



Tetra Tech NUS

INTERNAL CORRESPONDENCE

TO: D. BRAYACK DATE: JUNE 20, 2007  
FROM: EDWARD SEDLMYER COPIES: DV FILE  
SUBJECT: ORGANIC DATA VALIDATION- VOC  
CTO 002 NWIRP BETHPAGE  
SDG F0517

SAMPLES: 5/Aqueous  
ANY-8480-042507 ANY-9338-042507 DUP-01-042507  
FB-01-042507 TB-01-042507

#### OVERVIEW

The sample set for NWIRP Bethpage, CTO 002, SDG F0517 consists of one (1) field blank, one (1) trip blank, and three (3) aqueous environmental samples. All samples were analyzed for volatile organic compounds (VOC). The following field duplicate pair was associated with this SDG: ANY-8480-042507 / DUP-01-042507.

The samples were collected by Tetra Tech NUS on April 25, 2007 and analyzed by Mitkem Corporation. Analyses were conducted in accordance with SW-846 Method 8260B analytical and reporting protocols. The data contained in this SDG were validated with regard to the following parameters:

- \* • Data completeness
- \* • Holding times
- \* • GCMS System Tuning and Performance
- Initial/continuing calibrations
- Laboratory method and field blank results
- \* • Surrogate Spike Recoveries
- \* • Internal Standard Recoveries
- \* • Blank Spike/Blank Spike Duplicate Results
- Matrix Spike/Matrix Spike Duplicate Results
- \* • Compound Identification
- Compound Quantitation
- Detection Limits
- \* • Tentatively Identified Compounds

The symbol (\*) indicates that all quality control criteria were met for this parameter. Qualified analytical results are presented in Appendix A, results as reported by the laboratory are presented in Appendix B, Region II data validation forms are presented in Appendix C, and documentation supporting these findings is presented in Appendix D.

#### Volatile

An initial calibration percent relative standard deviation (%RSD) exceeded the 30% quality control limit for

methylene chloride on instrument V6, on 4/26/07. The non-detected results reported for methylene chloride were qualified estimated (UJ), in all of the samples.

Initial and continuing calibration relative response factors (RRFs) were less than the 0.05 quality control limit for acetone and 2-butanone on instrument V6. Only non-detected results were reported for the aforementioned compounds and these were rejected (UR) in all of the samples.

The matrix spike / matrix spike duplicate (MS/MSD) performed on sample ANY-8480-042507 had a percent recovery in the MSD less than the quality control limit for styrene. The non-detected styrene result for sample ANY-8480-042507 has been qualified as estimated (UJ).

Chloroform was detected in the field blank. No action was taken on this basis because chloroform was not detected in any other samples.

The samples were intended to be analyzed by EPA CLP low level method OLC03.2 however, the samples were analyzed by SW-846 8260B. The samples were not re-analyzed because the hold time had been exceeded before the error was realized. The reporting limits for the majority of samples is 1 ug/L instead of the intended 0.5 ug/L. However, if any compounds had been detected the laboratory would have reported all detections down to the MDL, which would have met or satisfied the intended 0.5 ug/L reporting limit for the majority of compounds. The main compound of concern is trichloroethene and the laboratory's MDL for trichloroethene is 0.5 ug/L. Trichloroethene was not detected in any samples associated with this SDG. No action was taken on this basis.

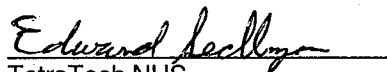
#### EXECUTIVE SUMMARY

**Laboratory Performance Issues:** Qualifications were made on initial and continuing calibration of two VOC compounds that failed to comply with RRF criterion and one compound that failed %RSD criterion.

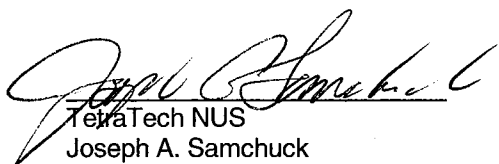
**Other Factors Affecting Data Quality:** Samples were intended to be analyzed by EPA CLP low level method OLC03.2 but were analyzed by SW-846 Method 8260B which raised reporting limits from 0.5 ppb to 1 ppb. One compound was qualified in one sample due to a low matrix spike recovery.

The data for these analyses were reviewed with reference to the USEPA Region II Standard Operating Procedures for the Validation of Organic Data Acquired Using Method 8260B (Rev. 1 January 1999) and Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006).

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the Quality Assurance Project Plan (QAPP)."



TetraTech NUS  
Edward Sedlmyer  
Chemist/Data Validator



TetraTech NUS  
Joseph A. Samchuck  
Data Validation Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Region II Validation Forms
4. Appendix D - Support Documentation

**APPENDIX A**

**QUALIFIED ANALYTICAL RESULTS**

**Data Validation Qualifier Codes:**

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = GFAA PDS - GFAA MSA's  $r < 0.995$  / ICP PDS Recovery Noncompliance
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (e.g. base-line drifting)
- P = Uncertainty near detection limit ( $< 2 \times$  IDL for inorganics and  $<$ CRQL for organics)
- Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = % Difference between columns/detectors  $>25\%$  for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient  $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids  $<30\%$
- Z = Uncertainty at 2 sigma deviation is greater than sample activity

**PROJ\_NO: 9845**

SDG: F0517 MEDIA: WATER DATA FRACTION: OV

nsample ANY-8480-042507  
 samp\_date 4/25/2007  
 lab\_id F0517-01A  
 qc\_type NM  
 units UG/L  
 Pct\_Solids  
 DUP\_OF:

nsample ANY-8480-042507  
 samp\_date 4/25/2007  
 lab\_id F0517-01A  
 qc\_type NM  
 units UG/L  
 Pct\_Solids  
 DUP\_OF:

nsample ANY-9338-042507  
 samp\_date 4/25/2007  
 lab\_id F0517-02A  
 qc\_type NM  
 units UG/L  
 Pct\_Solids  
 DUP\_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	1	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	UR	C
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UR	C
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	

Parameter	Result	Val Qual	Qual Code
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	1	UJ	C
STYRENE	1	UJ	D
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFUOROMETHANE	1	U	
VINYL CHLORIDE	1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	1	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	UR	C
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UR	C
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	

**PROJ\_NO: 9845**

SDG: F0517 MEDIA: WATER DATA FRACTION: OV

nsample ANY-9938-042507  
 samp\_date 4/25/2007  
 lab\_id F0517-02A  
 qc\_type NM  
 units UG/L  
 Pct\_Solids  
 DUP\_OF:

nsample DUP-01-042507  
 samp\_date 4/25/2007  
 lab\_id F0517-05A  
 qc\_type NM  
 units UG/L  
 Pct\_Solids  
 DUP\_OF: ANY-8480-042507

nsample DUP-01-042507  
 samp\_date 4/25/2007  
 lab\_id F0517-05A  
 qc\_type NM  
 units UG/L  
 Pct\_Solids  
 DUP\_OF: ANY-8480-042507

Parameter	Result	Val Qual	Qual Code
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	1	UJ	C
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	1	U	
VINYL CHLORIDE	1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	1	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	UR	C
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UR	C
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	

Parameter	Result	Val Qual	Qual Code
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	1	UJ	C
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	1	U	
VINYL CHLORIDE	1	U	

**PROJ\_NO: 9845**

SDG: F0517 MEDIA: WATER DATA FRACTION: OV

nsample FB-01-042507  
 samp\_date 4/25/2007  
 lab\_id F0517-03A  
 qc\_type NM  
 units UG/L  
 Pct\_Solids  
 DUP\_OF:

nsample FB-01-042507  
 samp\_date 4/25/2007  
 lab\_id F0517-03A  
 qc\_type NM  
 units UG/L  
 Pct\_Solids  
 DUP\_OF:

nsample TB-01-042507  
 samp\_date 4/25/2007  
 lab\_id F0517-04A  
 qc\_type NM  
 units UG/L  
 Pct\_Solids  
 DUP\_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	1	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	UR	C
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UR	C
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	4.2		
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	

Parameter	Result	Val Qual	Qual Code
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	1	UJ	C
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	1	U	
VINYL CHLORIDE	1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	1	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	UR	C
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UR	C
BENZENE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	



**PROJ\_NO: 9845**

SDG: F0517 MEDIA: WATER DATA FRACTION: OV

nsample TB-01-042507  
samp\_date 4/25/2007  
lab\_id F0517-04A  
qc\_type NM  
units UG/L

Pct\_Solids  
DUP\_OF:

Parameter	Result	Val Qual	Qual Code
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	1	UJ	C
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	1	U	
VINYL CHLORIDE	1	U	

**APPENDIX B**

**RESULTS AS REPORTED BY THE LABORATORY**

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANY-8480

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Matrix: (soil/water) WATER Lab Sample ID: F0517-01A  
 Sample wt/vol: 5 (G/ML) ML Lab File ID: V6F2267.D  
 Level: (low/med) LOW Date Received: 04/26/2007  
 % Moisture: not dec. Date Analyzed: 05/01/2007  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: \_\_\_\_\_ 1.00  
 Soil Extract Volume: \_\_\_\_\_ (µL) Soil Aliquot Volume: \_\_\_\_\_ (µL)

## CONCENTRATION UNITS:

(µg/L or µg/Kg) UG/L

Q

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANY-8480

Lab Name: Mitkem Corporation

Contract: \_\_\_\_\_

Lab Code: MITKEM

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: MF0517Matrix: (soil/water) WATERLab Sample ID: F0517-01A

Sample wt/vol: \_\_\_\_\_

5 (G/ML) MLLab File ID: V6F2267.DLevel: (low/med) LOWDate Received: 04/26/2007% Moisture: not dec.Date Analyzed: 05/01/2007GC Column: DB-624ID: 0.25 (mm)

Dilution Factor: \_\_\_\_\_

1.00

Soil Extract Volume: \_\_\_\_\_

(μL)

Soil Aliquot Volume: \_\_\_\_\_

(μL)

## CONCENTRATION UNITS:

(μg/L or μg/Kg) UG/L

Q

CAS NO.	COMPOUND	(μg/L or μg/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylene (Total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U
110-82-7	Cyclohexane	1.0	U
79-20-9	Methyl acetate	1.0	U
108-87-2	Methylcyclohexane	1.0	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANY-8480

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Matrix: (soil/water) WATER Lab Sample ID: F0517-01A  
 Sample wt/vol: \_\_\_\_\_ 5 (G/ML) ML Lab File ID: V6F2267.D  
 Level: (low/med) LOW Date Received: 04/26/2007  
 % Moisture: not dec. Date Analyzed: 05/01/2007  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: \_\_\_\_\_ 1.00  
 Soil Extract Volume: \_\_\_\_\_ 5000 ( $\mu$ L) Soil Aliquot Volume: \_\_\_\_\_ 0 ( $\mu$ L)  
 Number TICs found: \_\_\_\_\_ 0

CONCENTRATION UNITS: UG/L

CAS NO.	COMPOUND	RT	ESTIMATED CONCENTRATION	Q
---------	----------	----	-------------------------	---

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANY-9338

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Matrix: (soil/water) WATER Lab Sample ID: F0517-02A  
 Sample wt/vol: 5 (G/ML) ML Lab File ID: V6F2270.D  
 Level: (low/med) LOW Date Received: 04/26/2007  
 % Moisture: not dec. Date Analyzed: 05/01/2007  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: \_\_\_\_\_ 1.00  
 Soil Extract Volume: \_\_\_\_\_ (µL) Soil Aliquot Volume: \_\_\_\_\_ (µL)

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANY-9338

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Matrix: (soil/water) WATER Lab Sample ID: F0517-02A  
 Sample wt/vol: 5 (G/ML) ML Lab File ID: V6F2270.D  
 Level: (low/med) LOW Date Received: 04/26/2007  
 % Moisture: not dec. Date Analyzed: 05/01/2007  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: \_\_\_\_\_ 1.00  
 Soil Extract Volume: \_\_\_\_\_ (µL) Soil Aliquot Volume: \_\_\_\_\_ (µL)

## CONCENTRATION UNITS:

(µg/L or µg/Kg) UG/L

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylene (Total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U
110-82-7	Cyclohexane	1.0	U
79-20-9	Methyl acetate	1.0	U
108-87-2	Methylcyclohexane	1.0	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ANY-9338

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Matrix: (soil/water) WATER Lab Sample ID: F0517-02A  
 Sample wt/vol: \_\_\_\_\_ 5 (G/ML) ML Lab File ID: V6F2270.D  
 Level: (low/med) LOW Date Received: 04/26/2007  
 % Moisture: not dec. Date Analyzed: 05/01/2007  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: \_\_\_\_\_ 1.00  
 Soil Extract Volume: \_\_\_\_\_ 5000 ( $\mu$ L) Soil Aliquot Volume: \_\_\_\_\_ 0 ( $\mu$ L)  
 Number TICs found: \_\_\_\_\_ 0

CONCENTRATION UNITS: UG/L

CAS NO.	COMPOUND	RT	ESTIMATED CONCENTRATION	Q
---------	----------	----	-------------------------	---



## VOLATILE ORGANICS ANALYSIS DATA SHEET

FB-01

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Matrix: (soil/water) WATER Lab Sample ID: F0517-03A  
 Sample wt/vol: 5 (G/ML) ML Lab File ID: V6F2264.D  
 Level: (low/med) LOW Date Received: 04/26/2007  
 % Moisture: not dec. Date Analyzed: 05/01/2007  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: \_\_\_\_\_ 1.00  
 Soil Extract Volume: \_\_\_\_\_ (µL) Soil Aliquot Volume: \_\_\_\_\_ (µL)

## CONCENTRATION UNITS:

(µg/L or µg/Kg) UG/L

Q

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
67-66-3	Chloroform	4.2	
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB-01

Lab Name: Mitkem Corporation

Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: \_\_\_\_\_SAS No.: \_\_\_\_\_ SDG No.: MF0517Matrix: (soil/water) WATERLab Sample ID: F0517-03A

Sample wt/vol: \_\_\_\_\_ 5 (G/ML) ML

Lab File ID: V6F2264.DLevel: (low/med) LOWDate Received: 04/26/2007% Moisture: not dec.Date Analyzed: 05/01/2007GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: \_\_\_\_\_ 1.00

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volume: \_\_\_\_\_ (µL)

## CONCENTRATION UNITS:

(µg/L or µg/Kg) UG/L

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylene (Total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U
110-82-7	Cyclohexane	1.0	U
79-20-9	Methyl acetate	1.0	U
108-87-2	Methylcyclohexane	1.0	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB-01

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Matrix: (soil/water) WATER Lab Sample ID: F0517-03A  
 Sample wt/vol: \_\_\_\_\_ 5 (G/ML) ML Lab File ID: V6F2264.D  
 Level: (low/med) LOW Date Received: 04/26/2007  
 % Moisture: not dec. Date Analyzed: 05/01/2007  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: \_\_\_\_\_ 1.00  
 Soil Extract Volume: \_\_\_\_\_ 5000 (µL) Soil Aliquot Volume: \_\_\_\_\_ 0 (µL)  
 Number TICs found: \_\_\_\_\_ 0

CONCENTRATION UNITS: UG/L

CAS NO.	COMPOUND	RT	ESTIMATED CONCENTRATION	Q
---------	----------	----	-------------------------	---

## VOLATILE ORGANICS ANALYSIS DATA SHEET

TB-01

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Matrix: (soil/water) WATER Lab Sample ID: F0517-04A  
 Sample wt/vol: 5 (G/ML) ML Lab File ID: V6F2265.D  
 Level: (low/med) LOW Date Received: 04/26/2007  
 % Moisture: not dec. Date Analyzed: 05/01/2007  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: \_\_\_\_\_ 1.00  
 Soil Extract Volume: \_\_\_\_\_ (µL) Soil Aliquot Volume: \_\_\_\_\_ (µL)

## CONCENTRATION UNITS:

(µg/L or µg/Kg) UG/L

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-01

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Matrix: (soil/water) WATER Lab Sample ID: F0517-04A  
 Sample wt/vol: 5 (G/ML) ML Lab File ID: V6F2265.D  
 Level: (low/med) LOW Date Received: 04/26/2007  
 % Moisture: not dec. Date Analyzed: 05/01/2007  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: \_\_\_\_\_ 1.00  
 Soil Extract Volume: \_\_\_\_\_ (µL) Soil Aliquot Volume: \_\_\_\_\_ (µL)

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylene (Total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U
110-82-7	Cyclohexane	1.0	U
79-20-9	Methyl acetate	1.0	U
108-87-2	Methylcyclohexane	1.0	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-01

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Matrix: (soil/water) WATER Lab Sample ID: F0517-04A  
 Sample wt/vol: \_\_\_\_\_ 5 (G/ML) ML Lab File ID: V6F2265.D  
 Level: (low/med) LOW Date Received: 04/26/2007  
 % Moisture: not dec. Date Analyzed: 05/01/2007  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: \_\_\_\_\_ 1.00  
 Soil Extract Volume: \_\_\_\_\_ 5000 (µL) Soil Aliquot Volume: \_\_\_\_\_ 0 (µL)  
 Number TICs found: \_\_\_\_\_ 0

CONCENTRATION UNITS: UG/L

CAS NO.	COMPOUND	RT	ESTIMATED CONCENTRATION	Q
---------	----------	----	-------------------------	---

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-01

Lab Name: Mitkem Corporation

Contract: \_\_\_\_\_

Lab Code: MITKEM

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: MF0517Matrix: (soil/water) WATERLab Sample ID: F0517-05ASample wt/vol: 5 (G/ML) MLLab File ID: V6F2266.DLevel: (low/med) LOWDate Received: 04/26/2007% Moisture: not dec.Date Analyzed: 05/01/2007GC Column: DB-624ID: 0.25 (mm)

Dilution Factor: \_\_\_\_\_

1.00

Soil Extract Volume: \_\_\_\_\_

(µL)

Soil Aliquot Volume: \_\_\_\_\_

(µL)

## CONCENTRATION UNITS:

(µg/L or µg/Kg) UG/L

Q

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP-01

Lab Name: Mitkem Corporation

Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: \_\_\_\_\_SAS No.: \_\_\_\_\_ SDG No.: MF0517Matrix: (soil/water) WATERLab Sample ID: F0517-05ASample wt/vol: \_\_\_\_\_ 5 (G/ML) MLLab File ID: V6F2266.DLevel: (low/med) LOWDate Received: 04/26/2007

% Moisture: not dec. \_\_\_\_\_

Date Analyzed: 05/01/2007GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: \_\_\_\_\_ 1.00

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volume: \_\_\_\_\_ (µL)

## CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylene (Total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U
110-82-7	Cyclohexane	1.0	U
79-20-9	Methyl acetate	1.0	U
108-87-2	Methylcyclohexane	1.0	U



## VOLATILE ORGANICS ANALYSIS DATA SHEET

DUP-01

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Matrix: (soil/water) WATER Lab Sample ID: F0517-05A  
 Sample wt/vol: \_\_\_\_\_ 5 (G/ML) ML Lab File ID: V6F2266.D  
 Level: (low/med) LOW Date Received: 04/26/2007  
 % Moisture: not dec. Date Analyzed: 05/01/2007  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: \_\_\_\_\_ 1.00  
 Soil Extract Volume: \_\_\_\_\_ 5000 ( $\mu$ L) Soil Aliquot Volume: \_\_\_\_\_ 0 ( $\mu$ L)  
 Number TICs found: \_\_\_\_\_ 0

CONCENTRATION UNITS: UG/L

CAS NO.	COMPOUND	RT	ESTIMATED CONCENTRATION	Q
---------	----------	----	-------------------------	---

**APPENDIX C**

**REGION II VALIDATION FORMS**

CLP DATA ASSESSMENT

Functional Guidelines for Evaluating Organic Analysis

CASE No.: \_\_\_\_\_ SDG No.: F0515 LABORATORY: Mit Kem

SITE: NWIRP Bethpage

DATA ASSESSMENT

The current SOP No. HW-6 (Revision 12), January 2000 for CLP Organics Review and Preliminary Review has been applied.

All data were found to be valid and acceptable except those analytes which have been rejected, "R" (unusable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material), "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All action is detailed on the attached sheets.

The "R" flag means that the associated value is unusable. In other words, significant data bias is evident and the reported analyte concentration is unreliable.

Reviewer's  
Signature: Edward Sclbyer Date: 6/14/07

Verified By: [Signature] Date: 6/19/07

## CLP DATA ASSESSMENT

### 1. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detects (sample quantitation limits) will be flagged as estimated, "J", or unusable, "R", if the holding times are grossly exceeded.

The following action was taken in the samples and analytes shown due to excessive holding time.

OK

### 2. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate concentrations were outside contract specifications, qualifications were applied to the samples and analytes as shown below.

OK

CLP DATA ASSESSMENT

3. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

OK

STYRENE < LOWER DL  
LIMIT IN ANY-8480-  
092507.  
CJT.

4. BLANK CONTAMINATION:

Quality assurance (QA) blanks, i.e., method, trip, field, or rinse blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. If the concentration of the analyte is less than 5 times the blank contaminant level (10 times for common contaminants), the analytes are qualified as non-detects, "U". The following analytes in the sample shown were qualified with "U" for these reasons:

A) Method blank contamination:

OK

B) Field or rinse blank contamination:

Chloroform 4.2 ug/L  
No samples were qualified due to field blank contamination.

C) Trip blank contamination:

OK

---

CLP DATA ASSESSMENT

5. MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is (BFB) Bromofluorobenzene and for semi-volatiles Decafluorotriphenylphosphine (DFTPP).

If the mass calibration is in error, all associated data will be classified as unusable "R".

OK

6. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor GC/MS:

The response factor measures the instrument's response to specific chemical compounds. The response factor for the Target Compound List (TCL) must be  $\geq 0.05$  in both initial and continuing calibrations. A value  $< 0.05$  indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound will be rejected "R".

*Acetone and 2-butanone were rejected in all samples.*

CLP DATA ASSESSMENT

7. CALIBRATION:

B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be < 30% and %D must be < 25%. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detects data may be qualified "R".

For the PEST/PCB fraction, if %RSD exceeds 20% for all analytes, for alpha and delta BHC 25%, and for the two surrogates (which must not exceed 30% RSD), qualify all associated positive results "J" and non-detects "UJ".

The following analytes in the sample shown were qualified for %RSD and %D: *Methylene chloride qualified in all samples.*

8. INTERNAL STANDARDS PERFORMANCE GC/MS:

Internal standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than ±30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, the reviewer will use professional judgement to determine either partial or total rejection of the data for that sample fraction.

OK

---

CLP DATA ASSESSMENT

9. COMPOUND IDENTIFICATION:

A) Volatile and Semi-Volatile Fractions:

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within  $\pm 0.06$  RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. For the tentatively identified compounds (TIC) the ion spectra must match accurately. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

OK

B) Pesticide Fraction:

The retention times of reported compounds must fall within the calculated retention time windows for the two chromatographic columns and a GC/MS confirmation is required if the concentration exceeds 10ng/ml in the final sample extract.

NA

10. CONTRACT PROBLEMS NON-COMPLIANCE:

See data validation Report.

11. FIELD DOCUMENTATION:

NA



CLP DATA ASSESSMENT

12. OTHER PROBLEMS:

*None*

13. This package contains reextractions, reanalyses or dilutions. Upon reviewing the QA results, the following Form 1(s) are identified not to be used.

*NA*

**APPENDIX D**

**SUPPORT DOCUMENTATION**

**HOLD TIME**

**SDG** F0517

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
OV	%	TB-01-042507	F0517-04A	NM	4/25/2007	5/1/2007	5/1/2007	6	0	6
OV	%	FB-01-042507	F0517-03A	NM	4/25/2007	5/1/2007	5/1/2007	6	0	6
OV	%	DUP-01-042507	F0517-05A	NM	4/25/2007	5/1/2007	5/1/2007	6	0	6
OV	%	ANY-9338-042507	F0517-02A	NM	4/25/2007	5/1/2007	5/1/2007	6	0	6
OV	%	ANY-8480-042507	F0517-01A	NM	4/25/2007	5/1/2007	5/1/2007	6	0	6
OV	UG/L	TB-01-042507	F0517-04A	NM	4/25/2007	5/1/2007	5/1/2007	6	0	6
OV	UG/L	FB-01-042507	F0517-03A	NM	4/25/2007	5/1/2007	5/1/2007	6	0	6
OV	UG/L	DUP-01-042507	F0517-05A	NM	4/25/2007	5/1/2007	5/1/2007	6	0	6
OV	UG/L	ANY-9338-042507	F0517-02A	NM	4/25/2007	5/1/2007	5/1/2007	6	0	6
OV	UG/L	ANY-8480-042507	F0517-01A	NM	4/25/2007	5/1/2007	5/1/2007	6	0	6

175 Metro Center Boulevard  
Warwick, Rhode Island 02886-1755  
(401) 732-3400 • Fax (401) 732-3499  
email: mitkem@mitkem.com

**CHAIN-OF-CUSTODY RECORD**



SAMPLE IDENTIFICATION	DATE/TIME SAMPLED	COMPOSITE	GRAB	WATER	SOIL	OTHER	LAB ID	# OF CONTAINERS	REQUESTED ANALYSES		COMMENTS	
									CLIENT PROJECT #:	LAB PROJECT #:		
ANY-8180-042507	4/25/07 1340		X				01	9	MS/MSD			
ANY-9338-042507	4/25/07 1350		X				02	3				
FB-01-042507	4/25/07 1400		X				03	3	Field Blank			
TB-01-042507	4/25/07 1330		X				04	3	Trip Blank Lab			
Dup'd-042507	4/25/07 0000		X				05	3	Field Duplicate			
	/											
	/											
	/											
	/											
	/											
	/											
	/											
	/											
	/											
								ACCEPTED BY	DATE/TIME	ADDITIONAL REMARKS:		
								Quid	4/25/07 1715	4/26/07 9:00	COOLER TEMP: 8°C	
									/			
									/			

**COMPANY** Tetra-Tech NUS  
**NAME** Dave Bra-yack  
**ADDRESS** Twin Oaks I, Suite 309, 5700 Lake Wright Dr.  
**CITY/ST/ZIP** Norfolk VA 23502  
**CLIENT PROJECT #:** 9845  
**LAB PROJECT #:** F0517  
**PHONE** (757) 461-3824  
**FAX**  
**TURNAROUND TIME:**  
**REQUESTED ANALYSES**  
 MS/MSD  
 Field Blank  
 Trip Blank Lab  
 Field Duplicate

WHITE: LABORATORY COPY    YELLOW: REPORT COPY    PINK: CLIENT'S COPY



*"Environmental Testing For The New Millennium"*

---

May 23, 2007

Tetra Tech NUS, Inc.  
661 Anderson Drive  
Pittsburgh, PA 15220  
Attn: Ms. Amy Thomson

RE: Client Project: CTO-0002, NWIRP Bethpage, NY/Aqua New York.  
Lab Project #: F0517

Dear Ms. Thomson:

Enclosed please find the data report on two CD-ROMs for the required analyses for the samples associated with the above referenced project. Per request from Kelly Carper, the hard copy data package is also submitted.

If you have any questions regarding this report, please call me.

We appreciate your business.

Sincerely,

A handwritten signature in cursive script, appearing to read "Edward A. Lawler".

Edward A. Lawler  
Laboratory Operations Manager

Analytical Data Package for Tetra Tech NUS, Inc.

Client Project: CTO-0002, NWIRP Bethpage/Aqua New York

Mitkem Project ID: F0517

May 23, 2007

Prepared For: Tetra Tech NUS, Inc.  
661 Anderson Drive  
Pittsburgh, PA 15220  
Attn: Ms. Amy Thomson

Prepared By: Mitkem Corporation  
175 Metro Center Boulevard  
Warwick, RI 02886  
(401) 732-3400

## SDG Narrative

Mitkem Corporation submits the enclosed data package in response to Tetra Tech NUS' CTO-0002, NWIRP Bethpage/Aqua New York project. Under this deliverable, analysis results are presented for five aqueous samples that were received at Mitkem on April 26, 2007.

Analyses were intended to be performed by EPA CLP low level method OLC03.2. Due to an error, the samples were mistakenly analyzed using Method 8260, modified to include an additional standard at the 1ug/L concentration level for most compounds. This error was not noticed until the analysis holding times had past. Per discussions with the client, the results of the Method 8260 analyses are reported.

The most significant difference between the OLC03.2 test and the Method 8260 test is the lowest calibration standard for OLC03.2 is at 0.5ug/L for most compounds and at 1ug/L for most compounds in Method 8260. Please note that compounds detected below the concentration of the low standard, but at or above the laboratory method detection limit (MDL) are reported, and qualified with a "J". If any compound had been present in the samples above the laboratory MDL, it would have been reported. The MDL for trichloroethene is 0.5ug/L. Trichloroethene was not detected in any sample of this submittal at a concentration of 0.5ug/L or above.

The analyses were performed according to SW-846 methods and reported in a CLP-format for Level 4 deliverable.

The following observation and/or deviations are observed for the following analyses:

### 1. Overall Observation:

Where needed, manual integrations were performed to improve data quality. The corrections were reviewed and associated hardcopies generated and reported as required. Manual integrations are coded to provide the data reviewer justification for such action. The codes are labeled on the ion chromatogram signal (GC/MS signal) and chromatogram for GC based analysis as follows:

- M1 peak tailing or fronting.
- M2 peak co-elution.
- M3 rising or falling baseline.
- M4 retention time shift.
- M5 miscellaneous – under this category, the justification is explained.

The enclosed report includes the originals of all data with the exception of logbook pages and certain initial calibrations. Photocopies of logbook pages are included, with the originals maintained on file at the laboratory. The originals of initial calibrations that are shared among several cases are maintained on file at the laboratory, with photocopies included in the data package.

## 2. Volatiles Analysis:

Samples were analyzed by EPA Method 8260B with an additional standard in the initial calibration to provide reporting limits of 1ug/L for most compounds.

Surrogate recovery: recoveries were within QC limits.

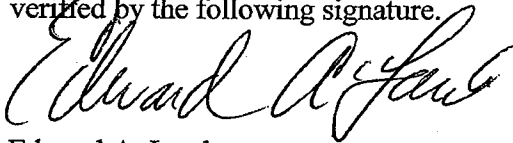
Lab control sample: spike recoveries were within the QC limits.

Matrix spike/matrix spike duplicate: duplicate matrix spikes were performed on sample ANY-8480. Percent recoveries and replicate RPDs were within the QC limits.

Sample analysis: no other unusual observations were made during sample analysis.

All pages in this report have been numbered consecutively, starting with the title page and ending with a page saying only "Last Page of Data Report".

I certify that this data package is in compliance, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.



Edward A. Lawler  
Laboratory Operations Manager  
5/23/07



# Mitkem and Client Sample ID Summary Report\*

Mitkem Workorder: F0517

Client Name: Tetra Tech NUS, Inc.

<i>Mitkem Sample ID</i>	<i>Reported Client Sample ID</i>	<i>Full Client Sample ID</i>
F0517-01A	ANY-8480	ANY-8480-042507
F0517-02A	ANY-9338	ANY-9338-042507
F0517-03A	FB-01	FB-01-042507
F0517-04A	TB-01	TB-01-042507
F0517-05A	DUP-01	DUP-01-042507

---

*\* If client sample ID has not been truncated, the full client sample ID is listed in the column labeled "Reported Client Sample ID"*

## WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: Mitkem Corporation

Contract: \_\_\_\_\_

Lab Code: MITKEM

Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_

SDG No.: MF0517

	EPA SAMPLE NO.	SMC1 DBFM #	SMC2 DCE #	SMC3 TOL #	SMC4 BFB #	TOT OUT
01	VBLK6R	102	102	97	96	0
02	V6RLCS	98	102	95	100	0
03	FB-01	101	108	96	93	0
04	TB-01	100	101	96	97	0
05	DUP-01	100	99	92	94	0
06	ANY-8480	99	104	93	94	0
07	ANY-8480MS	100	112	93	100	0
08	ANY-8480MSD	101	103	96	100	0
09	ANY-9338	105	107	94	92	0

## QC Limits

SMC 1 DBFM = Dibromofluoromethane (85-115)  
 SMC 2 DCE = 1,2-Dichloroethane-d4 (70-120)  
 SMC 3 TOL = Toluene-d8 (85-120)  
 SMC 4 BFB = Bromofluorobenzene (75-120)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

## WATER VOLATILE LABORATORY CONTROL SAMPLE/DUPLICATE RECOVERY

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517Matrix Spike - EPA Sample No.: V6RLCS

COMPOUND	SPIKE ADDED (µg/L)	BLANK CONCENTRATION (µg/L)	LCS CONCENTRATION (µg/L)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50	0	45	90	30-155
Chloromethane	50	0	44	88	40-125
Vinyl chloride	50	0	48	96	50-145
Bromomethane	50	0	45	90	30-145
Chloroethane	50	0	44	88	60-135
Trichlorofluoromethane	50	0	52	104	60-145
1,1-Dichloroethene	50	0	49	98	70-130
Acetone	50	0	45	90	40-140
Carbon disulfide	50	0	50	100	35-160
Methylene chloride	50	0	41	82	55-140
trans-1,2-Dichloroethene	50	0	48	96	60-140
Methyl tert-butyl ether	50	0	53	106	65-125
1,1-Dichloroethane	50	0	50	100	70-135
2-Butanone	50	0	51	102	30-150
cis-1,2-Dichloroethene	50	0	47	94	70-125
Chloroform	50	0	47	94	65-135
1,1,1-Trichloroethane	50	0	48	96	65-130
Carbon tetrachloride	50	0	47	94	65-140
1,2-Dichloroethane	50	0	49	98	70-130
Benzene	50	0	49	98	80-120
Trichloroethene	50	0	46	92	70-125
1,2-Dichloropropane	50	0	49	98	75-125
Bromodichloromethane	50	0	50	100	75-120
cis-1,3-Dichloropropene	50	0	50	100	70-130
4-Methyl-2-pentanone	50	0	57	114	60-135
Toluene	50	0	48	96	75-120
trans-1,3-Dichloropropene	50	0	54	108	55-140
1,1,2-Trichloroethane	50	0	51	102	75-125
Tetrachloroethene	50	0	46	92	45-150
2-Hexanone	50	0	54	108	55-130
Dibromochloromethane	50	0	49	98	60-135

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

COMMENTS: \_\_\_\_\_

## WATER VOLATILE LABORATORY CONTROL SAMPLE/DUPLICATE RECOVERY

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517Matrix Spike - EPA Sample No.: V6RLCS

1,2-Dibromoethane	50	0	50	100	80-120
Chlorobenzene	50	0	47	94	80-120
Ethylbenzene	50	0	50	100	75-125
Xylene (Total)	150	0	150	100	81-121
Styrene	50	0	53	106	65-135
Bromoform	50	0	51	102	70-130
Isopropylbenzene	50	0	51	102	75-125
1,1,2,2-Tetrachloroethane	50	0	50	100	65-130
1,3-Dichlorobenzene	50	0	47	94	75-125
1,4-Dichlorobenzene	50	0	45	90	75-125
1,2-Dichlorobenzene	50	0	47	94	70-120
1,2-Dibromo-3-chloropropa	50	0	55	110	50-130
1,2,4-Trichlorobenzene	50	0	49	98	65-135
1,1,2-Trichloro-1,2,2-tri	50	0	48	96	70-130
Cyclohexane	50	0	50	100	70-130
Methyl acetate	50	0	57	114	70-130
Methylcyclohexane	50	0	51	102	70-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

COMMENTS: \_\_\_\_\_

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517Matrix Spike - EPA Sample No.: ANY-8480

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50	0	53	107	30-155
Chloromethane	50	0	49	98	40-125
Vinyl chloride	50	0	54	109	50-145
Bromomethane	50	0	52	103	30-145
Chloroethane	50	0	52	105	60-135
Trichlorofluoromethane	50	0	62	123	60-145
1,1-Dichloroethene	50	0	56	112	70-130
Acetone	50	0	39	79	40-140
Carbon disulfide	50	0	51	103	35-160
Methylene chloride	50	0	48	96	55-140
trans-1,2-Dichloroethene	50	0	56	112	60-140
Methyl tert-butyl ether	50	0	60	120	65-125
1,1-Dichloroethane	50	0	57	113	70-135
2-Butanone	50	0	53	105	30-150
cis-1,2-Dichloroethene	50	0	56	111	70-125
ChloroForm	50	0	54	107	65-135
1,1,1-Trichloroethane	50	0	56	112	65-130
Carbon tetrachloride	50	0	56	111	65-140
1,2-Dichloroethane	50	0	58	117	70-130
Benzene	50	0	57	114	80-120
Trichloroethene	50	0	56	112	70-125
1,2-Dichloropropane	50	0	57	114	75-125
Bromodichloromethane	50	0	56	112	75-120
cis-1,3-Dichloropropene	50	0	59	118	70-130
4-Methyl-2-pentanone	50	0	67	134	60-135
Toluene	50	0	56	111	75-120
trans-1,3-Dichloropropene	50	0	59	119	55-140
1,1,2-Trichloroethane	50	0	60	121	75-125
Tetrachloroethene	50	0	52	103	45-150
2-Hexanone	50	0	57	115	55-130
Dibromochloromethane	50	0	53	107	60-135
1,2-Dibromoethane	50	0	58	117	80-120
Chlorobenzene	50	0	52	105	80-120
Ethylbenzene	50	0	55	110	75-125
Xylene (Total)	150	0	160	107	81-121
Styrene	50	0	33	66	65-135

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

COMMENTS: \_\_\_\_\_

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Matrix Spike - EPA Sample No.: ANY-8480

Bromoform	50	0	54	108	70-130
Isopropylbenzene	50	0	57	114	75-125
1,1,2,2-Tetrachloroethane	50	0	57	114	65-130
1,3-Dichlorobenzene	50	0	54	107	75-125
1,4-Dichlorobenzene	50	0	52	104	75-125
1,2-Dichlorobenzene	50	0	53	106	70-120
1,2-Dibromo-3-chloropropa	50	0	65	129	50-130
1,2,4-Trichlorobenzene	50	0	56	111	65-135
1,1,2-Trichloro-1,2,2-tri	50	0	55	110	70-130
Cyclohexane	50	0	58	116	70-130
Methyl acetate	50	0	65	130	70-130
Methylcyclohexane	50	0	61	121	70-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517Matrix Spike - EPA Sample No.: ANY-8480

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Dichlorodifluoromethane	50	48	95	12	40	30-155
Chloromethane	50	45	90	8	40	40-125
Vinyl chloride	50	47	94	14	40	50-145
Bromomethane	50	45	91	12	40	30-145
Chloroethane	50	46	93	12	40	60-135
Trichlorofluoromethane	50	54	109	12	40	60-145
1,1-Dichloroethene	50	53	106	6	40	70-130
Acetone	50	34	68	15	40	40-140
Carbon disulfide	50	45	90	13	40	35-160
Methylene chloride	50	43	87	10	40	55-140
trans-1,2-Dichloroethene	50	49	98	13	40	60-140
Methyl tert-butyl ether	50	55	109	9	40	65-125
1,1-Dichloroethane	50	50	100	13	40	70-135
2-Butanone	50	46	92	13	40	30-150
cis-1,2-Dichloroethene	50	51	101	10	40	70-125
Chloroform	50	49	98	9	40	65-135
1,1,1-Trichloroethane	50	50	100	11	40	65-130
Carbon tetrachloride	50	50	100	11	40	65-140
1,2-Dichloroethane	50	51	103	12	40	70-130
Benzene	50	51	101	12	40	80-120
Trichloroethene	50	50	100	11	40	70-125
1,2-Dichloropropane	50	50	101	12	40	75-125
Bromodichloromethane	50	52	103	8	40	75-120
cis-1,3-Dichloropropene	50	52	104	13	40	70-130
4-Methyl-2-pentanone	50	59	119	12	40	60-135
Toluene	50	50	100	11	40	75-120
trans-1,3-Dichloropropene	50	54	108	9	40	55-140
1,1,2-Trichloroethane	50	53	106	13	40	75-125
Tetrachloroethene	50	46	92	12	40	45-150
2-Hexanone	50	50	99	15	40	55-130
Dibromochloromethane	50	48	95	12	40	60-135
1,2-Dibromoethane	50	52	104	12	40	80-120
Chlorobenzene	50	48	96	9	40	80-120
Ethylbenzene	50	50	99	11	40	75-125
Xylene (Total)	150	140	93	14	40	81-121
Styrene	50	30	59*	12	40	65-135

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

COMMENTS: \_\_\_\_\_

## WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517Matrix Spike - EPA Sample No.: ANY-8480

Bromoform	50	47	94	13	40	70-130
Isopropylbenzene	50	51	102	11	40	75-125
1,1,2,2-Tetrachloroethane	50	52	103	10	40	65-130
1,3-Dichlorobenzene	50	49	97	10	40	75-125
1,4-Dichlorobenzene	50	47	94	10	40	75-125
1,2-Dichlorobenzene	50	48	97	9	40	70-120
1,2-Dibromo-3-chloropropa	50	55	111	15	40	50-130
1,2,4-Trichlorobenzene	50	50	101	10	40	65-135
1,1,2-Trichloro-1,2,2-tri	50	51	101	8	40	70-130
Cyclohexane	50	53	106	9	40	70-130
Methyl acetate	50	54	107	19	40	70-130
Methylcyclohexane	50	54	107	13	40	70-130

RPD: 0 out of 48 outside limitsSpike Recovery: 1 out of 96 outside limits

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_



## VOLATILE METHOD BLANK SUMMARY

VBLK6R

Lab Name: Mitkem Corporation Contract:

Lab Code: MITKEM Case No.: SAS No.: \_\_\_\_\_ SDG No.: MF0517

Lab File ID: V6F2262.D Lab Sample ID: MB-29659

Date Analyzed: 05/01/07 Time Analyzed: 15:04

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: V6

THIS METHOD BLANK APPLIES TO THE FOLLOWING:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V6RLCS	LCS-29659	V6F2263.D	15:42
02	FB-01	F0517-03A	V6F2264.D	16:20
03	TB-01	F0517-04A	V6F2265.D	17:39
04	DUP-01	F0517-05A	V6F2266.D	18:06
05	ANY-8480	F0517-01A	V6F2267.D	19:52
06	ANY-8480MS	F0517-01AMS	V6F2268.D	20:18
07	ANY-8480MSD	F0517-01AMSD	V6F2269.D	20:44
08	ANY-9338	F0517-02A	V6F2270.D	21:09

COMMENTS:

page 1 of 1

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK6R

Lab Name: Mitkem Corporation

Contract: \_\_\_\_\_

Lab Code: MITKEM Case No.: \_\_\_\_\_

SAS No.: \_\_\_\_\_ SDG No.: MF0517

Matrix: (soil/water) WATER

Lab Sample ID: MB-29659

Sample wt/vol: 5 (G/ML) ML

Lab File ID: V6F2262.D

Level: (low/med) LOW

Date Received: \_\_\_\_\_

% Moisture: not dec.

Date Analyzed: 05/01/2007

GC Column: DB-624

ID: 0.25 (mm)

Dilution Factor: \_\_\_\_\_ 1.00

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volume: \_\_\_\_\_ (µL)

## CONCENTRATION UNITS:

(µg/L or µg/Kg) UG/L

Q

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK6R

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Matrix: (soil/water) WATER Lab Sample ID: MB-29659  
 Sample wt/vol: \_\_\_\_\_ 5 (G/ML) ML Lab File ID: V6F2262.D  
 Level: (low/med) LOW Date Received: \_\_\_\_\_  
 % Moisture: not dec. Date Analyzed: 05/01/2007  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: \_\_\_\_\_ 1.00  
 Soil Extract Volume: \_\_\_\_\_ (µL) Soil Aliquot Volume: \_\_\_\_\_ (µL)

## CONCENTRATION UNITS:

(µg/L or µg/Kg) UG/L Q

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U
110-82-7	Cyclohexane	1.0	U
79-20-9	Methyl acetate	1.0	U
108-87-2	Methylcyclohexane	1.0	U

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK6R

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Matrix: (soil/water) WATER Lab Sample ID: MB-29659  
 Sample wt/vol: \_\_\_\_\_ 5 (G/ML) ML Lab File ID: V6F2262.D  
 Level: (low/med) LOW Date Received: \_\_\_\_\_  
 % Moisture: not dec. Date Analyzed: 05/01/2007  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: \_\_\_\_\_ 1:00  
 Soil Extract Volume: \_\_\_\_\_ 5000 (µL) Soil Aliquot Volume: \_\_\_\_\_ 0 (µL)  
 Number TICs found: \_\_\_\_\_ 0

CONCENTRATION UNITS: UG/L

CAS NO.	COMPOUND	RT	ESTIMATED CONCENTRATION	Q
---------	----------	----	-------------------------	---

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Lab File ID: V6F2140.D BFB Injection Date: 04/26/07  
 Instrument ID: V6 BFB Injection Time: 09:08  
 GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.2
75	30.0 - 60.0% of mass 95	54.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.6 (0.9)1
174	50.0 - 100.0% of mass 95	70.0
175	5.0 - 9.0% of mass 174	5.5 (7.8)1
176	95.0 - 101.0% of mass 174	69.3 (99.0)1
177	5.0 - 9.0% of mass 176	4.3 (6.2)2

1-Value is % mass 174

2-Value is % 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	VSTD0506K	VSTD0506K	V6F2141.D	04/26/07	12:34
02	VSTD0056K	VSTD0056K	V6F2142.D	04/26/07	13:34
03	VSTD0016K	VSTD0016K	V6F2143.D	04/26/07	13:59
04	VSTD2006K	VSTD2006K	V6F2144.D	04/26/07	14:25
05	VSTD1006K	VSTD1006K	V6F2145.D	04/26/07	14:51
06	VSTD0206K	VSTD0206K	V6F2146.D	04/26/07	15:16

VOC by GC-MS INITIAL CALIBRATION DATA

Lab Name: Mitkem Corporation

Contract: Mitkem Corporati

Lab Code: MITKEM Case No.:

SDG No.: MF0517

Instrument ID: V6

Calibration Dates: 4/26/2007 04/26/2007

Heated Purge: (Y/N) N

Calibration Times: 12:34 15:16

GC Column: DB-624

ID: 0.25 (nm)

LAB FILE ID:	VSTD0056	V6F2142.D	VSTD0206	V6F2146.D	VSTD1006K	VSTD0506K	VSTD206K	VSTD0506K	VSTD1006K	VSTD206K	VSTD0016K	VSTD1006	V6F2145.D	VSTD2006	V6F2144.D
COMPOUND	VSTD0056K	VSTD0206K	VSTD0506K	VSTD1006K	VSTD206K	VSTD0506K	VSTD1006K	VSTD206K	VSTD0506K	VSTD1006K	RRF	% RSD	R <sup>2</sup>		
Dichlorodifluoromethane	*	0.4249	0.4108	0.4035	0.361	0.3863	0.3402	0.3878	8.3 *						
Chloromethane	*	0.2801	0.2469	0.2593	0.2189	0.2277	0.3325	0.2609	15.9 *						
Vinyl chloride	*	0.2775	0.2764	0.2572	0.2434	0.227	0.2477	0.2549	7.7 *						
Bromomethane	*	0.1953	0.1684	0.1542	0.1465	0.1517	0.1967	0.1688	13.2 *						
Chloroethane	*	0.1526	0.1421	0.132	0.1236	0.1214	0.1818	0.1423	15.9 *						
Trichlorofluoromethane	*	0.2657	0.5102	0.4973	0.4512	0.4906	0.4349	0.4417	20.6 *						
1,1-Dichloroethene	*	0.175	0.1938	0.174	0.1587	0.1701	0.1851	0.1761	6.9 *						
Acetone	*	0.026	0.0171	0.0207	0.0135	0.0179	0	0.019	24.5 *						
Carbon disulfide	*	0.6467	0.6908	0.6267	0.5754	0.6166	0.6395	0.6326	6.0 *						
Methylene chloride	*	0.4282	0.3926	0.3542	0.3121	0.3116	0.6632	0.4103	32.2 *						
trans-1,2-Dichloroethene	*	0.339	0.3452	0.333	0.287	0.2798	0.3572	0.3235	9.9 *						
Methyl tert-butyl ether	*	0.8401	0.9214	0.7869	0.7774	0.7947	0.7379	0.8097	7.9 *						
1,1-Dichloroethane	*	0.6553	0.673	0.6216	0.555	0.5682	0.6021	0.6109	8.0 *						
2-Butanone	*	0.033	0.0319	0.0322	0.0275	0.0295	0	0.0308	7.4 *						
cis-1,2-Dichloroethene	*	0.3477	0.3455	0.3313	0.2935	0.2882	0.3339	0.3234	8.0 *						
Chloroform	*	0.6666	0.6788	0.6289	0.5779	0.5987	0.684	0.6392	6.9 *						
1,1,1-Trichloroethane	*	0.5835	0.6098	0.5833	0.5348	0.5659	0.5502	0.5713	4.7 *						
Carbon tetrachloride	*	0.4856	0.5131	0.4813	0.4461	0.4738	0.4449	0.4741	5.5 *						
1,2-Dichloroethane	*	0.5239	0.5598	0.4913	0.4568	0.4909	0.5024	0.5042	6.9 *						
Benzene	*	1.313	1.3212	1.2066	1.0768	1.0278	1.1935	1.1898	10.1 *						
Trichloroethene	*	0.3267	0.336	0.3035	0.2787	0.2912	0.2724	0.3014	8.5 *						
1,2-Dichloropropane	*	0.3406	0.3413	0.3058	0.2859	0.284	0.287	0.3074	8.8 *						
Bromodichloromethane	*	0.427	0.4795	0.4634	0.4393	0.4682	0.4095	0.4478	6.0 *						

VOC by GC-MS INITIAL CALIBRATION DATA

Lab Name: Mitkem Corporation Contract: Mitkem Corporati  
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: MF0517  
 Instrument ID: V6 Calibration Dates: 4/26/2007 04/26/2007  
 Heated Purge: (Y/N) N Calibration Times: 12:34 15:16  
 GC Column: DB-624 ID: 0.25 (mm)

LAB FILE ID:	VSTD0056	V6F2142.D	VSTD0206	V6F2146.D	VSTD0506	V6F2141.D	VSTD1006	V6F2145.D	VSTD2006	V6F2144.D
COMPOUND	VSTD0056K	VSTD0206K	VSTD0506K	VSTD1006K	VSTD2006K	VSTD0016K	RRF	% RSD	R <sup>2</sup>	
cis-1,3-Dichloropropene	* 0.4635	0.5196	0.485	0.4738	0.4982	0.3835	0.4706	10.0 *		
4-Methyl-2-pentanone	* 0.1541	0.2009	0.1717	0.1728	0.2004	0	0.18	11.3 *		
Toluene	* 1.2278	1.3121	1.21	1.0938	1.0708	1.2449	1.1932	7.8 *		
trans-1,3-Dichloropropene	* 0.3696	0.4571	0.431	0.4225	0.4659	0.2955	0.4069	15.8 *		
1,1,2-Trichloroethane	* 0.2529	0.2735	0.2348	0.2276	0.2417	0.2212	0.242	7.8 *		
Tetrachloroethene	* 0.3636	0.3493	0.3444	0.3126	0.3311	0.3748	0.346	6.5 *		
2-Hexanone	* 0.1495	0.1803	0.1987	0.178	0.2358	0	0.1885	16.9 *		
Dibromochloromethane	* 0.3754	0.4145	0.4074	0.4002	0.4689	0.3455	0.402	10.3 *		
1,2-Dibromoethane	* 0.3478	0.3973	0.3596	0.357	0.4102	0.3459	0.3696	7.4 *		
Chlorobenzene	* 1.1511	1.2003	1.1173	1.0295	1.0756	1.1332	1.1178	5.3 *		
Ethylbenzene	* 0.5633	0.6568	0.6374	0.5913	0.6351	0.5228	0.6011	8.6 *		
Xylene (Total)	* 0.7015	0.8017	0.7554	0.6868	0.6889	0.5721	0.7011	11.1 *		
Styrene	* 1.011	1.2523	1.2053	1.1268	1.1518	0.7571	1.0841	16.6 *		
Bromofrom	* 0.1831	0.2291	0.1995	0.2197	0.2688	0.1781	0.2131	15.9 *		
isopropylbenzene	* 1.6006	1.8997	1.8648	1.7692	1.8098	1.3549	1.7165	12.0 *		
1,1,2,2-Tetrachloroethane	* 0.989	1.1212	0.8761	0.8491	0.8563	1.0455	0.9562	11.8 *		
1,3-Dichlorobenzene	* 1.778	1.9012	1.7228	1.6075	1.6169	1.5788	1.7009	7.3 *		
1,4-Dichlorobenzene	* 1.8691	1.8784	1.7261	1.6126	1.5963	1.7582	1.7401	7.0 *		
1,2-Dichlorobenzene	* 1.7882	1.8279	1.6331	1.4863	1.447	1.6747	1.6429	9.4 *		
1,2-Dibromo-3-chloropropane	* 0.1495	0.178	0.1419	0.1534	0.1675	0.1115	0.1536	17.6 *		
1,2,4-Trichlorobenzene	* 0.9185	1.0991	0.9592	0.9743	1.0319	0.8494	0.9714	9.0 *		
1,1,2-Trichloro-1,2,2-trifluoroethane	* 0.2484	0.2515	0.2365	0.213	0.2302	0.2143	0.2323	7.1 *		
Cyclohexane	* 0.5506	0.5872	0.5425	0.5071	0.5175	0.4787	0.5306	7.1 *		

VOC by GC-MS INITIAL CALIBRATION DATA

Lab Name: Mitkem Corporation Contract: Mitkem Corporati  
 Lab Code: MITKEM Case No.: SAS No.: MF0517 SDG No.: MF0517  
 Instrument ID: V6 Calibration Dates: 4/26/2007 04/26/2007  
 Heated Purge: (Y/N) N Calibration Times: 12:34 15:16  
 GC Column: DB-624 ID: 0.25 (mm)

COMPOUND	VSTD0056 V6F2142.D		VSTD0206 V6F2146.D		VSTD0506 V6F2141.D		VSTD1006 V6F2145.D		VSTD2006 V6F2144.D	
	VSTD0056K	VSTD0206K	VSTD0506K	VSTD1006K	VSTD2006K	VSTD0016K	RRF	% RSD	R <sup>2</sup>	
Methyl acetate	* 0.2734	0.3049	0.2508	0.2339	0.2415	0.2977	0.267	11.1	*	
Methylcyclohexane	0.5063	0.5824	0.5345	0.5023	0.5067	0.399	0.5052	11.9		
Dibromofluoromethane	* 0.2743	0.2736	0.2661	0.2639	0.2663	13.769	<del>2.5207</del>	218.3	*	
1,2-Dichloroethane-d4	* 0.0612	0.0604	0.0592	0.0564	0.0599	3.042	0.5566	278.9	*	
Toluene-d8	* 0.9194	0.9117	0.9166	0.9186	0.9208	4.5815	8.948	217.5	*	
Bromofluorobenzene	* 0.5169	0.5306	0.5348	0.5641	0.5961	25.1424	4.0425	246.0	*	

\* Compounds with required minimum RRF and maximum %RSD values.  
 All other compounds must meet a minimum RRF of 0.010.



5A  
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Lab File ID: V6F2260.D BFB Injection Date: 05/01/07  
 Instrument ID: V6 BFB Injection Time: 14:06  
 GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.4
75	30.0 - 60.0% of mass 95	55.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.4 (0.6)1
174	50.0 - 100.0% of mass 95	68.1
175	5.0 - 9.0% of mass 174	5.2 (7.6)1
176	95.0 - 101.0% of mass 174	65.9 (96.8)1
177	5.0 - 9.0% of mass 176	4.4 (6.7)2

1-Value is % mass 174

2-Value is % 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	VSTD0506R	VSTD0506R	V6F2261.D	05/01/07	14:29
02	VBLK6R	MB-29659	V6F2262.D	05/01/07	15:04
03	V6RLCS	LCS-29659	V6F2263.D	05/01/07	15:42
04	FB-01	F0517-03A	V6F2264.D	05/01/07	16:20
05	TB-01	F0517-04A	V6F2265.D	05/01/07	17:39
06	DUP-01	F0517-05A	V6F2266.D	05/01/07	18:06
07	ANY-8480	F0517-01A	V6F2267.D	05/01/07	19:52
08	ANY-8480MS	F0517-01AMS	V6F2268.D	05/01/07	20:18
09	ANY-8480MSD	F0517-01AMSD	V6F2269.D	05/01/07	20:44
10	ANY-9338	F0517-02A	V6F2270.D	05/01/07	21:09

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Instrument ID: V6 Calibration Date: 05/01/2007 Time: 14:29  
 Lab File ID: V6F2261.D Init Calib. Date(s): 04/26/07 04/26/2007  
 EPA Sample No. (SSTD050##): VSTD0506R Init Calib. Time(s): 12:34 15:16  
 GC Column: DB-624 ID: 0.25 (mm)  
 Heated Purge: (Y/N) N

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.388	0.360	0.010	-7.2	20.0
Chloromethane	0.261	0.252	0.100	-3.4	20.0
Vinyl chloride	0.255	0.252	0.010	-1.1	20.0
Bromomethane	0.169	0.147	0.010	-12.9	20.0
Chloroethane	0.142	0.124	0.010	-12.9	20.0
Trichlorofluoromethane	0.442	0.438	0.010	-0.8	20.0
1,1-Dichloroethene	0.176	0.174	0.010	-1.2	20.0
Acetone	0.019	0.017	0.010	-10.5	20.0
Carbon disulfide	0.633	0.622	0.010	-1.7	20.0
Methylene chloride	0.410	0.341	0.010	-16.9	20.0
trans-1,2-Dichloroethene	0.324	0.318	0.010	-1.7	20.0
Methyl tert-butyl ether	0.810	0.887	0.010	9.5	20.0
1,1-Dichloroethane	0.611	0.598	0.100	-2.1	20.0
2-Butanone	0.031	0.031	0.010	0.6	20.0
cis-1,2-Dichloroethene	0.323	0.314	0.010	-2.9	20.0
Chloroform	0.639	0.596	0.010	-6.8	20.0
1,1,1-Trichloroethane	0.571	0.539	0.010	-5.7	20.0
Carbon tetrachloride	0.474	0.441	0.010	-7.0	20.0
1,2-Dichloroethane	0.504	0.487	0.010	-3.4	20.0
Benzene	1.190	1.154	0.010	-3.0	20.0
Trichloroethene	0.301	0.280	0.010	-7.1	20.0
1,2-Dichloropropane	0.307	0.302	0.010	-1.8	20.0
Bromodichloromethane	0.448	0.440	0.010	-1.7	20.0
cis-1,3-Dichloropropene	0.471	0.482	0.010	2.4	20.0
4-Methyl-2-pentanone	0.180	0.214	0.010	18.9	20.0
Toluene	1.193	1.151	0.010	-3.5	20.0
trans-1,3-Dichloropropene	0.407	0.439	0.010	7.9	20.0
1,1,2-Trichloroethane	0.242	0.248	0.010	2.5	20.0
Tetrachloroethene	0.346	0.305	0.010	-11.8	20.0
2-Hexanone	0.189	0.207	0.010	9.8	20.0
Dibromochloromethane	0.402	0.378	0.010	-6.0	20.0
1,2-Dibromoethane	0.370	0.365	0.010	-1.2	20.0
Chlorobenzene	1.118	1.025	0.300	-8.3	20.0

## VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Instrument ID: V6 Calibration Date: 05/01/2007 Time: 14:29  
 Lab File ID: V6F2261.D Init Calib. Date(s): 04/26/07 04/26/2007  
 EPA Sample No. (SSTD050##): VSTD0506R Init Calib. Time(s): 12:34 15:16  
 GC Column: DB-624 ID: 0.25 (mm)  
 Heated Purge: (Y/N) N

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Ethylbenzene	0.601	0.591	0.010	-1.7	20.0
Xylene (Total)	0.701	0.697	0.010	-0.6	20.0
Styrene	1.084	1.137	0.010	4.9	20.0
Bromoform	0.213	0.210	0.100	-1.5	20.0
Isopropylbenzene	1.716	1.710	0.010	-0.4	20.0
1,1,2,2-Tetrachloroethane	0.956	0.957	0.300	0.1	20.0
1,3-Dichlorobenzene	1.701	1.647	0.010	-3.2	20.0
1,4-Dichlorobenzene	1.740	1.619	0.010	-7.0	20.0
1,2-Dichlorobenzene	1.643	1.578	0.010	-4.0	20.0
1,2-Dibromo-3-chloropropane	0.154	0.170	0.010	10.7	20.0
1,2,4-Trichlorobenzene	0.971	1.003	0.010	3.3	20.0
1,1,2-Trichloro-1,2,2-trifluoro	0.232	0.221	0.010	-4.9	20.0
Cyclohexane	0.531	0.541	0.010	2.0	20.0
Methyl acetate	0.267	0.314	0.010	17.6	20.0

## VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Lab File ID (Standard): V6F2261.D Date Analyzed: 05/01/07  
 EPA Sample No. (VSTD050##): VSTD0506R Time Analyzed: 14:29  
 Instrument ID: V6 Heated Purge: (Y/N) N  
 GC Column: DB-624 ID: 0.25 (mm)

	IS1		IS2		IS3	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	1857587	6.62237	1293959	10.34545	602936	13.20468
UPPER LIMIT	3715174	7.12237	2587918	10.84545	1205872	13.70468
LOWER LIMIT	928794	6.12237	646980	9.84545	301468	12.70468
EPA SAMPLE						
01 VBLK6R	1781124	6.63	1202918	10.34	536114	13.21
02 V6RLCS	1843364	6.62	1268662	10.35	605027	13.21
03 FB-01	2081958	6.62	1422195	10.35	618092	13.21
04 TB-01	2005974	6.62	1391936	10.35	615499	13.20
05 DUP-01	1955739	6.62	1348510	10.35	580596	13.20
06 ANY-8480	1651168	6.62	1130172	10.34	497538	13.21
07 ANY-8480MS	1435548	6.62	1022773	10.34	496905	13.21
08 ANY-8480MSD	1645034	6.62	1158743	10.34	552086	13.21
09 ANY-9338	1550058	6.62	1074131	10.34	467176	13.21

IS1 = Fluorobenzene  
 IS2 = Chlorobenzene-d5  
 IS3 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area  
 AREA LOWER LIMIT = -50% of internal standard area  
 RT UPPER LIMIT = +0.50 minutes of internal standard RT  
 RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.  
 \* Values outside of QC limits.

SDG F0515

*6-19-07  
JA*

*Chloroform calculation*

SAMPLE CALC	SAMPLE ID FB-01			
IS AREA	DILUTION	COMPOUND OF INTEREST	AREA	IS AMOUNT (NG)
2081958	1	110458	250	5
			0.6390	4.1514
			AVE RRF	CONCENTRATION PPB

Mitkem Corporation

Method 8260 Water and Medium Soil  
 Data file : \\Avogadro\Organics\organic\voa\V6.i\070501A.B\V6F2264.D  
 Lab Smp Id: F0517-03A Client Smp ID: FB-01  
 Inj Date : 01-MAY-2007 16:20  
 Operator : HZA SRC: LIMS Inst ID: V6.i  
 Smp Info : 5Ml,F0517-03A,,29659  
 Misc Info :  
 Comment :  
 Method : \\Avogadro\Organics\organic\voa\V6.i\070501A.B\v68260-6LNL.m  
 Meth Date : 17-May-2007 12:01 V6.i Quant Type: ISTD  
 Cal Date : 26-APR-2007 15:16 Cal File: V6F2146.D  
 Als bottle: 4  
 Dil Factor: 1.00000  
 Integrator: HP RTE  
 Target Version: 4.14  
 Compound Sublist: OLM\_VOA6LVL.sub

Concentration Formula: Amt \* DF \* Uf \* 5/Vo \* CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	CONCENTRATIONS					
		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN ( ug/L)	FINAL ( ug/L)
35 Chloroform	83	5.704	5.697	(0.861)	110458	4.15044	4
\$ 36 Dibromofluoromethane	113	5.874	5.874	(0.887)	567149	50.6629	51
\$ 42 1,2-Dichloroethane-d4	102	6.251	6.245	(0.944)	133244	53.8706	54
* 46 Fluorobenzene	96	6.622	6.622	(1.000)	2081958	50.0000	
\$ 58 Toluene-d8	98	8.490	8.490	(0.821)	1859952	47.7764	48
* 68 Chlorobenzene-d5	117	10.345	10.345	(1.000)	1422195	50.0000	
\$ 79 Bromofluorobenzene	95	11.830	11.823	(1.143)	728308	46.6818	47
* 92 1,4-Dichlorobenzene-d4	152	13.211	13.204	(1.000)	618092	50.0000	

SB  
5/17/07

NO TCE 7MDL

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB-01

Lab Name: Mitkem Corporation Contract: \_\_\_\_\_  
 Lab Code: MITKEM Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: MF0517  
 Matrix: (soil/water) WATER Lab Sample ID: F0517-03A  
 Sample wt/vol: 5 (G/ML) ML Lab File ID: V6F2264.D  
 Level: (low/med) LOW Date Received: 04/26/2007  
 % Moisture: not dec. Date Analyzed: 05/01/2007  
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: \_\_\_\_\_ 1.00  
 Soil Extract Volume: \_\_\_\_\_ (µL) Soil Aliquot Volume: \_\_\_\_\_ (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
67-66-3	Chloroform	4.2	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U