TETRA TECH NUS

PHIL-19490

TO:	RUSS TURNER	DATE:	SEPTEMBER 23, 2005
FROM:	MEGAN N. RITCHIE	COPIES:	FILE

SUBJECT: ORGANIC DATA VALIDATION – VOLATILES AND 1,4-DIOXANE
NAS JRB WILLOW GROVE, PENNSYLVANIA
SDG NO. T4162

SAMPLES: 9/Aqueous/

05-MW05-I	05-MW07-S	05-MW10-S
05-MW05-S	05-MW10-I	FB-081005
05-MW07-I	05-MW10-SI	TB-080905

OVERVIEW

The sample set for NAS JRB Willow Grove Site 5 – Willow Grove, PA, SDG T4162 consists of seven aqueous environmental samples (designated 05-MW-) and two field quality control (QC) blanks (designated FB- and TB-). Sample 05-MW10-I was designated for matrix spike/matrix spike duplicate (MS/MSD) analyses. No field duplicate pairs were included in this sample set. All samples except the trip blank were analyzed for target compound list (TCL) Volatile Organic Compounds (VOCs) and 1,4-Dioxane. The trip blank was analyzed for VOCs only.

The samples were collected by Tetra Tech NUS on August 9 and 10, 2005 and analyzed by Chemtech of Mountainside, New Jersey.

All analyses were conducted using EPA SW-846 Methods 8260 for VOCs and 8270 for 1,4-Dioxane.

SUMMARY

All analytes were successfully analyzed in all samples. The findings offered in this report are based upon a general review of all available data including data completeness, holding times until analysis, GC/MS tuning and calibration data, laboratory and field quality control blank results, system monitoring compound recoveries, matrix spike/matrix spike duplicate results, laboratory control spike/spike duplicate results, internal standards performance, compound identification, and compound quantitation.

MINOR PROBLEMS

- The continuing calibration for m&p-xylene, chloromethane, and methyl acetate exhibited percent differences (%Ds) exceeding the QC limit of ±50%. Non-detected results for m&p-xylene, chloromethane, and methyl acetate in the associated samples were qualified as estimated (UJ).
- The continuing calibration for 1,1-dichloroethane and trichloroethene exhibited %Ds exceeding the QC limit of ±25%. Detected results for 1,1-dichloroethane and trichloroethene in the associated samples were qualified as estimated (J).
- Positive results at concentrations less than the Reporting Limits (RLs) were qualified as estimated (J).

NOTES

Methylene chloride was detected in the field QC blanks and one laboratory blank. No qualifications were made because this compound was not detected in the associated environmental samples.

The average relative response factor (RRF) for acetone was less than 0.05 in one initial calibration and the corresponding continuing calibration. No qualifications were made because the sample results associated with these calibrations were not reported.

Several compounds exceeded the percent relative standard deviation (%RSD) criteria of 30% in the initial calibrations. No qualifications were made because there were no positive results of these compounds in the reported results.

Several compounds exceeded the percent difference (%D) criteria of 25% in the continuing calibrations. No qualifications were made for many of these compounds because there were no positive results of these compounds in the reported results.

The MS and MSD recoveries for 1,1-dichloroethene was below the lower QC limit. No action was taken on MS/MSD data alone.

Sample 05-MW10-SI was reanalyzed at a 10X dilution for 1,1,1-trichloroethane, 1,1-dichloroethane, 1,1-dichloroethene, and trichloroethene. The concentrations for these compounds exceeded the initial calibration concentration range. The concentrations for these compounds were reported from the diluted analysis.

Sample FB-081005 was reanalyzed at a 5X dilution for methylene chloride. The concentration for methylene chloride exceeded the initial calibration concentration range. The methylene chloride concentration was reported from the diluted analysis.

The 1,4-dioxane data is acceptable as reported by the laboratory.

EXECUTIVE SUMMARY

Laboratory Performance: Methylene chloride was detected in one laboratory blank. Acetone exhibited RRFs below the QC criteria. Several compounds exceeded initial calibration RSD criteria. Several compounds exceeded continuing calibration %D criteria.

Other Factors Affecting Data Quality: Methylene chloride was detected in the field QC blanks. One compound exhibited MS/MSD recoveries outside the lower QC criteria.

The data for these analyses were reviewed with reference to the EPA "Functional Guidelines for Organic Data Review", as amended for use within EPA Region 3 (9/94).

The text of this report has been formatted to address only those problem areas affecting data quality.

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

Megan N. Ritchie
Megan N. Ritchie
Chemist

Tetra Tech NUS, Inc.
Russell Sloboda
Data Validation Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as Reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A

Qualified Analytical Results

PROJ_NO: 2192

SDG: T4162 MEDIA: WATER DATA FRACTION: OV

nsample	05-MW05-I	nsample	05-MW05-I	nsample	05-MW05-S
samp_date	8/10/2005	samp_date	8/10/2005	samp_date	8/10/2005
lab_id	T4162-09	lab_id	T4162-09	lab_id	T4162-10
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids	0.0	Pct_Solids	0.0	Pct_Solids	0.0
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.16	U	
1,1,2,2-TETRACHLOROETHANE	0.09	U	
1,1,2-TRICHLOROETHANE	0.11	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.13	U	
1,1-DICHLOROETHANE	0.17	U	
1,1-DICHLOROETHENE	2.4		
1,2,4-TRICHLOROBENZENE	0.08	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.2	U	
1,2-DIBROMOETHANE	0.12	U	
1,2-DICHLOROBENZENE	0.08	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.15	U	
1,3-DICHLOROBENZENE	0.1	U	
1,4-DICHLOROBENZENE	0.12	U	
2-BUTANONE	0.23	U	
2-HEXANONE	0.57	U	
4-METHYL-2-PENTANONE	0.46	U	
ACETONE	1.6	U	
BENZENE	0.15	U	
BROMODICHLOROMETHANE	0.14	U	
BROMOFORM	0.09	U	
BROMOMETHANE	0.18	U	
CARBON DISULFIDE	0.11	U	
CARBON TETRACHLORIDE	0.16	U	
CHLOROBENZENE	0.11	U	
CHLORODIBROMOMETHANE	0.13	U	
CHLOROETHANE	0.46	U	
CHLOROFORM	0.16	U	
CHLOROMETHANE	0.08	UJ	C
CIS-1,2-DICHLOROETHENE	0.09	U	
CIS-1,3-DICHLOROPROPENE	0.12	U	
CYCLOHEXANE	0.15	U	

Parameter	Result	Val Qual	Qual Code
DICHLORODIFLUOROMETHANE	0.12	U	
ETHYLBENZENE	0.11	U	
ISOPROPYLBENZENE	0.12	U	
M+P-XYLENES	0.24	UJ	C
METHYL ACETATE	0.16	UJ	C
METHYL CYCLOHEXANE	0.14	U	
METHYL TERT-BUTYL ETHER	0.22	U	
METHYLENE CHLORIDE	0.42	U	
O-XYLENE	0.13	U	
STYRENE	0.11	U	
TETRACHLOROETHENE	0.12	U	
TOLUENE	0.11	U	
TOTAL XYLENES	0.37	U	
TRANS-1,2-DICHLOROETHENE	0.1	U	
TRANS-1,3-DICHLOROPROPENE	0.1	U	
TRICHLOROETHENE	1	J	C
TRICHLOROFLUOROMETHANE	0.1	U	
VINYL CHLORIDE	0.09	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.16	U	
1,1,2,2-TETRACHLOROETHANE	0.09	U	
1,1,2-TRICHLOROETHANE	0.11	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.13	U	
1,1-DICHLOROETHANE	0.17	U	
1,1-DICHLOROETHENE	0.19	U	
1,2,4-TRICHLOROBENZENE	0.08	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.2	U	
1,2-DIBROMOETHANE	0.12	U	
1,2-DICHLOROBENZENE	0.08	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.15	U	
1,3-DICHLOROBENZENE	0.1	U	
1,4-DICHLOROBENZENE	0.12	U	
2-BUTANONE	0.23	U	
2-HEXANONE	0.57	U	
4-METHYL-2-PENTANONE	0.46	U	
ACETONE	1.6	U	
BENZENE	0.15	U	
BROMODICHLOROMETHANE	0.14	U	
BROMOFORM	0.09	U	
BROMOMETHANE	0.18	U	
CARBON DISULFIDE	0.11	U	
CARBON TETRACHLORIDE	0.16	U	
CHLOROBENZENE	0.11	U	
CHLORODIBROMOMETHANE	0.13	U	
CHLOROETHANE	0.46	U	
CHLOROFORM	0.16	U	
CHLOROMETHANE	0.08	UJ	C
CIS-1,2-DICHLOROETHENE	0.09	U	
CIS-1,3-DICHLOROPROPENE	0.12	U	
CYCLOHEXANE	0.15	U	

PROJ_NO: 2192

SDG: T4162 MEDIA: WATER DATA FRACTION: OV

nsample	05-MW05-S
samp_date	8/10/2005
lab_id	T4162-10
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
DICHLORODIFLUOROMETHANE	0.12	U	
ETHYLBENZENE	0.11	U	
ISOPROPYLBENZENE	0.12	U	
M+P-XYLENES	0.24	UJ	C
METHYL ACETATE	0.16	UJ	C
METHYL CYCLOHEXANE	0.14	U	
METHYL TERT-BUTYL ETHER	0.22	U	
METHYLENE CHLORIDE	0.42	U	
O-XYLENE	0.13	U	
STYRENE	0.11	U	
TETRACHLOROETHENE	0.12	U	
TOLUENE	0.11	U	
TOTAL XYLENES	0.37	U	
TRANS-1,2-DICHLOROETHENE	0.1	U	
TRANS-1,3-DICHLOROPROPENE	0.1	U	
TRICHLOROETHENE	0.12	U	
TRICHLOROFLUOROMETHANE	0.1	U	
VINYL CHLORIDE	0.09	U	

nsample	05-MW07-I
samp_date	8/9/2005
lab_id	T4162-03
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.16	U	
1,1,2,2-TETRACHLOROETHANE	0.09	U	
1,1,2-TRICHLOROETHANE	0.11	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.13	U	
1,1-DICHLOROETHANE	0.17	U	
1,1-DICHLOROETHENE	3		
1,2,4-TRICHLOROBENZENE	0.08	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.2	U	
1,2-DIBROMOETHANE	0.12	U	
1,2-DICHLOROBENZENE	0.08	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.15	U	
1,3-DICHLOROBENZENE	0.1	U	
1,4-DICHLOROBENZENE	0.12	U	
2-BUTANONE	0.23	U	
2-HEXANONE	0.57	U	
4-METHYL-2-PENTANONE	0.46	U	
ACETONE	1.6	U	
BENZENE	0.15	U	
BROMODICHLOROMETHANE	0.14	U	
BROMOFORM	0.09	U	
BROMOMETHANE	0.18	U	
CARBON DISULFIDE	0.11	U	
CARBON TETRACHLORIDE	0.16	U	
CHLOROBENZENE	0.11	U	
CHLORODIBROMOMETHANE	0.13	U	
CHLOROETHANE	0.46	U	
CHLOROFORM	0.16	U	
CHLOROMETHANE	0.08	UJ	C
CIS-1,2-DICHLOROETHENE	0.09	U	
CIS-1,3-DICHLOROPROPENE	0.12	U	
CYCLOHEXANE	0.15	U	

nsample	05-MW07-I
samp_date	8/9/2005
lab_id	T4162-03
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
DICHLORODIFLUOROMETHANE	0.12	U	
ETHYLBENZENE	0.11	U	
ISOPROPYLBENZENE	0.12	U	
M+P-XYLENES	0.24	UJ	C
METHYL ACETATE	0.16	UJ	C
METHYL CYCLOHEXANE	0.14	U	
METHYL TERT-BUTYL ETHER	0.22	U	
METHYLENE CHLORIDE	0.42	U	
O-XYLENE	0.13	U	
STYRENE	0.11	U	
TETRACHLOROETHENE	0.12	U	
TOLUENE	0.11	U	
TOTAL XYLENES	0.37	U	
TRANS-1,2-DICHLOROETHENE	0.1	U	
TRANS-1,3-DICHLOROPROPENE	0.1	U	
TRICHLOROETHENE	1.6	J	C
TRICHLOROFLUOROMETHANE	0.1	U	
VINYL CHLORIDE	0.09	U	

PROJ_NO: 2192

SDG: T4162 MEDIA: WATER DATA FRACTION: OV

nsample	05-MW07-S
samp_date	8/9/2005
lab_id	T4162-02
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.16	U	
1,1,2,2-TETRACHLOROETHANE	0.09	U	
1,1,2-TRICHLOROETHANE	0.11	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.13	U	
1,1-DICHLOROETHANE	0.17	U	
1,1-DICHLOROETHENE	0.19	U	
1,2,4-TRICHLOROBENZENE	0.08	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.2	U	
1,2-DIBROMOETHANE	0.12	U	
1,2-DICHLOROBENZENE	0.08	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.15	U	
1,3-DICHLOROBENZENE	0.1	U	
1,4-DICHLOROBENZENE	0.12	U	
2-BUTANONE	0.23	U	
2-HEXANONE	0.57	U	
4-METHYL-2-PENTANONE	0.46	U	
ACETONE	1.6	U	
BENZENE	0.15	U	
BROMODICHLOROMETHANE	0.14	U	
BROMOFORM	0.09	U	
BROMOMETHANE	0.18	U	
CARBON DISULFIDE	0.11	U	
CARBON TETRACHLORIDE	0.16	U	
CHLOROBENZENE	0.11	U	
CHLORODIBROMOMETHANE	0.13	U	
CHLOROETHANE	0.46	U	
CHLOROFORM	0.16	U	
CHLOROMETHANE	0.08	UJ	C
CIS-1,2-DICHLOROETHENE	0.09	U	
CIS-1,3-DICHLOROPROPENE	0.12	U	
CYCLOHEXANE	0.15	U	

nsample	05-MW07-S
samp_date	8/9/2005
lab_id	T4162-02
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
DICHLORODIFLUOROMETHANE	0.12	U	
ETHYLBENZENE	0.11	U	
ISOPROPYLBENZENE	0.12	U	
M+P-XYLENES	0.24	UJ	C
METHYL ACETATE	0.16	UJ	C
METHYL CYCLOHEXANE	0.14	U	
METHYL TERT-BUTYL ETHER	0.22	U	
METHYLENE CHLORIDE	0.42	U	
O-XYLENE	0.13	U	
STYRENE	0.11	U	
TETRACHLOROETHENE	0.12	U	
TOLUENE	0.11	U	
TOTAL XYLENES	0.37	U	
TRANS-1,2-DICHLOROETHENE	0.1	U	
TRANS-1,3-DICHLOROPROPENE	0.1	U	
TRICHLOROETHENE	0.12	U	
TRICHLOROFLUOROMETHANE	0.1	U	
VINYL CHLORIDE	0.09	U	

nsample	05-MW10-I
samp_date	8/9/2005
lab_id	T4162-05
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	2.7		
1,1,2,2-TETRACHLOROETHANE	0.09	U	
1,1,2-TRICHLOROETHANE	0.11	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.13	U	
1,1-DICHLOROETHANE	0.17	U	
1,1-DICHLOROETHENE	4.6		
1,2,4-TRICHLOROBENZENE	0.08	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.2	U	
1,2-DIBROMOETHANE	0.12	U	
1,2-DICHLOROBENZENE	0.08	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.15	U	
1,3-DICHLOROBENZENE	0.1	U	
1,4-DICHLOROBENZENE	0.12	U	
2-BUTANONE	0.23	U	
2-HEXANONE	0.57	U	
4-METHYL-2-PENTANONE	0.46	U	
ACETONE	1.6	U	
BENZENE	0.15	U	
BROMODICHLOROMETHANE	0.14	U	
BROMOFORM	0.09	U	
BROMOMETHANE	0.18	U	
CARBON DISULFIDE	0.11	U	
CARBON TETRACHLORIDE	0.16	U	
CHLOROBENZENE	0.11	U	
CHLORODIBROMOMETHANE	0.13	U	
CHLOROETHANE	0.46	U	
CHLOROFORM	0.16	U	
CHLOROMETHANE	0.08	UJ	C
CIS-1,2-DICHLOROETHENE	0.51	J	
CIS-1,3-DICHLOROPROPENE	0.12	U	
CYCLOHEXANE	0.15	U	

PROJ_NO: 2192

SDG: T4162 MEDIA: WATER DATA FRACTION: OV

nsample	05-MW10-I
samp_date	8/9/2005
lab_id	T4162-05
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
DICHLORODIFLUOROMETHANE	0.12	U	
ETHYLBENZENE	0.11	U	
ISOPROPYLBENZENE	0.12	U	
M+P-XYLENES	0.24	UJ	C
METHYL ACETATE	0.16	UJ	C
METHYL CYCLOHEXANE	0.14	U	
METHYL TERT-BUTYL ETHER	0.22	U	
METHYLENE CHLORIDE	0.42	U	
O-XYLENE	0.13	U	
STYRENE	0.11	U	
TETRACHLOROETHENE	0.12	U	
TOLUENE	0.11	U	
TOTAL XYLENES	0.37	U	
TRANS-1,2-DICHLOROETHENE	0.1	U	
TRANS-1,3-DICHLOROPROPENE	0.1	U	
TRICHLOROETHENE	2.3	J	C
TRICHLOROFLUOROMETHANE	0.1	U	
VINYL CHLORIDE	0.09	U	

nsample	05-MW10-S
samp_date	8/9/2005
lab_id	T4162-08
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	22		
1,1,2,2-TETRACHLOROETHANE	0.09	U	
1,1,2-TRICHLOROETHANE	0.11	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.13	U	
1,1-DICHLOROETHANE	11	J	C
1,1-DICHLOROETHENE	17		
1,2,4-TRICHLOROBENZENE	0.08	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.2	U	
1,2-DIBROMOETHANE	0.12	U	
1,2-DICHLOROBENZENE	0.08	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.15	U	
1,3-DICHLOROBENZENE	0.1	U	
1,4-DICHLOROBENZENE	0.12	U	
2-BUTANONE	0.23	U	
2-HEXANONE	0.57	U	
4-METHYL-2-PENTANONE	0.46	U	
ACETONE	1.6	U	
BENZENE	0.15	U	
BROMODICHLOROMETHANE	0.14	U	
BROMOFORM	0.09	U	
BROMOMETHANE	0.18	U	
CARBON DISULFIDE	0.11	U	
CARBON TETRACHLORIDE	0.16	U	
CHLOROBENZENE	0.11	U	
CHLORODIBROMOMETHANE	0.13	U	
CHLOROETHANE	0.46	U	
CHLOROFORM	0.16	U	
CHLOROMETHANE	0.08	UJ	C
CIS-1,2-DICHLOROETHENE	1.3		
CIS-1,3-DICHLOROPROPENE	0.12	U	
CYCLOHEXANE	0.15	U	

nsample	05-MW10-S
samp_date	8/9/2005
lab_id	T4162-08
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
DICHLORODIFLUOROMETHANE	0.12	U	
ETHYLBENZENE	0.11	U	
ISOPROPYLBENZENE	0.12	U	
M+P-XYLENES	0.24	UJ	C
METHYL ACETATE	0.16	UJ	C
METHYL CYCLOHEXANE	0.14	U	
METHYL TERT-BUTYL ETHER	0.22	U	
METHYLENE CHLORIDE	0.42	U	
O-XYLENE	0.13	U	
STYRENE	0.11	U	
TETRACHLOROETHENE	1.5		
TOLUENE	0.11	U	
TOTAL XYLENES	0.37	U	
TRANS-1,2-DICHLOROETHENE	0.1	U	
TRANS-1,3-DICHLOROPROPENE	0.1	U	
TRICHLOROETHENE	6.2	J	C
TRICHLOROFLUOROMETHANE	0.1	U	
VINYL CHLORIDE	0.09	U	

PROJ_NO: 2192

SDG: T4162 MEDIA: WATER DATA FRACTION: OV

nsample	05-MW10-SI
samp_date	8/9/2005
lab_id	T4162-04
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,2,2-TETRACHLOROETHANE	0.09	U	
1,1,2-TRICHLOROETHANE	2.6		
1,1,2-TRICHLOROTRIFLUOROETHANE	0.13	U	
1,2,4-TRICHLOROBENZENE	0.08	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.2	U	
1,2-DIBROMOETHANE	0.12	U	
1,2-DICHLOROBENZENE	0.08	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.15	U	
1,3-DICHLOROBENZENE	0.1	U	
1,4-DICHLOROBENZENE	0.12	U	
2-BUTANONE	0.23	U	
2-HEXANONE	0.57	U	
4-METHYL-2-PENTANONE	0.46	U	
ACETONE	1.6	U	
BENZENE	1.1		
BROMODICHLOROMETHANE	0.14	U	
BROMOFORM	0.09	U	
BROMOMETHANE	0.18	U	
CARBON DISULFIDE	0.11	U	
CARBON TETRACHLORIDE	0.16	U	
CHLOROBENZENE	0.11	U	
CHLORODIBROMOMETHANE	0.13	U	
CHLOROETHANE	0.46	U	
CHLOROFORM	0.16	U	
CHLOROMETHANE	0.08	UJ	C
CIS-1,2-DICHLOROETHENE	14		
CIS-1,3-DICHLOROPROPENE	0.12	U	
CYCLOHEXANE	0.15	U	
DICHLORODIFLUOROMETHANE	0.12	U	
ETHYLBENZENE	0.11	U	
ISOPROPYLBENZENE	0.12	U	

nsample	05-MW10-SI
samp_date	8/9/2005
lab_id	T4162-04
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
M+P-XYLENES	0.24	UJ	C
METHYL ACETATE	0.16	UJ	C
METHYL CYCLOHEXANE	0.14	U	
METHYL TERT-BUTYL ETHER	0.22	U	
METHYLENE CHLORIDE	0.42	U	
O-XYLENE	0.13	U	
STYRENE	0.11	U	
TETRACHLOROETHENE	4		
TOLUENE	0.11	U	
TOTAL XYLENES	0.37	U	
TRANS-1,2-DICHLOROETHENE	0.1	U	
TRANS-1,3-DICHLOROPROPENE	0.1	U	
TRICHLOROFLUOROMETHANE	0.1	U	
VINYL CHLORIDE	0.09	U	

nsample	05-MW10-SIDL
samp_date	8/9/2005
lab_id	T4162-04DL
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	73		
1,1-DICHLOROETHANE	51		
1,1-DICHLOROETHENE	79		
TRICHLOROETHENE	52		

PROJ_NO: 2192

SDG: T4162 MEDIA: WATER DATA FRACTION: OV

nsample	FB-081005
samp_date	8/10/2005
lab_id	T4162-11
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.16	U	
1,1,2,2-TETRACHLOROETHANE	0.09	U	
1,1,2-TRICHLOROETHANE	0.11	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.13	U	
1,1-DICHLOROETHANE	0.17	U	
1,1-DICHLOROETHENE	0.19	U	
1,2,4-TRICHLOROBENZENE	0.08	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.2	U	
1,2-DIBROMOETHANE	0.12	U	
1,2-DICHLOROBENZENE	0.08	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.15	U	
1,3-DICHLOROBENZENE	0.1	U	
1,4-DICHLOROBENZENE	0.12	U	
2-BUTANONE	0.23	U	
2-HEXANONE	0.57	U	
4-METHYL-2-PENTANONE	0.46	U	
ACETONE	1.6	U	
BENZENE	0.15	U	
BROMODICHLOROMETHANE	0.14	U	
BROMOFORM	0.09	U	
BROMOMETHANE	0.18	U	
CARBON DISULFIDE	0.11	U	
CARBON TETRACHLORIDE	0.16	U	
CHLOROBENZENE	0.11	U	
CHLORODIBROMOMETHANE	0.13	U	
CHLOROETHANE	0.46	U	
CHLOROFORM	0.16	U	
CHLOROMETHANE	0.08	U	
CIS-1,2-DICHLOROETHENE	0.09	U	
CIS-1,3-DICHLOROPROPENE	0.12	U	
CYCLOHEXANE	0.15	U	

nsample	FB-081005
samp_date	8/10/2005
lab_id	T4162-11
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
DICHLORODIFLUOROMETHANE	0.12	U	
ETHYLBENZENE	0.11	U	
ISOPROPYLBENZENE	0.12	U	
M+P-XYLENES	0.24	UJ	C
METHYL ACETATE	0.16	U	
METHYL CYCLOHEXANE	0.14	U	
METHYL TERT-BUTYL ETHER	0.22	U	
O-XYLENE	0.13	U	
STYRENE	0.11	U	
TETRACHLOROETHENE	0.12	U	
TOLUENE	0.11	U	
TOTAL XYLENES	0.37	U	
TRANS-1,2-DICHLOROETHENE	0.1	U	
TRANS-1,3-DICHLOROPROPENE	0.1	U	
TRICHLOROETHENE	0.12	U	
TRICHLOROFLUOROMETHANE	0.1	U	
VINYL CHLORIDE	0.09	U	

nsample	FB-081005DL
samp_date	8/10/2005
lab_id	T4162-11DL
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
METHYLENE CHLORIDE	34		

PROJ_NO: 2192

SDG: T4162 MEDIA: WATER DATA FRACTION: OV

nsample	TB-080905	nsample	TB-080905
samp_date	8/9/2005	samp_date	8/9/2005
lab_id	T4162-01	lab_id	T4162-01
qc_type	NM	qc_type	NM
units	UG/L	units	UG/L
Pct_Solids	0.0	Pct_Solids	0.0
DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.16	U	
1,1,2,2-TETRACHLOROETHANE	0.09	U	
1,1,2-TRICHLOROETHANE	0.11	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.13	U	
1,1-DICHLOROETHANE	0.17	U	
1,1-DICHLOROETHENE	0.19	U	
1,2,4-TRICHLOROBENZENE	0.08	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.2	U	
1,2-DIBROMOETHANE	0.12	U	
1,2-DICHLOROBENZENE	0.08	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.15	U	
1,3-DICHLOROBENZENE	0.1	U	
1,4-DICHLOROBENZENE	0.12	U	
2-BUTANONE	0.23	U	
2-HEXANONE	0.57	U	
4-METHYL-2-PENTANONE	0.46	U	
ACETONE	1.6	U	
BENZENE	0.15	U	
BROMODICHLOROMETHANE	0.14	U	
BROMOFORM	0.09	U	
BROMOMETHANE	0.18	U	
CARBON DISULFIDE	0.11	U	
CARBON TETRACHLORIDE	0.16	U	
CHLOROBENZENE	0.11	U	
CHLORODIBROMOMETHANE	0.13	U	
CHLOROETHANE	0.46	U	
CHLOROFORM	0.16	U	
CHLOROMETHANE	0.08	U	
CIS-1,2-DICHLOROETHENE	0.09	U	
CIS-1,3-DICHLOROPROPENE	0.12	U	
CYCLOHEXANE	0.15	U	

Parameter	Result	Val Qual	Qual Code
DICHLORODIFLUOROMETHANE	0.12	U	
ETHYLBENZENE	0.11	U	
ISOPROPYLBENZENE	0.12	U	
M+P-XYLENES	0.24	UJ	C
METHYL ACETATE	0.16	U	
METHYL CYCLOHEXANE	0.14	U	
METHYL TERT-BUTYL ETHER	0.22	U	
METHYLENE CHLORIDE	2.3		
O-XYLENE	0.13	U	
STYRENE	0.11	U	
TETRACHLOROETHENE	0.12	U	
TOLUENE	0.11	U	
TOTAL XYLENES	0.37	U	
TRANS-1,2-DICHLOROETHENE	0.1	U	
TRANS-1,3-DICHLOROPROPENE	0.1	U	
TRICHLOROETHENE	0.12	U	
TRICHLOROFLUOROMETHANE	0.1	U	
VINYL CHLORIDE	0.09	U	

PROJ_NO: 2192

SDG: T4162 MEDIA: WATER DATA FRACTION: OS

nsample	05-MW05-I	nsample	05-MW05-S	nsample	05-MW07-I
samp_date	8/10/2005	samp_date	8/10/2005	samp_date	8/9/2005
lab_id	T4162-09	lab_id	T4162-10	lab_id	T4162-03
qc_type	NM	qc_type	NM	qc_type	NM
units	UG/L	units	UG/L	units	UG/L
Pct_Solids	0.0	Pct_Solids	0.0	Pct_Solids	0.0
DUP_OF:		DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,4-DIOXANE	2.1	U	

Parameter	Result	Val Qual	Qual Code
1,4-DIOXANE	2.1	U	

Parameter	Result	Val Qual	Qual Code
1,4-DIOXANE	2.1	U	

PROJ_NO: 2192

SDG: T4162 MEDIA: WATER DATA FRACTION: OS

nsample	05-MW07-S
samp_date	8/9/2005
lab_id	T4162-02
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,4-DIOXANE	2.1	U	

nsample	05-MW10-I
samp_date	8/9/2005
lab_id	T4162-05
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,4-DIOXANE	2	U	

nsample	05-MW10-S
samp_date	8/9/2005
lab_id	T4162-08
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,4-DIOXANE	2.1	U	

PROJ_NO: 2192

SDG: T4162 MEDIA: WATER DATA FRACTION: OS

nsample	05-MW10-SI	nsample	FB-081005
samp_date	8/9/2005	samp_date	8/10/2005
lab_id	T4162-04	lab_id	T4162-11
qc_type	NM	qc_type	NM
units	UG/L	units	UG/L
Pct_Solids	0.0	Pct_Solids	0.0
DUP_OF:		DUP_OF:	

Parameter	Result	Val Qual	Qual Code
1,4-DIOXANE	2.1	U	

Parameter	Result	Val Qual	Qual Code
1,4-DIOXANE	2.1	U	

Data Qualifier Key:

B	-	Positive result is considered to be an artifact of blank contamination and should not be considered present.
J	-	Value is considered estimated due to exceedance of technical quality control or because result is less than the Contract Required Quantitation Limit (CRQL).
L	-	Positive result is considered biased low due to exceedance of technical quality control criteria.
R	-	Positive result is considered unusable due to exceedance of technical quality control criteria.
U	-	Value is a non-detected result as reported by the laboratory.
UJ	-	Non-detected result is considered estimated due to exceedance of technical quality control criteria.
UL	-	Non-detected result is considered biased low due to exceedance of technical quality control criteria.

Qualifier Codes:

a	=	Lab Blank Contamination
b	=	Field Blank Contamination
c	=	Calibration (i.e., %RSDs, %Ds, ICVs, CCVs, RPDs, RRFs, etc.) Noncompliance
d	=	MS/MSD Noncompliance
e	=	LSC/LSCD Noncompliance
f	=	Laboratory Duplicate Imprecision
g	=	Field Duplicate Imprecision
h	=	Holding Time Exceedance
i	=	ICP Serial Dilution Noncompliance
j	=	GFAA PDS – GFAA MSA's r<0.995 (correlation coefficient)
k	=	ICP Interference – include ICSAB %Rs
l	=	Instrument Calibration Range Exceedance
m	=	Sample Preservation
n	=	Internal Standard Noncompliance
o	=	Poor Instrument Performance (i.e. baseline drifting)
p	=	Uncertainty Near Detection Limit (<2 x IDL for inorganics and < CRQL for organics)
q	=	Other Problems (can encompass of number of issues)
r	=	Surrogates Recovery Noncompliance
s	=	Pesticide/PCB Resolution
t	=	% Breakdown Noncompliance for DDT and Endrin
u	=	Pesticide/PCB % Difference Between Columns for Positive Results
v	=	Non-linear Calibrations, Tuning r <0.995 (correlation coefficient)

APPENDIX B

Results as Reported by the Laboratory

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/10/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW05-I	SDG No.:	T4162
Lab Sample ID:	T4162-09	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG082011.D	1	8/20/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-69-4	Trichlorofluoromethane	0.10	U	1.0	0.10	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.13	U	1.0	0.13	ug/L
75-35-4	1,1-Dichloroethene	2.4		1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.22	U	1.0	0.22	ug/L
79-20-9	Methyl Acetate	0.16	U	1.0	0.16	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
110-82-7	Cyclohexane	0.15	U	1.0	0.15	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
108-87-2	Methylcyclohexane	0.14	U	1.0	0.14	ug/L
71-43-2	Benzene	0.15	U	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	1.0		1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/10/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW05-I	SDG No.:	T4162
Lab Sample ID:	T4162-09	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Vol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG082011.D	1	8/20/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
106-93-4	1,2-Dibromoethane	0.12	U	1.0	0.12	ug/L
127-18-4	Tetrachloroethene	0.12	U	1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.11	U	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	0.24	U	1.0	0.24	ug/L
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
98-82-8	Isopropylbenzene	0.12	U	1.0	0.12	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L
541-73-1	1,3-Dichlorobenzene	0.10	U	1.0	0.10	ug/L
106-46-7	1,4-Dichlorobenzene	0.12	U	1.0	0.12	ug/L
95-50-1	1,2-Dichlorobenzene	0.08	U	1.0	0.08	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.20	U	1.0	0.20	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.08	U	1.0	0.08	ug/L
1330-20-7	Total Xylenes	0.37	U	3.0	0.37	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	10.44	104 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	9.33	93 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	9.94	99 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.18	102 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	297442	3.83			
540-36-3	1,4-Difluorobenzene	484489	4.28			
3114-55-4	Chlorobenzene-d5	348621	7.32			
3855-82-1	1,4-Dichlorobenzene-d4	200753	9.61			

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/10/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW05-S	SDG No.:	T4162
Lab Sample ID:	T4162-10	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG082012.D	1	8/20/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-69-4	Trichlorofluoromethane	0.10	U	1.0	0.10	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.13	U	1.0	0.13	ug/L
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.22	U	1.0	0.22	ug/L
79-20-9	Methyl Acetate	0.16	U	1.0	0.16	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
110-82-7	Cyclohexane	0.15	U	1.0	0.15	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
108-87-2	Methylcyclohexane	0.14	U	1.0	0.14	ug/L
71-43-2	Benzene	0.15	U	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	0.12	U	1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/10/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW05-S	SDG No.:	T4162
Lab Sample ID:	T4162-10	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG082012.D	1	8/20/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
106-93-4	1,2-Dibromoethane	0.12	U	1.0	0.12	ug/L
127-18-4	Tetrachloroethene	0.12	U	1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.11	U	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	0.24	U	1.0	0.24	ug/L
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
98-82-8	Isopropylbenzene	0.12	U	1.0	0.12	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L
541-73-1	1,3-Dichlorobenzene	0.10	U	1.0	0.10	ug/L
106-46-7	1,4-Dichlorobenzene	0.12	U	1.0	0.12	ug/L
95-50-1	1,2-Dichlorobenzene	0.08	U	1.0	0.08	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.20	U	1.0	0.20	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.08	U	1.0	0.08	ug/L
1330-20-7	Total Xylenes	0.37	U	3.0	0.37	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	9.49	95 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	9.34	93 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	10.02	100 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	9.57	96 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	294118	3.83			
540-36-3	1,4-Difluorobenzene	499698	4.28			
3114-55-4	Chlorobenzene-d5	374131	7.33			
3855-82-1	1,4-Dichlorobenzene-d4	208693	9.61			

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW07-I	SDG No.:	T4162
Lab Sample ID:	T4162-03	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG082007.D	1	8/20/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-69-4	Trichlorofluoromethane	0.10	U	1.0	0.10	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.13	U	1.0	0.13	ug/L
75-35-4	1,1-Dichloroethene	3.0		1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.22	U	1.0	0.22	ug/L
79-20-9	Methyl Acetate	0.16	U	1.0	0.16	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
110-82-7	Cyclohexane	0.15	U	1.0	0.15	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
108-87-2	Methylcyclohexane	0.14	U	1.0	0.14	ug/L
71-43-2	Benzene	0.15	U	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	1.6		1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L

U = Not Detected
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MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW07-I	SDG No.:	T4162
Lab Sample ID:	T4162-03	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG082007.D	1	8/20/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
106-93-4	1,2-Dibromoethane	0.12	U	1.0	0.12	ug/L
127-18-4	Tetrachloroethene	0.12	U	1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.11	U	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	0.24	U	1.0	0.24	ug/L
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
98-82-8	Isopropylbenzene	0.12	U	1.0	0.12	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L
541-73-1	1,3-Dichlorobenzene	0.10	U	1.0	0.10	ug/L
106-46-7	1,4-Dichlorobenzene	0.12	U	1.0	0.12	ug/L
95-50-1	1,2-Dichlorobenzene	0.08	U	1.0	0.08	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.20	U	1.0	0.20	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.08	U	1.0	0.08	ug/L
1330-20-7	Total Xylenes	0.37	U	3.0	0.37	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	10.26	103 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	9.37	94 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	9.73	97 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.42	104 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	298930	3.82			
540-36-3	1,4-Difluorobenzene	520749	4.27			
3114-55-4	Chlorobenzene-d5	379596	7.33			
3855-82-1	1,4-Dichlorobenzene-d4	212363	9.60			

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW07-S	SDG No.:	T4162
Lab Sample ID:	T4162-02	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG082006.D	1	8/20/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-69-4	Trichlorofluoromethane	0.10	U	1.0	0.10	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.13	U	1.0	0.13	ug/L
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.22	U	1.0	0.22	ug/L
79-20-9	Methyl Acetate	0.16	U	1.0	0.16	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
110-82-7	Cyclohexane	0.15	U	1.0	0.15	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
108-87-2	Methylcyclohexane	0.14	U	1.0	0.14	ug/L
71-43-2	Benzene	0.15	U	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	0.12	U	1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW07-S	SDG No.:	T4162
Lab Sample ID:	T4162-02	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG082006.D	1	8/20/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
106-93-4	1,2-Dibromoethane	0.12	U	1.0	0.12	ug/L
127-18-4	Tetrachloroethene	0.12	U	1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.11	U	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	0.24	U	1.0	0.24	ug/L
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
98-82-8	Isopropylbenzene	0.12	U	1.0	0.12	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L
541-73-1	1,3-Dichlorobenzene	0.10	U	1.0	0.10	ug/L
106-46-7	1,4-Dichlorobenzene	0.12	U	1.0	0.12	ug/L
95-50-1	1,2-Dichlorobenzene	0.08	U	1.0	0.08	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.20	U	1.0	0.20	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.08	U	1.0	0.08	ug/L
1330-20-7	Total Xylenes	0.37	U	3.0	0.37	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	10.37	104 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	8.62	86 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	9.53	95 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.19	102 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	302656	3.83			
540-36-3	1,4-Difluorobenzene	567242	4.28			
3114-55-4	Chlorobenzene-d5	410140	7.32			
3855-82-1	1,4-Dichlorobenzene-d4	223992	9.61			

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW10-I	SDG No.:	T4162
Lab Sample ID:	T4162-05	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG082009.D	1	8/20/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-69-4	Trichlorofluoromethane	0.10	U	1.0	0.10	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.13	U	1.0	0.13	ug/L
75-35-4	1,1-Dichloroethene	4.6		1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.22	U	1.0	0.22	ug/L
79-20-9	Methyl Acetate	0.16	U	1.0	0.16	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
110-82-7	Cyclohexane	0.15	U	1.0	0.15	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.51	J	1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	2.7		1.0	0.16	ug/L
108-87-2	Methylcyclohexane	0.14	U	1.0	0.14	ug/L
71-43-2	Benzene	0.15	U	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	2.3		1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L

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N = Presumptive Evidence of a Compound

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW10-I	SDG No.:	T4162
Lab Sample ID:	T4162-05	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG082009.D	1	8/20/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
106-93-4	1,2-Dibromoethane	0.12	U	1.0	0.12	ug/L
127-18-4	Tetrachloroethene	0.12	U	1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.11	U	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	0.24	U	1.0	0.24	ug/L
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
98-82-8	Isopropylbenzene	0.12	U	1.0	0.12	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L
541-73-1	1,3-Dichlorobenzene	0.10	U	1.0	0.10	ug/L
106-46-7	1,4-Dichlorobenzene	0.12	U	1.0	0.12	ug/L
95-50-1	1,2-Dichlorobenzene	0.08	U	1.0	0.08	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.20	U	1.0	0.20	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.08	U	1.0	0.08	ug/L
1330-20-7	Total Xylenes	0.37	U	3.0	0.37	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	9.95	100 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	9.09	91 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	9.82	98 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.32	103 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	311289	3.83			
540-36-3	1,4-Difluorobenzene	505834	4.28			
3114-55-4	Chlorobenzene-d5	388405	7.33			
3855-82-1	1,4-Dichlorobenzene-d4	198906	9.61			

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW10-S	SDG No.:	T4162
Lab Sample ID:	T4162-08	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG082010.D	1	8/20/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-69-4	Trichlorofluoromethane	0.10	U	1.0	0.10	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.13	U	1.0	0.13	ug/L
75-35-4	1,1-Dichloroethene	17		1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.22	U	1.0	0.22	ug/L
79-20-9	Methyl Acetate	0.16	U	1.0	0.16	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	11		1.0	0.17	ug/L
110-82-7	Cyclohexane	0.15	U	1.0	0.15	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	1.3		1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	22		1.0	0.16	ug/L
108-87-2	Methylcyclohexane	0.14	U	1.0	0.14	ug/L
71-43-2	Benzene	0.15	U	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	6.2		1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L

U = Not Detected
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E = Value Exceeds Calibration Range
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N = Presumptive Evidence of a Compound

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW10-S	SDG No.:	T4162
Lab Sample ID:	T4162-08	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG082010.D	1	8/20/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
106-93-4	1,2-Dibromoethane	0.12	U	1.0	0.12	ug/L
127-18-4	Tetrachloroethene	1.5		1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.11	U	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	0.24	U	1.0	0.24	ug/L
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
98-82-8	Isopropylbenzene	0.12	U	1.0	0.12	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L
541-73-1	1,3-Dichlorobenzene	0.10	U	1.0	0.10	ug/L
106-46-7	1,4-Dichlorobenzene	0.12	U	1.0	0.12	ug/L
95-50-1	1,2-Dichlorobenzene	0.08	U	1.0	0.08	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.20	U	1.0	0.20	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.08	U	1.0	0.08	ug/L
1330-20-7	Total Xylenes	0.37	U	3.0	0.37	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	10.52	105 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	9.02	90 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	10.01	100 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.1	101 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	291371	3.83			
540-36-3	1,4-Difluorobenzene	499246	4.27			
3114-55-4	Chlorobenzene-d5	376735	7.33			
3855-82-1	1,4-Dichlorobenzene-d4	204076	9.60			

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW10-SI	SDG No.:	T4162
Lab Sample ID:	T4162-04	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG082008.D	1	8/20/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-69-4	Trichlorofluoromethane	0.10	U	1.0	0.10	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.13	U	1.0	0.13	ug/L
75-35-4	1,1-Dichloroethene	100	E	1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.22	U	1.0	0.22	ug/L
79-20-9	Methyl Acetate	0.16	U	1.0	0.16	ug/L
75-09-2	Methylene Chloride	0.42	U	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	76	E	1.0	0.17	ug/L
110-82-7	Cyclohexane	0.15	U	1.0	0.15	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	14		1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	110	E	1.0	0.16	ug/L
108-87-2	Methylcyclohexane	0.14	U	1.0	0.14	ug/L
71-43-2	Benzene	1.1		1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	60	E	1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	2.6		1.0	0.11	ug/L

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW10-SI	SDG No.:	T4162
Lab Sample ID:	T4162-04	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG082008.D	1	8/20/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
106-93-4	1,2-Dibromoethane	0.12	U	1.0	0.12	ug/L
127-18-4	Tetrachloroethene	4.0		1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.11	U	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	0.24	U	1.0	0.24	ug/L
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
98-82-8	Isopropylbenzene	0.12	U	1.0	0.12	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L
541-73-1	1,3-Dichlorobenzene	0.10	U	1.0	0.10	ug/L
106-46-7	1,4-Dichlorobenzene	0.12	U	1.0	0.12	ug/L
95-50-1	1,2-Dichlorobenzene	0.08	U	1.0	0.08	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.20	U	1.0	0.20	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.08	U	1.0	0.08	ug/L
1330-20-7	Total Xylenes	0.37	U	3.0	0.37	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	9.29	93 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	10.02	100 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	9.39	94 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	9.41	94 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	297172	3.82			
540-36-3	1,4-Difluorobenzene	497639	4.27			
3114-55-4	Chlorobenzene-d5	373582	7.32			
3855-82-1	1,4-Dichlorobenzene-d4	198563	9.61			

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW10-SIDL	SDG No.:	T4162
Lab Sample ID:	T4162-04DL	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VF082307.D	10	8/23/2005	VF082005

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	1.2	U	10	1.2	ug/L
74-87-3	Chloromethane	0.80	U	10	0.80	ug/L
75-01-4	Vinyl chloride	0.85	U	10	0.85	ug/L
74-83-9	Bromomethane	1.8	U	10	1.8	ug/L
75-00-3	Chloroethane	4.6	U	10	4.6	ug/L
75-69-4	Trichlorofluoromethane	1.0	U	10	1.0	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	1.3	U	10	1.3	ug/L
75-35-4	1,1-Dichloroethene	79	D	10	1.9	ug/L
67-64-1	Acetone	16	U	50	16	ug/L
75-15-0	Carbon disulfide	1.1	U	10	1.1	ug/L
1634-04-4	Methyl tert-butyl Ether	2.2	U	10	2.2	ug/L
79-20-9	Methyl Acetate	1.6	U	10	1.6	ug/L
75-09-2	Methylene Chloride	6.4	JDB	10	4.2	ug/L
156-60-5	trans-1,2-Dichloroethene	0.99	U	10	0.99	ug/L
75-34-3	1,1-Dichloroethane	51	D	10	1.7	ug/L
110-82-7	Cyclohexane	1.5	U	10	1.5	ug/L
78-93-3	2-Butanone	2.3	U	50	2.3	ug/L
56-23-5	Carbon Tetrachloride	1.6	U	10	1.6	ug/L
156-59-2	cis-1,2-Dichloroethene	12	D	10	0.92	ug/L
67-66-3	Chloroform	1.6	U	10	1.6	ug/L
71-55-6	1,1,1-Trichloroethane	73	D	10	1.6	ug/L
108-87-2	Methylcyclohexane	1.4	U	10	1.4	ug/L
71-43-2	Benzene	1.5	U	10	1.5	ug/L
107-06-2	1,2-Dichloroethane	1.3	U	10	1.3	ug/L
79-01-6	Trichloroethene	52	D	10	1.2	ug/L
78-87-5	1,2-Dichloropropane	1.5	U	10	1.5	ug/L
75-27-4	Bromodichloromethane	1.4	U	10	1.4	ug/L
108-10-1	4-Methyl-2-Pentanone	4.6	U	50	4.6	ug/L
108-88-3	Toluene	1.1	U	10	1.1	ug/L
10061-02-6	t-1,3-Dichloropropene	0.96	U	10	0.96	ug/L
10061-01-5	cis-1,3-Dichloropropene	1.2	U	10	1.2	ug/L
79-00-5	1,1,2-Trichloroethane	1.1	U	10	1.1	ug/L

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW10-SIDL	SDG No.:	T4162
Lab Sample ID:	T4162-04DL	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VF082307.D	10	8/23/2005	VF082005

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
591-78-6	2-Hexanone	5.8	U	50	5.8	ug/L
124-48-1	Dibromochloromethane	1.3	U	10	1.3	ug/L
106-93-4	1,2-Dibromoethane	1.2	U	10	1.2	ug/L
127-18-4	Tetrachloroethene	5.6	JD	10	1.2	ug/L
108-90-7	Chlorobenzene	1.1	U	10	1.1	ug/L
100-41-4	Ethyl Benzene	1.1	U	10	1.1	ug/L
126777-61-2	m&p-Xylenes	2.4	U	10	2.4	ug/L
95-47-6	o-Xylene	1.3	U	10	1.3	ug/L
100-42-5	Styrene	1.1	U	10	1.1	ug/L
75-25-2	Bromoform	0.94	U	10	0.94	ug/L
98-82-8	Isopropylbenzene	1.2	U	10	1.2	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.93	U	10	0.93	ug/L
541-73-1	1,3-Dichlorobenzene	0.97	U	10	0.97	ug/L
106-46-7	1,4-Dichlorobenzene	1.2	U	10	1.2	ug/L
95-50-1	1,2-Dichlorobenzene	0.83	U	10	0.83	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	10	2.0	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.83	U	10	0.83	ug/L
1330-20-7	Total Xylenes	3.7	U	30	3.7	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	8.96	90 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	9.43	94 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	9.77	98 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	9.79	98 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	3327217	7.97			
540-36-3	1,4-Difluorobenzene	4743110	9.29			
3114-55-4	Chlorobenzene-d5	3932140	15.24			
3855-82-1	1,4-Dichlorobenzene-d4	1966231	20.59			

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/10/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	FB-081005	SDG No.:	T4162
Lab Sample ID:	T4162-11	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG081906.D	1	8/19/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-69-4	Trichlorofluoromethane	0.10	U	1.0	0.10	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.13	U	1.0	0.13	ug/L
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.22	U	1.0	0.22	ug/L
79-20-9	Methyl Acetate	0.16	U	1.0	0.16	ug/L
75-09-2	Methylene Chloride	47	E	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
110-82-7	Cyclohexane	0.15	U	1.0	0.15	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
108-87-2	Methylcyclohexane	0.14	U	1.0	0.14	ug/L
71-43-2	Benzene	0.15	U	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	0.12	U	1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/10/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	FB-081005	SDG No.:	T4162
Lab Sample ID:	T4162-11	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG081906.D	1	8/19/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
106-93-4	1,2-Dibromoethane	0.12	U	1.0	0.12	ug/L
127-18-4	Tetrachloroethene	0.12	U	1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.11	U	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	0.24	U	1.0	0.24	ug/L
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
98-82-8	Isopropylbenzene	0.12	U	1.0	0.12	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L
541-73-1	1,3-Dichlorobenzene	0.10	U	1.0	0.10	ug/L
106-46-7	1,4-Dichlorobenzene	0.12	U	1.0	0.12	ug/L
95-50-1	1,2-Dichlorobenzene	0.08	U	1.0	0.08	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.20	U	1.0	0.20	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.08	U	1.0	0.08	ug/L
1330-20-7	Total Xylenes	0.37	U	3.0	0.37	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	9.09	91 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	8.6	86 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	9.81	98 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.07	101 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	335507	3.83			
540-36-3	1,4-Difluorobenzene	542099	4.27			
3114-55-4	Chlorobenzene-d5	397742	7.32			
3855-82-1	1,4-Dichlorobenzene-d4	217029	9.60			

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/10/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	FB-081005DL	SDG No.:	T4162
Lab Sample ID:	T4162-11DL	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VF082308.D	5	8/23/2005	VF082005

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.62	U	5.0	0.62	ug/L
74-87-3	Chloromethane	0.40	U	5.0	0.40	ug/L
75-01-4	Vinyl chloride	0.42	U	5.0	0.42	ug/L
74-83-9	Bromomethane	0.88	U	5.0	0.88	ug/L
75-00-3	Chloroethane	2.3	U	5.0	2.3	ug/L
75-69-4	Trichlorofluoromethane	0.52	U	5.0	0.52	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.64	U	5.0	0.64	ug/L
75-35-4	1,1-Dichloroethene	0.94	U	5.0	0.94	ug/L
67-64-1	Acetone	7.9	U	25	7.9	ug/L
75-15-0	Carbon disulfide	0.55	U	5.0	0.55	ug/L
1634-04-4	Methyl tert-butyl Ether	1.1	U	5.0	1.1	ug/L
79-20-9	Methyl Acetate	0.80	U	5.0	0.80	ug/L
75-09-2	Methylene Chloride	34	DB	5.0	2.1	ug/L
156-60-5	trans-1,2-Dichloroethene	0.50	U	5.0	0.50	ug/L
75-34-3	1,1-Dichloroethane	0.84	U	5.0	0.84	ug/L
110-82-7	Cyclohexane	0.73	U	5.0	0.73	ug/L
78-93-3	2-Butanone	1.2	U	25	1.2	ug/L
56-23-5	Carbon Tetrachloride	0.78	U	5.0	0.78	ug/L
156-59-2	cis-1,2-Dichloroethene	0.46	U	5.0	0.46	ug/L
67-66-3	Chloroform	0.80	U	5.0	0.80	ug/L
71-55-6	1,1,1-Trichloroethane	0.81	U	5.0	0.81	ug/L
108-87-2	Methylcyclohexane	0.68	U	5.0	0.68	ug/L
71-43-2	Benzene	0.74	U	5.0	0.74	ug/L
107-06-2	1,2-Dichloroethane	0.64	U	5.0	0.64	ug/L
79-01-6	Trichloroethene	0.58	U	5.0	0.58	ug/L
78-87-5	1,2-Dichloropropane	0.76	U	5.0	0.76	ug/L
75-27-4	Bromodichloromethane	0.68	U	5.0	0.68	ug/L
108-10-1	4-Methyl-2-Pentanone	2.3	U	25	2.3	ug/L
108-88-3	Toluene	0.54	U	5.0	0.54	ug/L
10061-02-6	t-1,3-Dichloropropene	0.48	U	5.0	0.48	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.60	U	5.0	0.60	ug/L
79-00-5	1,1,2-Trichloroethane	0.56	U	5.0	0.56	ug/L

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/10/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	FB-081005DL	SDG No.:	T4162
Lab Sample ID:	T4162-11DL	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VF082308.D	5	8/23/2005	VF082005

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
591-78-6	2-Hexanone	2.9	U	25	2.9	ug/L
124-48-1	Dibromochloromethane	0.65	U	5.0	0.65	ug/L
106-93-4	1,2-Dibromoethane	0.60	U	5.0	0.60	ug/L
127-18-4	Tetrachloroethene	0.61	U	5.0	0.61	ug/L
108-90-7	Chlorobenzene	0.55	U	5.0	0.55	ug/L
100-41-4	Ethyl Benzene	0.57	U	5.0	0.57	ug/L
126777-61-2	m&p-Xylenes	1.2	U	5.0	1.2	ug/L
95-47-6	o-Xylene	0.65	U	5.0	0.65	ug/L
100-42-5	Styrene	0.56	U	5.0	0.56	ug/L
75-25-2	Bromoform	0.47	U	5.0	0.47	ug/L
98-82-8	Isopropylbenzene	0.61	U	5.0	0.61	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.46	U	5.0	0.46	ug/L
541-73-1	1,3-Dichlorobenzene	0.48	U	5.0	0.48	ug/L
106-46-7	1,4-Dichlorobenzene	0.62	U	5.0	0.62	ug/L
95-50-1	1,2-Dichlorobenzene	0.42	U	5.0	0.42	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	1.0	U	5.0	1.0	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.42	U	5.0	0.42	ug/L
1330-20-7	Total Xylenes	1.8	U	15	1.8	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	9.16	92 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	9.4	94 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	9.8	98 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	9.95	100 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	3096435	7.97			
540-36-3	1,4-Difluorobenzene	4457419	9.29			
3114-55-4	Chlorobenzene-d5	3576805	15.23			
3855-82-1	1,4-Dichlorobenzene-d4	1770997	20.57			

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	TB-080905	SDG No.:	T4162
Lab Sample ID:	T4162-01	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG081905.D	1	8/19/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-69-4	Trichlorofluoromethane	0.10	U	1.0	0.10	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.13	U	1.0	0.13	ug/L
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.22	U	1.0	0.22	ug/L
79-20-9	Methyl Acetate	0.16	U	1.0	0.16	ug/L
75-09-2	Methylene Chloride	2.3		1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
110-82-7	Cyclohexane	0.15	U	1.0	0.15	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
108-87-2	Methylcyclohexane	0.14	U	1.0	0.14	ug/L
71-43-2	Benzene	0.15	U	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	0.12	U	1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	TB-080905	SDG No.:	T4162
Lab Sample ID:	T4162-01	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VG081905.D	1	8/19/2005	VG081805

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
591-78-6	2-Hexanone	0.57	U	5.0	0.57	ug/L
124-48-1	Dibromochloromethane	0.13	U	1.0	0.13	ug/L
106-93-4	1,2-Dibromoethane	0.12	U	1.0	0.12	ug/L
127-18-4	Tetrachloroethene	0.12	U	1.0	0.12	ug/L
108-90-7	Chlorobenzene	0.11	U	1.0	0.11	ug/L
100-41-4	Ethyl Benzene	0.11	U	1.0	0.11	ug/L
126777-61-2	m&p-Xylenes	0.24	U	1.0	0.24	ug/L
95-47-6	o-Xylene	0.13	U	1.0	0.13	ug/L
100-42-5	Styrene	0.11	U	1.0	0.11	ug/L
75-25-2	Bromoform	0.09	U	1.0	0.09	ug/L
98-82-8	Isopropylbenzene	0.12	U	1.0	0.12	ug/L
79-34-5	1,1,2,2-Tetrachloroethane	0.09	U	1.0	0.09	ug/L
541-73-1	1,3-Dichlorobenzene	0.10	U	1.0	0.10	ug/L
106-46-7	1,4-Dichlorobenzene	0.12	U	1.0	0.12	ug/L
95-50-1	1,2-Dichlorobenzene	0.08	U	1.0	0.08	ug/L
96-12-8	1,2-Dibromo-3-Chloropropane	0.20	U	1.0	0.20	ug/L
120-82-1	1,2,4-Trichlorobenzene	0.08	U	1.0	0.08	ug/L
1330-20-7	Total Xylenes	0.37	U	3.0	0.37	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	9.37	94 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	8.87	89 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	9.92	99 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.38	104 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	347937	3.82			
540-36-3	1,4-Difluorobenzene	585176	4.27			
3114-55-4	Chlorobenzene-d5	445776	7.32			
3855-82-1	1,4-Dichlorobenzene-d4	233484	9.60			

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CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/10/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW05-I	SDG No.:	T4162
Lab Sample ID:	T4162-09	Matrix:	WATER
Analytical Method:	8270	% Moisture:	100
Sample Wt/Vol:	970.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BA020551.D	1	8/11/2005	8/24/2005	BA082305

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
123-91-1	1,4-Dioxane	2.1	U	2.1	2.1	ug/L
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	149545	7.56			
1146-65-2	Naphthalene-d8	458638	9.98			
15067-26-2	Acenaphthene-d10	270205	13.48			
1517-22-2	Phenanthrene-d10	469865	16.47			
1719-03-5	Chrysene-d12	436315	21.80			
1520-96-3	Perylene-d12	440031	25.20			

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RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/10/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW05-S	SDG No.:	T4162
Lab Sample ID:	T4162-10	Matrix:	WATER
Analytical Method:	8270	% Moisture:	100
Sample Wt/Wol:	970.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BA020556.D	1	8/11/2005	8/24/2005	BA082305

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
123-91-1	1,4-Dioxane	2.1	U	2.1	2.1	ug/L
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	150041	7.57			
1146-65-2	Naphthalene-d8	477672	9.98			
15067-26-2	Acenaphthene-d10	296730	13.48			
1517-22-2	Phenanthrene-d10	521057	16.47			
1719-03-5	Chrysene-d12	464859	21.81			
1520-96-3	Perylene-d12	462858	25.20			

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW07-I	SDG No.:	T4162
Lab Sample ID:	T4162-03	Matrix:	WATER
Analytical Method:	8270	% Moisture:	100
Sample Wt/Wol:	970.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BA020545.D	1	8/11/2005	8/23/2005	BA082305

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
123-91-1	1,4-Dioxane	2.1	U	2.1	2.1	ug/L
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	203646	7.58			
1146-65-2	Naphthalene-d8	629728	9.98			
15067-26-2	Acenaphthene-d10	385255	13.48			
1517-22-2	Phenanthrene-d10	680997	16.47			
1719-03-5	Chrysene-d12	648811	21.82			
1520-96-3	Perylene-d12	657051	25.21			

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW07-S	SDG No.:	T4162
Lab Sample ID:	T4162-02	Matrix:	WATER
Analytical Method:	8270	% Moisture:	100
Sample Wt/Wol:	960.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BA020544.D	1	8/11/2005	8/23/2005	BA082305

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
123-91-1	1,4-Dioxane	2.1	U	2.1	2.1	ug/L
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	134380	7.57			
1146-65-2	Naphthalene-d8	421797	9.98			
15067-26-2	Acenaphthene-d10	256612	13.48			
1517-22-2	Phenanthrene-d10	465853	16.47			
1719-03-5	Chrysene-d12	395416	21.81			
1520-96-3	Perylene-d12	397603	25.20			

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW10-I	SDG No.:	T4162
Lab Sample ID:	T4162-05	Matrix:	WATER
Analytical Method:	8270	% Moisture:	100
Sample Wt/Vol:	980.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BA020547.D	1	8/11/2005	8/23/2005	BA082305

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
123-91-1	1,4-Dioxane	2.0	U	2.0	2.0	ug/L
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	169746	7.57			
1146-65-2	Naphthalene-d8	523942	9.98			
15067-26-2	Acenaphthene-d10	324452	13.48			
1517-22-2	Phenanthrene-d10	572161	16.47			
1719-03-5	Chrysene-d12	543442	21.81			
1520-96-3	Perylene-d12	560721	25.21			

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW10-S	SDG No.:	T4162
Lab Sample ID:	T4162-08	Matrix:	WATER
Analytical Method:	8270	% Moisture:	100
Sample Wt/Wol:	960.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BA020550.D	1	8/11/2005	8/23/2005	BA082305

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
123-91-1	1,4-Dioxane	2.1	U	2.1	2.1	ug/L
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	190281	7.57			
1146-65-2	Naphthalene-d8	597415	9.97			
15067-26-2	Acenaphthene-d10	361051	13.48			
1517-22-2	Phenanthrene-d10	629719	16.47			
1719-03-5	Chrysene-d12	586397	21.81			
1520-96-3	Perylene-d12	594394	25.21			

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/9/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	05-MW10-SI	SDG No.:	T4162
Lab Sample ID:	T4162-04	Matrix:	WATER
Analytical Method:	8270	% Moisture:	100
Sample Wt/Wol:	960.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BA020546.D	1	8/11/2005	8/23/2005	BA082305

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
123-91-1	1,4-Dioxane	2.1	U	2.1	2.1	ug/L
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	121302	7.57			
1146-65-2	Naphthalene-d8	367600	9.98			
15067-26-2	Acenaphthene-d10	217429	13.47			
1517-22-2	Phenanthrene-d10	389220	16.47			
1719-03-5	Chrysene-d12	374176	21.81			
1520-96-3	Perylene-d12	390070	25.20			

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/10/2005
Project:	NAS JRB Willow Grove	Date Received:	8/11/2005
Client Sample ID:	FB-081005	SDG No.:	T4162
Lab Sample ID:	T4162-11	Matrix:	WATER
Analytical Method:	8270	% Moisture:	100
Sample Wt/Wol:	970.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BA020557.D	1	8/11/2005	8/24/2005	BA082305

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
123-91-1	1,4-Dioxane	2.1	U	2.1	2.1	ug/L
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	142197	7.57			
1146-65-2	Naphthalene-d8	432797	9.98			
15067-26-2	Acenaphthene-d10	275227	13.48			
1517-22-2	Phenanthrene-d10	467356	16.46			
1719-03-5	Chrysene-d12	404390	21.81			
1520-96-3	Perylene-d12	403730	25.19			

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found In Associated Method Blank
N = Presumptive Evidence of a Compound

APPENDIX C

Support Documentation

CHEMTECH

CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. T416

COC Number 053926

377

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Tetra Tech NVS
ADDRESS: 600 Clark Avenue Suite 3
CITY: King of Prussia STATE: PA ZIP: 19406
ATTENTION: Russ Turner
PHONE: 610 491 9688 FAX: 610 491 9645

CLIENT PROJECT INFORMATION

PROJECT NAME: NASJRB Willow Grove
PROJECT NO.: 2192 LOCATION: Willow Grove
PROJECT MANAGER: Russ Turner
e-mail: rturner at TtNUS.com
PHONE: 610 491 9688 FAX: 610 491 9655

CLIENT BILLING INFORMATION

BILL TO: Tetra Tech NVS PO#:
ADDRESS: Foster Plaza 7 661 Anderson Drive
CITY: Pittsburgh STATE: PA ZIP: 15220
ATTENTION: Accounts Payable PHONE:

DATA TURNAROUND INFORMATION

FAX: _____ DAYS *
HARD COPY: _____ DAYS *
EDD: _____ DAYS *
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ RESULTS ONLY ☐ USEPA CLP
☐ RESULTS + QC ☐ New York State ASP "B"
☐ New Jersey REDUCED ☐ New York State ASP "A"
☐ New Jersey CLP ☐ Other _____
☐ EDD FORMAT _____

ANALYSIS

40 ml VOA vial HCl
TCL VOC
1 Liter Amber Glass
1,4-Dioxane

PRESERVATIVES

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	1 HCl	2 4°C	3	4	5	6	7	8	9	COMMENTS (← Specify Preservatives A-HCl B-HNO_3 C-H_2SO_4 D-NaOH E-ICE F-Other)
1. 1	TB-080905	Aq		X	8/9/05	0700	3	3									Laboratory Supplied
2. 2	05-MW07-S	GW		X	8/9/05	1115	4	3	1								
3. 3	05-MW07-I	GW		X	8/9/05	1125	4	3	1								
4. 4	05-MW10-SI	GW		X	8/9/05	1415	4	3	1								
5. 5,6,7	05-MW10-I	GW		X	8/9/05	1420	12	9	3								DO MS/MSD
6. 8	05-MW10-S	GW		X	8/9/05	1610	4	3	1								
7. 9	05-MW05-I	GW		X	8/10/05	1240	4	3	1								
8. 10	05-MW05-S	GW		X	8/10/05	1520	4	3	1								
9. 11	FB-081005	Aq		X	8/10/05	1450	4	3	1								Lab supplied DI Water For Blank
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. Charles Hugo	8/10/05 1830	1.
RELINQUISHED BY: 2.	DATE/TIME:	RECEIVED BY: 2.
RELINQUISHED BY: 3. Fedex	DATE/TIME: 920 8/11/05	RECEIVED FOR LAB BY: 3. Jim Munoz

Conditions of bottles or coolers at receipt: ☒ Compliant ☐ Non Compliant
MeOH extraction requires an additional 4 oz jar for percent solid.
Comments: Laboratory Supplied Trip Blank TB-080905
Lab supplied water For FB-081005

Cooler Temp. 4°C
Ice in Cooler?: Yes

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ HAND DELIVERED ☒ OVERNIGHT
CHEMTECH: ☐ PICKED UP ☐ OVERNIGHT

Shipment Complete: ☒ YES ☐ NO

Revision 4/2005

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

Shipped Via Federal Express Air Bill No 8455 3266 2928

CHEMTECH

CASE NARRATIVE

Tetra Tech NUS, Inc.
Project Name: NAS JRB Willow Grove
Project # N/A
Chemtech Project # T4162

A. Number of Samples and Date of Receipt:
11 Water samples were received on 8/11/05.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: SVOCMS Group1, and VOCMS Group1. This data package contains results for VOCMS Group1.

C. Analytical Techniques:
The analysis performed on instrument MSVOA G were done using GC column RTX624, which is 20 meters, 0.18 ID, 1.0 df, Restek Cat. #40924. The Trap was supplied by OI Analytical, OI #10 Trap , OI Eclipse 4660 Concentrator. The analysis performed on instrument MSVOA F were done using GC column RTX624, which is 75 meters, 0.53 ID, 3.0 df, Restek Cat. #10974. The Trap was supplied by Supelco, VOCARB 3000, Tekmar 2000 Concentrator.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries met the acceptable criteria.
The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.
The MS recoveries met the requirements for all compounds except for 1,1-Dichloroethene.
The MSD recoveries met the acceptable requirements except for 1,1-Dichloroethene.
The RPD recoveries met criteria.
The Blank Spike met requirements for all samples.
The Blank analysis indicated presence of Methylene Chloride due to possible lab contamination.
The Calibration met the requirements except for vinyl chloride in file id VG082002.D But no hit in the samples
The Tuning criteria met requirements.

E. Additional Comments:
Samples 05-MW10-SI and FB-08100 were diluted due to high concentrations.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Chemtech Contract: TETR04

Lab Code: CHEM Case No.: T4162 SAS No.: T4162 SDG No.: T4162

Instrument ID: MSVOAG Calibration Date/Time: 8/19/2005 05:38

Lab File ID: VG081902.D Init. Calib. Date(s): 8/18/2005 8/18/2005

Heated Purge: (Y/N) N Init. Calib. Time(s): 17:44 21:14

GC Column: RTX624 ID: 0.18 (mm)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.562	0.474		-15.7	
Chloromethane	1.204	1.219	0.100	1.2	
Vinyl Chloride	1.077	1.059		-1.7	20.0
Bromomethane	0.670	0.642		-4.2	
Chloroethane	0.537	0.509		-5.2	
Trichlorofluoromethane	0.982	0.876		-10.8	
1,1,2-Trichlorotrifluoroethane	0.773	0.634		-18.0	
1,1-Dichloroethene	0.769	0.740		-3.8	20.0
Acetone	0.059	0.054		-8.5	
Carbon Disulfide	2.269	2.356		3.8	
Methyl tert-butyl Ether	1.489	1.479		-0.7	
Methyl Acetate	0.328	0.354		7.9	
Methylene Chloride	0.787	0.851		8.1	
trans-1,2-Dichloroethene	0.831	0.876		5.4	
1,1-Dichloroethane	1.585	1.684	0.100	6.2	
Cyclohexane	1.321	1.108		-16.1	
2-Butanone	0.097	0.100		3.1	
Carbon Tetrachloride	0.696	0.637		-8.5	
cis-1,2-Dichloroethene	0.954	0.926		-2.9	
Chloroform	1.606	1.527		-4.9	20.0
1,1,1-Trichloroethane	0.950	0.932		-1.9	
Methylcyclohexane	0.693	0.519		-25.1	
Benzene	1.791	1.720		-4.0	
1,2-Dichloroethane	0.496	0.415		-16.3	
Trichloroethene	0.520	0.514		-1.2	
1,2-Dichloropropane	0.503	0.495		-1.6	20.0
Bromodichloromethane	0.591	0.593		0.3	
4-Methyl-2-Pentanone	0.267	0.268		0.4	
Toluene	0.823	0.783		-4.9	20.0
t-1,3-Dichloropropene	0.421	0.373		-11.4	
cis-1,3-Dichloropropene	0.533	0.505		-5.3	
1,1,2-Trichloroethane	0.229	0.203		-11.4	
2-Hexanone	0.184	0.188		2.2	
Dibromochloromethane	0.285	0.254		-10.9	
1,2-Dibromoethane	0.244	0.211		-13.5	
Tetrachloroethene	0.640	0.657		2.7	
Chlorobenzene	1.175	1.091	0.300	-7.1	
Ethyl Benzene	0.629	0.562		-10.7	20.0
m&p-Xylenes	0.321	0.740		130.5	
o-Xylene	0.746	0.729		-2.3	
Styrene	1.223	1.199		-2.0	

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Chemtech Contract: TETR04

Lab Code: CHEM Cas No.: T4162 SAS No.: T4162 SDG No.: T4162

Instrument ID: MSVOAG Calibration Date/Time: 8/19/2005 05:38

Lab File ID: VG081902.D Init. Calib. Date(s): 8/18/2005 8/18/2005

Heated Purge: (Y/N) N Init. Calib. Time(s): 17:44 21:14

GC Column: RTX624 ID: 0.18 (mm)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX%D
Bromoform	0.277	0.224	0.100	-19.1	
Isopropylbenzene	3.428	3.171		-7.5	
1,1,2,2-Tetrachloroethane	0.673	0.554	0.300	-17.7	
1,3-Dichlorobenzene	1.667	1.579		-5.3	
1,4-Dichlorobenzene	1.805	1.704		-5.6	
1,2-Dichlorobenzene	1.486	1.324		-10.9	
1,2-Dibromo-3-Chloropropane	0.096	0.110		14.6	
1,2,4-Trichlorobenzene	1.161	0.978		-15.8	
1,2-Dichloroethane-d4	0.581	0.643		10.7	
Dibromofluoromethane	0.441	0.429		-2.7	
Toluene-d8	0.900	0.913		1.4	
4-Bromofluorobenzene	0.379	0.499		31.7	

All other compounds must meet a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Chemtech Contract: TETR04

Lab Code: CHEM Case No.: T4162 SAS No.: T4162 SDG No.: T4162

Instrument ID: MSVOAG Calibration Date/Time: 8/20/2005 08:29

Lab File ID: VG082002.D Init. Calib. Date(s): 8/18/2005 8/18/2005

Heated Purge: (Y/N) N Init. Calib. Time(s): 17:44 21:14

GC Column: RTX624 ID: 0.18 (mm)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.562	0.649		15.5	
Chloromethane	1.204	1.829	0.100	51.9	
Vinyl Chloride	1.077	1.503		39.6	20.0
Bromomethane	0.670	0.727		8.5	
Chloroethane	0.537	0.596		11.0	
Trichlorofluoromethane	0.982	0.970		-1.2	
1,1,2-Trichlorotrifluoroethane	0.773	0.766		-0.9	
1,1-Dichloroethene	0.769	0.875		13.8	20.0
Acetone	0.059	0.079		33.9	
Carbon Disulfide	2.269	3.006		32.5	
Methyl tert-butyl Ether	1.489	1.898		27.5	
Methyl Acetate	0.328	0.528		61.0	
Methylene Chloride	0.787	1.051		33.5	
trans-1,2-Dichloroethene	0.831	1.178		41.8	
1,1-Dichloroethane	1.585	2.100	0.100	32.5	
Cyclohexane	1.321	1.415		7.1	
2-Butanone	0.097	0.122		25.8	
Carbon Tetrachloride	0.696	0.611		-12.2	
cis-1,2-Dichloroethene	0.954	1.138		19.3	
Chloroform	1.606	1.848		15.1	20.0
1,1,1-Trichloroethane	0.950	1.167		22.8	
Methylcyclohexane	0.693	0.668		-3.6	
Benzene	1.791	2.216		23.7	
1,2-Dichloroethane	0.496	0.528		6.5	
Trichloroethene	0.520	0.671		29.0	
1,2-Dichloropropane	0.503	0.593		17.9	20.0
Bromodichloromethane	0.591	0.670		13.4	
4-Methyl-2-Pentanone	0.267	0.340		27.3	
Toluene	0.823	0.981		19.2	20.0
t-1,3-Dichloropropene	0.421	0.497		18.1	
cis-1,3-Dichloropropene	0.533	0.603		13.1	
1,1,2-Trichloroethane	0.229	0.247		7.9	
2-Hexanone	0.184	0.255		38.6	
Dibromochloromethane	0.285	0.370		29.8	
1,2-Dibromoethane	0.244	0.300		23.0	
Tetrachloroethene	0.640	0.712		11.3	
Chlorobenzene	1.175	1.330	0.300	13.2	
Ethyl Benzene	0.629	0.723		14.9	20.0
m&p-Xylenes	0.321	0.908		182.9	
o-Xylene	0.746	0.891		19.4	
Styrene	1.223	1.478		20.9	

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Chemtech Contract: TETR04

Lab Code: CHEM Case No.: T4162 SAS No.: T4162 SDG No.: T4162

Instrument ID: MSVOAG Calibration Date/Time: 8/20/2005 08:29

Lab File ID: VG082002.D Init. Calib. Date(s): 8/18/2005 8/18/2005

Heated Purge: (Y/N) N Init. Calib. Time(s): 17:44 21:14

GC Column: RTX624 ID: 0.18 (mm)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX%D
Bromoform	0.277	0.275	0.100	-0.7	
Isopropylbenzene	3.428	4.337		26.5	
1,1,2,2-Tetrachloroethane	0.673	0.515	0.300	-23.5	
1,3-Dichlorobenzene	1.667	1.905		14.3	
1,4-Dichlorobenzene	1.805	2.066		14.5	
1,2-Dichlorobenzene	1.486	1.576		6.1	
1,2-Dibromo-3-Chloropropane	0.096	0.090		-6.3	
1,2,4-Trichlorobenzene	1.161	1.141		-1.7	
1,2-Dichloroethane-d4	0.581	0.571		-1.7	
Dibromofluoromethane	0.441	0.397		-10.0	
Toluene-d8	0.900	0.974		8.2	
4-Bromofluorobenzene	0.379	0.461		21.6	

All other compounds must meet a minimum RRF of 0.010.

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	NAS JRB Willow Grove	Date Received:	
Client Sample ID:	VBLK03	SDG No.:	T4162
Lab Sample ID:	VBF0823W2	Matrix:	WATER
Analytical Method:	8260-Low	% Moisture:	100
Sample Wt/Wol:	25.0 Units: mL	Soil Extract Vol:	uL
Soil Aliquot Vol:	uL		

File ID:	Dilution:	Date Analyzed	Analytical Batch ID
VF082304.D	1	8/23/2005	VF082005

CAS Number	Parameter	Conc.	Qualifier	RL	MDL	Units
TARGETS						
75-71-8	Dichlorodifluoromethane	0.12	U	1.0	0.12	ug/L
74-87-3	Chloromethane	0.08	U	1.0	0.08	ug/L
75-01-4	Vinyl chloride	0.09	U	1.0	0.09	ug/L
74-83-9	Bromomethane	0.18	U	1.0	0.18	ug/L
75-00-3	Chloroethane	0.46	U	1.0	0.46	ug/L
75-69-4	Trichlorofluoromethane	0.10	U	1.0	0.10	ug/L
76-13-1	1,1,2-Trichlorotrifluoroethane	0.13	U	1.0	0.13	ug/L
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L
67-64-1	Acetone	1.6	U	5.0	1.6	ug/L
75-15-0	Carbon disulfide	0.11	U	1.0	0.11	ug/L
1634-04-4	Methyl tert-butyl Ether	0.22	U	1.0	0.22	ug/L
79-20-9	Methyl Acetate	0.16	U	1.0	0.16	ug/L
75-09-2	Methylene Chloride	0.69	J	1.0	0.42	ug/L
156-60-5	trans-1,2-Dichloroethene	0.10	U	1.0	0.10	ug/L
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L
110-82-7	Cyclohexane	0.15	U	1.0	0.15	ug/L
78-93-3	2-Butanone	0.23	U	5.0	0.23	ug/L
56-23-5	Carbon Tetrachloride	0.16	U	1.0	0.16	ug/L
156-59-2	cis-1,2-Dichloroethene	0.09	U	1.0	0.09	ug/L
67-66-3	Chloroform	0.16	U	1.0	0.16	ug/L
71-55-6	1,1,1-Trichloroethane	0.16	U	1.0	0.16	ug/L
108-87-2	Methylcyclohexane	0.14	U	1.0	0.14	ug/L
71-43-2	Benzene	0.15	U	1.0	0.15	ug/L
107-06-2	1,2-Dichloroethane	0.13	U	1.0	0.13	ug/L
79-01-6	Trichloroethene	0.12	U	1.0	0.12	ug/L
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L
75-27-4	Bromodichloromethane	0.14	U	1.0	0.14	ug/L
108-10-1	4-Methyl-2-Pentanone	0.46	U	5.0	0.46	ug/L
108-88-3	Toluene	0.11	U	1.0	0.11	ug/L
10061-02-6	t-1,3-Dichloropropene	0.10	U	1.0	0.10	ug/L
10061-01-5	cis-1,3-Dichloropropene	0.12	U	1.0	0.12	ug/L
79-00-5	1,1,2-Trichloroethane	0.11	U	1.0	0.11	ug/L

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound

Chemtech

Matrix Spike/Matrix Spike Duplicate Summary
SW-846

SDG No.: T4162

Client: Tetra Tech NUS, Inc.

Analytical Method: EPA SW846 8260 - LOW

Lab Sample ID	Parameter	Spike	Sample Result	Result	Rec	RPD	Qual	Limits Low	Limits High	Limits RPD
Client Sample ID:	**05-MW10-IMS**									
T4162-06MS	1,1-Dichloroethene	10	0.0	15	150		*	68	131	
	Benzene	10	0.0	11	110			74	125	
	Trichloroethene	10	0.0	12	120			76	123	
	Toluene	10	0.0	11	110			73	129	
	Chlorobenzene	10	0.0	11	110			72	135	
Client Sample ID:	**05-MW10-IMSD**									
T4162-07MSD	1,1-Dichloroethene	10	0.0	15	150	0	*	68	131	21
	Benzene	10	0.0	10	100	10		74	125	17
	Trichloroethene	10	0.0	12	120	0		76	123	20
	Toluene	10	0.0	11	110	0		73	129	20
	Chlorobenzene	10	0.0	10	100	10		72	135	21

MWK
9/20/05

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Chemtech Contract: TETR04

Lab Code: CHEM Case No.: T4162 SAS No.: T4162 SDG No.: T4162

Instrument ID: MSVOAF Calibration Date(s): 8/20/2005 8/20/2005

Heated Purge: (Y/N) N Calibration Time(s): 11:13 13:53

GC Column: RTX624 ID: 0.53 (mm)

LAB FILE ID: RRF001 = VF082002.D RRF004 = VF082003.D

RRF010 = VF082004.D RRF020 = VF082005.D RRF040 = VF082006.D

COMPOUND	RRF001	RRF004	RRF010	RRF020	RRF040	$\overline{RRF}$	% RSD	
Dichlorodifluoromethane	0.542	0.527	0.517	0.502	0.495	0.517	3.7	
Chloromethane *	0.333	0.317	0.326	0.315	0.320	0.322	2.3	*
Vinyl Chloride *	0.429	0.424	0.431	0.405	0.392	0.416	4.1	*
Bromomethane	0.262	0.237	0.223	0.215	0.204	0.228	9.8	
Chloroethane	0.240	0.222	0.177	0.130	0.115	0.177	31.0	
Trichlorofluoromethane	0.750	0.691	0.672	0.653	0.611	0.675	7.6	
1,1,2-Trichlorotrifluor	0.799	0.767	0.741	0.729	0.690	0.745	5.5	
1,1-Dichloroethene *	0.428	0.410	0.395	0.385	0.362	0.396	6.3	*
Acetone	0.024	0.019	0.017	0.016	0.015	0.018	19.8	
Carbon Disulfide	1.224	1.237	1.214	1.178	1.115	1.194	4.1	
Methyl tert-butyl Ether	0.476	0.504	0.465	0.493	0.457	0.479	4.1	
Methyl Acetate	0.093	0.088	0.079	0.083	0.078	0.084	7.5	
Methylene Chloride	0.499	0.371	0.326	0.328	0.309	0.367	21.1	
trans-1,2-Dichloroethen	0.451	0.450	0.434	0.440	0.432	0.441	2.0	
1,1-Dichloroethane *	0.747	0.752	0.731	0.744	0.707	0.736	2.5	*
Cyclohexane	0.838	0.850	0.805	0.791	0.742	0.805	5.3	
2-Butanone	0.060	0.068	0.062	0.066	0.059	0.063	6.1	
Carbon Tetrachloride *	0.505	0.575	0.467	0.438	0.429	0.483	12.3	*
cis-1,2-Dichloroethene	0.445	0.449	0.439	0.447	0.436	0.443	1.2	
Chloroform *	0.748	0.787	0.759	0.774	0.746	0.763	2.3	*
1,1,1-Trichloroethane *	0.733	0.744	0.716	0.723	0.713	0.726	1.8	*
Methylcyclohexane	0.678	0.655	0.632	0.624	0.596	0.637	4.9	
Benzene *	1.050	0.981	0.959	0.942	0.903	0.967	5.6	*
1,2-Dichloroethane *	0.181	0.185	0.168	0.175	0.166	0.175	4.7	*
Trichloroethene *	0.391	0.366	0.368	0.372	0.362	0.372	3.0	*
1,2-Dichloropropane *	0.340	0.323	0.308	0.311	0.288	0.314	6.1	*
Bromodichloromethane *	0.376	0.392	0.381	0.388	0.368	0.381	2.5	*
4-Methyl-2-Pentanone	0.083	0.090	0.083	0.087	0.075	0.084	6.7	
Toluene *	0.729	0.717	0.702	0.694	0.660	0.700	3.8	*
t-1,3-Dichloropropene *	0.257	0.283	0.272	0.280	0.260	0.270	4.3	*
cis-1,3-Dichloropropene *	0.401	0.421	0.405	0.421	0.388	0.407	3.5	*
1,1,2-Trichloroethane *	0.179	0.184	0.174	0.175	0.158	0.174	5.6	*
2-Hexanone	0.051	0.055	0.053	0.056	0.048	0.053	6.1	
Dibromochloromethane *	0.219	0.242	0.232	0.244	0.232	0.234	4.3	*
1,2-Dibromoethane	0.195	0.211	0.203	0.207	0.192	0.202	4.0	
T trachloroethene *	0.413	0.385	0.386	0.377	0.371	0.386	4.2	*
Chlorobenzene *	1.027	1.003	0.967	0.989	0.942	0.986	3.3	*

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

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Chemtech Contract: TETR04

Lab Code: CHEM Case No.: T4162 SAS No.: T4162 SDG No.: T4162

Instrument ID: MSVOAF Calibration Date/Time: 8/23/2005 11:35

Lab File ID: VF082302.D Init. Calib. Date(s): 8/20/2005 8/20/2005

Heated Purge: (Y/N) N Init. Calib. Time(s): 11:13 13:53

GC Column: RTX624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF050	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	0.517	0.427		-17.4	
Chloromethane	0.322	0.254	0.100	-21.1	
Vinyl Chloride	0.416	0.373		-10.3	20.0
Bromomethane	0.228	0.217		-4.8	
Chloroethane	0.177	0.181		2.3	
Trichlorofluoromethane	0.675	0.638		-5.5	
1,1,2-Trichlorotrifluoroethane	0.745	0.747		0.3	
1,1-Dichloroethene	0.396	0.389		-1.8	20.0
Acetone	0.018	0.015		-16.7	
Carbon Disulfide	1.194	1.190		-0.3	
Methyl tert-butyl Ether	0.479	0.451		-5.8	
Methyl Acetate	0.084	0.076		-9.5	
Methylene Chloride	0.367	0.326		-11.2	
trans-1,2-Dichloroethene	0.441	0.441		0.0	
1,1-Dichloroethane	0.736	0.701	0.100	-4.8	
Cyclohexane	0.805	0.759		-5.7	
2-Butanone	0.063	0.056		-11.1	
Carbon Tetrachloride	0.483	0.487		0.8	
cis-1,2-Dichloroethene	0.443	0.423		-4.5	
Chloroform	0.763	0.707		-7.3	20.0
1,1,1-Trichloroethane	0.726	0.690		-5.0	
Methylcyclohexane	0.637	0.632		-0.8	
Benzene	0.967	0.955		-1.2	
1,2-Dichloroethane	0.175	0.169		-3.4	
Trichloroethene	0.372	0.373		0.3	
1,2-Dichloropropane	0.314	0.302		-3.8	20.0
Bromodichloromethane	0.381	0.372		-2.4	
4-Methyl-2-Pentanone	0.084	0.077		-8.3	
Toluene	0.700	0.703		0.4	20.0
t-1,3-Dichloropropene	0.270	0.266		-1.5	
cis-1,3-Dichloropropene	0.407	0.403		-1.0	
1,1,2-Trichloroethane	0.174	0.168		-3.4	
2-Hexanone	0.053	0.049		-7.5	
Dibromochloromethane	0.234	0.233		-0.4	
1,2-Dibromoethane	0.202	0.202		0.0	
Tetrachloroethene	0.386	0.421		9.1	
Chlorobenzene	0.986	1.012	0.300	2.6	
Ethyl Benzene	0.567	0.583		2.8	20.0
m&p-Xylenes	0.685	0.716		4.5	
o-Xylene	0.631	0.654		3.6	
Styrene	1.024	1.054		2.9	

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Chemtech Contract: TETR04

Lab Code: CHEM Case No.: T4162 SAS No.: T4162 SDG No.: T4162

Instrument ID: MSVOAG Calibration Date(s): 8/18/2005 8/18/2005

Heated Purge: (Y/N) N Calibration Time(s): 17:44 21:14

GC Column: RTX624 ID: 0.18 (mm)

LAB FILE ID: RRF001 = VG081813.D RRF004 = VG081808.D

RRF010 = VG081809.D RRF020 = VG081810.D RRF040 = VG081811.D

COMPOUND	RRF001	RRF004	RRF010	RRF020	RRF040	$\overline{RRF}$	% RSD	
Dichlorodifluoromethane	0.591	0.599	0.588	0.490	0.540	0.562	8.2	
Chloromethane *	1.110	1.227	1.285	1.217	1.182	1.204	5.3	*
Vinyl Chloride *	1.176	1.133	1.088	1.009	0.981	1.077	7.6	*
Bromomethane	0.806	0.618	0.649	0.730	0.545	0.670	15.1	
Chloroethane	0.635	0.659	0.657	0.486	0.250	0.537	32.8	
Trichlorofluoromethane	1.092	0.943	0.922	0.884	1.069	0.982	9.4	
1,1,2-Trichlorotrifluor	0.651	0.836	0.775	0.808	0.794	0.773	9.3	
1,1-Dichloroethene *	0.953	0.896	0.835	0.771	0.390	0.769	28.9	*
Acetone	0.104	0.043	0.045	0.056	0.046	0.059	43.7	
Carbon Disulfide	2.136	2.825	2.546	2.458	1.378	2.269	24.5	
Methyl tert-butyl Ether	1.376	1.575	1.554	1.563	1.379	1.489	6.9	
Methyl Acetate	0.521	0.276	0.300	0.292	0.253	0.328	33.3	
Methylene Chloride	0.785	0.938	0.897	0.809	0.507	0.787	21.4	
trans-1,2-Dichloroethen	0.678	0.883	0.945	0.904	0.747	0.831	13.7	
1,1-Dichloroethane *	1.414	1.739	1.725	1.675	1.372	1.585	11.2	*
Cyclohexane	1.307	1.430	1.350	1.271	1.246	1.321	5.5	
2-Butanone	0.093	0.099	0.095	0.109	0.088	0.097	8.1	
Carbon Tetrachloride *	0.652	0.733	0.677	0.738	0.678	0.696	5.4	*
cis-1,2-Dichloroethene	1.000	0.999	0.907	0.913	0.952	0.954	4.7	
Chloroform *	1.755	1.608	1.529	1.545	1.593	1.606	5.6	*
1,1,1-Trichloroethane *	0.706	1.087	1.058	0.959	0.941	0.950	15.8	*
Methylcyclohexane	0.722	0.700	0.637	0.687	0.720	0.693	5.0	
Benzene *	1.544	1.903	1.797	1.919	1.791	1.791	8.4	*
1,2-Dichloroethane *	0.570	0.528	0.465	0.484	0.434	0.496	10.8	*
Trichloroethene *	0.582	0.479	0.472	0.520	0.549	0.520	9.0	*
1,2-Dichloropropane *	0.425	0.535	0.492	0.529	0.535	0.503	9.4	*
Bromodichloromethane *	0.559	0.630	0.567	0.603	0.596	0.591	4.9	*
4-Methyl-2-Pentanone	0.250	0.261	0.263	0.284	0.277	0.267	5.1	
Toluene *	0.709	0.807	0.818	0.844	0.938	0.823	10.0	*
t-1,3-Dichloropropene *	0.384	0.389	0.422	0.445	0.465	0.421	8.3	*
cis-1,3-Dichloropropene *	0.459	0.507	0.540	0.562	0.599	0.533	10.0	*
1,1,2-Trichloroethane *	0.271	0.250	0.199	0.197	0.227	0.229	14.0	*
2-Hexanone	0.144	0.201	0.177	0.197	0.200	0.184	13.2	
Dibromochloromethane *	0.290	0.282	0.265	0.288	0.299	0.285	4.4	*
1,2-Dibromoethane	0.314	0.245	0.221	0.213	0.229	0.244	16.7	
Tetrachloroethene *	0.560	0.596	0.644	0.662	0.740	0.640	10.7	*
Chlorobenzene *	1.194	1.166	1.117	1.178	1.222	1.175	3.3	*

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