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STL Denver
4955 Yarrow Street
Arvada, CO 80002

Tel: 303 736 0100 Fax: 303 431 7171
www.stl-inc.com

ANALYTICAL REPORT

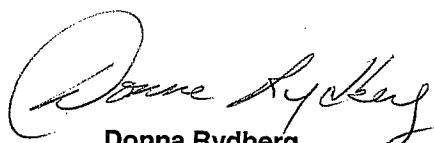
Raton Basin Baseline STD, CO
73407

Lot #: D7A260184

Tom Melland

Petroglyph
124 N Main
PO Box 979
La Veta, CO

SEVERN TRENT LABORATORIES, INC.



Donna Rydberg
Project Manager

February 9, 2007

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CASE NARRATIVE D7A260184

The following report contains the analytical results for one water sample submitted to STL Denver by Norwest Corporation for the Raton Basin Baseline site. The sample was received January 26, 2007 according to documented sample acceptance procedures.

Dilution factors and footnotes have been provided on each data sheet to assist in the interpretation of the results. In some cases, due to interference or analytes present above the linear calibration curve, samples must be analyzed at a dilution. For samples analyzed at a dilution, the reporting limits are adjusted relative to the dilution required. Dilutions made for reasons other than the presence of target compound(s) are addressed in the Supplemental Information Section.

STL Denver utilizes USEPA approved methods in all analytical work. The sample presented in this report was analyzed for the parameters listed on the methods summary page in accordance with the methods indicated. A summary of QC data for these analyses is included near the end of the report.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan and meet all requirements of NELAC. All data have been found to be compliant with laboratory protocol, with the exception of any items noted below.

Supplemental QC Information

Sample Arrival and Receipt

The sample presented in this report was received at the laboratory in good condition and at a temperature of 5.3°C.

Method RSK SOP-175 – GC Volatiles

Sample "Roberts 1 WW" was analyzed at a dilution to bring target compounds within the linear calibration range of the instrument. Reporting limits were raised accordingly.

Matrix Spike samples were not requested and they could not be performed due to insufficient sample volume. The associated LCS and LCSD were in control and demonstrate that operating procedures were in control. Method precision and accuracy were demonstrated.

No other anomalies were observed.

Method 8015B/DRO

No anomalies were observed.

Method 200.8/200.7 – Dissolved Metals

The MS/MSD recoveries for Barium in prep batch 7030460 and for Boron, Calcium and Sodium in prep batch 7032548 were not calculated due to concentrations in the parent samples at levels greater than four times the spiked amount.

Several spike recoveries were outside control limits in the MS and/or MSD samples associated with prep batch 7032548. The associated LCS and Method Blank were in control and demonstrate that operating procedures were in control. No further action was required.

No other anomalies were observed.

Lot D7A260184 continued

General Chemistry – Various

No anomalies were observed.

EXECUTIVE SUMMARY - Detection Highlights

D7A260184

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
ROBERTS 1 WW 01/25/07 13:10 001				
Methane	860	10	ug/L	RSK SOP-175
Boron - DISSOLVED	0.035 B	0.10	mg/L	MCAWW 200.7
Calcium - DISSOLVED	15	0.20	mg/L	MCAWW 200.7
Magnesium - DISSOLVED	5.9	0.20	mg/L	MCAWW 200.7
Potassium - DISSOLVED	3.4	3.0	mg/L	MCAWW 200.7
Sodium - DISSOLVED	300	5.0	mg/L	MCAWW 200.7
Zinc - DISSOLVED	0.010 B	0.020	mg/L	MCAWW 200.7
Barium - DISSOLVED	0.59	0.0010	mg/L	MCAWW 200.8
Copper - DISSOLVED	0.00022 B	0.0020	mg/L	MCAWW 200.8
Lead - DISSOLVED	0.00027 B	0.0010	mg/L	MCAWW 200.8
Manganese - DISSOLVED	0.011	0.0010	mg/L	MCAWW 200.8
pH	7.8	0.10	No Units	MCAWW 150.1
Total Dissolved Solids	740	10	mg/L	MCAWW 160.1
Chloride	9.9	3.0	mg/L	MCAWW 300.0A
Sulfate	7.1	5.0	mg/L	MCAWW 300.0A
Fluoride	0.96	0.50	mg/L	MCAWW 300.0A
Bromide	0.15 B	0.20	mg/L	MCAWW 300.0A
Total Sulfide	0.19	0.050	mg/L	MCAWW 376.2
Bicarbonate, as CaCO ₃	680	5.0	mg/L	MCAWW 310.1
Total Alkalinity	680	5.0	mg/L	MCAWW 310.1

METHODS SUMMARY

D7A260184

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
pH (Electrometric)	MCAWW 150.1	MCAWW 150.1
Alkalinity	MCAWW 310.1	MCAWW 310.1
Bicarbonate Alkalinity	MCAWW 310.1	MCAWW 310.1
Bromide	MCAWW 300.0A	MCAWW 300.0A
Carbonate Alkalinity	MCAWW 310.1	MCAWW 310.1
Chloride	MCAWW 300.0A	MCAWW 300.0A
Dissolved Gases in Water	RSK SOP-175	RSK RSKSOP-175
Dissolved ICP Metals	MCAWW 200.7	MCAWW 200.7
Extractable Petroleum Hydrocarbons	SW846 8015B	SW846 3510
Filterable Residue (TDS)	MCAWW 160.1	MCAWW 160.1
Fluoride	MCAWW 300.0A	MCAWW 300.0A
Hydroxide Alkalinity	MCAWW 310.1	MCAWW 310.1
ICP-Mass Spectrometry ICP-Mass SPectrometry	MCAWW 200.8	MCAWW 200.8
Nitrate as N	MCAWW 300.0A	MCAWW 300.0A
Nitrite as N	MCAWW 300.0A	MCAWW 300.0A
Non-Filterable Residue (TSS)	MCAWW 160.2	MCAWW 160.2
Sulfate	MCAWW 300.0A	MCAWW 300.0A
Sulfide (Colorimetric, MB)	MCAWW 376.2	MCAWW 376.2

References:

- MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.
- RSK Sample Prep and Calculations for Dissolved Gas Analysis in Water Samples Using a GC Headspace Equilibration Technique, RSKSOP-175, REV. 0, 8/11/94, USEPA Research Lab
- SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

METHOD / ANALYST SUMMARY

D7A260184

<u>ANALYTICAL METHOD</u>	<u>ANALYST</u>	<u>ANALYST ID</u>
MCAWW 150.1	Danielle M. Fougere	006481
MCAWW 160.1	Kevin Bloom	006134
MCAWW 160.2	Kevin Bloom	006134
MCAWW 200.7	Lynn-Anne Trudell	006645
MCAWW 200.7	Lynn-Anne Trudell	6645
MCAWW 200.8	Thomas Lill	6929
MCAWW 300.0A	Grant Henshaw	004878
MCAWW 310.1	Bilikisu Davies-Moir	021821
MCAWW 376.2	Christopher Grisdale	009582
RSK SOP-175	Patrick Quirk	006795
SW846 8015B	Heather Dybas	038161

References:

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

RSK Sample Prep and Calculations for Dissolved Gas Analysis in Water Samples Using a GC Headspace Equilibration Technique, RSKSOP-175, REV. 0, 8/11/94, USEPA Research Lab

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

D7A260184

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT</u>	<u>SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
JNFVH	001	ROBERTS	1 WW	01/25/07	13:10

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.

Applied Hydrology Associates Inc

Client Sample ID: ROBERTS 1 WW

GC Volatiles

Lot-Sample #....: D7A260184-001 **Work Order #....:** JNFVH1AR **Matrix.....:** WATER
Date Sampled....: 01/25/07 13:10 **Date Received...:** 01/26/07
Prep Date.....: 01/30/07 **Analysis Date...:** 01/30/07
Prep Batch #....: 7031461 **Analysis Time...:** 15:08
Dilution Factor: 2

Method.....: RSK SOP-175

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Ethane	ND	10	ug/L	0.49
Ethene	ND	10	ug/L	0.80
Methane	860	10	ug/L	0.44

Applied Hydrology Associates Inc

Client Sample ID: ROBERTS 1 WW

GC Semivolatiles

Lot-Sample #....: D7A260184-001 **Work Order #....:** JNFVH1AT **Matrix.....:** WATER
Date Sampled....: 01/25/07 13:10 **Date Received...:** 01/26/07
Prep Date.....: 01/26/07 **Analysis Date...:** 01/29/07
Prep Batch #....: 7026171 **Analysis Time...:** 22:22
Dilution Factor: 1

Method.....: SW846 8015B

PARAMETER	RESULT	REPORTING		
		LIMIT	UNITS	MDL
Diesel Range Organics	ND	0.25	mg/L	0.032
SURROGATE	PERCENT	RECOVERY		
o-Terphenyl	RECOVERY	LIMITS		
	115	(48 - 117)		

Applied Hydrology Associates Inc

Client Sample ID: ROBERTS 1 WW

DISSOLVED Metals

Lot-Sample #....: D7A260184-001 Date Sampled...: 01/25/07 13:10 Date Received...: 01/26/07					Matrix.....: WATER	
PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
Prep Batch #....: 7030460						
Arsenic	ND	0.0050	mg/L	MCAWW 200.8 Dilution Factor: 1	Analysis Time...: 03:07	01/31-02/01/07 JNFVH1A6 MDL.....: 0.00050
Barium	0.59	0.0010	mg/L	MCAWW 200.8 Dilution Factor: 1	Analysis Time...: 03:07	01/31-02/01/07 JNFVH1A7 MDL.....: 0.00012
Copper	0.00022 B	0.0020	mg/L	MCAWW 200.8 Dilution Factor: 1	Analysis Time...: 03:07	01/31-02/01/07 JNFVH1A8 MDL.....: 0.00020
Lead	0.00027 B	0.0010	mg/L	MCAWW 200.8 Dilution Factor: 1	Analysis Time...: 03:07	01/31-02/01/07 JNFVH1A9 MDL.....: 0.00010
Manganese	0.011	0.0010	mg/L	MCAWW 200.8 Dilution Factor: 1	Analysis Time...: 03:07	01/31-02/01/07 JNFVH1CA MDL.....: 0.00012
Selenium	ND	0.0050	mg/L	MCAWW 200.8 Dilution Factor: 1	Analysis Time...: 03:07	01/31-02/01/07 JNFVH1CC MDL.....: 0.0010
Prep Batch #....: 7032548						
Boron	0.035 B	0.10	mg/L	MCAWW 200.7 Dilution Factor: 1	Analysis Time...: 21:47	02/02/07 JNFVH1AU MDL.....: 0.0059
Cadmium	ND	0.0050	mg/L	MCAWW 200.7 Dilution Factor: 1	Analysis Time...: 21:47	02/02/07 JNFVH1AV MDL.....: 0.00045
Calcium	15	0.20	mg/L	MCAWW 200.7 Dilution Factor: 1	Analysis Time...: 21:47	02/02/07 JNFVH1AW MDL.....: 0.034
Chromium	ND	0.010	mg/L	MCAWW 200.7 Dilution Factor: 1	Analysis Time...: 21:47	02/02/07 JNFVH1AX MDL.....: 0.0026
Iron	ND	0.10	mg/L	MCAWW 200.7 Dilution Factor: 1	Analysis Time...: 21:47	02/02/07 JNFVH1A0 MDL.....: 0.022
Magnesium	5.9	0.20	mg/L	MCAWW 200.7 Dilution Factor: 1	Analysis Time...: 20:16	02/02-02/05/07 JNFVH1A1 MDL.....: 0.043
Potassium	3.4	3.0	mg/L	MCAWW 200.7 Dilution Factor: 1	Analysis Time...: 20:16	02/02-02/05/07 JNFVH1A2 MDL.....: 0.24

(Continued on next page)

Applied Hydrology Associates Inc

Client Sample ID: ROBERTS 1 WW

DISSOLVED Metals

Lot-Sample #....: D7A260184-001

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	WORK
		LIMIT	UNITS				
Silver	ND	0.010	mg/L		MCAWW 200.7	02/02/07	JNFVH1A3
		Dilution Factor: 1			Analysis Time...: 21:47	MDL.....	: 0.0028
Sodium	300	5.0	mg/L		MCAWW 200.7	02/02-02/05/07	JNFVH1A4
		Dilution Factor: 1			Analysis Time...: 20:16	MDL.....	: 0.092
Zinc	0.010 B	0.020	mg/L		MCAWW 200.7	02/02/07	JNFVH1A5
		Dilution Factor: 1			Analysis Time...: 21:47	MDL.....	: 0.0045

NOTE(S) :

B Estimated result. Result is less than RL.

Applied Hydrology Associates Inc

Client Sample ID: ROBERTS 1 WW

General Chemistry

Lot-Sample #....: D7A260184-001 Work Order #....: JNFWH Matrix.....: WATER
 Date Sampled...: 01/25/07 13:10 Date Received..: 01/26/07

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH	7.8	0.10	No Units	MCAWW 150.1	01/26/07	7026411
		Dilution Factor: 1		Analysis Time...: 14:43	MDL.....	
Bicarbonate, as CaCO ₃	5.0	mg/L		MCAWW 310.1	01/26/07	7030109
3		Dilution Factor: 1		Analysis Time...: 13:00	MDL.....: 1.1	
Bromide	0.15 B	0.20	mg/L	MCAWW 300.0A	01/26/07	7027067
		Dilution Factor: 1		Analysis Time...: 14:13	MDL.....: 0.11	
Carbonate, as CaCO ₃	ND	5.0	mg/L	MCAWW 310.1	01/26/07	7030110
		Dilution Factor: 1		Analysis Time...: 13:00	MDL.....: 1.1	
Chloride	9.9	3.0	mg/L	MCAWW 300.0A	01/26/07	7027068
		Dilution Factor: 1		Analysis Time...: 14:13	MDL.....: 0.25	
Fluoride	0.96	0.50	mg/L	MCAWW 300.0A	01/26/07	7027069
		Dilution Factor: 1		Analysis Time...: 14:13	MDL.....: 0.060	
Hydroxide, as CaCO ₃	ND	5.0	mg/L	MCAWW 310.1	01/26/07	7030111
		Dilution Factor: 1		Analysis Time...: 13:00	MDL.....: 1.1	
Nitrate	ND	0.50	mg/L	MCAWW 300.0A	01/26/07	7027066
		Dilution Factor: 1		Analysis Time...: 14:13	MDL.....: 0.042	
Nitrite	ND	0.50	mg/L	MCAWW 300.0A	01/26/07	7027064
		Dilution Factor: 1		Analysis Time...: 14:13	MDL.....: 0.049	
Sulfate	7.1	5.0	mg/L	MCAWW 300.0A	01/26/07	7027065
		Dilution Factor: 1		Analysis Time...: 14:13	MDL.....: 0.23	
Total Alkalinity	680	5.0	mg/L	MCAWW 310.1	01/26/07	7030106
		Dilution Factor: 1		Analysis Time...: 13:00	MDL.....: 1.1	
Total Dissolved Solids	740	10	mg/L	MCAWW 160.1	01/29/07	7029432
		Dilution Factor: 1		Analysis Time...: 14:30	MDL.....: 4.7	
Total Sulfide	0.19	0.050	mg/L	MCAWW 376.2	01/30/07	7030429
		Dilution Factor: 1		Analysis Time...: 16:00	MDL.....: 0.0071	

(Continued on next page)

Applied Hydrology Associates Inc

Client Sample ID: ROBERTS 1 WW

General Chemistry

Lot-Sample #....: D7A260184-001 Work Order #....: JNFWH Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Suspended Solids	ND	4.0	mg/L	MCAWW 160.2	01/29/07	7029428
		Dilution Factor: 1		Analysis Time.: 10:00	MDL.....	: 1.1

NOTE(S) :

RL Reporting Limit

B Estimated result. Result is less than RL.

QC DATA ASSOCIATION SUMMARY

D7A260184

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	WATER	MCAWW 150.1		7026411	7027036
	WATER	MCAWW 160.1		7029432	7031053
	WATER	MCAWW 160.2		7029428	7030116
	WATER	MCAWW 200.7		7032548	7032353
	WATER	MCAWW 310.1		7030110	
	WATER	MCAWW 300.0A		7027068	7027048
	WATER	MCAWW 300.0A		7027065	7027059
	WATER	MCAWW 300.0A		7027069	7027047
	WATER	MCAWW 300.0A		7027066	7027058
	WATER	MCAWW 300.0A		7027067	7027057
	WATER	MCAWW 300.0A		7027064	7027049
	WATER	SW846 8015B		7026171	7030082
	WATER	RSK SOP-175		7031461	
	WATER	MCAWW 310.1		7030111	
	WATER	MCAWW 200.8		7030460	7030267
	WATER	MCAWW 376.2		7030429	7030236
	WATER	MCAWW 310.1		7030109	
	WATER	MCAWW 310.1		7030106	7030088

METHOD BLANK REPORT**GC Volatiles**

Client Lot #....: D7A260184
MB Lot-Sample #: D7A310000-461
Analysis Date..: 01/30/07
Dilution Factor: 1

Work Order #....: JNNP91AA
Prep Date.....: 01/30/07
Prep Batch #....: 7031461

Matrix.....: WATER
Analysis Time..: 10:17

PARAMETER	REPORTING			METHOD
	RESULT	LIMIT	UNITS	
Methane	ND	5.0	ug/L	RSK SOP-175
Ethane	ND	5.0	ug/L	RSK SOP-175
Ethene	ND	5.0	ug/L	RSK SOP-175

NOTE(S) :

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #....: D7A260184 Work Order #....: JNNP91AC-LCS Matrix.....: WATER
LCS Lot-Sample#: D7A310000-461 JNNP91AD-LCSD
Prep Date.....: 01/30/07 Analysis Date...: 01/30/07
Prep Batch #....: 7031461 Analysis Time..: 10:07
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	LIMITS	METHOD
Acetylene	109	(75 - 125)	8.4	(0-20)	RSK SOP-175
	118	(75 - 125)			
Ethane	108	(75 - 125)	6.0	(0-20)	RSK SOP-175
	114	(75 - 125)			
Ethene	110	(75 - 125)	7.3	(0-20)	RSK SOP-175
	118	(75 - 125)			
Methane	107	(75 - 125)	5.9	(0-20)	RSK SOP-175
	113	(75 - 125)			

NOTE(S) :

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

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #....: D7A260184 **Work Order #....:** JNNP91AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: D7A310000-461 JNNP91AD-LCSD
Prep Date.....: 01/30/07 **Analysis Date..:** 01/30/07
Prep Batch #....: 7031461 **Analysis Time..:** 10:07
Dilution Factor: 1

PARAMETER	SPIKE	MEASURED		PERCENT RECOVERY	RPD	METHOD
	AMOUNT	AMOUNT	UNITS			
Acetylene	118	128	ug/L	109		RSK SOP-175
	118	140	ug/L	118	8.4	RSK SOP-175
Ethane	137	147	ug/L	108		RSK SOP-175
	137	156	ug/L	114	6.0	RSK SOP-175
Ethene	127	139	ug/L	110		RSK SOP-175
	127	150	ug/L	118	7.3	RSK SOP-175
Methane	73.0	77.8	ug/L	107		RSK SOP-175
	73.0	82.6	ug/L	113	5.9	RSK SOP-175

NOTE(S) :

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

Bold print denotes control parameters

METHOD BLANK REPORT

GC Semivolatiles

Client Lot #....: D7A260184
MB Lot-Sample #: D7A260000-171
Analysis Date..: 01/29/07
Dilution Factor: 1

Work Order #....: JNFHN1AA
Prep Date.....: 01/26/07
Prep Batch #....: 7026171

Matrix.....: WATER
Analysis Time..: 18:20

PARAMETER	REPORTING			METHOD
	RESULT	LIMIT	UNITS	
Diesel Range Organics	ND	0.25	mg/L	SW846 8015B
SURROGATE	PERCENT			RECOVERY
	RECOVERY	LIMITS	(48 - 117)	
o-Terphenyl	111			

NOTE (S) :

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #....: D7A260184 **Work Order #....:** JNFHN1AC **Matrix.....:** WATER
LCS Lot-Sample#: D7A260000-171
Prep Date.....: 01/26/07 **Analysis Date...:** 01/29/07
Prep Batch #....: 7026171 **Analysis Time..:** 18:47
Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>METHOD</u>
<u>RECOVERY</u>		<u>LIMITS</u>	
Diesel Range Organics	90	(54 - 115)	SW846 8015B
<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	<u>LIMITS</u>
o-Terphenyl	90		(50 - 115)

NOTE (S) :

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

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: D7A260184 **Work Order #....:** JNFHN1AC **Matrix.....:** WATER
LCS Lot-Sample#: D7A260000-171
Prep Date.....: 01/26/07 **Analysis Date..:** 01/29/07
Prep Batch #....: 7026171 **Analysis Time..:** 18:47
Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>PERCENT</u>	
	<u>AMOUNT</u>	<u>AMOUNT</u>	<u>UNITS</u>	<u>RECOVERY</u>
Diesel Range Organics	2.00	1.80	mg/L	90
<u>SURROGATE</u>		<u>PERCENT</u>	<u>RECOVERY</u>	
o-Terphenyl		<u>RECOVERY</u>	<u>LIMITS</u>	
		90	(50 - 115)	

NOTE(S) :

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Semivolatiles

Client Lot #....: D7A260184 Work Order #....: JNC861AW-MS Matrix.....: WATER
MS Lot-Sample #: D7A250167-002 JNC861AX-MSD
Date Sampled...: 01/24/07 11:35 Date Received..: 01/25/07
Prep Date.....: 01/26/07 Analysis Date..: 01/29/07
Prep Batch #....: 7026171 Analysis Time..: 20:35
Dilution Factor: 1

PARAMETER	PERCENT	RECOVERY	RPD	LIMITS	METHOD
	<u>RECOVERY</u>	<u>LIMITS</u>			
Diesel Range Organics	86	(50 - 115)			SW846 8015B
	86	(50 - 115)	1.4	(0-31)	SW846 8015B
SURROGATE	PERCENT	RECOVERY			
o-Terphenyl	<u>RECOVERY</u>	<u>LIMITS</u>			
	93	(48 - 117)			
	89	(48 - 117)			

NOTE(S) :

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

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Semivolatiles

Client Lot #....: D7A260184 Work Order #....: JNC861AW-MS Matrix.....: WATER
MS Lot-Sample #: D7A250167-002 JNC861AX-MSD
Date Sampled....: 01/24/07 11:35 Date Received...: 01/25/07
Prep Date.....: 01/26/07 Analysis Date...: 01/29/07
Prep Batch #....: 7026171 Analysis Time..: 20:35
Dilution Factor: 1

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			METHOD
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD	
Diesel Range Organics	ND	2.00	1.73	mg/L	86		SW846 8015B
	ND	1.98	1.71	mg/L	86	1.4	SW846 8015B

SURROGATE	PERCENT	RECOVERY	RECOVERY
	RECOVERY	LIMITS	
o-Terphenyl	93	(48 - 117)	
	89	(48 - 117)	

NOTE(S) :

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

Bold print denotes control parameters

METHOD BLANK REPORT

DISSOLVED Metals

Client Lot #....: D7A260184

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: D7A300000-460 Prep Batch #...: 7030460						
Arsenic	ND	0.0050	mg/L	MCAWW 200.8	01/31-02/01/07	JNLWD1AA
		Dilution Factor: 1				
		Analysis Time...: 03:00				
Barium	ND	0.0010	mg/L	MCAWW 200.8	01/31-02/01/07	JNLWD1AC
		Dilution Factor: 1				
		Analysis Time...: 03:00				
Copper	ND	0.0020	mg/L	MCAWW 200.8	01/31-02/01/07	JNLWD1AD
		Dilution Factor: 1				
		Analysis Time...: 03:00				
Lead	ND	0.0010	mg/L	MCAWW 200.8	01/31-02/01/07	JNLWD1AE
		Dilution Factor: 1				
		Analysis Time...: 03:00				
Manganese	ND	0.0010	mg/L	MCAWW 200.8	01/31-02/01/07	JNLWD1AF
		Dilution Factor: 1				
		Analysis Time...: 03:00				
Selenium	ND	0.0050	mg/L	MCAWW 200.8	01/31-02/01/07	JNLWD1AG
		Dilution Factor: 1				
		Analysis Time...: 03:00				
MB Lot-Sample #: D7B010000-548 Prep Batch #...: 7032548						
Boron	ND	0.10	mg/L	MCAWW 200.7	02/02/07	JNRRE1CK
		Dilution Factor: 1				
		Analysis Time...: 21:36				
Cadmium	ND	0.0050	mg/L	MCAWW 200.7	02/02/07	JNRRE1CL
		Dilution Factor: 1				
		Analysis Time...: 21:36				
Calcium	ND	0.20	mg/L	MCAWW 200.7	02/02/07	JNRRE1AG
		Dilution Factor: 1				
		Analysis Time...: 21:36				
Chromium	ND	0.010	mg/L	MCAWW 200.7	02/02/07	JNRRE1AJ
		Dilution Factor: 1				
		Analysis Time...: 21:36				

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METHOD BLANK REPORT

DISSOLVED Metals

Client Lot #...: D7A260184

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
		LIMIT	UNITS				
Iron	ND	0.10	mg/L		MCAWW 200.7	02/02/07	JNRRE1AL
		Dilution Factor: 1					
		Analysis Time...: 21:36					
Magnesium	ND	0.20	mg/L		MCAWW 200.7	02/02-02/05/07	JNRRE1AN
		Dilution Factor: 1					
		Analysis Time...: 19:42					
Potassium	ND	3.0	mg/L		MCAWW 200.7	02/02-02/05/07	JNRRE1AM
		Dilution Factor: 1					
		Analysis Time...: 19:42					
Silver	ND	0.010	mg/L		MCAWW 200.7	02/02/07	JNRRE1CM
		Dilution Factor: 1					
		Analysis Time...: 21:36					
Sodium	ND	5.0	mg/L		MCAWW 200.7	02/02-02/05/07	JNRRE1AU
		Dilution Factor: 1					
		Analysis Time...: 19:42					
Zinc	ND	0.020	mg/L		MCAWW 200.7	02/02/07	JNRRE1AT
		Dilution Factor: 1					
		Analysis Time...: 21:36					

NOTE(S) :

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #....: D7A260184

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
LCS Lot-Sample#: D7A300000-460 Prep Batch #....: 7030460					
Arsenic	98	(89 - 111)	MCAWW 200.8	01/31-02/01/07	JNLWD1AH
		Dilution Factor: 1		Analysis Time...:	03:03
Barium	91	(89 - 117)	MCAWW 200.8	01/31-02/01/07	JNLWD1AJ
		Dilution Factor: 1		Analysis Time...:	03:03
Copper	97	(90 - 117)	MCAWW 200.8	01/31-02/01/07	JNLWD1AK
		Dilution Factor: 1		Analysis Time...:	03:03
Lead	103	(88 - 119)	MCAWW 200.8	01/31-02/01/07	JNLWD1AL
		Dilution Factor: 1		Analysis Time...:	03:03
Manganese	100	(87 - 124)	MCAWW 200.8	01/31-02/01/07	JNLWD1AM
		Dilution Factor: 1		Analysis Time...:	03:03
Selenium	94	(82 - 114)	MCAWW 200.8	01/31-02/01/07	JNLWD1AN
		Dilution Factor: 1		Analysis Time...:	03:03
LCS Lot-Sample#: D7B010000-548 Prep Batch #....: 7032548					
Boron	96	(86 - 110)	MCAWW 200.7	02/02/07	JNRRE1CP
		Dilution Factor: 1		Analysis Time...:	21:42
Cadmium	99	(88 - 111)	MCAWW 200.7	02/02/07	JNRRE1CQ
		Dilution Factor: 1		Analysis Time...:	21:42
Calcium	95	(90 - 111)	MCAWW 200.7	02/02/07	JNRRE1A4
		Dilution Factor: 1		Analysis Time...:	21:42
Chromium	99	(90 - 113)	MCAWW 200.7	02/02/07	JNRRE1A6
		Dilution Factor: 1		Analysis Time...:	21:42
Iron	98	(89 - 116)	MCAWW 200.7	02/02-02/07/07	JNRRE1A8
		Dilution Factor: 1		Analysis Time...:	10:53
Magnesium	101	(90 - 113)	MCAWW 200.7	02/02-02/05/07	JNRRE1CA
		Dilution Factor: 1		Analysis Time...:	19:47
Potassium	104	(89 - 114)	MCAWW 200.7	02/02-02/05/07	JNRRE1A9
		Dilution Factor: 1		Analysis Time...:	19:47

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #....: D7A260184

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>WORK ORDER #</u>
Silver	106	(86 - 120)	MCAWW 200.7 Dilution Factor: 1	02/02/07 Analysis Time...: 21:42	JNRRE1CR
Sodium	104	(90 - 117)	MCAWW 200.7 Dilution Factor: 1	02/02-02/05/07 Analysis Time...: 19:47	JNRRE1CG
Zinc	99	(84 - 111)	MCAWW 200.7 Dilution Factor: 1	02/02/07 Analysis Time...: 21:42	JNRRE1CF

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

DISSOLVED Metals

Client Lot #....: D7A260184

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	PREPARATION- ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: D7A300000-460 Prep Batch #....: 7030460						
Arsenic	0.0400	0.0392	mg/L	98 Dilution Factor: 1	MCAWW 200.8 Analysis Time...: 03:03	01/31-02/01/07 JNLWD1AH
Barium	0.0400	0.0364	mg/L	91 Dilution Factor: 1	MCAWW 200.8 Analysis Time...: 03:03	01/31-02/01/07 JNLWD1AJ
Copper	0.0400	0.0390	mg/L	97 Dilution Factor: 1	MCAWW 200.8 Analysis Time...: 03:03	01/31-02/01/07 JNLWD1AK
Lead	0.0400	0.0411	mg/L	103 Dilution Factor: 1	MCAWW 200.8 Analysis Time...: 03:03	01/31-02/01/07 JNLWD1AL
Manganese	0.0400	0.0400	mg/L	100 Dilution Factor: 1	MCAWW 200.8 Analysis Time...: 03:03	01/31-02/01/07 JNLWD1AM
Selenium	0.0400	0.0374	mg/L	94 Dilution Factor: 1	MCAWW 200.8 Analysis Time...: 03:03	01/31-02/01/07 JNLWD1AN
LCS Lot-Sample#: D7B010000-548 Prep Batch #....: 7032548						
Boron	1.00	0.961	mg/L	96 Dilution Factor: 1	MCAWW 200.7 Analysis Time...: 21:42	02/02/07 JNRRE1CP
Cadmium	0.100	0.0992	mg/L	99 Dilution Factor: 1	MCAWW 200.7 Analysis Time...: 21:42	02/02/07 JNRRE1CQ
Calcium	50.0	47.6	mg/L	95 Dilution Factor: 1	MCAWW 200.7 Analysis Time...: 21:42	02/02/07 JNRRE1A4
Chromium	0.200	0.199	mg/L	99 Dilution Factor: 1	MCAWW 200.7 Analysis Time...: 21:42	02/02/07 JNRRE1A6
Iron	1.00	0.977	mg/L	98 Dilution Factor: 1	MCAWW 200.7 Analysis Time...: 10:53	02/02-02/07/07 JNRRE1A8
Magnesium	50.0	50.5	mg/L	101 Dilution Factor: 1	MCAWW 200.7 Analysis Time...: 19:47	02/02-02/05/07 JNRRE1CA
Potassium	50.0	51.9	mg/L	104 Dilution Factor: 1	MCAWW 200.7 Analysis Time...: 19:47	02/02-02/05/07 JNRRE1A9

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LABORATORY CONTROL SAMPLE DATA REPORT

DISSOLVED Metals

Client Lot #....: D7A260184

Matrix.....: WATER

PARAMETER	SPIKE	MEASURED	UNITS	PERCNT	METHOD	PREPARATION-	WORK	ORDER #
	AMOUNT	AMOUNT		RECVRY		ANALYSIS DATE		
Silver	0.0500	0.0529	mg/L	106	MCAWW 200.7	02/02/07	JNRRE1CR	
		Dilution Factor: 1			Analysis Time...: 21:42			
Sodium	50.0	51.8	mg/L	104	MCAWW 200.7	02/02-02/05/07	JNRRE1CG	
		Dilution Factor: 1			Analysis Time...: 19:47			
Zinc	0.500	0.494	mg/L	99	MCAWW 200.7	02/02/07	JNRRE1CF	
		Dilution Factor: 1			Analysis Time...: 21:42			

NOTE(S) :

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #...: D7A260184

Matrix.....: WATER

Date Sampled...: 01/25/07 13:10 Date Received...: 01/26/07

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	WORK
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	ORDER #
MS Lot-Sample #: D7A260184-001 Prep Batch #...: 7030460						
Arsenic	118	(79 - 120)		MCAWW 200.8	01/31-02/01/07	JNFVH1CU
	115	(79 - 120) 3.2 (0-30)	3.2 (0-30)	MCAWW 200.8	01/31-02/01/07	JNFVH1CV
		Dilution Factor: 1				
		Analysis Time...: 03:11				
Barium	NC,MSB	(83 - 118)		MCAWW 200.8	01/31-02/01/07	JNFVH1CW
	NC,MSB	(83 - 118)	(0-30)	MCAWW 200.8	01/31-02/01/07	JNFVH1CX
		Dilution Factor: 1				
		Analysis Time...: 03:11				
Copper	100	(82 - 114)		MCAWW 200.8	01/31-02/01/07	JNFVH1C0
	97	(82 - 114) 2.5 (0-30)	2.5 (0-30)	MCAWW 200.8	01/31-02/01/07	JNFVH1C1
		Dilution Factor: 1				
		Analysis Time...: 03:11				
Lead	104	(79 - 119)		MCAWW 200.8	01/31-02/01/07	JNFVH1C2
	98	(79 - 119) 5.9 (0-30)	5.9 (0-30)	MCAWW 200.8	01/31-02/01/07	JNFVH1C3
		Dilution Factor: 1				
		Analysis Time...: 03:11				
Manganese	100	(57 - 149)		MCAWW 200.8	01/31-02/01/07	JNFVH1C4
	98	(57 - 149) 1.2 (0-35)	1.2 (0-35)	MCAWW 200.8	01/31-02/01/07	JNFVH1C5
		Dilution Factor: 1				
		Analysis Time...: 03:11				
Selenium	128	(64 - 134)		MCAWW 200.8	01/31-02/01/07	JNFVH1C6
	120	(64 - 134) 6.4 (0-35)	6.4 (0-35)	MCAWW 200.8	01/31-02/01/07	JNFVH1C7
		Dilution Factor: 1				
		Analysis Time...: 03:11				

NOTE (S) :

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

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MATRIX SPIKE SAMPLE DATA REPORT

DISSOLVED Metals

Client Lot #....: D7A260184

Matrix.....: WATER

Date Sampled...: 01/25/07 13:10 **Date Received..:** 01/26/07

SAMPLE PARAMETER	SPIKE AMOUNT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS	WORK DATE	ORDER #
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MS Lot-Sample #: D7A260184-001 **Prep Batch #....:** 7030460

Arsenic

ND	0.0400	0.0476	mg/L	118		MCAWW	200.8	01/31-02/01/07	JNFVH1CU
ND	0.0400	0.0461	mg/L	115	3.2	MCAWW	200.8	01/31-02/01/07	JNFVH1CV
Dilution Factor: 1									
Analysis Time...: 03:11									

Barium

0.59	0.0400	0.666	mg/L			MCAWW	200.8	01/31-02/01/07	JNFVH1CW
Qualifiers: NC,MSB									
0.59	0.0400	0.652	mg/L			MCAWW	200.8	01/31-02/01/07	JNFVH1CX
Qualifiers: NC,MSB									
Dilution Factor: 1									
Analysis Time...: 03:11									

Copper

0.00022	0.0400	0.0400	mg/L	100		MCAWW	200.8	01/31-02/01/07	JNFVH1C0
0.00022	0.0400	0.0391	mg/L	97	2.5	MCAWW	200.8	01/31-02/01/07	JNFVH1C1
Dilution Factor: 1									
Analysis Time...: 03:11									

Lead

0.00027	0.0400	0.0418	mg/L	104		MCAWW	200.8	01/31-02/01/07	JNFVH1C2
0.00027	0.0400	0.0394	mg/L	98	5.9	MCAWW	200.8	01/31-02/01/07	JNFVH1C3
Dilution Factor: 1									
Analysis Time...: 03:11									

Manganese

0.011	0.0400	0.0506	mg/L	100		MCAWW	200.8	01/31-02/01/07	JNFVH1C4
0.011	0.0400	0.0500	mg/L	98	1.2	MCAWW	200.8	01/31-02/01/07	JNFVH1C5
Dilution Factor: 1									
Analysis Time...: 03:11									

Selenium

ND	0.0400	0.0512	mg/L	128		MCAWW	200.8	01/31-02/01/07	JNFVH1C6
ND	0.0400	0.0480	mg/L	120	6.4	MCAWW	200.8	01/31-02/01/07	JNFVH1C7
Dilution Factor: 1									
Analysis Time...: 03:11									

NOTE (S) :

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

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MATRIX SPIKE SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #....: D7A260184

Matrix.....: WATER

Date Sampled...: 01/30/07 10:15 **Date Received..:** 01/31/07

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	WORK
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	ORDER #
MS Lot-Sample #: D7A310178-001 Prep Batch #....: 7032548						
Boron	NC,MSB	(86 - 110)		MCAWW 200.7	02/02/07	JNMXE1EE
	NC,MSB	(86 - 110)	(0-20)	MCAWW 200.7	02/02/07	JNMXE1EF
		Dilution Factor: 1				
		Analysis Time...: 22:10				
Cadmium	101	(88 - 111)		MCAWW 200.7	02/02/07	JNMXE1EH
	101	(88 - 111) 0.49	(0-20)	MCAWW 200.7	02/02/07	JNMXE1EJ
		Dilution Factor: 1				
		Analysis Time...: 22:10				
Calcium	NC,MSB	(90 - 111)		MCAWW 200.7	02/02/07	JNMXE1D0
	NC,MSB	(90 - 111)	(0-20)	MCAWW 200.7	02/02/07	JNMXE1D1
		Dilution Factor: 1				
		Analysis Time...: 22:10				
Chromium	96	(90 - 113)		MCAWW 200.7	02/02/07	JNMXE1CF
	97	(90 - 113) 0.86	(0-20)	MCAWW 200.7	02/02/07	JNMXE1CG
		Dilution Factor: 1				
		Analysis Time...: 22:10				
Iron	88 N	(89 - 116)		MCAWW 200.7	02/02/07	JNMXE1CK
	89	(89 - 116) 0.66	(0-20)	MCAWW 200.7	02/02/07	JNMXE1CL
		Dilution Factor: 1				
		Analysis Time...: 22:10				
Magnesium	91	(90 - 113)		MCAWW 200.7	02/02-02/05/07	JNMXE1CP
	93	(90 - 113) 0.42	(0-20)	MCAWW 200.7	02/02-02/05/07	JNMXE1CQ
		Dilution Factor: 1				
		Analysis Time...: 20:04				
Potassium	124 N	(89 - 114)		MCAWW 200.7	02/02-02/05/07	JNMXE1CM
	129 N	(89 - 114) 2.6	(0-20)	MCAWW 200.7	02/02-02/05/07	JNMXE1CN
		Dilution Factor: 1				
		Analysis Time...: 20:04				
Silver	110	(86 - 120)		MCAWW 200.7	02/02/07	JNMXE1EL
	113	(86 - 120) 2.5	(0-20)	MCAWW 200.7	02/02/07	JNMXE1EM
		Dilution Factor: 1				
		Analysis Time...: 22:10				

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MATRIX SPIKE SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #....: D7A260184

Matrix.....: WATER

Date Sampled...: 01/30/07 10:15 Date Received...: 01/31/07

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	WORK
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	ORDER #
Sodium		NC, MSB	(90 - 117)	MCAWW 200.7	02/02-02/05/07	JNMXE1C2
		NC, MSB	(90 - 117)	(0-20) MCAWW 200.7	02/02-02/05/07	JNMXE1C3
			Dilution Factor: 1			
			Analysis Time...: 20:04			
Zinc	91	(84 - 111)		MCAWW 200.7	02/02/07	JNMXE1C0
	91	(84 - 111)	0.77 (0-20)	MCAWW 200.7	02/02/07	JNMXE1C1
			Dilution Factor: 1			
			Analysis Time...: 22:10			

NOTE(S) :

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

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MATRIX SPIKE SAMPLE DATA REPORT

DISSOLVED Metals

Client Lot #....: D7A260184

Matrix.....: WATER

Date Sampled....: 01/30/07 10:15 **Date Received..:** 01/31/07

<u>SAMPLE</u>	<u>SPIKE</u>	<u>MEASRD</u>	<u>PERCNT</u>	<u>PREPARATION-</u>	<u>WORK</u>				
<u>PARAMETER</u>	<u>AMOUNT</u>	<u>AMT</u>	<u>UNITS</u>	<u>RECVRY</u>	<u>RPD</u>	<u>METHOD</u>	<u>ANALYSIS</u>	<u>DATE</u>	<u>ORDER #</u>
MS Lot-Sample #: D7A310178-001 Prep Batch #...: 7032548									
Boron									
4.7	1.00	5.52	mg/L			MCAWW	200.7	02/02/07	JNMXE1EE
		Qualifiers: NC,MSB							
4.7	1.00	5.53	mg/L			MCAWW	200.7	02/02/07	JNMXE1EF
		Qualifiers: NC,MSB							
		Dilution Factor: 1							
		Analysis Time...: 22:10							
Cadmium									
0.0013	0.100	0.102	mg/L	101		MCAWW	200.7	02/02/07	JNMXE1EH
0.0013	0.100	0.103	mg/L	101	0.49	MCAWW	200.7	02/02/07	JNMXE1EJ
		Dilution Factor: 1							
		Analysis Time...: 22:10							
Calcium									
600	50.0	636	mg/L			MCAWW	200.7	02/02/07	JNMXE1D0
		Qualifiers: NC,MSB							
600	50.0	631	mg/L			MCAWW	200.7	02/02/07	JNMXE1D1
		Qualifiers: NC,MSB							
		Dilution Factor: 1							
		Analysis Time...: 22:10							
Chromium									
ND	0.200	0.192	mg/L	96		MCAWW	200.7	02/02/07	JNMXE1CF
ND	0.200	0.193	mg/L	97	0.86	MCAWW	200.7	02/02/07	JNMXE1CG
		Dilution Factor: 1							
		Analysis Time...: 22:10							
Iron									
ND	1.00	0.882	N mg/L	88		MCAWW	200.7	02/02/07	JNMXE1CK
ND	1.00	0.888	mg/L	89	0.66	MCAWW	200.7	02/02/07	JNMXE1CL
		Dilution Factor: 1							
		Analysis Time...: 22:10							
Magnesium									
180	50.0	227	mg/L	91		MCAWW	200.7	02/02-02/05/07	JNMXE1CP
180	50.0	228	mg/L	93	0.42	MCAWW	200.7	02/02-02/05/07	JNMXE1CQ
		Dilution Factor: 1							
		Analysis Time...: 20:04							

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

DISSOLVED Metals

Client Lot #...: D7A260184

Matrix.....: WATER

Date Sampled...: 01/30/07 10:15 Date Received..: 01/31/07

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			METHOD	PREPARATION-	WORK
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD		ANALYSIS DATE	ORDER #
Potassium									
	17	50.0	78.8	N mg/L	124		MCAWW	200.7	02/02-02/05/07 JNMXE1CM
	17	50.0	80.9	N mg/L	129	2.6	MCAWW	200.7	02/02-02/05/07 JNMXE1CN
	Dilution Factor: 1								
	Analysis Time.: 20:04								
Silver									
	ND	0.0500	0.0551	mg/L	110		MCAWW	200.7	02/02/07 JNMXE1EL
	ND	0.0500	0.0565	mg/L	113	2.5	MCAWW	200.7	02/02/07 JNMXE1EM
	Dilution Factor: 1								
	Analysis Time.: 22:10								
Sodium									
	2000	50.0	1990	mg/L			MCAWW	200.7	02/02-02/05/07 JNMXE1C2
			Qualifiers: NC,MSB						
	2000	50.0	2010	mg/L			MCAWW	200.7	02/02-02/05/07 JNMXE1C3
			Qualifiers: NC,MSB						
			Dilution Factor: 1						
			Analysis Time.: 20:04						
Zinc									
	0.0050	0.500	0.458	mg/L	91		MCAWW	200.7	02/02/07 JNMXE1C0
	0.0050	0.500	0.462	mg/L	91	0.77	MCAWW	200.7	02/02/07 JNMXE1C1
	Dilution Factor: 1								
	Analysis Time.: 22:10								

NOTE (S) :

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

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

METHOD BLANK REPORT

General Chemistry

Client Lot #....: D7A260184

Matrix.....: WATER

PARAMETER	RESULT	REPORTING			METHOD	PREPARATION-	PREP	BATCH #
		LIMIT	UNITS					
Bicarbonate, as CaCO3	ND	Work Order #: JNKRE1AA 5.0	mg/L	MB Lot-Sample #: D7A300000-109 MCAWW 310.1		01/26/07		7030109
		Dilution Factor: 1						
		Analysis Time...: 13:00						
Bromide	ND	Work Order #: JNH0V1AA 0.20	mg/L	MB Lot-Sample #: D7A270000-067 MCAWW 300.0A		01/26/07		7027067
		Dilution Factor: 1						
		Analysis Time...: 13:57						
Carbonate, as CaCO3	ND	Work Order #: JNKR01AA 5.0	mg/L	MB Lot-Sample #: D7A300000-110 MCAWW 310.1		01/26/07		7030110
		Dilution Factor: 1						
		Analysis Time...: 13:00						
Chloride	ND	Work Order #: JNHX71AA 3.0	mg/L	MB Lot-Sample #: D7A270000-068 MCAWW 300.0A		01/26/07		7027068
		Dilution Factor: 1						
		Analysis Time...: 13:57						
Fluoride	ND	Work Order #: JNHX51AA 0.50	mg/L	MB Lot-Sample #: D7A270000-069 MCAWW 300.0A		01/26/07		7027069
		Dilution Factor: 1						
		Analysis Time...: 13:57						
Hydroxide, as CaCO3	ND	Work Order #: JNKTA1AA 5.0	mg/L	MB Lot-Sample #: D7A300000-111 MCAWW 310.1		01/26/07		7030111
		Dilution Factor: 1						
		Analysis Time...: 13:00						
Nitrate	ND	Work Order #: JNH0X1AA 0.50	mg/L	MB Lot-Sample #: D7A270000-066 MCAWW 300.0A		01/26/07		7027066
		Dilution Factor: 1						
		Analysis Time...: 13:57						
Nitrite	ND	Work Order #: JNH0C1AA 0.50	mg/L	MB Lot-Sample #: D7A270000-064 MCAWW 300.0A		01/26/07		7027064
		Dilution Factor: 1						
		Analysis Time...: 13:57						
Sulfate	ND	Work Order #: JNH011AA 5.0	mg/L	MB Lot-Sample #: D7A270000-065 MCAWW 300.0A		01/26/07		7027065
		Dilution Factor: 1						
		Analysis Time...: 13:57						

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METHOD BLANK REPORT

General Chemistry

Client Lot #...: D7A260184

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Alkalinity	ND	Work Order #: JNKM91AA 5.0 mg/L	MB Lot-Sample #: D7A300000-106 MCAWW 310.1	Dilution Factor: 1 Analysis Time...: 13:00	01/26/07	7030106
Total Dissolved Solids	ND	10 mg/L	MCAWW 160.1	Dilution Factor: 1 Analysis Time...: 14:30	01/29/07	7029432
Total Sulfide	ND	Work Order #: JNLQ61AA 0.050 mg/L	MB Lot-Sample #: D7A300000-429 MCAWW 376.2	Dilution Factor: 1 Analysis Time...: 16:00	01/30/07	7030429
Total Suspended Solids	ND	4.0 mg/L	MCAWW 160.2	Dilution Factor: 1 Analysis Time...: 10:00	01/29/07	7029428

NOTE(S) :

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #....: D7A260184

Matrix.....: WATER

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	PREP
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	BATCH #
pH			WO#:JNHAA1AA-LCS/JNHAA1AC-LCSD	LCS	Lot-Sample#: D7A260000-411	
	100	(97 - 102)		MCAWW 150.1	01/26/07	7026411
	100	(97 - 102) 0.14 (0-5.0)		MCAWW 150.1	01/26/07	7026411
			Dilution Factor: 1	Analysis Time...: 14:44		
Bromide			WO#:JNH0V1AC-LCS/JNH0V1AD-LCSD	LCS	Lot-Sample#: D7A270000-067	
	97	(90 - 110)		MCAWW 300.0A	01/26/07	7027067
	98	(90 - 110) 0.08 (0-10)		MCAWW 300.0A	01/26/07	7027067
			Dilution Factor: 1	Analysis Time...: 13:25		
Chloride			WO#:JNhx71AC-LCS/JNhx71AD-LCSD	LCS	Lot-Sample#: D7A270000-068	
	99	(90 - 110)		MCAWW 300.0A	01/26/07	7027068
	99	(90 - 110) 0.18 (0-10)		MCAWW 300.0A	01/26/07	7027068
			Dilution Factor: 1	Analysis Time...: 13:25		
Fluoride			WO#:JNhx51AC-LCS/JNhx51AD-LCSD	LCS	Lot-Sample#: D7A270000-069	
	103	(90 - 110)		MCAWW 300.0A	01/26/07	7027069
	103	(90 - 110) 0.03 (0-10)		MCAWW 300.0A	01/26/07	7027069
			Dilution Factor: 1	Analysis Time...: 13:25		
Nitrate			WO#:JNH0X1AC-LCS/JNH0X1AD-LCSD	LCS	Lot-Sample#: D7A270000-066	
	99	(90 - 110)		MCAWW 300.0A	01/26/07	7027066
	99	(90 - 110) 0.11 (0-10)		MCAWW 300.0A	01/26/07	7027066
			Dilution Factor: 1	Analysis Time...: 13:25		
Nitrite			WO#:JNH0C1AC-LCS/JNH0C1AD-LCSD	LCS	Lot-Sample#: D7A270000-064	
	101	(90 - 110)		MCAWW 300.0A	01/26/07	7027064
	101	(90 - 110) 0.02 (0-10)		MCAWW 300.0A	01/26/07	7027064
			Dilution Factor: 1	Analysis Time...: 13:25		
Sulfate			WO#:JNH011AC-LCS/JNH011AD-LCSD	LCS	Lot-Sample#: D7A270000-065	
	100	(90 - 110)		MCAWW 300.0A	01/26/07	7027065
	100	(90 - 110) 0.19 (0-10)		MCAWW 300.0A	01/26/07	7027065
			Dilution Factor: 1	Analysis Time...: 13:25		
Total Alkalinity			WO#:JNKM91AC-LCS/JNKM91AD-LCSD	LCS	Lot-Sample#: D7A300000-106	
	98	(90 - 110)		MCAWW 310.1	01/26/07	7030106
	99	(90 - 110) 1.5 (0-10)		MCAWW 310.1	01/26/07	7030106
			Dilution Factor: 1	Analysis Time...: 13:00		

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #....: D7A260184

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION-ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Dissolved Solids		WO#:JNL9K1AC-LCS/JNL9K1AD-LCSD	LCS	Lot-Sample#:	D7A290000-432		
	100	(86 - 106)			MCAWW 160.1	01/29/07	7029432
	105	(86 - 106) 4.3 (0-20)			MCAWW 160.1	01/29/07	7029432
			Dilution Factor: 1		Analysis Time...: 14:30		
Total Sulfide		WO#:JNLQ61AC-LCS/JNLQ61AD-LCSD	LCS	Lot-Sample#:	D7A300000-429		
	107	(83 - 112)			MCAWW 376.2	01/30/07	7030429
	101	(83 - 112) 5.0 (0-10)			MCAWW 376.2	01/30/07	7030429
			Dilution Factor: 1		Analysis Time...: 16:00		
Total Suspended Solids		WO#:JNKV21AC-LCS/JNKV21AD-LCSD	LCS	Lot-Sample#:	D7A290000-428		
	98	(86 - 114)			MCAWW 160.2	01/29/07	7029428
	92	(86 - 114) 6.3 (0-20)			MCAWW 160.2	01/29/07	7029428
			Dilution Factor: 1		Analysis Time...: 10:00		

NOTE(S) :

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

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #....: D7A260184

Matrix.....: WATER

PARAMETER	SPIKE	MEASURED	PERCNT				PREPARATION-	PREP	ANALYSIS DATE	BATCH #
	AMOUNT	AMOUNT	UNITS	RECVRY	RPD	METHOD				
PH			WO#:JNHAA1AA-LCS/JNHAA1AC-LCSD		LCS	Lot-Sample#:	D7A260000-411			
	7.00	7.02	No Units	100		MCAWW	150.1	01/26/07	7026411	
	7.00	7.03	No Units	100	0.14	MCAWW	150.1	01/26/07	7026411	
			Dilution Factor:	1			Analysis Time...: 14:44			
Bromide			WO#:JNH0V1AC-LCS/JNH0V1AD-LCSD		LCS	Lot-Sample#:	D7A270000-067			
	5.00	4.87	mg/L	97		MCAWW	300.0A	01/26/07	7027067	
	5.00	4.88	mg/L	98	0.08	MCAWW	300.0A	01/26/07	7027067	
			Dilution Factor:	1			Analysis Time...: 13:25			
Chloride			WO#:JNhx71AC-LCS/JNhx71AD-LCSD		LCS	Lot-Sample#:	D7A270000-068			
	25.0	24.8	mg/L	99		MCAWW	300.0A	01/26/07	7027068	
	25.0	24.9	mg/L	99	0.18	MCAWW	300.0A	01/26/07	7027068	
			Dilution Factor:	1			Analysis Time...: 13:25			
Fluoride			WO#:JNhx51AC-LCS/JNhx51AD-LCSD		LCS	Lot-Sample#:	D7A270000-069			
	5.00	5.13	mg/L	103		MCAWW	300.0A	01/26/07	7027069	
	5.00	5.13	mg/L	103	0.03	MCAWW	300.0A	01/26/07	7027069	
			Dilution Factor:	1			Analysis Time...: 13:25			
Nitrate			WO#:JNH0X1AC-LCS/JNH0X1AD-LCSD		LCS	Lot-Sample#:	D7A270000-066			
	5.00	4.94	mg/L	99		MCAWW	300.0A	01/26/07	7027066	
	5.00	4.95	mg/L	99	0.11	MCAWW	300.0A	01/26/07	7027066	
			Dilution Factor:	1			Analysis Time...: 13:25			
Nitrite			WO#:JNH0C1AC-LCS/JNH0C1AD-LCSD		LCS	Lot-Sample#:	D7A270000-064			
	5.00	5.07	mg/L	101		MCAWW	300.0A	01/26/07	7027064	
	5.00	5.07	mg/L	101	0.02	MCAWW	300.0A	01/26/07	7027064	
			Dilution Factor:	1			Analysis Time...: 13:25			
Sulfate			WO#:JNH011AC-LCS/JNH011AD-LCSD		LCS	Lot-Sample#:	D7A270000-065			
	25.0	25.0	mg/L	100		MCAWW	300.0A	01/26/07	7027065	
	25.0	24.9	mg/L	100	0.19	MCAWW	300.0A	01/26/07	7027065	
			Dilution Factor:	1			Analysis Time...: 13:25			
Total Alkalinity			WO#:JNKM91AC-LCS/JNKM91AD-LCSD		LCS	Lot-Sample#:	D7A300000-106			
	200	195	mg/L	98		MCAWW	310.1	01/26/07	7030106	
	200	198	mg/L	99	1.5	MCAWW	310.1	01/26/07	7030106	
			Dilution Factor:	1			Analysis Time...: 13:00			

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LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #....: D7A260184

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Total Dissolved Solids			WO#:JNL9K1AC-LCS/JNL9K1AD-LCSD		LCS	Lot-Sample#: D7A290000-432		
	500	501	mg/L	100		MCAWW 160.1	01/29/07	7029432
	500	523	mg/L	105	4.3	MCAWW 160.1	01/29/07	7029432
			Dilution Factor: 1			Analysis Time...: 14:30		
Total Sulfide			WO#:JNLQ61AC-LCS/JNLQ61AD-LCSD		LCS	Lot-Sample#: D7A300000-429		
	0.538	0.573	mg/L	107		MCAWW 376.2	01/30/07	7030429
	0.538	0.545	mg/L	101	5.0	MCAWW 376.2	01/30/07	7030429
			Dilution Factor: 1			Analysis Time...: 16:00		
Total Suspended Solids			WO#:JNKV21AC-LCS/JNKV21AD-LCSD		LCS	Lot-Sample#: D7A290000-428		
	100	98.0	mg/L	98		MCAWW 160.2	01/29/07	7029428
	100	92.0	mg/L	92	6.3	MCAWW 160.2	01/29/07	7029428
			Dilution Factor: 1			Analysis Time...: 10:00		

NOTE (S) :

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #....: D7A260184

Matrix.....: WATER

Date Sampled...: 01/26/07 08:30 **Date Received..:** 01/26/07

PARAMETER	PERCENT RECOVERY		RPD	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
	RECOVERY	LIMITS				
Bromide		WO#: JNJVH1CK-MS/JNJVH1CL-MSD	MS	Lot-Sample #:	D7A260184-001	
	98	(80 - 120)		MCAWW 300.0A	01/26/07	7027067
	102	(80 - 120) 3.4 (0-20)		MCAWW 300.0A	01/26/07	7027067
		Dilution Factor: 1				
		Analysis Time...: 14:28				
Bromide		WO#: JNGL31AQ-MS/JNGL31AR-MSD	MS	Lot-Sample #:	D7A260297-002	
	99	(85 - 115)		MCAWW 300.0A	01/26/07	7027074
	100	(85 - 115) 1.5 (0-20)		MCAWW 300.0A	01/26/07	7027074
		Dilution Factor: 1				
		Analysis Time...: 22:07				
Chloride		WO#: JNJVH1CF-MS/JNJVH1CG-MSD	MS	Lot-Sample #:	D7A260184-001	
	101	(80 - 120)		MCAWW 300.0A	01/26/07	7027068
	105	(80 - 120) 2.6 (0-20)		MCAWW 300.0A	01/26/07	7027068
		Dilution Factor: 1				
		Analysis Time...: 14:28				
Chloride		WO#: JNGL31AJ-MS/JNGL31AK-MSD	MS	Lot-Sample #:	D7A260297-002	
	97	(85 - 115)		MCAWW 300.0A	01/26/07	7027070
	99	(85 - 115) 0.91 (0-20)		MCAWW 300.0A	01/26/07	7027070
		Dilution Factor: 1				
		Analysis Time...: 22:07				
Fluoride		WO#: JNJVH1CD-MS/JNJVH1CE-MSD	MS	Lot-Sample #:	D7A260184-001	
	97	(80 - 120)		MCAWW 300.0A	01/26/07	7027069
	100	(80 - 120) 2.9 (0-20)		MCAWW 300.0A	01/26/07	7027069
		Dilution Factor: 1				
		Analysis Time...: 14:28				
Nitrate		WO#: JNJVH1CM-MS/JNJVH1CN-MSD	MS	Lot-Sample #:	D7A260184-001	
	101	(80 - 120)		MCAWW 300.0A	01/26/07	7027066
	104	(80 - 120) 3.3 (0-20)		MCAWW 300.0A	01/26/07	7027066
		Dilution Factor: 1				
		Analysis Time...: 14:28				
Nitrate		WO#: JNGL31AU-MS/JNGL31AV-MSD	MS	Lot-Sample #:	D7A260297-002	
	101	(85 - 115)		MCAWW 300.0A	01/26/07	7027071
	102	(85 - 115) 1.3 (0-20)		MCAWW 300.0A	01/26/07	7027071
		Dilution Factor: 1				
		Analysis Time...: 22:07				

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #....: D7A260184

Matrix.....: WATER

Date Sampled....: 01/26/07 08:30 **Date Received..:** 01/26/07

PARAMETER	PERCENT	RECOVERY	RPD	METHOD	PREPARATION-	PREP
	RECOVERY	LIMITS	RPD		ANALYSIS DATE	BATCH #
Nitrite			WO#: JNFWH1CH-MS/JNFWH1CJ-MSD	MS	Lot-Sample #:	D7A260184-001
	107	(80 - 120)		MCAWW 300.0A	01/26/07	7027064
	111	(80 - 120)	3.4 (0-20)	MCAWW 300.0A	01/26/07	7027064
				Dilution Factor: 1		
				Analysis Time...: 14:28		
Nitrite			WO#: JNGL31AM-MS/JNGL31AN-MSD	MS	Lot-Sample #:	D7A260297-002
	103	(85 - 115)		MCAWW 300.0A	01/26/07	7027072
	105	(85 - 115)	1.4 (0-20)	MCAWW 300.0A	01/26/07	7027072
				Dilution Factor: 1		
				Analysis Time...: 22:07		
Sulfate			WO#: JNFWH1CP-MS/JNFWH1CQ-MSD	MS	Lot-Sample #:	D7A260184-001
	98	(80 - 120)		MCAWW 300.0A	01/26/07	7027065
	101	(80 - 120)	2.4 (0-20)	MCAWW 300.0A	01/26/07	7027065
				Dilution Factor: 1		
				Analysis Time...: 14:28		
Sulfate			WO#: JNGL31AX-MS/JNGL31A0-MSD	MS	Lot-Sample #:	D7A260297-002
	98	(85 - 115)		MCAWW 300.0A	01/26/07	7027073
	100	(85 - 115)	1.8 (0-20)	MCAWW 300.0A	01/26/07	7027073
				Dilution Factor: 1		
				Analysis Time...: 22:07		
Total Sulfide			WO#: JNFWH1CR-MS/JNFWH1CT-MSD	MS	Lot-Sample #:	D7A260184-001
	111	(20 - 156)		MCAWW 376.2	01/30/07	7030429
	113	(20 - 156)	1.5 (0-30)	MCAWW 376.2	01/30/07	7030429
				Dilution Factor: 1		
				Analysis Time...: 16:00		

NOTE(S) :

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

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #....: D7A260184

Matrix.....: WATER

Date Sampled....: 01/26/07 08:30 **Date Received..:** 01/26/07

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			METHOD	PREPARATION-	PREP
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD		ANALYSIS DATE	BATCH #
Bromide			WO#:	JNFVH1CK-MS/JNFVH1CL-MSD	MS	Lot-Sample	#:	D7A260184-001	
	0.15	5.00	5.07	mg/L	98		MCAWW	300.0A	01/26/07
	0.15	5.00	5.25	mg/L	102	3.4	MCAWW	300.0A	01/26/07
			Dilution Factor:	1					
			Analysis Time...:	14:28					
Bromide			WO#:	JNGL31AQ-MS/JNGL31AR-MSD	MS	Lot-Sample	#:	D7A260297-002	
	ND	5.00	5.04	mg/L	99		MCAWW	300.0A	01/26/07
	ND	5.00	5.12	mg/L	100	1.5	MCAWW	300.0A	01/26/07
			Dilution Factor:	1					
			Analysis Time...:	22:07					
Chloride			WO#:	JNFVH1CF-MS/JNFVH1CG-MSD	MS	Lot-Sample	#:	D7A260184-001	
	9.9	25.0	35.3	mg/L	101		MCAWW	300.0A	01/26/07
	9.9	25.0	36.2	mg/L	105	2.6	MCAWW	300.0A	01/26/07
			Dilution Factor:	1					
			Analysis Time...:	14:28					
Chloride			WO#:	JNGL31AJ-MS/JNGL31AK-MSD	MS	Lot-Sample	#:	D7A260297-002	
	15	25.0	39.8	mg/L	97		MCAWW	300.0A	01/26/07
	15	25.0	40.1	mg/L	99	0.91	MCAWW	300.0A	01/26/07
			Dilution Factor:	1					
			Analysis Time...:	22:07					
Fluoride			WO#:	JNFVH1CD-MS/JNFVH1CE-MSD	MS	Lot-Sample	#:	D7A260184-001	
	0.96	5.00	5.80	mg/L	97		MCAWW	300.0A	01/26/07
	0.96	5.00	5.97	mg/L	100	2.9	MCAWW	300.0A	01/26/07
			Dilution Factor:	1					
			Analysis Time...:	14:28					
Nitrate			WO#:	JNFVH1CM-MS/JNFVH1CN-MSD	MS	Lot-Sample	#:	D7A260184-001	
	ND	5.00	5.04	mg/L	101		MCAWW	300.0A	01/26/07
	ND	5.00	5.21	mg/L	104	3.3	MCAWW	300.0A	01/26/07
			Dilution Factor:	1					
			Analysis Time...:	14:28					
Nitrate			WO#:	JNGL31AU-MS/JNGL31AV-MSD	MS	Lot-Sample	#:	D7A260297-002	
	0.052	5.00	5.09	mg/L	101		MCAWW	300.0A	01/26/07
	0.052	5.00	5.16	mg/L	102	1.3	MCAWW	300.0A	01/26/07
			Dilution Factor:	1					
			Analysis Time...:	22:07					

(Continued on next page)

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #....: D7A260184

Matrix.....: WATER

Date Sampled....: 01/26/07 08:30 **Date Received..:** 01/26/07

PARAMETER	SAMPLE	SPIKE	MEASRD	PERCNT			METHOD	PREPARATION-	PREP
	AMOUNT	AMT	AMOUNT	UNITS	RECVRY	RPD		ANALYSIS DATE	BATCH #
Nitrite WO#: JNFWH1CH-MS/JNFWH1CJ-MSD MS Lot-Sample #: D7A260184-001									
ND	5.00	5.36	mg/L	107			MCAWW 300.0A	01/26/07	7027064
ND	5.00	5.54	mg/L	111	3.4		MCAWW 300.0A	01/26/07	7027064
		Dilution Factor:	1						
		Analysis Time...:	14:28						
Nitrite WO#: JNGL31AM-MS/JNGL31AN-MSD MS Lot-Sample #: D7A260297-002									
ND	5.00	5.15	mg/L	103			MCAWW 300.0A	01/26/07	7027072
ND	5.00	5.23	mg/L	105	1.4		MCAWW 300.0A	01/26/07	7027072
		Dilution Factor:	1						
		Analysis Time...:	22:07						
Sulfate WO#: JNFWH1CP-MS/JNFWH1CQ-MSD MS Lot-Sample #: D7A260184-001									
7.1	25.0	31.6	mg/L	98			MCAWW 300.0A	01/26/07	7027065
7.1	25.0	32.4	mg/L	101	2.4		MCAWW 300.0A	01/26/07	7027065
		Dilution Factor:	1						
		Analysis Time...:	14:28						
Sulfate WO#: JNGL31AX-MS/JNGL31A0-MSD MS Lot-Sample #: D7A260297-002									
1.0	25.0	25.5	mg/L	98			MCAWW 300.0A	01/26/07	7027073
1.0	25.0	26.0	mg/L	100	1.8		MCAWW 300.0A	01/26/07	7027073
		Dilution Factor:	1						
		Analysis Time...:	22:07						
Total Sulfide WO#: JNFWH1CR-MS/JNFWH1CT-MSD MS Lot-Sample #: D7A260184-001									
0.19	0.538	0.788	mg/L	111			MCAWW 376.2	01/30/07	7030429
0.19	0.538	0.800	mg/L	113	1.5		MCAWW 376.2	01/30/07	7030429
		Dilution Factor:	1						
		Analysis Time...:	16:00						

NOTE (S) :

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

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Date Sampled...: 01/25/07 10:36 Date Received..: 01/26/07

DUPLICATE		RPD		PREPARATION-		PREP		
PARAM	RESULT	RESULT	UNITS	RPD	LIMIT	METHOD	ANALYSIS DATE	BATCH #
pH	8.4	8.4	No Units	0.0	(0-5.0)	SD Lot-Sample #: MCAWW 150.1	D7A260176-001 01/26/07	7026411
			Dilution Factor:	1		Analysis Time..:	14:47	
Total Suspended Solids						SD Lot-Sample #: D7A260176-001		
	4.0	4.0	mg/L	0.0	(0-20)	MCAWW 160.2	01/29/07	7029428
			Dilution Factor:	1		Analysis Time..:	10:00	

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #....: D7A260184 **Work Order #....:** JNGL3-SMP **Matrix.....:** WATER
JNGL3-DUP

Date Sampled....: 01/26/07 08:30 **Date Received...:** 01/26/07

PARAM RESULT	DUPLICATE		RPD	LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
	RESULT	UNITS					
Chloride					SD Lot-Sample #: D7A260297-002		
	15	mg/L	0.12	(0-20)	MCAWW 300.0A	01/26/07	7027070
		Dilution Factor: 1			Analysis Time...: 21:35		
Nitrite					SD Lot-Sample #: D7A260297-002		
ND	ND	mg/L	0	(0-20)	MCAWW 300.0A	01/26/07	7027072
		Dilution Factor: 1			Analysis Time...: 21:35		
Bromide					SD Lot-Sample #: D7A260297-002		
ND	ND	mg/L	0.20	(0-20)	MCAWW 300.0A	01/26/07	7027074
		Dilution Factor: 1			Analysis Time...: 21:35		
Nitrate					SD Lot-Sample #: D7A260297-002		
0.052 F	0.051 F	mg/L	1.7	(0-20)	MCAWW 300.0A	01/26/07	7027071
		Dilution Factor: 1			Analysis Time...: 21:35		
Sulfate					SD Lot-Sample #: D7A260297-002		
1.0	1.0	mg/L	0.38	(0-20)	MCAWW 300.0A	01/26/07	7027073
		Dilution Factor: 1			Analysis Time...: 21:35		

NOTE(S) :

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

F The analyte was identified but the value was below the RL and above the MDL.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #....: D7A260184 **Work Order #....:** JND1D-SMP
 JND1D-DUP

Date Sampled....: 01/24/07 12:10 **Date Received...:** 01/25/07

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE</u>	<u>UNITS</u>	<u>RPD</u>	<u>LIMIT</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
		<u>RESULT</u>		<u>RPD</u>			<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Total Dissolved Solids						SD Lot-Sample #:	D7A250245-014	
	1200	1200	mg/L	0.41	(0-20)	MCAWW 160.1	01/29/07	7029432
			Dilution Factor: 1			Analysis Time...: 14:30		

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

**Client Lot #....: D7A260184 Work Order #....: JNEH4-SMP Matrix.....: WATER
JNEH4-DUP**

Date Sampled...: 01/24/07 08:59 Date Received...: 01/25/07

PARAM	RESULT	DUPLICATE	RPD			METHOD	PREPARATION-	PREP
		RESULT	UNITS	RPD	LIMIT			
Total Alkalinity	150	150	mg/L	0.93	(0-10)	SD Lot-Sample #: D7A250331-002 MCAWW 310.1	01/26/07	7030106
			Dilution Factor: 1			Analysis Time...: 13:00		

5.30C

A
1.26.07
R1

Chain of Custody Record

STL-4124 (0901)

SEVERN TREN T
STL

STL Denver
4955 Yarrow Street
Arvada, CO 80002

Severn Trent Laboratories, Inc.

MORWEST APPLIED GEOLOGY

Konrad Quest

Chain of Custody Number
349632

Address
950 S. Chever St. Suite 810

Telephone Number (Area Code)/Fax Number
303-782-0164

Date
1-25-07

Chain of Custody Number
349632

City
DENVER

Site Contact
Carrier/Waybill Number

Date
1/26/07

Project Name and Location (State)
LARSEN BARN BASELINE STUDY, CO

Lab Contact
Analysis (Attach list if more space is needed)

Date
1/26/07

Contract/Purchase Order/Quote No.
73407

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description
(Containers for each sample may be combined on one line)

Date
1-25-07

Time
13:10

Air

Aqueous

Sed.

Soil

Unpres.

H2SO4

HNO3

HCl

NaOH

ZnAc / NaOH

Matrix

Gren Chem

TS-5

TOTAL SURFACE

DRO

METALS, diss

VQA

Containers & Preservatives

Lab Contact

Lab Number

Date
1/26/07

Time
0845

Possible Hazard Identification

Non-Hazard Flammable Skin Irritant Poison B Unknown

Return To Client

Disposal By Lab

Archive For _____ Months

(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

24 Hours 48 Hours 7 Days 14 Days 21 Days Other _____

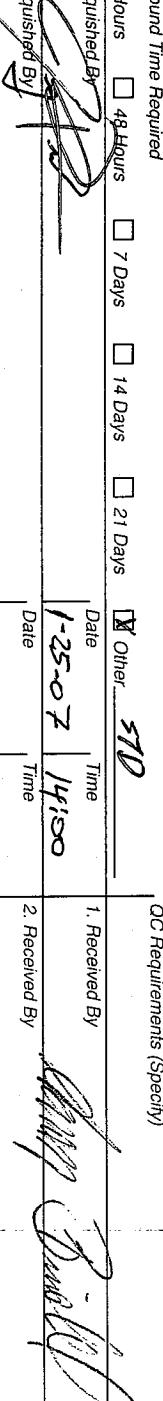
STL

QC Requirements (Specify)

Archive For _____ Months

(A fee may be assessed if samples are retained longer than 1 month)

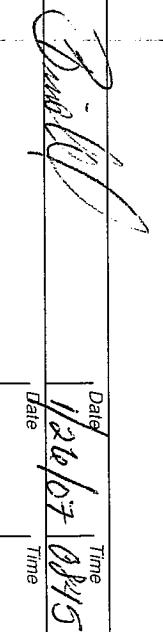
1. Relinquished By


Date **1-25-07** Time **14:50**

Received By _____

Date **1/26/07** Time **0845**

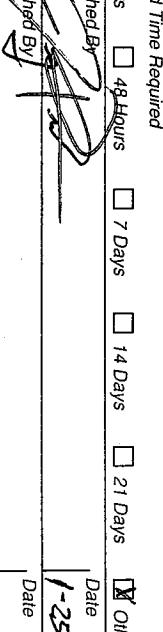
2. Relinquished By


Date _____ Time _____

Received By _____

Date _____ Time _____

3. Relinquished By


Date _____ Time _____

Comments

STL Denver
Sample Receiving Checklist

Lot #: DFA2600184 Date/Time Received: 1/26/07 0845

Company Name & Sampling Site: Norwest / Applied Hydrology

PM to Complete This Section: Yes No

Quarantined: Yes No

Quote #: 73407

Special Instructions:

for VOC log as RSK-125 Diss gases

Log all tests in quote

*may have to filter/preserve Diss. metals

Time Zone:

• EDT/EST • CDT/CST • MDT/MST • PDT/PST • OTHER

Unpacking Checks:

Cooler #(s): 1 _____

Temperatures (°C): 5.3 _____

N/A Yes No

Initials

PS

- 1. Cooler seals intact? (N/A if hand delivered) If no, document on CUR.
- 2. Chain of custody present? If no, document on CUR.
- 3. Bottles broken and/or are leaking? If yes, document on CUR.
- 4. Multiphasic samples obvious? If yes, document on CUR.
- 5. Proper container & preservatives used? (ref. Attachment D of SOP# DEN-QA-0003) If no, document on CUR.
- 6. pH of all samples checked and meet requirements? If no, document on CUR.
- 7. Sufficient volume provided for all analysis requested? (ref. Attachment D of SOP# DEN-QA-0003) If no, document on CUR, and contact PM before proceeding.
- 8. Did chain of custody agree with labels ID and samples received? If no, document on CUR.
- 9. Were VOA samples without headspace? If no, document on CUR.
- 10. Were VOA vials preserved? Preservative HCl 4±2°C Sodium Thiosulfate Ascorbic Acid
- 11. Did samples require preservation with sodium thiosulfate?
- 12. If yes to #11, did the samples contain residual chlorine? If yes, document on CUR.
- 13. Sediment present in dissolved/filtered bottles? If yes, document on CUR.
- 14. Is sufficient volume provided for client requested MS, MSD or matrix duplicates? If no, document on CUR, and contact PM before proceeding.
- 15. Receipt date(s) > 48 hours past the collection date(s)? If yes, notify PA/PM.
- 16. Are analyses with short holding times requested?
- 17. Was a quick Turn Around (TAT) requested?

STL Denver
Sample Receiving Checklist

Lot # D7A260184

Login Checks:

N/A Yes No

Initials

AB

18. Sufficient volume provided for all analysis requested? (ref. Attachment D of SOP# DEN-QA-0003) If no, document on CUR, and contact PM before proceeding.
19. Is sufficient volume provided for client requested MS, MSD or matrix duplicates? If no, document on CUR, and contact PM before proceeding.
20. Did the chain of custody includes "received by" and "relinquished" by signatures, dates, and times?
21. Were special log in instructions read and followed?
22. Were AFCEE metals logged for refrigerated storage?
23. Were tests logged checked against the COC? Which samples were confirmed? J
24. Was a Rush form completed for quick TAT?
25. Was a Short Hold form completed for any short holds?
26. Is "Strict ICOC" required?
27. Were special archiving instructions indicated in the General Comments? If so, what were they?

Labeling and Storage Checks:

Initials

PS

28. Was the subcontract COC signed and sent with samples to bottle prep?
29. Were sample labels double-checked by a second person?
30. Were sample bottles and COC double checked for dissolved/filtered metals by a second person?
31. Did the sample ID, Date, and Time from label match what was logged?
32. Were stickers for special archiving instructions affixed to each box and to the ICOC? See #27
33. Were AFCEE metals stored refrigerated?
34. Were "Strict ICOC" copies given to satellite storage areas?

Document any problems or discrepancies and the actions taken to resolve them on a Condition Upon Receipt Anomaly Report (CUR).