STL 1213013

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CASE NARRATIVE

Fluor Hanford Inc.
P.O. Box 1000
MSIN E6-135
Richland, Washington 99352
July 11, 2007
Attention: Steve Trent

SDG	:	SL673A
Number of Samples	:	1
Sample Matrix	:	Water
Data Deliverable	:	RDR-R3890
Date SDG Closed	:	June 19, 2007

II. Introduction

On June 19, 2007 data reanalysis orders were received at STL-St. Louis.

III. Analytical Results/ Methodology

The analytical results for this report are presented by analytical test. Each set of data includes sample identification information, analytical results and the appropriate detection limits.

Analyses requested: see attached copy of RDR

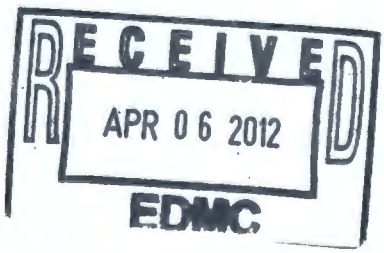
Deviation from Request: No Deviation from requested methods.

IV. Definitions

The following codes are used to denote laboratory quality control samples and can be found in the data summary section of this report:
QCBLK- Quality Control Blank, Method Blank
QCLCS- Quality Control Laboratory Control Sample, Blank Spike

V. Comments

General: The recheck request consists of RDR# 070619STLSL-R3890. A copy of the request (and the original it replaced) is included in this package for reference.



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The term "Detection Limit" used in the analytical data reports refers to either the lab's standard reporting limits or contractually required reporting limits, whichever is applicable.

Anion Results: The results of the reanalysis compares favorably to those of the original for Fluoride Chloride and Sulfate. There was significant variance in the Nitrate and Nitrite results. The Nitrate was ND at 10.0 mg/L reporting limit in the original and 177 mg/L in the reanalysis. Nitrite was reported a 3.0 mg/L in the original analysis and ND at 0.020 mg/L reporting limit in the reanalysis. In the original analysis there was a software peak misidentification that was not caught by the analyst, resulting in no detect being reported for Nitrate. No definitive cause is noted for the Nitrite variance.

Analysis Comments: The anion matrix spike solution contains all routine anions. Spiking technique, sample preparation and method compliance is demonstrated by the remaining acceptable MS recoveries. Poor matrix spike recovery for Nitrite in batch 7169097 is attributed to matrix interference.

The reanalysis was performed beyond the method required holding time.

I certify that this Summary Package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. The Laboratory Manager or a designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Reviewed and approved:

Brian O'Donnell
St. Louis Project Manager

06/19/2007

RECHECK, RECOUNT, OR REANALYSIS ORDER
CONTRACT NO MW6-SBB-A19981

Severn Trent St. Louis
13715 Rider Trail North
Earth City, MO 63045

Battelle PNNL Order Number: 070619STLSL-R3890

Sample Delivery Group: SL673

Special Instructions This RDR replaces 070613STLSL-UNKNOWN4

Samples(s)

Lab Sample ID	PNNL Sample	Action	TAT	METHOD_NAME:
F7B240136001	B1M8K8	Reanalysis	15/15	300.0_ANIONS_IC

Deliver Report Results to: Fluor Hanford, Inc.
1200 Jadwin Ave.
Richland, WA 99352
C/O Mr. Steve Trent

The report results must reference the Battelle PNNL-order number, SDG number, and the Battelle PNNL sample identification number shown above.

METHODS SUMMARY

SL673A

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Chloride	MCAWW 300.0A	MCAWW 300.0A
Fluoride	MCAWW 300.0A	MCAWW 300.0A
Nitrate as NO3	MCAWW 300.0A	
Nitrite as N	MCAWW 300.0A	MCAWW 300.0A
Sulfate	MCAWW 300.0A	MCAWW 300.0A

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SAMPLE SUMMARY

SL673A : F7F130351

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
J0XRW	001	B1M8K8	02/23/07	10:2

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

WET CHEMISTRY

Fluor Hanford Inc

Client Sample ID: B1M8K8

General Chemistry

Lot-Sample #...: F7F130351-001 Work Order #...: J0XRW Matrix.....: WATER
Date Sampled...: 02/23/07 Date Received..: 06/13/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride	**38.4 D**	**4.0**	**mg/L**	**MCAWW 300.0A**	**06/15/07**	**7169094**
		Dilution Factor: 20		MDL.....: 0.40		
Fluoride	**0.28**	**0.10**	**mg/L**	**MCAWW 300.0A**	**06/15/07**	**7169095**
		Dilution Factor: 1		MDL.....: 0.025		
Nitrate	**177 D**	**4.0**	**mg/L**	**MCAWW 300.0A**	**06/15/07**	**7169098**
		Dilution Factor: 200		MDL.....: 0.80		
Nitrite	ND N	0.020	mg/L	MCAWW 300.0A	06/15/07	7169097
		Dilution Factor: 1		MDL.....: 0.0050		
Sulfate	**194 D**	**10.0**	**mg/L**	**MCAWW 300.0A**	**06/15/07**	**7169096**
		Dilution Factor: 20		MDL.....: 1.0		

NOTE(S):

RL Reporting Limit

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: SL673A **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #: J08R41AA		MB Lot-Sample #:	F7F180000-094	
	ND	0.20	mg/L	MCAWW 300.0A	06/15/07	7169094
		Dilution Factor: 1				
Fluoride		Work Order #: J08R51AA		MB Lot-Sample #:	F7F180000-095	
	ND	0.10	mg/L	MCAWW 300.0A	06/15/07	7169095
		Dilution Factor: 1				
Nitrate		Work Order #: J08TC1AA		MB Lot-Sample #:	F7F180000-098	
	ND	0.020	mg/L	MCAWW 300.0A	06/15/07	7169098
		Dilution Factor: 1				
Nitrite		Work Order #: J08R81AA		MB Lot-Sample #:	F7F180000-097	
	ND	0.020	mg/L	MCAWW 300.0A	06/15/07	7169097
		Dilution Factor: 1				
Sulfate		Work Order #: J08R61AA		MB Lot-Sample #:	F7F180000-096	
	ND	0.50	mg/L	MCAWW 300.0A	06/15/07	7169096
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: SL673A **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		WO#:J08R41AC-LCS/J08R41AD-LCSD				LCS Lot-Sample#: F7F180000-094		
	2.00	1.92	mg/L	96		MCAWW 300.0A	06/15/07	7169094
	2.00	1.96	mg/L	98	2.3	MCAWW 300.0A	06/15/07	7169094
		Dilution Factor: 1						
Fluoride		WO#:J08R51AC-LCS/J08R51AD-LCSD				LCS Lot-Sample#: F7F180000-095		
	1.00	0.942	mg/L	94		MCAWW 300.0A	06/15/07	7169095
	1.00	0.934	mg/L	93	0.91	MCAWW 300.0A	06/15/07	7169095
		Dilution Factor: 1						
Nitrate		WO#:J08TC1AC-LCS/J08TC1AD-LCSD				LCS Lot-Sample#: F7F180000-098		
	0.400	0.395	mg/L	99		MCAWW 300.0A	06/15/07	7169098
	0.400	0.407	mg/L	102	2.8	MCAWW 300.0A	06/15/07	7169098
		Dilution Factor: 1						
Nitrite		WO#:J08R81AC-LCS/J08R81AD-LCSD				LCS Lot-Sample#: F7F180000-097		
	0.160	0.155	mg/L	97		MCAWW 300.0A	06/15/07	7169097
	0.160	0.167	mg/L	104	7.2	MCAWW 300.0A	06/15/07	7169097
		Dilution Factor: 1						
Sulfate		WO#:J08R61AC-LCS/J08R61AD-LCSD				LCS Lot-Sample#: F7F180000-096		
	8.00	7.60	mg/L	95		MCAWW 300.0A	06/15/07	7169096
	8.00	7.80	mg/L	98	2.6	MCAWW 300.0A	06/15/07	7169096
		Dilution Factor: 1						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: SL673A **Matrix.....:** WATER
Date Sampled...: 04/11/07 **Date Received..:** 06/13/07

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride			Work Order #...: J0VWW1AG			MS Lot-Sample #: F7F130123-001		
	27.7	20.0	49.6 D	mg/L	110	MCAWW 300.0A	06/15/07	7169094
			Dilution Factor: 10					
Fluoride			Work Order #...: J0VWW1AJ			MS Lot-Sample #: F7F130123-001		
	4.9	20.0	25.7 D	mg/L	104	MCAWW 300.0A	06/15/07	7169095
			Dilution Factor: 10					
Nitrate			Work Order #...: J0VWW1AQ			MS Lot-Sample #: F7F130123-001		
	46.3	40.0	84.2 D	mg/L	95	MCAWW 300.0A	06/15/07	7169098
			Dilution Factor: 100					
Nitrite			Work Order #...: J0VWW1AN			MS Lot-Sample #: F7F130123-001		
	1.2	1.00	2.52 N,D	mg/L	129	MCAWW 300.0A	06/15/07	7169097
			Dilution Factor: 10					
Sulfate			Work Order #...: J0VWW1AL			MS Lot-Sample #: F7F130123-001		
	13.1	4.00	17.4	mg/L	107	MCAWW 300.0A	06/15/07	7169096
			Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

D Result was obtained from the analysis of a dilution.

N Spiked analyte recovery is outside stated control limits.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: F7F130351 **Work Order #...:** J0VWW-SMP J0VWW-DUP **Matrix.....:** WATER

Date Sampled...: 04/11/07 **Date Received..:** 06/13/07

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH
Chloride						SD Lot-Sample #: F7F130123-001		
	27.7 D	28.8 D	mg/L	3.7	(0-20)	MCAWW 300.0A	06/15/07	716909
			Dilution Factor: 10					
Fluoride						SD Lot-Sample #: F7F130123-001		
	4.9 D	4.9 D	mg/L	0.70	(0-20)	MCAWW 300.0A	06/15/07	716909
			Dilution Factor: 10					
Sulfate						SD Lot-Sample #: F7F130123-001		
	13.1	13.2	mg/L	0.38	(0-20)	MCAWW 300.0A	06/15/07	716909
			Dilution Factor: 1					
Nitrate						SD Lot-Sample #: F7F130123-001		
	46.3 D	45.6 D	mg/L	1.6	(0-20)	MCAWW 300.0A	06/15/07	716909
			Dilution Factor: 100					
Nitrite						SD Lot-Sample #: F7F130123-001		
	1.2 DN	1.4 DN	mg/L	13	(0-20)	MCAWW 300.0A	06/15/07	716909
			Dilution Factor: 10					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

D Result was obtained from the analysis of a dilution.

DN Result obtained from dilution; spike sample recovery outside control limits.