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STL St. Louis
13715 Rider Trail North
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Tel: 314 298 8566 Fax: 314 298 8757
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ANALYTICAL REPORT

W07-011

Lot #: F7C060269
SDG #: SL649B



Dot Stewart

Pacific Northwest National Lab
3110 Port of Benton Blvd.
Sigma 5 MS K694
Richland, WA 99352

SEVERN TRENT LABORATORIES, INC.


Brian O'Donnell
Project Manager

May 10, 2007

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CASE NARRATIVE

Pacific Northwest National Laboratories
P.O. Box 1970
Richland, Washington 99352

May 10, 2007

Attention: Dot Stewart

SDG	:	SL649B
Number of Samples	:	1
Sample Matrix	:	Water
Data Deliverable	:	RDR- R3760
Date SDG Closed	:	February 27, 2007

II. Introduction

On February 27, 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 reanalysis request consists of RDR# 070227STLSL-R3760. A copy of the request is included in this package for reference.

Pacific Northwest National Laboratories
May10, 2007
SDG: SL649B
Page 2

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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 reanalysis results for anions fluoride and nitrite (0.33 mg/L and ND respectively) are comparable to the original results (0.41 mg/L and ND). The reanalysis results for chloride, nitrate and sulfate (43.2, 19.8 and 38.4 mg/L) are higher than those in the original report (19.0, 7.0 and 13.9 mg/L).

Analysis Comments:

The sample was analyzed at a dilution due to the presence of matrix interferences. The reporting limit has been adjusted for the dilution for Nitrite in batch 7085104.

The reanalysis was performed beyond the method required holding time.

Affected Samples:

F7B010236 (1): B1K251

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

02/27/2007
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: 070227STLSSL-R3760

Sample Delivery Group: SL649

Special Instructions None

Samples(s)

Lab Sample ID	PNNL Sample	Action	TAT	METHOD_NAME:
F6K110131016	B1L696	Reanalysis	15/15	300.0_ANIONS_IC
F6K110131016	B1L696	Reanalysis	15/15	300.0_ANIONS_IC

Deliver Report Results to: Dorothy L. Stewart, K6-96
c/o Secretary
3110 Port of Benton Blvd.
Richland, WA 99352

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

METHODS SUMMARY

SL649B

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
Chloride	MCAWW 300.0A	MCAWW 300.0A
Fluoride	MCAWW 300.0A	MCAWW 300.0A
Nitrate as NO ₃	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

SL649B : F7C060269

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
JQJT2	001	B1L696	11/10/06	08:42

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

Pacific Northwest National Laboratory

Client Sample ID: B1L696

General Chemistry

Lot-Sample #...: F7C060269-001 Work Order #...: JQJT2 Matrix.....: WATER
 Date Sampled...: 11/10/06 Date Received...: 03/05/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	43.2 D	4.0	mg/L	MCAWW 300.0A	03/23/07	7085101
		Dilution Factor: 20		MDL.....: 0.46		
Fluoride	0.33	0.10	mg/L	MCAWW 300.0A	03/23/07	7085102
		Dilution Factor: 1		MDL.....: 0.020		
Nitrate	19.8 D	1.0	mg/L	MCAWW 300.0A	03/23/07	7085105
		Dilution Factor: 50		MDL.....: 0.20		
Nitrite	ND D	0.40	mg/L	MCAWW 300.0A	03/23/07	7085104
		Dilution Factor: 20		MDL.....: 0.080		
Sulfate	38.4 D	10.0	mg/L	MCAWW 300.0A	03/23/07	7085103
		Dilution Factor: 20		MDL.....: 1.0		

NOTE(S) :

RL Reporting Limit

D Result was obtained from the analysis of a dilution.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: SL649B

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride	ND	Work Order #: JRQEQ1AA 0.20	mg/L	MB Lot-Sample #: MCAWW 300.0A	F7C260000-101 03/23/07	7085101
		Dilution Factor: 1				
Fluoride	ND	Work Order #: JRQET1AA 0.10	mg/L	MB Lot-Sample #: MCAWW 300.0A	F7C260000-102 03/23/07	7085102
		Dilution Factor: 1				
Nitrate	ND	Work Order #: JRQEX1AA 0.020	mg/L	MB Lot-Sample #: MCAWW 300.0A	F7C260000-105 03/23/07	7085105
		Dilution Factor: 1				
Nitrite	ND	Work Order #: JRQEW1AA 0.020	mg/L	MB Lot-Sample #: MCAWW 300.0A	F7C260000-104 03/23/07	7085104
		Dilution Factor: 1				
Sulfate	ND	Work Order #: JRQEV1AA 0.50	mg/L	MB Lot-Sample #: MCAWW 300.0A	F7C260000-103 03/23/07	7085103
		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 #...: SL649B

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Chloride				WO#:JRQEQ1AC-LCS/JRQEQ1AD-LCSD LCS Lot-Sample#: F7C260000-101				
	2.00	1.92	mg/L	96		MCAWW 300.0A	03/23/07	7085101
	2.00	1.97	mg/L	99	2.8	MCAWW 300.0A	03/23/07	7085101
	Dilution Factor: 1							
Fluoride				WO#:JRQET1AC-LCS/JRQET1AD-LCSD LCS Lot-Sample#: F7C260000-102				
	1.00	0.968	mg/L	97		MCAWW 300.0A	03/23/07	7085102
	1.00	0.975	mg/L	98	0.68	MCAWW 300.0A	03/23/07	7085102
	Dilution Factor: 1							
Nitrate				WO#:JRQEX1AC-LCS/JRQEX1AD-LCSD LCS Lot-Sample#: F7C260000-105				
	0.400	0.388	mg/L	97		MCAWW 300.0A	03/23/07	7085105
	0.400	0.388	mg/L	97	0.03	MCAWW 300.0A	03/23/07	7085105
	Dilution Factor: 1							
Nitrite				WO#:JRQEW1AC-LCS/JRQEW1AD-LCSD LCS Lot-Sample#: F7C260000-104				
	0.160	0.163	mg/L	102		MCAWW 300.0A	03/23/07	7085104
	0.160	0.155	mg/L	97	5.1	MCAWW 300.0A	03/23/07	7085104
	Dilution Factor: 1							
Sulfate				WO#:JRQEV1AC-LCS/JRQEV1AD-LCSD LCS Lot-Sample#: F7C260000-103				
	8.00	7.32	mg/L	91		MCAWW 300.0A	03/23/07	7085103
	8.00	7.56	mg/L	95	3.3	MCAWW 300.0A	03/23/07	7085103
	Dilution Factor: 1							

NOTE(S) :

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