
**Pacific Northwest
National Laboratory**

Operated by Battelle for the
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Aquifer Tube Sampling Along the 100-N Area Shoreline

MJ Lindberg
MM Valenta

August 2007



Prepared for the U.S. Department of Energy
under Contract DE-AC05-76RL01830

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Pacific Northwest National Laboratory
Richland, Washington 99352

August 14, 2007

Report number: PNNL-16737

To: Steve Trent

From: Michael Lindberg
Environmental Sciences Laboratory

Subject: Final Results for Sample Delivery Group PNL0052 – SAF Number F07-028
(Aquifer Tube Sampling Along the 100-N Area Shoreline)

This letter contains the following information for sample delivery group PNL0052

- Cover Sheet
- Narrative
- Analytical Results

PNNL SAF Number Cross Reference

Group#: PNL0052
Data Deliverable Date: May 21, 2007
Data Deliverable: Hard Copy Report

SAF Number	Sample ID	Matrix
F07-028	B1MPF8	Water
	B1MPF9	Water
	B1MRN4	Water
	B1MPH0	Water
	B1MPH1	Water
	B1MPH2	Water
	B1MPH3	Water

Introduction

On April 4, 2007, 7 water samples were received from the 100-N Area for citrate analysis.

Analytical Results/Methodology

The analyses for this project were performed at the 325 building located in the 300 Area of the Hanford Site. The analyses were performed according to Pacific Northwest National Laboratory (PNNL) approved procedures. The data sets include the sample identification numbers, analytical results, estimated quantification limits (EQL) and quality control data.

Quality Control

The preparatory and analytical quality control requirements, calibration requirements, acceptance criteria, and failure actions are defined in the on-line QA plan "Conducting Analytical Work in Support of Regulatory Programs" (CAW). This QA plan implements the Hanford Analytical Services Quality Assurance Requirements Documents (HASQARD) for PNNL.

Definitions

CCB Continuing Calibration Blank
CCV Continuing Calibration Verification
Spike Matrix Spike
Dup Duplicate

Sample Receipt

Samples were received with a chain of custody (COC) and were analyzed according to the sample identification numbers supplied by the client. All Samples were refrigerated upon receipt until analyzed.

All samples were received with custody seals intact.

Holding Times

The prescribed holding times were met for all analytes.

Analytical Results

All reported analytical results met the requirements of the CAW.

This data package has been reviewed technically for completeness and compliance to the CAW.

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Samples received 4/4/2007
Sample Analysis Date: 5/1/2007
Approximate Concentration/Type of Solvent Matrix: Groundwater
Special Analysis Requirements:
Calibration and Standards Prep. Date: As run
Stock Standards: BNW LRB 57971
Please contact Mike Lindberg (372-2483) for analysis requests or questions.

Analyst name:	Cristian Iovin
Peer reviewer name:	Michelle Valenta
Project Manager acceptance date:	6/28/2007

Dionex DX600 Chromatographic System RPL Rm 312 Analysis Results: (all results in ppm unless otherwise stated)

Sample Name	Citrate
	ug/mL
B1MPF8	<1.00E-01
B1MPF9	<1.00E-01
B1MPH0	1.49E-01
B1MPH1	1.76E-01
B1MPH2	<1.00E-01
B1MPH3	<1.00E-01
B1MRN4	<1.00E-01

Standard Recoveries (%)	Citrate
CCV	108.29
CCV1	103.78

Spike recoveries(%)	Citrate
B1MPF8 IC SPIKE	104.83

Blanks	Citrate
CCB	<1.00E-01
CCB1	<1.00E-01