



TEST REPORT NO: 381207108

Date: July 16, 2012

Page 1 of 8

Client's name: First Fishery Development Services, Inc.
Client's address: 9484 Chesapeake Dr. Suite 802, San Diego, CA 92123

Contact person: Richard Lentz

The following sample was submitted and identified *on behalf of* the client as:

Sample Description : Seagate Powder Lot # 011

Sample Number : 1

Sample Condition/Temp. : N/A

Sample Code/Reference : N/A

Shipper : N/A

Buyer : N/A

P. O. Number : N/A

Sampling Date : N/A

Sampling Place : N/A

Sample Submitted By : First Fishery

Date Received : 6/29/2012

Testing Period : 6/29/2012 to 7/13/2012

COMMENTS/CONCLUSION : No radioactive isotopes detected as noted.

Results: See attached information.

Testing performed by EMSL Analytical, Inc.

Signed for and on behalf of
SGS NORTH AMERICA, INC.

James Cook
Food Technologist

Remark: 1. LOD = "Limit of Detection"
2. Less than = Lower than LOQ "limit of Quantification"

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample tested and such sample are retained for 30 days only.



Gamma Testing of Seagate Lot # 011; Order Number 38120708

EMSL Analytical, Inc. has tested the sample provided by First Fishery, Seagate Powder Lot # 011 for potential radiation contamination. The sample was thoroughly homogenized prior to analysis. The sample was then placed into the counting vessel and counted for 8 hours. It was then analyzed using the EMSL "Food" Library to look for specific isotopes within the sample.

The FDA has stated that, "Iodine-131 (I-131), Cesium-134 (Cs-134) and Cesium-137 (Cs-137) are the radionuclides of greatest concern to the food supply following a nuclear power plant accident. Along with those three radionuclides, FDA also monitors others as needed – among them, Strontium-90, Ruthenium-103 (Ru-103) and Ruthenium-106 (Ru-106)." This FDA webpage also contains a link to a page which describes the "interventional limits" for radioisotopes in foods. -CPG Sec. 560.750 Radionuclides in Imported Foods - Levels of Concern, <http://www.fda.gov/ICECI/ComplianceManuals/CompliancePolicyGuidanceManual/UCM074576>

This webpage includes the following information on limits, and what constitutes contamination:

I. Derived Intervention Levels (DILs) for Each Radionuclide Group for Food in Domestic Commerce and Food Offered for Import^{a,b}

Radionuclide Group	Reported Value (Bq/kg)	DIL (Bq/kg)
Iodine-131	≤ Detection Limit	170
Cesium-134 + Cesium-137	≤ Detection Limit	1200
Ruthenium-103 + Ruthenium-106 ^c	≤ Detection Limit	$(C_3 / 6800) + (C_6 / 450) < 1$

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample tested and such sample are retained for 30 days only.



II.

^aThe DIL for each radionuclide group is applied independently. Each DIL applies to the sum of the concentrations of the radionuclides in the group at the time of measurement.

^bApplicable to foods as prepared for consumption. For dried or concentrated products such as powdered milk or concentrated juices, adjust by a factor appropriate to reconstitution, and assume the reconstitution water is not contaminated. For spices, which are consumed in very small quantities, use a dilution factor of 10.

^cDue to the large differences in DILs for Ruthenium-103 and Ruthenium-106, the individual concentrations of Ruthenium-103 and Ruthenium-106 are divided by their respective DILs and then summed. The DIL for the Ruthenium group is set at less than one. C3 and C6 are the concentrations, at the time of measurement, for Ruthenium-103 and Ruthenium-106, respectively.

The results were below the recommend limits as published by the FDA. As follows under the "Summary of Nuclides", the, the report showed that there was no activity above the minimum detectable levels for the sample submitted.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample tested *and such sample are retained for 30 days only.*



TEST REPORT NO: 381207108

Date: July 16, 2012

Page 4 of 8

ORTEC g v - i (1199) Env32 G53W4.25 7/13/2012 8:52:54 AM
EMSL Analytical, Inc. Spectrum name: 381207108 Seagate.An1

Sample description
381207108 Seagate

Spectrum Filename: C:\User\Spectra\Gamma03 2012\381207108 Seagate.An1

Acquisition information

Start time: 7/12/2012 4:40:28 PM
Live time: 28800
Real time: 28838
Dead time: 0.13 %
Detector ID: 3

Detector system
Gamma03

Calibration

Filename: Calibration 500mL Soil Marinelli 90022 G
Gamma03 7-12-12.C1b
Gamma03 90022 500mL Soil Marinelli Calibration 7-12-12

Energy Calibration

Created: 7/12/2012 2:04:03 PM
Zero offset: 0.293 keV
Gain: 0.250 keV/channel
Quadratic: -1.938E-08 keV/channel²

Efficiency Calibration

Created: 7/12/2012 2:04:53 PM
Type: Polynomial
Uncertainty: 1.431 %
Coefficients: -0.314710 -4.379547 0.627669
-0.086258 0.004881 -0.000116

Library Files

Main analysis library: EMSL_Food.Lib
Library Match Width: 0.500
Peak stripping: Library based

Analysis parameters

Analysis engine: Env32 G53W4.25
Start channel: 100 (25.33keV)
Stop channel: 8144 (2037.88keV)
Peak rejection level: 50.000%
Peak search sensitivity: 1
Sample Size: 4.3055E+02
Activity scaling factor: 1.0000E+06/(1.0000E+00* 4.3055E+02) =
2.3226E+03
Detection limit method: Reg. Guide 4.16 Method
Random error: 1.000000E+00
Systematic error: 1.000000E+00
Fraction Limit: 0.000%
Background width: average of five points.
Half lives decay limit: 12.000

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample tested and such sample are retained for 30 days only.



TEST REPORT NO: 381207108

Date: July 16, 2012

Page 5 of 8

ORTEC g v - i (1199) Env32 G53W4.25 7/13/2012 8:52:54 AM
EMSL Analytical, Inc. Spectrum name: 381207108 Seagate.An1

Activity range factor: 2.000
Min. step backg. energy 0.000
Multiplet shift channel 2.000

Corrections Status Comments
Decay correct to date: YES 6/22/2012 12:00:00 PM
Decay during acquisition: NO
Decay during collection: NO
True coincidence correction: NO
Peaked background correction: YES Gamma03 LB 7-9-12.Pbc
7/12/2012 10:59:41 AM
Absorption (Internal): NO
Geometry correction: NO
Random summing: NO

total peaks alloc. S cutoff: 2.00E+01 %
Energy Calibration
Normalized diff: 1.0000

Table with columns: Peak Energy, Area, Uncert, FWHM, Corrcn Factor, Nuclide Energy, Brnch. Ratio, Act. pCi/G, Nuc. Contains a list of peaks and their characteristics.

Table with columns: Channel, Peak Energy, Centroid Energy, Background Counts, Net Area Counts, Intensity Cts/Sec, Uncert 2 Sigma %, FWHM keV, Suspected Nuclide. Lists unidentified peaks.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm. Attention is drawn to the limitation of liability, Indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample tested and such sample are retained for 30 days only.



TEST REPORT NO: 381207108

Date: July 16, 2012

Page 6 of 8

306.91	77.17	2815.	242.	0.008	63.32	1.273	PB-212	D
369.49	92.79	2899.	623.	0.022	29.01	0.810	TH-234	sM
512.18	128.51	1597.	141.	0.005	83.97	0.249	-	sM
740.19	185.59	1903.	468.	0.016	27.94	1.344	U-235	D
834.35	209.16	1760.	179.	0.006	80.03	0.738	AC-228	sM
951.81	238.39	1800.	238.	0.008	52.09	1.378	PB-212	D
1177.64	295.09	1579.	243.	0.008	59.05	0.951	RU-103	sM
1404.59	351.90	1405.	470.	0.016	30.43	1.036	PB-214	sM
1752.37	438.65	882.	350.	0.012	26.25	1.502	BA-140	D
2040.59	511.08	1321.	627.	0.022	23.39	2.305	NA-22	sM
2225.45	557.59	722.	139.	0.005	67.99	0.414	RU-103	sM
2328.81	583.21	881.	125.	0.004	88.03	0.287	TL-208	sM
2433.20	609.34	906.	339.	0.012	34.06	1.135	BI-214	sM
2471.99	619.04	772.	101.	0.004	97.35	0.582	BR-82	s
3435.43	860.13	657.	119.	0.004	74.38	0.599	TL-208	s
3794.73	950.03	1392.	543.	0.019	29.11	1.861	LA-140	s
4052.96	1014.64	805.	103.	0.004	93.89	0.279	-	s

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample tested and such sample are retained for 30 days only.



ORTEC g v - i (1199) Env32 G53W4.25 7/13/2012 8:52:54 AM
 EMSL Analytical, Inc. Spectrum name: 381207108 Seagate.An1

Channel	Energy	Background	Net area	Cnts/sec	Uncert	FWHM	Suspected
4403.07	1102.24	1356.	140.	0.005	98.46	0.321	- s
4618.39	1156.10	2040.	187.	0.006	97.71	0.451	- s
4860.06	1216.56	1830.	176.	0.006	88.46	0.291	AS-76 s
5499.79	1376.59	262.	70.	0.002	89.23	0.358	PR-144 s
5785.30	1448.01	178.	59.	0.002	88.13	0.431	- s
5836.82	1460.89	199.	53429.	1.855	0.87	1.915	K-40
6453.36	1615.10	7.	12.	0.000	89.44	0.477	- s
6824.57	1707.94	16.	29.	0.001	69.99	0.315	- s
6906.55	1728.44	2.	25.	0.001	46.53	0.288	- s
7049.92	1764.29	3.	76.	0.003	25.18	0.740	BI-214 s
7238.00	1811.33	6.	20.	0.001	61.64	0.584	- s
7485.81	1873.30	2.	10.	0.000	78.24	0.308	- s

- s - Peak fails shape tests.
- D - Peak area deconvoluted.
- L - Peak written from unknown list.
- C - Area < Critical level.
- M - Peak is close to a library peak.

 This section based on library: EMSL_Food.Lib

***** I D E N T I F I E D P E A K S U M M A R Y *****

Nuclide	Peak Channel	Centroid Energy	Background Counts	Net Area Counts	Intensity Cts/Sec	Uncert 2 Sigma	FWHM %
RU-103	0.00	497.08	0.	0.	0.000	0.00	0.000
RU-103	0.00	610.33	0.	0.	0.000	0.00	0.000
CS-137	2642.13	661.62	666.	93.	0.003	80.91	1.633D

- s - Peak fails shape tests.
- D - Peak area deconvoluted.
- A - Derived peak area.

***** S U M M A R Y O F N U C L I D E S I N S A M P L E *****

Nuclide	Time of Count	Activity pCi/G	Time Corrected	Activity pCi/G	Uncertainty Counting pCi/G	2 Sigma Total pCi/G	MDA
BE-7	<	1.2185E-01		1.5836E-01			
CR-51	<	3.9023E-02		6.4687E-02			
MN-54	<	1.5919E-02		1.6649E-02			
FE-59	<	3.1137E-02		4.2467E-02			
CO-57	<	1.1349E-02		1.1953E-02			
CO-58	<	1.5598E-02		1.9009E-02			
CO-60	<	1.7426E-02		1.7553E-02			
ZN-65	<	4.8786E-02		5.1670E-02			
ZR-95	<	2.5245E-02		3.1375E-02			
NB-95	<	6.8995E-03		1.0275E-02			

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise stated the results shown in this test report refer only to the sample tested and such sample are retained for 30 days only.



ORTEC g v - i (1199) Env32 G53W4.25 7/13/2012 8:52:54 AM
EMSL Analytical, Inc. Spectrum name: 381207108 Seagate.An1

Table with columns for ID, activity values, and units. Includes entries like RU-103, RH-106, AG-110M, SB-124, SB-125, T-131, CS-134, CS-137, BA-140, LA-140, CE-141, CE-144.

- < - MDA value printed.
A - Activity printed, but activity < MDA.
B - Activity < MDA and failed test.
C - Area < Critical level.
F - Failed fraction or key line test.
H - Half-life limit exceeded

SUMMARY
Total Activity (1376.4 to 2037.9 keV) 1.096E-02 pCi/G
Total Decayed Activity (1376.4 to 2037.9 keV) 1.0971990E-02 pCi/G

This section based on library: C:\User\Libraries\EMSL_Food.Lib

SUMMARY OF DISCARDED PEAKS table with columns for activity, nuclide, and identification symbols.

- ! - Peak is part of a multiplet and this area went negative during deconvolution.
? - Peak is too narrow.
@ - Peak is too wide at FW25M, but ok at FWHM.
% - Peak fails sensitivity test.
\$ - Peak identified, but first peak of this nuclide failed one or more qualification tests.
+ - Peak activity higher than counting uncertainty range.
- - Peak activity lower than counting uncertainty range.
= - Peak outside analysis energy range.
& - Calculated peak centroid is not close enough to the library energy centroid for positive identification.
P - Peakbackground subtraction
} - Peak is too close to another for the activity to be found directly.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms and conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms e-document.htm.

Unless otherwise stated the results shown in this test report refer only to the sample tested and such sample are retained for 30 days only.