AZOMITE®

Grow everything better, naturally.

Is AZOMITE® Radioactive?

No. AZOMITE® is not radioactive and does not have the capacity to emit alpha particles, which can harm humans or animals.

The following gross alpha/beta test report prepared by the ALS Environmental Laboratory Group of Fort Collins, Colorado, reveal that the alpha radiation values present in AZOMITE® are lower than those from a sample taken from the ALS parking lot.

Beta emission is actually consistent with the potassium in AZOMITE®.

AZOMITE®'s alpha number, averaged from 6 samples, gave a value of 5.8 pCi/g. A value greater than 20 pCi/g is required to even warrant documentation.

Gross Alpha/Beta

Case Narrative

AZOMITE Mineral Products, Inc.

Radiation

Work Order Number: 1207221

1. This report consists of the analytical results for nine solid samples received by ALS on 07/19/2012.

2. These samples were prepared according to the current revision of SOP 702, with procedure modifications outlined in QASS #422608.

3. The samples were analyzed for gross alpha and beta activity by gas flow proportional counting according to the current revision of SOP 724. The analyses were completed on 07/27/2012. Gross alpha results are referenced to ^{241}Am. Gross beta results are referenced to ^{90}Sr/Y.

4. The analysis results for these samples are reported on an 'As Received' basis in units of pCi/gram.

5. The samples were and the QC samples for both batches were flamed, as prescribed in the current revision of SOP 702 for solid sample analyses. This could reduce the beta activity if the samples contained ^{137}Cs, or other beta emitters, that may be volatile under the conditions associated with flaming.

6. The radiometric recovery for the matrix spike of sample 1207221-4 is below the lower control limit of 70% at -13.8% for gross alpha and -21.8 for gross beta. It appears due to an oversight, the matrix spike was not spiked. All other quality control criteria have been met. ALS does not control on matrix spike recovery. The results for this sample are considered an estimated value and per project manager's instruction, the results are submitted without further qualification.

7. No further anomalous situations were encountered during the preparation or analysis of these samples. All remaining quality control criteria were met.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Linda Arend
Radiochemistry Primary Data Reviewer

07/29/12
Date

Radiochemistry Final Data Reviewer

07/30/12
Date

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1207221
Client Name: AZOMITE Mineral Products, Inc.
Client Project Name: Radiation
Client Project Number:
Client PO Number:

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
1	1207221-1		SOLID	18-Jul-12	
2	1207221-2		SOLID	18-Jul-12	
3	1207221-3		SOLID	18-Jul-12	
4	1207221-4		SOLID	18-Jul-12	
5	1207221-5		SOLID	18-Jul-12	
6	1207221-6		SOLID	18-Jul-12	
7	1207221-7		SOLID	18-Jul-12	
8	1207221-8		SOLID	18-Jul-12	
9	1207221-9		SOLID	18-Jul-12	

ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Form 202r8

WORKORDER #	

		SAMPLER	Jim Phillips	DATE	
PROJECT NAME	Radiation	SITE ID		TURNAROUND	14 days
PROJECT No.		EDD FORMAT			
		PURCHASE ORDER			
COMPANY NAME	AZOMITE Mineral Products, Inc.	BILL TO COMPANY	AZOMITE Mineral Products, Inc.		
SEND REPORT TO	Jim Phillips	INVOICE ATTN TO	Jim Phillips		
ADDRESS	PO Box 21	ADDRESS	PO Box 21		
CITY / STATE / ZIP	Nephi, Utah 84648	CITY / STATE / ZIP	Nephi, Utah 84648		
PHONE	435-623-8007	PHONE	(435) 623-8007		
FAX	435-623-8009	FAX	435-623-8009		
E-MAIL	jim@azomite.com	E-MAIL	Jim@azomite.com		

PAGE	of
DISPOSAL	By Lab or Return to Client

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	gross alpha/beta w/ HF digestion
1	1		7/18/2012					
2	2		7/18/2012					
3	3		7/18/2012					
4	4		7/18/2012					
5	5		7/18/2012					
6	6		7/18/2012					
7	7		7/18/2012					
8	8		7/18/2012					
9	9		7/18/2012					

*Time Zone (Circle): EST CST MST PST Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments:	QC PACKAGE (check below)
	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms + raw data)

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	James Phillips	James D. Phillips	7/18/12	4:00 p.m.
RECEIVED BY	C Trimble	C Trimble	7-19-12	0920
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: Azomite Workorder No: 1207221

Project Manager: LS Initials: CDT Date: 7-19-12

1. Does this project require any special handling in addition to standard ALS procedures?		YES	(NO)
2. Are custody seals on shipping containers intact?	(NONE)	YES	NO
3. Are Custody seals on sample containers intact?	(NONE)	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		(YES)	NO
5. Are the COC and bottle labels complete and legible?		(YES)	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		(YES)	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	(YES)	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	(N/A)	YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	(N/A)	YES	NO
10. Is there sufficient sample for the requested analyses?		(YES)	NO
11. Were all samples placed in the proper containers for the requested analyses?		(YES)	NO
12. Are all samples within holding times for the requested analyses?		(YES)	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		(YES)	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____ > green pea	(N/A)	YES	NO
15. Do any water samples contain sediment? Amount Amount of sediment: ____ dusting ____ moderate ____ heavy	(N/A)	YES	NO
16. Were the samples shipped on ice?		YES	(NO)
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	(RAD ONLY)	YES	(NO)

Cooler #:	1							
Temperature (°C):	Amb							
No. of custody seals on cooler:	0							
DOT Survey/ Acceptance Information — External µR/hr reading:	11							
Background µR/hr reading:	11							

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? (YES) / NO / NA (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? YES / NO / (NA) Contact: _____ Date/Time: _____

Project Manager Signature / Date: [signature] 7/20/12

*IR Gun #2: Oakton, SN 29922500201-0066
*IR Gun #4: Oakton, SN 2372220101-0002

ORIGIN ID: VELA (435) 623-0264
RYM/COPYEXPRESS
RYM/COPYEXPRESS
42 SOUTH MAIN

NEPHI, UT 84648
UNITED STATES US

1207221

SHIP DATE: 18JUL12
ACTWGT: 2.2 LB MAN
CAD: 0906887/CAFE2511
DIMS: 10x6x5 IN

BILL THIRD PARTY

TO ALS LABORATORY GROUP
ALS LABORATORY GROUP
225 COMMERENCE DRIVE

FORT COLLINS CO 80524

(970) 490-1511 REF:
INV:
PO: DEPT:

11

FedEx Express

TRK# 0201 5115 2177 2711

THU - 19 JUL A2
PRIORITY OVERNIGHT

XH FTCA

80524
CO-US DEN

Gross Alpha/Beta Analysis by GFPC

PAI 724 Rev 11

Method Blank Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1207221
Client Name: AZOMITE Mineral Products, Inc.
ClientProject ID: Radiation

Lab ID: AB120725-1MB

Sample Matrix: SOLID
Prep SOP: PAI 702 Rev 20
Date Collected: 25-Jul-12
Date Prepared: 25-Jul-12
Date Analyzed: 27-Jul-12

Prep Batch: AB120725-1
QCBatchID: AB120725-1-3
Run ID: AB120725-1A
Count Time: 30 minutes

Final Aliquot: 2.00 g
Result Units: pCi/g
File Name: ABC0727B

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	Lab Qualifier
12587-46-1	GROSS ALPHA	-0.06 +/- 0.13	0.42	3	U
12587-47-2	GROSS BETA	0.13 +/- 0.27	0.63	4	U

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

LT - Result is less than Requested MDC, greater than sample specific MDC.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

M - Requested MDC not met.

B - Analyte concentration greater than MDC.

B3 - Analyte concentration greater than MDC but less than Requested MDC.

Data Package ID: *AB1207221-1*

Gross Alpha/Beta Analysis by GFPC

PAI 724 Rev 11

Method Blank Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1207221
Client Name: AZOMITE Mineral Products, Inc.
ClientProject ID: Radiation

Lab ID: AB120725-2MB

Sample Matrix: SOLID
Prep SOP: PAI 702 Rev 20
Date Collected: 25-Jul-12
Date Prepared: 25-Jul-12
Date Analyzed: 27-Jul-12

Prep Batch: AB120725-2
QCBatchID: AB120725-2-1
Run ID: AB120725-2A
Count Time: 30 minutes

Final Aliquot: 2.00 g
Result Units: pCi/g
File Name: ABB0727A

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	Lab Qualifier
12587-46-1	GROSS ALPHA	0.14 +/- 0.19	0.36	3	U
12587-47-2	GROSS BETA	0.02 +/- 0.24	0.58	4	U

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

LT - Result is less than Requested MDC, greater than sample specific MDC.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

M - Requested MDC not met.

B - Analyte concentration greater than MDC.

B3 - Analyte concentration greater than MDC but less than Requested MDC.

Data Package ID: *AB1207221-1*

Gross Alpha/Beta Analysis by GFPC

PAI 724 Rev 11

Laboratory Control Sample(s)

Lab Name: ALS Environmental -- FC
Work Order Number: 1207221
Client Name: AZOMITE Mineral Products, Inc.
ClientProject ID: Radiation

Lab ID: AB120725-1LCS

Sample Matrix: SOLID
Prep SOP: PAI 702 Rev 20
Date Collected: 25-Jul-12
Date Prepared: 25-Jul-12
Date Analyzed: 27-Jul-12

Prep Batch: AB120725-1
QCBatchID: AB120725-1-3
Run ID: AB120725-1A
Count Time: 30 minutes

Final Aliquot: 2.00 g
Result Units: pCi/g
File Name: ABC0727B

CASNO	Target Nuclide	Results +/- 2s TPU	MDC	Spike Added	% Rec	Control Limits	Lab Qualifier
12587-46-1	GROSS ALPHA	13.8 +/- 2.6	0.5	14.77	93.3	70 - 130	P
12587-47-2	GROSS BETA	14.2 +/- 2.5	1.0	14.55	97.8	70 - 130	P

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC.

LT - Result is less than Requested MDC, greater than sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

L - LCS Recovery below lower control limit.

H - LCS Recovery above upper control limit.

P - LCS Recovery within control limits.

M - The requested MDC was not met.

M3 - The requested MDC was not met, but thereported activity is greater than the reported MDC.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

Data Package ID: *AB1207221-1*

Gross Alpha/Beta Analysis by GFPC

PAI 724 Rev 11

Laboratory Control Sample(s)

Lab Name: ALS Environmental -- FC
Work Order Number: 1207221
Client Name: AZOMITE Mineral Products, Inc.
ClientProject ID: Radiation

Lab ID: AB120725-2LCS

Sample Matrix: SOLID
Prep SOP: PAI 702 Rev 20
Date Collected: 25-Jul-12
Date Prepared: 25-Jul-12
Date Analyzed: 27-Jul-12

Prep Batch: AB120725-2
QCBatchID: AB120725-2-1
Run ID: AB120725-2A
Count Time: 30 minutes

Final Aliquot: 2.00 g
Result Units: pCi/g
File Name: ABB0727A

CASNO	Target Nuclide	Results +/- 2s TPU	MDC	Spike Added	% Rec	Control Limits	Lab Qualifier
12587-46-1	GROSS ALPHA	13.5 +/- 2.6	0.4	14.77	91.7	70 - 130	P
12587-47-2	GROSS BETA	13.7 +/- 2.4	1.0	14.55	93.9	70 - 130	P

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC.

LT - Result is less than Requested MDC, greater than sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

L - LCS Recovery below lower control limit.

H - LCS Recovery above upper control limit.

P - LCS Recovery within control limits.

M - The requested MDC was not met.

M3 - The requested MDC was not met, but thereported activity is greater than the reported MDC.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

Data Package ID: *AB1207221-1*

Gross Alpha/Beta Analysis by GFPC

PAI 724 Rev 11

Matrix Spike Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1207221
Client Name: AZOMITE Mineral Products, Inc.
ClientProject ID: Radiation

Field ID: 4
Lab ID: 1207221-4MS

Sample Matrix: SOLID
Prep SOP: PAI 702 Rev 20
Date Collected: 18-Jul-12
Date Prepared: 25-Jul-12
Date Analyzed: 27-Jul-12

Prep Batch: AB120725-2
QCBatchID: AB120725-2-1
Run ID: AB120725-2A
Count Time: 30 minutes
Report Basis: As Received

Final Aliquot: 0.518 g
Prep Basis: As Received
Moisture(%): NA
Result Units: pCi/g
File Name: ABB0727

CASNO	Target Nuclide	Matrix Spike	Sample Results	MDC	Spike Added	% Rec	Control Limits	Lab Qualifier
12587-46-1	GROSS ALPHA	4.9	6.9	1.5	14.2	-13.8	70 - 130	N
12587-47-2	GROSS BETA	22.5	25.6	2.8	14.0	-21.8	70 - 130	N

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC.

LT - Result is less than Requested MDC, greater than sample specific MDC.

Y1 - Chemical Yield in control at 100-110%. Quantitative yield is assumed.

Y2 - Chemical Yield outside default limits.

N - Matrix Spike Recovery outside control limits

P - Matrix Spike Recovery within control limits

M - The requested MDC was not met.

M3 - The requested MDC was not met, but thereported activity is greater than the reported MDC.

Abbreviations:

MDC - Minimum Detectable Concentration

Data Package ID: *AB1207221-1*

Gross Alpha/Beta Analysis by GFPC

PAI 724 Rev 11

Duplicate Sample Results (DER)

Lab Name: ALS Environmental -- FC
Work Order Number: 1207221
Client Name: AZOMITE Mineral Products, Inc.
ClientProject ID: Radiation

Field ID: 1
Lab ID: 1207221-1DUP

Sample Matrix: SOLID
Prep SOP: PAI 702 Rev 20
Date Collected: 18-Jul-12
Date Prepared: 25-Jul-12
Date Analyzed: 27-Jul-12

Prep Batch: AB120725-2
QCBatchID: AB120725-2-1
Run ID: AB120725-2A
Count Time: 30 minutes
Report Basis: As Received

Final Aliquot: 0.530 g
Prep Basis: As Received
Moisture(%): NA
Result Units: pCi/g
File Name: ABB0727

CASNO	Analyte	Sample			Duplicate			DER	DER Lim
		Result +/- 2 s TPU	MDC	Flags	Result +/- 2 s TPU	MDC	Flags		
12587-46-1	GROSS ALPHA	8.0 +/- 2.8	2.0		7.1 +/- 2.4	1.6		0.264	2.13
12587-47-2	GROSS BETA	29.0 +/- 5.6	2.6		23.4 +/- 4.6	2.5		0.76	2.13

Comments:

Duplicate Qualifiers/Flags:

U - Result is less than the sample specific MDC.
Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.
Y2 - Chemical Yield outside default limits.
W - DER is greater than Warning Limit of 1.42
D - DER is greater than Control Limit of 2.13
LT - Result is less than Request MDC, greater than sample specific MDC
M - Requested MDC not met.
M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.
L - LCS Recovery below lower control limit.
H - LCS Recovery above upper control limit.
P - LCS, Matrix Spike Recovery within control limits.
N - Matrix Spike Recovery outside control limits

Abbreviations:

TPU - Total Propagated Uncertainty
DER - Duplicate Error Ratio
BDL - Below Detection Limit
NR - Not Reported

Data Package ID: *AB1207221-1*

Gross Alpha/Beta Analysis by GFPC

PAI 724 Rev 11

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1207221
Client Name: AZOMITE Mineral Products, Inc.
ClientProject ID: Radiation

Field ID: 1
Lab ID: 1207221-1

Sample Matrix: SOLID
Prep SOP: PAI 702 Rev 20
Date Collected: 18-Jul-12
Date Prepared: 25-Jul-12
Date Analyzed: 27-Jul-12

Prep Batch: AB120725-2
QCBatchID: AB120725-2-1
Run ID: AB120725-2A
Count Time: 30 minutes
Report Basis: As Received

Final Aliquot: 0.509 g
Prep Basis: As Received
Moisture(%): NA
Result Units: pCi/g
File Name: ABB0727

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	Lab Qualifier
12587-46-1	GROSS ALPHA	8.0 +/- 2.8	2.0	3	
12587-47-2	GROSS BETA	29.0 +/- 5.6	2.6	4	

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

LT - Result is less than Requested MDC, greater than sample specific MDC.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

M - The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

Data Package ID: *AB1207221-1*

Gross Alpha/Beta Analysis by GFPC

PAI 724 Rev 11

Sample Duplicate Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1207221
Client Name: AZOMITE Mineral Products, Inc.
ClientProject ID: Radiation

Field ID: 1
Lab ID: 1207221-1DUP

Sample Matrix: SOLID
Prep SOP: PAI 702 Rev 20
Date Collected: 18-Jul-12
Date Prepared: 25-Jul-12
Date Analyzed: 27-Jul-12

Prep Batch: AB120725-2
QCBatchID: AB120725-2-1
Run ID: AB120725-2A
Count Time: 30 minutes
Report Basis: As Received

Final Aliquot: 0.530 g
Prep Basis: As Received
Moisture(%): NA
Result Units: pCi/g
File Name: ABB0727

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	Lab Qualifier
12587-46-1	GROSS ALPHA	7.1 +/- 2.4	1.6	3	
12587-47-2	GROSS BETA	23.4 +/- 4.6	2.5	4	

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.

Y2 - Chemical Yield outside default limits.

LT - Result is less than Requested MDC, greater than sample specific MDC.

M - The requested MDC was not met.

M3 - The requested MDC was not met, but thereported activity is greater than the reported MDC.

W - DER is greater than Warning Limit of 1.42

D - DER is greater than Control Limit of 2.13

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

Data Package ID: *AB1207221-1*

Gross Alpha/Beta Analysis by GFPC

PAI 724 Rev 11

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1207221
Client Name: AZOMITE Mineral Products, Inc.
ClientProject ID: Radiation

Field ID: 2
Lab ID: 1207221-2

Sample Matrix: SOLID
Prep SOP: PAI 702 Rev 20
Date Collected: 18-Jul-12
Date Prepared: 25-Jul-12
Date Analyzed: 27-Jul-12

Prep Batch: AB120725-2
QCBatchID: AB120725-2-1
Run ID: AB120725-2A
Count Time: 30 minutes
Report Basis: As Received

Final Aliquot: 0.520 g
Prep Basis: As Received
Moisture(%): NA
Result Units: pCi/g
File Name: ABB0727

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	Lab Qualifier
12587-46-1	GROSS ALPHA	3.2 +/- 1.6	1.6	3	
12587-47-2	GROSS BETA	24.3 +/- 4.8	2.8	4	

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

LT - Result is less than Requested MDC, greater than sample specific MDC.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

M - The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

Data Package ID: *AB1207221-1*

Gross Alpha/Beta Analysis by GFPC

PAI 724 Rev 11

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1207221
Client Name: AZOMITE Mineral Products, Inc.
ClientProject ID: Radiation

Field ID: 3
Lab ID: 1207221-3

Sample Matrix: SOLID
Prep SOP: PAI 702 Rev 20
Date Collected: 18-Jul-12
Date Prepared: 25-Jul-12
Date Analyzed: 27-Jul-12

Prep Batch: AB120725-2
QCBatchID: AB120725-2-1
Run ID: AB120725-2A
Count Time: 30 minutes
Report Basis: As Received

Final Aliquot: 0.504 g
Prep Basis: As Received
Moisture(%): NA
Result Units: pCi/g
File Name: ABB0727

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	Lab Qualifier
12587-46-1	GROSS ALPHA	6.3 +/- 2.3	1.7	3	
12587-47-2	GROSS BETA	24.5 +/- 4.9	2.7	4	

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

LT - Result is less than Requested MDC, greater than sample specific MDC.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

M - The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

Data Package ID: *AB1207221-1*

Gross Alpha/Beta Analysis by GFPC

PAI 724 Rev 11

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1207221
Client Name: AZOMITE Mineral Products, Inc.
ClientProject ID: Radiation

Field ID: 4
Lab ID: 1207221-4

Sample Matrix: SOLID
Prep SOP: PAI 702 Rev 20
Date Collected: 18-Jul-12
Date Prepared: 25-Jul-12
Date Analyzed: 27-Jul-12

Prep Batch: AB120725-2
QCBatchID: AB120725-2-1
Run ID: AB120725-2A
Count Time: 30 minutes
Report Basis: As Received

Final Aliquot: 0.508 g
Prep Basis: As Received
Moisture(%): NA
Result Units: pCi/g
File Name: ABB0727

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	Lab Qualifier
12587-46-1	GROSS ALPHA	6.9 +/- 2.4	1.6	3	
12587-47-2	GROSS BETA	25.6 +/- 5.0	2.5	4	

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

LT - Result is less than Requested MDC, greater than sample specific MDC.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

M - The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

Data Package ID: *AB1207221-1*

Gross Alpha/Beta Analysis by GFPC

PAI 724 Rev 11

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1207221
Client Name: AZOMITE Mineral Products, Inc.
ClientProject ID: Radiation

Field ID: 5
Lab ID: 1207221-5

Sample Matrix: SOLID
Prep SOP: PAI 702 Rev 20
Date Collected: 18-Jul-12
Date Prepared: 25-Jul-12
Date Analyzed: 27-Jul-12

Prep Batch: AB120725-2
QCBatchID: AB120725-2-1
Run ID: AB120725-2A
Count Time: 30 minutes
Report Basis: As Received

Final Aliquot: 0.505 g
Prep Basis: As Received
Moisture(%): NA
Result Units: pCi/g
File Name: ABB0727A

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	Lab Qualifier
12587-46-1	GROSS ALPHA	6.8 +/- 2.4	1.7	3	
12587-47-2	GROSS BETA	15.7 +/- 3.5	2.6	4	

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

LT - Result is less than Requested MDC, greater than sample specific MDC.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

M - The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

Data Package ID: *AB1207221-1*

Gross Alpha/Beta Analysis by GFPC

PAI 724 Rev 11

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1207221
Client Name: AZOMITE Mineral Products, Inc.
ClientProject ID: Radiation

Field ID: 6
Lab ID: 1207221-6

Sample Matrix: SOLID
Prep SOP: PAI 702 Rev 20
Date Collected: 18-Jul-12
Date Prepared: 25-Jul-12
Date Analyzed: 27-Jul-12

Prep Batch: AB120725-2
QCBatchID: AB120725-2-1
Run ID: AB120725-2A
Count Time: 30 minutes
Report Basis: As Received

Final Aliquot: 0.504 g
Prep Basis: As Received
Moisture(%): NA
Result Units: pCi/g
File Name: ABB0727A

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	Lab Qualifier
12587-46-1	GROSS ALPHA	4.6 +/- 1.8	1.4	3	
12587-47-2	GROSS BETA	13.4 +/- 3.1	2.5	4	

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

LT - Result is less than Requested MDC, greater than sample specific MDC.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

M - The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

Data Package ID: *AB1207221-1*

Gross Alpha/Beta Analysis by GFPC

PAI 724 Rev 11

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1207221
Client Name: AZOMITE Mineral Products, Inc.
ClientProject ID: Radiation

Field ID: 7
Lab ID: 1207221-7

Sample Matrix: SOLID
Prep SOP: PAI 702 Rev 20
Date Collected: 18-Jul-12
Date Prepared: 25-Jul-12
Date Analyzed: 27-Jul-12

Prep Batch: AB120725-2
QCBatchID: AB120725-2-1
Run ID: AB120725-2A
Count Time: 30 minutes
Report Basis: As Received

Final Aliquot: 0.515 g
Prep Basis: As Received
Moisture(%): NA
Result Units: pCi/g
File Name: ABB0727A

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	Lab Qualifier
12587-46-1	GROSS ALPHA	4.7 +/- 2.0	1.8	3	
12587-47-2	GROSS BETA	27.2 +/- 5.3	2.9	4	

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

LT - Result is less than Requested MDC, greater than sample specific MDC.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

M - The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

Data Package ID: *AB1207221-1*

Gross Alpha/Beta Analysis by GFPC

PAI 724 Rev 11

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1207221
Client Name: AZOMITE Mineral Products, Inc.
ClientProject ID: Radiation

Field ID: 8
Lab ID: 1207221-8

Sample Matrix: SOLID
Prep SOP: PAI 702 Rev 20
Date Collected: 18-Jul-12
Date Prepared: 25-Jul-12
Date Analyzed: 27-Jul-12

Prep Batch: AB120725-1
QCBatchID: AB120725-1-3
Run ID: AB120725-1A
Count Time: 30 minutes
Report Basis: As Received

Final Aliquot: 0.524 g
Prep Basis: As Received
Moisture(%): NA
Result Units: pCi/g
File Name: ABC0727A

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	Lab Qualifier
12587-46-1	GROSS ALPHA	0.21 +/- 0.56	1.38	3	U
12587-47-2	GROSS BETA	2.3 +/- 1.2	2.2	4	LT

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

LT - Result is less than Requested MDC, greater than sample specific MDC.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

M - The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

Data Package ID: *AB1207221-1*

Gross Alpha/Beta Analysis by GFPC

PAI 724 Rev 11

Sample Results

Lab Name: ALS Environmental -- FC
Work Order Number: 1207221
Client Name: AZOMITE Mineral Products, Inc.
ClientProject ID: Radiation

Field ID: 9
Lab ID: 1207221-9

Sample Matrix: SOLID
Prep SOP: PAI 702 Rev 20
Date Collected: 18-Jul-12
Date Prepared: 25-Jul-12
Date Analyzed: 27-Jul-12

Prep Batch: AB120725-2
QCBatchID: AB120725-2-1
Run ID: AB120725-2A
Count Time: 30 minutes
Report Basis: As Received

Final Aliquot: 0.524 g
Prep Basis: As Received
Moisture(%): NA
Result Units: pCi/g
File Name: ABB0727A

CASNO	Target Nuclide	Result +/- 2 s TPU	MDC	Requested MDC	Lab Qualifier
12587-46-1	GROSS ALPHA	2.2 +/- 1.3	1.6	3	LT
12587-47-2	GROSS BETA	8.2 +/- 2.2	2.4	4	

Comments:

Qualifiers/Flags:

U - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative Yield is assumed.

Y2 - Chemical Yield outside default limits.

LT - Result is less than Requested MDC, greater than sample specific MDC.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

M - The requested MDC was not met.

Abbreviations:

TPU - Total Propagated Uncertainty

MDC - Minimum Detectable Concentration

BDL - Below Detection Limit

Data Package ID: *AB1207221-1*

ALS

QUALITY ASSURANCE SUMMARY SHEET

ALS W.O. # / BATCH AB120725-2
TEST Alpha Beta
METHOD Prep
SOP/REV (PREP) 702 rev 20
SOP/REV (ANAL) —

Briefly document any QA or other problems or deviations associated with the analysis of samples. Problems could result from: log-in, color, odor, dilution, consistency, scheduling, equipment, or instrumentation, or may include documentation of minor deviations necessary due to unique DQO's or sample characteristics.

MEL 7/27/12

Per PM instruction, all samples were aliquotted, spiked and digested in 25 mL of HF. The next morning 15 mL of concentrated nitric was added to each sample and brought to dryness. The samples were then transferred with 8 N nitric to centrifuge tubes and brought up to 30 mL. The samples were then ready to start at step 8.4.8 in SOP 702 revision 20 and carried though the rest of the procedure.

MEL MEL 7/27/12 7/27/12

MEL 7/27/12

MEL 7/27/12

MEL 7/27/12

TECHNICIAN/ANALYST [signature] DATE 7/27/12

DEPARTMENT MANAGER [signature] DATE 07/27/12

FORM 302r6.doc (4/22/04)

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