



November 12, 2007

Entrix, Inc  
Jillian Aldrin  
701 University Ave, Suite 200  
Sacramento, CA 95825

RE: Brooks Rand Project: ENX002; Report #: 07BR1467

Dear Ms. Aldrin,

This report details the monomethyl mercury (MMHg) analysis of two fish samples received by Brooks Rand Labs (BRL) on October 23, 2007. One sample was listed on the chain-of-custody (COC) form as "I-U2-BNT-1" and labeled as "INTB-U2-BT-PG". This sample was logged in according to the COC form. The samples were received, stored, prepared, and analyzed according to BRL standard operating procedures (SOPs) and a modification of EPA Method 1630.

Once thawed, the samples were filleted and were homogenized using pre-cleaned commercial grade homogenization equipment. A homogenization blank "HB-07-1221-MMHg" was collected and analyzed with the samples.

Results were blank corrected as described in the calculations section of the applicable BRL SOP and in Method 1630. The result less than or equal to the method detection limit (MDL) has been qualified "U" for non-detect and has been reported at the MDL.

The analysis of the post preparation spike (PPS) performed on a sample from a different sample delivery group 07BR1337-04 yielded a recovery above the control limits. This recovery was not indicative of a sample preparation issue that could affect other sample results as the spike was performed at the instrument. Furthermore, all other spikes at the instrument met the acceptance criteria, therefore, it has been concluded that the elevated PPS recovery was not indicative of analytical or instrumental issues that affect the data quality of other samples analyzed in this batch. All other quality control (QC) samples analyzed with this batch met their respective criteria including the analysis of two method duplicates (MDs), an independent calibration verification standard (ICV), four continuing calibration verification standards (CCVs), and a certified reference material (CRM). 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



Jennifer Holmes  
Client Services Manager  
jennifer@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:** Jillian Aldrin

701 University Ave Suite 200

Sacramento CA 95825

Tel: 916-386-3824

Lab Project # ENX002

Lab Tracking # 07BR1467

Lab Services Agreement ENX002

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## ***Sample/Sampling/Receiving Info***

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*Entrix, Inc.*

*BRL*

Sample  
Identification

Sampling Date

Matrix

Submatrix

Sample Number

Receiving Date

I-U2-BNT-1

9/21/2007

Biota

Fish

07BR1467 - 01

10/23/2007

OC-RBT-1

10/16/2007

Biota

Fish

07BR1467 - 02

10/23/2007

HB-07-1221-MMHg

10/24/2007

Biota


blank

07BR1467 - 03

10/23/2007

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Monday, November 12, 2007

  
Project Manager

Reported by

**Brooks Rand LLC**

Contact: Amanda Fawley

3958 6th Avenue NW

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## Hg(Monomethyl)

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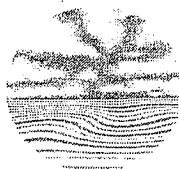
Sample Identification	BRL Number	Total or Dissolved	Preparation date	Analysis date	Batch #	Result	Units	Qualifier (Q)
I-U2-BNT-1	07BR1467 - 01	T		11/5/2007	07-1182a	49.900	ng/g	
OC-RBT-1	07BR1467 - 02	T		11/5/2007	07-1182a	81.200	ng/g	
HB-07-1221-MMHg	07BR1467 - 03	T		11/5/2007	07-1182a	1.000	ng/g	U

Monday, November 12, 2007

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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 #: 07-1182a

Method #: BR-0011

Analyte: MMHg

Matrix: Biota

BIAS Criterion: Recovery = 80-120% Independent Calibration Verification (ICV)			
QCS ID	Certified Value ng/L	Measured Value ng/L	Recovery %
ICV*	7.33	8.50	116%

\* The ICV standard is prepared from an aliquot of the CRM DORM-2.

BIAS Criterion: Recovery = 67-133% Continuing Calibration Verification (CCV)			
QCS ID	Certified Value ng/L	Measured Value ng/L	Recovery %
CCV1	0.625	0.604	97%
CCV2	0.625	0.460	74%
CCV3	0.625	0.563	90%
CCV4	0.625	0.487	78%

BIAS Criteria: Recovery = 65-135% Certified Reference Material (CRM)			
CRM ID	Certified Value ng/g	Measured Value ng/g	Recovery %
DORM-2	4470	4659	104%

BIAS Criteria: Recovery = 65-135%, RPD ≤ 35% Matrix Spikes/Matrix Spike Duplicates (MS/MSD)								
Sample ID	Sample Value ng/g AR	Matrix Spike			Matrix Spike Duplicate			Duplicate RPD
		Spiked Value ng/g AR	Measured Value ng/g AR	MS Recovery %	Spiked Value ng/g AR	Measured Value ng/g AR	MSD Recovery %	
07BR1337-04	357	1961	2925	131%	2018	2887	125%	1%
07BR1467-01*	49.9	1718	2134	121%	1992	2583	127%	5%

\*Due to the large difference in spiking level, the RPD is calculated using the % recoveries rather than the measured values.

BIAS Criterion: Recovery = 67-133% Post Preparation Spike (PPS)				
Sample ID	Sample Value ng/g AR	Spiked Value ng/g AR	Measured Value ng/g AR	PPS Recovery %
07BR1337-04	357	1462	2433	142%
07BR1467-01	49.9	284.9	402.4	124%

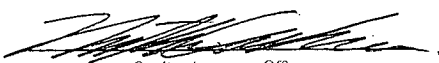
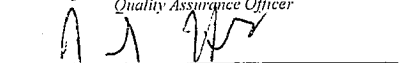
07BR1337-04PPS produced a high recovery, see narrative.

PRECISION Criteria: RPD ≤ 35% or results +/- 2xPQL if < 5xPQL Method Duplicate Analysis (MD)				
Sample ID	Sample Value ng/g AR	Duplicate Value ng/g AR	Average Value ng/g AR	RPD
07BR1337-04	357	355	356	1%
07BR1467-01	49.9	47.1	48.5	6%

Method Blanks (MB) Criteria: Avg. < 2x MDL, Std Dev < 2/3 MDL					
MB1	MB2	MB3	MB4	Average	Std Dev
ng/g	ng/g	ng/g	ng/g	ng/g	ng/g
0.2	0.2	0.2	0.1	0.2	0.1

Method Detection Limits	
MDL	PQL
ng/g	ng/g
1.0	3.0

Sample Specific Reporting Limits		
Sample ID	MDL ng/g	PQL ng/g
07BR1337-04	9	26
07BR1337-05	9	26

  
Quality Assurance Officer  
  
Project Manager

3958 6<sup>th</sup> Avenue NW

Phone: 206-632-6206

Seattle, WA 98107

Fax: 206-632-6017

www.brooksrand.com

Email: brl@brooksrand.com

## Sample Receiving Log

Tracking # 07BR1467

Customer: Entrix, Inc.

Contact: Jillian Aldrin

Project Ref. #: ENX002

BRL Project Manager: Amanda Fawley

Due Date: 11/20/2007

Receiving Date: 10/23/2007

Receiving Time: 8:45 AM

Logged-in by: Katie Jahanmir

Log-in Date: 10/23/2007

Log-in Time: 2:35 PM

Airbill present? Yes

Airbill # 848362948344

Courier: FedEx

Custody seal present? Yes

Custody seal intact? Yes

COC Present? Yes

COC/Sample tag agree? Yes

COC Number: N/A

QA Level Standard

Sample Condition Intact

Shipping container intact? Yes

Shipping container type: Ziploc Bag

Shipping container temp: 3.0 C

Shipping container coolant: Ice

Sample Turnaround Time:

Contract Turnaround Time: 28 days

Comments: Client label on sample 01 does not match the COC, sample has been logged in per the COC.

### Lab ID:

**01**

Sample Tag #: I-U2-BNT-1

Collection Date/Time: 9/21/2007, 11:15:00 AM

ContainerType and Lot #: Ziploc Bag,

Size:

Matrix/Sub-Matrix: Biota, Fish

Preservation: none

Acid Lot#: n/a

pH:

Filtered?: No

Sample Storage Location: Freezer #3

#### Comments:

Analysis / Method: Filleting

In-House

Analysis / Method: Hg(Monomethyl)

EPA 1630 Mod.

Analysis / Method: Homogenization

BR-0103

**02**

Sample Tag #: OC-RBT-1

Collection Date/Time: 10/16/2007,

ContainerType and Lot #: Ziploc Bag,

Size:

Matrix/Sub-Matrix: Biota, Fish

Preservation: none

Acid Lot#: n/a

pH:

Filtered?: No

Sample Storage Location: Freezer #3

#### Comments:

Analysis / Method: Filleting

In-House

Analysis / Method: Hg(Monomethyl)

EPA 1630 Mod.

Analysis / Method: Homogenization

BR-0103

Lab ID:

Kr  
Sample Custodian signature

10/23/07  
Date

Nicole C. Mead  
Reviewed By signature

10/24/07  
Date



**BROOKSRAND**  
TRACE METALS ANALYSIS & PRODUCTS

### Chain Of Custody Record

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

Client: <u>ENTRIX</u>		COC receipt confirmation? (Y/N) <u>(X)</u>		Ship to: <b>Brooks Rand LLC</b>															
Contact: <u>CORRIE DAYDE</u>		If yes, by Fax / Email (circle one)		3958 6 <sup>th</sup> Avenue NW															
Address: <u>2300 CRAWFORD, Ste 200</u> <u>CONCORD, CA 94520</u>		Fax #:		Seattle, WA 98107															
Phone #: <u>925-988-1234</u>		Email:		Phone: 206-632-6206															
PO #:		Sampler's name: <u>C. DAYDE</u>		Fax: 206-632-6017															
		Client project ID: <u>PCWA WP</u>		Email: <u>samples@brooksrand.com</u>															
		BRL project ID: <u>ENVX002</u>		<u>www.brooksrand.com</u>															
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 <sub>3</sub> /BrCl (circle one)	Other (specify)	Total Hg, EPA 1631		Methyl Hg, EPA 1630	Metals ICP-MS (specify)	As / Se species (specify)	% Solids	Filtration	Other	Other (specify)	Other (specify)
1	I-142-BNT-1	9/21	11:15	PC	Fish		X				X								Net fish w/skin off and homogenized individually
2	OC-RBT-1	10/16	?	PC	Fish		X												
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
Relinquished by: <u>Mark</u>		Date: <u>10/22</u>		Time: <u>5:40</u>		Received by: <u>[Signature]</u>		Date: <u>10/23/07</u>		Time: <u>0845</u>									
Relinquished by:		Date:		Time:		Received at BRL by: <u>[Signature]</u>		Date: <u>10/23/07</u>		Time: <u>0845</u>									
Shipping carrier:		# of coolers:				BRL Tracking #: <u>07BR1467</u>													