

W. Lee's tests in the Feather River-Lake Abasco between 2000 and 2002 measured total silver (from all sources) in the water and sediments. Sampling and lab analysis was performed by Brooks Rand LLC, 3058 6th Ave, NW, Seattle, WA, 98107.

Sampling locations (Table 1-1), silver analysis results for 2000 (Table 1-2) and 2002 (Table 1-3) are presented.

Table 1-1 Sampling Locations

Sample	Location	2000 Silver (ppb)	2002 Silver (ppb)
W1	WTR 2000 Lake Abasco near 1st dam	100-1500	100-1500
W2	WTR 2000 Lake Abasco near 2nd dam	100-1500	100-1500
W3	WTR 2000 Lake Abasco near 3rd dam	100-1500	100-1500
W4	WTR 2000 Lake Abasco near 4th dam	100-1500	100-1500
W5	WTR 2000 Lake Abasco near 5th dam	100-1500	100-1500
W6	WTR 2000 Lake Abasco near 6th dam	100-1500	100-1500
W7	WTR 2000 Lake Abasco near 7th dam	100-1500	100-1500
W8	WTR 2000 Lake Abasco near 8th dam	100-1500	100-1500
W9	WTR 2000 Lake Abasco near 9th dam	100-1500	100-1500
W10	WTR 2000 Lake Abasco near 10th dam	100-1500	100-1500
W11	WTR 2000 Lake Abasco near 11th dam	100-1500	100-1500
W12	WTR 2000 Lake Abasco near 12th dam	100-1500	100-1500
W13	WTR 2000 Lake Abasco near 13th dam	100-1500	100-1500
W14	WTR 2000 Lake Abasco near 14th dam	100-1500	100-1500
W15	WTR 2000 Lake Abasco near 15th dam	100-1500	100-1500
W16	WTR 2000 Lake Abasco near 16th dam	100-1500	100-1500
W17	WTR 2000 Lake Abasco near 17th dam	100-1500	100-1500
W18	WTR 2000 Lake Abasco near 18th dam	100-1500	100-1500
W19	WTR 2000 Lake Abasco near 19th dam	100-1500	100-1500
W20	WTR 2000 Lake Abasco near 20th dam	100-1500	100-1500
W21	WTR 2000 Lake Abasco near 21st dam	100-1500	100-1500
W22	WTR 2000 Lake Abasco near 22nd dam	100-1500	100-1500
W23	WTR 2000 Lake Abasco near 23rd dam	100-1500	100-1500
W24	WTR 2000 Lake Abasco near 24th dam	100-1500	100-1500
W25	WTR 2000 Lake Abasco near 25th dam	100-1500	100-1500
W26	WTR 2000 Lake Abasco near 26th dam	100-1500	100-1500
W27	WTR 2000 Lake Abasco near 27th dam	100-1500	100-1500
W28	WTR 2000 Lake Abasco near 28th dam	100-1500	100-1500
W29	WTR 2000 Lake Abasco near 29th dam	100-1500	100-1500
W30	WTR 2000 Lake Abasco near 30th dam	100-1500	100-1500
W31	WTR 2000 Lake Abasco near 31st dam	100-1500	100-1500
W32	WTR 2000 Lake Abasco near 32nd dam	100-1500	100-1500
W33	WTR 2000 Lake Abasco near 33rd dam	100-1500	100-1500
W34	WTR 2000 Lake Abasco near 34th dam	100-1500	100-1500
W35	WTR 2000 Lake Abasco near 35th dam	100-1500	100-1500
W36	WTR 2000 Lake Abasco near 36th dam	100-1500	100-1500
W37	WTR 2000 Lake Abasco near 37th dam	100-1500	100-1500
W38	WTR 2000 Lake Abasco near 38th dam	100-1500	100-1500
W39	WTR 2000 Lake Abasco near 39th dam	100-1500	100-1500
W40	WTR 2000 Lake Abasco near 40th dam	100-1500	100-1500
W41	WTR 2000 Lake Abasco near 41st dam	100-1500	100-1500
W42	WTR 2000 Lake Abasco near 42nd dam	100-1500	100-1500
W43	WTR 2000 Lake Abasco near 43rd dam	100-1500	100-1500
W44	WTR 2000 Lake Abasco near 44th dam	100-1500	100-1500
W45	WTR 2000 Lake Abasco near 45th dam	100-1500	100-1500
W46	WTR 2000 Lake Abasco near 46th dam	100-1500	100-1500
W47	WTR 2000 Lake Abasco near 47th dam	100-1500	100-1500
W48	WTR 2000 Lake Abasco near 48th dam	100-1500	100-1500
W49	WTR 2000 Lake Abasco near 49th dam	100-1500	100-1500
W50	WTR 2000 Lake Abasco near 50th dam	100-1500	100-1500
W51	WTR 2000 Lake Abasco near 51st dam	100-1500	100-1500
W52	WTR 2000 Lake Abasco near 52nd dam	100-1500	100-1500
W53	WTR 2000 Lake Abasco near 53rd dam	100-1500	100-1500
W54	WTR 2000 Lake Abasco near 54th dam	100-1500	100-1500
W55	WTR 2000 Lake Abasco near 55th dam	100-1500	100-1500
W56	WTR 2000 Lake Abasco near 56th dam	100-1500	100-1500
W57	WTR 2000 Lake Abasco near 57th dam	100-1500	100-1500
W58	WTR 2000 Lake Abasco near 58th dam	100-1500	100-1500
W59	WTR 2000 Lake Abasco near 59th dam	100-1500	100-1500
W60	WTR 2000 Lake Abasco near 60th dam	100-1500	100-1500
W61	WTR 2000 Lake Abasco near 61st dam	100-1500	100-1500
W62	WTR 2000 Lake Abasco near 62nd dam	100-1500	100-1500
W63	WTR 2000 Lake Abasco near 63rd dam	100-1500	100-1500
W64	WTR 2000 Lake Abasco near 64th dam	100-1500	100-1500
W65	WTR 2000 Lake Abasco near 65th dam	100-1500	100-1500
W66	WTR 2000 Lake Abasco near 66th dam	100-1500	100-1500
W67	WTR 2000 Lake Abasco near 67th dam	100-1500	100-1500
W68	WTR 2000 Lake Abasco near 68th dam	100-1500	100-1500
W69	WTR 2000 Lake Abasco near 69th dam	100-1500	100-1500
W70	WTR 2000 Lake Abasco near 70th dam	100-1500	100-1500
W71	WTR 2000 Lake Abasco near 71st dam	100-1500	100-1500
W72	WTR 2000 Lake Abasco near 72nd dam	100-1500	100-1500
W73	WTR 2000 Lake Abasco near 73rd dam	100-1500	100-1500
W74	WTR 2000 Lake Abasco near 74th dam	100-1500	100-1500
W75	WTR 2000 Lake Abasco near 75th dam	100-1500	100-1500
W76	WTR 2000 Lake Abasco near 76th dam	100-1500	100-1500
W77	WTR 2000 Lake Abasco near 77th dam	100-1500	100-1500
W78	WTR 2000 Lake Abasco near 78th dam	100-1500	100-1500
W79	WTR 2000 Lake Abasco near 79th dam	100-1500	100-1500
W80	WTR 2000 Lake Abasco near 80th dam	100-1500	100-1500
W81	WTR 2000 Lake Abasco near 81st dam	100-1500	100-1500
W82	WTR 2000 Lake Abasco near 82nd dam	100-1500	100-1500
W83	WTR 2000 Lake Abasco near 83rd dam	100-1500	100-1500
W84	WTR 2000 Lake Abasco near 84th dam	100-1500	100-1500
W85	WTR 2000 Lake Abasco near 85th dam	100-1500	100-1500
W86	WTR 2000 Lake Abasco near 86th dam	100-1500	100-1500
W87	WTR 2000 Lake Abasco near 87th dam	100-1500	100-1500
W88	WTR 2000 Lake Abasco near 88th dam	100-1500	100-1500
W89	WTR 2000 Lake Abasco near 89th dam	100-1500	100-1500
W90	WTR 2000 Lake Abasco near 90th dam	100-1500	100-1500
W91	WTR 2000 Lake Abasco near 91st dam	100-1500	100-1500
W92	WTR 2000 Lake Abasco near 92nd dam	100-1500	100-1500
W93	WTR 2000 Lake Abasco near 93rd dam	100-1500	100-1500
W94	WTR 2000 Lake Abasco near 94th dam	100-1500	100-1500
W95	WTR 2000 Lake Abasco near 95th dam	100-1500	100-1500
W96	WTR 2000 Lake Abasco near 96th dam	100-1500	100-1500
W97	WTR 2000 Lake Abasco near 97th dam	100-1500	100-1500
W98	WTR 2000 Lake Abasco near 98th dam	100-1500	100-1500
W99	WTR 2000 Lake Abasco near 99th dam	100-1500	100-1500
W100	WTR 2000 Lake Abasco near 100th dam	100-1500	100-1500

Exhibit A

Water Quality Sampling Results

PG&E's tests in the Feather River-Lake Almanor between 2000 and 2003 examined total silver (from all sources) in the water and sediments. Sampling and lab analysis was performed by Brooks Rand LLC, 3958 6th Ave, NW, Seattle, WA. 98107

Sampling locations (Table E-1), silver analyses results for 2000 (Table E-2) and 2002-2003 (Table E-3) are presented.

Table E-1 Station Locations

Station	Location	Longitude	Latitude
NF1	NFFR above Lake Almanor near Chester	40° 18.614	121° 13.633
LA1	Lake Almanor near Canyon Dam	40° 10.636	121° 05.256
LA2	Lake Almanor near Prattville Intake	40° 12.777	121° 09.768
HB1	Hamilton Branch above Lake Almanor	40° 16.266	121° 05.317
HB2	Hamilton Branch Powerhouse	40° 16.242	121° 04.895
NF2	NFFR below Canyon Dam - Seneca Reach	40° 10.299	121° 05.484
NF3	NFFR near Seneca Bridge - Seneca Reach	40° 06.971	121° 05.018
NF4	NFFR above Caribou Powerhouse - Seneca Reach	40° 05.121	121° 08.803
BC1	Butt Creek above Butt Valley Reservoir	40° 10.477	121° 11.373
BC2	Butt Creek below Butt Valley Dam (below Benner Creek confluence)	40° 06.595	121° 08.480
BC3	Butt Creek above NFFR	40° 05.642	121° 07.900
BV1	Butt Valley Powerhouse tailrace	40° 10.483	121° 11.400
BV2	Butt Valley Reservoir near Caribou 1 intake	40° 07.032	121° 08.694
CARB1	Caribou No. 1 Powerhouse	40° 05.124	121° 08.891
CARB2	Caribou No. 2 Powerhouse	40° 05.144	121° 08.952
BD1	Belden Reservoir	40° 04.614	121° 09.651
NF5	NFFR below Belden Dam - Belden Reach	40° 04.295	121° 09.871
MC1	Mosquito Creek	40° 03.674	121° 12.053
NF6	NFFR near Queen Lily Bridge - Belden Reach	40° 03.378	121° 12.416
NF7	NFFR above confluence with EBNFFR - Belden Reach	40° 01.240	121° 13.400
NF8	NFFR near Belden Town Bridge (above Yellow Creek Confluence)	40° 00.395	121° 14.918
EB1	EBNFFR above confluence with NFFR	40° 00.834	121° 13.440
BD2	Belden Powerhouse Tailrace	40° 00.430	121° 14.985
YC1	Yellow Creek above Belden PH	40° 00.482	121° 14.962

Table E-2

Silver Concentrations in Water Samples Collected in Lake Almanor and the Upper North Fork Feather River between April and November 2000 (Parts-per-billion¹)

Station	April 4-6	June 20-22	July 18-20	August 15-17	September 26-28	November 14-16
NF1	ND ²	ND	ND	ND	ND	ND
HB1	ND	ND	ND	ND	ND	ND
HB2	0.40	ND	ND	ND	ND	ND
LA1-S	ND	ND	ND	ND	ND	ND
LA1-B	0.44	ND	ND	ND	ND	ND
BC1	ND	ND	0.50	0.41	ND	ND
BV1	0.50	ND	ND	ND	ND	ND
BV1-S	ND	ND	ND	ND	ND	ND
BV1-B	0.39	ND	ND	ND	ND	ND
NF2	ND	ND	ND	ND	ND	ND
BC3	0.52	ND	0.45	0.48	ND	ND
NF4	0.56	ND	ND	ND	ND	ND
CARB1	. ³	ND	ND	ND	ND	ND
CARB2	. ³	ND	ND	ND	ND	ND
NF5	0.74	ND	ND	ND	ND	ND
NF7	0.47	ND	ND	ND	ND	ND
EB1	0.48	0.51	0.44	0.53	ND	ND
NF8	0.61	0.41	0.46	ND	ND	ND
BD2	. ³	ND	ND	ND	ND	ND
YC1	0.48	0.45	ND	ND	0.40	ND

¹ Units are part-per-billion and are equivalent to micro-gram per liter² ND means not detected above method detection limit (MDL). MDL was 0.36 µg/L (micro-gram per liter) and the reporting limit was 5.0 µg/L.³ Powerhouse not operating at time of sampling event. No sample taken.

Table E-3

Silver Concentrations in Water Samples Collected in Lake Almanor and the Upper North Fork Feather River between October 2002 and July 2003 (Parts-per-billion¹)

Station	October 15-17 2002	April 22-24 2003	July 15-17 2003
NF1	ND ²	ND	ND
HB1	ND	ND	ND
HB2	ND	ND	ND
LA1-S	ND	ND	ND ^H
LA1-B	ND	ND	ND ^H
BC1	ND	ND	ND
BV1-S	0.093 ^J	NS	ND
BV2-S	ND	ND	ND
BV2-B	ND	ND	ND
NF2	ND	ND	ND
BC3	0.155 ^J	ND	ND
NF4	ND	ND	ND

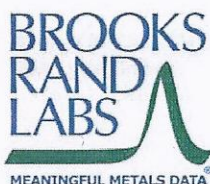
¹ Units are part-per-billion and are equivalent to micro-gram per liter

² ND means not detected; method detection limit was 0.090 µg/L.

J = Estimated concentration below the reporting limit (RL) and above the method detection limit (MDL), the MDL is based on a statistical calculation, the RL is normally set to 5 to 10 times the MDL by the analytical laboratory.

H = Sample arrived at 13.8°C (recommended temperature is 0-4°C)

NS = Constituent not sampled for during monitoring program



May 22, 2012

California State University – Chico
ATTN: Gina Johnston
2055 Amanda Way, #47
Chico, CA 95928
gjohnston@csuchico.edu

RE: Project CSC-CH1201

Dear Ms. Johnston,

On April 24, 2012, Brooks Rand Labs (BRL) received ten (10) surface water samples. The samples were logged-in for the contracted analyses of dissolved silver (Ag) and dissolved hardness [calculated from Calcium (Ca) and Magnesium (Mg)] according to the chain-of-custody (COC) form. Samples were filtered by BRL. The samples were received, prepared, analyzed, and stored according to BRL SOPs and EPA methodology.

The results were blank-corrected as described in the calculations section of the relevant SOP(s) and may have been evaluated using reporting limits that have been adjusted to account for sample aliquot size. Please refer to the *Sample Results* page for sample-specific MDLs, MRLs, and other details.

In instances where the native sample result and/or the associated DUP result were below the MDL the RPD was not calculated (N/C).

In instances where a matrix spike/matrix spike duplicate (MS/MSD) set was spiked at a level less than the native sample, the recoveries are not considered valid indicators of data quality. However, these results are reported as a demonstration of precision. When the spiking levels were $\leq 25\%$ of the native sample concentrations, the recoveries were not reported (NR).

Aside from concentration qualifiers, all data was reported without qualification and all associated quality control sample results met the acceptance criteria.

BRL, an accredited laboratory, certifies that the reported results of all analyses for which BRL is NELAP accredited meet all NELAP requirements. For more information please see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,

Lydia Greaves
Project Manager
lydia@brooksrand.com



Report Information

Laboratory Accreditation

BRL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BRL is also certified by many other states to perform environmental analyses. For a current list of our accreditations/certifications, please visit our website at <http://www.brooksrand.com/default.asp?contentID=586>. Results reported relate only to the samples listed in the report.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

BLK	method blank	MS	matrix spike
BRL	Brooks Rand Labs	MSD	matrix spike duplicate
BS	laboratory fortified blank	ND	non-detect
CAL	calibration standard	NR	non-reportable
CCV	continuing calibration verification	PS	post preparation spike
COC	chain of custody record	REC	percent recovery
CRM	certified reference material	RPD	relative percent difference
D	dissolved fraction	RSD	relative standard deviation
DUP	duplicate	SCV	secondary calibration verification
ICV	initial calibration verification	SOP	standard operating procedure
MDL	method detection limit	SRM	standard reference material
MRL	method reporting limit	T	total recoverable fraction

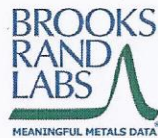
Definition of Data Qualifiers

(Effective 9/23/09)

- B** Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
- E** An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
- H** Holding time and/or preservation requirements not met. Result is estimated.
- J** Estimated value. A full explanation is presented in the narrative.
- J-M** Duplicate precision (RPD) for associated QC sample was not within acceptance criteria. Result is estimated.
- J-N** Spike recovery for associated QC sample was not within acceptance criteria. Result is estimated.
- M** Duplicate precision (RPD) was not within acceptance criteria. Result is estimated.
- N** Spike recovery was not within acceptance criteria. Result is estimated.
- R** Rejected, unusable value. A full explanation is presented in the narrative.
- U** Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
- X** Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.

These qualifiers are based on those previously utilized by Brooks Rand, Ltd., those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses; USEPA; July 2002. These supersede all previous qualifiers ever employed by BRL.

Project ID: CSC-CH1201
PM: Lydia Greaves



BRL Report 1217011
Client PM: Gina Johnston
Client PO: LSA

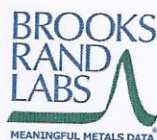
Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
FR-S	1217011-01	Water	Sample	04/22/2012	04/24/2012
HB-S	1217011-02	Water	Sample	04/22/2012	04/24/2012
BC-S	1217011-03	Water	Sample	04/22/2012	04/24/2012
LA-01S	1217011-04	Water	Sample	04/22/2012	04/24/2012
LA-01B	1217011-05	Water	Sample	04/22/2012	04/24/2012
LA-02S	1217011-06	Water	Sample	04/22/2012	04/24/2012
LA-02B	1217011-07	Water	Sample	04/22/2012	04/24/2012
LA-03S	1217011-08	Water	Sample	04/22/2012	04/24/2012
LA-03B	1217011-09	Water	Sample	04/22/2012	04/24/2012
Field Blank	1217011-10	DIW	Field Blank	04/22/2012	04/24/2012

Batch Summary

Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
Ag	Water	EPA 1638	04/30/2012	05/09/2012	B120811	1200339
Ca	Water	EPA 1638	04/30/2012	05/04/2012	B120722	1200328
Mg	Water	EPA 1638	04/30/2012	05/04/2012	B120722	1200328

Project ID: CSC-CH1201
PM: Lydia Greaves



BRL Report 1217011
Client PM: Gina Johnston
Client PO: LSA

Sample Results

Sample	Analyte	Report Matrix	Fraction	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
BC-S										
1217011-03	Ag	Water	D	0.005	U	0.005	0.020	µg/L	B120811	1200339
1217011-03	Ca	Water	D	8570		30.3	152	µg/L	B120722	1200328
1217011-03	Hardness	Water	D	39.1		0.09	0.44	mg eq CaCO3/L	[CALC]	N/A
1217011-03	Mg	Water	D	4310		3.03	15.2	µg/L	B120722	1200328
Field Blank										
1217011-10	Ag	DIW	D	0.005	U	0.005	0.020	µg/L	B120811	1200339
FR-S										
1217011-01	Ag	Water	D	0.005	U	0.005	0.020	µg/L	B120811	1200339
1217011-01	Ca	Water	D	4480		30.3	152	µg/L	B120722	1200328
1217011-01	Hardness	Water	D	18.4		0.09	0.44	mg eq CaCO3/L	[CALC]	N/A
1217011-01	Mg	Water	D	1750		3.03	15.2	µg/L	B120722	1200328
HB-S										
1217011-02	Ag	Water	D	0.005	U	0.005	0.020	µg/L	B120811	1200339
1217011-02	Ca	Water	D	10500		30.3	152	µg/L	B120722	1200328
1217011-02	Hardness	Water	D	46.0		0.09	0.44	mg eq CaCO3/L	[CALC]	N/A
1217011-02	Mg	Water	D	4820		3.03	15.2	µg/L	B120722	1200328
LA-01B										
1217011-05	Ag	Water	D	0.005	U	0.005	0.020	µg/L	B120811	1200339
1217011-05	Ca	Water	D	8650		30.3	152	µg/L	B120722	1200328
1217011-05	Hardness	Water	D	39.3		0.09	0.44	mg eq CaCO3/L	[CALC]	N/A
1217011-05	Mg	Water	D	4310		3.03	15.2	µg/L	B120722	1200328
LA-01S										
1217011-04	Ag	Water	D	0.005	U	0.005	0.020	µg/L	B120811	1200339
1217011-04	Ca	Water	D	8910		30.3	152	µg/L	B120722	1200328
1217011-04	Hardness	Water	D	40.4		0.09	0.44	mg eq CaCO3/L	[CALC]	N/A
1217011-04	Mg	Water	D	4410		3.03	15.2	µg/L	B120722	1200328



Sample Results

Sample	Analyte	Report Matrix	Fraction	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
LA-02B										
1217011-07	Ag	Water	D	0.005	U	0.005	0.020	µg/L	B120811	1200339
1217011-07	Ca	Water	D	8910		30.3	152	µg/L	B120722	1200328
1217011-07	Hardness	Water	D	40.6		0.09	0.44	mg eq CaCO3/L	[CALC]	N/A
1217011-07	Mg	Water	D	4450		3.03	15.2	µg/L	B120722	1200328
LA-02S										
1217011-06	Ag	Water	D	0.005	U	0.005	0.020	µg/L	B120811	1200339
1217011-06	Ca	Water	D	8840		30.3	152	µg/L	B120722	1200328
1217011-06	Hardness	Water	D	40.1		0.09	0.44	mg eq CaCO3/L	[CALC]	N/A
1217011-06	Mg	Water	D	4380		3.03	15.2	µg/L	B120722	1200328
LA-03B										
1217011-09	Ag	Water	D	0.005	U	0.005	0.020	µg/L	B120811	1200339
1217011-09	Ca	Water	D	8630		30.3	152	µg/L	B120722	1200328
1217011-09	Hardness	Water	D	39.5		0.09	0.44	mg eq CaCO3/L	[CALC]	N/A
1217011-09	Mg	Water	D	4350		3.03	15.2	µg/L	B120722	1200328
LA-03S										
1217011-08	Ag	Water	D	0.005	U	0.005	0.020	µg/L	B120811	1200339
1217011-08	Ca	Water	D	8710		30.3	152	µg/L	B120722	1200328
1217011-08	Hardness	Water	D	39.6		0.09	0.44	mg eq CaCO3/L	[CALC]	N/A
1217011-08	Mg	Water	D	4350		3.03	15.2	µg/L	B120722	1200328

Project ID: CSC-CH1201
 PM: Lydia Greaves



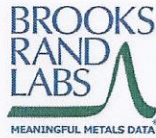
BRL Report 1217011
 Client PM: Gina Johnston
 Client PO: LSA

Accuracy & Precision Summary

Batch: B120722
 Lab Matrix: Water
 Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B120722-BS1	Laboratory Fortified Blank (1210062)						
	Ca		606.1	609.0	µg/L	100% 75-125	
	Mg		60.61	59.32	µg/L	98% 75-125	
B120722-SRM1	Certified Reference Material (1132016, NIST 1643e)						
	Ca		32300	30240	µg/L	94% 75-125	
	Mg		8037	7687	µg/L	96% 75-125	
B120722-SRM2	Certified Reference Material (1219014, Hardness CRM -batch QC)						
	Ca		70400	68060	µg/L	97% 85-115	
	Mg		34000	33550	µg/L	99% 85-115	
B120722-DUP2	Duplicate (1217011-01)						
	Ca	4479		4471	µg/L		0.2% 20
	Mg	1746		1751	µg/L		0.3% 20
B120722-MS2	Matrix Spike (1217011-01)						
	Ca	4479	1515	5923	µg/L	95% 75-125	
	Mg	1746	151.5	1891	µg/L	NR 75-125	
B120722-MSD2	Matrix Spike Duplicate (1217011-01)						
	Ca	4479	1515	5950	µg/L	97% 75-125	0.4% 20
	Mg	1746	151.5	1901	µg/L	NR 75-125	0.5% 20

Project ID: CSC-CH1201
PM: Lydia Greaves



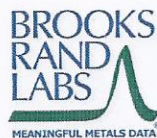
BRL Report 1217011
Client PM: Gina Johnston
Client PO: LSA

Accuracy & Precision Summary

Batch: B120811
Lab Matrix: Water
Method: EPA 1638

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B120811-BS1	Laboratory Fortified Blank (1210062) Ag		0.4040	0.397	µg/L	98% 75-125	
B120811-SRM1	Certified Reference Material (1202032, NIST 1643e) Ag		1.062	0.932	µg/L	88% 75-125	
B120811-DUP1	Duplicate (1217011-01) Ag	ND		ND	µg/L		N/C 20
B120811-MS1	Matrix Spike (1217011-01) Ag	ND	5.051	4.773	µg/L	94% 75-125	
B120811-MSD1	Matrix Spike Duplicate (1217011-01) Ag	ND	5.051	4.836	µg/L	96% 75-125	1% 20

Project ID: CSC-CH1201
PM: Lydia Greaves



BRL Report 1217011
Client PM: Gina Johnston
Client PO: LSA

Method Blanks & Reporting Limits

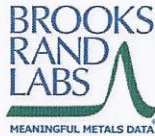
Batch: B120722
Matrix: Water
Method: EPA 1638
Analyte: Ca

Sample	Result	Units		
B120722-BLK1	6.19	µg/L		
B120722-BLK2	7.00	µg/L		
B120722-BLK3	7.50	µg/L		
B120722-BLK4	7.81	µg/L		
Average: 7.13		Standard Deviation: 0.71	MDL: 6.06	
Limit: 30.30		Limit: 6.06	MRL: 30.3	

Analyte: Mg

Sample	Result	Units		
B120722-BLK1	0.35	µg/L		
B120722-BLK2	0.35	µg/L		
B120722-BLK3	0.72	µg/L		
B120722-BLK4	0.36	µg/L		
Average: 0.45		Standard Deviation: 0.18	MDL: 0.61	
Limit: 3.03		Limit: 0.61	MRL: 3.03	

Project ID: CSC-CH1201
PM: Lydia Greaves



BRL Report 1217011
Client PM: Gina Johnston
Client PO: LSA

Sample Containers

Lab ID: 1217011-01

Sample: FR-S

Des Container
A Bottle HDPE ICP-W

Size
125 mL

Lot
12-066

Report Matrix: Water
Sample Type: Sample
Preservation
0.1% HNO3 (BRL)

P-Lot
1210015

Collected: 04/22/2012
Received: 04/24/2012
pH Ship. Cont.
<2 Cooler

Lab ID: 1217011-02

Sample: HB-S

Des Container
A Bottle HDPE ICP-W

Size
125 mL

Lot
12-066

Report Matrix: Water
Sample Type: Sample
Preservation
0.1% HNO3 (BRL)

P-Lot
1210015

Collected: 04/22/2012
Received: 04/24/2012
pH Ship. Cont.
<2 Cooler

Lab ID: 1217011-03

Sample: BC-S

Des Container
A Bottle HDPE ICP-W

Size
125 mL

Lot
12-066

Report Matrix: Water
Sample Type: Sample
Preservation
0.1% HNO3 (BRL)

P-Lot
1210015

Collected: 04/22/2012
Received: 04/24/2012
pH Ship. Cont.
<2 Cooler

Lab ID: 1217011-04

Sample: LA-01S

Des Container
A Bottle HDPE ICP-W

Size
125 mL

Lot
12-066

Report Matrix: Water
Sample Type: Sample
Preservation
0.1% HNO3 (BRL)

P-Lot
1210015

Collected: 04/22/2012
Received: 04/24/2012
pH Ship. Cont.
<2 Cooler

Lab ID: 1217011-05

Sample: LA-01B

Des Container
A Bottle HDPE ICP-W

Size
125 mL

Lot
12-066

Report Matrix: Water
Sample Type: Sample
Preservation
0.1% HNO3 (BRL)

P-Lot
1210015

Collected: 04/22/2012
Received: 04/24/2012
pH Ship. Cont.
<2 Cooler

Lab ID: 1217011-06

Sample: LA-02S

Des Container
A Bottle HDPE ICP-W

Size
125 mL

Lot
12-066

Report Matrix: Water
Sample Type: Sample
Preservation
0.1% HNO3 (BRL)

P-Lot
1210015

Collected: 04/22/2012
Received: 04/24/2012
pH Ship. Cont.
<2 Cooler

Lab ID: 1217011-07

Sample: LA-02B

Des Container
A Bottle HDPE ICP-W

Size
125 mL

Lot
12-066

Report Matrix: Water
Sample Type: Sample
Preservation
0.1% HNO3 (BRL)

P-Lot
1210015

Collected: 04/22/2012
Received: 04/24/2012
pH Ship. Cont.
<2 Cooler

Project ID: CSC-CH1201
PM: Lydia Greaves



BRL Report 1217011
Client PM: Gina Johnston
Client PO: LSA

Sample Containers

Lab ID: 1217011-08

Sample: LA-03S

Des Container
A Bottle HDPE ICP-W

Size
125 mL

Lot
12-066

Report Matrix: Water
Sample Type: Sample
Preservation
0.1% HNO₃ (BRL)

P-Lot
1210015

Collected: 04/22/2012
Received: 04/24/2012
pH Ship. Cont.
<2 Cooler

Lab ID: 1217011-09

Sample: LA-03B

Des Container
A Bottle HDPE ICP-W

Size
125 mL

Lot
12-066

Report Matrix: Water
Sample Type: Sample
Preservation
0.1% HNO₃ (BRL)

P-Lot
1210015

Collected: 04/22/2012
Received: 04/24/2012
pH Ship. Cont.
<2 Cooler

Lab ID: 1217011-10

Sample: Field Blank

Des Container
A Bottle HDPE ICP-W

Size
125 mL

Lot
12-066

Report Matrix: DIW
Sample Type: Field Blank
Preservation
0.1% HNO₃ (BRL)

P-Lot
1210015

Collected: 04/22/2012
Received: 04/24/2012
pH Ship. Cont.
<2 Cooler

Shipping Containers

Cooler

Received: April 24, 2012 8:45
Tracking No: 874159988733 via FedEx
Coolant Type: Ice
Temperature: 2.6 °C

Description: Cooler
Damaged in transit? No
Returned to client? No

Custody seals present? Yes
Custody seals intact? Yes
COC present? Yes