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Attention:Susan Schmitz

Accurassay Laboratories
1046 Gorham Street
Thunder Bay, ON
Canada P7B 5X5

Report Date: 2015/07/30
Report #: R3612288
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B5D7043
Received: 2015/07/14, 14:33

Sample Matrix: SOLID
Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Trace Metals by Neutron Activation	10	N/A	2015/07/29	BQL SOP-00001	Neutron Activation

Remarks:

Becquerel is an ISO 17025 accredited laboratory for certain tests listed within the scope of accreditation. This test report shall not be reproduced, except in full, without written approval of Becquerel Laboratories Inc.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

Encryption Key

Simona Vatamanescu

30 Jul 2015 12:57:43 -04:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Simona Vatamanescu,
Email: SVatamanescu@maxxam.ca
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==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Becquerel Laboratories. A Maxxam Company 6790 Kitimat Rd, Unit 4, Mississauga, ON L5N 5L9 Phone: (905) 826-3080 Fax: (905) 826-4151 Toll Free: 1 877-726-3080 www.becquerellabs.com

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RESULTS OF ANALYSES OF SOLID

Maxxam ID		APS900	APS901	APS902	APS903	APS904	APS905	APS906		
Sampling Date										
	Units	**284039**	**284154**	**284186**	**284194**	**284205**	**284211**	**284306**	**RDL**	**QC Batch**
Cerium (Ce)	ppm	63.2	28.5	36.9	33.7	34.1	30.8	31.1	0.5	4119168
Europium (Eu)	ppm	1.2	0.8	1.1	1.3	0.9	0.8	0.6	0.5	4119168
Lanthanum (La)	ppm	33.9	14.6	18.4	17.4	17.8	16.0	16.1	0	4119168
Lutetium (Lu)	ppm	0.127	0.0915	0.0724	0.0766	0.0714	0.0628	0.0949	0	4119168
Neodymium (Nd)	ppm	25.4	13.7	16.3	16.8	16.4	13.3	14.9	0.5	4119168
Samarium (Sm)	ppm	4.44	2.40	2.67	2.57	2.75	2.31	2.55	0	4119168
Scandium (Sc)	ppm	11.2	10.9	8.31	8.33	6.92	6.74	9.44	0	4119168
Terbium (Tb)	ppm	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	4119168
Thorium (Th)	ppm	5.3	2.2	2.2	2.3	2.1	1.6	1.9	0.5	4119168
Uranium (U)	ppm	2	<1	1	<1	<1	<1	<1	1	4119168
Ytterbium (Yb)	ppm	0.8	0.7	0.6	0.5	0.5	0.6	0.6	0.5	4119168

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		APS907	APS908	APS909		
Sampling Date						
	Units	**284313**	**284334**	**284360**	**RDL**	**QC Batch**
Cerium (Ce)	ppm	28.5	48.4	57.1	0.5	4119168
Europium (Eu)	ppm	<0.5	0.6	0.8	0.5	4119168
Lanthanum (La)	ppm	15.3	27.1	31.0	0	4119168
Lutetium (Lu)	ppm	0.132	0.107	0.103	0	4119168
Neodymium (Nd)	ppm	16.9	20.1	21.2	0.5	4119168
Samarium (Sm)	ppm	3.25	3.28	3.91	0	4119168
Scandium (Sc)	ppm	8.54	7.75	7.06	0	4119168
Terbium (Tb)	ppm	1.0	<0.5	<0.5	0.5	4119168
Thorium (Th)	ppm	6.9	4.1	5.3	0.5	4119168
Uranium (U)	ppm	16	2	2	1	4119168
Ytterbium (Yb)	ppm	1.1	0.6	0.8	0.5	4119168

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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GENERAL COMMENTS

Results relate only to the items tested.

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Steven Simpson, Becquerel

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