.04	.02	130.0	47898	.3865	52.66
28) 1,2-Dichloropropane	22.49	22.47	.02	63.0	45384	.3540	54.48
29)D Dibromomethane	23.28	23.06	.20	93.0	3295	.5143	2.72
29) Dibromomethane	23.29	23.23	.02	93.0	62501	.5143	51.69
30) Bromodichloromethane	23.86	23.86	.01	83.0	101842	.8032	53.88
31) 2-Chloroethyl vinylether	23.62	23.62	.01	63.0	18139	.1608	47.9[illegible]
32) Cis-1,3-Dichloropropene	24.26	24.24	.01	75.0	68288	.5591	51.
33) *Chlorobenzene-d5	28.49	28.57	.08	117.0	100466	1.0000	50.[illegible]
34) 4-Methyl-2-pentanone	23.64	23.65	.01	58.0	19039	.1863	50.85
35) Toluene-d8(SURR)	24.78	24.80	.02	98.0	102689	.5301	96.41
36) Toluene	24.98	24.98	.00	92.0	62275	.6152	50.38
37) Trans-1,3-Dichloropropene	25.40	25.41	.01	75.0	61679	.6243	49.17
38) 1,1,2-Trichloroethane	25.81	25.82	.01	97.0	46264	.4476	51.43
39) Tetrachloroethene	26.52	26.54	.02	166.0	58258	.5811	49.90
40) 1,3-Dichloropropane	26.43	26.44	.01	76.0	69589	.6897	50.22
41) 2-Hexanone	25.68	25.70	.02	58.0	20568	.1986	51.59
42) Dibromochloromethane	27.19	27.19	.00	129.0	92667	.9139	50.46
43) 1,2-Dibromoethane (EDB)	27.69	27.69	.00	107.0	82616	.8343	49.28
44) Chlorobenzene	28.67	28.67	.00	112.0	86333	.8742	49.15
45) 1,1,1,2-Tetrachloroethane	28.74	28.75	.01	131.0	51444	.5074	50.46
46) Ethylbenzene	28.71	28.71	.00	91.0	129304	1.2794	50.30
47)D m&p-Xylenes	28.88	28.71	.13	106.0	36897	.4519	40.64
47) m&p-Xylenes	28.88	28.89	.01	106.0	89868	.4519	98.98
48) o-Xylene	30.05	30.06	.01	106.0	85435	.4371	97.27
49) Styrene	30.18	30.18	.00	104.0	161637	.7984	100.75
50) Bromoform	31.26	31.26	.00	173.0	79269	.7751	50.89
51) [illegible]	[illegible]	30.93	.01	105.0	132459	1.3309	49.53
52)		31.51	.22	95.0	13943	.4395	15.79
53) [illegible]	[illegible]	[illegible]	.01	95.0	[illegible]	[illegible]	[illegible]

221

54)	Bromobenzene	32.32	32.30	.02	156.0	55717	.8957	50.34
55)	1,1,2,2-Tetrachloroethane	31.52	31.51	.01	83.0	98113	1.5837	50.[redacted]
55)D	1,1,2,2-Tetrachloroethane	31.52	31.91	.40	83.0	2017	1.5837	[redacted]
56)	1,2,3-Trichloropropane	31.91	31.91	.00	75.0	67475	1.0702	50.[redacted]
57)	n-Propylbenzene	32.01	32.01	.00	120.0	31782	.5378	47.7[redacted]
58)	2-Chlorotoluene	32.61	32.59	.01	126.0	32721	.5539	47.78
58)D	2-Chlorotoluene	32.61	32.70	.09	126.0	33541	.5539	48.98
59)D	4-Chlorotoluene	32.70	32.59	.11	126.0	32721	.5610	47.18
59)	4-Chlorotoluene	32.70	32.70	.00	126.0	33541	.5610	48.36
60)	1,3,5-Trimethylbenzene	32.42	32.40	.01	105.0	112964	1.8453	49.33
61)	tert-Butylbenzene	33.39	33.39	.00	119.0	110111	1.8369	48.48
62)	1,2,4-Trimethylbenzene	33.51	33.50	.00	105.0	114259	1.8700	49.42
63)	sec-Butylbenzene	33.95	33.95	.01	105.0	159593	2.6227	49.21
64)	1,3-Dichlorobenzene	34.74	34.73	.01	146.0	89125	1.4434	49.94
64)D	1,3-Dichlorobenzene	34.74	35.03	.30	146.0	90949	1.4434	50.96
65)D	1,4-Dichlorobenzene	35.03	34.73	.30	146.0	89125	1.4673	49.12
65)	1,4-Dichlorobenzene	35.03	35.03	.00	146.0	90949	1.4673	50.13
66)	p-Isopropyltoluene	34.31	34.30	.02	119.0	124395	2.0493	49.09
67)	1,2-Dichlorobenzene	36.10	36.09	.01	146.0	84272	1.3757	49.54
68)	n-Butylbenzene	35.45	35.43	.02	91.0	136750	2.2296	49.60
69)	1,2-Dibromo-3-chloroprope	38.43	38.42	.01	75.0	31284	.4939	51.23
70)	1,2,4-Trichlorobenzene	41.27	41.25	.01	180.0	75284	1.2136	50.17
71)	Naphthalene	42.38	42.37	.01	128.0	147610	2.3445	50.92
72)	Hexachlorobutadiene	41.63	41.61	.02	225.0	45768	.7607	48.66
73)	1,2,3-Trichlorobenzene	43.30	43.32	.02	180.0	73023	1.1613	50.86

* - Compound is an Internal Standard
D - Compound Qdel'ed

JJ031

ORIGINAL (Red)

LRB

Diagnostic Quant Report

Data File: >JJ032::01 Injected at: 10:28 09/21/93
Quant'd : 11:14 09/21/93
ID File : VOASOL::QT Calibrated : : / /

Compound	- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1) *1,4-Difluorobenzene	21.28	21.25	.04	114.0	115167	1.0000	50.00
2) Dichlorodifluoromethane	5.97	0.00	--	85.0	0	.2571	0.00
3) Chloromethane	8.27	0.00	--	50.0	0	.2472	0.00
4) Vinyl Chloride	9.14	0.00	--	62.0	0	.2120	0.00
5) Bromomethane	11.34	0.00	--	94.0	0	.0537	0.00
6) Chloroethane	11.77	0.00	--	64.0	0	.1359	0.00
7) Trichlorofluoromethane	12.56	0.00	--	101.0	0	.6336	0.00
8) 1,1-Dichloroethene	14.36	0.00	--	61.0	0	.9190	0.00
9) Carbon Disulfide	15.54	0.00	--	76.0	0	.7317	0.00
10) Acetone	14.39	0.00	--	43.0	0	.1509	0.00
11)D Methylene Chloride	15.68	15.70	.02	49.0	1028	.4840	.[illegible]
12) Trans-1,2-Dichloroethene	16.27	0.00	--	96.0	0	.3181	0.
13) 1,1-Dichloroethane	17.28	0.00	--	63.0	0	.6138	0.00
14) Vinyl Acetate	17.28	0.00	--	43.0	0	.7487	0.00
15) 2,2-Dichloropropane	18.45	0.00	--	77.0	0	.5018	0.00
16) Cis-1,2-Dichloroethene	18.60	0.00	--	96.0	0	.3571	0.00
17) 2-Butanone	18.24	0.00	--	43.0	0	.2330	0.00
18) Bromochloromethane	19.34	0.00	--	128.0	0	.2685	0.00
19) Chloroform	19.93	0.00	--	83.0	0	.7787	0.00
20) 1,1,1-Trichloroethane	19.75	0.00	--	97.0	0	.5914	0.00
21) Carbon Tetrachloride	20.30	0.00	--	117.0	0	.5809	0.00
22) 1,1-Dichloro-1-propene	20.06	0.00	--	75.0	0	.4593	0.00
23) 1,2-Dichloroethane-d4(SUR	20.50	20.51	.01	67.0	27240	.1190	99.42
24) Benzene	20.72	0.00	--	78.0	0	.8045	0.00
25) 1,2-Dichloroethane	20.71	0.00	--	62.0	0	.5109	0.00
26) Fluorobenzene(SURR)	21.14	21.15	.01	96.0	124191	.5248	102.71
27) Trichloroethene	22.00	0.00	--	130.0	0	.4071	0.00
28) 1,2-Dichloropropane	22.43	0.00	--	63.0	0	.3857	0.
29) Dibromomethane	23.19	0.00	--	93.0	0	.5312	0.
30) Bromodichloromethane	23.01	0.00	--	83.0	0	.8656	0.00
31) 2-Chloroethylvinylether	23.57	0.00	--	63.0	0	.1542	0.00
32) Cis-1,3-Dichloropropene	24.20	0.00	--	75.0	0	.5804	0.00
33) *Chlorobenzene-d5	28.57	28.55	.01	117.0	98109	1.0000	50.00
34) 4-Methyl-2-pentanone	23.64	0.00	--	58.0	0	.1895	0.00
35) Toluene-d8(SURR)	24.79	24.77	.02	98.0	101414	.9110	101.13
36) Toluene	24.97	0.00	--	92.0	0	.6199	0.00
37) Trans-1,3-Dichloropropene	25.40	0.00	--	75.0	0	.6139	0.00
38) 1,1,2-Trichloroethane	25.81	0.00	--	97.0	0	.4605	0.00
39) Tetrachloroethene	26.53	0.00	--	166.0	0	.5799	0.00
40) 1,3-Dichloropropane	26.42	0.00	--	76.0	0	.6927	0.00
41) 2-Hexanone	25.69	0.00	--	58.0	0	.2047	0.00
42) Dibromochloromethane	27.18	0.00	--	129.0	0	.9224	0.00
43) 1,2-Dibromoethane (EDB)	27.68	0.00	--	107.0	0	.8223	0.00
44) Chlorobenzene	28.66	0.00	--	112.0	0	.8593	0.00
45) 1,1,1,2-Tetrachloroethane	28.74	0.00	--	131.0	0	.5121	0.00
46) Ethylbenzene	28.69	0.00	--	91.0	0	1.2870	0.00
47) m&p-Xylenes	28.88	0.00	--	106.0	0	.4473	0.00
48) [illegible]	[illegible]	0.00	--	106.0	0	.4252	0.00
49)		0.00	--	104.0	0	.3044	0.00
50) Bromoform	31.25	0.00	--	173.0	0	.2890	0.00

223

52)	Bromofluorobenzene(SURR)	31.70	31.71	.01	95.0	85008	.4441	97.55
53)	*1,2-Dichlorobenzene-D4	36.02	36.00	.02	152.0	59213	1.0000	[redacted]
54)	Bromobenzene	32.28	0.00	--	156.0	0	.9012	
55)	1,1,2,2-Tetrachloroethane	31.49	0.00	--	83.0	0	1.5870	0
56)	1,2,3-Trichloropropane	31.90	0.00	--	75.0	0	1.0914	0.0
57)	n-Propylbenzene	31.99	0.00	--	120.0	0	.5141	0.00
58)	2-Chlorotoluene	32.57	0.00	--	126.0	0	.5293	0.00
59)	4-Chlorotoluene	32.68	0.00	--	126.0	0	.5425	0.00
60)	1,3,5-Trimethylbenzene	32.39	0.00	--	105.0	0	1.8208	0.00
61)	tert-Butylbenzene	33.37	0.00	--	119.0	0	1.7811	0.00
62)	1,2,4-Trimethylbenzene	33.48	0.00	--	105.0	0	1.8482	0.00
63)	sec-Butylbenzene	33.93	0.00	--	105.0	0	2.5815	0.00
64)	1,3-Dichlorobenzene	34.71	0.00	--	146.0	0	1.4416	0.00
65)	1,4-Dichlorobenzene	35.01	0.00	--	146.0	0	1.4711	0.00
66)	p-Isopropyltoluene	34.28	0.00	--	119.0	0	2.0121	0.00
67)	1,2-Dichlorobenzene	36.07	0.00	--	146.0	0	1.3631	0.00
68)	n-Butylbenzene	35.41	0.00	--	91.0	0	2.2120	0.00
69)	1,2-Dibromo-3-chloropropa	38.40	0.00	--	75.0	0	.5060	0.00
70)	1,2,4-Trichlorobenzene	41.23	0.00	--	180.0	0	1.2178	0.00
71)D	Naphthalene	42.35	42.38	.03	128.0	1010	2.3877	.36
72)	Hexachlorobutadiene	41.59	0.00	--	225.0	0	.7403	0.00
73)	1,2,3-Trichlorobenzene	43.29	0.00	--	180.0	0	1.1812	0.00

* - Compound is an Internal Standard
D - Compound Qdel'ed

JJ032

224

930916-01

Diagnostic Quant Report

Data File: >JJ033::D4 Injected at: 11:38 09/21/93
Quant'd : 12:24 09/21/93
ID File : VOASOL::QT Calibrated : : / /

Compound	- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1) *1,4-Difluorobenzene	21.28	21.28	.01	114.0	100505	1.0000	50.00
2) Dichlorodifluoromethane	5.98	0.00	--	85.0	0	.2571	0.00
3) Chloromethane	8.28	0.00	--	50.0	0	.2472	0.00
4) Vinyl Chloride	9.16	0.00	--	62.0	0	.2120	0.00
5) Bromomethane	11.36	0.00	--	94.0	0	.0537	0.00
6) Chloroethane	11.79	0.00	--	64.0	0	.1359	0.00
7) Trichlorofluoromethane	12.58	0.00	--	101.0	0	.6336	0.00
8) 1,1-Dichloroethene	14.38	0.00	--	61.0	0	.5190	0.00
9) Carbon Disulfide	15.56	0.00	--	76.0	0	.7317	0.00
10) Acetone	14.37	0.00	--	43.0	0	.1509	0.00
11) Methylene Chloride	15.70	15.67	.03	49.0	1806	.4840	1.9
12) Trans-1,2-Dichloroethene	16.29	0.00	--	96.0	0	.3181	0.
13) 1,1-Dichloroethane	17.30	0.00	--	63.0	0	.6138	0.00
14) Vinyl Acetate	17.30	0.00	--	43.0	0	.7487	0.00
15) 2,2-Dichloropropane	18.48	0.00	--	77.0	0	.5018	0.00
16) Cis-1,2-Dichloroethene	18.63	0.00	--	96.0	0	.3571	0.00
17) 2-Butanone	18.27	0.00	--	43.0	0	.2330	0.00
18) Bromochloromethane	19.37	0.00	--	128.0	0	.2685	0.00
19)D Chloroform	18.96	18.95	.01	83.0	681	.7787	.44
20) 1,1,1-Trichloroethane	19.77	0.00	--	97.0	0	.5914	0.00
21) Carbon Tetrachloride	20.33	0.00	--	117.0	0	.5809	0.00
22) 1,1-Dichloro-1-propene	20.09	0.00	--	75.0	0	.4593	0.00
23) 1,2-Dichloroethane-d4(SUR	20.53	20.53	.00	67.0	23637	.1190	98.85
24) Benzene	20.79	0.00	--	78.0	0	.8045	0.00
25) 1,2-Dichloroethane	20.74	0.00	--	62.0	0	.5105	0.00
26) Fluorobenzene(SURR)	21.17	21.17	.00	96.0	106274	.5248	100.79
27) Trichloroethene	22.03	0.00	--	130.0	0	.4071	0.00
28) 1,2-Dichloropropane	22.47	0.00	--	63.0	0	.3897	0.
29) Dibromomethane	23.22	0.00	--	93.0	0	.5312	0.
30) Bromodichloromethane	23.09	0.00	--	83.0	0	.8656	0.00
31) 2-Chloroethylvinylether	23.61	0.00	--	63.0	0	.1542	0.00
32) Cis-1,3-Dichloropropene	24.24	0.00	--	75.0	0	.5804	0.00
33) *Chlorobenzene-d5	28.57	28.57	.01	117.0	83998	1.0000	50.00
34) 4-Methyl-2-pentanone	23.66	0.00	--	58.0	0	.1895	0.00
35) Toluene-d8(SURR)	24.81	24.79	.02	98.0	87389	.5110	101.79
36) Toluene	24.98	0.00	--	92.0	0	.6199	0.00
37) Trans-1,3-Dichloropropene	25.42	0.00	--	75.0	0	.6139	0.00
38) 1,1,2-Trichloroethane	25.82	0.00	--	97.0	0	.4605	0.00
39) Tetrachloroethene	26.55	0.00	--	166.0	0	.5799	0.00
40) 1,3-Dichloropropane	26.44	0.00	--	76.0	0	.6927	0.00
41) 2-Hexanone	25.71	0.00	--	58.0	0	.2047	0.00
42) Dibromochloromethane	27.20	0.00	--	129.0	0	.9224	0.00
43) 1,2-Dibromoethane (EDB)	27.70	0.00	--	107.0	0	.8223	0.00
44) Chlorobenzene	28.68	0.00	--	112.0	0	.8593	0.00
45) 1,1,1,2-Tetrachloroethane	28.76	0.00	--	131.0	0	.5121	0.00
46) Ethylbenzene	28.71	0.00	--	91.0	0	1.2870	0.00
47) m&p-Xylenes	29.90	0.00	--	106.0	0	.4473	0.00
48)	[illegible]	0.00	--	106.0	0	.4252	0.00
49)		0.00	--	104.0	0	.8044	0.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

225

AR101256

52)	Bromofluorobenzene(SURR)	31.72	31.73	.00	95.0	73506	.4441	98
53)	*1,2-Dichlorobenzene-D4	36.02	36.02	.00	152.0	50679	1.0000	
54)	Bromobenzene	32.30	0.00	--	156.0	0	.9012	0
55)	1,1,2,2-Tetrachloroethane	31.50	0.00	--	83.0	0	1.9870	0.00
56)	1,2,3-Trichloropropane	31.91	0.00	--	79.0	0	1.0914	0.00
57)	n-Propylbenzene	32.01	0.00	--	120.0	0	.5141	0.00
58)	2-Chlorotoluene	32.59	0.00	--	126.0	0	.5293	0.00
59)	4-Chlorotoluene	32.70	0.00	--	126.0	0	.5425	0.00
60)	1,3,5-Trimethylbenzene	32.40	0.00	--	105.0	0	1.8208	0.00
61)	tert-Butylbenzene	33.38	0.00	--	119.0	0	1.7811	0.00
62)	1,2,4-Trimethylbenzene	33.50	0.00	--	105.0	0	1.8482	0.00
63)	sec-Butylbenzene	33.95	0.00	--	105.0	0	2.5815	0.00
64)	1,3-Dichlorobenzene	34.73	0.00	--	146.0	0	1.4416	0.00
65)	1,4-Dichlorobenzene	35.03	0.00	--	146.0	0	1.4711	0.00
66)	p-Isopropyltoluene	34.30	0.00	--	119.0	0	2.0121	0.00
67)	1,2-Dichlorobenzene	36.09	0.00	--	146.0	0	1.3631	0.00
68)D	n-Butylbenzene	35.43	35.44	.01	91.0	530	2.2120	.24
69)	1,2-Dibromo-3-chloroprope	38.42	0.00	--	75.0	0	.5060	0.00
70)	1,2,4-Trichlorobenzene	41.25	0.00	--	180.0	0	1.2178	0.00
71)D	Naphthalene	42.37	42.40	.03	128.0	981	2.3877	.41
72)	Hexachlorobutadiene	41.61	0.00	--	225.0	0	.7403	0.00
73)	1,2,3-Trichlorobenzene	43.31	0.00	--	180.0	0	1.1812	0.00

* - Compound is an Internal Standard
D - Compound Qdel'ed

JJ033

226

930916-02

Diagnostic Quant Report

Data File: >JJ034::D4 Injected at: 12:30 09/21/93
Quant'd : 13:16 09/21/93
ID File : VOASOL::QT Calibrated : : / /

Compound	- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1) *1,4-Difluorobenzene	21.28	21.30	.01	114.0	100666	1.0000	50.00
2) Dichlorodifluoromethane	5.99	0.00	--	85.0	0	.2571	0.00
3) Chloromethane	8.29	0.00	--	50.0	0	.2472	0.00
4) Vinyl Chloride	9.17	0.00	--	62.0	0	.2120	0.00
5) Bromomethane	11.37	0.00	--	94.0	0	.0537	0.00
6) Chloroethane	11.80	0.00	--	64.0	0	.1359	0.00
7) Trichlorofluoromethane	12.59	0.00	--	101.0	0	.6336	0.00
8) 1,1-Dichloroethene	14.40	0.00	--	61.0	0	.5190	0.00
9)D Carbon Disulfide	15.57	15.58	.01	76.0	511	.7317	.35
10) Acetone	14.38	14.36	.02	43.0	895	.1509	2.95
11) Methylene Chloride	15.71	15.71	.00	49.0	2222	.4840	2.2[illegible]
12) Trans-1,2-Dichloroethene	16.31	0.00	--	96.0	0	.3181	0.
13)D 1,1-Dichloroethane	17.32	17.32	.00	63.0	950	.6138	.[illegible]
14)D Vinyl Acetate	17.32	17.33	.01	43.0	576	.2487	.38
15) 2,2-Dichloropropane	18.50	0.00	--	77.0	0	.5018	0.00
16) Cis-1,2-Dichloroethene	18.65	0.00	--	96.0	0	.3571	0.00
17) 2-Butanone	18.29	0.00	--	43.0	0	.2330	0.00
18) Bromochloromethane	19.38	0.00	--	128.0	0	.2685	0.00
19) Chloroform	18.97	18.97	.01	83.0	1762	.7787	1.12
20) 1,1,1-Trichloroethane	19.79	0.00	--	97.0	0	.5914	0.00
21)D Carbon Tetrachloride	20.35	20.36	.01	117.0	527	.5809	.45
22) 1,1-Dichloro-1-propene	20.11	0.00	--	75.0	0	.4593	0.00
23) 1,2-Dichloroethane-d4(SUR	20.55	20.55	.00	67.0	24254	.1190	101.27
24)D Benzene	20.77	20.78	.01	78.0	1204	.8045	.74
25)D 1,2-Dichloroethane	20.76	20.77	.01	62.0	831	.5105	.81
26) Fluorobenzene(SURR)	21.19	21.20	.01	96.0	109640	.5248	99.98
27)D Trichloroethene	22.85	22.88	.02	130.0	540	.4071	.66
28) 1,2-Dichloropropane	22.49	0.00	--	63.0	0	.3857	0.
29)D Dibromomethane	23.24	23.25	.01	93.0	865	.5312	.[illegible]
30)D Bromodichloromethane	23.07	23.08	.01	83.0	1027	.8656	.59
31) 2-Chloroethylvinylether	23.63	0.00	--	63.0	0	.1542	0.00
32) Cis-1,3-Dichloropropene	24.26	0.00	--	75.0	0	.5804	0.00
33) *Chlorobenzene-d5	28.57	28.59	.03	117.0	84409	1.0000	50.00
34) 4-Methyl-2-pentanone	23.67	0.00	--	58.0	0	.1895	0.00
35) Toluene-d8(SURR)	24.83	24.81	.02	98.0	86719	.5110	100.52
36)D Toluene	25.00	25.00	.00	92.0	741	.6199	.71
37) Trans-1,3-Dichloropropene	25.43	0.00	--	75.0	0	.6139	0.00
38)D 1,1,2-Trichloroethane	25.84	25.85	.01	97.0	583	.4605	.79
39) Tetrachloroethene	26.57	0.00	--	166.0	0	.5799	0.00
40)D 1,3-Dichloropropane	26.46	26.46	.00	76.0	924	.6927	.79
41) 2-Hexanone	25.73	0.00	--	58.0	0	.2047	0.00
42)D Dibromochloromethane	27.22	27.21	.01	129.0	823	.9224	.53
43) 1,2-Dibromoethane (EDB)	27.72	0.00	--	107.0	0	.8223	0.00
44)D Chlorobenzene	28.70	28.69	.01	112.0	1114	.8593	.77
45) 1,1,1,2-Tetrachloroethane	28.78	0.00	--	131.0	0	.5121	0.00
46)D Ethylbenzene	28.74	28.72	.01	91.0	1500	1.2870	.69
47) m&p-Xylenes	28.92	28.90	.02	106.0	946	.4473	1.25
48) [illegible]	[illegible]	30.07	.02	106.0	1206	.4252	1.68
49)		30.19	.02	104.0	2141	.3044	1.58
50)D Bromoform	[illegible]	[illegible]	[illegible]	173.0	708	.7880	.63

227

AR101258

2)	Bromofluorobenzene(SURR)	31.75	31.75	.00	95.0	73681	.4441	98.28
3)	*1,2-Dichlorobenzene-D4	36.02	36.03	.01	152.0	50734	1.0000	[redacted]
4)D	Bromobenzene	32.31	32.32	.01	156.0	806	.9012	
5)D	1,1,2,2-Tetrachloroethane	31.52	31.52	.00	83.0	985	1.5870	
6)	1,2,3-Trichloropropane	31.92	31.92	.00	75.0	1210	1.0914	1.[illegible]
7)	n-Propylbenzene	32.02	0.00	--	120.0	0	.5141	0.00
8)	2-Chlorotoluene	32.60	0.00	--	126.0	0	.5293	0.00
9)	4-Chlorotoluene	32.71	0.00	--	126.0	0	.5425	0.00
0)D	1,3,5-Trimethylbenzene	32.42	32.43	.01	105.0	1401	1.8208	.76
1)	tert-Butylbenzene	33.40	33.39	.00	119.0	2570	1.7811	1.42
2)D	1,2,4-Trimethylbenzene	33.51	33.51	.01	105.0	1525	1.8482	.81
3)	sec-Butylbenzene	33.96	33.97	.02	105.0	2681	2.5815	1.02
4)D	1,3-Dichlorobenzene	34.74	34.74	.00	146.0	1377	1.4416	.94
4)D	1,3-Dichlorobenzene	34.74	35.06	.32	146.0	1321	1.4416	.90
5)D	1,4-Dichlorobenzene	35.04	34.74	.30	146.0	1377	1.4711	.92
5)D	1,4-Dichlorobenzene	35.04	35.06	.01	146.0	1321	1.4711	.88
6)D	p-Isopropyltoluene	34.31	34.30	.01	119.0	1598	2.0121	.78
7)D	1,2-Dichlorobenzene	36.10	36.12	.01	146.0	1542	1.3631	1.11
8)D	n-Butylbenzene	35.44	35.49	.01	91.0	1873	2.2120	.83
9)	1,2-Dibromo-3-chloropropa	38.43	0.00	--	75.0	0	.5060	0.00
0)	1,2,4-Trichlorobenzene	41.26	0.00	--	180.0	0	1.2178	0.00
1)	Naphthalene	42.39	42.41	.03	128.0	5870	2.3877	2.42
2)	Hexachlorobutadiene	41.63	41.67	.04	225.0	965	.7403	1.28
3)	1,2,3-Trichlorobenzene	43.33	43.35	.02	180.0	1584	1.1812	1.32

* - Compound is an Internal Standard
- - Compound Qdel'ed

JJ034

228

AR101260

930916-03

Diagnostic Quant Report

a File: >JJ035::D4 Injected at: 13:23 09/21/93
nt'd : 14:09 09/21/93
File : VOASOL::QT Calibrated : : / /

	pound	- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
	*1,4-Difluorobenzene	21.28	21.30	.01	114.0	91263	1.0000	50.00
	Dichlorodifluoromethane	5.99	0.00	--	85.0	0	.2571	0.00
	Chloromethane	8.29	0.00	--	50.0	0	.2472	0.00
	Vinyl Chloride	9.17	0.00	--	62.0	0	.2120	0.00
	Bromomethane	11.37	0.00	--	94.0	0	.0537	0.00
	Chloroethane	11.80	0.00	--	64.0	0	.1359	0.00
	Trichlorofluoromethane	12.59	0.00	--	101.0	0	.6336	0.00
8)	1,1-Dichloroethene	14.40	14.40	.01	61.0	6138	.5190	6.48
9)D	Carbon Disulfide	15.57	15.58	.00	76.0	651	.7317	.49
10)	Acetone	14.38	14.36	.03	43.0	6193	.1509	22.48
11)	Methylene Chloride	15.71	15.72	.00	49.0	2077	.4840	2.
12)	Trans-1,2-Dichloroethene	16.31	16.31	.00	96.0	720	.3181	1.
13)	1,1-Dichloroethane	17.32	17.31	.01	63.0	103579	.6138	92.46
14)	Vinyl Acetate	17.32	0.00	--	43.0	0	.7487	0.00
15)	2,2-Dichloropropane	18.50	0.00	--	77.0	0	.5018	0.00
16)	Cis-1,2-Dichloroethene	18.65	18.65	.00	96.0	380507	.3571	583.86
17)	2-Butanone	18.29	18.29	.00	43.0	1562	.2330	3.67
18)	Bromochloromethane	19.38	0.00	--	128.0	0	.2685	0.00
19)	Chloroform	18.98	0.00	--	83.0	0	.7787	0.00
20)	1,1,1-Trichloroethane	19.79	19.78	.01	97.0	271137	.5914	251.18
21)	Carbon Tetrachloride	20.35	0.00	--	117.0	0	.5809	0.00
22)	1,1-Dichloro-1-propene	20.11	0.00	--	75.0	0	.4593	0.00
23)	1,2-Dichloroethane-d4(SUR	20.55	20.55	.00	67.0	20789	.1190	95.75
24)D	Benzene	20.77	20.76	.01	78.0	733	.8045	.50
25)D	1,2-Dichloroethane	20.76	20.76	.00	62.0	907	.5105	.97
26)	Fluorobenzene(SURR)	21.19	21.19	.00	96.0	94270	.5248	98.42
27)D	Trichloroethene	22.06	22.06	.00	130.0	19712	.4071	26.
28)	1,2-Dichloropropane	22.49	0.00	--	63.0	0	.3857	0.
29)	Dibromomethane	23.25	0.00	--	93.0	0	.5312	0.
30)	Bromodichloromethane	23.07	0.00	--	83.0	0	.8656	0.00
31)	2-Chloroethylvinylether	23.63	0.00	--	63.0	0	.1542	0.00
32)	Cis-1,3-Dichloropropene	24.26	0.00	--	75.0	0	.5804	0.00
33)	*Chlorobenzene-d5	28.57	28.60	.03	117.0	72521	1.0000	50.00
34)	4-Methyl-2-pentanone	23.68	0.00	--	58.0	0	.1895	0.00
35)	Toluene-d8(SURR)	24.83	24.81	.02	98.0	76861	.5110	103.69
36)	Toluene	25.01	25.01	.00	92.0	323392	.6199	359.70
37)	Trans-1,3-Dichloropropene	25.44	0.00	--	75.0	0	.6139	0.00
38)	1,1,2-Trichloroethane	25.85	0.00	--	97.0	0	.4605	0.00
39)	Tetrachloroethene	26.57	26.56	.01	166.0	6956	.5799	8.27
40)	1,3-Dichloropropane	26.46	0.00	--	76.0	0	.6927	0.00
41)	2-Hexanone	25.73	0.00	--	58.0	0	.2047	0.00
42)	Dibromochloromethane	27.22	0.00	--	129.0	0	.9224	0.00
43)D	1,2-Dibromoethane (EDB)	27.72	27.72	.00	107.0	564	.8223	.47
44)	Chlorobenzene	28.70	0.00	--	112.0	0	.8593	0.00
45)	1,1,1,2-Tetrachloroethane	28.79	0.00	--	131.0	0	.5121	0.00
46)	Ethylbenzene	28.74	0.00	--	91.0	0	1.2870	0.00
47)D	m&p-Xylenes	28.93	28.73	.20	106.0	30181	.4473	46.52
47)	m&p-Xylenes	28.93	28.91	.01	106.0	162768	.4473	250.91
48)	o-Xylene	30.09	30.08	.01	106.0	57308	.4252	92.93

229