1085981 - R8 SDMS

COMPLETE SAMPLE DELIVERY GROUP FILE (CSF)
CHAIN OF CUSTODY FORM
U.S. Environmental Protection Agency
Region 8 Superfund Program
Contract Laboratory Program (CLP)

Audit Number:	7 (A8-2D08-7)	Site Name:	Richardson Flat Tailings
Date CSF Received:	9/11/08	Site Manager:	Kathryn Hernandez
Received By:	Don Goodrich	Case Number:	37402
Lab Name:	Datachem	SDG Number:	MH25F1
Lab Location:	Salt Lake City, UT	Number of Samples:	13
CLP Lab Code:	DATAC	Resubmitted CSF:	Yes ____ No X

CSF Relinquished By:

Print Name	Date	Signature
Don Goodrich	10/21/2008	[signature]

CSF Received By:

Print Name	Date	Signature

CSF Relinquished By:

Print Name	Date	Signature

CSF Received By:

Print Name	Date	Signature

CSF Relinquished By:

Print Name	Date	Signature

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CSF Relinquished By:

Print Name	Date	Signature

CSF Received By:

Print Name	Date	Signature

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA Sample No.
MH25F1

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Matrix: (soil/water) WATER Lab Sample ID: 8171034001

Level: (low/med) LOW Date Received: 06/18/2008

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	728.			P
7440-36-0	Antimony	518.			P
7440-38-2	Arsenic	19.0			P
7440-39-3	Barium	584.			P
7440-41-7	Beryllium	5.6	U		P
7440-43-9	Cadmium	0.63	J		P
7440-70-2	Calcium	13700			P
7440-47-3	Chromium	2.7	J		P
7440-48-4	Cobalt	1.0	J		P
7440-50-8	Copper	21.8	J		P
7439-89-6	Iron	563.			P
7439-92-1	Lead	296.			P
7439-95-4	Magnesium	2380	J		P
7439-96-5	Manganese	700.			P
7439-97-6	Mercury				NR
7440-02-0	Nickel	2.4	J		P
7440-09-7	Potassium	824.	J		P
7782-49-2	Selenium	12.3	J		P
7440-22-4	Silver	11.1	U		P
7440-23-5	Sodium	8000			P
7440-28-0	Thallium	27.8	U		P
7440-62-2	Vanadium	1.4	J		P
7440-66-6	Zinc	143.			P
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA Sample No.
MH2698

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Matrix: (soil/water) WATER Lab Sample ID: 8171034002

Level: (low/med) LOW Date Received: 06/18/2008

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3790			P
7440-36-0	Antimony	41.8	J		P
7440-38-2	Arsenic	5.1	J		P
7440-39-3	Barium	474.			P
7440-41-7	Beryllium	5.6	U		P
7440-43-9	Cadmium	2.5	J		P
7440-70-2	Calcium	15100			P
7440-47-3	Chromium	7.3	J		P
7440-48-4	Cobalt	1.1	J		P
7440-50-8	Copper	30.1			P
7439-89-6	Iron	2840			P
7439-92-1	Lead	109.			P
7439-95-4	Magnesium	2440	J		P
7439-96-5	Manganese	247.			P
7439-97-6	Mercury				NR
7440-02-0	Nickel	4.3	J		P
7440-09-7	Potassium	2140	J		P
7782-49-2	Selenium	15.1	J		P
7440-22-4	Silver	11.1	U		P
7440-23-5	Sodium	7360			P
7440-28-0	Thallium	27.8	U		P
7440-62-2	Vanadium	8.0	J		P
7440-66-6	Zinc	397.			P
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA Sample No.
MH26A0

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Matrix: (soil/water) WATER Lab Sample ID: 8171034003

Level: (low/med) LOW Date Received: 06/18/2008

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2010			P
7440-36-0	Antimony	39.3	J		P
7440-38-2	Arsenic	11.1	J		P
7440-39-3	Barium	416.			P
7440-41-7	Beryllium	5.6	U		P
7440-43-9	Cadmium	2.7	J		P
7440-70-2	Calcium	14500			P
7440-47-3	Chromium	4.5	J		P
7440-48-4	Cobalt	55.6	U		P
7440-50-8	Copper	29.7			P
7439-89-6	Iron	1770			P
7439-92-1	Lead	309.			P
7439-95-4	Magnesium	1680	J		P
7439-96-5	Manganese	172.			P
7439-97-6	Mercury				NR
7440-02-0	Nickel	3.6	J		P
7440-09-7	Potassium	1370	J		P
7782-49-2	Selenium	8.5	J		P
7440-22-4	Silver	3.2	J		P
7440-23-5	Sodium	7020			P
7440-28-0	Thallium	27.8	U		P
7440-62-2	Vanadium	2.9	J		P
7440-66-6	Zinc	614.			P
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA Sample No.
MH26A2

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Matrix: (soil/water) WATER Lab Sample ID: 8171034004

Level: (low/med) LOW Date Received: 06/18/2008

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2400			P
7440-36-0	Antimony	18.5	J		P
7440-38-2	Arsenic	5.1	J		P
7440-39-3	Barium	294.			P
7440-41-7	Beryllium	5.6	U		P
7440-43-9	Cadmium	1.6	J		P
7440-70-2	Calcium	11100			P
7440-47-3	Chromium	5.1	J		P
7440-48-4	Cobalt	1.0	J		P
7440-50-8	Copper	26.0	J		P
7439-89-6	Iron	2160			P
7439-92-1	Lead	188.			P
7439-95-4	Magnesium	1880	J		P
7439-96-5	Manganese	232.			P
7439-97-6	Mercury				NR
7440-02-0	Nickel	4.0	J		P
7440-09-7	Potassium	1430	J		P
7782-49-2	Selenium	8.9	J		P
7440-22-4	Silver	11.1	U		P
7440-23-5	Sodium	4380	J		P
7440-28-0	Thallium	27.8	U		P
7440-62-2	Vanadium	4.3	J		P
7440-66-6	Zinc	304.			P
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA Sample No.
MH26A5

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Matrix: (soil/water) WATER Lab Sample ID: 8171034005

Level: (low/med) LOW Date Received: 06/18/2008

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	947.			P
7440-36-0	Antimony	45.2	J		P
7440-38-2	Arsenic	6.6	J		P
7440-39-3	Barium	475.			P
7440-41-7	Beryllium	5.6	U		P
7440-43-9	Cadmium	0.72	J		P
7440-70-2	Calcium	11300			P
7440-47-3	Chromium	2.6	J		P
7440-48-4	Cobalt	55.6	U		P
7440-50-8	Copper	35.8			P
7439-89-6	Iron	958.			P
7439-92-1	Lead	157.			P
7439-95-4	Magnesium	1120	J		P
7439-96-5	Manganese	284.			P
7439-97-6	Mercury				NR
7440-02-0	Nickel	1.5	J		P
7440-09-7	Potassium	1780	J		P
7782-49-2	Selenium	8.7	J		P
7440-22-4	Silver	11.1	U		P
7440-23-5	Sodium	15600			P
7440-28-0	Thallium	27.8	U		P
7440-62-2	Vanadium	1.4	J		P
7440-66-6	Zinc	166.			P
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA Sample No.
MH26A8

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Matrix: (soil/water) WATER Lab Sample ID: 8171034006

Level: (low/med) LOW Date Received: 06/18/2008

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5300			P
7440-36-0	Antimony	26.9	J		P
7440-38-2	Arsenic	13.0			P
7440-39-3	Barium	385.			P
7440-41-7	Beryllium	0.22	J		P
7440-43-9	Cadmium	2.1	J		P
7440-70-2	Calcium	11700			P
7440-47-3	Chromium	9.7	J		P
7440-48-4	Cobalt	2.2	J		P
7440-50-8	Copper	31.3			P
7439-89-6	Iron	4270			P
7439-92-1	Lead	358.			P
7439-95-4	Magnesium	3120	J		P
7439-96-5	Manganese	319.			P
7439-97-6	Mercury				NR
7440-02-0	Nickel	6.5	J		P
7440-09-7	Potassium	1760	J		P
7782-49-2	Selenium	19.7	J		P
7440-22-4	Silver	11.1	U		P
7440-23-5	Sodium	3500	J		P
7440-28-0	Thallium	27.8	U		P
7440-62-2	Vanadium	8.2	J		P
7440-66-6	Zinc	461.			P
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA Sample No.
MH26B0

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Matrix: (soil/water) WATER Lab Sample ID: 8171034007

Level: (low/med) LOW Date Received: 06/18/2008

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3910			P
7440-36-0	Antimony	25.1	J		P
7440-38-2	Arsenic	16.1			P
7440-39-3	Barium	511.			P
7440-41-7	Beryllium	0.19	J		P
7440-43-9	Cadmium	0.97	J		P
7440-70-2	Calcium	10900			P
7440-47-3	Chromium	7.0	J		P
7440-48-4	Cobalt	0.72	J		P
7440-50-8	Copper	15.2	J		P
7439-89-6	Iron	3010			P
7439-92-1	Lead	95.8			P
7439-95-4	Magnesium	1790	J		P
7439-96-5	Manganese	93.6			P
7439-97-6	Mercury				NR
7440-02-0	Nickel	3.9	J		P
7440-09-7	Potassium	1210	J		P
7782-49-2	Selenium	6.9	J		P
7440-22-4	Silver	11.1	U		P
7440-23-5	Sodium	4310	J		P
7440-28-0	Thallium	27.8	U		P
7440-62-2	Vanadium	6.6	J		P
7440-66-6	Zinc	187.			P
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA Sample No.
MH26B3

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Matrix: (soil/water) WATER Lab Sample ID: 8171034008

Level: (low/med) LOW Date Received: 06/18/2008

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2690			P
7440-36-0	Antimony	13.9	J		P
7440-38-2	Arsenic	3.3	J		P
7440-39-3	Barium	372.			P
7440-41-7	Beryllium	0.15	J		P
7440-43-9	Cadmium	0.71	J		P
7440-70-2	Calcium	11700			P
7440-47-3	Chromium	5.9	J		P
7440-48-4	Cobalt	55.6	U		P
7440-50-8	Copper	10.6	J		P
7439-89-6	Iron	1990			P
7439-92-1	Lead	33.8			P
7439-95-4	Magnesium	1790	J		P
7439-96-5	Manganese	128.			P
7439-97-6	Mercury				NR
7440-02-0	Nickel	11.5	J		P
7440-09-7	Potassium	1030	J		P
7782-49-2	Selenium	8.0	J		P
7440-22-4	Silver	11.1	U		P
7440-23-5	Sodium	4810	J		P
7440-28-0	Thallium	27.8	U		P
7440-62-2	Vanadium	5.2	J		P
7440-66-6	Zinc	117.			P
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA Sample No.
MH26C1

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Matrix: (soil/water) WATER Lab Sample ID: 8171034009

Level: (low/med) LOW Date Received: 06/18/2008

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4040			P
7440-36-0	Antimony	37.8	J		P
7440-38-2	Arsenic	11.2			P
7440-39-3	Barium	703.			P
7440-41-7	Beryllium	0.15	J		P
7440-43-9	Cadmium	2.9	J		P
7440-70-2	Calcium	12500			P
7440-47-3	Chromium	7.2	J		P
7440-48-4	Cobalt	55.6	U		P
7440-50-8	Copper	36.0			P
7439-89-6	Iron	2900			P
7439-92-1	Lead	326.			P
7439-95-4	Magnesium	2270	J		P
7439-96-5	Manganese	111.			P
7439-97-6	Mercury				NR
7440-02-0	Nickel	5.3	J		P
7440-09-7	Potassium	1500	J		P
7782-49-2	Selenium	10.1	J		P
7440-22-4	Silver	3.6	J		P
7440-23-5	Sodium	9900			P
7440-28-0	Thallium	27.8	U		P
7440-62-2	Vanadium	5.0	J		P
7440-66-6	Zinc	1010			P
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA Sample No.
MH26C3

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Matrix: (soil/water) WATER Lab Sample ID: 8171034010

Level: (low/med) LOW Date Received: 06/18/2008

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	173.	J		P
7440-36-0	Antimony	35.0	J		P
7440-38-2	Arsenic	11.1	U		P
7440-39-3	Barium	259.			P
7440-41-7	Beryllium	5.6	U		P
7440-43-9	Cadmium	0.54	J		P
7440-70-2	Calcium	23200			P
7440-47-3	Chromium	1.3	J		P
7440-48-4	Cobalt	55.6	U		P
7440-50-8	Copper	8.3	J		P
7439-89-6	Iron	156.			P
7439-92-1	Lead	19.4			P
7439-95-4	Magnesium	1700	J		P
7439-96-5	Manganese	4.3	J		P
7439-97-6	Mercury				NR
7440-02-0	Nickel	1.7	J		P
7440-09-7	Potassium	1170	J		P
7782-49-2	Selenium	8.8	J		P
7440-22-4	Silver	11.1	U		P
7440-23-5	Sodium	3080	J		P
7440-28-0	Thallium	27.8	U		P
7440-62-2	Vanadium	55.6	U		P
7440-66-6	Zinc	47.0	J		P
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA Sample No.
MH26C5

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Matrix: (soil/water) WATER Lab Sample ID: 8171034011

Level: (low/med) LOW Date Received: 06/18/2008

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	346.			P
7440-36-0	Antimony	34.1	J		P
7440-38-2	Arsenic	2.4	J		P
7440-39-3	Barium	312.			P
7440-41-7	Beryllium	5.6	U		P
7440-43-9	Cadmium	0.64	J		P
7440-70-2	Calcium	18700			P
7440-47-3	Chromium	1.6	J		P
7440-48-4	Cobalt	55.6	U		P
7440-50-8	Copper	14.1	J		P
7439-89-6	Iron	377.			P
7439-92-1	Lead	57.2			P
7439-95-4	Magnesium	1950	J		P
7439-96-5	Manganese	259.			P
7439-97-6	Mercury				NR
7440-02-0	Nickel	1.7	J		P
7440-09-7	Potassium	1510	J		P
7782-49-2	Selenium	6.6	J		P
7440-22-4	Silver	11.1	U		P
7440-23-5	Sodium	3380	J		P
7440-28-0	Thallium	27.8	U		P
7440-62-2	Vanadium	0.88	J		P
7440-66-6	Zinc	65.3	J		P
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA Sample No.
MH26C7

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Matrix: (soil/water) WATER Lab Sample ID: 8171034012

Level: (low/med) LOW Date Received: 06/18/2008

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1780			P
7440-36-0	Antimony	13.6	J		P
7440-38-2	Arsenic	2.6	J		P
7440-39-3	Barium	425.			P
7440-41-7	Beryllium	5.6	U		P
7440-43-9	Cadmium	0.48	J		P
7440-70-2	Calcium	13700			P
7440-47-3	Chromium	5.5	J		P
7440-48-4	Cobalt	55.6	U		P
7440-50-8	Copper	8.2	J		P
7439-89-6	Iron	1310			P
7439-92-1	Lead	24.8			P
7439-95-4	Magnesium	1800	J		P
7439-96-5	Manganese	182.			P
7439-97-6	Mercury				NR
7440-02-0	Nickel	3.3	J		P
7440-09-7	Potassium	979.	J		P
7782-49-2	Selenium	19.0	J		P
7440-22-4	Silver	11.1	U		P
7440-23-5	Sodium	5890			P
7440-28-0	Thallium	27.8	U		P
7440-62-2	Vanadium	3.1	J		P
7440-66-6	Zinc	78.3			P
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA Sample No.
MH26C9

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Matrix: (soil/water) WATER Lab Sample ID: 8171034013

Level: (low/med) LOW Date Received: 06/18/2008

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1820			P
7440-36-0	Antimony	6.5	J		P
7440-38-2	Arsenic	4.8	J		P
7440-39-3	Barium	427.			P
7440-41-7	Beryllium	5.6	U		P
7440-43-9	Cadmium	0.19	J		P
7440-70-2	Calcium	10600			P
7440-47-3	Chromium	4.7	J		P
7440-48-4	Cobalt	55.6	U		P
7440-50-8	Copper	6.4	J		P
7439-89-6	Iron	1240			P
7439-92-1	Lead	5.5	J		P
7439-95-4	Magnesium	1730	J		P
7439-96-5	Manganese	45.6			P
7439-97-6	Mercury				NR
7440-02-0	Nickel	2.7	J		P
7440-09-7	Potassium	1180	J		P
7782-49-2	Selenium	6.6	J		P
7440-22-4	Silver	11.1	U		P
7440-23-5	Sodium	5540	J		P
7440-28-0	Thallium	27.8	U		P
7440-62-2	Vanadium	4.7	J		P
7440-66-6	Zinc	37.3	J		P
57-12-5	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments:

USEPA - CLP

2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Initial Calibration Verification Source: ICV-1(1201)

Continuing Calibration Verification Source: C.P.I.

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification					M
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	2482	2498	101	25000	24557	98	24425	98	P
Antimony	992.0	999.95	101	5000	4985	100	4996	100	P
Arsenic	996.0	998.80	100	750.0	736.31	98	736.72	98	P
Barium	502.0	511.09	102	5000	5046	101	5122	102	P
Beryllium	493.0	497.71	101	750.0	761.77	102	755.69	101	P
Cadmium	494.0	494.57	100	750.0	765.57	102	761.20	101	P
Calcium	10180	9949	98	25000	24713	99	24315	97	P
Chromium	490.0	494.82	101	5000	4968	99	4997	100	P
Cobalt	496.0	499.52	101	5000	4919	98	4903	98	P
Copper	490.0	496.46	101	5000	4987	100	4997	100	P
Iron	5107	5115	100	25000	25000	100	24861	99	P
Lead	996.0	994.26	100	750.0	766.21	102	766.11	102	P
Magnesium	6003	5884	98	25000	24694	99	24474	98	P
Manganese	495.0	508.38	103	5000	4950	99	4879	98	P
Mercury									NR
Nickel	492.0	496.58	101	5000	4896	98	4876	98	P
Potassium	10008	9915	99	25000	24619	98	24760	99	P
Selenium	1005	1011	101	750.0	769.44	103	778.26	104	P
Silver	495.0	498.99	101	750.0	774.03	103	773.60	103	P
Sodium	10039	9844	98	25000	24818	99	25056	100	P
Thallium	1027	1046	102	750.0	721.59	96	722.54	96	P
Vanadium	501.0	498.71	100	5000	5069	101	4972	99	P
Zinc	1000	1013	101	5000	4948	99	4888	98	P
Cyanide									NR

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Initial Calibration Verification Source: _____

Continuing Calibration Verification Source: C.P.I.

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification					M
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				25000	24445	98	24345	97	P
Antimony				5000	5018	100	5024	100	P
Arsenic				750.0	740.09	99	736.49	98	P
Barium				5000	5095	102	5126	103	P
Beryllium				750.0	752.35	100	743.55	99	P
Cadmium				750.0	755.71	101	750.92	100	P
Calcium				25000	24188	97	23773	95	P
Chromium				5000	4996	100	5002	100	P
Cobalt				5000	4923	98	4912	98	P
Copper				5000	4986	100	4977	100	P
Iron				25000	24737	99	24543	98	P
Lead				750.0	767.37	102	767.89	102	P
Magnesium				25000	24331	97	24086	96	P
Manganese				5000	4857	97	4771	95	P
Mercury									NR
Nickel				5000	4875	98	4852	97	P
Potassium				25000	24756	99	24765	99	P
Selenium				750.0	777.33	104	775.60	103	P
Silver				750.0	768.90	103	765.98	102	P
Sodium				25000	25075	100	25292	101	P
Thallium				750.0	724.29	97	724.99	97	P
Vanadium				5000	4954	99	4890	98	P
Zinc				5000	4875	97	4825	96	P
Cyanide									NR

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2B-IN
CRQL CHECK STANDARD

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

CRQL Check Standard Source: I.V.

Concentration Units: ug/L

	CRDL Check Standard				
	Initial			Final	
Analyte	True	Found*	%R(1)	Found*	%R(1)
Aluminum	200.00	225.33	113	198.90J	99
Antimony	60.00	60.87	101	61.28	102
Arsenic	10.00	11.01	110	10.34	103
Barium	200.00	207.60	104	210.10	105
Beryllium	5.00	5.06	101	4.99J	100
Cadmium	5.00	5.03	101	4.96J	99
Calcium	5000.00	4997.27J	100	4863.53J	97
Chromium	10.00	9.97J	100	10.24	102
Cobalt	50.00	50.59	101	50.67	101
Copper	25.00	25.10	100	24.99J	100
Iron	100.00	102.93	103	102.34	102
Lead	10.00	10.36	104	10.18	102
Magnesium	5000.00	4908.17J	98	4807.60J	96
Manganese	15.00	15.41	103	14.78J	99
Mercury					
Nickel	40.00	40.28	101	40.31	101
Potassium	5000.00	4927.20J	99	4912.47J	98
Selenium	35.00	34.86J	100	32.14J	92
Silver	10.00	10.93	109	8.39J	84
Sodium	5000.00	4912.47J	98	4941.93J	99
Thallium	25.00	27.79	111	25.80	103
Vanadium	50.00	50.60	101	49.08J	98
Zinc	60.00	61.19	102	61.92	103
Cyanide					

(1) Control Limits: 70-130 with the following exceptions:
ICP-AES - Antimony, Lead, and Thallium: 50-150.
ICP-MS - Cobalt, Manganese, and Zinc: 50-150.

* If applicable, enter the concentration qualifier "J" or "U" after the concentration in these columns (e.g., 0.20U for Mercury).

USEPA - CLP

2B-IN
CRQL CHECK STANDARD

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

CRQL Check Standard Source: I.V.

Concentration Units: ug/L

	CRDL Check Standard				
	Initial			Final	
Analyte	True	Found*	%R(1)	Found*	%R(1)
Aluminum	200.00			208.16	104
Antimony	60.00			60.46	101
Arsenic	10.00			11.42	114
Barium	200.00			209.76	105
Beryllium	5.00			4.93J	99
Cadmium	5.00			4.96J	99
Calcium	5000.00			4843.00J	97
Chromium	10.00			10.13	101
Cobalt	50.00			50.36	101
Copper	25.00			25.45	102
Iron	100.00			100.37	100
Lead	10.00			10.74	107
Magnesium	5000.00			4788.97J	96
Manganese	15.00			14.78J	99
Mercury					
Nickel	40.00			39.70J	99
Potassium	5000.00			4924.67J	98
Selenium	35.00			33.75J	96
Silver	10.00			8.04J	80
Sodium	5000.00			4924.77J	98
Thallium	25.00			25.86	103
Vanadium	50.00			49.08J	98
Zinc	60.00			59.20J	99
Cyanide					

(1) Control Limits: 70-130 with the following exceptions:
ICP-AES - Antimony, Lead, and Thallium: 50-150.
ICP-MS - Cobalt, Manganese, and Zinc: 50-150.

* If applicable, enter the concentration qualifier "J" or "U" after the concentration in these columns (e.g., 0.20U for Mercury).

USEPA - CLP

3-IN
BLANKS

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	1	C	2	C	3	C		C	M
Aluminum	200.000	U	25.880	J	200.000	U	200.000	U	222.222	U	P
Antimony	60.000	U	60.000	U	60.000	U	60.000	U	66.667	U	P
Arsenic	2.145	J	1.871	J	10.000	U	2.384	J	-2.002	J	P
Barium	200.000	U	200.000	U	200.000	U	200.000	U	0.523	J	P
Beryllium	5.000	U	5.000	U	5.000	U	5.000	U	5.556	U	P
Cadmium	5.000	U	5.000	U	0.094	J	5.000	U	0.207	J	P
Calcium	5000.000	U	10.836	J	6.826	J	7.819	J	88.444	J	P
Chromium	10.000	U	10.000	U	10.000	U	10.000	U	1.288	J	P
Cobalt	50.000	U	50.000	U	50.000	U	0.449	J	55.556	U	P
Copper	25.000	U	25.000	U	25.000	U	25.000	U	27.778	U	P
Iron	100.000	U	20.123	J	100.000	U	19.562	J	16.376	J	P
Lead	10.000	U	10.000	U	10.000	U	-2.017	J	1.515	J	P
Magnesium	5000.000	U	5000.000	U	5000.000	U	5000.000	U	5555.556	U	P
Manganese	15.000	U	15.000	U	15.000	U	15.000	U	16.667	U	P
Mercury											NR
Nickel	40.000	U	2.073	J	40.000	U	40.000	U	1.289	J	P
Potassium	5000.000	U	5000.000	U	5000.000	U	5000.000	U	5555.556	U	P
Selenium	35.000	U	35.000	U	35.000	U	35.000	U	38.889	U	P
Silver	0.585	J	10.000	U	-2.218	J	-2.218	J	-1.477	J	P
Sodium	5000.000	U	5000.000	U	5000.000	U	5000.000	U	5555.556	U	P
Thallium	0.790	J	0.788	J	0.815	J	2.109	J	27.778	U	P
Vanadium	50.000	U	0.770	J	50.000	U	50.000	U	55.556	U	P
Zinc	60.000	U	12.254	J	60.000	U	4.743	J	3.928	J	P
Cyanide											NR

USEPA - CLP

3-IN
BLANKS

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	1	C	2	C	3	C		C	M
Aluminum			200.000	U							P
Antimony			60.000	U							P
Arsenic			10.000	U							P
Barium			200.000	U							P
Beryllium			5.000	U							P
Cadmium			5.000	U							P
Calcium			5000.000	U							P
Chromium			10.000	U							P
Cobalt			0.327	J							P
Copper			25.000	U							P
Iron			100.000	U							P
Lead			10.000	U							P
Magnesium			5000.000	U							P
Manganese			15.000	U							P
Mercury											NR
Nickel			40.000	U							P
Potassium			5000.000	U							P
Selenium			35.000	U							P
Silver			-2.553	J							P
Sodium			5000.000	U							P
Thallium			0.917	J							P
Vanadium			0.588	J							P
Zinc			60.000	U							P
Cyanide											NR

USEPA - CLP

4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

ICP-AES Instrument ID: ICP07 ICS Source: EPA(1206)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	244000		256000	105			254000	104		
Antimony	0.0		-3.2				-4.0			
Arsenic	0.0		0.65				0.36			
Barium	2.0		2.7	135			2.3	115		
Beryllium	0.0		0.51				0.42			
Cadmium	0.0		2.2				2.4			
Calcium	235000		251000	107			245000	104		
Chromium	32.0		48.5	152			48.3	151		
Cobalt	4.0		3.5	88			2.7	68		
Copper	23.0		26.0	113			26.0	113		
Iron	95600		99400	104			98300	103		
Lead	10.0		10.2	102			9.2	92		
Magnesium	248000		270000	109			265000	107		
Manganese	19.0		20.1	106			19.6	103		
Nickel	21.0		25.6	122			25.2	120		
Potassium	0.0		-36.5				12.0			
Selenium	0.0		-0.040				-0.091			
Silver	0.0		11.6				9.1			
Sodium	0.0		827.				840.			
Thallium	0.0		6.3				4.3			
Vanadium	0.0		-13.8				-13.8			
Zinc	28.0		33.6	120			33.0	118		

USEPA - CLP

4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

ICP-AES Instrument ID: ICP07 ICS Source: EPA(0203)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum		241000			256000	106			253000	105
Antimony		589.			660.	112			664.	113
Arsenic		101.			111.	110			109.	108
Barium		495.			524.	106			531.	107
Beryllium		475.			516.	109			503.	106
Cadmium		940.			1040	111			1030	110
Calcium		231000			250000	108			244000	106
Chromium		511.			578.	113			579.	113
Cobalt		461.			529.	115			525.	114
Copper		548.			568.	104			561.	102
Iron		94800			99100	105			98200	104
Lead		61.0			63.9	105			63.1	103
Magnesium		251000			269000	107			264000	105
Manganese		502.			534.	106			518.	103
Nickel		984.			1090	111			1080	110
Potassium		0.0			-7.3				-20.5	
Selenium		53.0			58.2	110			57.9	109
Silver		206.			226.	110			221.	107
Sodium		0.0			841.				849.	
Thallium		103.			115.	112			113.	110
Vanadium		494.			493.	100			475.	96
Zinc		1030			1080	105			1060	103

USEPA - CLP

4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

ICP-AES Instrument ID: ICP07 ICS Source: EPA(1206)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	244000						252000	103		
Antimony	0.0						-3.0			
Arsenic	0.0						0.73			
Barium	2.0						2.4	120		
Beryllium	0.0						0.45			
Cadmium	0.0						2.5			
Calcium	235000						243000	103		
Chromium	32.0						48.1	150		
Cobalt	4.0						3.1	78		
Copper	23.0						26.1	113		
Iron	95600						97700	102		
Lead	10.0						9.9	99		
Magnesium	248000						263000	106		
Manganese	19.0						19.3	102		
Nickel	21.0						24.3	116		
Potassium	0.0						-3.9			
Selenium	0.0						0.51			
Silver	0.0						9.0			
Sodium	0.0						836.			
Thallium	0.0						5.1			
Vanadium	0.0						-13.6			
Zinc	28.0						32.7	117		

USEPA - CLP

4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

ICP-AES Instrument ID: ICP07 ICS Source: EPA(0203)

Concentration Units: ug/L

Analyte	True		Initial Found				Final Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum		241000							252000	105
Antimony		589.							664.	113
Arsenic		101.							111.	110
Barium		495.							528.	107
Beryllium		475.							502.	106
Cadmium		940.							1020	109
Calcium		231000							242000	105
Chromium		511.							580.	114
Cobalt		461.							526.	114
Copper		548.							566.	103
Iron		94800							97500	103
Lead		61.0							64.7	106
Magnesium		251000							262000	104
Manganese		502.							517.	103
Nickel		984.							1080	110
Potassium		0.0							-4.9	
Selenium		53.0							57.1	108
Silver		206.							222.	108
Sodium		0.0							851.	
Thallium		103.							114.	111
Vanadium		494.							479.	97
Zinc		1030							1050	102

USEPA - CLP

5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA Sample No.
MH26C9S

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Matrix: (soil/water) WATER Level: (low/med) LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	3847.3333		1821.0370		2000.00	101		P
Antimony	75-125	101.4222		6.5481	J	100.00	95		P
Arsenic	75-125	46.8422		4.7692	J	40.00	105		P
Barium	75-125	2523.6297		427.4186		2000.00	105		P
Beryllium	75-125	49.6241		5.5556	U	50.00	99		P
Cadmium	75-125	51.2992		0.1860	J	50.00	102		P
Calcium									NR
Chromium	75-125	217.1444		4.6593	J	200.00	106		P
Cobalt	75-125	522.1889		55.5556	U	500.00	104		P
Copper	75-125	258.5481		6.3957	J	250.00	101		P
Iron	75-125	2251.5186		1239.8148		1000.00	101		P
Lead	75-125	25.9303		5.4844	J	20.00	102		P
Magnesium									NR
Manganese	75-125	543.2741		45.5952		500.00	100		P
Mercury									NR
Nickel	75-125	521.2667		2.7436	J	500.00	104		P
Potassium									NR
Selenium	75-125	57.8614		6.6346	J	50.00	102		P
Silver	75-125	47.6381		11.1111	U	50.00	95		P
Sodium									NR
Thallium	75-125	49.3252		27.7778	U	50.00	99		P
Vanadium	75-125	498.8408		4.7293	J	500.00	99		P
Zinc	75-125	542.7963		37.3067	J	500.00	101		P
Cyanide									NR

Comments:

USEPA - CLP

6-IN
DUPLICATES

EPA Sample No.

MH26C9D

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Matrix: (soil/water) WATER Level: (low/med) LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		1821.0370		1905.4814		5		P
Antimony		6.5481	J	4.4722	J	38		P
Arsenic		4.7692	J	4.2861	J	11		P
Barium	222.222	427.4186		429.7852		1		P
Beryllium		5.5556	U	5.5556	U			P
Cadmium		0.1860	J	0.2331	J	22		P
Calcium	5555.556	10618.1481		10635.5186		0		P
Chromium		4.6593	J	4.0243	J	15		P
Cobalt		55.5556	U	55.5556	U			P
Copper		6.3957	J	6.5733	J	3		P
Iron		1239.8148		1248.9259		1		P
Lead		5.4844	J	5.8468	J	6		P
Magnesium		1729.3333	J	1744.7408	J	1		P
Manganese	16.667	45.5952		45.6967		0		P
Mercury								NR
Nickel		2.7436	J	2.6578	J	3		P
Potassium		1183.6297	J	1204.1852	J	2		P
Selenium		6.6346	J	4.4937	J	38		P
Silver		11.1111	U	11.1111	U			P
Sodium	5555.556	5535.8519	J	5559.6297		0		P
Thallium		27.7778	U	27.7778	U			P
Vanadium		4.7293	J	4.8531	J	3		P
Zinc		37.3067	J	38.2130	J	2		P
Cyanide								NR

USEPA - CLP

7-IN
LABORATORY CONTROL SAMPLE

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Solid LCS Source: _____

Aqueous LCS Source: ICV-1(1201)

	Aqueous (ug/L)			Solid (mg/kg)					
Analyte	True	Found	%R	True	Found	C	Limits		%R
Aluminum	2482.0	2476.63	100						
Antimony	992.0	1010.39	102						
Arsenic	996.0	1002.29	101						
Barium	502.0	524.00	104						
Beryllium	493.0	486.48	99						
Cadmium	494.0	502.79	102						
Calcium	10180.0	9902.52	97						
Chromium	490.0	515.56	105						
Cobalt	496.0	513.31	103						
Copper	490.0	499.37	102						
Iron	5107.0	5109.52	100						
Lead	996.0	1013.19	102						
Magnesium	6003.0	5815.15	97						
Manganese	495.0	501.50	101						
Mercury									
Nickel	492.0	508.33	103						
Potassium	10008.0	9836.04	98						
Selenium	1005.0	1007.88	100						
Silver	495.0	495.05	100						
Sodium	10039.0	9951.41	99						
Thallium	1027.0	1063.52	104						
Vanadium	501.0	493.82	99						
Zinc	1000.0	1024.18	102						
Cyanide									

USEPA - CLP

8-IN

ICP-AES and ICP-MS SERIAL DILUTIONS

EPA Sample No.

MH26C9L

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Matrix: (soil/water) WATER Level: (low/med) LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	1638.93		1782.48		9		P
Antimony	5.89	J	300.00	U	100		P
Arsenic	4.29	J	10.21	J	138		P
Barium	384.68		392.02	J	2		P
Beryllium	5.00	U	25.00	U			P
Cadmium	0.17	J	25.00	U	100		P
Calcium	9556.33		9950.50	J	4		P
Chromium	4.19	J	4.16	J	1		P
Cobalt	50.00	U	250.00	U			P
Copper	5.76	J	125.00	U	100		P
Iron	1115.83		1158.80		4		P
Lead	4.94	J	50.00	U	100		P
Magnesium	1556.40	J	1557.50	J	0		P
Manganese	41.04		41.81	J	2		P
Nickel	2.47	J	200.00	U	100		P
Potassium	1065.27	J	1016.95	J	5		P
Selenium	5.97	J	175.00	U	100		P
Silver	10.00	U	50.00	U			P
Sodium	4982.27	J	5123.83	J	3		P
Thallium	25.00	U	125.00	U			P
Vanadium	4.26	J	6.94	J	63		P
Zinc	33.58	J	35.49	J	6		P

USEPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Instrument Type: P Instrument ID: ICP07 Date: 01/12/2008

Preparation Method: NP1

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Wavelength /Mass	CRQL	MDL
Aluminum	308.22	200	20.0
Antimony	206.83	60	1.8
Arsenic	189.04	10	1.5
Barium	455.40	200	0.33
Beryllium	313.11	5.0	0.089
Cadmium	214.44	5.0	0.084
Calcium	317.93	5000	5.9
Chromium	205.55	10	0.73
Cobalt	228.62	50	0.32
Copper	324.75	25	2.6
Iron	259.94	100	9.0
Lead	220.35	10	0.94
Magnesium	279.08	5000	26.7
Manganese	257.61	15	0.26
Mercury			
Nickel	231.60	40	1.7
Potassium	766.49	5000	80.4
Selenium	196.09	35	2.6
Silver	328.07	10	0.28
Sodium	589.59	5000	41.6
Thallium	190.86	25	0.77
Vanadium	292.40	50	0.40
Zinc	206.20	60	2.7
Cyanide			

Comments:

USEPA - CLP

9-IN
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Instrument Type: P Instrument ID: ICP07 Date: 01/09/2008

Preparation Method: MW1

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Wavelength /Mass	CRQL	MDL
Aluminum	308.22	200	25.7
Antimony	206.83	60	1.8
Arsenic	189.04	10	1.5
Barium	455.40	200	0.34
Beryllium	313.11	5.0	0.14
Cadmium	214.44	5.0	0.12
Calcium	317.93	5000	23.3
Chromium	205.55	10	0.37
Cobalt	228.62	50	0.44
Copper	324.75	25	2.9
Iron	259.94	100	3.3
Lead	220.35	10	1.2
Magnesium	279.08	5000	23.7
Manganese	257.61	15	0.57
Mercury			
Nickel	231.60	40	0.89
Potassium	766.49	5000	40.8
Selenium	196.09	35	2.4
Silver	328.07	10	0.48
Sodium	589.59	5000	13.0
Thallium	190.86	25	0.81
Vanadium	292.40	50	0.81
Zinc	206.20	60	2.3
Cyanide			

Comments:

USEPA - CLP

10A-IN

ICP-AES INTERELEMENT CORRECTION FACTORS (QUARTERLY)

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

ICP-AES Instrument ID: ICP07 Date: 04/16/2008

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	V
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0281000
Antimony	206.83	0.0000000	0.0000000	0.0001380	0.0000000	0.0000000
Arsenic	189.04	-0.0000240	0.0000000	-0.0000900	0.0000000	0.0000000
Barium	455.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.11	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	214.44	-0.0000070	0.0000000	0.0000490	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	205.55	0.0000050	0.0000000	-0.0000070	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000200	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0001480	0.0000000	0.0000710	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000200	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000230	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.09	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	-0.0000080	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	-0.0002300	0.0000000	0.0019970
Vanadium	292.40	0.0000000	0.0000000	0.0000090	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	0.0000100	0.0000000	0.0000000

Comments:

USEPA - CLP

10B-IN

ICP-AES INTERELEMENT CORRECTION FACTORS (QUARTERLY)

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

ICP-AES Instrument ID: ICP07 Date: 04/16/2008

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Cu	Co	Mn	Be
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.83	0.0053630	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	455.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.11	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	214.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	205.55	0.0000000	0.0000000	0.0000000	0.0000000	0.0003400
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	-0.0000040	0.0001810	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.09	0.0000000	0.0000000	0.0000000	0.0005780	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000320	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0002270	0.0000000	0.0031730	0.0008690	0.0000000
Vanadium	292.40	-0.0014760	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.20	-0.0004230	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

USEPA - CLP

10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (QUARTERLY)

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

ICP-AES Instrument ID: ICP07 Date: 04/16/2008

Analyte	Wave-length (nm)	Interelement Correction Factors for: Ni	Mo	Ti		
Aluminum	308.22	0.0000000	0.0000000	0.0000000		
Antimony	206.83	0.0000000	0.0000000	0.0000000		
Arsenic	189.04	0.0000000	0.0000000	0.0000000		
Barium	455.40	0.0000000	0.0000000	0.0000000		
Beryllium	313.11	0.0000000	0.0000000	0.0000000		
Cadmium	214.44	0.0000000	0.0000000	0.0000000		
Calcium	317.93	0.0000000	0.0000000	0.0000000		
Chromium	205.55	-0.0005380	0.0000000	0.0000000		
Cobalt	228.62	0.0000000	0.0000000	0.0022060		
Copper	324.75	0.0000000	0.0000000	0.0000000		
Iron	259.94	0.0000000	0.0000000	0.0000000		
Lead	220.35	0.0002310	-0.0021710	0.0000000		
Magnesium	279.08	0.0000000	0.0000000	0.0000000		
Manganese	257.61	0.0000000	0.0000000	0.0000000		
Molybdenum	202.03	0.0000000	0.0000000	0.0000000		
Nickel	231.60	0.0000000	0.0000000	0.0000000		
Potassium	766.49	0.0000000	0.0000000	0.0000000		
Selenium	196.09	0.0000000	0.0000000	0.0000000		
Silver	328.07	0.0000000	0.0000000	0.0004470		
Sodium	589.59	0.0000000	0.0000000	0.0000000		
Titanium	334.94	0.0000000	0.0000000	0.0000000		
Thallium	190.86	0.0000000	-0.0089620	0.0000000		
Vanadium	292.40	0.0000000	0.0000000	0.0000000		
Zinc	206.20	0.0000000	0.0000000	0.0000000		

Comments:

USEPA - CLP

11-IN

ICP-AES and ICP-MS LINEAR RANGES (QUARTERLY)

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

ICP Instrument ID: ICP07 Date: 04/16/2008

Analyte	Integ. Time (sec.)	Concentration (ug/L)	M
Aluminum	8.00	500000	P
Antimony	20.00	90000	P
Arsenic	20.00	10000	P
Barium	8.00	40000	P
Beryllium	8.00	40000	P
Cadmium	20.00	7000	P
Calcium	8.00	700000	P
Chromium	20.00	40000	P
Cobalt	20.00	70000	P
Copper	20.00	30000	P
Iron	8.00	220000	P
Lead	20.00	50000	P
Magnesium	8.00	1000000	P
Manganese	20.00	75000	P
Nickel	20.00	90000	P
Potassium	8.00	250000	P
Selenium	20.00	20000	P
Silver	8.00	2000	P
Sodium	8.00	250000	P
Thallium	20.00	17500	P
Vanadium	8.00	17500	P
Zinc	20.00	12500	P

Comments:

USEPA - CLP

12-IN
PREPARATION LOG

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Preparation Method: MW1

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
PBW	06/26/2008		50
LCSW	06/26/2008		50
MH25F1	06/26/2008		50
MH2698	06/26/2008		50
MH26A0	06/26/2008		50
MH26A2	06/26/2008		50
MH26A5	06/26/2008		50
MH26A8	06/26/2008		50
MH26B0	06/26/2008		50
MH26B3	06/26/2008		50
MH26C1	06/26/2008		50
MH26C3	06/26/2008		50
MH26C5	06/26/2008		50
MH26C7	06/26/2008		50
MH26C9	06/26/2008		50
MH26C9D	06/26/2008		50
MH26C9S	06/26/2008		50

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Instrument ID: ICP07 Analysis Method: P

Start Date: 07/01/2008 End Date: 07/01/2008

EPA Sample No.	D/F	Time	Analytes																								
			AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN		
S0	1.0	0953	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
S1500	1.0	0958			X		X	X						X						X	X		X					
S10000	1.0	1002		X		X				X	X	X				X		X						X	X			
S50000	1.0	1007	X						X				X		X				X			X						
ICV	1.0	1012	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ICB	1.0	1017	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CRII	1.0	1022	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ICSAI	1.0	1027	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ICSABI	1.0	1032	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCV	1.0	1037	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCB	1.0	1041	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
PBW	1.0	1046	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
LCSW	1.0	1051	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
MH26C9	1.0	1056	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
MH26C9S	1.0	1101	X	X	X	X	X	X		X	X	X	X	X		X		X		X	X		X	X	X			
MH26C9D	1.0	1106	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
MH26C9L	5.0	1111	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
MH25F1	1.0	1116	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
MH2698	1.0	1121	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
MH26A0	1.0	1126	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
MH26A2	1.0	1131	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCV2	1.0	1135	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCB2	1.0	1140	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
MH26A5	1.0	1145	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
MH26A8	1.0	1150	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
MH26B0	1.0	1155	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
MH26B3	1.0	1200	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
MH26C1	1.0	1205	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
MH26C3	1.0	1210	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
MH26C5	1.0	1215	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CRIF	1.0	1220	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ICSAF	1.0	1225	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ICSABF	1.0	1230	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCV3	1.0	1234	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCB3	1.0	1239	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
MH26C7	1.0	1244	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: DATACHEM LABORATORIES Contract: EP-W-06-054

Lab Code: DATAC Case No.: 37402 NRAS No.: 1553.0 SDG No.: MH25F1

Instrument ID: ICP07 Analysis Method: P

Start Date: 07/01/2008 End Date: 07/01/2008

EPA Sample No.	D/F	Time	Analytes																								
			AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN		
ZZZZZZ	1.0	1249																										
CRIF2	1.0	1254	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ICSAF2	1.0	1259	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ICSABF2	1.0	1304	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCV4	1.0	1309	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCB4	1.0	1314	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			

Sample Name: S0 Acquired: 7/1/2008 9:53:03 Type: Cal
Method: ICP07 ILM05.4 2008(v2) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

i08155
Joanna C. Sanchez
7/2/08

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00033**	**-.00086**	**-.00218**	**.00230**	**.00000**	**.00062**	**.00033**
Stddev	.00003	.00020	.00009	.00001	.0001	.00009	.00005
%RSD	8.3186	22.835	4.2238	.61964	1650.7	15.276	15.428
#1	.00030	-.00109	-.00212	.00231	-.00004	.00052	.00038
#2	.00035	-.00077	-.00228	.00229	.00005	.00063	.00028
#3	.00034	-.00073	-.00213	.00231	-.00003	.00070	.00034

Elem	Cr2055	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00076**	**-.00092**	**.00057**	**.00009**	**.00031**	**-.00001**	**.00001**
Stddev	.00011	.00025	.00002	.00000	.00021	.00000	.00001
%RSD	14.970	27.521	3.1187	4.9417	66.231	10.965	69.214
#1	.00068	-.00108	.00059	.00010	.00055	-.00001	.00000
#2	.00090	-.00063	.00056	.00009	.00023	-.00001	.00002
#3	.00071	-.00105	.00057	.00009	.00016	-.00001	.00002

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Ti3349
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0009**	**.00171**	**-.00185**	**.00096**	**.00203**	**-.00043**	**.0000**
Stddev	.0001	.00014	.00011	.00022	.00001	.00009	.0001
%RSD	7.112	7.9456	6.1480	23.411	.29575	19.782	182.4
#1	.0010	.00155	-.00197	.00093	.00204	-.00039	.0001
#2	.0008	.00176	-.00174	.00119	.00202	-.00053	.0000
#3	.0010	.00181	-.00185	.00075	.00203	-.00037	.0000

Elem	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S
Avg	**-.00013**	**.00002**	**.00091**
Stddev	.00009	.00000	.00010
%RSD	70.548	14.783	11.491
#1	-.00011	.00001	.00087
#2	-.00023	.00002	.00103
#3	-.00005	.00002	.00084

Sample Name: S0 Acquired: 7/1/2008 9:53:03 Type: Cal
Method: ICP07 ILM05.4 2008(v2) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**2034.5**	**64506.**	**385260.**
Stddev	3.6	29.	2764.
%RSD	.17727	.04526	.71741
#1	2036.8	64477.	382190.
#2	2030.4	64535.	387540.
#3	2036.4	64507.	386060.

Sample Name: S1500 Acquired: 7/1/2008 9:58:00 Type: Cal
Method: ICP07 ILM05.4 2008(v2) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	As1890	Be3131	Cd2144	Pb2203	Se1960	Ag3280	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.22387**	**1.1679**	**4.5449**	**.44969**	**.14962**	**.05174**	**.34081**
Stddev	.00020	.0019	.0025	.00037	.00025	.00008	.00066
%RSD	.08924	.16722	.05507	.08149	.16955	.14600	.19231
#1	.22376	1.1700	4.5464	.44960	.14944	.05183	.34015
#2	.22410	1.1676	4.5462	.45010	.14952	.05172	.34146
#3	.22375	1.1662	4.5420	.44938	.14991	.05168	.34081

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**2026.7**	**64806.**	**386460.**
Stddev	.3	75.	114.
%RSD	.01573	.11581	.02941
#1	2027.0	64745.	386420.
#2	2026.6	64784.	386380.
#3	2026.4	64890.	386590.

Sample Name: S10000 Acquired: 7/1/2008 10:02:52 Type: Cal
Method: ICP07 ILM05.4 2008(v2) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Sb2068	Ba4554	Cr2055	Co2286	Cu3247	Mn2576	Mo2020	Ni2316
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.0756**	**5.6012**	**16.327**	**9.6156**	**.65706**	**1.2946**	**11.29**	**4.5697**
Stddev	.0028	.0449	.030	.0150	.00080	.0015	.02	.0090
%RSD	.13618	.80088	.18393	.15644	.12200	.11243	.1595	.19640
#1	2.0771	5.5617	16.304	9.6070	.65775	1.2961	11.28	4.5673
#2	2.0724	5.5919	16.317	9.6068	.65618	1.2932	11.28	4.5621
#3	2.0774	5.6500	16.361	9.6330	.65726	1.2945	11.31	4.5796

Elem	Ti3349	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S
Avg	**1.528**	**.15605**	**6.4842**
Stddev	.002	.00024	.0103
%RSD	.1200	.15532	.15884
#1	1.530	.15580	6.4781
#2	1.527	.15607	6.4784
#3	1.526	.15629	6.4961

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1987.1**	**64612.**	**383540.**
Stddev	3.4	21.	899.
%RSD	.17198	.03271	.23451
#1	1988.1	64602.	384570.
#2	1990.0	64637.	382990.
#3	1983.4	64598.	383040.

Sample Name: S50000 Acquired: 7/1/2008 10:07:51 Type: Cal
Method: ICP07 ILM05.4 2008(v2) Mode: IR Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Ca3179	Fe2599	Mg2790	K_7664	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.13710**	**.84689**	**1.0379**	**.11850**	**.33274**	**1.4406**
Stddev	.00049	.00166	.0007	.00011	.00061	.0035
%RSD	.35481	.19646	.07138	.09316	.18261	.24408
#1	.13686	.84523	1.0372	.11839	.33320	1.4416
#2	.13677	.84855	1.0378	.11861	.33205	1.4367
#3	.13765	.84688	1.0386	.11851	.33297	1.4435

Int. Std.	Sc3613
Units	Cts/S
Avg	**63426.**
Stddev	13.
%RSD	.02015
#1	63440.
#2	63418.
#3	63419.

Sample Name: ICV Acquired: 7/1/2008 10:12:46 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055	Co2286
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**2498.1**	**999.96**	**998.79**	**511.08**	**497.71**	**494.57**	**9949.3**	**494.82**	**499.52**
Stddev	10.0	1.19	4.12	1.11	.93	1.02	24.9	.22	.66
%RSD	.40074	.11896	.41228	.21788	.18774	.20592	.25061	.04393	.13182
#1	2496.4	998.86	1002.3	512.14	498.76	494.20	9972.1	494.68	498.88
#2	2489.0	1001.2	994.24	511.20	497.41	493.78	9953.0	495.07	499.48
#3	2508.9	999.79	999.86	509.92	496.96	495.72	9922.7	494.71	500.19
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**496.46**	**5115.1**	**994.26**	**5884.4**	**508.38**	**.5673**	**496.58**	**9915.3**	**1011.1**
Stddev	2.93	18.8	2.18	36.2	.13	.2238	.55	10.2	1.4
%RSD	.59021	.36712	.21959	.61440	.02637	39.45	.11079	.10297	.13932
#1	499.42	5136.7	993.34	5924.5	508.23	.6864	497.15	9921.3	1012.6
#2	496.41	5106.3	996.76	5854.2	508.45	.3092	496.05	9921.2	1010.8
#3	493.56	5102.4	992.69	5874.5	508.47	.7065	496.53	9903.5	1009.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**498.99**	**9844.1**	**2.971**	**1045.8**	**498.71**	**1013.3**
Stddev	2.70	7.1	.432	.3	1.71	.6
%RSD	.54060	.07165	14.55	.02823	.34378	.06400
#1	501.85	9842.1	3.424	1045.6	500.65	1013.8
#2	498.65	9838.4	2.564	1045.7	498.06	1012.6
#3	496.48	9852.0	2.925	1046.1	497.41	1013.5
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: ICV Acquired: 7/1/2008 10:12:46 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1993.2**	**64202.**	**378250.**
Stddev	2.6	102.	1276.
%RSD	.13078	.15861	.33737
#1	1995.1	64152.	376810.
#2	1994.3	64136.	378710.
#3	1990.3	64320.	379240.

Sample Name: ICB Acquired: 7/1/2008 10:17:27 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1.3790**	**-.31917**	**2.1450**	**.07062**	**-.00730**	**.01016**	**3.2264**	**.07150**
Stddev	12.477	.88537	1.1671	.08155	.09751	.05621	1.9218	.08489
%RSD	904.79	277.40	54.409	115.47	1336.3	553.42	59.566	118.72
#1	11.337	.06682	3.2365	.04573	.04359	-.03341	2.2073	.13985
#2	-12.617	.30768	.91476	.16172	-.11972	-.00973	2.0287	-.02352
#3	5.4171	-1.3320	2.2837	.00442	.05424	.07361	5.4431	.09817
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.24255**	**.05804**	**1.1631**	**-.39969**	**-11.482**	**-.12394**	**.2191**	**.03475**
Stddev	.09809	.06124	.6638	.63302	20.254	.28333	.2122	.46426
%RSD	40.440	105.52	57.071	158.38	176.40	228.60	96.86	1336.0
#1	.13671	-.01262	.53901	.33125	-11.568	-.10525	.1940	-.48178
#2	.33039	.09086	1.0897	-.76805	-31.692	.14958	.4426	.41723
#3	.26055	.09587	1.8605	-.76228	8.8147	-.41615	.0205	.16880
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-16.213**	**-.13017**	**.58533**	**-.32733**	**.9750**	**.78959**	**.19748**	**.66192**
Stddev	21.604	.96406	.25824	4.0392	.1007	.98957	.47712	.06990
%RSD	133.25	740.63	44.119	1234.0	10.33	125.33	241.61	10.561
#1	8.5923	-.84623	.84234	3.7602	1.004	-.07613	-.19873	.64427
#2	-30.909	-.51029	.32587	-4.3165	.8631	1.8683	.72710	.60253
#3	-26.324	.96601	.58778	-.42565	1.058	.57660	.06406	.73895
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: ICB Acquired: 7/1/2008 10:17:27 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**2011.6**	**64157.**	**380610.**
Stddev	2.3	246.	1313.
%RSD	.11559	.38275	.34502
#1	2014.3	63894.	379390.
#2	2010.1	64380.	380440.
#3	2010.4	64198.	382000.

Sample Name: CRII Acquired: 7/1/2008 10:22:24 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055	Co2286
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**225.33**	**60.868**	**11.007**	**207.60**	**5.0590**	**5.0316**	**4997.3**	**9.9688**	**50.594**
Stddev	12.79	.897	.898	.53	.0326	.0170	15.8	.1882	.131
%RSD	5.6769	1.4740	8.1613	.25422	.64365	.33810	.31621	1.8874	.25917
#1	211.99	59.866	9.9761	207.36	5.0510	5.0502	5014.6	9.9656	50.443
#2	237.49	61.596	11.427	208.20	5.0948	5.0276	4993.6	10.159	50.660
#3	226.51	61.142	11.620	207.23	5.0311	5.0169	4983.6	9.7824	50.680
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**25.098**	**102.93**	**10.356**	**4908.2**	**15.410**	**-.0486**	**40.283**	**4927.2**	**34.863**
Stddev	.317	.49	1.507	18.8	.235	.1279	.443	16.3	1.216
%RSD	1.2647	.47496	14.547	.38271	1.5245	263.3	1.1006	.33105	3.4879
#1	25.307	103.44	11.921	4926.4	15.172	-.1631	40.689	4925.0	34.326
#2	24.733	102.47	10.233	4888.9	15.417	.0894	40.349	4912.1	34.007
#3	25.255	102.88	8.9156	4909.2	15.642	-.0719	39.810	4944.5	36.254
Check ?	Chk Pass	None	Chk Pass	None	Chk Pass	None	Chk Pass	None	Chk Pass
Value									
Range									

Elem	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**10.926**	**4912.5**	**1.122**	**27.788**	**50.603**	**61.190**
Stddev	.339	15.2	.376	.345	1.194	.317
%RSD	3.1003	.30849	33.50	1.2409	2.3589	.51778
#1	10.977	4910.1	1.184	28.033	50.504	61.539
#2	11.237	4928.7	1.463	27.394	51.843	61.113
#3	10.565	4898.6	.7191	27.937	49.462	60.919
Check ?	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRII Acquired: 7/1/2008 10:22:24 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**2013.7**	**64599.**	**381620.**
Stddev	3.2	136.	1273.
%RSD	.15864	.21047	.33364
#1	2010.9	64442.	380580.
#2	2017.1	64675.	381240.
#3	2013.1	64679.	383040.

Sample Name: ICSAI Acquired: 7/1/2008 10:27:19 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**255600.**	**-3.1501**	**.64696**	**2.6621**	**.50921**	**2.1944**	**251390.**
Stddev	209.	.5265	2.3121	.1091	.10634	.0375	1015.
%RSD	.08195	16.715	357.37	4.0985	20.884	1.7099	.40369
#1	255840.	-2.5753	-.76883	2.7441	.46552	2.2075	250640.
#2	255490.	-3.6092	3.3150	2.5383	.43167	2.2236	250970.
#3	255460.	-3.2657	-.60532	2.7039	.63044	2.1520	252540.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cr2055	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**48.542**	**3.5089**	**26.010**	**99403.**	**10.179**	**269920.**	**20.067**
Stddev	.251	.2826	.572	166.	3.087	215.	.275
%RSD	.51652	8.0550	2.2001	.16727	30.326	.07983	1.3705
#1	48.258	3.4275	25.349	99522.	12.985	270100.	20.365
#2	48.634	3.2759	26.343	99213.	10.680	269680.	20.014
#3	48.734	3.8233	26.338	99474.	6.8724	269980.	19.823
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Ti3349
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.030**	**25.617**	**-36.487**	**-.03977**	**11.613**	**827.18**	**10.10**
Stddev	.265	.270	47.230	2.2398	.212	10.06	.38
%RSD	25.77	1.0544	129.44	5631.7	1.8262	1.2163	3.798
#1	-.7285	25.579	4.1129	.62828	11.838	830.49	9.934
#2	-1.133	25.368	-25.252	-2.5376	11.417	815.88	9.835
#3	-1.228	25.904	-88.321	1.7900	11.584	835.16	10.54
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSAI Acquired: 7/1/2008 10:27:19 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**6.2711**	**-13.776**	**33.589**
Stddev	1.0643	.441	.427
%RSD	16.971	3.2049	1.2721
#1	6.2022	-13.622	33.923
#2	7.3681	-14.273	33.108
#3	5.2429	-13.432	33.737
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1732.9**	**61276.**	**352070.**
Stddev	5.8	118.	669.
%RSD	.33384	.19235	.19007
#1	1737.6	61153.	351480.
#2	1726.4	61286.	352800.
#3	1734.6	61389.	351920.

Sample Name: ICSABI Acquired: 7/1/2008 10:32:21 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**256440.**	**660.03**	**111.23**	**523.79**	**515.68**	**1044.7**	**250140.**
Stddev	493.	.57	3.72	1.36	1.11	3.6	357.
%RSD	.19233	.08611	3.3408	.25971	.21572	.34789	.14253
#1	256950.	660.52	115.21	525.34	516.82	1046.9	250320.
#2	256380.	660.17	110.62	523.23	515.63	1046.7	250370.
#3	255970.	659.41	107.85	522.80	514.59	1040.5	249730.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cr2055	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**577.97**	**528.77**	**568.48**	**99105.**	**63.913**	**268600.**	**534.37**
Stddev	.64	.98	.85	34.	2.825	179.	1.26
%RSD	.11125	.18456	.14947	.03432	4.4195	.06663	.23562
#1	577.46	529.73	569.45	99141.	63.694	268790.	535.69
#2	578.70	528.79	567.92	99074.	66.841	268580.	533.18
#3	577.76	527.78	568.05	99099.	61.204	268430.	534.25
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Ti3349
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.164**	**1090.5**	**-7.2545**	**58.231**	**225.79**	**841.03**	**10.89**
Stddev	.156	5.6	11.542	4.768	1.00	3.17	.75
%RSD	13.42	.51508	159.10	8.1880	.44140	.37665	6.917
#1	-1.018	1094.0	4.9640	61.497	226.72	844.44	10.13
#2	-1.145	1093.5	-17.973	60.436	225.92	838.18	10.90
#3	-1.329	1084.0	-8.7550	52.759	224.73	840.46	11.63
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSABI Acquired: 7/1/2008 10:32:21 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**114.65**	**492.60**	**1081.1**
Stddev	1.02	2.36	2.5
%RSD	.88541	.47969	.22878
#1	115.56	494.25	1081.1
#2	114.84	493.67	1083.6
#3	113.56	489.90	1078.7
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1727.8**	**61235.**	**348960.**
Stddev	4.5	79.	430.
%RSD	.26224	.12873	.12334
#1	1726.8	61173.	348480.
#2	1723.9	61209.	349090.
#3	1732.8	61324.	349310.

Sample Name: CCV Acquired: 7/1/2008 10:37:15 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055	Co2286
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**24557.**	**4985.1**	**736.31**	**5046.1**	**761.77**	**765.57**	**24713.**	**4967.8**	**4918.7**
Stddev	56.	4.3	2.78	11.6	.33	1.77	59.	5.5	3.1
%RSD	.22994	.08694	.37771	.23051	.04395	.23126	.23981	.11091	.06205
#1	24535.	4984.5	739.31	5059.3	761.43	767.13	24776.	4963.7	4921.9
#2	24622.	4981.2	733.82	5037.3	762.10	763.65	24705.	4965.5	4915.8
#3	24515.	4989.8	735.80	5041.7	761.78	765.94	24658.	4974.0	4918.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**4987.1**	**25000.**	**766.21**	**24694.**	**4950.2**	**-2.131**	**4895.9**	**24619.**	**769.44**
Stddev	18.1	70.	1.13	92.	1.1	.087	9.7	23.	2.18
%RSD	.36393	.27944	.14752	.37333	.02164	4.065	.19895	.09293	.28390
#1	4990.2	25081.	765.26	24774.	4949.3	-2.137	4906.3	24623.	767.06
#2	4967.6	24962.	767.46	24593.	4951.4	-2.042	4886.9	24594.	771.34
#3	5003.5	24958.	765.92	24715.	4949.8	-2.215	4894.6	24639.	769.93
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**774.03**	**24818.**	**5.221**	**721.59**	**5068.6**	**4948.4**
Stddev	3.46	67.	.145	1.97	22.8	9.3
%RSD	.44641	.27103	2.785	.27351	.44930	.18711
#1	775.03	24895.	5.070	723.56	5068.5	4958.1
#2	770.19	24784.	5.231	721.60	5045.9	4939.7
#3	776.88	24774.	5.361	719.61	5091.4	4947.4
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV Acquired: 7/1/2008 10:37:15 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1953.7**	**64476.**	**376010.**
Stddev	1.6	77.	1500.
%RSD	.07997	.11965	.39887
#1	1955.3	64556.	375860.
#2	1953.4	64470.	377570.
#3	1952.2	64402.	374590.

Sample Name: CCB Acquired: 7/1/2008 10:41:57 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**25.880**	**.13659**	**1.8712**	**.05401**	**.04604**	**.01383**	**10.836**	**.32439**
Stddev	4.860	.85294	1.0012	.01241	.07496	.06411	.104	.22189
%RSD	18.780	624.43	53.507	22.983	162.84	463.42	.96376	68.402
#1	30.171	-.77010	1.2750	.04445	.01879	.05371	10.733	.33065
#2	26.866	.92302	3.0271	.06803	-.01149	-.06011	10.834	.54308
#3	20.602	.25687	1.3115	.04953	.13082	.04790	10.942	.09944
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.25985**	**.20277**	**20.124**	**-.28705**	**1.8150**	**.05982**	**-.0555**	**2.0734**
Stddev	.27275	.13711	.754	.76858	10.414	.01903	.1137	.2459
%RSD	104.97	67.618	3.7444	267.75	573.73	31.818	204.9	11.859
#1	.18961	.35444	19.734	-.91493	13.823	.04134	-.1338	1.8422
#2	.56084	.08760	19.644	-.51630	-3.6382	.07936	.0749	2.0462
#3	.02908	.16628	20.992	.57007	-4.7394	.05876	-.1077	2.3317
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**23.133**	**-2.0560**	**-.25133**	**-1.1790**	**.8032**	**.78753**	**.76985**	**12.254**
Stddev	1.092	.9836	.06543	6.0903	.7843	.97273	.54442	.182
%RSD	4.7199	47.838	26.033	516.58	97.64	123.52	70.718	1.4853
#1	22.947	-.93848	-.21407	5.6701	.3048	1.1265	.96432	12.456
#2	22.147	-2.7900	-.21304	-5.9853	.3977	1.5454	.15490	12.104
#3	24.307	-2.4396	-.32687	-3.2216	1.707	-.30933	1.1903	12.201
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 7/1/2008 10:41:57 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**2001.1**	**64517.**	**379990.**
Stddev	2.6	129.	1679.
%RSD	.12851	.19972	.44188
#1	2001.4	64462.	378050.
#2	2003.4	64425.	381010.
#3	1998.3	64664.	380910.

Sample Name: PBW Acquired: 7/1/2008 10:46:57 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.38681**	**.11326**	**-1.8017**	**.47077**	**-.02668**	**.18651**	**79.600**	**1.1596**
Stddev	3.6346	1.9363	.9455	.08332	.05696	.07426	1.907	.2850
%RSD	939.64	1709.6	52.477	17.699	213.51	39.817	2.3953	24.578
#1	-1.3016	-.02294	-1.7566	.40507	-.08071	.23280	81.800	1.0931
#2	4.5585	-1.7513	-.87960	.44275	.03281	.22587	78.556	.91373
#3	-2.0965	2.1140	-2.7689	.56449	-.03213	.10085	78.442	1.4720

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.00006**	**.11066**	**14.739**	**1.3631**	**-.70646**	**-.05127**	**.1351**	**1.1599**
Stddev	.08212	.05971	.455	.9842	20.374	.27545	.1998	.5104
%RSD	130140.	53.961	3.0882	72.203	2883.9	537.28	147.9	44.002
#1	.06154	.14666	14.231	1.8052	-7.5077	.26373	.0906	.94137
#2	.03157	.04173	15.111	2.0486	-16.810	-.24690	.3535	.79520
#3	-.09330	.14358	14.874	.23535	22.198	-.17064	-.0387	1.7432

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**4.3841**	**-.78759**	**-1.3289**	**4.7475**	**.7298**	**-.12920**	**.21646**	**3.5349**
Stddev	12.258	1.7261	.3928	5.6508	.4681	.73529	.27146	.0889
%RSD	279.61	219.16	29.561	119.03	64.14	569.10	125.41	2.5154
#1	1.9285	-2.7706	-1.7661	.40989	.3936	-.97818	.24968	3.6307
#2	-6.4607	.37761	-1.2149	2.6949	1.264	.28662	-.07008	3.4550
#3	17.684	.03023	-1.0057	11.138	.5314	.30396	.46978	3.5191

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1925.5**	**64559.**	**379270.**
Stddev	4.9	96.	764.
%RSD	.25626	.14856	.20154
#1	1929.4	64453.	380140.
#2	1927.2	64582.	378940.
#3	1920.0	64641.	378720.

Sample Name: LCSW Acquired: 7/1/2008 10:51:56 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055	Co2286
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**2228.9**	**909.35**	**902.06**	**471.60**	**437.83**	**452.51**	**8912.3**	**464.01**	**461.98**
Stddev	1.2	.49	1.84	1.24	.56	.78	4.2	.54	.73
%RSD	.05355	.05357	.20344	.26265	.12795	.17179	.04688	.11537	.15801
#1	2229.5	909.70	900.76	472.51	438.45	452.11	8915.5	463.39	462.14
#2	2227.6	908.80	901.27	472.11	437.67	452.02	8907.6	464.34	461.18
#3	2229.8	909.56	904.16	470.19	437.37	453.41	8913.7	464.29	462.61

Elem	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**449.43**	**4598.6**	**911.87**	**5233.6**	**451.35**	**-.0045**	**457.50**	**8852.4**	**907.09**
Stddev	2.67	5.9	1.05	14.0	.52	.1754	.26	30.1	3.40
%RSD	.59369	.12795	.11491	.26723	.11476	3901.	.05589	.33996	.37480
#1	449.61	4605.3	910.98	5238.0	450.76	-.0902	457.21	8881.5	905.64
#2	452.01	4594.2	911.59	5244.9	451.74	.1973	457.68	8821.4	904.66
#3	446.68	4596.2	913.03	5218.0	451.54	-.1206	457.61	8854.4	910.97

Elem	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**445.55**	**8956.3**	**2.259**	**957.17**	**444.44**	**921.76**
Stddev	1.78	31.3	.622	2.85	1.30	.63
%RSD	.39898	.34953	27.53	.29789	.29214	.06840
#1	445.41	8980.1	2.943	954.06	444.74	921.14
#2	447.39	8967.9	1.729	959.65	445.56	921.75
#3	443.84	8920.8	2.104	957.80	443.02	922.40

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1918.5**	**64757.**	**379170.**
Stddev	1.9	103.	1002.
%RSD	.10153	.15884	.26416
#1	1918.0	64663.	378660.
#2	1920.6	64742.	378530.
#3	1916.8	64867.	380320.

Sample Name: MH26C9 Acquired: 7/1/2008 10:56:41 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1638.9**	**5.8933**	**4.2923**	**384.68**	**.03686**	**.16744**	**9556.3**	**4.1934**
Stddev	11.1	1.3375	.9616	1.11	.04548	.02287	24.3	.1574
%RSD	.67804	22.695	22.404	.28958	123.39	13.658	.25437	3.7535
#1	1638.2	5.4815	3.9563	385.36	.04772	.17856	9564.0	4.2371
#2	1628.2	7.3882	5.3769	385.28	-.01307	.18261	9529.1	4.3243
#3	1650.4	4.8101	3.5438	383.39	.07593	.14113	9575.9	4.0187

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.06362**	**5.7561**	**1115.8**	**4.9360**	**1556.4**	**41.036**	**2.116**	**2.4692**
Stddev	.10556	.2165	5.4	.7576	18.3	.151	.288	.6665
%RSD	165.92	3.7608	.47962	15.349	1.1760	.36778	13.61	26.991
#1	.11805	5.6384	1116.0	4.0673	1535.6	41.090	2.024	1.7435
#2	-.05804	6.0059	1110.4	5.2804	1563.7	41.152	1.886	2.6102
#3	.13085	5.6241	1121.1	5.4602	1569.9	40.865	2.439	3.0539

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1065.3**	**5.9712**	**-1.5026**	**4982.3**	**27.02**	**-1.6865**	**4.2564**	**33.576**
Stddev	21.1	.7253	.2470	8.3	.40	1.3807	.3908	.201
%RSD	1.9795	12.147	16.435	.16668	1.495	81.867	9.1825	.59756
#1	1063.6	5.4558	-1.2336	4988.7	26.57	-.09224	3.9318	33.792
#2	1045.1	6.8005	-1.5551	4985.2	27.16	-2.4902	4.6903	33.395
#3	1087.1	5.6571	-1.7190	4972.9	27.34	-2.4771	4.1472	33.541

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1862.8**	**64586.**	**376920.**
Stddev	4.6	87.	1649.
%RSD	.24585	.13534	.43758
#1	1859.5	64609.	376220.
#2	1860.8	64660.	375740.
#3	1868.0	64490.	378810.

Sample Name: MH26C9S Acquired: 7/1/2008 11:01:39 Type: RQC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055	Co2286
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**3462.6**	**91.280**	**42.158**	**2271.3**	**44.662**	**46.169**	**9505.1**	**195.43**	**469.97**
Stddev	28.5	.812	.305	1.6	.044	.127	3.1	.50	.86
%RSD	.82444	.88961	.72297	.07103	.09848	.27610	.03273	.25762	.18299
#1	3489.4	92.215	42.502	2270.1	44.612	46.094	9508.1	194.86	469.11
#2	3465.8	90.875	41.922	2273.1	44.697	46.097	9501.9	195.61	469.97
#3	3432.6	90.750	42.050	2270.6	44.676	46.317	9505.1	195.82	470.83
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									
Recovery	1823.6	85.386	37.866	1886.6	44.625	46.002	None	191.24	469.91
% Recover	101.31%	94.874%	105.08%	104.81%	99.067%	102.12%		106.14%	104.32%

Elem	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**232.69**	**2026.4**	**23.337**	**1559.3**	**488.94**	**2.087**	**469.14**	**1068.2**	**52.075**
Stddev	1.96	2.1	1.154	8.5	1.26	.148	1.34	22.4	.893
%RSD	.84061	.10567	4.9447	.54403	.25721	7.101	.28612	2.0990	1.7157
#1	233.03	2028.8	22.900	1554.7	487.60	1.948	468.06	1085.2	52.490
#2	234.46	2024.7	24.646	1554.2	489.15	2.071	468.72	1042.8	51.050
#3	230.59	2025.6	22.466	1569.1	490.09	2.243	470.64	1076.5	52.686
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass	None	Chk Pass
Value									
Range									
Recovery	226.94	910.52	18.401	None	447.91	None	466.67	None	46.104
% Recover	100.86%	101.07%	102.13%		99.436%		103.60%		102.35%

Sample Name: MH26C9S Acquired: 7/1/2008 11:01:39 Type: RQC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**42.874**	**4993.6**	**27.73**	**44.393**	**448.96**	**488.52**
Stddev	.766	12.7	.23	.854	.72	1.27
%RSD	1.7860	.25424	.8475	1.9232	.15934	.26040
#1	43.462	4989.4	27.96	44.678	448.14	487.33
#2	43.152	5007.8	27.49	43.433	449.47	489.86
#3	42.009	4983.5	27.74	45.067	449.26	488.36
Check ?	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value						
Range						
Recovery	44.377	None	None	46.079	444.70	454.94
% Recover	98.517%			102.30%	98.724%	101.00%

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1864.0**	**64666.**	**377970.**
Stddev	3.3	18.	1632.
%RSD	.17888	.02722	.43167
#1	1866.7	64651.	377800.
#2	1865.0	64685.	376430.
#3	1860.3	64663.	379680.

Sample Name: MH26C9D Acquired: 7/1/2008 11:06:28 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1714.9**	**4.0250**	**3.8575**	**386.81**	**.04422**	**.20983**	**9572.0**	**3.6219**
Stddev	35.8	.6421	1.3592	.99	.10933	.04308	63.6	.0912
%RSD	2.0903	15.954	35.236	.25542	247.23	20.533	.66488	2.5181
#1	1727.9	3.6725	2.2889	386.96	.16954	.25948	9542.4	3.5282
#2	1742.5	4.7662	4.6873	387.71	-.03165	.18779	9528.5	3.6271
#3	1674.4	3.6362	4.5963	385.75	-.00523	.18223	9645.0	3.7104

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.00982**	**5.9160**	**1124.0**	**5.2621**	**1570.2**	**41.127**	**2.308**	**2.3919**
Stddev	.17991	.2048	6.0	1.5343	10.3	.499	.099	.8935
%RSD	1831.6	3.4622	.53776	29.158	.65511	1.2133	4.281	37.355
#1	.01008	5.6952	1122.1	4.5761	1574.9	41.123	2.201	2.2154
#2	-.19885	5.9530	1119.2	7.0198	1558.5	41.628	2.396	3.3606
#3	.15931	6.0999	1130.8	4.1905	1577.4	40.630	2.327	1.5999

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1083.8**	**4.0443**	**-1.6528**	**5003.7**	**27.50**	**-.31521**	**4.3678**	**34.392**
Stddev	34.4	1.8640	.1562	24.0	.40	.42560	.4210	.374
%RSD	3.1723	46.091	9.4509	.48019	1.470	135.02	9.6392	1.0887
#1	1097.7	2.2034	-1.5638	4996.0	27.24	-.02334	4.5795	34.818
#2	1109.0	3.9988	-1.5615	5030.6	27.97	-.11874	3.8829	34.242
#3	1044.6	5.9306	-1.8332	4984.4	27.30	-.80356	4.6409	34.115

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1871.1**	**64685.**	**377880.**
Stddev	4.1	69.	586.
%RSD	.22139	.10703	.15512
#1	1867.7	64616.	377370.
#2	1875.7	64754.	378520.
#3	1869.8	64686.	377760.

Sample Name: MH26C9L Acquired: 7/1/2008 11:11:25 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**356.50**	**.57361**	**2.0423**	**78.403**	**.04962**	**.05994**	**1990.1**	**.83288**
Stddev	24.34	.98727	.5465	.279	.01798	.03649	9.6	.09826
%RSD	6.8276	172.12	26.761	.35624	36.229	60.889	.48203	11.797
#1	339.22	.93891	2.6718	78.425	.06352	.06326	2001.1	.91996
#2	345.94	-.54426	1.7661	78.671	.05602	.09466	1983.4	.72636
#3	384.33	1.3262	1.6890	78.114	.02932	.02189	1985.8	.85232

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.05172**	**1.2239**	**231.76**	**.09949**	**311.50**	**8.3614**	**.3305**	**.70197**
Stddev	.16404	.1753	1.67	.94003	14.96	.2560	.0869	.45895
%RSD	317.19	14.320	.72237	944.88	4.8039	3.0615	26.30	65.379
#1	-.12566	1.3961	231.71	-.47406	320.05	8.0856	.4300	.48308
#2	.13628	1.0458	233.46	1.1843	294.22	8.4072	.2921	.39345
#3	-.16578	1.2299	230.11	-.41183	320.23	8.5913	.2694	1.2294

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**203.39**	**.84923**	**-1.6054**	**1024.8**	**6.398**	**-.37110**	**1.3887**	**7.0970**
Stddev	26.33	1.2078	.2815	2.0	.372	.49393	.2474	.0792
%RSD	12.948	142.23	17.534	.19550	5.814	133.10	17.816	1.1165
#1	218.51	2.2227	-1.6627	1022.5	6.740	.10334	1.6409	7.0975
#2	172.98	.37237	-1.8538	1025.7	6.002	-.88245	1.1463	7.1760
#3	218.68	-.04739	-1.2996	1026.1	6.451	-.33417	1.3789	7.0176

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1966.7**	**65051.**	**383020.**
Stddev	4.8	48.	1098.
%RSD	.24489	.07331	.28656
#1	1971.1	64997.	381920.
#2	1967.5	65066.	384110.
#3	1961.6	65089.	383040.

Sample Name: MH25F1 Acquired: 7/1/2008 11:16:21 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**655.26**	**465.98**	**17.132**	**525.71**	**.00436**	**.56320**	**12292.**	**2.4379**
Stddev	18.15	1.63	1.792	.95	.07153	.03255	12.	.2075
%RSD	2.7699	.35064	10.463	.18049	1639.3	5.7800	.09629	8.5099
#1	675.65	467.55	18.689	526.37	-.04635	.56570	12295.	2.5213
#2	649.26	466.09	17.534	524.62	.08618	.52947	12303.	2.5906
#3	640.87	464.29	15.172	526.14	-.02675	.59443	12279.	2.2017

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.91412**	**19.578**	**506.63**	**266.19**	**2140.8**	**630.25**	**21.84**	**2.1695**
Stddev	.39312	.292	2.16	2.21	15.0	1.02	.14	.2988
%RSD	43.005	1.4914	.42622	.83160	.69942	.16215	.6203	13.770
#1	1.3544	19.841	505.56	263.95	2132.9	630.57	21.71	2.4074
#2	.78963	19.264	509.12	266.24	2131.5	631.07	21.98	2.2668
#3	.59832	19.628	505.21	268.37	2158.1	629.10	21.83	1.8342

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**741.98**	**11.063**	**-.64519**	**7200.6**	**13.81**	**-3.8468**	**1.2855**	**128.64**
Stddev	7.74	1.877	.24711	5.8	.23	1.1493	.1542	.06
%RSD	1.0429	16.963	38.300	.08122	1.654	29.878	11.997	.04956
#1	740.87	10.133	-.76065	7207.2	14.03	-4.0418	1.4631	128.64
#2	734.86	9.8333	-.81343	7196.2	13.83	-2.6125	1.1858	128.70
#3	750.22	13.223	-.36148	7198.3	13.57	-4.8863	1.2075	128.57

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1831.5**	**64558.**	**374900.**
Stddev	2.3	99.	1194.
%RSD	.12795	.15302	.31854
#1	1830.3	64444.	376040.
#2	1834.2	64619.	375010.
#3	1830.0	64612.	373660.

Sample Name: MH2698 Acquired: 7/1/2008 11:21:15 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**3413.6**	**37.618**	**4.5968**	**426.50**	**.10370**	**2.2851**	**13574.**	**6.5543**
Stddev	19.7	.239	.9384	.55	.01792	.1805	8.	.1034
%RSD	.57668	.63455	20.414	.12834	17.283	7.9011	.05864	1.5771
#1	3418.3	37.450	4.6752	426.84	.09133	2.2410	13582.	6.5436
#2	3430.4	37.891	3.6217	426.79	.12425	2.4836	13566.	6.4567
#3	3391.9	37.512	5.4935	425.87	.09551	2.1307	13576.	6.6626

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1.0309**	**27.056**	**2553.9**	**98.228**	**2193.4**	**222.07**	**3.940**	**3.8865**
Stddev	.1709	.120	5.8	.457	11.8	.33	.144	.5160
%RSD	16.578	.44219	.22885	.46549	.53964	.14710	3.644	13.278
#1	1.2168	26.923	2560.1	98.163	2192.7	221.70	3.845	4.4379
#2	.88057	27.155	2548.5	97.807	2181.9	222.21	4.105	3.8063
#3	.99545	27.089	2553.1	98.715	2205.5	222.31	3.871	3.4152

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1927.0**	**13.579**	**-2.0867**	**6625.7**	**68.47**	**-6.6104**	**7.2365**	**356.97**
Stddev	8.0	1.770	.0703	18.2	.60	.5714	.6440	.53
%RSD	.41457	13.032	3.3713	.27486	.8763	8.6437	8.8994	.14800
#1	1917.8	15.470	-2.1650	6639.7	69.12	-6.3345	7.5697	357.30
#2	1931.0	11.962	-2.0287	6632.3	68.35	-6.2292	6.4942	357.25
#3	1932.2	13.306	-2.0665	6605.1	67.94	-7.2673	7.6458	356.36

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1778.8**	**64412.**	**372710.**
Stddev	5.6	23.	138.
%RSD	.31653	.03605	.03712
#1	1776.2	64438.	372580.
#2	1775.1	64407.	372690.
#3	1785.3	64392.	372860.

Sample Name: MH26A0 Acquired: 7/1/2008 11:26:08 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1804.7**	**35.345**	**9.9600**	**374.74**	**.07208**	**2.4337**	**13067.**	**4.0771**
Stddev	18.4	1.873	1.3087	.42	.08875	.0834	18.	.3207
%RSD	1.0213	5.2978	13.140	.11280	123.14	3.4265	.13476	7.8655
#1	1805.4	33.517	8.6405	374.94	.05441	2.4352	13069.	4.2510
#2	1786.0	37.259	9.9818	374.25	-.00651	2.5164	13083.	3.7071
#3	1822.8	35.259	11.258	375.02	.16833	2.3496	13048.	4.2733

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.14118**	**26.726**	**1591.6**	**278.55**	**1515.6**	**154.95**	**4.072**	**3.2711**
Stddev	.10995	.383	4.1	1.80	13.5	.18	.024	.6076
%RSD	77.880	1.4324	.25630	.64777	.89145	.11861	.5957	18.575
#1	.04231	27.166	1592.4	280.01	1531.2	155.11	4.047	3.0382
#2	.12164	26.467	1595.3	276.53	1507.9	154.98	4.095	2.8143
#3	.25959	26.544	1587.3	279.10	1507.6	154.75	4.074	3.9606

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1234.4**	**7.6450**	**2.8446**	**6316.9**	**31.73**	**-3.6902**	**2.6408**	**552.70**
Stddev	18.4	.4342	.5565	22.7	.31	1.5349	.1767	.25
%RSD	1.4875	5.6790	19.561	.35860	.9781	41.593	6.6902	.04457
#1	1213.3	8.0731	2.2422	6342.2	31.83	-3.9123	2.6486	552.60
#2	1243.1	7.2050	3.3393	6310.0	31.39	-5.1019	2.4604	552.52
#3	1246.9	7.6568	2.9525	6298.5	31.99	-2.0564	2.8135	552.98

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1812.4**	**64467.**	**375270.**
Stddev	1.7	92.	1213.
%RSD	.09651	.14262	.32329
#1	1811.6	64550.	376220.
#2	1811.2	64368.	373900.
#3	1814.4	64481.	375690.

Sample Name: MH26A2 Acquired: 7/1/2008 11:31:02 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**2159.3**	**16.642**	**4.5949**	**265.02**	**.05853**	**1.4497**	**10020.**	**4.5650**
Stddev	23.2	.531	1.5148	.41	.02087	.0802	46.	.0367
%RSD	1.0765	3.1916	32.967	.15328	35.658	5.5313	.45954	.80327
#1	2166.7	16.614	4.2307	265.36	.07403	1.4889	10049.	4.5932
#2	2133.3	16.126	6.2587	265.12	.03480	1.3575	10044.	4.5235
#3	2178.0	17.187	3.2954	264.57	.06678	1.5028	9967.1	4.5782

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.91245**	**23.394**	**1945.6**	**169.33**	**1691.0**	**208.55**	**3.297**	**3.5830**
Stddev	.34440	.184	3.9	1.20	22.4	.95	.304	.1927
%RSD	37.745	.78653	.20067	.70972	1.3233	.45720	9.223	5.3774
#1	.53217	23.353	1946.9	170.11	1704.1	209.46	3.162	3.7888
#2	1.2033	23.234	1948.6	169.93	1703.8	208.63	3.084	3.4069
#3	1.0018	23.595	1941.2	167.94	1665.2	207.56	3.645	3.5533

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1282.5**	**8.0258**	**-1.2745**	**3943.1**	**41.26**	**-3.7670**	**3.8973**	**273.66**
Stddev	23.5	.5797	.4405	13.9	.70	1.0271	.6028	.11
%RSD	1.8306	7.2230	34.567	.35165	1.687	27.267	15.467	.04153
#1	1280.5	8.4495	-1.3599	3929.8	41.86	-4.6481	4.4911	273.74
#2	1260.2	7.3652	-.79748	3957.5	41.41	-4.0142	3.9147	273.53
#3	1307.0	8.2628	-1.6660	3941.8	40.50	-2.6389	3.2859	273.70

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1825.3**	**64683.**	**376620.**
Stddev	4.0	283.	1373.
%RSD	.21815	.43789	.36450
#1	1820.9	64377.	375540.
#2	1826.3	64736.	376170.
#3	1828.7	64936.	378170.

Sample Name: CCV2 Acquired: 7/1/2008 11:35:55 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055	Co2286
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**24425.**	**4996.1**	**736.73**	**5122.5**	**755.70**	**761.20**	**24315.**	**4996.9**	**4903.4**
Stddev	38.	19.1	2.64	7.7	.86	2.75	30.	18.9	15.9
%RSD	.15674	.38271	.35831	.15114	.11444	.36069	.12185	.37907	.32396
#1	24469.	4983.5	736.47	5131.1	756.27	758.94	24342.	4984.9	4892.0
#2	24399.	4986.7	734.22	5119.9	756.11	760.40	24319.	4987.2	4896.7
#3	24407.	5018.1	739.48	5116.3	754.70	764.25	24284.	5018.8	4921.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**4997.2**	**24861.**	**766.11**	**24474.**	**4879.4**	**-2.247**	**4875.7**	**24760.**	**778.26**
Stddev	11.5	43.	4.55	26.	5.1	.276	16.8	6.	3.42
%RSD	.22959	.17224	.59387	.10453	.10484	12.30	.34471	.02457	.43948
#1	5000.2	24909.	764.74	24502.	4882.7	-2.467	4862.9	24767.	775.10
#2	5006.9	24850.	762.40	24467.	4881.9	-1.936	4869.4	24757.	777.80
#3	4984.5	24825.	771.19	24452.	4873.5	-2.336	4894.7	24756.	781.89
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**773.60**	**25057.**	**5.451**	**722.54**	**4971.9**	**4888.3**
Stddev	2.03	34.	.344	3.22	4.8	19.6
%RSD	.26272	.13468	6.315	.44518	.09598	.40000
#1	772.61	25070.	5.825	720.24	4967.9	4871.3
#2	775.94	25018.	5.381	721.17	4977.2	4884.1
#3	772.26	25081.	5.148	726.22	4970.7	4909.7
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV2 Acquired: 7/1/2008 11:35:55 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1925.6**	**64742.**	**373650.**
Stddev	7.3	47.	950.
%RSD	.37852	.07248	.25436
#1	1928.7	64695.	373740.
#2	1930.8	64789.	372660.
#3	1917.3	64743.	374550.

Sample Name: CCB2 Acquired: 7/1/2008 11:40:39 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**4.9249**	**1.1537**	**1.1854**	**.01189**	**.04301**	**.09378**	**6.8257**	**.10061**
Stddev	5.0609	1.1127	.9286	.07980	.05412	.01844	2.5782	.22518
%RSD	102.76	96.447	78.341	671.04	125.83	19.668	37.773	223.81
#1	7.2374	.47475	.11336	-.03793	.06294	.11406	9.6427	.35585
#2	-.87914	2.4378	1.7426	.10393	.08435	.07801	6.2512	-.07000
#3	8.4165	.54848	1.7002	-.03032	-.01825	.08927	4.5831	.01599
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.22452**	**.27068**	**3.3636**	**-.06258**	**13.143**	**.24289**	**-.1556**	**.14554**
Stddev	.11842	.29623	1.7205	.89658	10.857	.04627	.1330	.64298
%RSD	52.744	109.44	51.151	1432.6	82.608	19.052	85.48	441.78
#1	.34858	.61271	4.6314	-.30486	9.2395	.19288	-.0471	.01155
#2	.11269	.10252	4.0543	-.81313	25.411	.28419	-.3040	.84496
#3	.21228	.09680	1.4051	.93024	4.7770	.25158	-.1156	-.41988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.1367**	**-1.6030**	**-2.2177**	**3.1896**	**.2685**	**.81485**	**.33557**	**2.5909**
Stddev	27.639	.9082	.3135	3.0264	.4286	.82344	.18529	.2312
%RSD	2431.4	56.659	14.137	94.884	159.7	101.05	55.215	8.9221
#1	-2.7141	-2.2232	-1.9710	1.9428	.7599	1.3423	.41079	2.5443
#2	-27.953	-2.0253	-2.1115	6.6402	.0733	1.2363	.12450	2.3866
#3	27.257	-.56051	-2.5705	.98569	-.0278	-.13401	.47141	2.8419
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB2 Acquired: 7/1/2008 11:40:39 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1968.4**	**65179.**	**381610.**
Stddev	1.5	100.	957.
%RSD	.07829	.15362	.25069
#1	1968.2	65100.	380840.
#2	1970.0	65147.	382680.
#3	1967.0	65292.	381310.

Sample Name: MH26A5 Acquired: 7/1/2008 11:45:37 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**852.50**	**40.708**	**5.9300**	**427.79**	**.00027**	**.64716**	**10126.**	**2.3207**
Stddev	18.64	1.608	2.8427	.70	.03603	.03570	17.	.0633
%RSD	2.1861	3.9502	47.937	.16287	13127.	5.5165	.16526	2.7293
#1	833.97	42.503	2.6967	428.59	.01750	.64654	10123.	2.2488
#2	871.24	40.223	8.0368	427.31	-.04114	.61177	10144.	2.3683
#3	852.30	39.399	7.0564	427.47	.02446	.68317	10111.	2.3449

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.09275**	**32.212**	**862.29**	**141.09**	**1004.1**	**255.55**	**8.186**	**1.3503**
Stddev	.25522	.355	1.36	1.89	3.3	.09	.150	.6240
%RSD	275.19	1.1035	.15717	1.3375	.32536	.03695	1.830	46.209
#1	.32625	31.884	863.27	141.06	1003.7	255.65	8.120	.95982
#2	.13170	32.590	862.84	143.00	1001.0	255.46	8.358	1.0211
#3	-.17972	32.163	860.74	139.22	1007.5	255.53	8.082	2.0699

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1603.8**	**7.8243**	**-1.4029**	**14081.**	**18.79**	**-2.9072**	**1.2536**	**149.80**
Stddev	25.8	.8099	.2804	38.	.34	1.0369	.4307	.40
%RSD	1.6062	10.351	19.985	.26969	1.815	35.667	34.354	.26683
#1	1576.0	7.6802	-1.1529	14125.	19.10	-3.7217	.75637	150.26
#2	1627.0	7.0961	-1.3498	14057.	18.84	-3.2598	1.5079	149.51
#3	1608.4	8.6965	-1.7060	14061.	18.42	-1.7399	1.4966	149.63

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1829.5**	**64756.**	**374970.**
Stddev	4.9	39.	2129.
%RSD	.26547	.06030	.56764
#1	1829.0	64711.	373360.
#2	1834.5	64777.	374160.
#3	1824.8	64780.	377380.

Sample Name: MH26A8 Acquired: 7/1/2008 11:50:33 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**4770.0**	**24.225**	**11.671**	**346.25**	**.19790**	**1.8928**	**10528.**	**8.7008**
Stddev	5.5	1.135	.693	.61	.06530	.0735	33.	.1561
%RSD	.11550	4.6857	5.9418	.17570	32.998	3.8820	.31116	1.7942
#1	4776.4	24.396	10.912	346.94	.16327	1.9299	10531.	8.8324
#2	4766.7	23.014	12.271	345.78	.15720	1.8081	10559.	8.5283
#3	4767.0	25.265	11.831	346.03	.27322	1.9402	10493.	8.7417

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1.9543**	**28.181**	**3846.9**	**322.03**	**2804.5**	**287.42**	**2.352**	**5.8640**
Stddev	.0546	.221	11.0	1.79	31.4	.72	.144	.3430
%RSD	2.7966	.78320	.28668	.55592	1.1210	.25017	6.107	5.8489
#1	2.0064	28.365	3849.2	320.56	2811.8	288.22	2.194	6.1699
#2	1.9590	27.936	3856.6	321.50	2831.7	287.21	2.475	5.9289
#3	1.8974	28.242	3834.9	324.02	2770.1	286.82	2.388	5.4932

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1579.7**	**17.693**	**-3.2257**	**3147.0**	**75.88**	**-10.085**	**7.3827**	**414.71**
Stddev	9.1	1.929	.1290	13.2	.67	.472	.4193	.53
%RSD	.57602	10.904	3.9985	.41786	.8833	4.6799	5.6791	.12772
#1	1571.9	17.245	-3.0834	3160.8	76.58	-9.5418	7.8668	415.18
#2	1589.7	16.027	-3.2590	3145.7	75.84	-10.396	7.1470	414.14
#3	1577.6	19.807	-3.3348	3134.6	75.24	-10.317	7.1344	414.82

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1726.8**	**64609.**	**371780.**
Stddev	.7	94.	1438.
%RSD	.03910	.14527	.38686
#1	1726.7	64501.	370150.
#2	1727.5	64674.	372860.
#3	1726.1	64651.	372320.

Sample Name: MH26B0 Acquired: 7/1/2008 11:55:28 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**3522.1**	**22.572**	**14.530**	**459.82**	**.17021**	**.86898**	**9788.8**	**6.2903**
Stddev	20.7	.747	.573	.66	.04400	.08664	29.9	.0838
%RSD	.58718	3.3107	3.9430	.14388	25.852	9.9703	.30572	1.3315
#1	3530.0	23.257	13.955	459.62	.21717	.77393	9754.8	6.2085
#2	3498.7	21.775	14.534	459.29	.16354	.88947	9811.1	6.2865
#3	3537.7	22.684	15.101	460.56	.12993	.94353	9800.6	6.3758

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.64871**	**13.720**	**2707.4**	**86.211**	**1612.5**	**84.260**	**2.346**	**3.4878**
Stddev	.15536	.462	10.0	1.532	5.1	.312	.238	.2616
%RSD	23.948	3.3688	.36862	1.7768	.31743	.37047	10.13	7.4992
#1	.48563	13.874	2696.1	84.508	1612.5	84.470	2.516	3.7518
#2	.66553	14.086	2714.8	87.476	1617.7	84.410	2.448	3.2288
#3	.79498	13.201	2711.4	86.650	1607.4	83.902	2.075	3.4829

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1089.8**	**6.1675**	**-1.7704**	**3877.1**	**56.95**	**-2.0902**	**5.9030**	**167.91**
Stddev	13.3	.5056	.2131	12.2	1.03	1.6129	.1224	.07
%RSD	1.2185	8.1983	12.039	.31492	1.809	77.167	2.0740	.04364
#1	1088.6	5.7948	-1.9948	3876.2	57.23	-.37879	6.0211	167.87
#2	1077.1	6.7431	-1.7456	3865.3	57.81	-3.5822	5.7767	168.00
#3	1103.6	5.9647	-1.5707	3889.7	55.80	-2.3096	5.9113	167.87

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1835.4**	**65021.**	**377630.**
Stddev	1.6	129.	269.
%RSD	.08606	.19900	.07118
#1	1835.4	65097.	377930.
#2	1833.8	64872.	377400.
#3	1837.0	65095.	377570.

Sample Name: MH26B3 Acquired: 7/1/2008 12:00:24 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**2421.1**	**12.477**	**2.9795**	**335.02**	**.13124**	**.63702**	**10493.**	**5.3042**
Stddev	1.7	.135	1.5726	1.33	.05782	.04859	25.	.0763
%RSD	.06997	1.0835	52.781	.39792	44.053	7.6283	.23759	1.4390
#1	2419.9	12.616	1.3954	336.08	.07268	.65663	10485.	5.2909
#2	2423.0	12.468	4.5404	335.45	.18828	.58168	10472.	5.2353
#3	2420.3	12.346	3.0027	333.52	.13276	.67274	10521.	5.3863

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.03551**	**9.5034**	**1790.8**	**30.452**	**1611.7**	**115.38**	**2.502**	**10.307**
Stddev	.16089	.2438	3.7	1.435	10.7	.78	.204	.933
%RSD	453.08	2.5655	.20612	4.7115	.66311	.67975	8.164	9.0504
#1	-.01330	9.7418	1787.6	31.876	1617.3	114.84	2.336	10.584
#2	.21515	9.5138	1789.9	30.473	1618.4	115.02	2.730	9.2670
#3	-.09532	9.2545	1794.8	29.007	1599.3	116.28	2.440	11.070

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**922.60**	**7.1726**	**-2.6323**	**4325.1**	**43.60**	**-3.0811**	**4.6998**	**105.58**
Stddev	12.25	1.9942	.2061	19.2	.24	.5576	.1530	.37
%RSD	1.3272	27.803	7.8295	.44393	.5519	18.096	3.2555	.34979
#1	919.51	6.6533	-2.8468	4342.7	43.88	-3.5985	4.7399	105.69
#2	912.19	5.4895	-2.4358	4328.0	43.47	-3.1544	4.8288	105.17
#3	936.09	9.3751	-2.6144	4304.6	43.45	-2.4906	4.5308	105.88

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1803.2**	**64812.**	**375590.**
Stddev	.5	20.	342.
%RSD	.02833	.03098	.09110
#1	1802.9	64820.	375210.
#2	1803.8	64789.	375880.
#3	1802.9	64826.	375670.

Sample Name: MH26C1 Acquired: 7/1/2008 12:05:19 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**3636.2**	**34.047**	**10.112**	**632.67**	**.13218**	**2.5676**	**11255.**	**6.4532**
Stddev	21.3	1.104	.961	1.25	.07394	.0738	14.	.0710
%RSD	.58535	3.2414	9.4993	.19829	55.940	2.8745	.12387	1.1000
#1	3612.1	34.638	9.1632	634.10	.04848	2.5908	11241.	6.3713
#2	3644.1	34.729	10.090	632.12	.15946	2.4850	11255.	6.4934
#3	3652.3	32.774	11.084	631.78	.18862	2.6271	11269.	6.4951

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.22102**	**32.357**	**2613.8**	**293.79**	**2040.8**	**100.17**	**3.314**	**4.8117**
Stddev	.09390	.113	6.7	1.13	10.8	.38	.031	.6304
%RSD	42.487	.34979	.25692	.38394	.52808	.37488	.9391	13.102
#1	.29402	32.451	2614.8	294.47	2029.8	99.768	3.336	5.3919
#2	.25395	32.231	2606.6	292.49	2051.3	100.23	3.329	4.9023
#3	.11508	32.388	2619.9	294.41	2041.2	100.51	3.279	4.1409

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1347.5**	**9.1072**	**3.2392**	**8910.1**	**58.19**	**-4.7784**	**4.4941**	**905.91**
Stddev	9.9	1.4461	.3103	44.0	.34	1.0176	.3339	1.25
%RSD	.73142	15.879	9.5795	.49374	.5906	21.295	7.4305	.13830
#1	1336.2	10.151	3.2236	8957.9	58.58	-5.4698	4.7368	907.16
#2	1352.6	9.7135	2.9369	8901.2	57.94	-3.6100	4.1133	904.65
#3	1353.9	7.4566	3.5570	8871.2	58.04	-5.2556	4.6323	905.93

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1804.5**	**64716.**	**373680.**
Stddev	1.6	33.	1023.
%RSD	.08696	.05161	.27365
#1	1802.7	64743.	374580.
#2	1805.2	64726.	373880.
#3	1805.6	64679.	372570.

Sample Name: MH26C3 Acquired: 7/1/2008 12:10:13 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**155.92**	**31.475**	**.22439**	**233.26**	**-.04051**	**.48989**	**20863.**	**1.1595**
Stddev	21.83	.234	1.4338	.61	.09350	.05271	80.	.1008
%RSD	14.002	.74209	638.96	.26160	230.82	10.759	.38178	8.6884
#1	172.85	31.263	-1.1925	233.90	-.07479	.54398	20908.	1.0890
#2	131.28	31.726	.19124	233.20	.06530	.48700	20771.	1.2749
#3	163.62	31.436	1.6745	232.68	-.11203	.43868	20909.	1.1147

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.17159**	**7.5101**	**139.98**	**17.463**	**1528.0**	**3.8531**	**4.132**	**1.5693**
Stddev	.24362	.2850	1.08	.870	10.7	.1220	.253	.4046
%RSD	141.98	3.7947	.77214	4.9818	.69765	3.1666	6.129	25.781
#1	-.05851	7.7952	141.07	18.467	1529.7	3.8141	4.383	1.6825
#2	-.00505	7.2252	138.91	16.994	1516.6	3.9898	4.137	1.9052
#3	-.45119	7.5099	139.96	16.928	1537.7	3.7553	3.877	1.1202

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1057.1**	**7.8810**	**-2.5262**	**2776.5**	**5.735**	**-3.6124**	**.57293**	**42.328**
Stddev	21.7	.8627	.2902	11.2	.262	.8200	.26092	.288
%RSD	2.0569	10.946	11.487	.40183	4.562	22.701	45.541	.68076
#1	1062.7	8.5158	-2.5525	2788.5	5.698	-2.9932	.74372	42.136
#2	1075.5	8.2284	-2.2237	2774.5	5.494	-4.5425	.70247	42.188
#3	1033.1	6.8988	-2.8023	2766.4	6.013	-3.3016	.27259	42.659

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1828.3**	**64797.**	**376590.**
Stddev	4.0	55.	2468.
%RSD	.21970	.08491	.65527
#1	1826.1	64815.	377740.
#2	1832.9	64841.	373760.
#3	1825.8	64735.	378280.

Sample Name: MH26C5 Acquired: 7/1/2008 12:15:09 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**311.54**	**30.694**	**2.1192**	**280.39**	**.02969**	**.57549**	**16792.**	**1.4107**
Stddev	27.68	1.019	1.9304	.76	.06307	.04295	17.	.1523
%RSD	8.8833	3.3197	91.090	.27129	212.40	7.4627	.09903	10.798
#1	291.19	29.690	1.6864	281.26	.07549	.62479	16785.	1.4230
#2	343.05	30.665	.44195	280.12	.05583	.54618	16781.	1.5566
#3	300.38	31.727	4.2293	279.81	-.04224	.55550	16812.	1.2527

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.07380**	**12.732**	**339.21**	**51.463**	**1752.0**	**232.66**	**6.067**	**1.5139**
Stddev	.20876	.157	.26	2.125	18.2	.56	.180	.3056
%RSD	282.88	1.2315	.07801	4.1296	1.0377	.23976	2.972	20.187
#1	.16704	12.877	339.51	49.073	1767.8	233.25	6.246	1.2834
#2	-.20306	12.754	339.09	53.140	1756.0	232.57	6.071	1.8605
#3	-.18537	12.565	339.03	52.176	1732.1	232.15	5.885	1.3977

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1363.0**	**5.9596**	**-2.0145**	**3037.8**	**7.358**	**-3.5687**	**.79224**	**58.766**
Stddev	8.5	1.3824	.2131	17.1	.717	1.1402	.41506	.376
%RSD	.62645	23.196	10.579	.56129	9.739	31.949	52.391	.63969
#1	1370.2	4.8153	-2.0850	3057.4	7.222	-3.9525	1.0322	58.647
#2	1353.6	7.4956	-1.7750	3025.8	6.719	-4.4674	.31297	58.464
#3	1365.3	5.5679	-2.1834	3030.4	8.133	-2.2861	1.0316	59.187

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1841.0**	**64843.**	**378170.**
Stddev	1.6	86.	1026.
%RSD	.08834	.13208	.27123
#1	1841.8	64851.	377030.
#2	1842.2	64754.	378490.
#3	1839.2	64925.	379010.

Sample Name: CRIF Acquired: 7/1/2008 12:20:04 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055	Co2286
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**198.90**	**61.278**	**10.342**	**210.10**	**4.9862**	**4.9571**	**4863.5**	**10.243**	**50.667**
Stddev	17.97	.702	1.177	.49	.0634	.0518	29.8	.129	.145
%RSD	9.0362	1.1454	11.383	.23319	1.2723	1.0449	.61171	1.2619	.28629
#1	195.69	60.971	11.429	210.62	5.0059	4.9973	4897.8	10.306	50.833
#2	182.75	60.781	10.506	210.03	4.9152	4.9754	4848.6	10.094	50.562
#3	218.27	62.081	9.0919	209.65	5.0374	4.8986	4844.2	10.329	50.607
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**24.987**	**102.34**	**10.183**	**4807.6**	**14.778**	**-.3588**	**40.312**	**4912.5**	**32.144**
Stddev	.406	.93	.415	30.1	.193	.2114	.514	6.4	2.388
%RSD	1.6229	.90430	4.0800	.62592	1.3092	58.92	1.2746	.12941	7.4298
#1	24.977	103.04	10.172	4815.8	14.972	-.1318	40.851	4908.0	29.502
#2	25.397	102.68	9.7727	4832.7	14.777	-.5500	40.257	4909.6	34.151
#3	24.586	101.29	10.603	4774.3	14.585	-.3947	39.828	4919.8	32.778
Check ?	Chk Pass	None	Chk Pass	None	Chk Pass	None	Chk Pass	None	Chk Pass
Value									
Range									

Elem	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**8.3871**	**4941.9**	**1.071**	**25.800**	**49.083**	**61.920**
Stddev	.6750	8.3	.483	.994	.701	.395
%RSD	8.0486	.16761	45.06	3.8522	1.4290	.63832
#1	7.8867	4943.2	1.294	26.610	48.788	62.286
#2	8.1198	4949.5	1.402	26.099	48.578	61.973
#3	9.1549	4933.1	.5173	24.691	49.884	61.501
Check ?	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRIF Acquired: 7/1/2008 12:20:04 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1961.2**	**65426.**	**380530.**
Stddev	1.2	77.	3063.
%RSD	.05973	.11772	.80503
#1	1961.6	65337.	382630.
#2	1962.2	65478.	381940.
#3	1959.9	65462.	377020.

Sample Name: ICSAF Acquired: 7/1/2008 12:25:00 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**253970.**	**-3.9741**	**.35900**	**2.2770**	**.41667**	**2.3650**	**244670.**
Stddev	334.	5.0201	.89506	.2245	.06598	.0570	662.
%RSD	.13159	126.32	249.32	9.8616	15.836	2.4116	.27058
#1	254330.	-2.8270	-.10090	2.0250	.35712	2.4007	244210.
#2	253890.	-9.4685	-.21262	2.4558	.40529	2.2993	244360.
#3	253680.	.37319	1.3905	2.3501	.48761	2.3951	245430.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cr2055	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**48.321**	**2.6745**	**25.999**	**98285.**	**9.1990**	**264600.**	**19.587**
Stddev	.250	.3964	.232	62.	1.0544	45.	.264
%RSD	.51685	14.820	.89170	.06295	11.463	.01684	1.3469
#1	48.038	3.1298	26.266	98347.	10.383	264560.	19.283
#2	48.415	2.4067	25.887	98223.	8.3616	264650.	19.723
#3	48.510	2.4870	25.846	98286.	8.8522	264600.	19.755
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Ti3349
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.376**	**25.169**	**11.970**	**-.09108**	**9.1424**	**840.07**	**10.54**
Stddev	.465	.079	25.744	4.5370	.2826	3.29	.24
%RSD	33.78	.31396	215.07	4981.6	3.0911	.39167	2.309
#1	-.8586	25.226	-5.8220	.52567	9.4465	838.02	10.68
#2	-1.758	25.078	.24303	-4.9049	9.0929	843.87	10.67
#3	-1.512	25.202	41.489	4.1060	8.8879	838.34	10.25
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSAF Acquired: 7/1/2008 12:25:00 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**4.3497**	**-13.791**	**32.966**
Stddev	1.0670	.349	.727
%RSD	24.529	2.5307	2.2038
#1	5.3175	-13.407	32.456
#2	3.2056	-13.878	33.798
#3	4.5261	-14.089	32.646
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1701.0**	**61723.**	**350040.**
Stddev	1.6	27.	1037.
%RSD	.09615	.04419	.29637
#1	1699.1	61698.	349390.
#2	1702.2	61718.	349510.
#3	1701.7	61752.	351240.

Sample Name: ICSABF Acquired: 7/1/2008 12:30:02 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**252620.**	**663.95**	**108.53**	**530.68**	**503.40**	**1029.5**	**244000.**
Stddev	335.	2.61	1.87	.56	1.06	2.7	970.
%RSD	.13254	.39341	1.7239	.10556	.20962	.26386	.39754
#1	252860.	662.15	110.50	530.98	502.26	1029.4	244880.
#2	252240.	662.76	106.78	530.04	504.34	1026.9	244160.
#3	252760.	666.95	108.30	531.03	503.61	1032.3	242960.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cr2055	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**578.57**	**525.18**	**561.06**	**98211.**	**63.108**	**263820.**	**517.81**
Stddev	1.25	2.04	1.20	177.	6.199	513.	1.56
%RSD	.21590	.38807	.21392	.17985	9.8233	.19433	.30128
#1	577.14	523.27	559.90	98013.	64.009	263270.	516.01
#2	579.14	524.93	562.30	98353.	56.507	264290.	518.77
#3	579.43	527.33	560.98	98267.	68.807	263890.	518.65
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Tl3349
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.208**	**1078.7**	**-20.453**	**57.876**	**221.12**	**848.79**	**10.86**
Stddev	.165	3.7	11.524	2.677	1.08	4.31	.16
%RSD	13.62	.34459	56.345	4.6253	.48761	.50747	1.436
#1	-1.133	1077.4	-8.8073	57.514	220.24	850.66	11.00
#2	-1.397	1075.8	-31.852	60.715	220.80	843.86	10.89
#3	-1.095	1082.9	-20.701	55.398	222.32	851.84	10.70
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSABF Acquired: 7/1/2008 12:30:02 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**113.08**	**474.58**	**1058.4**
Stddev	2.08	1.50	1.9
%RSD	1.8432	.31582	.17725
#1	111.11	476.16	1056.2
#2	115.26	474.42	1059.1
#3	112.87	473.18	1059.8
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1698.2**	**61964.**	**351090.**
Stddev	2.2	162.	611.
%RSD	.12821	.26084	.17392
#1	1700.4	62054.	351790.
#2	1698.2	61778.	350690.
#3	1696.0	62061.	350790.

Sample Name: CCV3 Acquired: 7/1/2008 12:34:54 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055	Co2286
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**24445.**	**5018.5**	**740.08**	**5094.5**	**752.35**	**755.71**	**24188.**	**4995.9**	**4923.0**
Stddev	22.	1.6	2.54	5.1	.37	.09	34.	6.6	3.6
%RSD	.08823	.03158	.34370	.10001	.04954	.01156	.14014	.13289	.07388
#1	24420.	5019.9	739.48	5096.8	752.25	755.61	24216.	4992.5	4921.7
#2	24457.	5018.7	742.88	5098.0	752.76	755.76	24197.	5003.5	4927.1
#3	24458.	5016.8	737.90	5088.7	752.04	755.76	24150.	4991.6	4920.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**4986.1**	**24736.**	**767.37**	**24332.**	**4856.6**	**-2.066**	**4875.2**	**24756.**	**777.33**
Stddev	16.3	47.	.40	64.	3.5	.238	3.7	53.	2.20
%RSD	.32610	.18819	.05190	.26475	.07148	11.51	.07690	.21295	.28285
#1	5004.8	24788.	767.62	24405.	4858.2	-1.954	4871.1	24713.	779.85
#2	4978.9	24724.	766.91	24304.	4858.9	-2.340	4878.5	24815.	776.30
#3	4974.8	24698.	767.58	24285.	4852.6	-1.906	4875.9	24741.	775.83
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**768.90**	**25075.**	**5.304**	**724.29**	**4953.9**	**4874.5**
Stddev	3.63	21.	.187	1.80	32.5	.5
%RSD	.47237	.08217	3.520	.24797	.65664	.00930
#1	772.72	25068.	5.516	722.81	4989.0	4874.9
#2	765.49	25098.	5.162	726.29	4924.9	4874.7
#3	768.48	25059.	5.234	723.76	4947.7	4874.0
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV3 Acquired: 7/1/2008 12:34:54 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1908.9**	**64583.**	**373600.**
Stddev	.9	43.	1690.
%RSD	.04469	.06584	.45235
#1	1909.4	64598.	371770.
#2	1907.9	64535.	375100.
#3	1909.3	64617.	373930.

Sample Name: CCB3 Acquired: 7/1/2008 12:39:35 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**8.3427**	**1.2370**	**2.3841**	**.06913**	**-.01363**	**.06546**	**7.8187**	**.08663**
Stddev	8.2518	2.5372	2.1937	.10381	.02016	.05688	3.1512	.22543
%RSD	98.911	205.10	92.012	150.17	147.90	86.898	40.303	260.21
#1	-1.1426	.57240	-.00346	-.00159	.00917	.12315	11.389	.33096
#2	12.302	4.0404	4.3105	.18830	-.02910	.06380	6.6413	.04223
#3	13.869	-.90170	2.8452	.02066	-.02096	.00942	5.4258	-.11329
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.44942**	**.55180**	**19.562**	**-2.0172**	**-5.2866**	**.16148**	**-.1221**	**.31488**
Stddev	.08721	.33249	1.120	1.0880	6.8688	.20912	.0434	.16700
%RSD	19.406	60.256	5.7245	53.936	129.93	129.50	35.56	53.035
#1	.54110	.93573	20.662	-1.6703	-13.040	-.06352	-.0729	.22094
#2	.43968	.36168	18.424	-1.1449	.0360	.19805	-.1382	.21601
#3	.36749	.35800	19.600	-3.2363	-2.8555	.34991	-.1551	.50769
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**22.603**	**-1.7619**	**-2.2175**	**-1.3456**	**.1232**	**2.1089**	**.33659**	**4.7429**
Stddev	22.285	.6636	.3449	4.3977	.6401	.9829	.43865	.2032
%RSD	98.593	37.666	15.555	326.83	519.4	46.607	130.32	4.2854
#1	48.333	-2.4991	-1.8197	-5.4216	-.2035	3.2076	-.16714	4.9770
#2	9.3893	-1.2121	-2.3994	3.3153	-.2876	1.3131	.54259	4.6119
#3	10.088	-1.5745	-2.4333	-1.9304	.8608	1.8060	.63433	4.6397
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB3 Acquired: 7/1/2008 12:39:35 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1969.6**	**65560.**	**382810.**
Stddev	1.7	130.	1708.
%RSD	.08426	.19782	.44616
#1	1969.0	65432.	380960.
#2	1971.5	65691.	384330.
#3	1968.3	65557.	383130.

Sample Name: MH26C7 Acquired: 7/1/2008 12:44:34 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**1604.2**	**12.266**	**2.3049**	**382.89**	**.05411**	**.43069**	**12308.**	**4.9244**
Stddev	15.1	1.232	.3389	.39	.03346	.11951	32.	.0386
%RSD	.94249	10.040	14.705	.10109	61.845	27.750	.25878	.78446
#1	1614.9	13.219	2.0778	383.33	.01591	.53144	12340.	4.9079
#2	1610.7	10.875	2.1424	382.62	.07826	.29864	12308.	4.8968
#3	1586.9	12.703	2.6944	382.71	.06814	.46198	12276.	4.9686

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.34646**	**7.3383**	**1183.1**	**22.289**	**1616.5**	**163.65**	**3.167**	**2.9627**
Stddev	.18130	.0371	4.2	.258	24.5	.62	.126	.5646
%RSD	52.329	.50576	.35838	1.1586	1.5132	.37973	3.987	19.055
#1	.15248	7.3783	1186.0	22.312	1643.3	163.33	3.048	2.5010
#2	.51163	7.3315	1185.1	22.535	1595.3	164.37	3.300	3.5921
#3	.37527	7.3050	1178.2	22.020	1611.0	163.26	3.153	2.7950

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**881.44**	**17.091**	**-4.8047**	**5301.7**	**30.21**	**-9.1922**	**2.8127**	**70.477**
Stddev	22.14	1.657	.1288	17.0	.39	.2559	.3748	.573
%RSD	2.5121	9.6957	2.6814	.32070	1.283	2.7842	13.327	.81284
#1	893.39	15.283	-4.9528	5320.4	29.83	-9.4110	2.7645	70.843
#2	895.05	18.537	-4.7426	5297.7	30.19	-9.2548	2.4643	70.772
#3	855.89	17.452	-4.7186	5287.1	30.61	-8.9108	3.2093	69.817

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1722.4**	**64353.**	**369590.**
Stddev	3.9	25.	627.
%RSD	.22779	.03927	.16960
#1	1719.3	64329.	369440.
#2	1721.1	64351.	370280.
#3	1726.8	64379.	369060.

Sample Name: ZZZZZZ Acquired: 7/1/2008 12:49:29 Type: Unk
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: MW1
Comment: RB

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-3.7005**	**-.68162**	**-1.1547**	**.58304**	**.00096**	**.15572**	**64.150**	**.49329**
Stddev	23.301	.95053	1.0259	.10126	.08677	.02566	1.884	.06744
%RSD	629.68	139.45	88.848	17.368	9038.4	16.477	2.9362	13.671
#1	12.298	-.98278	-1.3562	.60242	-.04604	.15392	64.026	.45535
#2	7.0349	.38300	-2.0648	.47348	-.05216	.13102	66.092	.57115
#3	-30.435	-1.4451	-.04296	.67321	.10109	.18224	62.331	.45336

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-.02765**	**.17119**	**3.6255**	**.35474**	**-9.2021**	**-.13143**	**.2576**	**.24112**
Stddev	.13032	.17661	.0767	.19327	16.098	.16692	.1344	.00304
%RSD	471.29	103.17	2.1156	54.483	174.94	127.00	52.17	1.2625
#1	-.16406	.30295	3.5780	.13157	-19.730	-.07310	.3655	.23844
#2	.09557	.24010	3.7139	.46715	9.3292	-.31969	.3001	.24048
#3	-.01447	-.02949	3.5844	.46551	-17.205	-.00151	.1071	.24443

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**20.273**	**.68532**	**-3.3965**	**32.086**	**.7463**	**.18136**	**.24850**	**-.02903**
Stddev	24.939	1.2108	.3485	8.274	.4084	1.3114	.35732	.28210
%RSD	123.01	176.67	10.261	25.786	54.72	723.09	143.79	971.71
#1	48.473	-.66441	-3.5099	38.949	.3629	-.64623	.28132	-.04741
#2	11.225	1.6758	-3.6742	22.899	1.176	-.50305	-.12409	.26181
#3	1.1212	1.0445	-3.0055	34.410	.7003	1.6934	.58828	-.30149

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1904.2**	**65285.**	**382050.**
Stddev	4.1	102.	893.
%RSD	.21528	.15603	.23385
#1	1900.0	65281.	382880.
#2	1908.2	65388.	382170.
#3	1904.5	65185.	381110.

Sample Name: CRIF2 Acquired: 7/1/2008 12:54:28 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055	Co2286
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**208.15**	**60.461**	**11.417**	**209.76**	**4.9326**	**4.9599**	**4843.0**	**10.131**	**50.355**
Stddev	12.03	1.107	.888	.19	.0021	.0359	7.9	.111	.186
%RSD	5.7798	1.8301	7.7763	.09271	.04252	.72311	.16261	1.0936	.36948
#1	199.52	60.999	11.612	209.98	4.9302	4.9343	4851.4	10.228	50.320
#2	221.90	59.189	12.192	209.61	4.9334	5.0009	4835.7	10.011	50.190
#3	203.05	61.196	10.448	209.70	4.9341	4.9446	4841.9	10.156	50.557
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**25.453**	**100.37**	**10.740**	**4789.0**	**14.778**	**-.3462**	**39.704**	**4924.7**	**33.747**
Stddev	.257	1.38	.537	9.5	.129	.0850	.330	13.7	.922
%RSD	1.0083	1.3779	4.9979	.19755	.87553	24.56	.83098	.27884	2.7328
#1	25.453	99.102	10.982	4778.1	14.809	-.4360	39.872	4916.5	32.929
#2	25.710	101.85	11.113	4794.5	14.889	-.2669	39.324	4917.0	34.746
#3	25.196	100.16	10.125	4794.3	14.636	-.3358	39.915	4940.5	33.565
Check ?	Chk Pass	None	Chk Pass	None	Chk Pass	None	Chk Pass	None	Chk Pass
Value									
Range									

Elem	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**8.0387**	**4924.8**	**1.078**	**25.861**	**49.084**	**59.201**
Stddev	.3471	9.8	.457	.453	.141	.071
%RSD	4.3175	.19856	42.39	1.7527	.28802	.12035
#1	7.6689	4935.7	.5634	26.384	48.985	59.254
#2	8.0899	4916.8	1.236	25.585	49.020	59.120
#3	8.3573	4921.8	1.436	25.613	49.246	59.229
Check ?	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CRIF2 Acquired: 7/1/2008 12:54:28 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1974.5**	**65407.**	**381710.**
Stddev	4.0	58.	875.
%RSD	.20407	.08852	.22911
#1	1969.9	65349.	382430.
#2	1976.8	65406.	381970.
#3	1977.0	65465.	380740.

Sample Name: ICSAF2 Acquired: 7/1/2008 12:59:25 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**251790.**	**-3.0217**	**.73111**	**2.4434**	**.45193**	**2.5246**	**243320.**
Stddev	259.	.4847	1.8251	.0211	.02889	.1436	746.
%RSD	.10281	16.040	249.63	.86240	6.3928	5.6876	.30658
#1	252080.	-2.4624	2.7699	2.4191	.46839	2.4527	242540.
#2	251580.	-3.2851	-.75030	2.4549	.46884	2.4311	243390.
#3	251700.	-3.3177	.17374	2.4562	.41857	2.6899	244030.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cr2055	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**48.135**	**3.1011**	**26.063**	**97698.**	**9.9197**	**262850.**	**19.256**
Stddev	.234	.4585	.379	99.	2.1792	244.	.085
%RSD	.48577	14.785	1.4529	.10161	21.968	.09275	.44204
#1	47.892	3.5500	26.476	97691.	8.1876	262750.	19.351
#2	48.154	3.1199	25.982	97800.	12.366	263130.	19.233
#3	48.358	2.6336	25.732	97602.	9.2050	262670.	19.186
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Ti3349
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.434**	**24.316**	**-3.8722**	**.50588**	**9.0293**	**836.19**	**10.44**
Stddev	.448	1.132	26.405	2.4182	.2620	9.12	.45
%RSD	31.24	4.6551	681.91	478.02	2.9014	1.0903	4.325
#1	-1.868	23.506	17.482	3.2355	8.7529	835.38	9.979
#2	-.9729	25.609	4.2986	-1.3683	9.2739	845.68	10.47
#3	-1.461	23.832	-33.397	-.34957	9.0611	827.50	10.88
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSAF2 Acquired: 7/1/2008 12:59:25 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**5.1254**	**-13.601**	**32.744**
Stddev	.9710	.457	.246
%RSD	18.944	3.3581	.74981
#1	5.9339	-13.114	32.660
#2	5.3939	-13.670	33.020
#3	4.0485	-14.019	32.552
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1701.3**	**62030.**	**351610.**
Stddev	1.1	77.	403.
%RSD	.06724	.12338	.11451
#1	1701.9	62002.	351680.
#2	1702.0	62117.	351180.
#3	1700.0	61971.	351970.

Sample Name: ICSABF2 Acquired: 7/1/2008 13:04:30 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**252300.**	**664.47**	**111.46**	**528.07**	**502.26**	**1022.9**	**242430.**
Stddev	181.	1.52	1.93	.05	.27	1.7	1555.
%RSD	.07156	.22919	1.7315	.00931	.05406	.16612	.64149
#1	252220.	665.18	109.24	528.11	501.95	1024.8	240650.
#2	252500.	662.72	112.75	528.07	502.46	1022.3	243550.
#3	252160.	665.50	112.38	528.02	502.38	1021.6	243090.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cr2055	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**580.28**	**526.21**	**566.25**	**97451.**	**64.681**	**262410.**	**516.61**
Stddev	.44	.70	.80	109.	1.403	182.	.24
%RSD	.07658	.13241	.14108	.11212	2.1685	.06942	.04554
#1	580.49	526.40	565.51	97575.	66.278	262240.	516.34
#2	580.58	526.79	567.09	97409.	63.650	262380.	516.79
#3	579.77	525.44	566.14	97369.	64.114	262600.	516.71
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280	Na5895	Ti3349
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**-1.356**	**1078.4**	**-4.9087**	**57.079**	**222.32**	**850.63**	**11.12**
Stddev	.092	1.8	18.089	3.025	.18	.26	.45
%RSD	6.812	.16228	368.50	5.2997	.08249	.03017	4.070
#1	-1.275	1079.6	-7.2779	54.774	222.51	850.59	11.60
#2	-1.457	1076.4	14.248	55.959	222.15	850.39	10.70
#3	-1.336	1079.1	-21.696	60.504	222.30	850.90	11.07
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSABF2 Acquired: 7/1/2008 13:04:30 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L
Avg	**113.75**	**478.77**	**1051.8**
Stddev	.98	2.43	3.3
%RSD	.86435	.50770	.31399
#1	114.69	480.19	1055.3
#2	112.73	480.16	1051.6
#3	113.82	475.96	1048.7
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1683.6**	**61914.**	**347640.**
Stddev	1.8	108.	765.
%RSD	.10812	.17445	.22001
#1	1685.7	62026.	346990.
#2	1682.6	61810.	347460.
#3	1682.5	61907.	348480.

Sample Name: CCV4 Acquired: 7/1/2008 13:09:25 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055	Co2286
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**24345.**	**5023.9**	**736.50**	**5125.5**	**743.55**	**750.92**	**23773.**	**5002.4**	**4912.2**
Stddev	75.	15.7	2.64	5.7	2.30	1.34	77.	9.7	5.1
%RSD	.30685	.31240	.35798	.11050	.30948	.17870	.32472	.19489	.10466
#1	24430.	5041.3	733.99	5130.6	746.20	752.44	23857.	5013.5	4918.2
#2	24291.	5019.5	736.25	5119.4	742.44	750.44	23759.	4995.5	4909.6
#3	24314.	5010.8	739.24	5126.6	742.02	749.89	23704.	4998.0	4909.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316	K_7664	Se1960
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**4976.9**	**24543.**	**767.89**	**24086.**	**4770.8**	**-1.937**	**4852.4**	**24765.**	**775.61**
Stddev	13.6	62.	3.02	31.	17.2	.167	6.7	60.	1.47
%RSD	.27365	.25237	.39340	.12898	.36011	8.623	.13863	.24411	.18889
#1	4984.0	24614.	768.59	24122.	4789.9	-1.882	4858.6	24827.	776.85
#2	4961.1	24509.	770.49	24069.	4766.2	-2.124	4853.3	24706.	773.99
#3	4985.4	24505.	764.58	24068.	4756.5	-1.804	4845.3	24762.	775.97
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**765.98**	**25292.**	**4.839**	**725.00**	**4889.9**	**4824.7**
Stddev	1.23	28.	.169	1.38	11.8	4.0
%RSD	.16019	.10957	3.495	.18991	.24071	.08350
#1	766.80	25315.	5.026	725.90	4902.0	4829.0
#2	764.57	25261.	4.696	723.41	4878.5	4824.3
#3	766.58	25299.	4.795	725.67	4889.2	4821.0
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Sample Name: CCV4 Acquired: 7/1/2008 13:09:25 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1895.9**	**65083.**	**372960.**
Stddev	5.1	198.	502.
%RSD	.26936	.30458	.13456
#1	1890.5	64873.	372760.
#2	1896.7	65111.	373530.
#3	1900.6	65266.	372580.

Sample Name: CCB4 Acquired: 7/1/2008 13:14:07 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Elem	Al3082	Sb2068	As1890	Ba4554	Be3131	Cd2144	Ca3179	Cr2055
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**13.020**	**.64696**	**1.3760**	**-.04820**	**.03641**	**.03164**	**5.4661**	**.12675**
Stddev	4.820	.58897	.8862	.19490	.02731	.02547	2.2747	.03493
%RSD	37.021	91.037	64.407	404.36	74.990	80.496	41.614	27.559
#1	9.4451	1.1899	.55613	.07157	.06045	.01615	7.7993	.12063
#2	11.113	.02084	1.2556	.05692	.00672	.01773	5.3441	.09529
#3	18.502	.73009	2.3163	-.27309	.04206	.06104	3.2549	.16434
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cu3247	Fe2599	Pb2203	Mg2790	Mn2576	Mo2020	Ni2316
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**.32651**	**.39761**	**4.5621**	**-.22723**	**4.1439**	**.13882**	**-.0764**	**.34227**
Stddev	.31622	.18699	1.2970	1.5276	19.112	.22477	.0886	.31691
%RSD	96.849	47.027	28.429	672.27	461.21	161.92	116.0	92.589
#1	.27957	.25213	5.8115	-1.4827	24.711	.39465	-.1463	.44751
#2	.66358	.33219	3.2223	-.67242	.79142	-.02695	-.1063	-.01387
#3	.03638	.60852	4.6526	1.4735	-13.070	.04876	.0233	.59317
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Elem	K_7664	Se1960	Ag3280	Na5895	Ti3349	Tl1908	V_2924	Zn2062
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Avg	**20.036**	**-.86005**	**-2.5527**	**.97618**	**.8913**	**.91720**	**.58821**	**2.1414**
Stddev	21.775	.42700	.3831	3.0143	.1363	.24392	.33494	.0790
%RSD	108.68	49.648	15.006	308.78	15.29	26.594	56.943	3.6893
#1	14.406	-1.3378	-2.2365	-2.3878	.9381	1.1028	.62521	2.1359
#2	44.073	-.72690	-2.9786	3.4319	.9980	.64093	.23629	2.0652
#3	1.6294	-.51549	-2.4429	1.8844	.7378	1.0079	.90311	2.2230
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB4 Acquired: 7/1/2008 13:14:07 Type: QC
Method: ICP07 ILM05.4 2008(v2) Mode: CONC Corr. Factor: 1.000000
User: sanchezjc SDG: MH25F1 CASE: 37402 Prep: NP1
Comment:

Int. Std.	Sc2273	Sc3613	Sc3613-2
Units	Cts/S	Cts/S	Cts/S
Avg	**1967.0**	**65459.**	**382280.**
Stddev	1.8	246.	1348.
%RSD	.09053	.37557	.35256
#1	1967.6	65213.	382140.
#2	1965.0	65460.	383690.
#3	1968.4	65704.	381010.

SDG/PREP GROUP# MH25F1 CONTINUED FROM PAGE#: 103

Explanations:

ILM05.4-MW1 Physical Description Log

CASE: 37402 **SDG:** MH25F1 **DCL SET ID:** 8171034

Sample ID	Matrix	Method	Prep Date	Amount of Sample Used (mL)	Final Volume of Digested Samples (mL)	pH	Color/Clarity, Texture		Init.
							Before	After	
PBW	ASTM Type II H_2O	ILM05.4 MW1	6/26/2008	45 mL	50 mL	NA	N/CL	N/CL	KK
LCSW	↓					NA	N/CL	N/CL	
MH25F1	Water					<2	N/CL	N/CL	
MH2698									
MH26A0									
MH26A2									
MH26A5									
MH26A8									
MH26B0									
MH26B3									
MH26C1									
MH26C3									
MH26C5									
MH26C7									
MH26C9									
MH26C9S									
MH26C9D	↓	↓	↓	↓	↓	↓	↓	↓	↓

COLOR			TEXTURE	CLARITY
BL = Black	N = Colorless	BR = Brown	F = Fine	CL = Clear
Y = Yellow	GR = Gray	GN = Green	M = Medium	CO = Cloudy
	R = Red	O = Orange	C = Coarse	

KK 6/26/08

KK 6/26/08

CONTINUED ON PAGE# X

Preparer Signature/Date: 6/26/08

Reviewer Signature/Date: 6/27/08

SAMPLE TAG INFORMATION SHEET

There are no Sample Tags included with this SDG
The TR/COC lists tag numbers and the DC-1 reflects this, however the Lab did not receive actual tags for this case. In the future communication between Sample Receipt and Log-in will include the status of the tags.

Notations concerning the location of the Sample Tags are included in Forms DC-1, DC-2 and in the SDG Administrative Narrative (if it is required).

Sample Delivery Group (SDG)
Cover Sheet

SDG Number: MH25F1

☒ ICPAES ☐ ICPMS ☐ HG ☐ CN

Laboratory Name: DataChem Laboratories, Inc.

Laboratory Code: DATAC

Contract No.: EP-W-06-054

Case No.: 37402

Analysis Price: N/A

SDG Turnaround: 21

Modified Analysis (if applicable):

Modification Reference No.: 1553.0

EPA Sample Numbers in SDG (Listed in Numerical Order)

1) MH25F1	7) MH26B0	13) MH26C9	19)
2) MH2698	8) MH26B3	14)	20)
3) MH26A0	9) MH26C1	15)	21)
4) MH26A2	10) MH26C3	16)	22)
5) MH26A5	11) MH26C5	17)	23)
6) MH26A8	12) MH26C7	18)	24)

MC 6/19/08

MC 6/19/08

MH25F1	MH26C9
First Sample in SDG	Last Sample in SDG
06/18/08	06/18/08
First Sample Receipt Date	Last Sample Receipt Date

Note: *There are a maximum of 20 field samples (excluding PE samples) in an SDG. Attach the TR/COC records to this form in alphanumeric order (the order listed above on this form).*

Signature: Meredith Edward

Date: 6/19/2008

DataChem Laboratories, Inc.
CHAIN-OF-CUSTODY

Project / Job / Task: P056L001 | **Split:** | **Workorder ID:** 8171034 | **Account:** 08201

Client: U. S. EPA Region 8

Comments:

Preservatives: COOL

Containers

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers	Count	Solids/Moisture	LM05.4 ICP-AES, Soil	LM05.4 Prep/Extr/Dig
1		MH25F1	8171034001		Soil/Solids/Sediment		1	X	X	X
2	6/5/2008 10:20	MH2698	8171034002		Soil/Solids/Sediment		1	X	X	X
3	6/5/2008 10:50	MH26A0	8171034003		Soil/Solids/Sediment		1	X	X	X
4	6/5/2008 12:55	MH26A2	8171034004		Soil/Solids/Sediment		1	X	X	X
5	6/5/2008 14:50	MH26A5	8171034005		Soil/Solids/Sediment		1	X	X	X
6	6/5/2008 15:00	MH26A8	8171034006		Soil/Solids/Sediment		1	X	X	X
7	6/6/2008 11:00	MH26B0	8171034007		Soil/Solids/Sediment		1	X	X	X
8	6/6/2008 10:30	MH26B3	8171034008		Soil/Solids/Sediment		1	X	X	X
9	6/5/2008 10:54	MH26C1	8171034009		Soil/Solids/Sediment		1	X	X	X
10	6/5/2008 14:30	MH26C3	8171034010		Soil/Solids/Sediment		1	X	X	X

Requested Analysis

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinqueshed By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	06/18/2008 08:15	DCL Sample Receiving	Sample Login
Meredith Edwards R-33-1 mye	6/19/08 1225 06/26/08 12:00	R-33-1 out Xinoy Chang	Storage SPLP EXT
Xinoy Chang R-403-1 KK	06/26/08 10:00 6/26/08 1030	R-403 mye [signature]	STOR Metals

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: ICP Metals

Prepared / Analyzed by: [signature]

Lab Notebook No.: 350

Date / Time: 6/26/08 1030

Relinqueshed By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
[signature] R-403-1 gcs	6/26/08 1640 6/27/08 13:40	R-403-1 KK gcs 6/27/08 ICP Lab gcs	storage analysis

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DataChem Laboratories, Inc.
CHAIN-OF-CUSTODY

Project / Job / Task: P056L001 | **Split:** | **Workorder ID:** 8171034 | **Account:** 08201

Client: U. S. EPA Region 8

Comments:

Preservatives: COOL

Item	Collect Date/Time	Sample ID	Lab ID	QC	Matrix	Containers	Count	Solids/Moisture	LM05.4 ICP-AES, Soil	LM05.4 PrepExtrDig
11	6/5/2008 14:37	MH26C5	8171034011		Soil/Solids/Sediment		1	X	X	X
12	6/6/2008 10:34	MH26C7	8171034012		Soil/Solids/Sediment		1	X	X	X
13	6/5/2008 18:45	MH26C9	8171034013		Soil/Solids/Sediment		1	X	X	X
14	6/5/2008 18:45	MH26C9S	8171034014	MS	Soil/Solids/Sediment		1		X	X
15	6/5/2008 18:45	MH26C9D	8171034015	MD	Soil/Solids/Sediment		1	X	X	X
16										
17										
18										
19										
20										

Requested Analysis

ORIGINAL FIELD SAMPLE CHAIN-OF-CUSTODY

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
Edwards, Meredith D.	06/18/2008 08:15	DCL Sample Receiving	Sample Login
Meredith Edwards R-33-1 mpc	06/18/08 1025	R-33-1	Storg
Stacy Cheung	06/26/08 12:00	Stacy Cheung	SPLP EXT
Stacy Cheung	06/26/08 16:00	R-403	STOR
R-403-1 KK	6/26/08 1030		Metals

SAMPLE PREPARATION / ANALYSIS CHAIN-OF-CUSTODY

Sample Prep / Analysis for: ICP Metals

Lab Notebook No.: 350

Prepared / Analyzed by:

Date / Time: 6/26/08 1030

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Reason for Transfer / Storage Location
	6/26/08 1640	R-403-1 KK	storage
R-403-1 BOS	6/27/08 13:20	ICP Lab BOS	analysis

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TITLE Splp Write up

Project No.

Book No. 4648

Account #: 8201	Initial Date/Time: 06/24/08/12:00	Client: U.S. EPA	Book #:	Page #:
DCL Set ID's: 8710244	Filter Date/Time: 06/25/08/10:00	Region 8	Tclp 23	54
—	Tumble Start Date/Time: 06/24/08/14:00	Tumbling Start Temp: 24.°C		
—	Tumble End Date/Time: 06/25/08/10:00	Tumbling End Temp: 23.°C		
—	SOP: OE-SW-1312	Temp. Min: 23.°C		
—	Page: 1 of 2	Temp. Max: 24.°C		

DCL Sample ID:	Splp BL	OE	8710244 001	8710244 002	8710244 003	8710244 004	8710244 005	8710244 006	8710244 007	8710244 008
Field ID:	—	—	MH25F1	MH2698	MH26A0	MH26A2	MH26A5	MH26A8	MH26B0	MH26B3
Weight Tumbled:	—	—	100g	100g	100g	100g	100g	100g	100g	100g
Fluid Tumbled:	2000ml	~~mjc~~	2000ml	2000ml	2000ml	2000ml	2000ml	2000ml	2000ml	2000ml
ZHE Sample Weight:										
ZHE Fluid Amount:										
ZHE Number:										
Initial pH:	—	—	—	—	—	—	—	—	—	—
Adjusted pH:	—	—	—	—	—	—	—	—	—	—
Final pH:	5.58	5.58	7.62	7.60	7.73	8.04	7.90	7.98	8.17	7.85
Fluid Number:	Splp F#2									
Batch Number:	072									
% Liquid By Weight:	100%	100%	≈ 0	≈ 0	≈ 0	≈ 0	≈ 0	≈ 0	≈ 0	≈ 0
% Solid By Weight:	0	0	≈100%	≈100%	≈100%	≈100%	≈100%	≈100%	≈100%	≈100%
% Other By Weight:	0									
ICP/HG Acid Spike:	NA NS	A NS	A NS	A NS	A NS	A NS	A NS	A NS	A NS	A NS

NA ~~mjc~~ 06/24/08

~~mjc~~

~~mjc~~

~~mjc~~

Key For Above Spikes: A = Acidified N = Not Acidified NS = Not Spiked S = Spiked

Group:	Blank ID's:	Spiking Solutions	Comments:
ICP	TB-	ICP ID #:	Balance # 108750
HG	TB-	Amt Spiked:	
Pest	TB-	Spiked By:	
Herb	TB-	HG ID #:	
SV	TB-	Amt Spiked:	
VOA	TB-	Spiked By:	

NA ~~mjc~~ 06/24/08

To Page No. 2

Witnessed & Understood by me,	Date	Invented by: NA	Date
	6/24/08	Recorded by: Jinny Chang	06/24/08

TITLE SPLP write up

Project No.

Book No. 4648

Account #: 8201	Initial Date/Time: 06/24/08/12:00	Client: U.S. EPA	Book #:	Page #:
DCL Set ID's: 8710244	Filter Date/Time: 06/25/08/10:00	Region 8	Tclp23	65
—	Tumble Start Date/Time: 06/24/08/14:00	Tumbling Start Temp: 24.0C		
—	Tumble End Date/Time: 06/25/08/10:00	Tumbling End Temp: 23.0C		
—	SOP: 08-SW-1311	Temp. Min: 23.0C		
—	Page: 2 of 2	Temp. Max: 24.0C		

DCL Sample ID:	8710244 009	8710244 010	8710244 011	8710244 012	8710244 013	8710244 013-MD	8710244 014-MS	8710244 015-MSD
Field ID:	MH26C1	MH26C3	MH26C5	MH26C7	MH26C9	MH26C9	MH26C9S	MH26C9D
Weight Tumbled:	100g	100g	100g	100g	100g			
Fluid Tumbled:	2000ml	2000ml	2000ml	2000ml	2000ml			
ZHE Sample Weight:								
ZHE Fluid Amount:								
ZHE Number:								
Initial pH:	—	—	—	—	—	—	—	—
Adjusted pH:	—	—	—	—	—	—	—	—
Final pH:	7.84	7.70	7.86	7.88	7.59			
Fluid Number:	SPLP F-#2							
Batch Number:	072							
% Liquid By Weight:	≈0	≈0	≈0	≈0	≈0			
% Solid By Weight:	≈100%	≈100%	≈100%	≈100%	≈100%			
% Other By Weight:	0							
ICP/HG Acid Spike:	A NS	A NS	A NS	A NS	A NS	A NS	A NS	A NS

NA mgk 06/24/08

mgk 06/24/08

mgk 06/24/08

Key For Above Spikes: A = Acidified N = Not Acidified NS = Not Spiked S = Spiked

Groups:	Blank ID's:	Spiking Solutions	Comments:
ICP	TB-	ICP ID #: NA	Balance #108750
HG	TB-	Amt Spiked:	
Pest	TB-	Spiked By:	mgk 06/24/08
Herb	TB-	HG ID #:	
SV	TB-	Amt Spiked:	
VOA	TB-	Spiked By:	

To Page No.

Witnessed & Understood by me,	Date	Invented by: NA	Date
	6/24/8	Recorded by: Jiang Chang	06/24/08

Batch Worklist

DATA CHEM LABORATORIES, INC.

Batch EIPX/ 1421 **Created** 6/26/2008 10:17 **HBN** 17091

Rule ILM ICP-AES MW1 Prep **Analyst** K. Kuwitzky **Status** NA

Workorder 8171034 **CASE** 37402 **SDG** MH25F1 **MODN** 1553.0

Pos	Lab ID	Sample ID	Prep Initial	Prep Final	Mx	Type	Container	Procedure	Mgr	Expire Date	Due Date
1	55083	PBW	211.9	212.0	3	PBW		ILMAESW.3P	6120	12/23/2008	6/24/2008
2	55084	LCSW	210.7	210.6	3	LCSW		ILMAESW.3P	6120	12/23/2008	6/24/2008
3	8171034001	MH25F1	212.2	212.2	3	SAMPLE	8171034001-A	I54AESW.3P	5936	12/15/2008	6/24/2008
4	8171034002	MH2698	212.0	211.9	3	SAMPLE	8171034002-A	I54AESW.3P	5936	12/15/2008	6/24/2008
5	8171034003	MH26A0	210.7	210.7	3	SAMPLE	8171034003-A	I54AESW.3P	5936	12/15/2008	6/24/2008
6	8171034004	MH26A2	209.2	209.2	3	SAMPLE	8171034004-A	I54AESW.3P	5936	12/15/2008	6/24/2008
7	8171034005	MH26A5	210.9	210.9	3	SAMPLE	8171034005-A	I54AESW.3P	5936	12/15/2008	6/24/2008
8	8171034006	MH26A8	211.8	211.8	3	SAMPLE	8171034006-A	I54AESW.3P	5936	12/15/2008	6/24/2008
9	8171034007	MH26B0	211.9	211.8	3	SAMPLE	8171034007-A	I54AESW.3P	5936	12/15/2008	6/24/2008
10	8171034008	MH26B3	212.2	212.1	3	SAMPLE	8171034008-A	I54AESW.3P	5936	12/15/2008	6/24/2008
11	8171034009	MH26C1	212.3	212.3	3	SAMPLE	8171034009-A	I54AESW.3P	5936	12/15/2008	6/24/2008
12	8171034010	MH26C3	212.7	212.6	3	SAMPLE	8171034010-A	I54AESW.3P	5936	12/15/2008	6/24/2008
13	8171034011	MH26C5	211.8	211.8	3	SAMPLE	8171034011-A	I54AESW.3P	5936	12/15/2008	6/24/2008
14	8171034012	MH26C7	212.9	212.6	3	SAMPLE	8171034012-A	I54AESW.3P	5936	12/15/2008	6/24/2008
15	8171034013	MH26C9	210.1	209.8	3	SAMPLE	8171034013-A	I54AESW.3P	5936	12/15/2008	6/24/2008
16	8171034014	MH26C9S	212.3	212.1	3	MS	8171034014-A	I54AESW.3P	5936	12/15/2008	6/24/2008
17	8171034015	MH26C9D	211.2	211.0	3	MD	8171034015-A	I54AESW.3P	5936	12/15/2008	6/24/2008

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DCL INORGANIC SAMPLE PREPARATION NOTE BOOK ISP 350 PAGE 103

GENERAL

Redigestion? (Y/N): N Original Bk/Pg: NA

DCL Set ID	Sample ID / TCLP Write-up Bk/Pg	Analytes	Account
8171034	MH25F1, 2698, 26A0, A2, A5, A8, B0, B3, C1, C3, C5, C7, C9	ICP Metals	8201

KK 6/26/08

Prep Group #: FIDX/1421

Hood: 21

Micro: MD7753

NA

SDG: MH25F1

Case: 37402

Sample Description (Bk/Pg): Water 1350/104

QC INFORMATION (All QC's prepared using same method as samples)

DCL QC ID	Matrix source	Spike source ID (include Bk/Pg)	Pipet ID	Spike Vol
PBW 55083	Method Reagents	NA	NA	NA
LCSW 55084	ICV-1 (1301)	IP-PS-08-054 (2261/98)	1166106	4.5mL
MH26C99	MH26C9	IP-PS-08-009 (2261/97) and IP-PS-08-008 (2261/96)	QC-2	45.0mL
MH26C9D	↓KK	NA	NA	NA

KK 6/26/08

QC's spiked by: KK Witness: agl

METHOD INFORMATION

Method reagents/Lots ID's: Conc. HNO3 Baker G11022

Balance ID: 102887

Samples measured using: 50mL cent tube

Digestion glassware type: microwave ve

Final volume container type: 50 mL cent tube

Amount of sample used: 45mL

Final sample volume: 50 mL

Explanations below -- if redigesting, WHY, Modified method? (Y/N) N WHAT/WHY: NA

[signature] 6/26/08 1030 45mL transfered to microwave vessels. QCs prepared as above. 5mL conc. HNO3 added to all. Samples capped and weighed. Samples put in microwave. Program "EPA CLP WATER" run to completion. Samples removed from microwave. Samples reweighed and transfered to 50 mL cent tubes. [signature] 6/26/08 1640

KK 6/26/08

METHOD/DCL SOP USED (Include revision): ~~IH~~ KK 6/26/08 ILM05.4-MW1 CONTINUED ON PAGE #: 104

Preparer Signature/Date: [signature] 6/26/08

Reviewer Signature/Date [signature] 6/27/08

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Project No. N/A

TITLE DATACHEM LABORATORIES- PRIMARY STANDARDS LOGBOOK Book No. 2261

From Page No. 95 DCL SOLUTION #	ANALYTES	CONCENTRATION	VENDOR	LOT #	DATE REC'D	DATE OPENED	DATE EXPIRES	INIT.
IP-PS-07-140	ICSA	SEE FACING PAGE	EPA / QATS	PART A (1206)	11/08/07	12/12/07	N/A	NE
IP-PS-07-141	SEE FACING PAGE					12/21/07		
IP-PS-07-142						12/21/07		
IP-PS-07-143						01/05/08		
IP-PS-07-144								
IP-PS-07-145								
IP-PS-07-146	ICSAB	SEE FACING PAGE	EPA / QATS	PART B (0203)	11/08/07		N/A	NE
IP-PS-07-147	SEE FACING PAGE					03/19/08		
IP-PS-07-148						05/09/08		
6020 Std IP-PS-07-149	Ag, Al, As, Ba, Be, Ca, Cd,	20 ug/mL	Inorganic Ventures	Z-MEB194104	12/17/07	12/17/07	01/01/09	KB
6020 Std IP-PS-07-150	Co, Cr3, Cu, Fe, K, Mg, Mn, Na,							
	Ni, Pb, Se, Sb, Tl, V, Zn							
12/17/07 KB-6020SPK-5 IP-PS-07-151	12/17/07 Ba, Cr3, Cu, Zn	50 ug/mL	Inorganic Ventures	A2-CICP20089	12/17/07	12/17/07	01/01/09	KB
	Ni/Co, Pb, Sb/V	25 ug/mL / 20 ug/mL / 30 ug/mL						
	Ag, As, Cd / Be, Se, Tl	10 ug/mL / 5 ug/mL						
ISS IP-PS-07-152	Br, Ho, In, Li, Rh, Sc,	10 ug/mL	Inorganic Ventures	A2-MEB194155	12/17/07	12/07/07	01/01/09	KB
ISS IP-PS-07-153	Tb, Y							
IP-PS-08-001	Lib, Rh, Y, Bi, Sc, Ho, Th	10 ug/mL	INORGANIC VENTURES	B2-MEB255072	02/05/08	02/05/08	03/01/09	NE
IP-PS-08-002	In	10 ug/mL	INOGANIC VENTURES	A2-Q1N01098	02/05/08	02/05/08	03/01/09	NE
6020 WATER SPK IP-PS-08-003	Fe / Ba, Zn	100 ug/mL / 50 ug/mL	INORGANIC VENTURES	Z-MEB194099	02/05/08	02/05/08	03/01/09	NE
	Co, Cr3, Cu, Mn, Ni, Sb, V	20 ug/mL						
	As, Pb	10 ug/mL						
	Ag, Be, Cd, Se, Tl	5 ug/mL						
IP-PS-08-004	Li, Sr, Th, U	20 ug/mL	INORGANIC VENTURES	A2-MEB248043	02/05/08	02/05/08	03/01/09	NE
IP-PS-08-005	B, Mo, Sn, Ti	20 ug/mL	INORGANIC VENTURES	A2-MEB248044	02/05/08	02/05/08	03/01/09	NE
IP-PS-08-006	Ca, Mg, K, Na / Al, Ba	500 ug/mL / 20 ug/mL	INORGANIC VENTURES	NE 02/14/08 Z-MEB194095	02/13/08	02/14/08	03/01/09	NE
	Fe / Sb, Zn	10 ug/mL / 6 ug/mL						
	Co, V / Ni / Se	5 ug/mL / 4 ug/mL / 3.5						
	Cu, Tl / Mn	2.5 ug/mL / 1.5 ug/mL						
	Ag, As, Cr3, Pb / Be, Cd	1.0 ug/mL / 0.5 ug/mL						
IP-PS-08-007	Ag, Al, As, Ba, Be, Cd,	10 ug/mL	SPEX KB 2/29/08 ~~Inorganic Ventures~~	S-112GS	02/28/08	02/29/08	02/28/09	KB
	Co, Cr, Cu, Mn, Ni, Pb,							
	Sb, Se, Tl, V, Zn							
CLP-SPK-6 IP-PS-08-008	Sb / Cd, Se, Tl	100 ug/mL / 50 ug/mL	INORGANIC VENTURES	Z-MEB194090	03/10/08	03/10/08	03/01/09	NE
1762	As / Pb	40 ug/mL / 20 ug/mL						

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Witnessed & Understood by me,	Date	Invented by	Date
Kristie Bitner	03/28/08	Recorded by [signature]	03/10/08

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Project No. N/A

TITLE DATACHEM LABORATORIES - PRIMARY STANDARDS LOGBOOK

Book No. 2261

From Page No. 96

DCL SOLUTION #	ANALYTES	CONCENTRATION	VENDOR	LOT #	DATE REC'D	DATE OPENED	DATE EXPIRES	INIT
CLPP-SPL-1 IP-PS-08-009	Al, Ba / Fe	2000 mg/mL / 1000 mg/mL	INORGANIC VENTURES	2-MER194075	03/10/08	03/10/08	03/01/09	KE
	Co, Mn, Ni, V, Zn / Cu	500 mg/mL / 250 mg/mL						
1261	Cr3 / Ag, Be	200 mg/mL / 50 mg/mL						
IP-PS-08-010	ICSA (SEE FACING PAGE)	SEE FACING PAGE	EPA / QATS	ICSA (1206)	03/10/08	03/19/08	N/A	KE
IP-PS-08-011						03/19/08		
IP-PS-08-012								
IP-PS-08-013								
IP-PS-08-014								
IP-PS-08-015						05/21/08		
IP-PS-08-016						05/09/08		
IP-PS-08-017						05/21/08		
IP-PS-08-018	ICSAB	SEE FACING PAGE	EPA / QATS	ICSAB (0203)	03/10/08		N/A	KE
IP-PS-08-019	SEE FACING PAGE							
IP-PS-08-020								
6020 ISS IP-PS-08-021	Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr3, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, Sb, Se, Tl, V, Zn	20 µg/mL	Inorganic Ventures	2-MER194104	03/27/08		04/01/09	KB
6020 ISS 03/28/08 IP-PS-08-022	Bi, Hf, In, Li, Rh, Sc, Tb, Y	10 µg/mL	Inorganic Ventures	A2-MER194155	03/27/08		04/01/09	KB
6020 ISS 03/28/08 IP-PS-08-023								
6020 ISS 03/28/08 IP-PS-08-024								
IM08023 (1879) IP-PS-08-025	Ag	1000 mg/mL	CPI	07H114	5/1/08	5/1/08	10/28/09	RKA
IM08024 (1883) IP-PS-08-026	Sb	10,000 mg/mL	CPI	07F023	5/1/08		10/28/09	RKA
IM08025 (1885) IP-PS-08-027	Ba	10,000 mg/mL	CPI	07C169	5/1/08		10/28/09	RKA
IP-PS-08-028 IM08026 (1886)	K	10,000 mg/mL	CPI	08C049	5/1/08		10/28/09	RKA
IP-PS-08-029 IM08027 (1887)	W	1000 mg/mL	CPI	07I208	5/1/08		10/28/09	RKA
IP-PS-08-030 IM08028 (1888)	Pt	10,000 mg/mL	CPI	07D260	5/1/08		10/28/09	RKA
IP-PS-08-031 IM08029 (1889)	Na	10,000 mg/mL	CPI	08A030	5/1/08		10/28/09	RKA
IM08030 (1890) IP-PS-08-032	Ti	10,000 mg/mL	CPI	08A002	5/1/08		10/28/09	RKA
IM08031 (1891) IP-PS-08-033	Be	10,000 mg/mL	CPI	07F218	5/1/08		10/28/09	RKA
IM08032 (1892) IP-PS-08-034	Al	10,000 mg/mL	CPI	08C004	5/1/08		10/28/09	RKA
IP-PS-08-035 IM08033 (1893)	Fe	10,000 mg/mL	CPI	08B059	5/1/08		10/28/09	RKA
IP-PS-08-036 IM08034 (1894)	Zr	1,000 mg/mL	CPI	08A083	5/1/08		10/28/09	RKA
IP-PS-08-037 IM08035 (1895)	Ni	10,000 mg/mL	CPI	08A040	5/1/08		10/28/09	RKA
IP-PS-08-038 IM08036 (1896)	Mg	10,000 mg/mL	CPI	08C006	5/1/08		10/28/09	RKA

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Witnessed & Understood by me, Joanna C. Sanchez

Date 5/5/08

Invented by NA

Recorded by [signature]

Date 5/5/08

Project No. NA

TITLE DATACHEM LABORATORIES - PRIMARY STANDARDS LOGBOOK 6/18/08 RKA

Book No. 2261

From Page No. 97 DCL Solution #	ANALYTES	CONCENTRATION	VENDOR	LOT#	DATE REC'D	DATE OPENED	DATE EXPIRES	INIT
IMOB037(1897) IP-PS-08-039	As	10,000 µg/mL	CPI	07H102	5/1/08	5/1/08	10/28/09	RKA
IMOB038(1898) IP-PS-08-040	Si	10,000 µg/mL	CPI	07D206	5/1/08	5/1/08	10/28/09	RKA
CRI-MS IP-PS-08-041	Ba / Sr, V Cr3, Cu, Sb, Zn Ag, As, Be, Cd, Co, Mn, Ni, Pb, Tl	10 µg/mL / 5 µg/mL 2 µg/mL 1 µg/mL	Inorganic Ventures	A2-MEB194150	05/05/08	05/05/08	06/01/09	KB
CLP-MS-SPE IP-PS-08-042	Al, Ba Co, Mn, Ni, V, Zn Cu / Cr3 Sb / Ag, Be, Cd, Tl As / Pb Se	200 µg/mL 50 µg/mL 25 µg/mL / 20 µg/mL 10 µg/mL / 5 µg/mL 4 µg/mL / 2 µg/mL 1 µg/mL	Inorganic Ventures	A2-MEB194119	05/05/08	05/05/08	06/01/09	KB
IMOB039(1899) IP-PS-08-043	Cr	10,000 µg/mL	CPI	07I020	5/6/08	5/6/08	11/2/09	RKA
IMOB042(1902) IP-PS-08-044	Bi	10,000 µg/mL	Elements	CS7011437	4/16/08	5/8/08	10/09	RKA
IP-PS-08-045 IP-PS-08-046 IP-PS-08-047 IP-PS-08-048 IP-PS-08-049	ICSA (See facing page)	See facing page	EPA/QATS	ICSA (1206)	04/16/08 04/17/08 GCS 6/18/08		NA	GCS
IP-PS-08-050 IP-PS-08-051 IP-PS-08-052	ICSAB (See facing Pg)	See facing page	EPA / QATS	ICSAB (0203)	04/16/08 04/17/08 GCS 6/18/08		NA	GCS
IP-PS-08-053 IP-PS-08-054 IP-PS-08-055 IP-PS-08-056 IP-PS-08-057	ICV-1 (See facing Pg)	See facing page	EPA / QATS	ICV-1 (1201)	04/16/08 04/17/08		NA	GCS
IP-PS-08-058	Soil LCSS (See facing page)	See facing page	EPA / QATS	LCS-S (0405)	04/17/08		NA	GCS
IP-PS-08-059	Ba, Be, Bi, Ce, Co, In, Li, Ni, Pb, U	10 µg/mL	Inorganic Ventures	B2-MEB265024	05/08/08	05/13/08	06/01/09	KB
ICP-MS CLP ICSA IP-PS-08-060	See p.91 facing page	See p.91 facing page	EPA / QATS	Part A ICS-MS (0803)	04/17/08		NA	KB
IP-PS-08-061	See p.91 facing page	See p.91 facing page	EPA / QATS	Part B ICS-MS (0803)	04/17/08		NA	KB
IP-PS-08-062	Pb	1,000 µg/mL	CPI	08D051	05/20/08	06/04/08	11/16/09	GCS
(6020 Cal) IP-PS-08-063	Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr3, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, Sb, Se, Tl, V, Zn	20 µg/mL	Inorganic Ventures	Z-MEB194104	06/17/08	06/18/08	07/01/09	KB

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Witnessed & Understood by me, | Date | Invented by | Date 06/18/08

Recorded by Krystie Britton

QATS INORGANIC REFERENCE MATERIAL
INTERFERENCE CHECK SAMPLE SET
PART A (1206) WITH PART B (0203) FOR ICP-AES

The "Certified Value" concentrations of the elements are listed in Table 1. The values are certified in that all results used in calculating the certified values were derived from statistically pooled results from the following sources. ILM05.4 Pre-award analysis, Quarterly Blind analysis, CLP laboratory referee analysis, and QATS Laboratory analysis. Preparation and analysis must be performed according to the following instructions:

Part A (1206), Interferents: Pipet 10 mL of the Part A solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this solution, Soln. A, by ICP-AES.

Part B (0203), Analytes, mixed with Part A (1206), Interferents: Pipet 10 mL of the Part A solution and 10 mL of the Part B solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this solution, Soln. AB, by ICP-AES.

NOTE: THIS ICS SET IS FOR USE WITH ILM05.4 AND REVISIONS ONLY, NOT ILM04.x.

gcs 5/12/08

Page facing page 98
book 2261 gcs 5/12/08

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES PART A (1206), AND PART A (1206) MIXED WITH PART B (0203)

Element	Concentration (µg/L) Part A	Concentration (µg/L) Part A + Part B
Al	244100	241100
Sb	(0)	589
As	(0)	101
Ba	(2)	495
Be	(0)	475
Cd	(0)	940
Ca	234900	231100
Cr	43	511
Co	(4)	461
Cu	(23)	548
Fe	95600	94800
Pb	10	61
Mg	247500	251100
Mn	19	502
Ni	(21)	984
Se	(0)	53
Ag	(0)	206
Tl	(0)	103
V	(0)	494
Zn	(28)	1028

( ) indicates analyte values that are less than the CRQL, and the value is to be used as a set point for the +/- 2 times CRQL acceptance criteria calculations.

QATS INORGANIC REFERENCE MATERIAL
INITIAL CALIBRATION VERIFICATION SOLUTIONS
(ICVs)

Element	ICV-1 (1201) Concentration (µg/L) (after 10 fold dilution)	ICV-1 (1201) Concentration (µg/L) (after 50 fold dilution)
Al	2482	496
Sb	992	198
As	996	199
Ba	502	100
Be	493	99
Cd	494	99
Ca	10180	2036
Cr	490	98
Co	496	99
Cu	490	98
Fe	5107	1021
Pb	996	199
Mg	6003	1201
Mn	495	99
Ni	492	98
K	10008	2002
Se	1005	201
Ag	495	99
Na	10039	2008
Tl	1027	205
V	501	100
Zn	1000	200

gcs 5/12/08

QATS INORGANIC REFERENCE MATERIAL
SOLID LABORATORY CONTROL SAMPLE
LCS-S (0405)

TABLE 1. "CERTIFIED VALUE" CONCENTRATIONS AND CONTROL LIMITS FOR THE ELEMENTS IN THE SOLID LABORATORY CONTROL SAMPLE, LCS-S (0405)

Element	"Certified Value" (mg/Kg)	Control Limits (mg/Kg) Low Limit	Control Limits (mg/Kg) High Limit
Al	115	54.7	175
Sb	66.0	27.6	104
As	253	154	352
Ba*	[1.6]	1.0	2.2
Be	4.9	3.0	6.8
Cd	10.9	7.7	14.0
Ca	44200	30300	58200
Cr	27.1	18.5	35.7
Co	37.4	24.2	50.6
Cu	1770	1320	2230
Fe	6470	4280	8660
Pb	56.9	41.4	72.4
Mg	28200	20500	37900
Mn	61.0	41.6	80.5
Hg	3.59	1.86	5.32
Ni	16.3	8.0	23.7
K*	[39.7]	0	85.3
Se	10.0	4.1	15.9
Ag	5.6	2.7	9.1
Na*	[72.5]	0	216
Tl	9.5	2.9	16.1
V	17.6	11.6	23.7
Zn	47.5	20.5	74.4

[ ] Denotes values which are greater than or equal to the method detection limit (MDL), but less than the Contract Required Quantitation Limit (CRQL).

* Barium, potassium, and sodium are present at concentrations below ILM05.x CRQLs. Acceptance limits are advisory only

gcs 5/12/08

Batch Worklist

DATA CHEM LABORATORIES, INC.

Batch EICP/ 1397 **Created** 7/2/2008 08:54 **HBN** 17285

Rule ILM ICP-AES Analysis **Analyst** J. Sanchez **Status** WP

Workorder 8171034 **CASE** 37402 **SDG** MH25F1 **MODN** 1553.0

Pos	Lab ID	Sample ID	Prep Initial	Prep Final	Mx	Type	Container	Procedure	Mgr	Expire Date	Due Date
1	55691	S0			3	STB		ILMAESW..3	5967	12/29/2008	7/2/2008
	i08155										
2	55692	S1500			3	STD		ILMAESW..3	5967	12/29/2008	7/2/2008
3	55693	S10000			3	STD		ILMAESW..3	5967	12/29/2008	7/2/2008
4	55694	S50000			3	STD		ILMAESW..3	5967	12/29/2008	7/2/2008
5	55695	ICV			3	ICV		ILMAESW..3	5967	12/29/2008	7/2/2008
6	55696	ICB			3	ICB		ILMAESW..3	5967	12/29/2008	7/2/2008
7	55697	CRII			3	CRI		ILMAESW..3	5967	12/29/2008	7/2/2008
8	55698	ICSAI			3	ICSA		ILMAESW..3	5967	12/29/2008	7/2/2008
9	55699	ICSABI			3	ICSAB		ILMAESW..3	5967	12/29/2008	7/2/2008
10	55700	CCV			3	CCV		ILMAESW..3	5967	12/29/2008	7/2/2008
11	55701	CCB			3	CCB		ILMAESW..3	5967	12/29/2008	7/2/2008
12	55083	PBW	45 mL	50 mL	3	PBW		ILMAESW..3	6120	12/23/2008	6/26/2008
13	55084	LCSW	45 mL	50 mL	3	LCSW		ILMAESW..3	6120	12/23/2008	6/26/2008
14	8171034013	MH26C9	45 mL	50 mL	3	SAMPLE	8171034013-A	I54AESS..4	5936	12/15/2008	7/7/2008
15	8171034014	MH26C9S	45 mL	50 mL	3	MS	8171034014-A	I54AESS..4	5936	12/15/2008	7/7/2008
16	8171034015	MH26C9D	45 mL	50 mL	3	MD	8171034015-A	I54AESS..4	5936	12/15/2008	7/7/2008
17	55702	MH26C9L			3	SD		ILMAESW..3	5967	12/15/2008	7/7/2008
18	8171034001	MH25F1	45 mL	50 mL	3	SAMPLE	8171034001-A	I54AESS..4	5936	12/15/2008	7/7/2008
19	8171034002	MH2698	45 mL	50 mL	3	SAMPLE	8171034002-A	I54AESS..4	5936	12/15/2008	7/7/2008
20	8171034003	MH26A0	45 mL	50 mL	3	SAMPLE	8171034003-A	I54AESS..4	5936	12/15/2008	7/7/2008
21	8171034004	MH26A2	45 mL	50 mL	3	SAMPLE	8171034004-A	I54AESS..4	5936	12/15/2008	7/7/2008
22	55703	CCV2			3	CCV		ILMAESW..3	5967	12/29/2008	7/2/2008
23	55704	CCB2			3	CCB		ILMAESW..3	5967	12/29/2008	7/2/2008
24	8171034005	MH26A5	45 mL	50 mL	3	SAMPLE	8171034005-A	I54AESS..4	5936	12/15/2008	7/7/2008
25	8171034006	MH26A8	45 mL	50 mL	3	SAMPLE	8171034006-A	I54AESS..4	5936	12/15/2008	7/7/2008
26	8171034007	MH26B0	45 mL	50 mL	3	SAMPLE	8171034007-A	I54AESS..4	5936	12/15/2008	7/7/2008
27	8171034008	MH26B3	45 mL	50 mL	3	SAMPLE	8171034008-A	I54AESS..4	5936	12/15/2008	7/7/2008
28	8171034009	MH26C1	45 mL	50 mL	3	SAMPLE	8171034009-A	I54AESS..4	5936	12/15/2008	7/7/2008

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Pos	Lab ID	Sample ID	Prep Initial	Prep Final	Mx	Type	Container	Procedure	Mgr	Expire Date	Due Date
29	8171034010	MH26C3	45 mL	50 mL	3	SAMPLE	8171034010-A	I54AESS..4	5936	12/15/2008	7/7/2008
30	8171034011	MH26C5	45 mL	50 mL	3	SAMPLE	8171034011-A	I54AESS..4	5936	12/15/2008	7/7/2008
31	55705	CRIF			3	CRI		ILMAESW..3	5967	12/29/2008	7/2/2008
32	55706	ICSAF			3	ICSA		ILMAESW..3	5967	12/29/2008	7/2/2008
33	55707	ICSABF			3	ICSAB		ILMAESW..3	5967	12/29/2008	7/2/2008
34	55708	CCV3			3	CCV		ILMAESW..3	5967	12/29/2008	7/2/2008
35	55709	CCB3			3	CCB		ILMAESW..3	5967	12/29/2008	7/2/2008
36	8171034012	MH26C7	45 mL	50 mL	3	SAMPLE	8171034012-A	I54AESS..4	5936	12/15/2008	7/7/2008
37	55710	CRIF2			3	CRI		ILMAESW..3	5967	12/29/2008	7/2/2008
38	55711	ICSAF2			3	ICSA		ILMAESW..3	5967	12/29/2008	7/2/2008
39	55712	ICSABF2			3	ICSAB		ILMAESW..3	5967	12/29/2008	7/2/2008
40	55713	CCV4			3	CCV		ILMAESW..3	5967	12/29/2008	7/2/2008
41	55714	CCB4			3	CCB		ILMAESW..3	5967	12/29/2008	7/2/2008

Project No. NA

TITLE DataChem Laboratories Analyst write up Logbook

Book No. 4728

From Page No. X

File #: i08155

WorkOrder#	Sample #'s	Analytes/Matrix	Prep Write-up(Bk./Pg.)	Prep Date/Time	HBN #	Account #
8171034	MH25F1, MH2698, A0, A2, A5, A8, B0, B3	#1/water (SPLP extract)	ISP 350/103	06/26/08 10:30	17091	8201
	MH26C1, C3, C5, C7, C9					

#1 = Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

MW1 Conversion Factor: (µg/L from instrument)(Dilution Factor)(0.05 L/0.045 L) = 1.11 µg/L

CALIBRATION AND QC STANDARDS UTILIZED:

	ID #	Book/Page
S0/ICB/CCB	ICP-08-084, -094	4535/07, 08
S1500	EI-SS-08-072	4676/72
S10000	EI-SS-08-075	4676/75
S50000	EI-SS-08-113	4721/13
ICV	EI-SS-08-123	4721/23
CRI	EI-SS-08-112	4721/12
ICSA	EI-SS-08-137	4721/37
ICSAB	EI-SS-08-125	4721/25
CCV	EI-SS-08-122	4721/22
Rinse	ICP-08-092	4535/07
Internal Standard	ICP-08-091	4535/07

MOD: 1553.0
SDG # MH25F1
CASE # 37402
Prep Method: MW1
Analysis Method: ILM05.4
Analysis Date: 07/01/08
Instrument ID: ICP07

ANALYSIS PARAMETERS:
RF Power = 1200 W
Nebulizer Flow = 0.60 L/min
Auxiliary Gas = 0.5 L/min
Pump Rate = 50 rpm

GCS 7/2/08

Dilutions: None were analyzed.

Comments: No Problems during analysis.
A Serial Dilution was done by combining 2 mL of MH26C9 with 8 mL of ICP-08-094 (4535/08) in a 14 mL Falcon tube.
The SPLP extraction was done on 06/24/08-06/25/08. The write-up is in 4648 page 54-55.

GCS 7/2/08

To Page No. X

Witnessed & Understood by me	Date	Invented by:	Date
John Kershaw	7/03/08	NA	7/2/08
		Recorded by: Joanna C. Sanchez	

Project No. NA

TITLE DataChem Laboratories - ICP07 Analysis Run Logbook Book No. 4527

From Page No. 13

Date	Time on	Time off	total time	Method	Matrix	Workorder(s)	SDG	Low IS / High IS	# of samples	Run #	Initials
06/19/08	9:40	14:55	315 min.	ILMO 5.4	soil	8164035, 8164038	MY43D0	2069 / 395410	20	i08146	gcs
06/20/08	11:42	15:53	251 min.	ILMO 5.4	SLSoil	8164034	MY43A5	1966 / 384590	20	i08147	gcs
06/23/08	8:54	14:24	330 min.	ILMO 5.4	gcs glitter soil	8164036	MY43B2	2027 / 392950	20	i08148	gcs
06/25/08	4:29	9:58	329 min.	ILMO 5.4	soil	8164036	MY43B2	2088 / 395710	20	i08149	gcs
06/25/08	10:04	13:25	201 min.	ILMO 5.4	water	8172026	MC00F4	195 / 375280	13	i08150	gcs
06/26/08	7:58	13:32	334 min.	ILMO 5.4	soil	8164037	MY43C7	2062 / 381710	20	i08151	gcs
06/27/08	7:48	9:50	122 min.	ILMO 5.4	soil	8164037	MY43C7	2186 / 396770	8	i08152	gcs
06/27/08	9:56	13:27	211 min.	ILMO 5.4	water	8171040	MC00B6	2084 / 386430	14	i08153	gcs
06/27/08	13:33	17:19	226 min.	ILMO 5.4	water	8171003 (SPLP)	MH2663	2029 / 38890	18	i08154	gcs
07/01/08	9:53	13:14	200 min.	ILMO 5.4	water	8171034 (SPLP)	MH25F1	2034 / 385260	13	i08155	gcs
07/01/08	13:19	17:26	247 min.	ILMO 5.4	water	8177041, 8178020	MF2WS8	1967 / 379910	17	i08156	gcs

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Witnessed & Understood by me, Date

Invented by: Date

Recorded by:

Project No. NA

TITLE DataChem Laboratories - ICP Solutions/Reagents Logbook

Book No. 4535

From Page No. 6

Date	ICP Solution #	Solution Type	Primary Solution ID (Book/Page)	Recipe Page	Acid Lots	Expiration Date	Initials	Comments
04/30/08	ICP-08-058	ScIs	IP-PS-07-125 (2261/95)	1	HNO3-G07057 HCl-4107090	10/01/08	gcs	NA
04/30/08	ICP-08-059	Rinse 5%/5%	NA	1	HNO3-G07057 HCl-4107090	10/30/08	gcs	NA
05/07/08	ICP-08-060	Rinse 5%/5%	NA	1	HNO3-G07057 HCl-4108010	11/07/08	gcs	NA
05/12/08	ICP-08-061	Rinse 5%/5%	NA	1	HNO3-G07057 HCl-4108010	11/12/08	gcs	NA
05/12/08	ICP-08-062	ScIS	IP-PS-07-125 (2261/95)	1	HNO3-G07057 HCl-4108010	10/01/08	gcs	NA
05/14/08	ICP-08-063	Rinse 5%/5%	NA	1	HNO3-G07057 HCl-4108010	11/14/08	gcs	NA
05/14/08	ICP-08-064	5%/5%	NA	1	HNO3-G07057 HCl-4108010	11/14/08	gcs	1L for SO, ICB, CCB, Dilutent
05/21/08	ICP-08-065	Rinse 5%/5%	NA	1	HNO3-G07057 HCl-4108010	11/21/08	gcs	NA
05/21/08	ICP-08-066	ScIs	IP-PS-07-125 (2261/95)	1	HNO3-G07057 HCl-4108010	10/01/08	gcs	only 1L made
05/22/08	ICP-08-067	5%/5%	NA	1	HNO3-G04026 HCl-4107090	11/22/08	gcs	1L for SO, ICB, CCB Dilutent
05/22/08	ICP-08-068	Rinse 5%/5%	NA	1	HNO3-G04026 HCl-4107090	11/22/08	gcs	NA
05/23/08	ICP-08-069	ScIs	IP-PS-07-125 (2261/95)	1	HNO3-G04026 HCl-4107090	10/01/08	gcs	NA
05/27/08	ICP-08-070	Rinse 5%/5%	NA	1	HNO3-G04026 HCl-4108010	11/27/08	gcs	NA
05/28/08	ICP-08-071	ScIs	IP-PS-07-125 (2261/95)	1	HNO3-G04026 HCl-4108010	10/01/08	gcs	only 1L made
05/28/08	ICP-08-072	Rinse 5%/5%	NA	1	HNO3-G04026 HCl-4108010	11/28/08	gcs	NA
05/30/08	ICP-08-073	Rinse 5%/5%	NA	1	HNO3-G04026 HCl-4108010	11/30/08	gcs	NA
05/30/08	ICP-08-074	5%/5%	NA	1	HNO3-G04026 HCl-4108010	gcs 5/30/08 11/30/08	gcs	1L for SO, ICB, CCB, Dilutent
05/30/08	ICP-08-075	5% 5%	NA	1	HNO3-G04026 HCL-4108010	11/30/08	JK	2L for SO, ICB, CCB Dilutent
05/30/08	ICP-08-076	Sc IS	IP-PS-07-125 (2261/95)	1	↓	10/01 gcs 11/30/08	JK	NA
05/30/08	ICP-08-077	Rinse 5% 5%	NA	1	↓	11/30/08	JK	6L of Rinse made
06/02/08	ICP-08-078	Sc IS	IP-PS-07-125 (2261/95)	1	HNO3-G11022 HCl-4108010	10/01/08	gcs	NA
06/03/08	ICP-08-079	Rinse 5%/5%	NA	1	HNO3-G11022 HCl-4108010	12/03/08	gcs	NA
06/05/08	ICP-08-080	Rinse 5%/5%	NA	1	HNO3-G11022 HCl-4108010	12/05/08	gcs	NA
06/06/08 gcs 6/6/08	ICP-08-081	ScIS	IP-PS-07-125 (2261/95)	1	HNO3-G11022 HCl-4108010	10/01/08	gcs	NA
06/10/08	ICP-08-082	Rinse 5%/5%	NA	1	HNO3-G11022 HCl-4108010	12/10/08	gcs	NA
06/11/08	ICP-08-083	Rinse 5%/5%	NA	1	HNO3-G11022 HCl-4108010	12/11/08	gcs	2L made
06/11/08	ICP-08-084	5%/5%	NA	1	HNO3-G11022 HCl-4108010	12/11/08	KK	1L for IIA, SO, CCB, Dilutent
06/17/08	ICP-08-085	ScIS	IP-PS-07-125 (2261/95)	1	HNO3-G02058 HCl-4108010	10/01/08	gcs	1L made
06/18/08	ICP-08-086	Rinse 5%/5%	NA	1	HNO3-G11022 HCl-4108010	12/18/08	gc	2L made
06/18/08	ICP-08-087	SCIS	IP-PS-07-125 (2261/95)	1	HNO3-G11022 HCl-4108010	10/01/08	JK	2L made
06/20/08	ICP-08-088	Rinse 5%/5%	NA	1	HNO3-G11022 HCl-4108010	12/20/08	gc	NA
06/20/08	ICP-08-089	ScIS	IP-PS-07-125 (2261/95)	1	HNO3-G11022 HCl-4108010	10/01/08	gcs	NA
06/25/08	ICP-08-090	Rinse 5%/5%	NA	1	HNO3-G11022 HCl-4108010	12/25/08	gcs	NA
06/26/08	ICP-08-091	ScIS	IP-PS-07-125 (2261/95)	1	HNO3-G11022 HCl-4108010	10/01/08	gcs	NA
06/26/08	ICP-08-092	Rinse 5%/5%	NA	1	HNO3-G11022 HCl-4108010	12/26/08	gcs	NA

To Page No. 8

Witnessed & Understood by me, Penny S. Foot

Date 26-Jun-2008

Invented by: NA

Recorded by: Joanna C. Sandberg

Date 6/26/08

Project No. NA

TITLE DataChem Laboratories-ICP Solutions/Reagents Logbook Book No. 4535

From Page No. 7

Date	ICP Solution #	Solution Type	Primary Solution ID (Book / Page)	Recipe Page	Acid Lots	Expiration Date	Initials	Comments
07/01/08	ICP-08-093	Rinse 5%/5%	NA	1	HNO_3-G11022 HCl-4108010	01/01/09	af	NA
07/01/08	ICP-08-094	5%/5%	NA	1	HNO_3-G11022 HCl-4108010	01/01/09	af	1L for SO, ICB, CCB Dilutant

To Page No. ____

Witnessed & Understood by me, | Date | Invented by: | Date | Recorded by:

Project No. N/A

TITLE DATACHEM LABORATORIES - ICP SOLUTION/REAGENTS LOGBOOK Book No. 4535

From Page No. X

RECIPES

7.5% HNO_3 = TRANSFERRED SOME ASTM TYPE II H_2O TO A 2L FLASK. ADD 150mL OF HNO_3 TO THE FLASK. BRING TO VOLUME WITH MORE ASTM TYPE II H_2O. STOPPER FLASK, SHAKE TO MIX. USE FOR SO, ICB, CCB AND DILUTANT.

Sc IS = ADDED SOME WATER TO A 2L FLASK. ADD ~~150~~ 100 mL OF HNO_3 AND ~~50~~ 100 mL OF HCl. ADD 1.2mL OF A 10,000 ug/mL Sc STAND. BRING TO VOLUME WITH MORE ASTM TYPE II H_2O. STOPPER FLASK AND SHAKE WELL.

7.5%/1% RINSE = ADD SOME ASTM TYPE II H_2O TO A 2L FLASK. ADD 150mL OF HNO_3 + 20mL OF HCl. BRING TO VOLUME WITH MORE ASTM TYPE II H_2O. STOPPER FLASK AND SHAKE WELL.

2ppm Zn. = ADD SOME ASTM TYPE II H_2O TO A 200mL VOLUMETERIC FLASK. ADD 2mL OF HNO_3. SPIKE IN 40 µl OF 10,000 µg/mL Zn. BRING TO VOLUME WITH MORE ASTM TYPE II H_2O. STOPPER AND SHAKE WELL. USE FOR TORCH ALIGNMENT.

5%/5% RINSE = ADD SOME ASTM TYPE II H_2O TO A 2L FLASK. ADD 100mL OF HNO_3 AND 100mL OF HCl TO THE FLASK. BRING TO VOLUME WITH MORE ASTM TYPE II H_2O. STOPPER FLASK AND SHAKE WELL.

Thermo Torch Alignment Solution = Add some ASTM Type II H_2O to a 250 mL flask. Add 2.5 mL of HNO_3, 7.5 µL of MeOH and 50 µL of 10,000 µg/mL Zn. Bring to volume with ASTM Type II H_2O, Stopper and shake to mix. 0.03 mL/L MeOH, 2 mg/L Zn in 1% HNO_3.

To Page No. ____

Witnessed & Understood by me,	Date	Invented by:	Date
		Recorded by:	

Project No. N/A

TITLE DATACHEM LABORATORIES - SECONDARY STANDARDS LOGBOOK

Book No. 4676

From Page No. X

ICP-AES Secondary Standard Solution Write-up

SOLUTION ID:	AKA:	USED FOR:
EI-SS-08-072	ILM05.4 Standard 1	S1500

This format is used to make a secondary solution from a raw chemical or purchased solution only.

ANALYTES	PRIMARY ID# (INCLUDING BOOK/PG.)	PRIMARY CONC.	VOLUME OF PRIMARY	FINAL CONC.
As	IP-PS-07-077 (2261/93)	1,000 µg/mL	1.5 mL	1,500 µg/L
Be	IP-PS-07-036 (2261/91)	10,000 µg/mL	0.15 mL	1,500 µg/L
Cd	IP-PS-07-078 (2261/93)	1,000 µg/mL	1.5 mL	1,500 µg/L
Pb	IP-PS-07-079 (2261/93)	1,000 µg/mL	1.5 mL	1,500 µg/L
Se	IP-PS-07-080 (2261/93)	1,000 µg/mL	1.5 mL	1,500 µg/L
Ag	IP-PS-07-052 (2261/92)	1,000 µg/mL	1.5 mL	1,500 µg/L
Tl	IP-PS-07-081 (2261/93)	1,000 µg/mL	1.5 mL	1,500 µg/L
			FINAL VOL.:	1000 mL

MADE TO BE USED: As is

Date Made: 04/08/08

Expiration date: 09/30/08

Date verified: 04/08/08

Verified by: AE

Comments: N/A

Verification data found in Run#: i08097

Verification instrument: ICP07

Acid used - Lot#: 50 mL HNO_3 - E50032 JT Baker
50 mL HCl - 4107090 Fisher

Source: CPI

PIPETTE #4095124(0.15 mL), PIPETTE #Z55088C (1.5 mL) AND A 1 L VOLUMETRIC FLASK WERE USED TO MAKE THIS SOLUTION.

VOLUMES OF PRIMARY SOLUTIONS WERE TAKEN TO THE FINAL VOLUME IN THE MATRIX ABOVE.

LEGEND: PS=Primary Solution, SS=Secondary Solution,

CALCULATION: {(FINAL VOL.) * (FINAL VOL. CONC.)} / CONC. OF PRIMARY = VOL. OF PRIMARY SOLUTION USED

AE 04/08/08

AE 04/08/08

To Page No. X

Witnessed & Understood by me, [signature] Date 04/08/08

Invented by: Date 04/08/08

Recorded by [signature]

Project No. N/A

TITLE Datachem Laboratories - Secondary Standards Logbook

Book No. 4676

From Page No. X

ICP-AES Secondary Standard Solution Write-up

SOLUTION ID:	AKA:	USED FOR:
EI-SS-08-075	ILM05.4 Standard 2	S10000

This format is used to make a secondary solution from a raw chemical or purchased solution only.

ANALYTES	PRIMARY ID# (INCLUDING BOOK/PG.)	PRIMARY CONC.	VOLUME OF PRIMARY	FINAL CONC.
Sb	IP-PS-07-040 (2261/92)	10,000 µg/mL	1.0 mL	10,000 µg/L
Ba	IP-PS-07-035 (2261/91)	10,000 µg/mL	1.0 mL	10,000 µg/L
Cr	IP-PS-07-037 (2261/92)	10,000 µg/mL	1.0 mL	10,000 µg/L
Co	IP-PS-07-058 (2261/92)	10,000 µg/mL	1.0 mL	10,000 µg/L
Cu	IP-PS-07-059 (2261/92)	10,000 µg/mL	1.0 mL	10,000 µg/L
Mn	IP-PS-07-064 (2261/93)	10,000 µg/mL	1.0 mL	10,000 µg/L
Mo	IP-PS-07-065 (2261/93)	10,000 µg/mL	1.0 mL	10,000 µg/L
Ni	IP-PS-07-038 (2261/92)	10,000 µg/mL	1.0 mL	10,000 µg/L
Ti	IP-PS-07-042 (2261/92)	10,000 µg/mL	1.0 mL	10,000 µg/L
V	IP-PS-07-074 (2261/93)	5,000 µg/mL	2.0 mL	10,000 µg/L
Zn	IP-PS-07-076 (2261/93)	10,000 µg/mL	1.0 mL	10,000 µg/L

FINAL VOL.: 1000 mL

MADE TO BE USED: As is

Date Made: 04/10/08

Expiration date: 09/30/08

Date verified: N/A

Verified by: N/A

Comments: N/A

Verification data found in Run#: N/A

Verification instrument: ICP07

Acid used - Lot#: 50 mL HNO_3 - G07075 JT Baker

50 mL HCl - 4107090 Fisher

Source: CPI

PIPETTE #PL-214(1.0 mL), PIPETTE #Z55088C (2.0 mL) AND A 1 L VOLUMETRIC FLASK WERE USED TO MAKE THIS SOLUTION.

VOLUMES OF PRIMARY SOLUTIONS WERE TAKEN TO THE FINAL VOLUME IN THE MATRIX ABOVE.

LEGEND: PS=Primary Solution, SS=Secondary Solution,

CALCULATION: {(FINAL VOL.) * (FINAL VOL. CONC.)} / CONC. OF PRIMARY = VOL. OF PRIMARY SOLUTION USED

JE 04/21/08

JE 04/21/08

To Page No. X

Witnessed & Understood by me, Kristie Bethea

Date 04/23/08

Invented by:

Recorded by:

Date 04/21/08

Project No. NA

TITLE DataChem Laboratories Secondary Standard Logbook Book No. 4721

From Page No. X

ICP-AES Secondary Standard Solution Write-up

SOLUTION ID:	AKA:	USED FOR:
EI-SS-08-113	ILM05.4 STD 3	S50000

This format is used to make a secondary solution from a raw chemical or purchased solution only.

ANALYTES	PRIMARY ID# (INCLUDING BOOK/PG.)	PRIMARY CONC.	VOLUME OF PRIMARY	FINAL CONC.
Al	IP-PS-07-053 (2261/92)	10,000 µg/mL	5.0 mL	50,000 µg/L
Ca	IP-PS-07-055 (2261/92)	10,000 µg/mL	5.0 mL	50,000 µg/L
Fe	IP-PS-07-060 (2261/92)	10,000 µg/mL	5.0 mL	50,000 µg/L
Mg	IP-PS-07-063 (2261/92)	10,000 µg/mL	5.0 mL	50,000 µg/L
K	IP-PS-07-061 (2261/92)	10,000 µg/mL	5.0 mL	50,000 µg/L
Na	IP-PS-07-066 (2261/93)	10,000 µg/mL	5.0 mL	50,000 µg/L
			FINAL VOL.:	1000 mL

MADE TO BE USED: As is

Date Made: 05/30/08
Expiration date: 11/30/08
Date verified: 05/30/08
Verified by: JCS
Comments:

Verification data found in Run #: i08130
Verification instrument: ICP07
Acid used - Lot#: 50 mL HNO_3 - G04026 JT Baker
50 mL HCl - 4108010 Fisher
Source: CPI

5 mL CLASS A PIPETTES AND A 1L VOLUMETRIC FLASK WERE USED TO MAKE THIS SOLUTION.
VOLUMES OF PRIMARY SOLUTIONS WERE TAKEN TO THE FINAL VOLUME IN THE MATRIX ABOVE.
LEGEND: PS=Primary Solution, SS=Secondary Solution,
CALCULATION: {(FINAL VOL.) * (FINAL VOL. CONC.)} / CONC. OF PRIMARY = VOL. OF PRIMARY SOLUTION USED

JCS 5/30/08

JCS 5/30/08

To Page No. X

Witnessed & Understood by me, Date 05/30/08

Invented by: NA

Recorded by: Joanna C. Sandoval Date 5/30/08

Project No. NA

TITLE DataChem Laboratories Secondary Standard Logbook Book No. 4721

From Page No. X

ICP-AES Secondary Standard Solution Write-up

SOLUTION ID:	AKA:	USED FOR:
EI-SS-08-123	ILM05.4 ICV	ICV

This format is used to make a secondary solution from a raw chemical or purchased solution only.

ANALYTES	PRIMARY ID# (INCLUDING BOOK/PG.)	PRIMARY CONC.	VOLUME OF PRIMARY	FINAL CONC.
Al	IP-PS-07-022 (2261/91)	24820 µg/L	50 mL	2482 µg/L
Sb	IP-PS-07-022 (2261/91)	9920 µg/L	50 mL	992 µg/L
As	IP-PS-07-022 (2261/91)	9960 µg/L	50 mL	996 µg/L
Ba	IP-PS-07-022 (2261/91)	5020 µg/L	50 mL	502 µg/L
Be	IP-PS-07-022 (2261/91)	4930 µg/L	50 mL	493 µg/L
Cd	IP-PS-07-022 (2261/91)	494 µg/L	50 mL	494 µg/L
Ca	IP-PS-07-022 (2261/91)	101800 µg/L	50 mL	10180 µg/L
Cr	IP-PS-07-022 (2261/91)	4900 µg/L	50 mL	490 µg/L
Co	IP-PS-07-022 (2261/91)	4960 µg/L	50 mL	496 µg/L
Cu	IP-PS-07-022 (2261/91)	4900 µg/L	50 mL	490 µg/L
Fe	IP-PS-07-022 (2261/91)	51070 µg/L	50 mL	5107 µg/L
Pb	IP-PS-07-022 (2261/91)	9960 µg/L	50 mL	996 µg/L
Mg	IP-PS-07-022 (2261/91)	60030 µg/L	50 mL	6003 µg/L
Mn	IP-PS-07-022 (2261/91)	4950 µg/L	50 mL	495 µg/L
Ni	IP-PS-07-022 (2261/91)	4920 µg/L	50 mL	492 µg/L
K	IP-PS-07-022 (2261/91)	100080 µg/L	50 mL	10008 µg/L
Se	IP-PS-07-022 (2261/91)	10050 µg/L	50 mL	1005 µg/L
Ag	IP-PS-07-022 (2261/91)	4950 µg/L	50 mL	495 µg/L
Na	IP-PS-07-022 (2261/91)	100390 µg/L	50 mL	10039 µg/L
Tl	IP-PS-07-022 (2261/91)	10270 µg/L	50 mL	1027 µg/L
V	IP-PS-07-022 (2261/91)	5010 µg/L	50 mL	501 µg/L
Zn	IP-PS-07-022 (2261/91)	10000 µg/L	50 mL	1000 µg/L
			FINAL VOL.:	500 mL

JCS 6/4/08

MADE TO BE USED: As is

Date Made: 6/4/2008 by KK

Expiration date: 12/04/08

Date verified: 06/04/08

Verified by: JCS

Comments: none.

Solution Replaces: N/A

Verification data found in Run#: i08136

Verification instrument: ICP07

Acid used - Lot#: 25 mL HNO_3 - G11022 Baker

25 mL HCl - 4108010 Fisher

Source: ICV-1 (1201)

A 50 mL CLASS A PIPETTE AND A 500 mL VOLUMETRIC FLASKS WERE USED TO MAKE THIS SOLUTION.

VOLUMES OF PRIMARY SOLUTIONS WERE TAKEN TO THE FINAL VOLUME IN THE MATRIX ABOVE.

LEGEND: PS=Primary Solution, SS=Secondary Solution,

*CALCULATION: ((FINAL VOL.) * (FINAL VOL. CONC.)) / CONC. OF PRIMARY = VOL. OF PRIMARY SOLUTION USED*

JCS 6/4/08

To Page No. X

Witnessed & Understood by me, Date 06/05/08

Invented by: NA

Recorded by: Joanna C. Sanchez Date 6/4/08

Project No. NA

TITLE DataChem Laboratories Secondary Standards Logbook

Book No. 4721

From Page No. X

ICP-AES Secondary Standard Solution Write-up

SOLUTION ID:	AKA:	USED FOR:
EI-SS-08-112	ILM05.4 CRI	ILM05.4 CRI

This format is used to make a secondary solution from a raw chemical or purchased solution only.

ANALYTES	PRIMARY ID# (INCLUDING BOOK/PG.)	PRIMARY CONC.	VOLUME OF PRIMARY	FINAL CONC.
Al	IP-PS-08-006 (2261/96)	20 µg/mL	10 mL	200 µg/L
Sb	IP-PS-08-006 (2261/96)	6 µg/mL	10 mL	60 µg/L
As	IP-PS-08-006 (2261/96)	1 µg/mL	10 mL	10 µg/L
Ba	IP-PS-08-006 (2261/96)	20 µg/mL	10 mL	200 µg/L
Be	IP-PS-08-006 (2261/96)	0.5 µg/mL	10 mL	5 µg/L
Cd	IP-PS-08-006 (2261/96)	0.5 µg/mL	10 mL	5 µg/L
Ca	IP-PS-08-006 (2261/96)	500 µg/mL	10 mL	5000 µg/L
Cr	IP-PS-08-006 (2261/96)	1 µg/mL	10 mL	10 µg/L
Co	IP-PS-08-006 (2261/96)	5 µg/mL	10 mL	50 µg/L
Cu	IP-PS-08-006 (2261/96)	2.5 µg/mL	10 mL	25 µg/L
Fe	IP-PS-08-006 (2261/96)	10 µg/mL	10 mL	100 µg/L
Pb	IP-PS-08-006 (2261/96)	1 µg/mL	10 mL	10 µg/L
Mg	IP-PS-08-006 (2261/96)	500 µg/mL	10 mL	5000 µg/L
Mn	IP-PS-08-006 (2261/96)	1.5 µg/mL	10 mL	15 µg/L
Ni	IP-PS-08-006 (2261/96)	4 µg/mL	10 mL	40 µg/L
K	IP-PS-08-006 (2261/96)	500 µg/mL	10 mL	5000 µg/L
Se	IP-PS-08-006 (2261/96)	3.5 µg/mL	10 mL	35 µg/L
Ag	IP-PS-08-006 (2261/96)	1 µg/mL	10 mL	10 µg/L
Na	IP-PS-08-006 (2261/96)	500 µg/mL	10 mL	5000 µg/L
Tl	IP-PS-08-006 (2261/96)	2.5 µg/mL	10 mL	25 µg/L
V	IP-PS-08-006 (2261/96)	5 µg/mL	10 mL	50 µg/L
Zn	IP-PS-08-006 (2261/96)	6 µg/mL	10 mL	60 µg/L
			FINAL VOL.:	1000 mL

MADE TO BE USED: As is

Date Made: 05/28/08

Expiration date: 11/28/08

Date verified: 06/29/08

Verified by: gcs

Comments: None.

Verification data found in Run#: i08128

Verification instrument: ICP07

Acid used - Lot#: 50 mL HNO_3 - G04026 Baker

50 mL HCl - 4108010 Fisher

Source: Inorganic Ventures

A 10 mL Glass Pipette and a CLASS A 1000 mL Volumeteric Flask were used to make this solution.

VOLUMES OF PRIMARY SOLUTIONS WERE TAKEN TO THE FINAL VOLUME IN THE MATRIX ABOVE.

LEGEND: PS=Primary Solution, SS=Secondary Solution,

CALCULATION: {(FINAL VOL.) * (FINAL VOL. CONC.)} / CONC. OF PRIMARY = VOL. OF PRIMARY SOLUTION USED

gcs 5/29/08

gcs 5/29/08

To Page No. X

Witnessed & Understood by me, [signature] Date 05/29/08

Invented by: NA

Recorded by: Joanna C. Sandoval Date 5/29/08

Project No. NA

TITLE Data Chem Laboratories Secondary Standard Logbook Book No. 4721

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ICP-AES Secondary Standard Solution Write-up

SOLUTION ID:	AKA:	USED FOR:
EI-SS-08-137	ILM05.4 ICSA	ICSA

This format is used to make a secondary solution from a raw chemical or purchased solution only.

ANALYTES	PRIMARY ID# (INCLUDING BOOK/PG.)	PRIMARY CONC.	VOLUME OF PRIMARY	FINAL CONC.
Al	IP-PS-08-014 (2261/97) and	2441 µg/mL	100 mL	244100 µg/L
Ba	IP-PS-08-047 (2261/98)	20 µg/L		(2 µg/L)
Ca		2349 µg/mL		234900 µg/L
Cr		430 µg/L		43 µg/L
Co		40 µg/L		(4 µg/L)
Cu		230 µg/L		(23 µg/L)
Fe		956 µg/mL		95600 µg/L
Pb		10 µg/L		10 µg/L
Mg		2475 µg/mL		247500 µg/L
Mn		190 µg/L		19 µg/L
Ni		210 µg/L		(21 µg/L)
Zn		280 µg/L		(28 µg/L)
			FINAL VOL.:	1000 mL

MADE TO BE USED: As is

Date Made: 06/20/08
Expiration date: 12/20/08
Date verified: 06/20/08
Verified by: JCS
Comments: NA

Verification data found in RUN#: i08147
Verification instrument: ICP07
Acid used - Lot#: 50 mL HNO_3 - G11022 Baker
50 mL HCl - 4108010 Fisher
Source: Part A (1206)

CLASS A 100 mL Pipette and a 1000 mL Volumeteric Flask were used to make this solution.
VOLUMES OF PRIMARY SOLUTIONS WERE TAKEN TO THE FINAL VOLUME IN THE MATRIX ABOVE.
LEGEND: PS=Primary Solution, SS=Secondary Solution,
CALCULATION: ((FINAL VOL.) * (FINAL VOL. CONC.)) / CONC. OF PRIMARY = VOL. OF PRIMARY SOLUTION USED
( ) indicates analytes values that are less than the CRQL and the value is to be used as a set point for the +/- times the CRQL acceptance criteria calculations.

JCS 6/20/08

JCS 6/20/08

To Page No. X

Witnessed & Understood by me,	Date	Invented by: NA	Date
Christopher R Hansen	6/20/2008	Recorded by: Joanna C. Sandoval	6/20/08

Project No. NA

TITLE DataChem Laboratories Secondary Standards Logbook

Book No. 4721

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ICP-AES Secondary Standard Solution Write-up

SOLUTION ID:	AKA:	USED FOR:
EI-SS-08-125	ILM05.4 ICSAB	ICSAB

This format is used to make a secondary solution from a raw chemical or purchased solution only.

ANALYTES	PRIMARY ID# (INCLUDING BOOK/PG.)	PRIMARY CONC.	VOLUME OF PRIMARY	FINAL CONC.
Al	IP-PS-08-046, -047 (2261/98)Part A	N/A	100 mL	241100 µg/L
Sb	IP-PS-08-020, -018 (2261/97)Part B		100 mL	589 µg/L
As	ICS Part A and ICS Part B			101 µg/L
Ba	solutions combined			495 µg/L
Be				475 µg/L
Cd				940 µg/L
Ca				231100 µg/L
Cr				511 µg/L
Co				461 µg/L
Cu				548 µg/L
Fe				94800 µg/L
Pb				61 µg/L
Mg				251100 µg/L
Mn				502 µg/L
Ni				984 µg/L
Se				53 µg/L
Ag				206 µg/L
Tl				103 µg/L
V				494 µg/L
Zn				1028 µg/L

FINAL VOL.: 1000 mL

MADE TO BE USED: As is

Date Made: 6/10/2008 by KK

Expiration date: 12/10/08

Date verified:

Verified by:

Comments: N/A

Verification data found in RUN#:

Verification instrument: ICP07

Acid used - Lot#: 50 mL HNO_3 - G11022 JT Baker

50 mL HCl - 4108010 Fisher

Source: Part A (1206) + Part B (0203)

CLASS A 50 mL Pipettes and a 1000 mL Volumeteric Flask were used to make this solution.

VOLUMES OF PRIMARY SOLUTIONS WERE TAKEN TO THE FINAL VOLUME IN THE MATRIX ABOVE.

LEGEND: PS=Primary Solution, SS=Secondary Solution,

CALCULATION: {(FINAL VOL.) * (FINAL VOL. CONC.)} / CONC. OF PRIMARY = VOL. OF PRIMARY SOLUTION USED

JCS 6/10/08

JCS 6/10/08

To Page No. X

Witnessed & Understood by me,	Date	Invented by: NA	Date	137
[signature]	06/11/08	Recorded by: Joanna C. Sandoy	6/10/08	

Project No. NA

TITLE DataChem Laboratories Secondary Standard Logbook Book No. 4721

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ICP-AES Secondary Standard Solution Write-up

SOLUTION ID:	AKA:	USED FOR:
EI-SS-08-122	ILM05.4 CCV	CCV

This format is used to make a secondary solution from a raw chemical or purchased solution only.

ANALYTES	PRIMARY ID# (INCLUDING BOOK/PG.)	PRIMARY CONC.	VOLUME OF PRIMARY	FINAL CONC.
Al	IP-PS-07-053 (2261/92)	10,000 µg/mL	5 mL	25,000 µg/L
Sb	IP-PS-08-026 (2261/97)	10,000 µg/mL	1.0 mL	5,000 µg/L
As	IP-PS-07-077 (2261/93)	1,000 µg/mL	1.5 mL	750 µg/L
Ba	IP-PS-08-027 (2261/97)	10,000 µg/mL	1.0 mL	5,000 µg/L
Be	IP-PS-08-033 (2261/97)	10,000 µg/mL	0.15 mL	750 µg/L
Cd	IP-PS-07-078 (2261/93)	1,000 µg/mL	1.5 mL	750 µg/L
Ca	IP-PS-07-055 (2261/92)	10,000 µg/mL	5 mL	25,000 µg/L
Cr	IP-PS-08-043 (2261/98)	10,000 µg/mL	1.0 mL	5,000 µg/L
Co	IP-PS-07-058 (2261/92)	10,000 µg/mL	1.0 mL	5,000 µg/L
Cu	IP-PS-07-059 (2261/92)	10,000 µg/mL	1.0 mL	5,000 µg/L
Fe	IP-PS-07-060 (2261/92)	10,000 µg/mL	5 mL	25,000 µg/L
Pb	IP-PS-08-062 (2261/98)	1,000 µg/mL	1.5 mL	750 µg/L
Mg	IP-PS-07-063 (2261/92)	10,000 µg/mL	5 mL	25,000 µg/L
Mn	IP-PS-07-064 (2261/93)	10,000 µg/mL	1.0 mL	5,000 µg/L
Ni	IP-PS-08-037 (2261/97)	10,000 µg/mL	1.0 mL	5,000 µg/L
K	IP-PS-07-061 (2261/92)	10,000 µg/mL	5 mL	25,000 µg/L
Se	IP-PS-07-080 (2261/93)	1,000 µg/mL	1.5 mL	750 µg/L
Ag	IP-PS-08-025 (2261/97)	1,000 µg/mL	1.5 mL	750 µg/L
Na	IP-PS-07-066 (2261/93)	10,000 µg/mL	5 mL	25,000 µg/L
Tl	IP-PS-07-081 (2261/93)	1,000 µg/mL	1.5 mL	750 µg/L
V	IP-PS-07-074 (2261/93)	5,000 µg/mL	2 mL	5,000 µg/L
Zn	IP-PS-07-076 (2261/93)	10,000 µg/mL	1.0 mL	5,000 µg/L
			FINAL VOL.:	2000 mL

JCS 6/4/08

MADE TO BE USED: As is

Date Made: 6/4/2008 by KK
Expiration date: 12/04/08
Date verified: 06/04/08
Verified by: JCS
Comments: N/A

Verification data found in Run#: i08136
Verification instrument: ICP07
Acid used - Lot#: 100 mL HNO_3 - G04026 JT Baker
100 mL HCL - Fisher 410010 KK 6/5/08
Source: CPI

Pipettes 11061166 (5 mL, 2 mL, 1.5 mL), PL-214 (1 ml, 0.150 mL) and a 2 L Volumeteric Flask were used to make this solution. (Glass for all others)

VOLUMES OF PRIMARY SOLUTIONS WERE TAKEN TO THE FINAL VOLUME IN THE MATRIX ABOVE.

LEGEND: PS=Primary Solution, SS=Secondary Solution,

CALCULATION: {(FINAL VOL.) * (FINAL VOL. CONC.)} / CONC. OF PRIMARY = VOL. OF PRIMARY SOLUTION USED

JCS 6/4/08

To Page No. X

Witnessed & Understood by me,	Date	Invented by: NA	Date
[signature]	06/05/08	Recorded by: Joanna C Sanchez	6/4/08

Project No. N/A

TITLE Data Chem Laboratories - Primary Standards Logbook

Book No. 2261

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DCL Solution #	Analytes	Concentration	Vendor	Lot #	Date Recd.	Date Opened	Date Expires	Init.
(CLPP-SPK-1) IP-PS-07-013/4 775 NE 03/07/07	Al, Ba / Fe Co, Mn, Ni, V, Zn Cu / Cr3 Ag, Be	2,000 ug/mL / 1,000 ug/mL 500 ug/mL 250 ug/mL / 200 ug/mL 50 ug/mL	Inorganic Ventures	Z-MEB194075	03/07/07	03/07/07	04/01/08	NE
(CLPP-SPK-5) IP-PS-07-015 776	Sb / Cd, Se, Tl As / Pb	100 ug/mL / 50 ug/mL 40 ug/mL / 20 ug/mL	Inorganic Ventures	Z-CLCP18071	03/07/07	03/07/07	04/01/08	NE
CRI 5.4 IP-PS-07-016	Ba / Se, V Cr3, Cu, Sb, Zn Ag, As, Be, Cd, Co, Mn, Ni, Pb, Tl	10 ug/mL / 5 ug/mL 2 ug/mL 1 ug/mL	Inorganic Ventures	AZ-MEB194150	03/28/07	03/29/07	05/01/08	KB
ISS IP-PS-07-017	Bi, Ho, In, Li, Rh, Sc, Tb, Y	10 ug/mL	Inorganic Ventures	Z-MEB194055	03/28/07	03/29/07	05/01/08	KB
ISS IP-PS-07-018	Bi, Ho, In, Li, Rh, Sc, Tb, Y	10 ug/mL	Inorganic Ventures	Z-MEB194055	03/28/07	03/29/07	05/01/08	KB
IP-PS-07-019	Se Al, Ca / As, Fe, Pb, Mg, Ni, Na Ba, Be, Cr, Co, Li, Mn, Mo, Sr, Ti, V, Y, Zn, Zr, Cu	1000 ug/mL / 500 ug/mL 200 ug/mL 200 ug/mL	CPI	07C089	04/01/07	04/18/07	09/08/08	NE
6010 ICV IP-PS-07-020	K, Na / Fe P Ba, Ca, Pb, Se, Tl, Al, As, Mg, B Ag, Be, Cd, Co, Cr, Cu, Mn, Ni V, Zn, Sr, Li	2000 ug/mL / 200 ug/mL 400 ug/mL 100 ug/mL	CPI	07C088	04/01/07	04/18/07	09/08/08	NE
IP-PS-07-021	Sb, Mo, Sn, Ti, Si	400 ug/mL, 100 ug/mL	CPI	07C088	04/01/07	04/18/07	09/08/08	NE
IP-PS-07-022 IP-PS-07-023 IP-PS-07-024	ICV-1 See facing Page	See facing page	EPA/QATS	ICV-1 (1201)	04/18/07		NA	KB
IP-PS-07-025 IP-PS-07-026 IP-PS-07-027 IP-PS-07-028 IP-PS-07-029 IP-PS-07-030	ICSA (ICP-MS) See facing page	See facing page	EPA/QATS	ICSA (0803)	04/18/07	09/23/07 01/17/08	NA	KB
IP-PS-07-031 IP-PS-07-032 IP-PS-07-033	ICSB (ICP-MS) See facing page	See facing page	EPA/QATS	ICSB (0803)	04/18/07	09/23/07	NA	KB
IP-PS-07-034	As	10,000 ug/mL	CPI	07B146	04/01/07	04/20/07	09/30/08	NE
IP-PS-07-035	Ba	10,000 ug/mL	CPI	07C169	04/01/07	04/20/07	09/30/08	NE
IP-PS-07-036	Be	10,000 ug/mL	CPI	07A145	04/01/07	04/20/07	~~09~~ 10/04/08 NE 04/20/07	NE

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Witnessed & Understood by me, Kristie Betwin

Date 04/20/07

Invented by

Recorded by [signature]

Date 04/20/07

Facing Page 91

QATS INORGANIC REFERENCE MATERIAL
INITIAL CALIBRATION VERIFICATION SOLUTIONS
(ICVs)

ICV-1 (1201):		
Element	Concentration (µg/L) (after 10-fold dilution)	Concentration (µg/L) (after 50-fold dilution)
Al	2482	496
Sb	992	198
As	996	199
Ba	502	100
Be	493	99
Cd	494	99
Ca	10180	2036
Cr	490	98
Co	496	99
Cu	490	98
Fe	5107	1021
Pb	996	199
Mg	6003	1201
Mn	495	99
Ni	492	98
K	10008	2002
Se	1005	201
Ag	495	99
Na	10039	2008
Tl	1027	205
V	501	100
Zn	1000	200

KB 4/19/07

QATS INORGANIC REFERENCE MATERIAL
INITIAL CALIBRATION VERIFICATION SOLUTIONS
(ICVs)

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP and AA instruments. These solutions may also be used as aqueous Laboratory Control Solutions.

The values for each element in the ICVs are listed below in µg/L (ppb) for the solutions that result after the concentrates have been diluted according to the following instructions:

1. ICV-1 (1201) — For ICP-AES use, dilute the ICV-1 concentrate 10-fold with 2% (v/v) nitric acid; pipet 10 mL of the concentrate into a 100-mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. For ICP-MS use, dilute the ICV-1 concentrate 50-fold with 1% (v/v) nitric acid; pipet 2 mL of the concentrate into a 100-mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

2. ICV-2 (0601) -- For furnace AA use, dilute the ICV-2 concentrate 20-fold with 2% (v/v) nitric acid; pipet 5 mL of the concentrate into a 100-mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

3. ICV-3 (0500) -- For ICP use, dilute the ICV-3 concentrate 10-fold with 2% (v/v) nitric acid; pipet 10 mL of the concentrate into a 100-mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. For furnace AA use, dilute the ICV-3 concentrate 100-fold with 2% (v/v) nitric acid; pipet 1 mL of the concentrate into a 100-mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

KB 4/19/07

4. ICV-4 (0499) -- For the furnace AA determination of lead and thallium, dilute the ICV-4 concentrate 10-fold with 2% (v/v) nitric acid; pipet 10 mL of the concentrate into a 100-mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. For the furnace AA determination of silver and cadmium, dilute the ICV-4 concentrate 100-fold with 2% (v/v) nitric acid; pipet 1 mL of the concentrate into a 100-mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.

5. ICV-5 (1104) -- For the cold vapor analysis of mercury by AA, dilute the ICV-5 concentrate 100-fold with 2% (v/v) nitric acid; pipet 1 mL of the concentrate into a 100-mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV-5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

6. ICV-6 (0400) -- For the analysis of cyanide, dilute the ICV-6 concentrate 100-fold with Type II water; pipet 1 mL of the concentrate into a 100-mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

QATS INORGANIC REFERENCE MATERIAL
INTERFERENCE CHECK SAMPLE FOR ICP-MS
PART A (0803) WITH PART B (0803)

Part A (0803), Inferferents: Pipet 10 mL of the Part A solution into a 100-mL volumetric flask and dilute to volume with 1% v/v HNO3. Analyze this solution, Soln. A, by ICP-MS.

Part B (0803), Analytes, mixed with Part A (0803), Interferents: Pipet 10 mL of the Part A solution and 10 mL of the Part B solution into a 100-mL volumetric flask and dilute to volume with 1% v/v HNO3. Analyze this solution, Soln. AB, by ICP-MS.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-MS PART A (0803) AND PART A (0803) MIXED WITH PART B (0803)

Element	Concentration (µg/L) Part A	Concentration (µg/L) Part A + Part B
Al	[100000]	[100000]
Sb	(1.5)	22
As	(0.1)	19
Ba	(1.2)	22
Be	(0)	19
Cd	(0.7)	20
Ca	[100000]	[100000]
C	[200000]	[200000]
Cl	[1000000]	[1000000]
Cr	21	40
Co	1	20
Cu	8	25
Fe	[100000]	[100000]
Pb	4	25
Mg	[100000]	[100000]
Mn	7	27
Mo	[2000]	[2000]
Ni	6	24
P	[100000]	[100000]
K	[100000]	[100000]
Se	(0.3)	19
Ag	(0)	18
Na	[100000]	[100000]
S	[100000]	[100000]
Tl	(0)	21
Ti	[2000]	[2000]
V	(0.5)	19
Zn	11	29

KB 04/19/07

[ ] INDICATES ANALYTES THAT DO NOT REQUIRE ICP-MS DETERMINATION IN THE ICS.
( ) INDICATES ANALYTE VALUES THAT ARE LESS THAN THE CRQL AND THE VALUE IS TO BE USED AS A SET POINT FOR THE ± 3 TIMES CRQL ACCEPTANCE CRITERIA CALCULATIONS.

Project No. N/A

TITLE DATACHEM LABORATORIES - PRIMARY STANDARDS LOGBOOK Book No. 2261

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DCL SOLUTION #	ANALYTES	CONCENTRATION	VENDOR	LOT #	DATE RECD	DATE OPENED	DATE EXPIRES	INIT.
IP-PS-07-037	Cr	10,000 ug/mL	CPI	07A104	04/01/07	04/20/07	10/04/08	NE
IP-PS-07-038	Ni	10,000 ug/mL	CPI	07B236	04/01/07	04/20/07	09/30/08	NE
IP-PS-07-039	Pt	10,000 ug/mL	CPI	06D247	04/01/07	04/20/07	09/30/08	NE
IP-PS-07-040	Sb	10,000 ug/mL	CPI	06D239	04/01/07	04/20/07	09/30/08	NE
IP-PS-07-041	Si	10,000 ug/mL	CPI	06J226	04/01/07	04/20/07	10/04/08	NE
IP-PS-07-042	Ti	10,000 ug/mL	CPI	06I044	04/01/07	04/20/07	09/30/08	NE
IP-PS-07-043	W	1,000 ug/mL	CPI	06L114	04/01/07	04/20/07	09/30/08	NE
IP-PS-07-044	Zr	1,000 ug/mL	CPI	07C203	04/01/07	04/20/07	09/30/08	NE
6020 Std IP-PS-07-045	Ag, Al, As, Ba, Br, Ca, Cd, Co, Cr3, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, Sb, Se, Tl, V, Zn	20.00 ug/mL	Inorganic Ventures	Z-MEB194104	05/29/07	05/29/07	06/01/08	KB
ICP-MS CLP Spike IP-PS-07-046	Al, Ba/Co, Mn, Ni, V, Zn Cu / Cr3 Sb/Ag, Br, Cd, Tl As/Pb/Se	200 ug/mL / 50 ug/mL 25 ug/mL / 20 ug/mL 10 ug/mL / 5 ug/mL 4 ug/mL / 2 ug/mL / 1 ug/mL	Inorganic Ventures	A2-MEB194119	05/29/07	05/29/07	06/01/08	KB
6020 ISS IP-PS-07-047	Bi, Ho, In, Li6, Rh, Sc, Tb, Y	10 ug/mL	Inorganic Ventures	Z-MEB194055	05/29/07	05/29/07	06/01/08	KB
6020 ISS IP-PS-07-048	Bi, Ho, In, Li6, Rh, Sc, Tb, Y	10 ug/mL	Inorganic Ventures	Z-MEB194085	05/29/07	05/29/07	06/01/08	KB
IP-PS-07-049	Li, Sr, Th, U	20 ug/mL	Inorganic Ventures	A2-MEB238016	06/01/07	06/04/07	06/01/08	KB
IP-PS-07-050	B, Mo, Sn, Ti	20 ug/mL	Inorganic Ventures	A2-MEB238017	06/01/07	06/04/07	06/01/08	KB
X-5 Tune IP-PS-07-051	Ba, Br, Bi, Cr, Co, In, Li, Ni, Pb, U	10 ug/mL	Inorganic Ventures	A2-MEB238018	06/01/07	06/04/07	06/01/08	KB
IP-PS-07-052	Ag	1,000 ug/mL	CPI	06J107	06/06/07	06/07/07	12/01/08	NE
IP-PS-07-053	AL	10,000		07E205	07/09/07	07/19/07	01/05/09	JK
IP-PS-07-054	B	5,000		06K019				
IP-PS-07-055	CA	10,000		07F345				
IP-PS-07-056	CA	10,000		07F345				
IP-PS-07-057	Cd	10,000		07E050				
IP-PS-07-058	Co	10,000		07F078				
IP-PS-07-059	Cu	10,000		07F075				
IP-PS-07-060	FE	10,000		07E183				
IP-PS-07-061	K	10,000		07F131				
IP-PS-07-062	Li	10,000		06I145				
IP-PS-07-063	MG	10,000		07D085				
~~IP-PS-07-064~~	JK 07-19-07							

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Witnessed & Understood by me, [signature] Date 07/19/07

Invented by

Recorded by John Kershisnik Date 07/19/07

Project No. N/A

TITLE DATACHEM LABORATORIES - PRIMARY STANDARDS LOGBOOK

Book No. 2261

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DCL SOLUTION #	ANALYTES	CONCENTRATION	VENDOR	LOT #	DATE REC'D	DATE OPENED	DATE EXPIRES	INIT.
IP-PS-07-064	MN	10,000 ug/mL	CPI	07C113	07/09/07	07/19/07	01/05/09	JK
IP-PS-07-065	MO	10,000		06H253				
IP-PS-07-066	NA	10,000		07F228				
IP-PS-07-067	P	10,000		07E211				
IP-PS-07-068	PB	10,000		07F278				
IP-PS-07-069	SE	10,000		07C158				
IP-PS-07-070	SN	10,000		06B011				
IP-PS-07-071	SR	10,000		06J208				
IP-PS-07-072	TE	10,000		4BK070				
IP-PS-07-073	TL	10,000		05K082				
IP-PS-07-074	V	5,000		07B083				
IP-PS-07-075	Y	10,000		07A200				
IP-PS-07-076	ZN	10,000		07D133				
IP-PS-07-077	AS	1,000		07F105				
IP-PS-07-078	CD	1,000		07C053				
IP-PS-07-079	PB	1,000		07F108				
IP-PS-07-080	SE	1,000		07C044				
IP-PS-07-081	TL	1,000		06C009				
IP-PS-07-082	SB	1,000		07A076				
IP-PS-07-083	ICSA	SEE FACING PAGE	EPA / QATS	ICSA (1206)	07/19/07	07/28/07	N/A	JK
IP-PS-07-084	SEE FACING PAGE					08/20/07		
IP-PS-07-085						08/27/07		
IP-PS-07-086						08/30/07		
IP-PS-07-087						10/15/07		
IP-PS-07-088						10/15/07		
IP-PS-07-089								
IP-PS-07-090								
IP-PS-07-091	ICSB	SEE FACING PAGE	EPA / QATS	ICSB (0203)	07/19/07	08/27/07	N/A	JK
IP-PS-07-092	SEE FACING PAGE					10/15/07		
IP-PS-07-093						12/21/07		
IP-PS-07-094						12/21/07		
IP-PS-07-095	ICV-1 SEE FACING PAGE	SEE FACING PAGE	EPA / QATS	ICV-1 (1201)	07/19/07	07/28/07	N/A	NE
IP-PS-07-096						08/30/07		
IP-PS-07-097						10/31/07		
IP-PS-07-098								

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Witnessed & Understood by me, John Kershenski

Date 07/29/07

Invented by

Recorded by

Date 07/20/07

Project No. 11

TITLE DataChem Laboratories - Primary Standards Log book

Book No. 2261

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DCL Solution #	Analytes	Concentration	Vendor	Lot #	Date Rec'd	Date Opened	Date Expires	Initials
6020 ICSB IP-PS-07-118	Ca, Cr3, Cu, Mn, Ni, V	20 µg/mL	Inorganic Ventures	Z-MEB194098	09/26/07	10/01/07	10/01/08	KB
	As, Cd, Sr, Zn / Ag	10/5 µg/mL						
Std IP-PS-07-119	Ce	1000 µg/mL	Inorganic Ventures	A2-CE01055	09/26/07	10/01/07	10/01/08	KB
Std IP-PS-07-120	Cs	1000 µg/mL	Inorganic Ventures	Z-CS01113	09/26/07	10/01/07	10/01/08	KB
Std IP-PS-07-121	Ga	1000 µg/mL	Inorganic Ventures	Z-GA01072	09/26/07	10/01/07	10/01/08	KB
6020 Std IP-PS-07-122	Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr3, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, Sb, Se, Tl, V, Zn	20 µg/mL	Inorganic Ventures	Z-MEB194104	09/26/07	10/01/07	10/01/08	KB
ISS IP-PS-07-123	Bi, Ho, In, Li, Rh, Sc, Tb, Y	10 µg/mL	Inorganic Ventures	A2-MEB194155	09/26/07	10/01/07	10/01/08	KB
ISS IP-PS-07-124	Bi, Ho, In, Li, Rh, Sc, Tb, Y	10 µg/mL	Inorganic Ventures	A2-MEB194155	09/26/07	10/01/07	10/01/08	KB
IP-PS-07-125	Sc	10000 µg/mL	INORGANIC VENTURES	A2-SC02073	09/26/07	10/03/07	10/01/08	JMY
IP-PS-07-126	Li, Sr, Th, U	20 µg/mL	Inorganic Ventures	A2-MEB248043	10/26/07 ~~09/26/07~~ KB 10/29/07	10/29/07	11/01/08	KB
IP-PS-07-127	B, Mo, Sn, Ti	20 µg/mL	Inorganic Ventures	A2-MEB248044	10/26/07	10/29/07	11/01/08	KB
IP-PS-07-128	Au, Ir, Os, Pd, Pt, Re, Rh, Ru	10 µg/mL	Inorganic Ventures	Z-MEB208107	10/26/07	10/29/07	11/01/08	KB
IP-PS-07-129	Li	10 µg/mL	Inorganic Ventures	A2-QLI02142	10/26/07	10/29/07	11/01/08	KB
IP-PS-07-130	Ag, Be, Cd	10 µg/mL	Inorganic Ventures	A2-MEB250073	12/03/07	12/05/07	01/01/09	gcs
	Cr 3	40 µg/mL						
	Cu	50 µg/mL						
	Co, Li, Mn, Ni, Pb, V, Zn	100 µg/mL						
	As, B, Fe, Se, Sr	200 µg/mL						
	Al, Ba, Tl	400 µg/mL						gcs
IP-PS-07-131	Sb, Ti	100 µg/mL	Inorganic Ventures	A2-MEB250074	12/03/07	12/05/07	01/01/09	gcs
	Si, Sn	200 µg/mL						
	Mo	400 µg/mL						gcs
IP-PS-07-132	SOIL LCSS	SEE FACING PAGE	EPA / DATS	LCS-S (0405)	11/08/07		N/A	KE
IP-PS-07-133	(SEE FACING PAGE)							
IP-PS-07-134								
IP-PS-07-135	ICV-1	SEE FACING PAGE	EPA / DATS	ICV-1 (1201)	11/08/07		N/A	KE
IP-PS-07-136	SEE FACING PAGE					01/08/08		
IP-PS-07-137						02/28/08		
IP-PS-07-138								
IP-PS-07-139						3/25/08		

KE 12/12/07

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Witnessed & Understood by me,	Date	Invented by	Date
Kristie Bitner	04/09/08	Recorded by	12/12/07

Project No. N/A

TITLE DATACHEM LABORATORIES- PRIMARY STANDARDS LOGBOOK Book No. 2261

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DCL SOLUTION #	ANALYTES	CONCENTRATION	VENDOR	LOT #	DATE REC'D	DATE OPENED	DATE EXPIRES	INIT.
IP-PS-07-140	ICSA	SEE FACING PAGE	EPA / QATS	PART A (1206)	11/08/07	12/12/07	N/A	NE
IP-PS-07-141	SEE FACING PAGE					12/21/07		
IP-PS-07-142						12/21/07		
IP-PS-07-143						01/05/08		
IP-PS-07-144								
IP-PS-07-145								
IP-PS-07-146	ICSAB	SEE FACING PAGE	EPA / QATS	PART B (0203)	11/08/07		N/A	NE
IP-PS-07-147	SEE FACING PAGE					03/19/08		
IP-PS-07-148						05/09/08		
6020 Std IP-PS-07-149 6020 Std IP-PS-07-150	Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr3, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, Se, Sb, Tl, V, Zn	20 ug/mL	Inorganic Ventures	Z-MEB194104	12/17/07	12/17/07	01/01/09	KB
12/17/07 6020SPK-5 IP-PS-07-151	12/17/07 Ba/ Ba, Cr3, Cu, Zn Ni/Co, Pb, Sb/V Ag, As, Cd/Be, Se, Tl	50 ug/mL 25 ug/mL / 20 ug/mL / 30 ug/mL 10 ug/mL / 5 ug/mL	Inorganic Ventures	A2-CICP20089	12/17/07	12/17/07	01/01/09	KB
ISS IP-PS-07-152 ISS IP-PS-07-153	Br, Ho, In, Li, Rh, Sc, Tb, Y	10 ug/mL	Inorganic Ventures	A2-MEB194155	12/17/07	12/07/07	01/01/09	KB
IP-PS-08-001	Li, Rh, Y, Bi, Sc, Ho, Th	10 ug/mL	INORGANIC VENTURES	B2-MEB255072	02/05/08	02/05/08	03/01/09	NE
IP-PS-08-002	In	10 ug/mL	INOGANIC VENTURES	A2-QIN01098	02/05/08	02/05/08	03/01/09	NE
6020 WATER SPK IP-PS-08-003	Fe / Ba, Zn Co, Cr3, Cu, Mn, Ni, Sb, V As, Pb Ag, Be, Cd, Se, Tl	100 ug/mL / 50 ug/mL 20 ug/mL 10 ug/mL 5 ug/mL	INORGANIC VENTURES	Z-MEB194099	02/05/08	02/05/08	03/01/09	NE
IP-PS-08-004	Li, Sc, Th, U	20 ug/mL	INORGANIC VENTURES	A2-MEB248045	02/05/08	02/05/08	03/01/09	NE
IP-PS-08-005	B, Mo, Sn, Ti	20 ug/mL	INORGANIC VENTURES	A2-MEB248044	02/05/08	02/05/08	03/01/09	NE
IP-PS-08-006	Ca, Mg, K, Na / Al, Ba Fe / Sb, Zn Co, V / Ni / Se Cu, Tl / Mn Ag, As, Cr3, Pb / Be, Cd	500 ug/mL / 20 ug/mL 10 ug/mL / 6 ug/mL 5 ug/mL / 4 ug/mL / 3.5 2.5 ug/mL / 1.5 ug/mL 1.0 ug/mL / 0.5 ug/mL	INORGANIC VENTURES	NE 02/14/08 Z-MEB194095	02/13/08	02/14/08	03/01/09	NE
IP-PS-08-007	Ag, Al, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Ni, Pb, Sb, Se, Tl, V, Zn	10 ug/mL	SPEX KB 2/29/08 ~~Inorganic Ventures~~	S-112GS	02/28/08	02/29/08	02/28/09	KB
CLP-SPK-6 IP-PS-08-008 1762	Sb / Cd, Se, Tl As / Pb	100 ug/mL / 50 ug/mL 40 ug/mL / 20 ug/mL	INORGANIC VENTURES	Z-MEB194090	03/10/08	03/10/08	03/01/09	NE

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Witnessed & Understood by me, Kristie Bitner

Date 03/28/08

Invented by

Recorded by [signature]

Date 03/10/08

FACING PAGE 96

QATS INORGANIC REFERENCE MATERIAL
INTERFERENCE CHECK SAMPLE SET
PART A (1206) WITH PART B (0203) FOR ICP-AES

The "Certified Value" concentrations of the elements are listed in Table 1. The values are certified in that all results used in calculating the certified values were derived from statistically pooled results from the following sources: ILM05.4 Pre-award analysis, Quarterly Blind analysis, CLP laboratory referee analysis, and QATS Laboratory analysis. Preparation and analysis must be performed according to the following instructions:

Part A (1206), Interferents: Pipet 10 mL of the Part A solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this solution, Soln. A, by ICP-AES.

Part B (0203), Analytes, mixed with Part A (1206), Interferents: Pipet 10 mL of the Part A solution and 10 mL of the Part B solution into a 100-mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this solution, Soln. AB, by ICP-AES.

NOTE: THIS ICS SET IS FOR USE WITH ILM05.4 AND REVISIONS ONLY, NOT ILM04.x.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES PART A (1206), AND PART A (1206) MIXED WITH PART B (0203)

Element	Concentration (µg/L) Part A	Concentration (µg/L) Part A + Part B
Al	244100	241100
Sb	(0)	589
As	(0)	101
Ba	2	495
Be	(0)	475
Cd	(0)	940
Ca	234900	231100
Cr	43	511
Co	(4)	461
Cu	(23)	548
Fe	95600	94800
Pb	10	61
Mg	247500	251100
Mn	19	502
Ni	(21)	984
Se	(0)	53
Ag	(0)	206
Tl	(0)	103
V	(0)	494
Zn	28	1028

( ) Indicates analyte values that are less than the CRQL, and the value is to be used as a set point for the +/- 2 times CRQL acceptance criteria calculations.

NE 12/12/07

Project No. N/A

TITLE DATACHEM LABORATORIES- PRIMARY STANDARDS LOGBOOK

Book No. 2261

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DCL SOLUTION #	ANALYTES	CONCENTRATION	VENDOR	LOT #	DATE RECD	DATE OPENED	DATE EXPIRES	INIT
CLPP-SPL-1 IP-PS-08-009	Al, Ba / Fe	2000 mg/mL / 1000 mg/mL	INORGANIC VENTURES	2-MER174075	03/10/08	03/10/08	03/01/09	KE
↓ 1361	Co, Mn, Ni, V, Zn / Cu	500 mg/mL / 250 mg/mL	↓	↓	↓	↓	↓	↓
	Cr3 / Ag, Be	200 mg/mL / 50 mg/mL						
IP-PS-08-010	ICSA (SEE FACING PAG)	SEE FACING PAGE	EPA / QATS	ICSA (1206)	03/10/08	03/19/08	N/A	KE
IP-PS-08-011	↓	↓	↓	↓	↓	03/19/08	↓	↓
IP-PS-08-012								
IP-PS-08-013								
IP-PS-08-014								
IP-PS-08-015						05/21/08		
IP-PS-08-016						05/09/08		
IP-PS-08-017						05/21/08		
IP-PS-08-018	ICSAB	SEE FACING PAGE	EPA / QATS	ICSAB (0203)	03/10/08		N/A	KE
IP-PS-08-019	SEE FACING PAGE	↓	↓	↓	↓		↓	↓
IP-PS-08-020	↓							
6020 3361 IP-PS-08-021	Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr3, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, Sb, Se, Tl, V, Zn	20 µg/mL	Inorganic Ventures	2-MER194104	03/27/08		04/01/09	KB
6020 ISS 03/28/08 IP-PS-08-022	Bi, Hf, In, Li, Rh, Sc,	10 µg/mL	Inorganic Ventures	A2-MER194155	03/27/08		04/01/09	KB
6020 ISS 03/28/08 IP-PS-08-023	Tb, Y	↓	↓	↓	↓		↓	↓
6020 ISS 03/28/08 IP-PS-08-024	↓							
IM08023 (1879) IP-PS-08-025	Ag	1000 mg/mL	CPI	07H114	5/1/08	5/1/08	10/28/09	RKA
IM08024 (1883) IP-PS-08-026	Sb	10,000 mg/mL	CPI	07F023	5/1/08		10/28/09	RKA
IM08025 (1885) IP-PS-08-027	Ba	10,000 mg/mL	CPI	07C169	5/1/08		10/28/09	RKA
IP-PS-08-028 IM08026 (1886)	K	10,000 mg/mL	CPI	08C049	5/1/08		10/28/09	RKA
IP-PS-08-029 IM08027 (1887)	W	1000 mg/mL	CPI	07I208	5/1/08		10/28/09	RKA
IP-PS-08-030 IM08028 (1888)	Pt	10000 mg/mL	CPI	07D260	5/1/08		10/28/09	RKA
IP-PS-08-031 IM08029 (1889)	Na	10,000 mg/mL	CPI	08A030	5/1/08		10/28/09	RKA
IM08030 (1890) IP-PS-08-032	Ti	10,000 mg/mL	CPI	08A002	5/1/08		10/28/09	RKA
IM08031 (1891) IP-PS-08-033	Be	10,000 mg/mL	CPI	07F218	5/1/08		10/28/09	RKA
IM08032 (1892) IP-PS-08-034	Al	10,000 mg/mL	CPI	08C004	5/1/08		10/28/09	RKA
IP-PS-08-035 IM08033 (1893)	Fe	10,000 mg/mL	CPI	08B059	5/1/08		10/28/09	RKA
IP-PS-08-036 IM08034 (1894)	Zr	1,000 mg/mL	CPI	08A083	5/1/08		10/28/09	RKA
IP-PS-08-037 IM08035 (1895)	Ni	10,000 mg/mL	CPI	08A040	5/1/08		10/28/09	RKA
IP-PS-08-038 IM08036 (1896)	Mg	10,000 mg/mL	CPI	08C006	5/1/08		10/28/09	RKA

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Witnessed & Understood by me, Joanna C. Sanchez — Date 5/5/08

Invented by NA — Date 5/5/08

Recorded by [signature]

QATS INORGANIC REFERENCE MATERIAL
INTERFERENCE CHECK SAMPLE SET
PART A (1206) WITH PART B (0203) FOR ICP-AES

The "Certified Value" concentrations of the elements are listed in Table 1. The values are certified in that all results used in calculating the certified values were derived from statistically pooled results from the following sources: ILM05.4 Pre-award analysis, Quarterly Blind analysis, CLP laboratory referee analysis, and QATS Laboratory analysis. Preparation and analysis must be performed according to the following instructions:

Part A (1206), Interferents: Pipet 10 mL of the Part A solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this solution, Soln. A, by ICP-AES.

Part B (0203), Analytes, mixed with Part A (1206), Interferents: Pipet 10 mL of the Part A solution and 10 mL of the Part B solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this solution, Soln. AB, by ICP-AES.

NOTE: THIS ICS SET IS FOR USE WITH ILM05.4 AND REVISIONS ONLY, NOT ILM04.x.

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES PART A (1206), AND PART A (1206) MIXED WITH PART B (0203)

Element	Concentration (µg/L) Part A	Concentration (µg/L) Part A + Part B
Al	244100	241100
Sb	(0)	589
As	(0)	101
Ba	(2)	495
Be	(0)	475
Cd	(0)	940
Ca	234900	231100
Cr	43	511
Co	(4)	461
Cu	(23)	548
Fe	95600	94800
Pb	10	61
Mg	247500	251100
Mn	19	502
Ni	(21)	984
Se	(0)	53
Ag	(0)	206
Tl	(0)	103
V	(0)	494
Zn	(28)	1028

( ) Indicates analyte values that are less than the CRQL, and the value is to be used as a set point for the +/- 2 times CRQL acceptance criteria calculations.

NE 03/10/08

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book 2261 gcs 5/9/08

Project No. NA

TITLE DATACHEM LABORATORIES - PRIMARY STANDARDS LOGBOOK 6/18/08 RKA

Book No. 2261

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DCL Solution #	Analytes	Concentration	Vendor	Lot #	Date Rec'd	Date Opened	Date Expires	Lot #
IM080317 (1897) IP-PS-08-039	As	10,000 µg/mL	CPI	07H102	5/1/08	5/1/08	10/28/09	RKA
IM080381 (1898) IP-PS-08-040	Si	10,000 µg/mL	CPI	07D206	5/1/08	5/1/08	10/28/09	RKA
CRI-MS IP-PS-08-041	Ba / Be, V	10 µg/mL / 5 µg/mL	Inorganic Ventures	A2-MEB194150	05/05/08	05/05/08	06/01/09	KB
	Cr3, Cu, Sb, Zn	2 µg/mL						
	Ag, As, Be, Cd, Co, Mn, Ni, Pb, Tl	1 µg/mL						
CLP-MS-SPK IP-PS-08-042	Al, Ba	200 µg/mL	Inorganic Ventures	A2-MEB194119	05/05/08	05/05/08	06/01/09	KB
	Co, Mn, Ni, V, Zn	50 µg/mL						
	Cu / Cr^3	25 µg/mL / 20 µg/mL						
	Sb / Ag, Be, Cd, Tl	10 µg/mL / 5 µg/mL						
	As / Pb	4 µg/mL / 2 µg/mL						
	Se	1 µg/mL						
IM080389 (1899) IP-PS-08-043	Cr	10,000 µg/mL	CPI	07I020	5/6/08	5/6/08	11/2/09	RKA
IM080342 (1902) IP-PS-08-044	Bi	10,000 µg/mL	Elements	CS7011437	4/16/08	5/8/08	10/09	RKA
IP-PS-08-045	ICSA (See facing page)	See facing page	EPA/QATS	ICSA (1206)	04/16/08		NA	gcs
IP-PS-08-046								
IP-PS-08-047								
IP-PS-08-048								
IP-PS-08-049					04/17/08 gcs 6/18/08			
IP-PS-08-050	ICSAB (See facing Pg.)	See facing page	EPA / QATS	ICSAB (0203)	04/16/08		NA	gcs
IP-PS-08-051								
IP-PS-08-052					04/17/08 gcs 6/18/08			
IP-PS-08-053	ICV-1 (See facing Pg.)	See facing page	EPA / QATS	ICV-1 (1201)	04/16/08		NA	gcs
IP-PS-08-054								
IP-PS-08-055								
IP-PS-08-056								
IP-PS-08-057					04/17/08			
IP-PS-08-058	Soil LCSS (See facing page)	See facing page	EPA / QATS	LCS-S (0405)	04/17/08		NA	gcs
IP-PS-08-059	Ba, Be, Bi, Ce, Co, In, Li, Ni, Pb, U	10 µg/mL	Inorganic Ventures	B2-MEB265024	05/08/08	05/13/08	06/01/09	KB
ICP-MS CLP ICSA IP-PS-08-060	See p.91 facing page	See p.91 facing page	EPA/QATS	Part A ICS-MS (0803)	04/17/08		NA	KB
IP-PS-08-061	See p.91 facing page	See p.91 facing page	EPA/QATS	Part B ICS-MS (0803)	04/17/08		NA	KB
IP-PS-08-062	Pb	1,000 µg/mL	CPI	08D051	05/20/08	06/04/08	11/16/09	gcs
(6020 Cal) IP-PS-08-063	Ag, Al, As, Ba, Be, Ca, Cd, Co, Cr^3, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, Sb, Se, Tl, V, Zn	20 µg/mL	Inorganic Ventures	Z-MEB194104	06/17/08	06/18/08	07/01/09	KB

To Page No. 99

Witnessed & Understood by me, Joanna C. Sanchez

Date 6/27/08

Invented by

Recorded by Krystie Butler

Date 06/18/08

QATS INORGANIC REFERENCE MATERIAL
INTERFERENCE CHECK SAMPLE SET
PART A (1206) WITH PART B (0203) FOR ICP-AES

The "Certified Value" concentrations of the elements are listed in Table 1. The values are certified in that all results used in calculating the certified values were derived from statistically pooled results from the following sources: ILM05.4 Pre-award analysis, Quarterly Blind analysis, CLP laboratory referee analysis, and QATS Laboratory analysis. Preparation and analysis must be performed according to the following instructions:

Part A (1206), Interferents: Pipet 10 mL of the Part A solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this solution, Soln. A, by ICP-AES.

Part B (0203), Analytes, mixed with Part A (1206), Interferents: Pipet 10 mL of the Part A solution and 10 mL of the Part B solution into a 100 mL volumetric flask and dilute to volume with 2% v/v HNO_3. Analyze this solution, Soln. AB, by ICP-AES.

NOTE: THIS ICS SET IS FOR USE WITH ILM05.4 AND REVISIONS ONLY, NOT ILM04.x.

gcs 5/12/08

Page facing page 98
book 2261 gcs 5/12/08

Table 1. "CERTIFIED VALUES" FOR INTERFERENCE CHECK SAMPLE ICP-AES PART A (1206), AND PART A (1206) MIXED WITH PART B (0203)

Element	Concentration (µg/L) Part A	Concentration (µg/L) Part A + Part B
Al	244100	241100
Sb	(0)	589
As	(0)	101
Ba	(2)	495
Be	(0)	475
Cd	(0)	940
Ca	234900	231100
Cr	43	511
Co	(4)	461
Cu	(23)	548
Fe	95600	94800
Pb	10	61
Mg	247500	251100
Mn	19	502
Ni	(21)	984
Se	(0)	53
Ag	(0)	206
Tl	(0)	103
V	(0)	494
Zn	(28)	1028

( ) indicates analyte values that are less than the CRQL, and the value is to be used as a set point for the +/- 2 times CRQL acceptance criteria calculations.

QATS INORGANIC REFERENCE MATERIAL
INITIAL CALIBRATION VERIFICATION SOLUTIONS
(ICVs)

Element	ICV-1 (1201) Concentration (µg/L) (after 10 fold dilution)	ICV-1 (1201) Concentration (µg/L) (after 50 fold dilution)
Al	2482	496
Sb	992	198
As	996	199
Ba	502	100
Be	493	99
Cd	494	99
Ca	10180	2036
Cr	490	98
Co	496	99
Cu	490	98
Fe	5107	1021
Pb	996	199
Mg	6003	1201
Mn	495	99
Ni	492	98
K	10008	2002
Se	1005	201
Ag	495	99
Na	10039	2008
Tl	1027	205
V	501	100
Zn	1000	200

gcs 5/12/08

QATS INORGANIC REFERENCE MATERIAL
SOLID LABORATORY CONTROL SAMPLE
LCS-S (0405)

TABLE 1. "CERTIFIED VALUE" CONCENTRATIONS AND CONTROL LIMITS FOR THE ELEMENTS IN THE SOLID LABORATORY CONTROL SAMPLE, LCS-S (0405)

Element	"Certified Value" (mg/Kg)	Control Limits (mg/Kg) Low Limit	Control Limits (mg/Kg) High Limit
Al	115	54.7	175
Sb	66.0	27.6	104
As	253	154	352
Ba*	[1.6]	1.0	2.2
Be	4.9	3.0	6.8
Cd	10.9	7.7	14.0
Ca	44200	30300	58200
Cr	27.1	18.5	35.7
Co	37.4	24.2	50.6
Cu	1770	1320	2230
Fe	6470	4280	8660
Pb	56.9	41.4	72.4
Mg	29200	20500	37900
Mn	61.0	41.6	80.5
Hg	3.59	1.86	5.32
Ni	16.3	9.0	23.7
K*	[39.7]	0	85.3
Se	10.0	4.1	15.9
Ag	5.9	2.7	9.1
Na*	[72.5]	0	216
Tl	9.5	2.9	16.1
V	17.6	11.6	23.7
Zn	47.5	20.5	74.4

[ ] Denotes values which are greater than or equal to the method detection limit (MDL), but less than the Contract Required Quantitation Limit (CRQL).

* Barium, potassium, and sodium are present at concentrations below ILM05.x CRQLs. Acceptance limits are advisory only.

gcs 5/12/08

Edwards, Meredith D.

From: Olson, Roxanne
Sent: Wednesday, June 18, 2008 2:47 PM
To: Edwards, Meredith D.
Subject: FW: Region 08 |Case 37402 | Lab DATAC | Issue Multiple | FINAL

Attachments: 2008061810320025.pdf; 37402 CLP IDs.xls

2008061810320025.pdf (642 KB) 37402 CLP IDs.xls (28 KB)

-----Original Message-----
From: Kramer, Caroline [mailto:ckramer5@fedcsc.com]
Sent: Wednesday, June 18, 2008 2:24 PM
To: Olson, Roxanne
Cc: beard.carol@epa.gov
Subject: Region 08 |Case 37402 | Lab DATAC | Issue Multiple | FINAL

Roxy,
Summary Start
-Discrepancies with tags, jars, and/or TR/COC- Issue 1: The soil, TM and DM samples were all given the same sample ID on the TR/COC. with tags, jars, and/or TR/COC- Issue 1: The soil, TM and DM samples were all given the same sample ID on the TR/COC.
Resolution 1: Per Region 8, the laboratory will note issue in the SDG Narrative and will use the CLP sample ID provided in the attached table for the DM water and soil samples. The TM water samples will retain the CLP ID listed on the TR/COC.

-Sample listed on TR/COC but not received at laboratory- Issue 2: No sample container was received for DM for sample on TR designated MH25A4. TM container was received.
Resolution 2: Per Region 8, the laboratory will note the issue in the SDG Narrative and proceed with the analysis of the samples.
Summary End

Caroline L. Kramer
ckramer5@fedcsc.com
Computer Sciences Corporation (CSC)
703.818.4248

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-----Original Message-----
From: Beard.Carol@epamail.epa.gov [mailto:Beard.Carol@epamail.epa.gov]
Sent: Wednesday, June 18, 2008 1:17 PM
To: Kramer, Caroline
Subject: Re: Region 08 |Case 37402 | Lab DATAC | Issue Multiple

Caroline-

Issue 1 : Please provide the laboratory with new ID for the different matrices for Case 37402.

Issue 2 : Please have the laboratory note this in the case narrative and proceed with the analysis.

Thanks! Carol

"Kramer, Caroline" <ckramer5@fedcsc.com>

06/18/2008 11:06 AM

To: Carol Beard/EPR/R8/USEPA/US@EPA

cc:

Subject: Region 08 |Case 37402 | Lab DATAC | Issue Multiple

Carol,
DATAC is reporting the follow issues regarding Case 37402 for samples delivered today. TR/COC are attached for reference. Please advise on how the Region wishes the laboratory to proceed.

-Discrepancies with tags, jars, and/or TR/COC- Issue 1: The soil, TM and DM samples were all given the same sample ID on the TR/COC.

*Please advise if you would like me to provide new ID for the different matrices. I can do this in a table like last time.

-Sample listed on TR/COC but not received at laboratory- Issue 2: No sample container was received for DM for sample on TR designated MH25A4.
TM container was received.

Please let me know if you have any questions.
Thanks,

Caroline L. Kramer
ckramer5@fedcsc.com
Computer Sciences Corporation (CSC)
703.818.4248

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-----Original Message-----
From: Olson, Roxanne [mailto:olsonr@datachem.com]
Sent: Wednesday, June 18, 2008 12:40 PM
To: Kramer, Caroline
Cc: Edwards, Meredith D.
Subject: Case 37402 Sample Delivery 6/18

Caroline: Here are the TRs for case 37402 for samples we received today and which we spoke about a few minutes ago on the phone.

Issues we see immediately:

TM, DM and Sediment samples all have same EPA IDs. Water containers labels do

differentiate between DM and TM.
No container was received for DM for sample on TR designated MH25A4. TM container was received.
How do we complete DC-1 forms?

More issues may crop up but we can't begin to address this delivery until we get the first issues taken care of.

Thanks for your help!

Roxy
(See attached file: 2008061810320025.pdf)

Listed TR ID	Matrix	Analysis	New CLP ID
MH2599	water	TM	MH2599
	water (filterd)	DM	MH2662
	soil	TM	MH2663
MH25A0	water	TM	MH25A0
	water (filterd)	DM	MH2664
	soil	TM	MH2665
MH25A1	water	TM	MH25A1
	water (filterd)	DM	MH2666
	soil	TM	MH2667
MH25A2	water	TM	MH25A2
	water (filterd)	DM	MH2668
	soil	TM	MH2669
MH25A3	water	TM	MH25A3
	water (filterd)	DM	MH2670
	soil	TM	MH2671
MH25A6	water	TM	MH25A6
	water (filterd)	DM	MH2672
MH25A7	water	TM	MH25A7
	water (filterd)	DM	MH2673
	soil	TM	MH2674
MH25A9	water	TM	MH25A9
	water (filterd)	DM	MH2675
	soil	TM	MH2676
MH25B0	water	TM	MH25B0
	water (filterd)	DM	MH2677
	soil	TM	MH2678
MH25B1	water	TM	MH25B1
	water (filterd)	DM	MH2679
	soil	TM	MH2680
MH25B2	water	TM	MH25B2
	water (filterd)	DM	MH2681
	soil	TM	MH2682
MH25B3	water	TM	MH25B3
	water (filterd)	DM	MH2683
	soil	TM	MH2684
MH25B4	water	TM	MH25B4
	water (filterd)	DM	MH2685
MH25B5	water	TM	MH25B5
	water (filterd)	DM	MH2686
	soil	TM	MH2687
MH25B6	water	TM	MH25B6
	water (filterd)	DM	MH2688
	soil	TM	MH2689
MH25B7	water	TM	MH25B7
	water (filterd)	DM	MH2690
	soil	TM	MH2691

MH25B8	water	TM	MH25B8
	water (filterd)	DM	MH2692
	soil	TM	MH2693
MH25C0	water	TM	MH25C0
	water (filterd)	DM	MH2694
	soil	TM	MH9695
MH25C4	water	TM	MH25C4
	water (filterd)	DM	MH2696
MH25C5	water	TM	MH25C5
	water (filterd)	DM	MH2697
	soil	TM	MH2698
MH25C7	water	TM	MH25C7
	water (filterd)	DM	MH2699
	soil	TM	MH26A0
MH25C8	water	TM	MH25C8
	water (filterd)	DM	MH26A1
	soil	TM	MH26A2
MH25C9	water	TM	MH25C9
	water (filterd)	DM	MH26A3
MH25D1	water	TM	MH25D1
	water (filterd)	DM	MH26A4
	soil	TM	MH26A5
MH25D3	water	TM	MH25D3
	water (filterd)	DM	MH26A6
MH25D4	water	TM	MH25D4
	water (filterd)	DM	MH26A7
	soil	TM	MH26A8
MH25D5	water	TM	MH25D5
	water (filterd)	DM	MH26A9
	soil	TM	MH26B0
MH25D6	water	TM	MH25D6
	water (filterd)	DM	MH26B1
MH25D7	water	TM	MH25D7
	water (filterd)	DM	MH26B2
	soil	TM	MH26B3
MH25D8	water	TM	MH25D8
	water (filterd)	DM	MH25B4
MH25D9	water	TM	MH25D9
	water (filterd)	DM	MH26B5
MH25E0	water	TM	MH25E0
	water (filterd)	DM	MH26B6
MH25E1	water	TM	MH25E1
	water (filterd)	DM	MH26B7
MH25E2	water	TM	MH25E2
	water (filterd)	DM	MH26B8
MH25E3	water	TM	MH25E3
	water (filterd)	DM	MH26B9

MH25E4	water	TM	MH25E4
	water (filterd)	DM	MH26C0
	soil	TM	MH26C1
MH25E5	water	TM	MH25E5
	water (filterd)	DM	MH26C2
	soil	TM	MH26C3
MH25E6	water	TM	MH25E6
	water (filterd)	DM	MH26C4
	soil	TM	MH26C5
MH25E7	water	TM	MH25E7
	water (filterd)	DM	MH26C6
	soil	TM	MH26C7
MH25E8	water	TM	MH25E8
	water (filterd)	DM	MH26C8
	soil	TM	MH26C9
MH25E9	water	TM	MH25E9
	water (filterd)	DM	MH26D0
MH25F0	water	TM	MH25F0
	water (filterd)	DM	MH26D1

Edwards, Meredith D.

From: Olson, Roxanne
Sent: Friday, June 20, 2008 9:54 AM
To: Edwards, Meredith D.
Subject: FW: Region 08 |Case 37402 | Lab DATAC | Issue Insufficient volume | FINAL

From: Kramer, Caroline [mailto:ckramer5@fedcsc.com]
Sent: Friday, June 20, 2008 9:46 AM
To: Olson, Roxanne
Cc: beard.carol@epa.gov
Subject: Region 08 |Case 37402 | Lab DATAC | Issue Insufficient volume | FINAL

Roxy,
Summary Start
Issue: There were no samples designated on the TR/COC for laboratory QC and lab QC is required per scheduling. The laboratory is unable to perform a reduced volume QC on the waters as the samplers delivered the samples in 500 mL bottles instead of the 1000 mL recommended in the SOW. Below is a list of the SDG for Case 37402 and the laboratory has indicated which SDG will not have sufficient volume for QC, and where possible selected a sample they would like to use for QC.
MH2599 (TM water) no QC selected as there is not enough volume.
MH25C5 (TM water) no QC selected as there is not enough volume.
MH25E8 (TM water) no QC selected as there is not enough volume.
MH2662 (DM water) no QC selected as there is not enough volume.
MH2697 (DM water) no QC selected as there is not enough volume.
MH26C8 (DM water) no QC selected as there is not enough volume.
MH25F1 (TM soil) selected MH26C9 for QC.
MH2663 (TM soil) selected MH2695 for QC
Resolution: Per Region 8, the laboratory's selection of soil QC samples is acceptable. The laboratory will note the volume insufficiency in the SDG Narrative, cancel lab QC on the TM and DM SDG and proceed with the analysis of the samples.
Summary End

Please let me know if you have any questions or problems.
Thank you,

Caroline L. Kramer
ckramer5@fedcsc.com
Computer Sciences Corporation (CSC)
703.818.4248

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→ **6/20/2008 Phone conversation between Caroline Kramer, SMO, and Carol Beard, Region 8. Carol confirmed that the soil samples selected for QC are acceptable and that DATAC can cancel the QC for the water samples due to insufficient sample volume. The laboratory will note the issue in the SDG Narrative.**

From: Kramer, Caroline

Sent: Thursday, June 19, 2008 3:21 PM
To: 'beard.carol@epa.gov'
Subject: Region 08 |Case 37402 | Lab DATAC | Issue Insufficient volume

Carol,
DATAC is reporting the following issue regarding Case 37402. Please advise on how the Region wishes the laboratory to proceed.

Issue: There were no samples designated on the TR/COC for laboratory QC and lab QC is required per scheduling. The laboratory is unable to perform a reduced volume QC on the waters as the samplers delivered the samples in 500 mL bottles instead of the 1000 mL recommended in the SOW. Below is a list of the SDG for Case 37402 and the laboratory has indicated which SDG will not have sufficient volume for QC, and where possible selected a sample they would like to use for QC.

MH2599 (TM water) no QC selected as there is not enough volume.
MH25C5 (TM water) no QC selected as there is not enough volume.
MH25E8 (TM water) no QC selected as there is not enough volume.
MH2662 (DM water) no QC selected as there is not enough volume.
MH2697 (DM water) no QC selected as there is not enough volume.
MH26C8 (DM water) no QC selected as there is not enough volume.
MH25F1 (TM soil) selected MH26C9 for QC.
MH2663 (TM soil) selected MH2695 for QC

Please let me know if you have any questions or problems.
Thank you,

Caroline L. Kramer
ckramer5@fedcsc.com
Computer Sciences Corporation (CSC)
703.818.4248

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From: Olson, Roxanne [mailto:olsonr@datachem.com]
Sent: Thursday, June 19, 2008 3:04 PM
To: Kramer, Caroline
Subject: FW: Region 8 Case 37402

Caroline: See the following for the SDGs and where possible DATAC's selection for QC. Please note that because this was a confusing login effort we have one SDG (MH2663) that we did not use the lowest alpha numeric number to name the SDG.

Roxy

From: Edwards, Meredith D.
Sent: Thursday, June 19, 2008 12:57 PM
To: DataChem EPA List
Subject: Region 8 Case 37402

Here are the SDG names and then the samples I chose for QC.

MH2599 TM water no QC selected as there is not enough volume.

MH25C5 TM water no QC selected as there is not enough volume.

MH25E8 TM water no QC selected as there is not enough volume.

MH2662 DM water no QC selected as there is not enough volume.

MH2697 DM water no QC selected as there is not enough volume.

MH26C8 DM water no QC selected as there is not enough volume.

MH25F1 TM soil selected MH26C9 for QC.

MH2663 TM soil selected MH2695 for QC also on this SDG I used a higher number to name the SDG. Since there were only 2 samples that didn't change names after receipt it was very confusing.

Thanks

Mere

----Original Message----
From: Kramer, Caroline
Sent: Thursday, June 19, 2008 10:47 AM
To: 'Olson, Roxanne'
Subject: RE: Region 08 |Case 37402 | Lab DATAC | Issue Multiple | FINAL

Roxy,
Just let me know as soon as you know which SDG will not have sufficient volume and I will pass it along to the Region for a resolution.
Please let me know if you have any confusion with the spreadsheet of new sample IDs as you are logging them in.
Thanks,

Caroline L. Kramer
ckramer5@fedcsc.com
Computer Sciences Corporation (CSC)
703.818.4248

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----Original Message----
From: Olson, Roxanne [mailto:olsonr@datachem.com]
Sent: Thursday, June 19, 2008 10:38 AM
To: Kramer, Caroline
Subject: FW: Region 08 |Case 37402 | Lab DATAC | Issue Multiple | FINAL

Caroline: Another issue with the samples from yesterday as we were logging them in. We have no extra volume for the water samples for QC. Is the case closed or should we expect additional volume from another delivery? We can't even do a reduced volume on the waters as the samplers are delivering the samples in 500 mL bottles instead of the 1000 mL recommended in the SOW. I will let you know which SDGs will not have QC as soon as we complete the login.

Roxy