TETRA TECH NUS

PHIL-19491

TO:	RUSS TURNER	DATE:	SEPTEMBER 22, 2005
FROM:	MEGAN N. RITCHIE	COPIES:	FILE

SUBJECT: ORGANIC DATA VALIDATION – VOLATILES AND 1,4-DIOXANE
NAS JRB WILLOW GROVE, PENNSYLVANIA
SDG NO. T4189

SAMPLES: 10/Aqueous/

05-MW06-I	05-MW08-SI	05-MW11-S	TB-081105
05-MW06-S	05-MW11-D	DUP-01	
05-MW08-S	05-MW11-I	RB-081205	

OVERVIEW

The sample set for NAS JRB Willow Grove Site 5 – Willow Grove, PA, SDG T4189 consists of eight aqueous environmental samples (designated 05-MW-) and two field quality control (QC) blanks (designated FB- and TB-). One field duplicate pair (05-MW08-SI and DUP-01) were included in this sample set. All samples were analyzed for target compound list (TCL) Volatile Organic Compounds (VOCs) and 1,4-dioxane except for 05-MW08-S and the trip blank. These samples were analyzed for VOCs only.

The samples were collected by Tetra Tech NUS on August 11 and 12, 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.

MAJOR PROBLEMS

- The initial and continuing calibration for acetone exhibited relative response factors (RRFs) below 0.05. Non-detected results for acetone in the associated samples were qualified as unusable (UR).

MINOR PROBLEMS

- 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. No qualifications were made because these compounds were not detected in the associated environmental samples.

The percent relative standard deviation (%RSD) for chloroethane exceeded the QC criteria of 30% in the initial calibration. No qualifications were made because there were no detections of this compound in the reported results.

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

The field duplicate pair results were within QC criteria. There were no positive results for either sample.

Sample 05-MW08-SI was inadvertently assigned as 05-MW08-I on the chain-of-custody (COC). The laboratory corrected the name of this sample as per Russ Turner's instructions.

EXECUTIVE SUMMARY

Laboratory Performance: Acetone exhibited RRFs below the QC criteria. One compound exceeded initial calibration RSD criteria.

Other Factors Affecting Data Quality: Methylene chloride was detected in the field QC blanks.

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: T4189 MEDIA: WATER DATA FRACTION: OV

nsample	05-MW06-I
samp_date	8/12/2005
lab_id	T4189-05
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	UR	C
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	05-MW06-I
samp_date	8/12/2005
lab_id	T4189-05
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	U	
METHYL ACETATE	0.16	U	
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-MW06-S
samp_date	8/12/2005
lab_id	T4189-06
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	UR	C
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	

PROJ_NO: 2192

SDG: T4189 MEDIA: WATER DATA FRACTION: OV

nsample	05-MW06-S
samp_date	8/12/2005
lab_id	T4189-06
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	U	
METHYL ACETATE	0.16	U	
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	0.77	J	
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-MW08-S
samp_date	8/12/2005
lab_id	T4189-08
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	UR	C
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	05-MW08-S
samp_date	8/12/2005
lab_id	T4189-08
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	U	
METHYL ACETATE	0.16	U	
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	

PROJ_NO: 2192

SDG: T4189 MEDIA: WATER DATA FRACTION: OV

nsample	05-MW08-SI
samp_date	8/12/2005
lab_id	T4189-07
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	DUP-01

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	UR	C
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	05-MW08-SI
samp_date	8/12/2005
lab_id	T4189-07
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	DUP-01

Parameter	Result	Val Qual	Qual Code
DICHLORODIFLUOROMETHANE	0.12	U	
ETHYLBENZENE	0.11	U	
ISOPROPYLBENZENE	0.12	U	
M+P-XYLENES	0.24	U	
METHYL ACETATE	0.16	U	
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-MW11-D
samp_date	8/11/2005
lab_id	T4189-02
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	UR	C
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	

PROJ_NO: 2192

SDG: T4189 MEDIA: WATER DATA FRACTION: OV

nsample	05-MW11-D
samp_date	8/11/2005
lab_id	T4189-02
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	U	
METHYL ACETATE	0.16	U	
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-MW11-I
samp_date	8/11/2005
lab_id	T4189-03
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	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	UR	C
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	05-MW11-I
samp_date	8/11/2005
lab_id	T4189-03
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	U	
METHYL ACETATE	0.16	U	
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	

PROJ_NO: 2192

SDG: T4189 MEDIA: WATER DATA FRACTION: OV

nsample	05-MW11-S
samp_date	8/11/2005
lab_id	T4189-04
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	UR	C
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	05-MW11-S
samp_date	8/11/2005
lab_id	T4189-04
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	U	
METHYL ACETATE	0.16	U	
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	DUP-01
samp_date	8/12/2005
lab_id	T4189-10
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	05-MW08-SI

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	UR	C
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	

PROJ_NO: 2192

SDG: T4189 MEDIA: WATER DATA FRACTION: OV

nsample	DUP-01
samp_date	8/12/2005
lab_id	T4189-10
qc_type	NM
units	UG/L
Pct_Solids	0.0
DUP_OF:	05-MW08-SI

Parameter	Result	Val Qual	Qual Code
DICHLORODIFLUOROMETHANE	0.12	U	
ETHYLBENZENE	0.11	U	
ISOPROPYLBENZENE	0.12	U	
M+P-XYLENES	0.24	U	
METHYL ACETATE	0.16	U	
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	RB-081205
samp_date	8/12/2005
lab_id	T4189-09
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	UR	C
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	RB-081205
samp_date	8/12/2005
lab_id	T4189-09
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	U	
METHYL ACETATE	0.16	U	
METHYL CYCLOHEXANE	0.14	U	
METHYL TERT-BUTYL ETHER	0.22	U	
METHYLENE CHLORIDE	30		
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: T4189 MEDIA: WATER DATA FRACTION: OV

nsample	TB-081105
samp_date	8/11/2005
lab_id	T4189-01
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	UR	C
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	TB-081105
samp_date	8/11/2005
lab_id	T4189-01
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	U	
METHYL ACETATE	0.16	U	
METHYL CYCLOHEXANE	0.14	U	
METHYL TERT-BUTYL ETHER	0.22	U	
METHYLENE CHLORIDE	2		
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: T4189 MEDIA: WATER DATA FRACTION: OS

nsample	05-MW06-I	nsample	05-MW06-S	nsample	05-MW08-SI
samp_date	8/12/2005	samp_date	8/12/2005	samp_date	8/12/2005
lab_id	T4189-05	lab_id	T4189-06	lab_id	T4189-07
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:	DUP-01

Parameter	Result	Val Qual	Qual Code
1,4-DIOXANE	2	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: T4189 MEDIA: WATER DATA FRACTION: OS

nsample	05-MW11-D
samp_date	8/11/2005
lab_id	T4189-02
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-MW11-I
samp_date	8/11/2005
lab_id	T4189-03
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-MW11-S
samp_date	8/11/2005
lab_id	T4189-04
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: T4189 MEDIA: WATER DATA FRACTION: OS

nsample	DUP-01	nsample	RB-081205
samp_date	8/12/2005	samp_date	8/12/2005
lab_id	T4189-10	lab_id	T4189-09
qc_type	NM	qc_type	NM
units	UG/L	units	UG/L
Pct_Solids	0.0	Pct_Solids	0.0
DUP_OF:	05-MW08-SI	DUP_OF:	

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

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

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)

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.
U	-	Value is a non-detected result as reported by the laboratory.
UL	-	Non-detected result is considered biased low due to exceedance of technical quality control criteria.

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:	8/12/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	05-MW06-I	SDG No.:	T4189
Lab Sample ID:	T4189-05	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
VF082014.D	1	8/20/05	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	0.42	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:	8/12/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	05-MW06-I	SDG No.:	T4189
Lab Sample ID:	T4189-05	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
VF082014.D	1	8/20/05	VF082005

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	10.85	109 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	10.41	104 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	10.33	103 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.9	109 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	2492115	7.96			
540-36-3	1,4-Difluorobenzene	3809397	9.28			
3114-55-4	Chlorobenzene-d5	3199047	15.23			
3855-82-1	1,4-Dichlorobenzene-d4	1601716	20.58			

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:	8/12/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	05-MW06-S	SDG No.:	T4189
Lab Sample ID:	T4189-06	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
VF082015.D	1	8/20/05	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	0.42	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:	8/12/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	05-MW06-S	SDG No.:	T4189
Lab Sample ID:	T4189-06	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
VF082015.D	1	8/20/05	VF082005

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	0.77	J	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	10.51	105 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	10.25	103 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	9.86	99 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.59	106 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	2564158	7.96			
540-36-3	1,4-Difluorobenzene	3883176	9.28			
3114-55-4	Chlorobenzene-d5	3279161	15.23			
3855-82-1	1,4-Dichlorobenzene-d4	1684294	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:	8/12/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	05-MW08-S	SDG No.:	T4189
Lab Sample ID:	T4189-08	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
VF082206.D	1	8/22/05	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	0.42	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:	8/12/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	05-MW08-S	SDG No.:	T4189
Lab Sample ID:	T4189-08	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
VF082206.D	1	8/22/05	VF082005

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	9.93	99 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	9.66	97 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	9.85	99 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.07	101 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	2993999	7.96			
540-36-3	1,4-Difluorobenzene	4385280	9.28			
3114-55-4	Chlorobenzene-d5	3587179	15.24			
3855-82-1	1,4-Dichlorobenzene-d4	1812802	20.58			

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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:	8/12/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	05-MW08-SI	SDG No.:	T4189
Lab Sample ID:	T4189-07	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
VF082205.D	1	8/22/05	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	0.42	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:	8/12/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	05-MW08-SI	SDG No.:	T4189
Lab Sample ID:	T4189-07	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
VF082205.D	1	8/22/05	VF082005

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	9.6	96 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	10.02	100 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	9.99	100 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	3093662	7.95			
540-36-3	1,4-Difluorobenzene	4489233	9.28			
3114-55-4	Chlorobenzene-d5	3657480	15.23			
3855-82-1	1,4-Dichlorobenzene-d4	1834429	20.59			

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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:	8/11/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	05-MW11-D	SDG No.:	T4189
Lab Sample ID:	T4189-02	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
VF082011.D	1	8/20/05	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	0.42	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:	8/11/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	05-MW11-D	SDG No.:	T4189
Lab Sample ID:	T4189-02	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
VF082011.D	1	8/20/05	VF082005

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	10.17	102 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	9.83	98 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	9.78	98 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.15	102 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	2270399	7.96			
540-36-3	1,4-Difluorobenzene	3356922	9.28			
3114-55-4	Chlorobenzene-d5	2820620	15.23			
3855-82-1	1,4-Dichlorobenzene-d4	1400220	20.58			

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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:	8/11/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	05-MW11-I	SDG No.:	T4189
Lab Sample ID:	T4189-03	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
VF082012.D	1	8/20/05	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	0.42	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:	8/11/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	05-MW11-I	SDG No.:	T4189
Lab Sample ID:	T4189-03	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
VF082012.D	1	8/20/05	VF082005

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	9.82	98 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	9.98	100 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	10.13	101 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.5	105 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	2641178	7.96			
540-36-3	1,4-Difluorobenzene	3853154	9.28			
3114-55-4	Chlorobenzene-d5	3241640	15.23			
3855-82-1	1,4-Dichlorobenzene-d4	1604013	20.58			

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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:	8/11/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	05-MW11-S	SDG No.:	T4189
Lab Sample ID:	T4189-04	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
VF082013.D	1	8/20/05	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	0.34	J	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	0.19	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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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:	8/11/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	05-MW11-S	SDG No.:	T4189
Lab Sample ID:	T4189-04	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
VF082013.D	1	8/20/05	VF082005

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	9.58	96 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	9.91	99 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	10.22	102 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.01	100 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	2672845	7.96			
540-36-3	1,4-Difluorobenzene	3990750	9.28			
3114-55-4	Chlorobenzene-d5	3293196	15.23			
3855-82-1	1,4-Dichlorobenzene-d4	1654603	20.58			

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E = Value Exceeds Calibration Range
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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:	8/12/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	DUP-01	SDG No.:	T4189
Lab Sample ID:	T4189-10	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
VF082208.D	1	8/22/05	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	0.42	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
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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:	8/12/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	DUP-01	SDG No.:	T4189
Lab Sample ID:	T4189-10	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
VF082208.D	1	8/22/05	VF082005

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	9.77	98 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	9.95	100 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	10.14	101 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.26	103 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	3050280	7.96			
540-36-3	1,4-Difluorobenzene	4398489	9.28			
3114-55-4	Chlorobenzene-d5	3586461	15.23			
3855-82-1	1,4-Dichlorobenzene-d4	1811386	20.58			

U = Not Detected
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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:	8/12/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	RB-081205	SDG No.:	T4189
Lab Sample ID:	T4189-09	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
VF082207.D	1	8/22/05	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	30		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
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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:	8/12/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	RB-081205	SDG No.:	T4189
Lab Sample ID:	T4189-09	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
VF082207.D	1	8/22/05	VF082005

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	9.39	94 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	9.84	98 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	10.1	101 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.19	102 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	3137594	7.95			
540-36-3	1,4-Difluorobenzene	4530693	9.28			
3114-55-4	Chlorobenzene-d5	3681641	15.23			
3855-82-1	1,4-Dichlorobenzene-d4	1886334	20.58			

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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:	8/11/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	TB-081105	SDG No.:	T4189
Lab Sample ID:	T4189-01	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
VF082010.D	1	8/20/05	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	2.0		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:	8/11/05
Project:	NAS JRB Willow Grove	Date Received:	8/13/05
Client Sample ID:	TB-081105	SDG No.:	T4189
Lab Sample ID:	T4189-01	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
VF082010.D	1	8/20/05	VF082005

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	9.26	93 %	72 - 119		SPK: 10
1868-53-7	Dibromofluoromethane	9.59	96 %	85 - 115		SPK: 10
2037-26-5	Toluene-d8	9.89	99 %	81 - 120		SPK: 10
460-00-4	4-Bromofluorobenzene	10.17	102 %	76 - 119		SPK: 10
INTERNAL STANDARDS						
363-72-4	Pentafluorobenzene	2650920	7.95			
540-36-3	1,4-Difluorobenzene	3793367	9.28			
3114-55-4	Chlorobenzene-d5	3155345	15.23			
3855-82-1	1,4-Dichlorobenzene-d4	1551742	20.58			

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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:	8/12/2005
Project:	NAS JRB Willow Grove	Date Received:	8/13/2005
Client Sample ID:	05-MW06-I	SDG No.:	T4189
Lab Sample ID:	T4189-05	Matrix:	WATER
Analytical Method:	8270	% Moisture:	100
Sample Wt/Wol:	980.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BA020563.D	1	8/17/2005	8/24/2005	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	145419	7.57			
1146-65-2	Naphthalene-d8	443475	9.98			
15067-26-2	Acenaphthene-d10	285937	13.47			
1517-22-2	Phenanthrene-d10	498219	16.47			
1719-03-5	Chrysene-d12	402191	21.80			
1520-96-3	Perylene-d12	426153	25.19			

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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:	8/12/2005
Project:	NAS JRB Willow Grove	Date Received:	8/13/2005
Client Sample ID:	05-MW06-S	SDG No.:	T4189
Lab Sample ID:	T4189-06	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
BA020564.D	1	8/17/2005	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	140602	7.56			
1146-65-2	Naphthalene-d8	428631	9.97			
15067-26-2	Acenaphthene-d10	255038	13.47			
1517-22-2	Phenanthrene-d10	459382	16.47			
1719-03-5	Chrysene-d12	394524	21.81			
1520-96-3	Perylene-d12	408352	25.19			

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MDL = Method Detection Limit
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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:	8/12/2005
Project:	NAS JRB Willow Grove	Date Received:	8/13/2005
Client Sample ID:	05-MW08-SI	SDG No.:	T4189
Lab Sample ID:	T4189-07	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
BA020565.D	1	8/17/2005	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	140584	7.57			
1146-65-2	Naphthalene-d8	399108	9.97			
15067-26-2	Acenaphthene-d10	263059	13.48			
1517-22-2	Phenanthrene-d10	445286	16.47			
1719-03-5	Chrysene-d12	404086	21.80			
1520-96-3	Perylene-d12	399448	25.19			

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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:	8/11/2005
Project:	NAS JRB Willow Grove	Date Received:	8/13/2005
Client Sample ID:	05-MW11-D	SDG No.:	T4189
Lab Sample ID:	T4189-02	Matrix:	WATER
Analytical Method:	8270	% Moisture:	100
Sample Wt/Wol:	980.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BA020560.D	1	8/17/2005	8/24/2005	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	131261	7.57			
1146-65-2	Naphthalene-d8	412551	9.97			
15067-26-2	Acenaphthene-d10	248674	13.47			
1517-22-2	Phenanthrene-d10	427649	16.47			
1719-03-5	Chrysene-d12	343996	21.81			
1520-96-3	Perylene-d12	357230	25.19			

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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:	8/11/2005
Project:	NAS JRB Willow Grove	Date Received:	8/13/2005
Client Sample ID:	05-MW11-I	SDG No.:	T4189
Lab Sample ID:	T4189-03	Matrix:	WATER
Analytical Method:	8270	% Moisture:	100
Sample Wt/Wol:	980.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BA020561.D	1	8/17/2005	8/24/2005	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	143254	7.57			
1146-65-2	Naphthalene-d8	450833	9.97			
15067-26-2	Acenaphthene-d10	273140	13.47			
1517-22-2	Phenanthrene-d10	478917	16.46			
1719-03-5	Chrysene-d12	387732	21.80			
1520-96-3	Perylene-d12	410305	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

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:	8/11/2005
Project:	NAS JRB Willow Grove	Date Received:	8/13/2005
Client Sample ID:	05-MW11-S	SDG No.:	T4189
Lab Sample ID:	T4189-04	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
BA020562.D	1	8/17/2005	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	154393	7.57			
1146-65-2	Naphthalene-d8	476727	9.97			
15067-26-2	Acenaphthene-d10	245225	13.47			
1517-22-2	Phenanthrene-d10	525302	16.47			
1719-03-5	Chrysene-d12	444363	21.80			
1520-96-3	Perylene-d12	439758	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:	8/12/2005
Project:	NAS JRB Willow Grove	Date Received:	8/13/2005
Client Sample ID:	DUP-01	SDG No.:	T4189
Lab Sample ID:	T4189-10	Matrix:	WATER
Analytical Method:	8270	% Moisture:	100
Sample Wt/Wol:	980.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BA020567.D	1	8/17/2005	8/24/2005	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	131071	7.56			
1146-65-2	Naphthalene-d8	393724	9.97			
15067-26-2	Acenaphthene-d10	248083	13.47			
1517-22-2	Phenanthrene-d10	429158	16.46			
1719-03-5	Chrysene-d12	390297	21.80			
1520-96-3	Perylene-d12	392828	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

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:	8/12/2005
Project:	NAS JRB Willow Grove	Date Received:	8/13/2005
Client Sample ID:	RB-081205	SDG No.:	T4189
Lab Sample ID:	T4189-09	Matrix:	WATER
Analytical Method:	8270	% Moisture:	100
Sample Wt/Wol:	980.0 mL	Extract Vol:	1000 uL

File ID	Dilution	Date Extracted	Date Analyzed	Analytical Batch ID
BA020566.D	1	8/17/2005	8/24/2005	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	139012	7.57			
1146-65-2	Naphthalene-d8	416431	9.97			
15067-26-2	Acenaphthene-d10	265413	13.47			
1517-22-2	Phenanthrene-d10	477670	16.46			
1719-03-5	Chrysene-d12	422457	21.80			
1520-96-3	Perylene-d12	419556	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. T4189

COC Number 053889

CLIENT INFORMATION (REPORT TO BE SENT TO:)

COMPANY: Tetra Tech NUS
ADDRESS: 600 Clark Avenue
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 9645

CLIENT BILLING INFORMATION

BILL TO: Tetra Tech NUS 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

1	2	3	4	5	6	7	8	9
40 ml VOA Vials HCl	1 Liter Amber Glass Tell 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 Ice	3	4	5	6	7	8	9	COMMENTS
1.	TB-081105	Aq		X	8/11/05	0700	3	3									Trip Blank Laboratory Supplied
2.	05-MW11-D	GW		X	8/11/05	1120	4	3	1								
3.	05-MW11-I	GW		X	8/11/05	1340	4	3	1								
4.	05-MW11-S	GW		X	8/11/05	1540	4	3	1								
5.	05-MW06-I	GW		X	8/12/05	1045	4	3	1								
6.	05-MW06-S	GW		X	8/12/05	1050	4	3	1								
7.	05-MW08-I	GW		X	8/12/05	1315	4	3	1								
8.	05-MW08-S	GW		X	8/12/05	1325	4	3	1								
9.	RB-081205	Aq		X	8/12/05	1600	4	3	1								Laboratory supplied water
10.	Dup-01	GW		X	8/12/05	1200	4	3	1								

← Specify Preservatives
A-HCl B-HNO_3
C-H_2SO_4 D-NaOH
E-ICE F-Other

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

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. [signature]	8/12/05 1730	1.
RE BY: 2.	DATE/TIME:	RECEIVED BY: 2.
RE BY: 3. [signature]	DATE/TIME: 1025 8/12/05	RECEIVED FOR LAB BY: 3. Jim Munoz

Conditions of bottles or coolers at receipt: ☒ Compliant ☐ Non Compliant Cooler Temp. 3°C
MeOH extraction requires an additional 4 oz jar for percent solid. Ice in Cooler?: yes
Comments: Trip blank TB-081105 was provided by Lab
Water for Rinsate Blank RB-081205 provided by Lab

Page 1 of 1

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

Shipment Complete: ☒ YES ☐ NO

138

CHEMTECH

CASE NARRATIVE

Tetra Tech NUS, Inc.
Project Name: NAS JRB Willow Grove
Project # N/A
Chemtech Project # T4189

A. Number of Samples and Date of Receipt:
10 Water samples were received on 8/13/05.

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 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 Blank Spike met requirements for all samples.
The Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.
The Tuning criteria met requirements.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature _____ Name: Krupa Dubey

Date: 9/2/05 Title: QA/QC

CHEMTECH

CASE NARRATIVE

Tetra Tech NUS, Inc.
Project Name: NAS JRB Willow Grove
Project # N/A
Chemtech Project # T4189

A. Number of Samples and Date of Receipt:
10 Water samples were received on 8/13/05.

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 SVOCMS Group1.

C. Analytical Techniques:
The samples were analyzed on instrument MSBNA A using GC Column RTX-5 SILMS which is 30 meters, 0.32mm ID, 0.5um df, Catalog # 12739.

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 Blank analysis did not indicate the presence of lab contamination.
The Calibration met the requirements.
The Tuning criteria met requirements.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature _____ Name: Krupa Dubey

Date: 9/12/05 Title: QA/QC

From: Turner, Russell [TurnerR@ttnus.com]
Sent: Monday, August 15, 2005 12:07 PM
To: Kurt Hummler
Cc: Dedic, Neb; Meyer, Charles
Subject: RE: NAS JRB Willow Grove

Kurt,

1. We will plan to obtain a resample for the broken sample bottle 05MW08S.

2. Item 7 from the COC form 053889 (listed as Sample 05MW08-I) was obtained from monitoring well 05MW08-SI, as the sample bottle was labeled. The id on the custody form is incorrect. Please note the correction.

Thanks,

Russ.

From: Kurt Hummler [mailto:Kurt@Chemtech.net]
Sent: Monday, August 15, 2005 10:38 AM
To: turnerr@ttnus.com
Subject: NAS JRB Willow Grove

Good morning Russell,

In reference to the samples received 8/13:

1. We received the SVOC amber liter for MW08-S broken and will be unable to analyze MW08-S for SVOCs.

2. The id listed on the chain of custody (05-MW08-I) taken on 8/12 at 13:15 doesn't match the sample label (050MW08-SI). Which is correct?

Kurt

Kurt Hummler

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

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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	
Tetrachloroethene *	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 values.
All other compounds must me t a minimum RRF of 0.010.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Chemtech Contract: TETR04

Lab Code: CTECH Case No.: T4189 SAS No.: T4189 SDG No.: T4189

Instrument ID: MSVOAF Calibration Date/Time: 8/22/05 10:55

Lab File ID: VF082202.D Init. Calib. Date(s): 8/20/05 8/20/05

Heat d 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	0.462		10.6	
Chloromethane	0.322	0.242	0.100	24.8	
Vinyl Chloride	0.416	0.376		9.6	20.0
Bromomethane	0.228	0.223		2.2	
Chloroethane	0.177	0.181		2.3	
Trichlorofluoromethane	0.675	0.654		3.1	
1,1,2-Trichlorotrifluoroethane	0.745	0.732		1.7	
1,1-Dichloroethene	0.396	0.382		3.5	20.0
Acetone	0.018	0.015		16.7	
Carbon Disulfide	1.194	1.183		0.9	
Methyl tert-butyl Ether	0.479	0.432		9.8	
Methyl Acetate	0.084	0.073		13.1	
Methylene Chloride	0.367	0.315		14.2	
trans-1,2-Dichloroethene	0.441	0.428		2.9	
1,1-Dichloroethane	0.736	0.701	0.100	4.8	
Cyclohexane	0.805	0.744		7.6	
2-Butanone	0.063	0.053		15.9	
Carbon Tetrachloride	0.483	0.483		0.0	
cis-1,2-Dichloroethene	0.443	0.407		8.1	
Chloroform	0.763	0.680		10.9	20.0
1,1,1-Trichloroethane	0.726	0.674		7.2	
Methylcyclohexane	0.637	0.634		0.5	
Benzene	0.967	0.957		1.0	
1,2-Dichloroethane	0.175	0.170		2.9	
Trichloroethene	0.372	0.370		0.5	
1,2-Dichloropropane	0.314	0.301		4.1	20.0
Bromodichloromethane	0.381	0.371		2.6	
4-Methyl-2-Pentanone	0.084	0.076		9.5	
Toluene	0.700	0.705		0.7	20.0
t-1,3-Dichloropropene	0.270	0.262		3.0	
cis-1,3-Dichloropropene	0.407	0.396		2.7	
1,1,2-Trichloroethane	0.174	0.165		5.2	
2-Hexanone	0.053	0.049		7.5	
Dibromochloromethane	0.234	0.229		2.1	
1,2-Dibromoethane	0.202	0.194		4.0	
Tetrachloroethene	0.386	0.419		8.5	
Chlorobenzene	0.986	0.994	0.300	0.8	
Ethyl Benzene	0.567	0.585		3.2	20.0
m&p-Xylenes	0.685	0.707		3.2	
o-Xylene	0.631	0.642		1.7	
Styrene	1.024	1.040		1.6	