

The ORP and TOC data were acceptable as reported by the laboratory.

EXECUTIVE SUMMARY

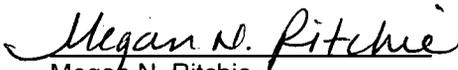
Laboratory Performance: None.

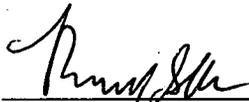
Other Factors Affecting Data Quality: The matrix spike recovery for sulfate was below the lower QC limit.

The data for these analyses were reviewed with reference to the EPA "Functional Guidelines for Inorganic Data Review", as amended for use within EPA Region 3 (4/93).

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
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: T4414 MEDIA: WATER DATA FRACTION: MISC

nsample 05MW12S
samp_date 8/25/2005
lab_id T4414-03
qc_type NM
Pct_Solids 0.0
DUP_OF:

nsample 05MW14I
samp_date 8/25/2005
lab_id T4414-04
qc_type NM
Pct_Solids 0.0
DUP_OF:

Parameter	units	Result	Val Qual	Qual Code
CHLORIDE	MG/L	3.52		
NITRATE	MG/L	0.613		
OXIDATION REDUCTION POTEN	MV	390		
SULFATE	MG/L	29		
TOTAL ORGANIC CARBON	MG/L	0.4	U	

Parameter	units	Result	Val Qual	Qual Code
CHLORIDE	MG/L	3.72		
NITRATE	MG/L	0.481		
OXIDATION REDUCTION POTEN	MV	400		
SULFATE	MG/L	28		
TOTAL ORGANIC CARBON	MG/L	0.419		

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 ($< 2 \times$ 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.
- 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.

APPENDIX B

Results as Reported by the Laboratory



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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/25/2005
Project:	NAS JRB Willow Grove	Date Received:	8/26/2005
Client Sample ID:	05MW12S	SDG No.:	T4414
Lab Sample ID:	T4414-03	Matrix:	WATER
% Solids:	0.00		

Analyte	Result	Qualifier	RL	Units	DF	Date Analyzed	Method
Chloride	3.520		0.500	mg/L	1	8/26/2005	300.0 Anions
Nitrate	0.613		0.100	mg/L	1	8/26/2005	300.0 Anions
Sulfate	29.00		1.000	mg/L	2	8/30/2005	300.0 Anions
TOC	0.400	U	0.400	mg/L	1	9/1/2005	9060 TOC
Redox Potential	390.00		0.000	mV	1	8/26/2005	1498 Redox Potential

Comment

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	8/25/2005
Project:	NAS JRB Willow Grove	Date Received:	8/26/2005
Client Sample ID:	05MW14I	SDG No.:	T4414
Lab Sample ID:	T4414-04	Matrix:	WATER
% Solids:	0.00		

Analyte	Result	Qualifier	RL	Units	DF	Date Analyzed	Method
Chloride	3.720		0.500	mg/L	1	8/26/2005	300.0 Anions
Nitrate	0.481		0.100	mg/L	1	8/26/2005	300.0 Anions
Sulfate	28.00		0.500	mg/L	1	8/26/2005	300.0 Anions
TOC	0.419		0.400	mg/L	1	9/1/2005	9060 TOC
Redox Potential	400.00		0.000	mV	1	8/26/2005	1498 Redox Potential

Comment

APPENDIX C

Support Documentation

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: NAS JRB Willow Grove

Project # N/A

Chemtech Project # T4414

A. Number of Samples and Date of Receipt:

6 Water samples were received on 8/26/05.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Anions, Gases methane, ethane, ethene, Redox Potential, SVOCMS Group1, Total Organic Carbon, and VOCMS Group1. This data package contains results for SVOCMS Group1.

C. Analytical Techniques:

The samples were analyzed on instruments MSBNA E using GC Column RTX-5 SILMS which is 30 meters, 0.32mm ID, 0.5 um 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.

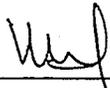
The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

The Tuning criteria met requirements.

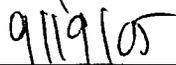
I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained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

Signature _____



Name: Krupa Dubey

Date: _____



Title: QA/QC

Matrix Spike Summary**Client:** Tetra Tech NUS, Inc.**SDG No.:** T4414**Project:****Sample ID:** T4414-03**Client ID:** 05MW12SS**Percent Solids for Spike Sample:** 0.0

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	Dilution Factor	% Rec	Qual	Date Analyzed
Chloride	mg/L	75-125	3.8		3.5		0.60	1	50.0		8/26/2005
Nitrate	mg/L	75-125	1.1		0.6		0.45	1	111.1		8/26/2005
Sulfate	mg/L	75-125	32.6		29.7		6.00	2	48.33		8/30/2005