



September 6, 2007

Entrix, Inc
Brian Frantz
590 Ygnacio Valley Road
Walnut Creek, CA 94596

RE: Brooks Rand Project: ENX002; Report #: 07BR1155

Dear Mr. Frantz,

Brooks Rand Labs (BRL) received seventeen containers, including two field blank samples, on August 8, 2007. The requested analyses listed on the chain of custody (COC) form were for total mercury (THg), trace metals including arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), iron (Fe), nickel (Ni), and lead (Pb), and hardness (calculation based on calcium (Ca) and magnesium (Mg) concentrations).

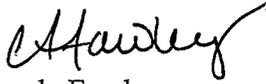
The samples were received, stored, prepared, and analyzed according to BRL standard operating procedures (SOPs) and EPA Methods 1631 and 1638. All samples were stored in a cabinet in a locked storage room until further processing. The water samples were field filtered by the client through pre-cleaned 0.45- μ m filtration units. Please refer to the Quality Assurance (QA) Summaries for QA details.

The analysis of a method blank (MB) in trace metals batch #07-0863 produced results for Mg and Ca that were greater than the practical quantitation limit (PQL). As a result, the associated MB in batch #07-0825 (hardness calculation) produced a result for hardness that was also greater than the PQL. These blank results were omitted as Grubb's outliers and were not used to method blank correct the results. All results from these batches were blank-corrected with the average of the three remaining MBs. Additionally, the standard deviation of the MBs for Mg in batch #07-0863 was greater than the method detection limit (MDL). However, all client sample results were more than ten times the highest MB result and were thus unaffected.

Sample results may have been evaluated using detection limits that have been adjusted to account for sample aliquot size; please refer to the Quality Assurance (QA) Summaries for a list of the sample specific MDLs and PQLs. Results less than or equal to the MDL have been qualified "U" for non-detect and have been reported at the MDL. Results above the MDL and less than or equal to the PQL have been qualified "B" and should be considered estimates. All QA criteria were met. No additional qualification of the data was required.

If you have any questions regarding this report, please feel free to contact us at any time.

Sincerely,



Amanda Fawley
Project Manager
amanda@brooksrands.com



Amy Durdle
Project Coordinator
amy@brooksrands.com

Reported by
Brooks Rand LLC

Contact: Amanda Fawley
3958 6th Avenue NW
Seattle, WA 98107
Tel: 206-632-6206 Fax: 206-632-6017

Summary of Results for
Entrix, Inc.

Contact: Brian Frantz
590 Ygnacio Valley Road
Walnut Creek CA 94596
Tel: 925-988-1217

Lab Project # ENX002
Lab Tracking # 07BR1155

Lab Services Agreement ENX002

Sample/Sampling/Receiving Info

Entrix, Inc.

BRL

Sample Identification	Sampling Date	Matrix	Submatrix	Sample Number	Receiving Date
FM-A	8/7/2007	Water		07BR1155 - 01	8/8/2007
FM-B	8/7/2007	Water		07BR1155 - 02	8/8/2007
FM-C	8/7/2007	Water		07BR1155 - 03	8/8/2007
FM-D	8/7/2007	Water		07BR1155 - 04	8/8/2007
FM-E	8/7/2007	Water		07BR1155 - 05	8/8/2007
Field Blank	8/7/2007	Water	Blank	07BR1155 - 06	8/8/2007
FM-A	8/7/2007	Water		07BR1155 - 07	8/8/2007
FM-B	8/7/2007	Water		07BR1155 - 08	8/8/2007
FM-C	8/7/2007	Water		07BR1155 - 09	8/8/2007
FM-D	8/7/2007	Water		07BR1155 - 10	8/8/2007
FM-E	8/7/2007	Water		07BR1155 - 11	8/8/2007
Field Blank	8/7/2007	Water	Blank	07BR1155 - 12	8/8/2007
FM-A	8/7/2007	Water		07BR1155 - 13	8/8/2007
FM-B	8/7/2007	Water		07BR1155 - 14	8/8/2007
FM-C	8/7/2007	Water		07BR1155 - 15	8/8/2007
FM-D	8/7/2007	Water		07BR1155 - 16	8/8/2007
FM-E	8/7/2007	Water		07BR1155 - 17	8/8/2007

Thursday, September 06, 2007


Project Manager

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Lab Services Agreement ENX002

As

Sample Identification	BRL Number	Total or Dissolved	Preparation date	Analysis date	Batch #	Result	Units	Qualifier (Q)
FM-A	07BR1155 - 07	D	8/13/2007	8/14/2007	07-0863	2.760	µg/L	
FM-B	07BR1155 - 08	D	8/13/2007	8/14/2007	07-0863	5.540	µg/L	
FM-C	07BR1155 - 09	D	8/13/2007	8/14/2007	07-0863	4.800	µg/L	
FM-D	07BR1155 - 10	D	8/13/2007	8/14/2007	07-0863	0.160	µg/L	B
FM-E	07BR1155 - 11	D	8/13/2007	8/14/2007	07-0863	0.120	µg/L	B
Field Blank	07BR1155 - 12	T	8/13/2007	8/14/2007	07-0863	0.060	µg/L	U

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Cd

Sample Identification	BRL Number	Total or Dissolved	Preparation date	Analysis date	Batch #	Result	Units	Qualifier (Q)
FM-A	07BR1155 - 07	D	8/13/2007	8/14/2007	07-0863	0.004	µg/L	U
FM-B	07BR1155 - 08	D	8/13/2007	8/14/2007	07-0863	0.004	µg/L	U
FM-C	07BR1155 - 09	D	8/13/2007	8/14/2007	07-0863	0.004	µg/L	U
FM-D	07BR1155 - 10	D	8/13/2007	8/14/2007	07-0863	0.004	µg/L	U
FM-E	07BR1155 - 11	D	8/13/2007	8/14/2007	07-0863	0.004	µg/L	U
Field Blank	07BR1155 - 12	T	8/13/2007	8/14/2007	07-0863	0.004	µg/L	U

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Cr

Sample Identification	BRL Number	Total or Dissolved	Preparation date	Analysis date	Batch #	Result	Units	Qualifier (Q)
FM-A	07BR1155 - 07	D	8/13/2007	8/14/2007	07-0863	0.140	µg/L	B
FM-B	07BR1155 - 08	D	8/13/2007	8/14/2007	07-0863	0.100	µg/L	B
FM-C	07BR1155 - 09	D	8/13/2007	8/14/2007	07-0863	0.090	µg/L	B
FM-D	07BR1155 - 10	D	8/13/2007	8/14/2007	07-0863	0.030	µg/L	U
FM-E	07BR1155 - 11	D	8/13/2007	8/14/2007	07-0863	0.030	µg/L	U
Field Blank	07BR1155 - 12	T	8/13/2007	8/14/2007	07-0863	0.030	µg/L	U

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Cu

Sample Identification	BRL Number	Total or Dissolved	Preparation date	Analysis date	Batch #	Result	Units	Qualifier (Q)
FM-A	07BR1155 - 07	D	8/13/2007	8/14/2007	07-0863	0.110	µg/L	B
FM-B	07BR1155 - 08	D	8/13/2007	8/14/2007	07-0863	0.060	µg/L	B
FM-C	07BR1155 - 09	D	8/13/2007	8/14/2007	07-0863	0.060	µg/L	B
FM-D	07BR1155 - 10	D	8/13/2007	8/14/2007	07-0863	0.190	µg/L	B
FM-E	07BR1155 - 11	D	8/13/2007	8/14/2007	07-0863	0.180	µg/L	B
Field Blank	07BR1155 - 12	T	8/13/2007	8/14/2007	07-0863	0.040	µg/L	U

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Fe

Sample Identification	BRL Number	Total or Dissolved	Preparation date	Analysis date	Batch #	Result	Units	Qualifier (Q)
FM-A	07BR1155 - 07	D	8/13/2007	8/27/2007	07-0863a	20,400.000	µg/L	
FM-B	07BR1155 - 08	D	8/13/2007	8/27/2007	07-0863a	16,000.000	µg/L	
FM-C	07BR1155 - 09	D	8/13/2007	8/27/2007	07-0863a	19,400.000	µg/L	
FM-D	07BR1155 - 10	D	8/13/2007	8/27/2007	07-0863a	137.000	µg/L	
FM-E	07BR1155 - 11	D	8/13/2007	8/27/2007	07-0863a	34.800	µg/L	
Field Blank	07BR1155 - 12	T	8/13/2007	8/27/2007	07-0863a	1.400	µg/L	U

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Lab Project # ENX002
Lab Tracking # 07BR1155

Lab Services Agreement ENX002

Hg

Sample Identification	BRL Number	Total or Dissolved	Preparation date	Analysis date	Batch #	Result	Units	Qualifier (Q)
FM-A	07BR1155 - 01	T	8/23/2007	8/30/2007	07-0871	0.100	ng/L	U
FM-B	07BR1155 - 02	T	8/23/2007	8/30/2007	07-0871	0.100	ng/L	U
FM-C	07BR1155 - 03	T	8/23/2007	8/30/2007	07-0871	0.100	ng/L	U
FM-D	07BR1155 - 04	T	8/23/2007	8/30/2007	07-0871	0.410	ng/L	
FM-E	07BR1155 - 05	T	8/23/2007	8/30/2007	07-0871	0.220	ng/L	B
Field Blank	07BR1155 - 06	T	8/23/2007	8/30/2007	07-0871	0.100	ng/L	U

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Lab Project # ENX002
Lab Tracking # 07BR1155

Lab Services Agreement ENX002

Ni

Sample Identification	BRL Number	Total or Dissolved	Preparation date	Analysis date	Batch #	Result	Units	Qualifier (Q)
FM-A	07BR1155 - 07	D	8/13/2007	8/14/2007	07-0863	0.390	µg/L	
FM-B	07BR1155 - 08	D	8/13/2007	8/14/2007	07-0863	0.310	µg/L	
FM-C	07BR1155 - 09	D	8/13/2007	8/14/2007	07-0863	0.240	µg/L	
FM-D	07BR1155 - 10	D	8/13/2007	8/14/2007	07-0863	0.070	µg/L	B
FM-E	07BR1155 - 11	D	8/13/2007	8/14/2007	07-0863	0.060	µg/L	B
Field Blank	07BR1155 - 12	T	8/13/2007	8/14/2007	07-0863	0.040	µg/L	U

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Lab Project # ENX002
Lab Tracking # 07BR1155

Lab Services Agreement ENX002

Pb

Sample Identification	BRL Number	Total or Dissolved	Preparation date	Analysis date	Batch #	Result	Units	Qualifier (Q)
FM-A	07BR1155 - 07	D	8/13/2007	8/14/2007	07-0863	0.010	µg/L	U
FM-B	07BR1155 - 08	D	8/13/2007	8/14/2007	07-0863	0.010	µg/L	U
FM-C	07BR1155 - 09	D	8/13/2007	8/14/2007	07-0863	0.010	µg/L	U
FM-D	07BR1155 - 10	D	8/13/2007	8/14/2007	07-0863	0.010	µg/L	U
FM-E	07BR1155 - 11	D	8/13/2007	8/14/2007	07-0863	0.010	µg/L	U
Field Blank	07BR1155 - 12	T	8/13/2007	8/14/2007	07-0863	0.010	µg/L	U

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Lab Services Agreement ENX002

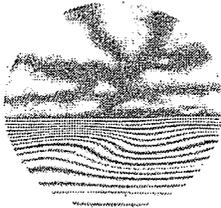
Hardness

Sample Identification	BRL Number	Total or Dissolved	Preparation date	Analysis date	Batch #	Result	Units	Qualifier (Q)
FM-A	07BR1155 - 13	T	8/13/2007	8/27/2007	07-0825	41.900	mg/L	
FM-B	07BR1155 - 14	T	8/13/2007	8/27/2007	07-0825	54.900	mg/L	
FM-C	07BR1155 - 15	T	8/13/2007	8/27/2007	07-0825	49.300	mg/L	
FM-D	07BR1155 - 16	T	8/13/2007	8/27/2007	07-0825	9.160	mg/L	
FM-E	07BR1155 - 17	T	8/13/2007	8/27/2007	07-0825	9.020	mg/L	

Thursday, September 06, 2007


Project Manager

QUALITY ASSURANCE SUMMARY



BROOKSRAND
TRACE METALS ANALYSIS & PRODUCTS

3958 6th Avenue NW
Seattle, WA 98107
Voice: 206-632-6206
Fax: 206-632-6017

Batch #: 07-0871

Method #: EPA 1631E

Analyte: Hg

Matrix: Water

BIAS Criterion: Recovery = 77-123%
Continuing Calibration Verification (CCV)

QCS ID	Certified Value ng/L	Measured Value ng/L	Recovery %
CCV1	5.00	4.95	99%
CCV2	5.00	5.16	103%
CCV3	5.00	5.19	104%
CCV4	5.00	5.02	100%
CCV5	5.00	5.27	105%

BIAS Criterion: Recovery = 85-115%
Independent Calibration Verification (ICV)

QCS ID	Certified Value ng/L	Measured Value ng/L	Recovery %
ICV*	16.01	15.60	97%

* Preparation of the CRM NIST 1641d.

BIAS Criteria: Recovery = 71-125%, RPD ≤ 24%
Matrix Spikes/Matrix Spike Duplicates (MS/MSD)

Sample ID	Sample Value ng/L	Matrix Spike			Matrix Spike Duplicate			Duplicate RPD
		Spiked Value ng/L	Measured Value ng/L	MS Recovery %	Spiked Value ng/L	Measured Value ng/L	MSD Recovery %	
07BR1130-01	101.8	401.6	523.1	105%	453.0	581.1	106%	11%
07BR1147-01	789.4	1020	1866	105%	1020	1864	105%	0%

1.0% BrCl Method Blanks (MB) Criterion: MB ≤ 0.5 ng/L, StDev ≤ 2/3 MDL

MB1 ng/L	MB2 ng/L	MB3 ng/L	MB4 ng/L	Average ng/L	StDev ng/L	MB MDL ng/L	MB PQL ng/L
0.18	0.17	0.17	0.12	0.16	0.03	0.10	0.25

1% BrCl MB prepared in quadruplicate.

Average MB result multiplied by appropriate factor to produce correction factor for each sample preservation BrCl level.

Sample Specific Detection Limits

Sample ID	MDL ng/L	PQL ng/L
07BR1130-01	2.1	5.1
07BR1130-02	0.21	0.53
07BR1130-03	0.36	0.91
07BR1130-04	0.47	1.17
07BR1130-05	0.53	1.33

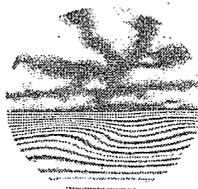
Sample Specific Detection Limits

Sample ID	MDL ng/L	PQL ng/L
07BR1130-06	0.43	1.07
07BR1130-07	0.45	1.13
07BR1130-08	0.42	1.05
07BR1130-09	0.40	1.00
07BR1147-01	2.0	5.1

Nicole C. Mead
Quality Assurance Officer

A. Hawley
Project Manager

QUALITY ASSURANCE SUMMARY



BROOKSTRAND
TRACE METALS ANALYSIS & PRODUCTS

3958 6th Avenue NW
Seattle, WA 98107
Voice: 206-632-6206
Fax: 206-632-6017

Batch #: 07-0863

Method #: EPA 1638 Mod. (ICP-MS)

Analyte: Trace Metals

Matrix: Water

BIAS Criterion: Recovery = 85-115%
Independent Calibration Verification (ICV)

Analyte	Certified Value µg/L	Measured Value µg/L	Recovery %
Cr	50.00	49.58	99%
Ni	50.00	51.30	103%
Cu	50.00	52.68	105%
As	50.00	48.52	97%
Cd	5.00	5.16	103%
Ba	50.00	50.19	100%
Pb	5.00	5.66	113%

BIAS Criteria: Recovery = 75-125%
Certified Reference Materials (CRM)

Analyte	NIST 1640			NIST 1643e		
	Certified Value µg/L	Measured Value µg/L	Recovery %	Certified Value µg/L	Measured Value µg/L	Recovery %
Cr	38.6	38.0	98%	20.4	20.6	101%
Ni	27.4	28.5	104%	62.41	62.48	100%
Cu	85.2	90.4	106%	22.76	23.24	102%
As	26.67	25.91	97%	60.45	55.89	92%
Cd	22.79	22.43	98%	6.568	6.439	98%
Ba	148.0	142.2	96%	544.2	535.3	98%
Pb	27.89	31.12	112%	19.63	19.84	101%

BIAS Criteria: Recovery = 75-125%, RPD ≤25%
Sample 07BR1113-33 Matrix Spike and Matrix Spike Duplicate Analysis (MS/MSD)

Analyte	Sample Value µg/L	Matrix Spike			Matrix Spike Duplicate			Duplicate RPD
		Spiked Value µg/L	Measured Value µg/L	MS Recovery %	Spiked Value µg/L	Measured Value µg/L	MSD Recovery %	
Ba	9.91	100.0	113.2	103%	100.0	111.5	102%	2%
Pb	0.15	5.00	5.21	101%	5.00	5.11	99%	2%

PRECISION Criteria: RPD ≤25% or results +/-PQL if ≤5x PQL
Sample 07BR1113-33 Method Duplicate Analysis (MD)

Analyte	Sample Value µg/L	Duplicate Value µg/L	Average Value µg/L	Duplicate RPD
Ba	9.91	10.12	10.01	2%
Pb	0.15	0.14	0.15	***

*** Results are less than 5x the PQL and within one PQL of each other, satisfying the secondary acceptance criteria.

Quality Assurance Officer

Project Manager

QUALITY ASSURANCE SUMMARY

Batch #: 07-0863 (continued)

Method #: EPA 1638 Mod. (ICP-MS)

Analyte: Trace Metals

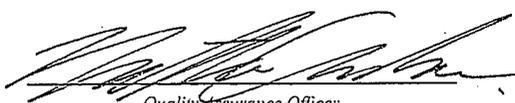
Matrix: Water

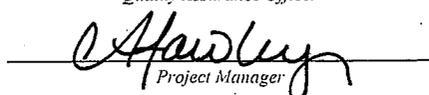
BIAS		Criteria: Recovery = 75-125%, RPD ≤25%						
Sample 07BR1155-07 Matrix Spike and Matrix Spike Duplicate Analysis (MS/MSD)								
Analyte	Sample Value µg/L	Matrix Spike			Matrix Spike Duplicate			Duplicate RPD
		Spiked Value µg/L	Measured Value µg/L	MS Recovery %	Spiked Value µg/L	Measured Value µg/L	MSD Recovery %	
Cr	0.14	1.00	0.97	83%	1.00	0.96	82%	1%
Ni	0.39	1.00	1.25	86%	1.00	1.26	87%	0%
Cu	0.11	1.00	1.07	97%	1.00	1.07	97%	0%
As	2.76	1.00	3.71	95%	1.00	3.68	92%	1%
Cd	0.003	0.500	0.479	95%	0.500	0.473	94%	1%
Pb	0.01	0.50	0.54	105%	0.50	0.54	105%	1%

PRECISION		Criteria: RPD ≤25% or results +/-PQL if ≤5x PQL		
Sample 07BR1155-07 Method Duplicate Analysis (MD)				
Analyte	Sample Value µg/L	Duplicate Value µg/L	Average Value µg/L	Duplicate RPD
Cr	0.14	0.11	0.1	***
Ni	0.39	0.38	0.38	5%
Cu	0.11	0.10	0.10	***
As	2.76	2.78	2.77	1%
Cd	0.003	0.003	0.003	***
Pb	0.01	0.01	0.01	***

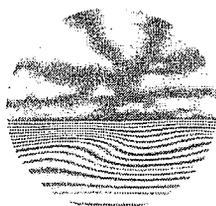
*** Results are less than 5x the PQL and within one PQL of each other, satisfying the secondary acceptance criteria.

Method Blanks (MB)							Method Detection Limits	
Criteria: Avg. ≤ PQL and StDev ≤ MDL or < 1/10th sample result							MDL	PQL
Analyte	MB1 µg/L	MB2 µg/L	MB3 µg/L	MB4 µg/L	Average µg/L	StDev µg/L	µg/L	µg/L
Cr	-0.01	-0.01	0.00	-0.01	-0.01	0.00	0.03	0.15
Ni	0.00	-0.01	-0.01	0.00	0.00	0.00	0.04	0.20
Cu	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.20
As	-0.01	0.00	0.00	-0.01	-0.01	0.01	0.06	0.20
Cd	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.010
Ba	-0.02	-0.02	-0.02	-0.02	-0.02	0.00	0.01	0.05
Pb	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.05


Quality Assurance Officer


Project Manager

QUALITY ASSURANCE SUMMARY



BROOKSRAND
TRACE METALS ANALYSIS & PRODUCTS

3958 6th Avenue NW
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Voice: 206-632-6206
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Batch #: 07-0863a

Method #: EPA 1638 Mod. (ICP-MS)

Analyte: Ca, Mg, and Fe

Matrix: Water

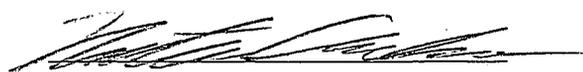
BIAS		Criteria: Recovery = 75-125%				
Certified Reference Materials (CRM)						
Analyte	NIST 1640			NIST 1643e		
	Certified Value µg/L	Measured Value µg/L	Recovery %	Certified Value µg/L	Measured Value µg/L	Recovery %
Mg	5819	5788	99%	8037	8020	100%
Ca	7045	7486	106%	32300	31323	97%
Fe	34.3	40.6	118%	n/a	n/a	n/a

BIAS		Criterion: Recovery = 75-125%	
ERA Hardness CRM			
Analyte	Expected Value* mg/L	Measured Value µg/L	Recovery %
Mg	6550	6677	102%
Ca	32400	34808	107%

* Analytical verification values from the Round Robin validation of the Hardness standard.

BIAS		Criteria: Recovery = 75-125%, RPD <25%						
Sample 07BR1155-07 Matrix Spike and Matrix Spike Duplicate Analysis (MS/MSD)								
Analyte	Sample Value µg/L	Matrix Spike			Matrix Spike Duplicate			Duplicate RPD
		Spiked Value µg/L	Measured Value µg/L	MS Recovery %	Spiked Value µg/L	Measured Value µg/L	MSD Recovery %	
Mg	3202	20000	23518	102%	20000	24085	104%	2%
Fe	20428	20000	40557	101%	20000	41479	105%	2%

PRECISION		Criteria: RPD <25% or results +/-PQL if <5x PQL		
Sample 07BR1155-07 Method Duplicate Analysis (MD)				
Analyte	Sample Value µg/L	Duplicate Value µg/L	Average Value µg/L	Duplicate RPD
Mg	3202	3321	3262	4%
Fe	20428	20851	20639	2%


 Quality Assurance Officer

 Project Manager

QUALITY ASSURANCE SUMMARY

Batch #: 07-0863a (continued)

Method #: EPA 1638 Mod. (ICP-MS)

Analyte: Ca, Mg, and Fe

Matrix: Water

BIAS		Criteria: Recovery = 75-125%, RPD <25%						
Sample 07BR1155-16 Matrix Spike and Matrix Spike Duplicate Analysis (MS/MSD)								
Analyte	Sample Value µg/L	Matrix Spike			Matrix Spike Duplicate			Duplicate RPD
		Spiked Value µg/L	Measured Value µg/L	MS Recovery %	Spiked Value µg/L	Measured Value µg/L	MSD Recovery %	
Mg	616.3	2000	2595	99%	2000	2558	97%	1%
Ca	2652	2000	4777	106%	2000	4804	108%	1%

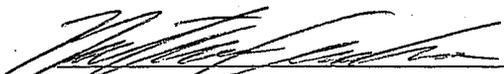
PRECISION		Criteria: RPD <25% or results +/-PQL if <5x PQL		
Sample 07BR1155-16 Method Duplicate Analysis (MD)				
Analyte	Sample Value µg/L	Duplicate Value µg/L	Average Value µg/L	Duplicate RPD
Mg	616	584	600	5%
Ca	2652	2553	2603	4%

Method Blanks (MB)		Criteria: Avg. < PQL and StDev < MDL or < 1/10th sample result				
Analyte	MB1 µg/L	MB2 µg/L	MB3 µg/L	MB4 µg/L	Average µg/L	StDev µg/L
Mg	17.1	2.7	0.9	-0.1	1.2	1.4
Ca	59.5	3.1	-4.5	-4.2	-1.9	4.3
Fe	-0.4	-0.6	-0.2	0.1	-0.3	0.3

MB1 for Mg and Ca is omitted as a Grubb's outlier. It is not included in the MB average used to blank correct the results. The MB standard deviation for Mg is >MDL, all sample results >10x the greatest blank result.

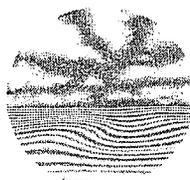
Method Detection Limits		
Analyte	MDL µg/L	PQL µg/L
Mg	0.6	3.0
Ca	6.0	30.0
Fe	1.4	5.0

Sample Specific Detection Limits For Fe		
Sample ID	MDL µg/L	PQL µg/L
07BR1155-07	7	25
07BR1155-08	7	25
07BR1155-09	7	25


 Quality Assurance Officer

 Project Manager

QUALITY ASSURANCE SUMMARY



BROOKSTRAND
TRACE METALS ANALYSIS & PRODUCTS

3958 6th Avenue NW
Seattle, WA 98107
Voice: 206-632-6206
Fax: 206-632-6017

Batch #: 07-0825

Method #: SM 2340 B (calculation)

Analyte: Hardness

Matrix: Water

BIAS		Criterion: Recovery = 75-125%	
ERA Hardness CRM			
Analyte	Expected Value* mg/L	Measured Value mg/L	Recovery %
Hardness	110	114	104%

* Analytical verification value from the Round Robin validation of the Hardness standard.

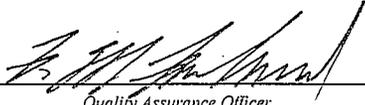
BIAS		Criteria: Recovery = 75-125%, RPD <25%						
Matrix Spike and Matrix Spike Duplicate Analysis (MS/MSD)								
Sample ID	Sample Value mg/L	Matrix Spike			Matrix Spike Duplicate			Duplicate RPD
		Spiked Value mg/L	Measured Value mg/L	MS Recovery %	Spiked Value mg/L	Measured Value mg/L	MSD Recovery %	
07BR1155-16	9.16	13.23	22.62	102%	13.23	22.53	101%	0%

PRECISION		Criteria: RPD <25% or results +/-PQL if <5x PQL		
Method Duplicate Analysis (MD)				
Sample ID	Sample Value mg/L	Duplicate Value mg/L	Average Value mg/L	Duplicate RPD
07BR1155-16	9.16	8.78	8.97	4%

Method Blanks (MB)		Criteria: Avg. < PQL and StDev < MDL or < 1/10th sample result				
Analyte	MB1 mg/L	MB2 mg/L	MB3 mg/L	MB4 mg/L	Average mg/L	StDev mg/L
Hardness	0.219*	0.019	-0.007	-0.011	0.000	0.016

* Omitted as a Grubb's outlier. Result not used to calculate average MB used to correct sample results.

Method Detection Limits		
Analyte	MDL mg/L	PQL mg/L
Hardness	0.018	0.088


 Quality Assurance Officer

 Project Manager



Sample Receiving Log

Tracking # **07BR1155**

Customer: Entrix, Inc.
Contact: Brian Frantz
Project Ref. #: ENX002

BRL Project Manager: Amanda Fawley

Due Date: 9/5/2007
Receiving Date: 8/8/2007
Receiving Time: 9:00 AM
Logged-in by: Katie Jahanmir
Log-in Date: 8/8/2007
Log-in Time: 12:26 PM

QA Level Standard
Sample Condition Intact
Shipping container intact? Yes
Shipping container type: Cooler
Shipping container temp: 4 °C
Shipping container coolant: Ice

Sample Turnaround Time:
Contract Turnaround Time: 28 days

Airbill present? Yes
Airbill # 862166261471
Courier: FedEx

Custody seal present? Yes
Custody seal intact? Yes
COC Present? Yes
COC/Sample tag agree? Yes

COC Number: N/A

Comments:

Lab ID:

<p>01 Sample Tag #: FM-A Collection Date/Time: 8/7/2007, 10:15:00 AM ContainerType and Lot #: FLPE bottle, 07-032 Size: 250-mL</p>	<p>Matrix/Sub-Matrix: Water, Preservation: none Acid Lot#: n/a pH: Sample Storage Location: Cabinet #5</p>	<p>Filtered?: No</p>
---	--	----------------------

Comments:

Analysis / Method: Hg EPA 1631

<p>02 Sample Tag #: FM-B Collection Date/Time: 8/7/2007, 10:50:00 AM ContainerType and Lot #: FLPE bottle, 07-032 Size: 250-mL</p>	<p>Matrix/Sub-Matrix: Water, Preservation: none Acid Lot#: n/a pH: Sample Storage Location: Cabinet #5</p>	<p>Filtered?: No</p>
---	--	----------------------

Comments:

Analysis / Method: Hg EPA 1631

<p>03 Sample Tag #: FM-C Collection Date/Time: 8/7/2007, 11:10:00 AM ContainerType and Lot #: FLPE bottle, 07-032 Size: 250-mL</p>	<p>Matrix/Sub-Matrix: Water, Preservation: none Acid Lot#: n/a pH: Sample Storage Location: Cabinet #5</p>	<p>Filtered?: No</p>
---	--	----------------------

Comments:

Analysis / Method: Hg EPA 1631

Lab ID:

04 Sample Tag #: FM-D
Collection Date/Time: 8/7/2007, 12:00:00 PM
ContainerType and Lot #: FLPE bottle, 07-032
Size: 250-mL
Matrix/Sub-Matrix: Water,
Preservation: none
Acid Lot#: n/a
pH:
Filtered?: No
Sample Storage Location: Cabinet #5

Comments:

Analysis / Method: Hg EPA 1631

05 Sample Tag #: FM-E
Collection Date/Time: 8/7/2007, 12:30:00 PM
ContainerType and Lot #: FLPE bottle,
Size: 500-mL
Matrix/Sub-Matrix: Water,
Preservation: none
Acid Lot#: n/a
pH:
Filtered?: No
Sample Storage Location: Cabinet #5

Comments:

Analysis / Method: Hg EPA 1631

06 Sample Tag #: Field Blank
Collection Date/Time: 8/7/2007, 12:45:00 PM
ContainerType and Lot #: FLPE bottle, 07-032
Size: 250-mL
Matrix/Sub-Matrix: Water, Blank
Preservation: none
Acid Lot#: n/a
pH:
Filtered?: No
Sample Storage Location: Cabinet #5

Comments:

Analysis / Method: Hg EPA 1631 Do Not Spike

07 Sample Tag #: FM-A
Collection Date/Time: 8/7/2007, 10:15:00 AM
ContainerType and Lot #: HDPE bottle, 07-092
Size: 250-mL
Matrix/Sub-Matrix: Water,
Preservation: none
Acid Lot#: n/a
pH:
Filtered?: Yes
Sample Storage Location: Cabinet #5

Comments:

Analysis / Method: As EPA 1638 Mod. (ICP-MS)
Analysis / Method: Cd EPA 1638 Mod. (ICP-MS)
Analysis / Method: Cr EPA 1638 Mod. (ICP-MS)
Analysis / Method: Cu EPA 1638 Mod. (ICP-MS)
Analysis / Method: Fe EPA 1638 Mod. (ICP-MS)
Analysis / Method: Mg EPA 1638 Mod. (ICP-MS)
Analysis / Method: Ni EPA 1638 Mod. (ICP-MS)
Analysis / Method: Pb EPA 1638 Mod. (ICP-MS)

08 Sample Tag #: FM-B
Collection Date/Time: 8/7/2007, 10:50:00 AM
ContainerType and Lot #: HDPE bottle, 07-092
Size: 250-mL
Matrix/Sub-Matrix: Water,
Preservation: none
Acid Lot#: n/a
pH:
Filtered?: Yes
Sample Storage Location: Cabinet #5

Comments:

Analysis / Method: As EPA 1638 Mod. (ICP-MS)
Analysis / Method: Cd EPA 1638 Mod. (ICP-MS)
Analysis / Method: Cr EPA 1638 Mod. (ICP-MS)
Analysis / Method: Cu EPA 1638 Mod. (ICP-MS)
Analysis / Method: Fe EPA 1638 Mod. (ICP-MS)
Analysis / Method: Mg EPA 1638 Mod. (ICP-MS)

Lab ID:

Analysis / Method: Ni EPA 1638 Mod. (ICP-MS)

Analysis / Method: Pb EPA 1638 Mod. (ICP-MS)

09

Sample Tag #: FM-C

Collection Date/Time: 8/7/2007, 11:10:00 AM

ContainerType and Lot #: HDPE bottle, 07-092

Size: 250-mL

Matrix/Sub-Matrix: Water,

Preservation: none

Acid Lot#: n/a

pH:

Filtered?: Yes

Sample Storage Location: Cabinet #5

Comments:

Analysis / Method: As EPA 1638 Mod. (ICP-MS)

Analysis / Method: Cd EPA 1638 Mod. (ICP-MS)

Analysis / Method: Cr EPA 1638 Mod. (ICP-MS)

Analysis / Method: Cu EPA 1638 Mod. (ICP-MS)

Analysis / Method: Fe EPA 1638 Mod. (ICP-MS)

Analysis / Method: Mg EPA 1638 Mod. (ICP-MS)

Analysis / Method: Ni EPA 1638 Mod. (ICP-MS)

Analysis / Method: Pb EPA 1638 Mod. (ICP-MS)

10

Sample Tag #: FM-D

Collection Date/Time: 8/7/2007, 12:00:00 PM

ContainerType and Lot #: HDPE bottle, 07-092

Size: 250-mL

Matrix/Sub-Matrix: Water,

Preservation: none

Acid Lot#: n/a

pH:

Filtered?: Yes

Sample Storage Location: Cabinet #5

Comments:

Analysis / Method: As EPA 1638 Mod. (ICP-MS)

Analysis / Method: Cd EPA 1638 Mod. (ICP-MS)

Analysis / Method: Cr EPA 1638 Mod. (ICP-MS)

Analysis / Method: Cu EPA 1638 Mod. (ICP-MS)

Analysis / Method: Fe EPA 1638 Mod. (ICP-MS)

Analysis / Method: Mg EPA 1638 Mod. (ICP-MS)

Analysis / Method: Ni EPA 1638 Mod. (ICP-MS)

Analysis / Method: Pb EPA 1638 Mod. (ICP-MS)

11

Sample Tag #: FM-E

Collection Date/Time: 8/7/2007, 12:30:00 PM

ContainerType and Lot #: HDPE bottle, 07-092

Size: 250-mL

Matrix/Sub-Matrix: Water,

Preservation: none

Acid Lot#: n/a

pH:

Filtered?: Yes

Sample Storage Location: Cabinet #5

Comments:

Analysis / Method: As EPA 1638 Mod. (ICP-MS)

Analysis / Method: Cd EPA 1638 Mod. (ICP-MS)

Analysis / Method: Cr EPA 1638 Mod. (ICP-MS)

Analysis / Method: Cu EPA 1638 Mod. (ICP-MS)

Analysis / Method: Fe EPA 1638 Mod. (ICP-MS)

Analysis / Method: Mg EPA 1638 Mod. (ICP-MS)

Analysis / Method: Ni EPA 1638 Mod. (ICP-MS)

Analysis / Method: Pb EPA 1638 Mod. (ICP-MS)

Lab ID:

12

Matrix/Sub-Matrix: Water, Blank

Sample Tag #: Field Blank
Collection Date/Time: 8/7/2007, 12:45:00 PM
ContainerType and Lot #: HDPE bottle, 07-092
Size: 250-mL

Preservation: none
Acid Lot#: n/a
pH:
Filtered?: No
Sample Storage Location: Cabinet #5

Comments:

Analysis / Method:	As	EPA 1638 Mod. (ICP-MS)	Do Not Spike
Analysis / Method:	Cd	EPA 1638 Mod. (ICP-MS)	Do Not Spike
Analysis / Method:	Cr	EPA 1638 Mod. (ICP-MS)	Do Not Spike
Analysis / Method:	Cu	EPA 1638 Mod. (ICP-MS)	Do Not Spike
Analysis / Method:	Fe	EPA 1638 Mod. (ICP-MS)	Do Not Spike
Analysis / Method:	Mg	EPA 1638 Mod. (ICP-MS)	Do Not Spike
Analysis / Method:	Ni	EPA 1638 Mod. (ICP-MS)	Do Not Spike
Analysis / Method:	Pb	EPA 1638 Mod. (ICP-MS)	Do Not Spike

13

Matrix/Sub-Matrix: Water,

Sample Tag #: FM-A
Collection Date/Time: 8/7/2007, 10:15:00 AM
ContainerType and Lot #: HDPE bottle, 07-092
Size: 250-mL

Preservation: none
Acid Lot#: n/a
pH:
Filtered?: No
Sample Storage Location: Cabinet #5

Comments:

Analysis / Method:	Ca	EPA 1638 Mod. (ICP-MS)
Analysis / Method:	Hardness	SM 2340 B (Calculation)
Analysis / Method:	Mg	EPA 1638 Mod. (ICP-MS)

14

Matrix/Sub-Matrix: Water,

Sample Tag #: FM-B
Collection Date/Time: 8/7/2007, 10:50:00 AM
ContainerType and Lot #: HDPE bottle, 07-092
Size: 250-mL

Preservation: none
Acid Lot#: n/a
pH:
Filtered?: No
Sample Storage Location: Cabinet #5

Comments:

Analysis / Method:	Ca	EPA 1638 Mod. (ICP-MS)
Analysis / Method:	Hardness	SM 2340 B (Calculation)
Analysis / Method:	Mg	EPA 1638 Mod. (ICP-MS)

15

Matrix/Sub-Matrix: Water,

Sample Tag #: FM-C
Collection Date/Time: 8/7/2007, 11:10:00 AM
ContainerType and Lot #: HDPE bottle, 07-092
Size: 250-mL

Preservation: none
Acid Lot#: n/a
pH:
Filtered?: No
Sample Storage Location: Cabinet #5

Comments:

Analysis / Method:	Ca	EPA 1638 Mod. (ICP-MS)
Analysis / Method:	Hardness	SM 2340 B (Calculation)
Analysis / Method:	Mg	EPA 1638 Mod. (ICP-MS)

16

Matrix/Sub-Matrix: Water,

Sample Tag #: FM-D
Collection Date/Time: 8/7/2007, 12:00:00 PM
ContainerType and Lot #: HDPE bottle, 07-092
Size: 250-mL

Preservation: none
Acid Lot#: n/a
pH:
Filtered?: No
Sample Storage Location: Cabinet #5

Comments:

Analysis / Method:	Ca	EPA 1638 Mod. (ICP-MS)
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Lab ID:

Analysis / Method: Hardness SM 2340 B (Calculation)
Analysis / Method: Mg EPA 1638 Mod. (ICP-MS)

17

Sample Tag #: FM-E
Collection Date/Time: 8/7/2007, 12:30:00 PM
Container Type and Lot #: HDPE bottle, 07-092
Size: 250-mL
Matrix/Sub-Matrix: Water,
Preservation: none
Acid Lot#: n/a
pH:
Filtered?: No
Sample Storage Location: Cabinet #5

Comments:

Analysis / Method: Ca EPA 1638 Mod. (ICP-MS)
Analysis / Method: Hardness SM 2340 B (Calculation)
Analysis / Method: Mg EPA 1638 Mod. (ICP-MS)

updated Amy Dunde 8/9/07
Sample Custodian signature Date
Amy Dunde 8/09/07
Reviewed by signature Date



BROOKSRAND
TRACE METALS ANALYSIS & PRODUCTS

Chain Of Custody Record

Page 1 of 1
White: LAB COPY
Yellow: CUSTOMER COPY

Client: ENTRIX	COC receipt confirmation? (Y / (N))	Ship to: Brooks Rand LLC
Contact: Coralia Dayde	If yes, by Fax / Email (circle one)	3958 6 th Avenue NW
Address: 590 Ygnacio Valley rd, ste 200 Walnut Creek CA 94596	Fax #:	Seattle, WA 98107
Phone #: 925-988-1234	Email:	Phone: 206-632-6206
PO #:	Sampler's name: C. Dayde - J Aldrin	Fax: 206-632-6017
	Client project ID: PCWA-WQ	Email: samples@brooksrand.com
	BRL project ID: ENK002	www.brooksrand.com

Sample ID	Collection		Miscellaneous			Field Preservation			Analyses required							Comments			
	Date	Time	Sampler (initials)	Matrix type	# of containers	Sample field filtered (Y/N)	Unpreserved / Ice only	HCl/HNO ₃ /BCl (circle one)	Other (specify)	Total Hg, EPA 1631	Methyl Hg, EPA 1630	Metals ICP-MS (specify)	As / Se species (specify)	% Solids	Filtration		Other (specify) <i>As, Cd, Cr, Hg, Ni, Pb</i>	Other (specify) <i>Hudsons</i>	Other (specify)
1 FM-A	8-7-07	10:15	CDJA	H ₂ O	3	Y/N	X			X						X			THg & Hudsons not filtered
2 FMB	8-7-07	10:50	CDJA	H ₂ O	3	Y/N	X			X						X			filtered
3 FM-C	8-7-07	11:10	CDJA	H ₂ O	3	Y/N	X			X						X			metals field filtered
4 FM-D	8-7-07	12:00	CDJA	H ₂ O	3	Y/N	X			X						X			filtered
5 FM-E	8-7-07	12:30	CDJA	H ₂ O	3	Y/N	X			X						X			THg not filtered
6 Field Blank	8-7-07	12:45	CDJA	H ₂ O	2	Y/N	X			X						X			Metals filtered
7																			
8																			
9																			
10																			

Relinquished by: Coralia Dayde	Date: 8-7-07	Time: 17:00	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at BRL by: <i>RJA</i>	Date: 8/8/07	Time: 9:00
Shipping carrier: FEDEX	# of coolers: 1	BRL Tracking #: 07BR1155			