

**Lab/Cor, Inc.**7619 6th Ave NW
Seattle, WA 98117**Analysis Report Cover
Final Report***A Professional Service Corporation in the Northwest*Phone: (206) 781-0155
Fax: (206) 789-8424
<http://www.labcor.net>**Job Number: 141014 SEA**
Client: Alion Science and Technology
Address: 1000 Park Forty Plaza
Ste 200
Durham, NC 27713
Project Name: SFP-078A
Project No.: 10-100614-135155-0009
PO Number: BLA1234509
Sub Project:
Reference No.:**Report Number: 141014R02**
Report Date: 2/27/2015

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

Lab/Cor Sample #	Client Sample # and Description	Analysis	Analysis Notes	Date Received:
141014 - S1	14394145 - OCSP-01-ABS-01	ISO 10312 - Direct		12/11/2014
141014 - S2	14394146 - OCSP-01-ABS-02	ISO 10312 - Direct		12/11/2014
141014 - S3	14394147 - OCSP-01-ABS-03	ISO 10312 - Direct		12/11/2014
141014 - S4	14394148 - OCSP-01-ABS-04	ISO 10312 - Direct		12/11/2014
141014 - S5	14394150 - OCSP-01-AIR-01	ISO 10312 - Direct		12/11/2014
141014 - S6	14394151 - OCSP-01-AIR-01	ISO 10312 - Direct		12/11/2014
141014 - S7	14394152 - OCSP-01-AIR-02	ISO 10312 - Direct	Not Analyzed When sample was opened the filter was below the backing pad. Particulates present on backing pad. Sample Rejected.	12/11/2014
141014 - S8	14394153 - OCSP-01-AIR-03	ISO 10312 - Direct		12/11/2014
141014 - S9	14394154 - OCSP-01-AIR-04	ISO 10312 - Direct		12/11/2014
141014 - S10	14394156 - OCSP-02-ABS-01	ISO 10312 - Direct		12/11/2014
141014 - S11	14394157 - OCSP-02-ABS-02	ISO 10312 - Direct		12/11/2014
141014 - S12	14394158 - OCSP-02-ABS-03	ISO 10312 - Direct		12/11/2014
141014 - S13	14394161 - OCSP-02-AIR-02	ISO 10312 - Direct		12/11/2014
141014 - S14	14394162 - OCSP-02-AIR-03	ISO 10312 - Direct		12/11/2014
141014 - S15	14394163 - OCSP-02-AIR-04	ISO 10312 - Direct		12/11/2014
141014 - S16	14394164 - OCSP-03-ABS-01	ISO 10312 - Direct		12/11/2014
141014 - S17	14394165 - OCSP-03-ABS-02	ISO 10312 - Direct		12/11/2014
141014 - S18	14394169 - OCSP-03-AIR-02	ISO 10312 - Direct		12/11/2014
141014 - S19	14394170 - OCSP-03-AIR-03	ISO 10312 - Direct		12/11/2014
141014 - S20	14394171 - OCSP-03-AIR-04	ISO 10312 - Direct		12/11/2014
141014 - S21	14394173 - OCSP-04-ABS-01	ISO 10312 - Direct		12/11/2014
141014 - S22	14394174 - OCSP-04-ABS-02	ISO 10312 - Direct		12/11/2014
141014 - S23	14394175 - OCSP-04-ABS-03	ISO 10312 - Direct		12/11/2014
141014 - S24	14394176 - OCSP-04-ABS-04	ISO 10312 - Direct		12/11/2014
141014 - S25	14394178 - OCSP-04-AIR-02	ISO 10312 - Direct		12/11/2014
141014 - S26	14394179 - OCSP-04-AIR-03	ISO 10312 - Direct		12/11/2014
141014 - S27	14394180 - OCSP-04-AIR-04	ISO 10312 - Direct		12/11/2014
141014 - S28	14394181 - OCSP-05-ABS-01	ISO 10312 - Direct		12/11/2014
141014 - S29	14394182 - OCSP-05-ABS-02	ISO 10312 - Direct		12/11/2014
141014 - S30	14394183 - OCSP-05-ABS-03	ISO 10312 - Direct		12/11/2014
141014 - S31	14394186 - OCSP-05-AIR-02	ISO 10312 - Direct		12/11/2014
141014 - S32	14394187 - OCSP-05-AIR-03	ISO 10312 - Direct		12/11/2014
141014 - S33	14394188 - OCSP-05-AIR-04	ISO 10312 - Direct		12/11/2014



Lab/Cor, Inc.

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Final Report

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A Professional Service Corporation in the Northwest

Job Number: 141014

SEA

Report Number: 141014R02

Client: Alion Science and Technology

Report Date: 2/27/2015

Project Name: SFP-078A

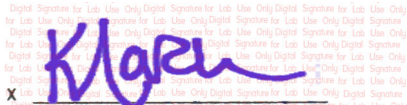
ISO 10312 - Direct Preparation and analysis of the above samples was conducted in accordance with the ISO method 10312 (Direct) for the identification of asbestos. Briefly, the samples were collapsed with a solution of N,N-dimethylformamide and acetic acid, then etched in a low temperature plasma etcher to remove the top surface of the filter and other organics. The samples were carbon coated at high vacuum with a thin layer of carbon, placed on 200 mesh copper grids and allowed to dissolve in N,N-Dimethylformamide / Acetone baths until cleared of filter debris.

TEM analysis was performed using a transmission electron microscope equipped with an EDS X ray analyzer. The air samples were analyzed at an approximate screen magnification of 20,000x for asbestos structures greater than 0.5 micrometer lengths. An accelerating voltage of 100 KV was applied. The sizing of grid openings was performed using a calibrated digital imaging system at low magnification.

Disclaimer The results reported relate only to the samples tested or analyzed; the laboratory is not responsible for data collected by personnel who are not affiliated with the laboratory. Results reported in both structures/cm3 and structures/mm2 are dependent on the sample volume and area. These parameters are measured and recorded by non-laboratory personnel and are not covered by the laboratory's accreditation. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please call us. Thank you for allowing the staff at Lab/Cor, Inc. the opportunity to provide you with the analytical services.

Sincerely,



Kate March
QC Manager

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ISO 10312 - Direct Summary Data**Job Number:** 141014**SEA****Client:** Alion Science and Technology**Project Name:** SFP-078A**Report Number:** 141014R02**Date Received:** 12/11/2014**Lab/Cor Sample No.:** S1**Client Sample No.:** 14394145**Description:** OCSP-01-ABS-01

Analyst(s)	Analysis Date	Microscope	Magnification
TH	1/15/2015	H-7000	20000

Volume (L) : 365.885**Lab Filter Area (mm2) :** 385**Grid Openings Analyzed :** 34**Average Grid Opening Area :** 0.01042**Area Analyzed (mm2) :** 0.35428**Analytical Sens. (struc/cc) :** 0.00297**Detection Limit. (struc/cc) :** 0.00888

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	0	< 0.003	0 - 0.011 - Poisson	0	
Total Asbestos Structures	0	< 0.003	0 - 0.011 - Poisson		0
Primary Asb & Libby-Other Amph Structures	0	< 0.003	0 - 0.011 - Poisson	0	
Total Asb & Libby-Other Amph Structures	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.**Lab/Cor Sample No.:** S2**Client Sample No.:** 14394146**Description:** OCSP-01-ABS-02

Analyst(s)	Analysis Date	Microscope	Magnification
TH	1/15/2015	H-7000	20000

Volume (L) : 231.34**Lab Filter Area (mm2) :** 385**Grid Openings Analyzed :** 54**Average Grid Opening Area :** 0.01042**Area Analyzed (mm2) :** 0.56268**Analytical Sens. (struc/cc) :** 0.00296**Detection Limit. (struc/cc) :** 0.00884

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	0	< 0.003	0 - 0.0109 - Poisson	0	
Total Asbestos Structures	0	< 0.003	0 - 0.0109 - Poisson		0
Primary Asb & Libby-Other Amph Structures	0	< 0.003	0 - 0.0109 - Poisson	0	
Total Asb & Libby-Other Amph Structures	0	< 0.003	0 - 0.0109 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.003	0 - 0.0109 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.003	0 - 0.0109 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.0109 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.003	0 - 0.0109 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.003	0 - 0.0109 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.0109 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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rptAnalysis_TEM_ISO_directSummary

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<http://www.labcor.net>**ISO 10312 - Direct Summary Data**Job Number: 141014 SEA
Client: Alion Science and Technology
Project Name: SFP-078AReport Number: 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No.: S3**

Client Sample No.: 14394147

Description: OCSP-01-ABS-03

Analyst(s) Analysis Date Microscope Magnification
TH 1/15/2015 H-7000 20000

Volume (L) : 202.02

Lab Filter Area (mm2) : 385

Grid Openings Analyzed : 61

Average Grid Opening Area : 0.01042

Area Analyzed (mm2) : 0.63562

Analytical Sens. (struc/cc) : 0.003

Detection Limit. (struc/cc) : 0.00896

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	0	< 0.003	0 - 0.0111 - Poisson	0	
Total Asbestos Structures	0	< 0.003	0 - 0.0111 - Poisson		0
Primary Asb & Libby-Other Amph Structures	0	< 0.003	0 - 0.0111 - Poisson	0	
Total Asb & Libby-OtherAmph Structures	0	< 0.003	0 - 0.0111 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.003	0 - 0.0111 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.003	0 - 0.0111 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.0111 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.003	0 - 0.0111 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.003	0 - 0.0111 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.0111 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.**Lab/Cor Sample No.: S4**

Client Sample No.: 14394148

Description: OCSP-01-ABS-04

Analyst(s) Analysis Date Microscope Magnification
TH 1/15/2015 H-7000 20000

Volume (L) : 288.99

Lab Filter Area (mm2) : 385

Grid Openings Analyzed : 43

Average Grid Opening Area : 0.01042

Area Analyzed (mm2) : 0.44806

Analytical Sens. (struc/cc) : 0.00297

Detection Limit. (struc/cc) : 0.00889

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	6.7	0.0089	0.0018 - 0.0261 - Poisson	3	
Total Asbestos Structures	6.7	0.0089	0.0018 - 0.0261 - Poisson		3
Primary Asb & Libby-Other Amph Structures	6.7	0.0089	0.0018 - 0.0261 - Poisson	3	
Total Asb & Libby-OtherAmph Structures	6.7	0.0089	0.0018 - 0.0261 - Poisson		3
PCM Equivalent Fibers-ISO	2.2	0.003	0.0001 - 0.0166 - Poisson		1
PCM Equivalent Fibers-NIOSH	2.2	0.003	0.0001 - 0.0166 - Poisson		1
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	2.2	0.003	0.0001 - 0.0166 - Poisson		1
PCM Equivalent Structures-ISO	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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Fax: (206) 789-8424
http://www.labcor.net**ISO 10312 - Direct Summary Data**Job Number: 141014 SEA
Client: Alion Science and Technology
Project Name: SFP-078AReport Number: 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No.: S5**

Client Sample No.: 14394150

Description: OCSP-01-AIR-01

Analyst(s) Analysis Date Microscope Magnification
TH 1/15/2015 H-7000 20000Volume (L) : 0
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 10
Average Grid Opening Area : 0.01042
Area Analyzed (mm2) : 0.1042
Analytical Sens. (struc/cc) : NA
Detection Limit. (struc/cc) : NA

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	0	Not Applicable	Not Applicable	0	
Total Asbestos Structures	0	Not Applicable	Not Applicable		0
Primary Asb & Libby-Other Amph Structures	0	Not Applicable	Not Applicable	0	
Total Asb & Libby-Other Amph Structures	0	Not Applicable	Not Applicable		0
PCM Equivalent Fibers-ISO	0	Not Applicable	Not Applicable		0
PCM Equivalent Fibers-NIOSH	0	Not Applicable	Not Applicable		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	Not Applicable	Not Applicable		0
PCM Equivalent Structures-ISO	0	Not Applicable	Not Applicable	0	
PCM Equivalent Structures-NIOSH	0	Not Applicable	Not Applicable	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	Not Applicable	Not Applicable	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.**Lab/Cor Sample No.: S6**

Client Sample No.: 14394151

Description: OCSP-01-AIR-01

Analyst(s) Analysis Date Microscope Magnification
TH 1/15/2015 H-7000 20000Volume (L) : 0
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 10
Average Grid Opening Area : 0.01042
Area Analyzed (mm2) : 0.1042
Analytical Sens. (struc/cc) : NA
Detection Limit. (struc/cc) : NA

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	0	Not Applicable	Not Applicable	0	
Total Asbestos Structures	0	Not Applicable	Not Applicable		0
Primary Asb & Libby-Other Amph Structures	0	Not Applicable	Not Applicable	0	
Total Asb & Libby-Other Amph Structures	0	Not Applicable	Not Applicable		0
PCM Equivalent Fibers-ISO	0	Not Applicable	Not Applicable		0
PCM Equivalent Fibers-NIOSH	0	Not Applicable	Not Applicable		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	Not Applicable	Not Applicable		0
PCM Equivalent Structures-ISO	0	Not Applicable	Not Applicable	0	
PCM Equivalent Structures-NIOSH	0	Not Applicable	Not Applicable	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	Not Applicable	Not Applicable	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

ISO 10312 - Direct Summary Data

Job Number: 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No.: S8

Client Sample No.: 14394153

Description: OCSP-01-AIR-03

Analyst(s)	Analysis Date	Microscope	Magnification
TH	1/16/2015	H-7000	20000
TH	2/4/2015	H-7000	20000

Volume (L) : 2277.6
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 55
Average Grid Opening Area : 0.01042
Area Analyzed (mm2) : 0.5731
Analytical Sens. (struc/cc) : 0.00029
Detection Limit. (struc/cc) : 0.00088

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	24.4	0.0041	0.0023 - 0.0069 - Poisson	14	
Total Asbestos Structures	57.6	0.0097	0.0067 - 0.0137 - Poisson		33
Primary Asb & Libby-Other Amph Structures	24.4	0.0041	0.0023 - 0.0069 - Poisson	14	
Total Asb & Libby-OtherAmph Structures	57.6	0.0097	0.0067 - 0.0137 - Poisson		33
PCM Equivalent Fibers-ISO	5.2	0.0009	0.0002 - 0.0026 - Poisson		3
PCM Equivalent Fibers-NIOSH	7	0.0012	0.0003 - 0.003 - Poisson		4
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	5.2	0.0009	0.0002 - 0.0026 - Poisson		3
PCM Equivalent Structures-ISO	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S9

Client Sample No.: 14394154

Description: OCSP-01-AIR-04

Analyst(s)	Analysis Date	Microscope	Magnification
TH	1/16/2015	H-7000	20000

Volume (L) : 2172
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 57
Average Grid Opening Area : 0.01042
Area Analyzed (mm2) : 0.59394
Analytical Sens. (struc/cc) : 0.0003
Detection Limit. (struc/cc) : 0.00089

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	42.1	0.0075	0.0048 - 0.011 - Poisson	25	
Total Asbestos Structures	126.3	0.0224	0.0176 - 0.0281 - Poisson		75
Primary Asb & Libby-Other Amph Structures	43.8	0.0078	0.0051 - 0.0114 - Poisson	26	
Total Asb & Libby-OtherAmph Structures	128	0.0227	0.0179 - 0.0284 - Poisson		76
PCM Equivalent Fibers-ISO	8.4	0.0015	0.0005 - 0.0035 - Poisson		5
PCM Equivalent Fibers-NIOSH	8.4	0.0015	0.0005 - 0.0035 - Poisson		5
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	8.4	0.0015	0.0005 - 0.0035 - Poisson		5
PCM Equivalent Structures-ISO	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures-NIOSH	1.7	0.0003	0 - 0.0017 - Poisson	1	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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http://www.labcor.net**ISO 10312 - Direct Summary Data**Job Number: 141014 SEA
Client: Alion Science and Technology
Project Name: SFP-078AReport Number: 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No.: S10**

Client Sample No.: 14394156

Description: OCSP-02-ABS-01

Analyst(s) Analysis Date Microscope Magnification
TH 1/16/2015 H-7000 20000

Volume (L) : 244.335

Lab Filter Area (mm2) : 385

Grid Openings Analyzed : 51

Average Grid Opening Area : 0.01042

Area Analyzed (mm2) : 0.53142

Analytical Sens. (struc/cc) : 0.00297

Detection Limit. (struc/cc) : 0.00887

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	0	< 0.003	0 - 0.0109 - Poisson	0	
Total Asbestos Structures	0	< 0.003	0 - 0.0109 - Poisson		0
Primary Asb & Libby-Other Amph Structures	0	< 0.003	0 - 0.0109 - Poisson	0	
Total Asb & Libby-OtherAmph Structures	0	< 0.003	0 - 0.0109 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.003	0 - 0.0109 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.003	0 - 0.0109 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.0109 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.003	0 - 0.0109 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.003	0 - 0.0109 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.0109 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.**Lab/Cor Sample No.: S11**

Client Sample No.: 14394157

Description: OCSP-02-ABS-02

Analyst(s) Analysis Date Microscope Magnification
TH 1/29/2015 H-7000 20000

Volume (L) : 97.47

Lab Filter Area (mm2) : 385

Grid Openings Analyzed : 127

Average Grid Opening Area : 0.01042

Area Analyzed (mm2) : 1.32334

Analytical Sens. (struc/cc) : 0.00298

Detection Limit. (struc/cc) : 0.00892

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	0.8	0.003	0.0001 - 0.0166 - Poisson	1	
Total Asbestos Structures	0.8	0.003	0.0001 - 0.0166 - Poisson		1
Primary Asb & Libby-Other Amph Structures	0.8	0.003	0.0001 - 0.0166 - Poisson	1	
Total Asb & Libby-OtherAmph Structures	0.8	0.003	0.0001 - 0.0166 - Poisson		1
PCM Equivalent Fibers-ISO	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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<http://www.labcor.net>*A Professional Service Corporation in the Northwest***ISO 10312 - Direct Summary Data**Job Number: 141014 SEA
Client: Alion Science and Technology
Project Name: SFP-078AReport Number: 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No.: S12**

Client Sample No.: 14394158

Description: OCSP-02-ABS-03

Analyst(s) Analysis Date Microscope Magnification
TH 1/30/2015 H-7000 20000

Volume (L) : 678.6

Lab Filter Area (mm2) : 385

Grid Openings Analyzed : 19

Average Grid Opening Area : 0.01042

Area Analyzed (mm2) : 0.19798

Analytical Sens. (struc/cc) : 0.00287

Detection Limit. (struc/cc) : 0.00857

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	15.2	0.0086	0.0018 - 0.0251 - Poisson	3	
Total Asbestos Structures	15.2	0.0086	0.0018 - 0.0251 - Poisson		3
Primary Asb & Libby-Other Amph Structures	15.2	0.0086	0.0018 - 0.0251 - Poisson	3	
Total Asb & Libby-OtherAmph Structures	15.2	0.0086	0.0018 - 0.0251 - Poisson		3
PCM Equivalent Fibers-ISO	5.1	0.0029	0.0001 - 0.016 - Poisson		1
PCM Equivalent Fibers-NIOSH	5.1	0.0029	0.0001 - 0.016 - Poisson		1
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	5.1	0.0029	0.0001 - 0.016 - Poisson		1
PCM Equivalent Structures-ISO	0	< 0.0029	0 - 0.0106 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.0029	0 - 0.0106 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.0029	0 - 0.0106 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.**Lab/Cor Sample No.: S13**

Client Sample No.: 14394161

Description: OCSP-02-AIR-02

Analyst(s) Analysis Date Microscope Magnification
TH 2/5/2015 H-7000 20000

Volume (L) : 2212.8

Lab Filter Area (mm2) : 385

Grid Openings Analyzed : 57

Average Grid Opening Area : 0.01042

Area Analyzed (mm2) : 0.59394

Analytical Sens. (struc/cc) : 0.00029

Detection Limit. (struc/cc) : 0.00088

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	0	< 0.0003	0 - 0.0011 - Poisson	0	
Total Asbestos Structures	0	< 0.0003	0 - 0.0011 - Poisson		0
Primary Asb & Libby-Other Amph Structures	0	< 0.0003	0 - 0.0011 - Poisson	0	
Total Asb & Libby-OtherAmph Structures	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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ISO 10312 - Direct Summary Data**Job Number:** 141014**SEA****Client:** Alion Science and Technology**Report Number:** 141014R02**Date Received:** 12/11/2014**Project Name:** SFP-078A**Lab/Cor Sample No.:** S14**Client Sample No.:** 14394162**Description:** OCSP-02-AIR-03**Volume (L) :** 2186.4**Lab Filter Area (mm2) :** 385**Grid Openings Analyzed :** 57**Average Grid Opening Area :** 0.01042**Area Analyzed (mm2) :** 0.59394**Analytical Sens. (struc/cc) :** 0.0003**Detection Limit. (struc/cc) :** 0.00089

Analyst(s)	Analysis Date	Microscope	Magnification
TH	2/5/2015	H-7000	20000

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	1.7	0.0003	0 - 0.0017 - Poisson	1	
Total Asbestos Structures	1.7	0.0003	0 - 0.0017 - Poisson		1
Primary Asb & Libby-Other Amph Structures	1.7	0.0003	0 - 0.0017 - Poisson	1	
Total Asb & Libby-OtherAmph Structures	1.7	0.0003	0 - 0.0017 - Poisson		1
PCM Equivalent Fibers-ISO	1.7	0.0003	0 - 0.0017 - Poisson		1
PCM Equivalent Fibers-NIOSH	1.7	0.0003	0 - 0.0017 - Poisson		1
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	1.7	0.0003	0 - 0.0017 - Poisson		1
PCM Equivalent Structures-ISO	1.7	0.0003	0 - 0.0017 - Poisson	1	
PCM Equivalent Structures-NIOSH	1.7	0.0003	0 - 0.0017 - Poisson	1	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	1.7	0.0003	0 - 0.0017 - Poisson	1	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.**Lab/Cor Sample No.:** S15**Client Sample No.:** 14394163**Description:** OCSP-02-AIR-04**Volume (L) :** 2174.4**Lab Filter Area (mm2) :** 385**Grid Openings Analyzed :** 57**Average Grid Opening Area :** 0.01042**Area Analyzed (mm2) :** 0.59394**Analytical Sens. (struc/cc) :** 0.0003**Detection Limit. (struc/cc) :** 0.00089

Analyst(s)	Analysis Date	Microscope	Magnification
TH	2/18/2015	H-7000	20000

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	0	< 0.0003	0 - 0.0011 - Poisson	0	
Total Asbestos Structures	0	< 0.0003	0 - 0.0011 - Poisson		0
Primary Asb & Libby-Other Amph Structures	0	< 0.0003	0 - 0.0011 - Poisson	0	
Total Asb & Libby-OtherAmph Structures	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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<http://www.labcor.net>**ISO 10312 - Direct Summary Data**Job Number: 141014 SEA
Client: Alion Science and Technology
Project Name: SFP-078AReport Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No.: S16

Client Sample No.: 14394164

Description: OCSP-03-ABS-01

Analyst(s) Analysis Date Microscope Magnification
TH 1/30/2015 H-7000 20000

Volume (L) : 191.345

Lab Filter Area (mm2) : 385

Grid Openings Analyzed : 65

Average Grid Opening Area : 0.01042

Area Analyzed (mm2) : 0.6773

Analytical Sens. (struc/cc) : 0.00297

Detection Limit. (struc/cc) : 0.00888

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	4.4	0.0089	0.0018 - 0.026 - Poisson	3	
Total Asbestos Structures	4.4	0.0089	0.0018 - 0.026 - Poisson		3
Primary Asb & Libby-Other Amph Structures	4.4	0.0089	0.0018 - 0.026 - Poisson	3	
Total Asb & Libby-OtherAmph Structures	4.4	0.0089	0.0018 - 0.026 - Poisson		3
PCM Equivalent Fibers-ISO	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S17

Client Sample No.: 14394165

Description: OCSP-03-ABS-02

Analyst(s) Analysis Date Microscope Magnification
TH 1/30/2015 H-7000 20000

Volume (L) : 189.035

Lab Filter Area (mm2) : 385

Grid Openings Analyzed : 68

Average Grid Opening Area : 0.01042

Area Analyzed (mm2) : 0.70856

Analytical Sens. (struc/cc) : 0.00287

Detection Limit. (struc/cc) : 0.00859

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	9.9	0.0201	0.0081 - 0.0415 - Poisson	7	
Total Asbestos Structures	11.3	0.023	0.0099 - 0.0453 - Poisson		8
Primary Asb & Libby-Other Amph Structures	9.9	0.0201	0.0081 - 0.0415 - Poisson	7	
Total Asb & Libby-OtherAmph Structures	11.3	0.023	0.0099 - 0.0453 - Poisson		8
PCM Equivalent Fibers-ISO	0	< 0.0029	0 - 0.0106 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.0029	0 - 0.0106 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.0029	0 - 0.0106 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0029	0 - 0.0106 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.0029	0 - 0.0106 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.0029	0 - 0.0106 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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ISO 10312 - Direct Summary Data**Job Number:** 141014**SEA****Client:** Alion Science and Technology**Report Number:** 141014R02**Date Received:** 12/11/2014**Project Name:** SFP-078A**Lab/Cor Sample No.:** S18**Client Sample No.:** 14394169**Description:** OCSP-03-AIR-02**Volume (L) :** 1702.8**Lab Filter Area (mm2) :** 385**Grid Openings Analyzed :** 75**Average Grid Opening Area :** 0.01042**Area Analyzed (mm2) :** 0.7815**Analytical Sens. (struc/cc) :** 0.00029**Detection Limit. (struc/cc) :** 0.00087

Analyst(s)	Analysis Date	Microscope	Magnification
TH	2/18/2015	H-7000	20000

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	1.3	0.0003	0 - 0.0016 - Poisson	1	
Total Asbestos Structures	1.3	0.0003	0 - 0.0016 - Poisson		1
Primary Asb & Libby-Other Amph Structures	1.3	0.0003	0 - 0.0016 - Poisson	1	
Total Asb & Libby-OtherAmph Structures	1.3	0.0003	0 - 0.0016 - Poisson		1
PCM Equivalent Fibers-ISO	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.**Lab/Cor Sample No.:** S19**Client Sample No.:** 14394170**Description:** OCSP-03-AIR-03**Volume (L) :** 1657.8**Lab Filter Area (mm2) :** 385**Grid Openings Analyzed :** 75**Average Grid Opening Area :** 0.01042**Area Analyzed (mm2) :** 0.7815**Analytical Sens. (struc/cc) :** 0.0003**Detection Limit. (struc/cc) :** 0.00089

Analyst(s)	Analysis Date	Microscope	Magnification
TH	2/18/2015	H-7000	20000

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	2.6	0.0006	0.0001 - 0.0021 - Poisson	2	
Total Asbestos Structures	5.1	0.0012	0.0003 - 0.003 - Poisson		4
Primary Asb & Libby-Other Amph Structures	2.6	0.0006	0.0001 - 0.0021 - Poisson	2	
Total Asb & Libby-OtherAmph Structures	5.1	0.0012	0.0003 - 0.003 - Poisson		4
PCM Equivalent Fibers-ISO	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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ISO 10312 - Direct Summary Data

Job Number: 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No.: S20

Client Sample No.: 14394171

Description: OCSP-03-AIR-04

Analyst(s) **Analysis Date** **Microscope** **Magnification**
TH 2/18/2015 H-7000 20000

Volume (L) : 1647

Lab Filter Area (mm2) : 385

Grid Openings Analyzed : 75

Average Grid Opening Area : 0.01042

Area Analyzed (mm2) : 0.7815

Analytical Sens. (struc/cc) : 0.0003

Detection Limit. (struc/cc) : 0.00089

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	3.8	0.0009	0.0002 - 0.0026 - Poisson	3	
Total Asbestos Structures	3.8	0.0009	0.0002 - 0.0026 - Poisson		3
Primary Asb & Libby-Other Amph Structures	3.8	0.0009	0.0002 - 0.0026 - Poisson	3	
Total Asb & Libby-OtherAmph Structures	3.8	0.0009	0.0002 - 0.0026 - Poisson		3
PCM Equivalent Fibers-ISO	1.3	0.0003	0 - 0.0017 - Poisson		1
PCM Equivalent Fibers-NIOSH	1.3	0.0003	0 - 0.0017 - Poisson		1
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	1.3	0.0003	0 - 0.0017 - Poisson		1
PCM Equivalent Structures-ISO	1.3	0.0003	0 - 0.0017 - Poisson	1	
PCM Equivalent Structures-NIOSH	2.6	0.0006	0.0001 - 0.0022 - Poisson	2	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	1.3	0.0003	0 - 0.0017 - Poisson	1	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S21

Client Sample No.: 14394173

Description: OCSP-04-ABS-01

Analyst(s) **Analysis Date** **Microscope** **Magnification**
TH 2/1/2015 H-7000 20000

Volume (L) : 0

Lab Filter Area (mm2) : 385

Grid Openings Analyzed : 10

Average Grid Opening Area : 0.01042

Area Analyzed (mm2) : 0.1042

Analytical Sens. (struc/cc) : NA

Detection Limit. (struc/cc) : NA

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	0	Not Applicable	Not Applicable	0	
Total Asbestos Structures	0	Not Applicable	Not Applicable		0
Primary Asb & Libby-Other Amph Structures	0	Not Applicable	Not Applicable	0	
Total Asb & Libby-OtherAmph Structures	0	Not Applicable	Not Applicable		0
PCM Equivalent Fibers-ISO	0	Not Applicable	Not Applicable		0
PCM Equivalent Fibers-NIOSH	0	Not Applicable	Not Applicable		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	Not Applicable	Not Applicable		0
PCM Equivalent Structures-ISO	0	Not Applicable	Not Applicable	0	
PCM Equivalent Structures-NIOSH	0	Not Applicable	Not Applicable	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	Not Applicable	Not Applicable	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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ISO 10312 - Direct Summary Data**Job Number:** 141014**SEA****Client:** Alion Science and Technology**Report Number:** 141014R02**Date Received:** 12/11/2014**Project Name:** SFP-078A**Lab/Cor Sample No.:** S22**Client Sample No.:** 14394174**Description:** OCSP-04-ABS-02**Volume (L) :** 103**Lab Filter Area (mm2) :** 385**Grid Openings Analyzed :** 120**Average Grid Opening Area :** 0.01042**Area Analyzed (mm2) :** 1.2504**Analytical Sens. (struc/cc) :** 0.00299**Detection Limit. (struc/cc) :** 0.00894

Analyst(s)	Analysis Date	Microscope	Magnification
TH	2/1/2015	H-7000	20000
TH	2/2/2015	H-7000	20000

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	10.4	0.0389	0.0207 - 0.0665 - Poisson	13	
Total Asbestos Structures	16.8	0.0628	0.0389 - 0.096 - Poisson		21
Primary Asb & Libby-Other Amph Structures	10.4	0.0389	0.0207 - 0.0665 - Poisson	13	
Total Asb & Libby-OtherAmph Structures	16.8	0.0628	0.0389 - 0.096 - Poisson		21
PCM Equivalent Fibers-ISO	0.8	0.003	0.0001 - 0.0167 - Poisson		1
PCM Equivalent Fibers-NIOSH	0.8	0.003	0.0001 - 0.0167 - Poisson		1
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0.8	0.003	0.0001 - 0.0167 - Poisson		1
PCM Equivalent Structures-ISO	0.8	0.003	0.0001 - 0.0167 - Poisson	1	
PCM Equivalent Structures-NIOSH	0.8	0.003	0.0001 - 0.0167 - Poisson	1	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0.8	0.003	0.0001 - 0.0167 - Poisson	1	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.**Lab/Cor Sample No.:** S23**Client Sample No.:** 14394175**Description:** OCSP-04-ABS-03**Volume (L) :** 107.6**Lab Filter Area (mm2) :** 385**Grid Openings Analyzed :** 115**Average Grid Opening Area :** 0.01042**Area Analyzed (mm2) :** 1.1983**Analytical Sens. (struc/cc) :** 0.00299**Detection Limit. (struc/cc) :** 0.00893

Analyst(s)	Analysis Date	Microscope	Magnification
TH	2/3/2015	H-7000	20000

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	0.8	0.003	0.0001 - 0.0166 - Poisson	1	
Total Asbestos Structures	1.7	0.006	0.0007 - 0.0216 - Poisson		2
Primary Asb & Libby-Other Amph Structures	0.8	0.003	0.0001 - 0.0166 - Poisson	1	
Total Asb & Libby-OtherAmph Structures	1.7	0.006	0.0007 - 0.0216 - Poisson		2
PCM Equivalent Fibers-ISO	0.8	0.003	0.0001 - 0.0166 - Poisson		1
PCM Equivalent Fibers-NIOSH	0.8	0.003	0.0001 - 0.0166 - Poisson		1
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0.8	0.003	0.0001 - 0.0166 - Poisson		1
PCM Equivalent Structures-ISO	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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<http://www.labcor.net>**ISO 10312 - Direct Summary Data**Job Number: 141014 SEA
Client: Alion Science and Technology
Project Name: SFP-078AReport Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No.: S24

Client Sample No.: 14394176

Description: OCSP-04-ABS-04

Analyst(s) Analysis Date Microscope Magnification
TH 2/1/2015 H-7000 20000

Volume (L) : 493.455

Lab Filter Area (mm2) : 385

Grid Openings Analyzed : 25

Average Grid Opening Area : 0.01042

Area Analyzed (mm2) : 0.2605

Analytical Sens. (struc/cc) : 0.003

Detection Limit. (struc/cc) : 0.00896

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	19.2	0.015	0.0049 - 0.0349 - Poisson	5	
Total Asbestos Structures	49.9	0.0389	0.0207 - 0.0666 - Poisson		13
Primary Asb & Libby-Other Amph Structures	19.2	0.015	0.0049 - 0.0349 - Poisson	5	
Total Asb & Libby-OtherAmph Structures	49.9	0.0389	0.0207 - 0.0666 - Poisson		13
PCM Equivalent Fibers-ISO	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S25

Client Sample No.: 14394178

Description: OCSP-04-AIR-02

Analyst(s) Analysis Date Microscope Magnification
TH 1/19/2015 H-7000 20000

Volume (L) : 2203.2

Lab Filter Area (mm2) : 385

Grid Openings Analyzed : 56

Average Grid Opening Area : 0.01042

Area Analyzed (mm2) : 0.58352

Analytical Sens. (struc/cc) : 0.0003

Detection Limit. (struc/cc) : 0.0009

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	3.4	0.0006	0.0001 - 0.0022 - Poisson	2	
Total Asbestos Structures	15.4	0.0027	0.0012 - 0.0051 - Poisson		9
Primary Asb & Libby-Other Amph Structures	3.4	0.0006	0.0001 - 0.0022 - Poisson	2	
Total Asb & Libby-OtherAmph Structures	15.4	0.0027	0.0012 - 0.0051 - Poisson		9
PCM Equivalent Fibers-ISO	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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ISO 10312 - Direct Summary Data**Job Number:** 141014**SEA****Client:** Alion Science and Technology**Report Number:** 141014R02**Date Received:** 12/11/2014**Project Name:** SFP-078A**Lab/Cor Sample No.:** S26**Client Sample No.:** 14394179**Description:** OCSP-04-AIR-03**Volume (L) :** 2200.8**Lab Filter Area (mm2) :** 385**Grid Openings Analyzed :** 58**Average Grid Opening Area :** 0.01042**Area Analyzed (mm2) :** 0.60436**Analytical Sens. (struc/cc) :** 0.00029**Detection Limit. (struc/cc) :** 0.00087

Analyst(s)	Analysis Date	Microscope	Magnification
TH	1/20/2015	H-7000	20000

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	0	< 0.0003	0 - 0.0011 - Poisson	0	
Total Asbestos Structures	0	< 0.0003	0 - 0.0011 - Poisson		0
Primary Asb & Libby-Other Amph Structures	0	< 0.0003	0 - 0.0011 - Poisson	0	
Total Asb & Libby-Other Amph Structures	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.**Lab/Cor Sample No.:** S27**Client Sample No.:** 14394180**Description:** OCSP-04-AIR-04**Volume (L) :** 2193.6**Lab Filter Area (mm2) :** 385**Grid Openings Analyzed :** 57**Average Grid Opening Area :** 0.01042**Area Analyzed (mm2) :** 0.59394**Analytical Sens. (struc/cc) :** 0.0003**Detection Limit. (struc/cc) :** 0.00088

Analyst(s)	Analysis Date	Microscope	Magnification
TH	1/20/2015	H-7000	20000

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	1.7	0.0003	0 - 0.0016 - Poisson	1	
Total Asbestos Structures	1.7	0.0003	0 - 0.0016 - Poisson		1
Primary Asb & Libby-Other Amph Structures	1.7	0.0003	0 - 0.0016 - Poisson	1	
Total Asb & Libby-Other Amph Structures	1.7	0.0003	0 - 0.0016 - Poisson		1
PCM Equivalent Fibers-ISO	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

ISO 10312 - Direct Summary Data

Job Number: 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No.: S28

Client Sample No.: 14394181

Description: OCSP-05-ABS-01

Analyst(s)	Analysis Date	Microscope	Magnification
TH	1/19/2015	H-7000	20000
TH	1/20/2015	H-7000	20000

Volume (L) : 145.5
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 85
Average Grid Opening Area : 0.01042
Area Analyzed (mm2) : 0.8857
Analytical Sens. (struc/cc) : 0.00299
Detection Limit. (struc/cc) : 0.00893

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	13.5	0.0359	0.0185 - 0.0626 - Poisson	12	
Total Asbestos Structures	37.3	0.0986	0.0679 - 0.1385 - Poisson		33
Primary Asb & Libby-Other Amph Structures	13.5	0.0359	0.0185 - 0.0626 - Poisson	12	
Total Asb & Libby-OtherAmph Structures	37.3	0.0986	0.0679 - 0.1385 - Poisson		33
PCM Equivalent Fibers-ISO	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S29

Client Sample No.: 14394182

Description: OCSP-05-ABS-02

Analyst(s)	Analysis Date	Microscope	Magnification
TH	1/19/2015	H-7000	20000

Volume (L) : 242.99
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 51
Average Grid Opening Area : 0.01042
Area Analyzed (mm2) : 0.53142
Analytical Sens. (struc/cc) : 0.00298
Detection Limit. (struc/cc) : 0.00891

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	0	< 0.003	0 - 0.011 - Poisson	0	
Total Asbestos Structures	0	< 0.003	0 - 0.011 - Poisson		0
Primary Asb & Libby-Other Amph Structures	0	< 0.003	0 - 0.011 - Poisson	0	
Total Asb & Libby-OtherAmph Structures	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

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http://www.labcor.net**ISO 10312 - Direct Summary Data**Job Number: 141014 SEA
Client: Alion Science and Technology
Project Name: SFP-078AReport Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No.: S30

Client Sample No.: 14394183

Description: OCSP-05-ABS-03

Analyst(s)	Analysis Date	Microscope	Magnification
TH	1/19/2015	H-7000	20000

Volume (L) : 253.33
 Lab Filter Area (mm2) : 385
 Grid Openings Analyzed : 49
 Average Grid Opening Area : 0.01042
 Area Analyzed (mm2) : 0.51058
 Analytical Sens. (struc/cc) : 0.00298
 Detection Limit. (struc/cc) : 0.0089

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	0	< 0.003	0 - 0.011 - Poisson	0	
Total Asbestos Structures	0	< 0.003	0 - 0.011 - Poisson		0
Primary Asb & Libby-Other Amph Structures	0	< 0.003	0 - 0.011 - Poisson	0	
Total Asb & Libby-OtherAmph Structures	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.011 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.003	0 - 0.011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.003	0 - 0.011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S31

Client Sample No.: 14394186

Description: OCSP-05-AIR-02

Analyst(s)	Analysis Date	Microscope	Magnification
TH	1/20/2015	H-7000	20000
TH	1/21/2015	H-7000	20000

Volume (L) : 843.3
 Lab Filter Area (mm2) : 385
 Grid Openings Analyzed : 147
 Average Grid Opening Area : 0.01042
 Area Analyzed (mm2) : 1.53174
 Analytical Sens. (struc/cc) : 0.0003
 Detection Limit. (struc/cc) : 0.00089

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	1.3	0.0006	0.0001 - 0.0022 - Poisson	2	
Total Asbestos Structures	4.6	0.0021	0.0008 - 0.0043 - Poisson		7
Primary Asb & Libby-Other Amph Structures	1.3	0.0006	0.0001 - 0.0022 - Poisson	2	
Total Asb & Libby-OtherAmph Structures	4.6	0.0021	0.0008 - 0.0043 - Poisson		7
PCM Equivalent Fibers-ISO	0.7	0.0003	0 - 0.0017 - Poisson		1
PCM Equivalent Fibers-NIOSH	0.7	0.0003	0 - 0.0017 - Poisson		1
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0.7	0.0003	0 - 0.0017 - Poisson		1
PCM Equivalent Structures-ISO	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3

ISO 10312 - Direct Summary Data

Job Number: 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No.: S32

Client Sample No.: 14394187

Description: OCSP-05-AIR-03

Analyst(s)	Analysis Date	Microscope	Magnification
TH	1/21/2015	H-7000	20000
TH	1/22/2015	H-7000	20000

Volume (L) : 812.7
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 157
Average Grid Opening Area : 0.01042
Area Analyzed (mm2) : 1.63594
Analytical Sens. (struc/cc) : 0.00029
Detection Limit. (struc/cc) : 0.00087

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	0.6	0.0003	0 - 0.0016 - Poisson	1	
Total Asbestos Structures	3.7	0.0017	0.0006 - 0.0038 - Poisson		6
Primary Asb & Libby-Other Amph Structures	0.6	0.0003	0 - 0.0016 - Poisson	1	
Total Asb & Libby-OtherAmph Structures	3.7	0.0017	0.0006 - 0.0038 - Poisson		6
PCM Equivalent Fibers-ISO	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S33

Client Sample No.: 14394188

Description: OCSP-05-AIR-04

Analyst(s)	Analysis Date	Microscope	Magnification
TH	1/22/2015	H-7000	20000
TH	1/23/2015	H-7000	20000

Volume (L) : 811.8
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 152
Average Grid Opening Area : 0.01042
Area Analyzed (mm2) : 1.58384
Analytical Sens. (struc/cc) : 0.0003
Detection Limit. (struc/cc) : 0.0009

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count ¹ Prim/Total	
Primary Asbestos Structures	0	< 0.0003	0 - 0.0011 - Poisson	0	
Total Asbestos Structures	0	< 0.0003	0 - 0.0011 - Poisson		0
Primary Asb & Libby-Other Amph Structures	0	< 0.0003	0 - 0.0011 - Poisson	0	
Total Asb & Libby-OtherAmph Structures	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures-NIOSH	0	< 0.0003	0 - 0.0011 - Poisson	0	
PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	0	< 0.0003	0 - 0.0011 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits may be used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 0, 1 str - 1, 2 str - 2, 3 str - 3



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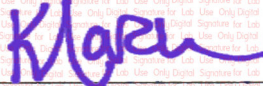
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ISO 10312 - Direct Summary Data

Job Number: 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A

Report Number: 141014R02
Date Received: 12/11/2014

Reviewed by:


X

Kate March
QC Manager



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ISO 10312 - Direct Raw Data

Job Number: 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S1
Client Sample No: 14394145
Description: OCSP-01-ABS-01

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C51				NSD							
G1	2	C52				NSD							
G1	3	E51				NSD							
G1	4	E52				NSD							
G1	5	F51				NSD							
G1	6	F52				NSD							
G1	7	G51				NSD							
G1	8	G52				NSD							
G1	9	H51				NSD							
G1	10	H52				NSD							
G1	11	K51				NSD							
G1	12	B54				NSD							
G1	13	C53				NSD							
G1	14	C54				NSD							
G1	15	E53				NSD							
G1	16	E54				NSD							
G2	17	C62				NSD							
G2	18	E61				NSD							
G2	19	E62				NSD							
G2	20	F61				NSD							
G2	21	F62				NSD							
G2	22	G61				NSD							
G2	23	G62				NSD							
G2	24	H61				NSD							
G2	25	C53				NSD							
G2	26	C54				NSD							
G2	27	E53				NSD							
G2	28	E54				NSD							
G2	29	F53				NSD							
G2	30	F54				NSD							
G2	31	G53				NSD							
G2	32	G54				NSD							
G2	33	H53				NSD							
G2	34	H54				NSD							



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ISO 10312 - Direct Raw Data

Job Number: 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S2
Client Sample No: 14394146
Description: OCSP-01-ABS-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C62				NSD							
G1	2	E61				NSD							
G1	3	E62				NSD							
G1	4	F61				NSD							
G1	5	F62				NSD							
G1	6	G61				NSD							
G1	7	G62				NSD							
G1	8	C53				NSD							
G1	9	C54				NSD							
G1	10	E53				NSD							
G1	11	E54				NSD							
G1	12	F53				NSD							
G1	13	G53				NSD							
G1	14	G54				NSD							
G1	15	H53				NSD							
G1	16	B52				NSD							
G1	17	C51				NSD							
G1	18	C52				NSD							
G1	19	E51				NSD							
G1	20	E52				NSD							
G1	21	F51				NSD							
G1	22	F52				NSD							
G1	23	G51				NSD							
G1	24	G52				NSD							
G1	25	H51				NSD							
G1	26	H52				NSD							
G1	27	K51				NSD							
G2	28	C53				NSD							
G2	29	C54				NSD							
G2	30	E53				NSD							
G2	31	E54				NSD							
G2	32	F53				NSD							
G2	33	F54				NSD							
G2	34	G53				NSD							
G2	35	G54				NSD							
G2	36	H53				NSD							
G2	37	H54				NSD							
G2	38	C51				NSD							



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ISO 10312 - Direct Raw Data

Job Number: 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S2
Client Sample No: 14394146
Description: OCSP-01-ABS-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	39	C52				NSD							
G2	40	E51				NSD							
G2	41	E52				NSD							
G2	42	F51				NSD							
G2	43	F52				NSD							
G2	44	G51				NSD							
G2	45	G52				NSD							
G2	46	H51				NSD							
G2	47	H52				NSD							
G2	48	K51				NSD							
G2	49	K52				NSD							
G2	50	B41				NSD							
G2	51	B42				NSD							
G2	52	C41				NSD							
G2	53	C42				NSD							
G2	54	E41				NSD							



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ISO 10312 - Direct Raw Data

Job Number: 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S3
Client Sample No: 14394147
Description: OCSP-01-ABS-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C62				NSD							
G1	2	E61				NSD							
G1	3	E62				NSD							
G1	4	F61				NSD							
G1	5	F62				NSD							
G1	6	G61				NSD							
G1	7	G62				NSD							
G1	8	C53				NSD							
G1	9	C54				NSD							
G1	10	E53				NSD							
G1	11	E54				NSD							
G1	12	G53				NSD							
G1	13	G54				NSD							
G1	14	H53				NSD							
G1	15	H54				NSD							
G1	16	B51				NSD							
G1	17	B52				NSD							
G1	18	C51				NSD							
G1	19	C52				NSD							
G1	20	E51				NSD							
G1	21	E52				NSD							
G1	22	F51				NSD							
G1	23	G51				NSD							
G1	24	G52				NSD							
G1	25	H51				NSD							
G1	26	H52				NSD							
G1	27	K51				NSD							
G1	28	B43				NSD							
G1	29	B44				NSD							
G1	30	C43				NSD							
G1	31	C44				NSD							
G1	32	E43				NSD							
G1	33	E44				NSD							
G1	34	F43				NSD							
G1	35	F44				NSD							
G1	36	G43				NSD							
G1	37	G44				NSD							
G1	38	H43				NSD							



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A Professional Service Corporation in the Northwest

ISO 10312 - Direct Raw Data

Job Number: 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S3
Client Sample No: 14394147
Description: OCSF-01-ABS-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	39	C61				NSD							
G2	40	C62				NSD							
G2	41	E61				NSD							
G2	42	E62				NSD							
G2	43	F61				NSD							
G2	44	F62				NSD							
G2	45	G61				NSD							
G2	46	G62				NSD							
G2	47	H61				NSD							
G2	48	B54				NSD							
G2	49	C53				NSD							
G2	50	C54				NSD							
G2	51	E53				NSD							
G2	52	E54				NSD							
G2	53	F53				NSD							
G2	54	F54				NSD							
G2	55	G53				NSD							
G2	56	G54				NSD							
G2	57	H53				NSD							
G2	58	H54				NSD							
G2	59	B51				NSD							
G2	60	B52				NSD							
G2	61	C51				NSD							

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Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S4
Client Sample No: 14394148
Description: OCSP-01-ABS-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C62				NSD							
G1	2	E61				NSD							
G1	3	E62				NSD							
G1	4	F61				NSD							
G1	5	F62				NSD							
G1	6	G61				NSD							
G1	7	G62				NSD							
G1	8	H61				NSD							
G1	9	H62				NSD							
G1	10	C53				NSD							
G1	11	C54	CD	1	1	B	2.6	0.38	6.8	Chrysotile			TAOS, PAOS
							ItemType	ItemNum			Confirmed	Comment	
							Diffraction	H37995DF			TH 1/15/2015	0.53 nm ROW SPACING	
							Brightfield	H37995BF			TH 1/15/2015		
G1	12	E53				NSD							
G1	13	E54				NSD							
G1	14	F53				NSD							
G1	15	F54				NSD							
G1	16	G53				NSD							
G1	17	G54	CD	2	2	MC 30-0	9.47	6.54	1.4	Chrysotile			TAOS, PAOS
							ItemType	ItemNum			Confirmed	Comment	
							Diffraction	H37999DF			TH 1/15/2015	0.53 nm ROW SPACING	
							Brightfield	H37999BF					
G1	18	H53				NSD							
G1	19	H54				NSD							
G1	20	B52				NSD							
G1	21	C51				NSD							
G1	22	C52				NSD							
G1	23	E51				NSD							
G1	24	E52				NSD							
G1	25	F51				NSD							
G1	26	F52				NSD							
G1	27	G51				NSD							
G1	28	G52				NSD							
G1	29	H51				NSD							
G1	30	H52				NSD							
G2	31	E61				NSD							
G2	32	E62				NSD							

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Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	33	F61				NSD							
G2	34	F62				NSD							
G2	35	G61				NSD							
G2	36	G62	CD	3		MD 1-1	11.47	7.34	1.6	Chrysotile			PAOS
G2	36	G62	CD		3	MB	8.49	1.04	8.2	Chrysotile			TAOS, PCMEF-NIOSH, PCMEF-ISO, PCMEFmodNIOSH
							ItemType	ItemNum		Confirmed		Comment	
							Diffraction	H38004DF		TH 1/15/2015		0.53 nm ROW SPACING	
							Brightfield	H38004BF					
G2	37	H61				NSD							
G2	38	C53				NSD							
G2	39	C54				NSD							
G2	40	E53				NSD							
G2	41	E54				NSD							
G2	42	F53				NSD							
G2	43	F54				NSD							

Lab/Cor Sample No: S5**Client Sample No:** 14394150**Description:** OCSP-01-AIR-01

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	E61				NSD							
G1	2	E62				NSD							
G1	3	F61				NSD							
G1	4	F62				NSD							
G1	5	G61				NSD							
G1	6	G62				NSD							
G1	7	H61				NSD							
G1	8	C54				NSD							
G1	9	E53				NSD							
G1	10	E54				NSD							



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ISO 10312 - Direct Raw Data

Job Number: 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S6
Client Sample No: 14394151
Description: OCSP-01-AIR-01

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	F53				NSD							
G1	2	F54				NSD							
G1	3	G53				NSD							
G1	4	G54				NSD							
G1	5	H53				NSD							
G1	6	H54				NSD							
G2	7	B51				NSD							
G2	8	B52				NSD							
G2	9	C51				NSD							
G2	10	C52				NSD							

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Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S8
Client Sample No: 14394153
Description: OCSF-01-AIR-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C61	CD	1		MD 10-1	10.22	4.4	2.3	Chrysotile			PAOS
G1	1	C61	CD		1	MB	7.29	0.36	20.2	Chrysotile			TAOS, PCMEF-NIOSH, PCMEF-ISO, PCMEFmodNIOSH
						ItemType	ItemNum	Confirmed		Comment			
						Spectra	H38043SP	TH 1/16/2015					
						Diffraction	H38043DF	TH 1/16/2015		0.53 nm ROW SPACING			
						Brightfield	H38043BF						
G1	1	C61	CM		2	MB	3.15	0.2	15.8	Chrysotile			TAOS
G1	1	C61	CM		3	MF	3.09	0.15	20.6	Chrysotile			TAOS
G1	1	C61	CM		4	MF	2.06	0.15	13.7	Chrysotile			TAOS
G1	1	C61	CM		5	MF	1.86	0.15	12.4	Chrysotile			TAOS
G1	1	C61	CM		6	MF	1.62	0.15	10.8	Chrysotile			TAOS
G1	1	C61	CM		7	MF	1.38	0.1	13.8	Chrysotile			TAOS
G1	1	C61	CM		8	MF	1.31	0.1	13.1	Chrysotile			TAOS
G1	1	C61	CM		9	MF	1.12	0.1	11.2	Chrysotile			TAOS
G1	1	C61	CM		10	MF	0.89	0.1	8.9	Chrysotile			TAOS
G1	2	C62				NSD							
G1	3	E61				NSD							
G1	4	E62				NSD							
G1	5	F61				NSD							
G1	6	F62				NSD							
G1	7	G61				NSD							
G1	8	G62				NSD							
G1	9	H61				NSD							
G1	10	B54				NSD							
G1	11	C53				NSD							
G1	12	C54				NSD							
G1	13	E53				NSD							
G1	14	E54				NSD							
G1	15	F53				NSD							
G1	16	F54				NSD							
G1	17	G53				NSD							
G1	18	G54	CM	2		MD 1-0	2.09	0.73	2.9	Chrysotile			PAOS
G1	18	G54	CM		11	MF	0.78	0.11	7.1	Chrysotile			TAOS
						ItemType	ItemNum	Confirmed		Comment			
						Brightfield	H38053BF						
G1	18	G54	CM	3		MD 1-0	4.68	2.59	1.8	Chrysotile			PAOS

ISO 10312 - Direct Raw Data

Job Number: 141014 **SEA**
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Project Name: SFP-078A
Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S8
Client Sample No: 14394153
Description: OSCP-01-AIR-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	18	G54	CM		12	MF	1.25	0.06	20.8	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
						Brightfield	H38054BF							
G1	18	G54	CD	4		MD 1-1	8.73	3.42	2.6	Chrysotile				PAOS
G1	18	G54	CD		13	MB	7.02	1.75	4	Chrysotile				TAOS, PCMEF-NIOSH, PCMEF-ISO, PCMEFmodNIOH
						ItemType	ItemNum				Confirmed	Comment		
						Diffraction	H38057DF		TH		1/16/2015	0.53 nm ROW SPACING		
						Brightfield	H38057BF							
G1	18	G54	CM		14	MF	3.36	0.09	37.3	Chrysotile				TAOS
G1	18	G54	CM		15	MF	1.91	0.1	19.1	Chrysotile				TAOS
G1	19	H53				NSD								
G1	20	H54	CM	5		MD 6-1	32.21	14	2.3	Chrysotile				PAOS
G1	20	H54	CM		16	MB	31.23	1.52	20.5	Chrysotile				TAOS, PCMEF-NIOSH, PCMEF-ISO, PCMEFmodNIOH
						ItemType	ItemNum				Confirmed	Comment		
						Brightfield	H38059BF							
G1	20	H54	CM		17	MF	2.62	0.1	26.2	Chrysotile				TAOS
G1	20	H54	CM		18	MF	2.18	0.1	21.8	Chrysotile				TAOS
G1	20	H54	CM		19	MF	2.11	0.1	21.1	Chrysotile				TAOS
G1	20	H54	CM		20	MF	1.74	0.1	17.4	Chrysotile				TAOS
G1	20	H54	CM		21	MF	1.45	0.1	14.5	Chrysotile				TAOS
G1	20	H54	CM	6	22	MC 45-0	8.87	6.19	1.4	Chrysotile				TAOS, PAOS
						ItemType	ItemNum				Confirmed	Comment		
						Brightfield	H38060BF							
G1	21	B52				NSD								
G1	22	C51				NSD								
G1	23	C52				NSD								
G1	24	E51				NSD								
G1	25	E52	CM	7		MD 1-0	1.51	0.38	4	Chrysotile				PAOS
G1	25	E52	CM		23	MF	1.51	0.05	30.2	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
						Brightfield	H38061BF							
G1	26	F51				NSD								
G1	27	F52				NSD								
G1	28	G51				NSD								

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Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S8
Client Sample No: 14394153
Description: OSCP-01-AIR-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	29	G52	CM	8		MD 4-1	23.19	22.23	1	Chrysotile		2X GRID BAR RULE	PAOS
G1	29	G52	CM		24	MB	14.61	3.93	3.7	Chrysotile			TAOS, PCMEF-NIOSH
G1	29	G52	CM		25	MF	2.01	0.1	20.1	Chrysotile			TAOS
G1	29	G52	CM		26	MF	1.65	0.1	16.5	Chrysotile			TAOS
G1	29	G52	CM		27	MF	1.52	0.1	15.2	Chrysotile			TAOS
G1	30	H51				NSD							
G1	31	H52				NSD							
G1	32	K51				NSD							
G2	33	C61	CM	9		MD 1-0	1.76	1.76	1	Chrysotile			PAOS
G2	33	C61	CM		28	MF	1.76	0.1	17.6	Chrysotile			TAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38062BF					
G2	34	C62				NSD							
G2	35	E61				NSD							
G2	36	E62	CD	10	29	MC 20-0	4.45	2.29	1.9	Chrysotile			TAOS, PAOS
							ItemType	ItemNum			Confirmed	Comment	
							Diffraction	H38063DF			TH 1/16/2015	0.53 nm ROW SPACING	
							Brightfield	H38063BF					
G2	37	F61				NSD							
G2	38	F62	CM	11	30	MC 3-0	1.93	1.5	1.3	Chrysotile			TAOS, PAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38065BF					
G2	38	F62	CM	12		MD 1-0	5.85	2.49	2.3	Chrysotile			PAOS
G2	38	F62	CM		31	MF	1.43	0.08	17.9	Chrysotile			TAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38067BF					
G2	38	F62	CM	13	32	MC 20-0	3	2.86	1	Chrysotile			TAOS, PAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38069BF					
G2	39	G61				NSD							
G2	40	G62				NSD							
G2	41	H61				NSD							
G2	42	B54				NSD							
G2	43	C53				NSD							
G2	44	C54				NSD							
G2	45	E53				NSD							
G2	46	E54				NSD							



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Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S8
Client Sample No: 14394153
Description: OCSP-01-AIR-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	47	F53				NSD							
G2	48	F54				NSD							
G2	49	G53				NSD							
G2	50	G54				NSD							
G2	51	H53				NSD							
G2	52	H54				NSD							
G2	53	B51	CM	14	33	MC 50-0	42.88	26.93	1.6	Chrysotile		2X GRID BAR RULE	TAOS, PAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38073BF					
G2	54	B52				NSD							
G2	55	C51				NSD							

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Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S9
Client Sample No: 14394154
Description: OCSF-01-AIR-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	1	C61				NSD								
G1	2	C62				NSD								
G1	3	E61				NSD								
G1	4	E62				NSD								
G1	5	F61				NSD								
G1	6	G61	CDQ	1		MD 6-1	6.75	6.64	1	Chrysotile				PAOS
G1	6	G61	CDQ		1	MF	5.93	0.15	39.5	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
						Diffraction	H38075DF				TH 1/16/2015	0.53 nm ROW SPACING		
						Spectra	H38075SP				TH 1/16/2015			
						Brightfield	H38075BF							
G1	6	G61	CM		2	MF	4.24	0.15	28.3	Chrysotile				TAOS
G1	6	G61	CM		3	MF	4.19	0.15	27.9	Chrysotile				TAOS
G1	6	G61	CM		4	MF	4.15	0.15	27.7	Chrysotile				TAOS
G1	6	G61	CM		5	MF	3.6	0.15	24	Chrysotile				TAOS
G1	6	G61	CM		6	MF	0.89	0.1	8.9	Chrysotile				TAOS
G1	6	G61	CM		7	MR	2	1.5	1.3	Chrysotile				TAOS
G1	7	G62				NSD								
G1	8	H61	CM	2		MD 3-1	6.68	5.81	1.1	Chrysotile				PAOS
G1	8	H61	CM		8	MF	5.53	0.25	22.1	Chrysotile				TAOS, PCMEF-NIOSH, PCMEF-ISO, PCMEFmodNIOSH
						ItemType	ItemNum				Confirmed	Comment		
						Brightfield	H38076BF							
G1	8	H61	CM		9	MF	4.82	0.1	48.2	Chrysotile				TAOS
G1	8	H61	CM		10	MF	4.56	0.1	45.6	Chrysotile				TAOS
G1	8	H61	CM	3		MD 1-0	0.71	0.2	3.5	Chrysotile				PAOS
G1	8	H61	CM		11	MF	0.61	0.1	6.1	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
						Brightfield	H38077BF							
G1	8	H61	CM	4		MD 2-0	1.73	1.44	1.2	Chrysotile				PAOS
G1	8	H61	CM		12	MF	1.44	0.1	14.4	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
						Brightfield	H38078BF							
G1	8	H61	CM		13	MF	1.44	0.1	14.4	Chrysotile				TAOS
G1	8	H61	CM	5		MD 4-1	19.48	5.59	3.5	Chrysotile				PAOS, PCMES-NIOSH

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Date Received: 12/11/2014**Lab/Cor Sample No:** S9
Client Sample No: 14394154
Description: OCSP-01-AIR-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	8	H61	CM		14	MF	17.17	0.15	114.5	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
						Brightfield	H38079BF							
G1	8	H61	CM		15	MF	4.5	0.15	30	Chrysotile				TAOS
G1	8	H61	CM		16	MF	3.53	0.15	23.5	Chrysotile				TAOS
G1	8	H61	CM		17	MF	3.82	0.2	19.1	Chrysotile				TAOS
G1	8	H61	CM		18	MR	4	3	1.3	Chrysotile				TAOS
G1	8	H61	CM	6		MD 5-0	7.42	7.24	1	Chrysotile				PAOS
G1	8	H61	CM		19	MF	1.54	0.15	10.3	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
						Brightfield	H38080BF							
G1	8	H61	CM		20	MF	1.39	0.15	9.3	Chrysotile				TAOS
G1	8	H61	CM		21	MF	1.05	0.1	10.5	Chrysotile				TAOS
G1	8	H61	CM		22	MF	0.55	0.1	5.5	Chrysotile				TAOS
G1	8	H61	CM		23	MF	0.54	0.1	5.4	Chrysotile				TAOS
G1	8	H61	CM	7		MD 5-0	9.5	8.98	1.1	Chrysotile				PAOS
G1	8	H61	CM		24	MF	2.96	0.15	19.7	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
						Brightfield	H38081BF							
G1	8	H61	CM		25	MF	2.69	0.15	17.9	Chrysotile				TAOS
G1	8	H61	CM		26	MF	1.22	0.1	12.2	Chrysotile				TAOS
G1	8	H61	CM		27	MF	0.6	0.1	6	Chrysotile				TAOS
G1	8	H61	CM		28	MF	0.54	0.1	5.4	Chrysotile				TAOS
G1	9	H62				NSD								
G1	10	C54				NSD								
G1	11	E53				NSD								
G1	12	E54				NSD								
G1	13	F53	CM	8		MD 1-1	16.08	7.49	2.1	Chrysotile				PAOS
G1	13	F53	CM		29	MB	13.29	0.25	53.2	Chrysotile				TAOS, PCMEF-NIOSH, PCMEF-ISO, PCMEFmodNIOSH
						ItemType	ItemNum				Confirmed	Comment		
						Brightfield	H38082BF							
G1	14	F54				NSD								
G1	15	G53				NSD								
G1	16	G54				NSD								

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<http://www.labcor.net>**ISO 10312 - Direct Raw Data****Job Number:** 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S9
Client Sample No: 14394154
Description: OCSF-01-AIR-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	17	H53	CD	9	30	B	4.12	0.47	8.8	Chrysotile			TAOS, PAOS
							ItemType	ItemNum			Confirmed	Comment	
							Diffraction	H38083DF			TH 1/16/2015	0.53 nm ROW SPACING	
							Brightfield	H38083BF					
G1	17	H53	CM	10		MD 1-0	1.12	0.38	2.9	Chrysotile			PAOS
G1	17	H53	CM		31	MF	1.12	0.1	11.2	Chrysotile			TAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38084BF					
G1	17	H53	CM	11		CD 2-0	0.71	0.51	1.4	Chrysotile			PAOS
G1	17	H53	CM		32	CF	0.71	0.2	3.5	Chrysotile			TAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38085BF					
G1	17	H53	CM		33	CF	0.64	0.2	3.2	Chrysotile			TAOS
G1	18	H54				NSD							
G1	19	K53				NSD							
G1	20	B52	CM	12		MD 2-0	14.44	7.22	2	Chrysotile			PAOS
G1	20	B52	CM		34	MF	1.57	0.1	15.7	Chrysotile			TAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38086BF					
G1	20	B52	CM		35	MF	0.92	0.1	9.2	Chrysotile			TAOS
G1	21	C51				NSD							
G1	22	C52				NSD							
G1	23	E51				NSD							
G1	24	E52				NSD							
G1	25	F51				NSD							
G1	26	F52	CM	13		MD 5-1	6.78	4.18	1.6	Chrysotile			PAOS
G1	26	F52	CM		36	MB	5.03	0.75	6.7	Chrysotile			TAOS, PCMEF-NIOSH, PCMEF-ISO, PCMEFmodNIOSH
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38087BF					
G1	26	F52	CM		37	MF	1.96	0.1	19.6	Chrysotile			TAOS
G1	26	F52	CM		38	MF	1.51	0.1	15.1	Chrysotile			TAOS
G1	26	F52	CM		39	MF	1.08	0.1	10.8	Chrysotile			TAOS
G1	26	F52	CM		40	MR	3.5	2	1.8	Chrysotile			TAOS
G1	26	F52	CM	14		MD 1-0	0.97	0.29	3.3	Chrysotile			PAOS

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Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	26	F52	CM		41	MF	0.97	0.07	13.9	Chrysotile				TAOS
							ItemType	ItemNum		Confirmed		Comment		
							Brightfield	H38089BF						
G1	27	G51				NSD								
G1	28	G52				NSD								
G1	29	H51				NSD								
G1	30	H52				NSD								
G1	31	K51	NAM	15		MD 1-0	10.18	8.82	1.2	Mg-Hornblende				PAOS
G1	31	K51	NAM		42	MF	2.87	0.53	5.4	Mg-Hornblende	Na, Mg, Al, Si, Ca, Mn, Fe			TAOS
							ItemType	ItemNum		Confirmed		Comment		
							Diffraction	H38090DF		TH 1/16/2015		0.53 nm ROW SPACING		
							Spectra	H38090SP		TH 1/16/2015				
							Brightfield	H38090BF						
G1	32	K52				NSD								
G1	33	B44	CM	16		MD 7-3	15.17	13.6	1.1	Chrysotile				PAOS
G1	33	B44	CM		43	MF	7.17	0.1	71.7	Chrysotile				TAOS
							ItemType	ItemNum		Confirmed		Comment		
							Brightfield	H38091BF						
G1	33	B44	CM		44	MF	6.78	0.1	67.8	Chrysotile				TAOS
G1	33	B44	CM		45	MF	6.77	0.1	67.7	Chrysotile				TAOS
G1	33	B44	CM		46	MF	3.87	0.1	38.7	Chrysotile				TAOS
G1	33	B44	CM		47	MF	3.42	0.1	34.2	Chrysotile				TAOS
G1	33	B44	CM		48	MF	2.36	0.1	23.6	Chrysotile				TAOS
G1	33	B44	CM		49	MF	1.79	0.1	17.9	Chrysotile				TAOS
G1	33	B44	CM		50	MR	7	2.5	2.8	Chrysotile				TAOS
G1	33	B44	CD	17		MD 1-0	1.75	0.64	2.7	Chrysotile				PAOS
G1	33	B44	CD		51	MF	1.75	0.64	2.7	Chrysotile				TAOS
							ItemType	ItemNum		Confirmed		Comment		
							Diffraction	H38092DF		TH 1/16/2015		0.53 nm ROW SPACING		
							Brightfield	H38092BF						
G1	34	C43				NSD								
G1	35	C44	CM	18		CD 2-0	1	0.43	2.3	Chrysotile				PAOS
G1	35	C44	CM		52	CF	1	0.1	10	Chrysotile				TAOS
							ItemType	ItemNum		Confirmed		Comment		
							Brightfield	H38093BF						
G1	35	C44	CM		53	CF	0.84	0.1	8.4	Chrysotile				TAOS

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Client Sample No: 14394154
Description: OSCP-01-AIR-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	35	C44	CM		54	CR 5-0	0.4	0.2	2	Chrysotile				TAOS
G2	36	E61				NSD								
G2	37	E62				NSD								
G2	38	C54				NSD								
G2	39	E53				NSD								
G2	40	E54				NSD								
G2	41	F53	CD	19		MD 8-5	33.49	18.14	1.8	Chrysotile				PAOS
G2	41	F53	CD		55	MF	22	0.25	88	Chrysotile				TAOS, PCMEF-NIOSH, PCMEF-ISO, PCMEFmodNIOSH
							ItemType	ItemNum			Confirmed		Comment	
							Diffraction	H38094DF			TH 1/16/2015		0.53 nm ROW SPACING	
							Brightfield	H38094BF						
G2	41	F53	CM		56	MF	13.28	0.15	88.5	Chrysotile				TAOS
G2	41	F53	CM		57	MF	8.64	0.15	57.6	Chrysotile				TAOS
G2	41	F53	CM		58	MF	7.51	0.15	50.1	Chrysotile				TAOS
G2	41	F53	CM		59	MF	7.07	0.1	70.7	Chrysotile				TAOS
G2	41	F53	CM		60	MF	3.72	0.1	37.2	Chrysotile				TAOS
G2	41	F53	CM		61	MF	3.1	0.1	31	Chrysotile				TAOS
G2	41	F53	CM		62	MF	1.95	0.1	19.5	Chrysotile				TAOS
G2	41	F53	CM		63	MR	10	7	1.4	Chrysotile				TAOS
G2	41	F53	CM	20	64	F	1.16	0.09	12.9	Chrysotile				TAOS, PAOS
							ItemType	ItemNum			Confirmed		Comment	
							Brightfield	H38095BF						
G2	42	H54	CM	21		MD 3-0	10.07	9.49	1.1	Chrysotile				PAOS
G2	42	H54	CM		65	MF	4.79	0.15	31.9	Chrysotile				TAOS
							ItemType	ItemNum			Confirmed		Comment	
							Brightfield	H38096BF						
G2	42	H54	CM		66	MF	2.79	0.25	11.2	Chrysotile				TAOS
G2	42	H54	CM		67	MF	2.7	0.15	18	Chrysotile				TAOS
G2	43	E51				NSD								
G2	44	E52				NSD								
G2	45	F51				NSD								
G2	46	F52				NSD								
G2	47	G51	CM	22		MD 1-0	18.81	13.8	1.4	Chrysotile				PAOS
G2	47	G51	CM		68	MF	3.18	0.15	21.2	Chrysotile				TAOS
							ItemType	ItemNum			Confirmed		Comment	
							Brightfield	H38097BF						

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Description: OCSF-01-AIR-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	47	G51	CM		69	MR	15.74	7.39	2.1	Chrysotile			TAOS
G2	47	G51	CM	23		MD 1-0	2.24	0.46	4.9	Chrysotile			PAOS
G2	47	G51	CM		70	MF	2.24	0.04	56	Chrysotile			TAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38098BF					
G2	48	H51				NSD							
G2	49	H52				NSD							
G2	50	K51				NSD							
G2	51	E43				NSD							
G2	52	E44				NSD							
G2	53	F43				NSD							
G2	54	F44	CM	24	71	F	1.16	0.11	10.5	Chrysotile			TAOS, PAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38099BF					
G2	54	F44	CM	25		MD 2-0	3.5	3.49	1	Chrysotile			PAOS
G2	54	F44	CM		72	MF	1.05	0.15	7	Chrysotile			TAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38100BF					
G2	54	F44	CM		73	MF	0.52	0.05	10.4	Chrysotile			TAOS
G2	55	G43	CM	26		MD 2-2	11.65	8.68	1.3	Chrysotile			PAOS
G2	55	G43	CM		74	MB	9.5	0.48	19.8	Chrysotile			TAOS, PCMEF-NIOSH, PCMEF-ISO, PCMEFmodNIOSH
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38101BF					
G2	55	G43	CM		75	MF	6.7	0.15	44.7	Chrysotile			TAOS
G2	55	G43	CM		76	MR	11.7	4	2.9	Chrysotile			TAOS
G2	56	G44				NSD							
G2	57	H43				NSD							



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Report Number: 141014R02
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Lab/Cor Sample No: S10
Client Sample No: 14394156
Description: OCSP-02-ABS-01

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C61				NSD							
G1	2	C62				NSD							
G1	3	E61				NSD							
G1	4	E62				NSD							
G1	5	F61				NSD							
G1	6	F62				NSD							
G1	7	G61				NSD							
G1	8	G62				NSD							
G1	9	H61				NSD							
G1	10	B54				NSD							
G1	11	C53				NSD							
G1	12	C54				NSD							
G1	13	E53				NSD							
G1	14	E54				NSD							
G1	15	F53				NSD							
G1	16	F54				NSD							
G1	17	G53				NSD							
G1	18	G54				NSD							
G1	19	H53				NSD							
G1	20	H54				NSD							
G1	21	B51				NSD							
G1	22	B52				NSD							
G1	23	C51				NSD							
G1	24	C52				NSD							
G1	25	E51				NSD							
G1	26	E52				NSD							
G1	27	F51				NSD							
G1	28	F52				NSD							
G1	29	G51				NSD							
G1	30	H52				NSD							
G1	31	K51				NSD							
G1	32	B44				NSD							
G1	33	C43				NSD							
G1	34	C44				NSD							
G1	35	E43				NSD							
G1	36	E44				NSD							
G1	37	F43				NSD							
G1	38	F44				NSD							



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Description: OCSP-02-ABS-01

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	39	G43				NSD							
G2	40	C61				NSD							
G2	41	C62				NSD							
G2	42	E61				NSD							
G2	43	E62				NSD							
G2	44	F61				NSD							
G2	45	F62				NSD							
G2	46	G61				NSD							
G2	47	G62				NSD							
G2	48	H61				NSD							
G2	49	B54				NSD							
G2	50	C53				NSD							
G2	51	C54				NSD							



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Lab/Cor Sample No: S11
Client Sample No: 14394157
Description: OCSP-02-ABS-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	E64				NSD							
G1	2	F63				NSD							
G1	3	F64				NSD							
G1	4	G63				NSD							
G1	5	G64				NSD							
G1	6	B62				NSD							
G1	7	C61				NSD							
G1	8	C62				NSD							
G1	9	E61				NSD							
G1	10	E62				NSD							
G1	11	F61				NSD							
G1	12	F62				NSD							
G1	13	G61				NSD							
G1	14	G62				NSD							
G1	15	H61				NSD							
G1	16	H62				NSD							
G1	17	B54				NSD							
G1	18	C53				NSD							
G1	19	C54				NSD							
G1	20	E53				NSD							
G1	21	E54				NSD							
G1	22	F53				NSD							
G1	23	F54				NSD							
G1	24	G53				NSD							
G1	25	G54				NSD							
G1	26	H53				NSD							
G1	27	H54				NSD							
G1	28	K53				NSD							
G1	29	B51				NSD							
G1	30	B52				NSD							
G1	31	C51				NSD							
G1	32	C52				NSD							
G1	33	E51				NSD							
G1	34	E52				NSD							
G1	35	F51				NSD							
G1	36	F52				NSD							
G1	37	G51				NSD							
G1	38	G52				NSD							



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Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	39	H51				NSD							
G1	40	H52				NSD							
G1	41	K51				NSD							
G1	42	K52				NSD							
G1	43	B43				NSD							
G1	44	B44				NSD							
G1	45	C43				NSD							
G1	46	C44				NSD							
G1	47	E43				NSD							
G1	48	E44				NSD							
G1	49	F43				NSD							
G1	50	F44				NSD							
G1	51	G43				NSD							
G1	52	G44				NSD							
G1	53	H43				NSD							
G1	54	H44				NSD							
G1	55	K43				NSD							
G1	56	K44				NSD							
G1	57	B41				NSD							
G1	58	B42				NSD							
G1	59	C41				NSD							
G1	60	C42				NSD							
G1	61	E41				NSD							
G1	62	E42				NSD							
G1	63	F41				NSD							
G1	64	F42				NSD							
G1	65	G41				NSD							
G1	66	G42				NSD							
G1	67	H41				NSD							
G1	68	H42				NSD							
G1	69	K41				NSD							
G1	70	K42				NSD							
G1	71	B33				NSD							
G1	72	B34				NSD							
G1	73	C33				NSD							
G1	74	C34				NSD							
G1	75	E33				NSD							
G1	76	E34				NSD							



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Description: OCSF-02-ABS-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	77	F33				NSD							
G1	78	F34				NSD							
G1	79	G33				NSD							
G1	80	G34				NSD							
G1	81	H33				NSD							
G1	82	H34				NSD							
G1	83	K33				NSD							
G1	84	C31				NSD							
G1	85	C32				NSD							
G1	86	E31				NSD							
G1	87	E32				NSD							
G1	88	F31				NSD							
G1	89	F32				NSD							
G1	90	G31				NSD							
G1	91	G32				NSD							
G1	92	H31				NSD							
G2	93	F61				NSD							
G2	94	F62				NSD							
G2	95	G61				NSD							
G2	96	G62				NSD							
G2	97	C53				NSD							
G2	98	F53				NSD							
G2	99	G53				NSD							
G2	100	G54				NSD							
G2	101	H53				NSD							
G2	102	H54				NSD							
G2	103	B52				NSD							
G2	104	C51				NSD							
G2	105	F52				NSD							
G2	106	G51				NSD							
G2	107	G52				NSD							
G2	108	H51				NSD							
G2	109	H52				NSD							
G2	110	K51				NSD							
G2	111	B43				NSD							
G2	112	B44				NSD							
G2	113	C43				NSD							
G2	114	C44	CD	1		MD 1-0	5.13	4.66	1.1	Chrysotile			

PAOS



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A Professional Service Corporation in the Northwest

ISO 10312 - Direct Raw Data

Job Number: 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S11
Client Sample No: 14394157
Description: OCSP-02-ABS-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G2	114	C44	CD		1	MB	4.63	0.56	8.3	Chrysotile				TAOS
							ItemType	ItemNum		Confirmed		Comment		
							Diffraction	H38482DF		TH 1/29/2015		0.53 nm ROW SPACING		
							Brightfield	H38482BF						
G2	115	E43				NSD								
G2	116	G43				NSD								
G2	117	G44				NSD								
G2	118	H43				NSD								
G2	119	H44				NSD								
G2	120	K43				NSD								
G2	121	B41				NSD								
G2	122	B42				NSD								
G2	123	C41				NSD								
G2	124	C42				NSD								
G2	125	E41				NSD								
G2	126	E42				NSD								
G2	127	F41				NSD								

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Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S12
Client Sample No: 14394158
Description: OCSP-02-ABS-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	1	C61				NSD								
G1	2	C62				NSD								
G1	3	E61				NSD								
G1	4	E62				NSD								
G1	5	F61				NSD								
G1	6	F62				NSD								
G1	7	G61				NSD								
G1	8	G62				NSD								
G2	9	C62	CD	1		MD 2-1	2.35	2.09	1.1	Chrysotile				PAOS
G2	9	C62	CD		1	MF	2.16	0.12	18	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
						Diffraction	H38509DF				TH 1/30/2015	0.53 nm ROW SPACING		
						Brightfield	H38509BF							
G2	9	C62	CD	2		MD 1-0	6.16	2.13	2.9	Chrysotile				PAOS
G2	9	C62	CD		2	MF	5.59	0.26	21.5	Chrysotile				TAOS, PCMEF-NIOSH, PCMEF-ISO, PCMEFmodNIOSH
						ItemType	ItemNum				Confirmed	Comment		
						Diffraction	H38510DF				TH 1/30/2015	0.53 nm ROW SPACING		
						Brightfield	H38510BF							
G2	10	E61				NSD								
G2	11	E62				NSD								
G2	12	F61				NSD								
G2	13	F62				NSD								
G2	14	G61				NSD								
G2	15	G62				NSD								
G2	16	H61	CD	3	3	MC 50-0	18.4	8.73	2.1	Chrysotile				TAOS, PAOS
						ItemType	ItemNum				Confirmed	Comment		
						Diffraction	H38511DF				TH 1/30/2015	0.53 nm ROW SPACING		
						Brightfield	H38511BF							
G2	17	F53				NSD								
G2	18	F54				NSD								
G2	19	G53				NSD								



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Project Name: SFP-078A
Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S13
Client Sample No: 14394161
Description: OCSP-02-AIR-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C61				NSD							
G1	2	C62				NSD							
G1	3	E61				NSD							
G1	4	E62				NSD							
G1	5	F61				NSD							
G1	6	F62				NSD							
G1	7	G61				NSD							
G1	8	G62				NSD							
G1	9	H61				NSD							
G1	10	B54				NSD							
G1	11	C53				NSD							
G1	12	C54				NSD							
G1	13	E53				NSD							
G1	14	E54				NSD							
G1	15	F53				NSD							
G1	16	F54				NSD							
G1	17	G53				NSD							
G1	18	G54				NSD							
G1	19	H53				NSD							
G1	20	H54				NSD							
G1	21	F51				NSD							
G1	22	F52				NSD							
G1	23	G51				NSD							
G1	24	G52				NSD							
G1	25	H51				NSD							
G1	26	H52				NSD							
G1	27	K51				NSD							
G1	28	A44				NSD							
G1	29	B43				NSD							
G1	30	B44				NSD							
G1	31	C43				NSD							
G1	32	C44				NSD							
G1	33	E43				NSD							
G1	34	E44				NSD							
G2	35	F62				NSD							
G2	36	G61				NSD							
G2	37	G62				NSD							
G2	38	H61				NSD							



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Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S13
Client Sample No: 14394161
Description: OCSP-02-AIR-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	39	B54				NSD							
G2	40	C53				NSD							
G2	41	C54				NSD							
G2	42	E53				NSD							
G2	43	E54				NSD							
G3	44	B51				NSD							
G3	45	B52				NSD							
G3	46	C51				NSD							
G3	47	C52				NSD							
G3	48	E51				NSD							
G3	49	E52				NSD							
G3	50	F51				NSD							
G3	51	F52				NSD							
G3	52	G51				NSD							
G3	53	G52				NSD							
G3	54	H51				NSD							
G3	55	H52				NSD							
G3	56	K51				NSD							
G3	57	B43				NSD							

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Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S14
Client Sample No: 14394162
Description: OCSF-02-AIR-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C61				NSD							
G1	2	C62				NSD							
G1	3	E61				NSD							
G1	4	E62				NSD							
G1	5	F61				NSD							
G1	6	F62				NSD							
G1	7	G61				NSD							
G1	8	B54				NSD							
G1	9	C53				NSD							
G1	10	C54				NSD							
G1	11	E53				NSD							
G1	12	E54				NSD							
G1	13	F53				NSD							
G1	14	F54				NSD							
G1	15	H54				NSD							
G1	16	B51				NSD							
G1	17	B52				NSD							
G1	18	C51				NSD							
G1	19	C52				NSD							
G1	20	E51				NSD							
G1	21	E52				NSD							
G1	22	F51				NSD							
G1	23	F52				NSD							
G1	24	H51				NSD							
G1	25	H52				NSD							
G1	26	K51				NSD							
G1	27	B43	CD	1		MD 1-1	5.97	1.31	4.6	Chrysotile			PAOS, PCMES-NIOSH, PCMES-ISO, PCMESmodNIOH
G1	27	B43	CD		1	MB	5.97	0.92	6.5	Chrysotile			TAOS, PCMEF-NIOSH, PCMEF-ISO, PCMEFmodNIOH
						ItemType	ItemNum		Confirmed		Comment		
						Diffraction	H38659DF		TH 2/5/2015		0.53 nm ROW SPACING		
						Brightfield	H38659BF						
G1	28	B44				NSD							
G1	29	C43				NSD							
G1	30	C44				NSD							
G1	31	E43				NSD							



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Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S14
Client Sample No: 14394162
Description: OCSP-02-AIR-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	32	E44				NSD							
G1	33	F43				NSD							
G2	34	F43				NSD							
G2	35	F44				NSD							
G2	36	H43				NSD							
G2	37	H44				NSD							
G2	38	K43				NSD							
G2	39	K44				NSD							
G2	40	B41				NSD							
G2	41	B42				NSD							
G2	42	C41				NSD							
G2	43	C42				NSD							
G2	44	E41				NSD							
G2	45	E42				NSD							
G2	46	F41				NSD							
G2	47	F42				NSD							
G2	48	G41				NSD							
G2	49	G42				NSD							
G2	50	H41				NSD							
G2	51	H42				NSD							
G2	52	K41				NSD							
G2	53	C33				NSD							
G2	54	C34				NSD							
G2	55	E33				NSD							
G2	56	E34				NSD							
G2	57	F33				NSD							



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Project Name: SFP-078A
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Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S15
Client Sample No: 14394163
Description: OCSP-02-AIR-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	F61				NSD							
G1	2	F62				NSD							
G1	3	G61				NSD							
G1	4	G62				NSD							
G1	5	H61				NSD							
G1	6	B54				NSD							
G1	7	C53				NSD							
G1	8	C54				NSD							
G1	9	E53				NSD							
G1	10	E54				NSD							
G1	11	F53				NSD							
G1	12	F54				NSD							
G1	13	G53				NSD							
G1	14	G54				NSD							
G1	15	H53				NSD							
G1	16	H54				NSD							
G1	17	B51				NSD							
G1	18	B52				NSD							
G1	19	C51				NSD							
G1	20	C52				NSD							
G1	21	E51				NSD							
G1	22	E52				NSD							
G1	23	F51				NSD							
G1	24	F52				NSD							
G1	25	G51				NSD							
G1	26	G52				NSD							
G1	27	H51				NSD							
G1	28	H52				NSD							
G1	29	K51				NSD							
G2	30	C62				NSD							
G2	31	E61				NSD							
G2	32	E62				NSD							
G2	33	F61				NSD							
G2	34	F62				NSD							
G2	35	G62				NSD							
G2	36	H61				NSD							
G2	37	H62				NSD							
G2	38	C53				NSD							



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Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S15
Client Sample No: 14394163
Description: OCSP-02-AIR-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	39	C54				NSD							
G2	40	E53				NSD							
G2	41	E54				NSD							
G2	42	F53				NSD							
G2	43	F54				NSD							
G2	44	G54				NSD							
G2	45	H53				NSD							
G2	46	K53				NSD							
G2	47	B51				NSD							
G2	48	B52				NSD							
G2	49	C51				NSD							
G2	50	C52				NSD							
G2	51	E51				NSD							
G2	52	E52				NSD							
G2	53	F51				NSD							
G2	54	F52				NSD							
G2	55	G52				NSD							
G2	56	H51				NSD							
G2	57	H52				NSD							

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Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S16
Client Sample No: 14394164
Description: OCSF-03-ABS-01

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C61				NSD							
G1	2	C62				NSD							
G1	3	E61				NSD							
G1	4	E62				NSD							
G1	5	F61				NSD							
G1	6	F62				NSD							
G1	7	G61				NSD							
G1	8	G62				NSD							
G1	9	H61				NSD							
G1	10	B54				NSD							
G1	11	C53				NSD							
G1	12	C54				NSD							
G1	13	E53				NSD							
G1	14	E54				NSD							
G1	15	F53				NSD							
G1	16	F54	CD	1		MD 1-0	3.45	0.95	3.6	Chrysotile			PAOS
G1	16	F54	CD		1	MF	3.45	0.16	21.6	Chrysotile			TAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38512BF					
G1	17	G53				NSD							
G1	18	G54				NSD							
G1	19	H53				NSD							
G1	20	H54				NSD							
G1	21	K53				NSD							
G1	22	B51	CM	2		MD 1-0	3	1.08	2.8	Chrysotile			PAOS
G1	22	B51	CM		2	MF	3	0.12	25	Chrysotile			TAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38513BF					
G1	23	B52				NSD							
G1	24	C51				NSD							
G1	25	C52				NSD							
G1	26	E51				NSD							
G1	27	E52				NSD							
G1	28	F51				NSD							
G1	29	F52				NSD							
G1	30	G51				NSD							
G1	31	G52				NSD							

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Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S16
Client Sample No: 14394164
Description: OCSF-03-ABS-01

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	32	H51				NSD							
G1	33	H52				NSD							
G1	34	K51				NSD							
G2	35	C62				NSD							
G2	36	E61				NSD							
G2	37	E62				NSD							
G2	38	F61				NSD							
G2	39	F62				NSD							
G2	40	G61				NSD							
G2	41	G62				NSD							
G2	42	H61				NSD							
G2	43	B54				NSD							
G2	44	C53				NSD							
G2	45	C54				NSD							
G2	46	E53	CM	3		MD 1-0	2.49	0.42	5.9	Chrysotile			PAOS
G2	46	E53	CM		3	MF	2.49	0.07	35.6	Chrysotile			TAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38516BF					
G2	47	E54				NSD							
G2	48	F53				NSD							
G2	49	F54				NSD							
G2	50	G53				NSD							
G2	51	G54				NSD							
G2	52	H53				NSD							
G2	53	H54				NSD							
G2	54	B51				NSD							
G2	55	B52				NSD							
G2	56	C51				NSD							
G2	57	C52				NSD							
G2	58	E51				NSD							
G2	59	E52				NSD							
G2	60	F51				NSD							
G2	61	F52				NSD							
G2	62	G51				NSD							
G2	63	G52				NSD							
G2	64	H51				NSD							
G2	65	H52				NSD							

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Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S17
Client Sample No: 14394165
Description: OCSF-03-ABS-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C62				NSD							
G1	2	E61				NSD							
G1	3	E62				NSD							
G1	4	F61	CD	1	1	F	1.43	0.24	6	Chrysotile			TAOS, PAOS
							ItemType	ItemNum			Confirmed	Comment	
							Diffraction	H38527DF			TH 1/30/2015	0.53 nm ROW SPACING	
							Brightfield	H38527BF					
G1	5	F62				NSD							
G1	6	G61				NSD							
G1	7	G62				NSD							
G1	8	H61				NSD							
G1	9	H62				NSD							
G1	10	C53				NSD							
G1	11	C54				NSD							
G1	12	E53				NSD							
G1	13	E54				NSD							
G1	14	F53				NSD							
G1	15	F54				NSD							
G1	16	G53				NSD							
G1	17	G54				NSD							
G1	18	H53				NSD							
G1	19	H54				NSD							
G1	20	B52				NSD							
G1	21	C51				NSD							
G1	22	C52				NSD							
G1	23	E51				NSD							
G1	24	E52				NSD							
G1	25	F51				NSD							
G1	26	F52				NSD							
G1	27	G51	CM	2		MD 1-0	1.81	1.81	1	Chrysotile			PAOS
G1	27	G51	CM		2	MF	1.81	0.19	9.5	Chrysotile			TAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38531BF					
G1	28	G52				NSD							
G1	29	H51				NSD							
G1	30	H52				NSD							
G1	31	K51	CM	3		MD 1-0	4.5	4.3	1	Chrysotile			PAOS

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http://www.labcor.net*A Professional Service Corporation in the Northwest***ISO 10312 - Direct Raw Data****Job Number:** 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S17
Client Sample No: 14394165
Description: OSCP-03-ABS-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	31	K51	CM		3	MF	3.3	0.18	18.3	Chrysotile			TAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38532BF					
G1	32	B43				NSD							
G1	33	B44				NSD							
G1	34	C43				NSD							
G1	35	C44	ADQ	4	4	MC 1-0	1.82	0.57	3.2	Anthophyllite			TAOS, PAOS
							ItemType	ItemNum			Confirmed	Comment	
							Diffraction	H38533DF			TH 1/30/2015	0.53 nm ROW SPACING	
							Spectra	H38533SP			TH 1/30/2015		
							Brightfield	H38533BF					
G2	36	C61	CM	5		MD 1-0	3.2	3.04	1.1	Chrysotile			PAOS
G2	36	C61	CM		5	MF	1.46	0.16	9.1	Chrysotile			TAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38535BF					
G2	37	C62				NSD							
G2	38	E61				NSD							
G2	39	E62				NSD							
G2	40	F61				NSD							
G2	41	F62				NSD							
G2	42	G61				NSD							
G2	43	G62				NSD							
G2	44	H61				NSD							
G2	45	B54				NSD							
G2	46	C53				NSD							
G2	47	C54				NSD							
G2	48	E53				NSD							
G2	49	E54				NSD							
G2	50	F53				NSD							
G2	51	F54				NSD							
G2	52	G53				NSD							
G2	53	G54				NSD							
G2	54	H53				NSD							
G2	55	H54				NSD							
G2	56	B51				NSD							
G2	57	B52				NSD							
G2	58	C51	CM	6		MD 2-0	13.69	11.62	1.2	Chrysotile			PAOS

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Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	58	C51	CM		6	MF	2.273	0.15	15.2	Chrysotile			TAOS
							ItemType	ItemNum		Confirmed		Comment	
							Brightfield	H38536BF					
G2	58	C51	CM		7	MF	2.16	0.15	14.4	Chrysotile			TAOS
G2	59	C52				NSD							
G2	60	E51				NSD							
G2	61	E52				NSD							
G2	62	F51				NSD							
G2	63	F52	CD	7		MD 1-0	1.54	0.37	4.2	Chrysotile			PAOS
G2	63	F52	CD		8	MF	1.54	0.11	14	Chrysotile			TAOS
							ItemType	ItemNum		Confirmed		Comment	
							Diffraction	H38537DF		TH 1/30/2015		0.53 nm ROW SPACING	
							Brightfield	H38537BF					
G2	64	G51				NSD							
G2	65	G52				NSD							
G2	66	H51				NSD							
G2	67	H52				NSD							
G2	68	K51				NSD							

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Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S18
Client Sample No: 14394169
Description: OCSF-03-AIR-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C61				NSD							
G1	2	C62				NSD							
G1	3	E61				NSD							
G1	4	E62				NSD							
G1	5	F61				NSD							
G1	6	F62				NSD							
G1	7	G61				NSD							
G1	8	G62				NSD							
G1	9	H61	CD	1		MD 1-0	2.87	1.42	2	Chrysotile			PAOS
G1	9	H61	CD		1	MF	2.07	0.07	29.6	Chrysotile			TAOS

ItemType	ItemNum	Confirmed	Comment
Diffraction	H38723DF	TH 2/18/2015	0.53 nm ROW SPACING
Brightfield	H38723BF		

G1	10	B54				NSD							
G1	11	C53				NSD							
G1	12	C54				NSD							
G1	13	E53				NSD							
G1	14	E54				NSD							
G1	15	F53				NSD							
G1	16	F54				NSD							
G1	17	G53				NSD							
G1	18	G54				NSD							
G1	19	H53				NSD							
G1	20	H54				NSD							
G1	21	B51				NSD							
G1	22	B52				NSD							
G1	23	C51				NSD							
G1	24	C52				NSD							
G1	25	E51				NSD							
G1	26	E52				NSD							
G1	27	F51				NSD							
G1	28	F52				NSD							
G1	29	G51				NSD							
G1	30	G52				NSD							
G1	31	H51				NSD							
G1	32	H52				NSD							
G1	33	K51				NSD							
G1	34	B43				NSD							



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Client Sample No: 14394169
Description: OCSP-03-AIR-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	35	B44				NSD							
G1	36	C43				NSD							
G1	37	C44				NSD							
G1	38	E43				NSD							
G1	39	E44				NSD							
G1	40	F43				NSD							
G1	41	F44				NSD							
G1	42	H43				NSD							
G2	43	C62				NSD							
G2	44	E61				NSD							
G2	45	E62				NSD							
G2	46	F61				NSD							
G2	47	F62				NSD							
G2	48	G61				NSD							
G2	49	G62				NSD							
G2	50	H61				NSD							
G2	51	B54				NSD							
G2	52	C53				NSD							
G2	53	C54				NSD							
G2	54	E53				NSD							
G2	55	E54				NSD							
G2	56	F53				NSD							
G2	57	F54				NSD							
G2	58	G53				NSD							
G2	59	G54				NSD							
G2	60	H53				NSD							
G2	61	H54				NSD							
G2	62	B51				NSD							
G2	63	B52				NSD							
G2	64	C51				NSD							
G2	65	C52				NSD							
G2	66	E51				NSD							
G2	67	G52				NSD							
G2	68	H51				NSD							
G2	69	H52				NSD							
G2	70	K51				NSD							
G2	71	B43				NSD							
G2	72	B44				NSD							



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Client Sample No: 14394169
Description: OCSP-03-AIR-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	73	C43				NSD							
G2	74	C44				NSD							
G2	75	E43				NSD							

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Date Received: 12/11/2014**Lab/Cor Sample No:** S19
Client Sample No: 14394170
Description: OCSF-03-AIR-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	E62				NSD							
G1	2	H61				NSD							
G1	3	H53				NSD							
G1	4	H54				NSD							
G1	5	E52				NSD							
G1	6	H43				NSD							
G1	7	C42				NSD							
G1	8	E41				NSD							
G1	9	E42				NSD							
G1	10	F41				NSD							
G1	11	F42	CD	1		MD 1-0	3.53	1.37	2.6	Chrysotile			PAOS
G1	11	F42	CD		1	MF	3.53	0.6	5.9	Chrysotile			TAOS

Item Type	Item Num	Confirmed	Comment
Diffraction	H38724DF	TH 2/18/2015	0.53 nm ROW SPACING
Brightfield	H38724BF		

G1	12	G41				NSD							
G1	13	G42				NSD							
G1	14	H41				NSD							
G1	15	K41				NSD							
G1	16	C34				NSD							
G1	17	E33				NSD							
G1	18	E34				NSD							
G1	19	F33				NSD							
G1	20	F34				NSD							
G1	21	G33				NSD							
G1	22	G34				NSD							
G1	23	H33				NSD							
G1	24	K33				NSD							
G1	25	B32				NSD							
G1	26	C31				NSD							
G1	27	C32				NSD							
G1	28	E31				NSD							
G1	29	E32				NSD							
G1	30	F31				NSD							
G1	31	F32				NSD							
G1	32	G31				NSD							
G1	33	G32				NSD							
G1	34	B24				NSD							

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Date Received: 12/11/2014**Lab/Cor Sample No:** S19
Client Sample No: 14394170
Description: OCSF-03-AIR-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	35	C23				NSD								
G1	36	C24				NSD								
G1	37	E23				NSD								
G1	38	E24				NSD								
G1	39	F23				NSD								
G1	40	G23				NSD								
G1	41	G24				NSD								
G2	42	C61				NSD								
G2	43	E61				NSD								
G2	44	E62				NSD								
G2	45	F61				NSD								
G2	46	F62				NSD								
G2	47	G61				NSD								
G2	48	G62				NSD								
G2	49	B54				NSD								
G2	50	C53				NSD								
G2	51	C54				NSD								
G2	52	E53				NSD								
G2	53	E54				NSD								
G2	54	F53				NSD								
G2	55	F54				NSD								
G2	56	G53	CD	2		MD 2-0	7.51	6.68	1.1	Chrysotile				PAOS
G2	56	G53	CD		2	MF	1.94	0.1	19.4	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
						Diffraction	H38725DF				TH 2/18/2015	0.53 nm ROW SPACING		
						Brightfield	H38725BF							
G2	56	G53	CM		3	MB	1.19	0.3	4	Chrysotile				TAOS
G2	56	G53	CM		4	MR	7.51	6.5	1.2	Chrysotile				TAOS
G2	57	G54				NSD								
G2	58	H53				NSD								
G2	59	H54				NSD								
G2	60	B51				NSD								
G2	61	B52				NSD								
G2	62	C51				NSD								
G2	63	C52				NSD								
G2	64	E51				NSD								
G2	65	E52				NSD								
G2	66	F51				NSD								



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Description: OCSP-03-AIR-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	67	F52				NSD							
G2	68	G51				NSD							
G2	69	G52				NSD							
G2	70	H51				NSD							
G2	71	H52				NSD							
G2	72	K51				NSD							
G2	73	B43				NSD							
G2	74	B44				NSD							
G2	75	C43				NSD							

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Client Sample No: 14394171
Description: OSCP-03-AIR-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C62				NSD							
G1	2	E61				NSD							
G1	3	E62				NSD							
G1	4	G61	CD	1		MD 1-0	7.07	1.82	3.9	Chrysotile			PCMES-NIOSH, PCMES-ISO, PAOS, PCMESmodNIOSSH
G1	4	G61	CD		1	MF	4.34	0.13	33.4	Chrysotile			TAOS
							ItemType	ItemNum			Confirmed	Comment	
							Diffraction	H38726DF			TH 2/18/2015	0.53 nm ROW SPACING	
							Brightfield	H38726BF					
G1	5	G62				NSD							
G1	6	H61				NSD							
G1	7	B54				NSD							
G1	8	C53				NSD							
G1	9	C54				NSD							
G1	10	E54				NSD							
G1	11	G54				NSD							
G1	12	H53				NSD							
G1	13	H54				NSD							
G1	14	B51				NSD							
G1	15	B52				NSD							
G1	16	C51				NSD							
G1	17	C52				NSD							
G1	18	E51				NSD							
G1	19	E52				NSD							
G1	20	F51				NSD							
G1	21	F52				NSD							
G1	22	G51				NSD							
G1	23	G52				NSD							
G1	24	H51				NSD							
G1	25	H52				NSD							
G1	26	K51				NSD							
G1	27	B43				NSD							
G1	28	B44				NSD							
G1	29	C43				NSD							
G1	30	C44				NSD							
G1	31	E43				NSD							
G1	32	E44				NSD							
G1	33	F43				NSD							



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Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	34	F44				NSD							
G1	35	G43				NSD							
G1	36	G44				NSD							
G1	37	H43				NSD							
G1	38	H44				NSD							
G1	39	K43				NSD							
G2	40	C61				NSD							
G2	41	C62				NSD							
G2	42	E61				NSD							
G2	43	E62				NSD							
G2	44	F61				NSD							
G2	45	F62				NSD							
G2	46	G61				NSD							
G2	47	G62				NSD							
G2	48	H61				NSD							
G2	49	B54				NSD							
G2	50	C53				NSD							
G2	51	C54				NSD							
G2	52	E53				NSD							
G2	53	E54				NSD							
G2	54	F53				NSD							
G2	55	F54				NSD							
G2	56	G53				NSD							
G2	57	G54				NSD							
G2	58	H53				NSD							
G2	59	H54				NSD							
G2	60	B51				NSD							
G2	61	B52				NSD							
G2	62	C51				NSD							
G2	63	C52				NSD							
G2	64	E51				NSD							
G2	65	E52				NSD							
G2	66	F51				NSD							
G2	67	F52				NSD							
G2	68	G51				NSD							
G2	69	G52				NSD							

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Description: OCSP-03-AIR-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	70	H51	CM	2	2	F	1.35	0.18	7.5	Chrysotile			TAOS, PAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38730BF					
G2	70	H51	CD	3		MD 1-1	18.19	3.11	5.8	Chrysotile			PCMES-NIOSH, PAOS
G2	70	H51	CD		3	MB	18.19	2.58	7.1	Chrysotile			PCMEF-NIOSH, PCMEF-ISO, TAOS, PCMEFmodNIOSH
							ItemType	ItemNum			Confirmed	Comment	
							Diffraction	H38731DF			TH 2/18/2015	0.53 nm ROW SPACING	
							Brightfield	H38731BF					
G2	71	H52				NSD							
G2	72	K51				NSD							
G2	73	B43				NSD							
G2	74	B44				NSD							
G2	75	C43				NSD							

Lab/Cor Sample No: S21
Client Sample No: 14394173
Description: OCSP-04-ABS-01

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C61				NSD							
G1	2	C62				NSD							
G1	3	E61				NSD							
G1	4	E62				NSD							
G1	5	F61				NSD							
G2	6	C61				NSD							
G2	7	C62				NSD							
G2	8	E61				NSD							
G2	9	E62				NSD							
G2	10	B54				NSD							



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Lab/Cor Sample No: S22
Client Sample No: 14394174
Description: OCSP-04-ABS-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	F61				NSD							
G1	2	F62				NSD							
G1	3	G61				NSD							
G1	4	G62				NSD							
G1	5	H61				NSD							
G1	6	E53				NSD							
G1	7	E54				NSD							
G1	8	F53				NSD							
G1	9	F54				NSD							
G1	10	G53				NSD							
G1	11	G54				NSD							
G1	12	H53				NSD							
G1	13	H54				NSD							
G1	14	E51				NSD							
G1	15	E52				NSD							
G1	16	F51				NSD							
G1	17	F52				NSD							
G1	18	G51				NSD							
G1	19	G52				NSD							
G1	20	H51				NSD							
G1	21	H52				NSD							
G1	22	K51				NSD							
G1	23	C43				NSD							
G1	24	C44				NSD							
G1	25	E43				NSD							
G1	26	E44				NSD							
G1	27	G43				NSD							
G1	28	G44				NSD							
G1	29	H43				NSD							
G1	30	H44				NSD							
G1	31	K43				NSD							
G1	32	K44				NSD							
G1	33	B41				NSD							
G1	34	B42				NSD							
G1	35	C41	CD	1		MD 2-0	2.27	1.22	1.9	Chrysotile			PAOS

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Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S22
Client Sample No: 14394174
Description: OCSF-04-ABS-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	35	C41	CD		1	MF	2.12	0.06	35.3	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
						Diffraction	H38565DF				TH 2/2/2015	0.53 nm ROW SPACING		
						Brightfield	H38565BF							
G1	35	C41	CM		2	MB	2.03	0.27	7.5	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
G1	35	C41	CM	2		MD 5-0	2.2	1.41	1.6	Chrysotile				PAOS
G1	35	C41	CM		3	MF	1.3	0.1	13	Chrysotile				TAOS
G1	35	C41	CM		4	MF	1.06	0.1	10.6	Chrysotile				TAOS
G1	35	C41	CM		5	MF	0.98	0.1	9.8	Chrysotile				TAOS
G1	35	C41	CM		6	MF	0.71	0.1	7.1	Chrysotile				TAOS
G1	35	C41	CM		7	MF	0.65	0.1	6.5	Chrysotile				TAOS
G1	35	C41	CM	3		MD 1-0	2.05	1.07	1.9	Chrysotile				PAOS
G1	35	C41	CM		8	MF	2.05	0.16	12.8	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
						Brightfield	H38567BF							
G1	35	C41	CM	4		MD 2-0	1.48	0.6	2.5	Chrysotile				PAOS
G1	35	C41	CM		9	MF	0.89	0.1	8.9	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
						Brightfield	H38568BF							
G1	35	C41	CM		10	MF	0.57	0.1	5.7	Chrysotile				TAOS
G1	35	C41	CM	5		MD 1-0	2.45	1.42	1.7	Chrysotile				PAOS
G1	35	C41	CM		11	MF	0.9	0.21	4.3	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
						Brightfield	H38569BF							
G1	35	C41	CM	6		MD 1-0	3.05	2.46	1.2	Chrysotile				PAOS
G1	35	C41	CM		12	MF	2.28	0.1	22.8	Chrysotile				TAOS
G1	35	C41	CM		13	MR	3.05	2.19	1.4	Chrysotile				TAOS
G1	35	C41	CM	7	14	MC 10-0	14.23	13.64	1	Chrysotile				TAOS, PAOS
G1	35	C41	CD	8	15	F	0.94	0.19	4.9	Chrysotile				TAOS, PAOS
						ItemType	ItemNum				Confirmed	Comment		
						Diffraction	H38570DF				TH 2/2/2015	0.53 nm ROW SPACING		
						Brightfield	H38570BF							
G1	35	C41	CM	9		MD 1-0	2.2	1.13	1.9	Chrysotile				PAOS

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Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	35	C41	CM		16	MF	2.2	0.4	5.5	Chrysotile			TAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38571BF					
G1	36	C42				NSD							
G1	37	E41				NSD							
G1	38	G41				NSD							
G1	39	G42				NSD							
G1	40	H41				NSD							
G1	41	H42				NSD							
G1	42	K41				NSD							
G1	43	K42				NSD							
G1	44	B33				NSD							
G1	45	B34				NSD							
G1	46	C33				NSD							
G1	47	C34				NSD							
G1	48	G33				NSD							
G1	49	G34				NSD							
G1	50	H33				NSD							
G1	51	H34				NSD							
G1	52	K33				NSD							
G1	53	B32				NSD							
G1	54	C31				NSD							
G1	55	C32				NSD							
G1	56	E31				NSD							
G1	57	E32				NSD							
G1	58	F31				NSD							
G1	59	F32				NSD							
G1	60	G31	CM	10		MD 1-0	3.49	3.25	1.1	Chrysotile			PAOS
G1	60	G31	CM		17	MF	1.94	0.1	19.4	Chrysotile			TAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38572BF					
G1	61	G32				NSD							
G1	62	H31				NSD							
G1	63	H32				NSD							
G1	64	K31				NSD							
G1	65	C23				NSD							
G1	66	C24				NSD							

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Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	67	E23				NSD								
G1	68	E24				NSD								
G1	69	F23				NSD								
G1	70	F24				NSD								
G1	71	G23				NSD								
G1	72	G24				NSD								
G1	73	H23				NSD								
G1	74	H24				NSD								
G2	75	C61				NSD								
G2	76	C62				NSD								
G2	77	E61				NSD								
G2	78	E62				NSD								
G2	79	F61				NSD								
G2	80	F62				NSD								
G2	81	B54				NSD								
G2	82	C53				NSD								
G2	83	C54				NSD								
G2	84	E53				NSD								
G2	85	E54				NSD								
G2	86	F53				NSD								
G2	87	B51				NSD								
G2	88	B52				NSD								
G2	89	C51				NSD								
G2	90	C52				NSD								
G2	91	E51	CD	11	18	F	1.75	0.19	9.2	Chrysotile				TAOS, PAOS
							ItemType	ItemNum		Confirmed		Comment		
							Diffraction	H38589DF		TH 2/2/2015		0.53 nm ROW SPACING		
							Brightfield	H38589BF						
G2	92	E52				NSD								
G2	93	F51				NSD								
G2	94	F52				NSD								
G2	95	G52				NSD								
G2	96	H51				NSD								
G2	97	A44				NSD								
G2	98	B43				NSD								
G2	99	B44				NSD								
G2	100	C43				NSD								
G2	101	C44				NSD								

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Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	102	E43				NSD							
G2	103	E44				NSD							
G2	104	F43				NSD							
G2	105	F44				NSD							
G2	106	G43				NSD							
G2	107	G44				NSD							
G2	108	H43				NSD							
G2	109	H44				NSD							
G2	110	K43				NSD							
G2	111	A42	CM	12		MD 2-0	2.25	1.3	1.7	Chrysotile			PAOS
G2	111	A42	CM		19	MF	1.62	0.17	9.5	Chrysotile			TAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38590BF					
G2	111	A42	CM		20	MF	1.43	0.17	8.4	Chrysotile			TAOS
G2	111	A42	CM	13	21	B	5.42	1.05	5.2	Chrysotile			TAOS, PAOS, PCMEF-NIOSH, PCMES-NIOSH, PCMEF-ISO, PCMES-ISO, PCMEFmodNIOSH, PCMESmodNIOSH
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38591BF					
G2	112	B41				NSD							
G2	113	B42				NSD							
G2	114	C41				NSD							
G2	115	C42				NSD							
G2	116	E41				NSD							
G2	117	E42				NSD							
G2	118	F41				NSD							
G2	119	F42				NSD							
G2	120	G41				NSD							



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Project Name: SFP-078A
Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S23
Client Sample No: 14394175
Description: OCSF-04-ABS-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C61				NSD							
G1	2	C62				NSD							
G1	3	E61				NSD							
G1	4	E62				NSD							
G1	5	F61				NSD							
G1	6	F62				NSD							
G1	7	G61				NSD							
G1	8	G62				NSD							
G1	9	H61				NSD							
G1	10	B54				NSD							
G1	11	C53				NSD							
G1	12	C54				NSD							
G1	13	E53				NSD							
G1	14	E54				NSD							
G1	15	F53				NSD							
G1	16	F54				NSD							
G1	17	G53				NSD							
G1	18	G54				NSD							
G1	19	H53				NSD							
G1	20	H54				NSD							
G1	21	B51				NSD							
G1	22	B52				NSD							
G1	23	C51				NSD							
G1	24	C52				NSD							
G1	25	E51				NSD							
G1	26	E52				NSD							
G1	27	F51				NSD							
G1	28	F52				NSD							
G1	29	G51				NSD							
G1	30	G52				NSD							
G1	31	H51				NSD							
G1	32	H52				NSD							
G1	33	K51				NSD							
G1	34	B43				NSD							
G1	35	B44				NSD							
G1	36	C43				NSD							
G1	37	C44				NSD							
G1	38	E43				NSD							



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Report Number: 141014R02
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Lab/Cor Sample No: S23
Client Sample No: 14394175
Description: OCSF-04-ABS-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	39	E44				NSD							
G1	40	F43				NSD							
G1	41	F44				NSD							
G1	42	G43				NSD							
G1	43	G44				NSD							
G1	44	H43				NSD							
G1	45	H44				NSD							
G1	46	K43				NSD							
G1	47	B41				NSD							
G1	48	B42				NSD							
G1	49	C41				NSD							
G1	50	C42				NSD							
G1	51	E41				NSD							
G1	52	E42				NSD							
G1	53	F41				NSD							
G1	54	F42				NSD							
G1	55	G41				NSD							
G1	56	G42				NSD							
G1	57	H41				NSD							
G1	58	H42				NSD							
G1	59	K41				NSD							
G1	60	B33				NSD							
G1	61	B34				NSD							
G1	62	C33				NSD							
G1	63	C34				NSD							
G1	64	E33				NSD							
G1	65	G34				NSD							
G1	66	H33				NSD							
G1	67	H34				NSD							
G1	68	K33				NSD							
G1	69	B31				NSD							
G1	70	B32				NSD							
G1	71	C31				NSD							
G1	72	C32				NSD							
G1	73	E31				NSD							
G1	74	E32				NSD							
G1	75	H31				NSD							
G1	76	H32				NSD							



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Lab/Cor Sample No: S23
Client Sample No: 14394175
Description: OCSP-04-ABS-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	77	B24				NSD							
G1	78	C23				NSD							
G1	79	C24				NSD							
G1	80	E23				NSD							
G1	81	E24				NSD							
G1	82	G24				NSD							
G1	83	H23				NSD							
G1	84	H24				NSD							
G2	85	C61				NSD							
G2	86	C62				NSD							
G2	87	E61				NSD							
G2	88	E62				NSD							
G2	89	F62				NSD							
G2	90	G61				NSD							
G2	91	G62				NSD							
G2	92	H61				NSD							
G2	93	B54				NSD							
G2	94	C53				NSD							
G2	95	C54				NSD							
G2	96	E53				NSD							
G2	97	E54				NSD							
G2	98	H53				NSD							
G2	99	B51				NSD							
G2	100	B52				NSD							
G2	101	C51				NSD							
G2	102	C52				NSD							
G2	103	E51				NSD							
G2	104	E52				NSD							
G2	105	H52				NSD							
G2	106	K51				NSD							
G2	107	K52				NSD							
G2	108	B43				NSD							
G2	109	B44				NSD							
G2	110	C43	CD	1		MD 1-1	10.5	9.51	1.1	Chrysotile		2X GRID BAR RULE	PAOS

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Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	110	C43	CD		1	MF	6.8	0.31	21.9	Chrysotile			TAOS, PCMEF-NIOSH, PCMEF-ISO, PCMEFmodNIOSH
							ItemType	ItemNum			Confirmed	Comment	
							Diffraction	H38597DF			TH 2/3/2015	0.53 nm ROW SPACING	
							Brightfield	H38597BF					
G2	110	C43	CM		2	MR	3.73	1.95	1.9	Chrysotile			TAOS
G2	111	C44				NSD							
G2	112	E43				NSD							
G2	113	B41				NSD							
G2	114	B42				NSD							
G2	115	C41				NSD							

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Date Received: 12/11/2014**Lab/Cor Sample No:** S24
Client Sample No: 14394176
Description: OCSF-04-ABS-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	1	C61				NSD								
G1	2	C62				NSD								
G1	3	E61				NSD								
G1	4	E62				NSD								
G1	5	F61				NSD								
G1	6	B54				NSD								
G1	7	C53				NSD								
G1	8	C54				NSD								
G1	9	E53				NSD								
G1	10	E54	CD	1		MD 7-0	5.98	5.24	1.1	Chrysotile				PAOS
G1	10	E54	CD		1	MF	1.8	0.15	12	Chrysotile				TAOS
							ItemType	ItemNum			Confirmed		Comment	
							Diffraction	H38542DF			TH 2/1/2015		0.53 nm ROW SPACING	
							Brightfield	H38542BF						
G1	10	E54	CM		2	MF	1.6	0.1	16	Chrysotile				TAOS
G1	10	E54	CM		3	MF	1.44	0.1	14.4	Chrysotile				TAOS
G1	10	E54	CM		4	MF	1.01	0.1	10.1	Chrysotile				TAOS
G1	10	E54	CM		5	MF	0.71	0.1	7.1	Chrysotile				TAOS
G1	10	E54	CM		6	MF	0.7	0.1	7	Chrysotile				TAOS
G1	10	E54	CM		7	MF	0.57	0.1	5.7	Chrysotile				TAOS
G1	10	E54	CM		8	MR	4.19	3.52	1.2	Chrysotile				TAOS
G1	11	B51	CM	2		MD 1-0	2.31	0.61	3.8	Chrysotile				PAOS
G1	11	B51	CM		9	MF	1.22	0.12	10.2	Chrysotile				TAOS
							ItemType	ItemNum			Confirmed		Comment	
							Brightfield	H38543BF						
G1	12	B52				NSD								
G1	13	C51	CM	3		MD 2-0	4.23	3.21	1.3	Chrysotile				PAOS
G1	13	C51	CM		10	MF	1.86	0.1	18.6	Chrysotile				TAOS
							ItemType	ItemNum			Confirmed		Comment	
							Brightfield	H38544BF						
G1	13	C51	CM		11	MF	0.88	0.1	8.8	Chrysotile				TAOS
G1	14	C52				NSD								
G1	15	E51				NSD								
G1	16	E52				NSD								
G1	17	F51				NSD								

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Client Sample No: 14394176
Description: OCSP-04-ABS-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	18	F52	CM	4	12	F	1.01	0.22	4.6	Chrysotile			TAOS, PAOS
							ItemType	ItemNum			Confirmed	Comment	
							Brightfield	H38545BF					
G2	19	C62				NSD							
G2	20	E61				NSD							
G2	21	E62	CD	5	13	MC 50-0	14.83	12.37	1.2	Chrysotile			TAOS, PAOS
							ItemType	ItemNum			Confirmed	Comment	
							Diffraction	H38546DF			TH 2/1/2015	0.53 nm ROW SPACING	
							Brightfield	H38546BF					
G2	22	F61				NSD							
G2	23	F62				NSD							
G2	24	G61				NSD							
G2	25	G62				NSD							



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Job Number: 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S25
Client Sample No: 14394178
Description: OCSP-04-AIR-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C61				NSD							
G1	2	C62				NSD							
G1	3	E61				NSD							
G1	4	E62				NSD							
G1	5	F61				NSD							
G1	6	F62				NSD							
G1	7	G61				NSD							
G1	8	G62				NSD							
G1	9	H61				NSD							
G1	10	E54				NSD							
G1	11	F53				NSD							
G1	12	F54				NSD							
G1	13	G53				NSD							
G1	14	G54				NSD							
G1	15	H53				NSD							
G1	16	H54				NSD							
G1	17	B51				NSD							
G1	18	E52				NSD							
G1	19	F51				NSD							
G1	20	F52				NSD							
G1	21	G51				NSD							
G1	22	G52				NSD							
G1	23	H51				NSD							
G1	24	B43				NSD							
G1	25	B44				NSD							
G1	26	C44				NSD							
G1	27	E43				NSD							
G1	28	E44				NSD							
G1	29	F43				NSD							
G1	30	F44				NSD							
G1	31	G43				NSD							
G1	32	G44				NSD							
G1	33	H43				NSD							
G1	34	H44				NSD							
G1	35	K43				NSD							
G2	36	C61				NSD							
G2	37	C62				NSD							
G2	38	E61				NSD							

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http://www.labcor.net*A Professional Service Corporation in the Northwest***ISO 10312 - Direct Raw Data****Job Number:** 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S25
Client Sample No: 14394178
Description: OSCP-04-AIR-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G2	39	E62				NSD								
G2	40	F61				NSD								
G2	41	F62				NSD								
G2	42	G61				NSD								
G2	43	G62				NSD								
G2	44	H61				NSD								
G2	45	B54				NSD								
G2	46	C53				NSD								
G2	47	C54				NSD								
G2	48	E53				NSD								
G2	49	F53	CD	1		MD 1-0	4.02	2.6	1.5	Chrysotile				PAOS
G2	49	F53	CD		1	MF	3.35	0.61	5.5	Chrysotile				TAOS
						ItemType	ItemNum		Confirmed		Comment			
						Diffraction	H38108DF		TH 1/19/2015		0.53 nm ROW SPACING			
						Brightfield	H38108BF							
G2	50	F54				NSD								
G2	51	G53				NSD								
G2	52	G54				NSD								
G2	53	H53				NSD								
G2	54	B51				NSD								
G2	55	B52	CD	2		MD 1-1	10.44	4.82	2.2	Chrysotile				PAOS
G2	55	B52	CD		2	MF	7.2	0.1	72	Chrysotile				TAOS
						ItemType	ItemNum		Confirmed		Comment			
						Diffraction	H38109DF		TH 1/19/2015		0.53 nm ROW SPACING			
						Brightfield	H38109BF							
G2	55	B52	CM		3	MF	5.13	0.15	34.2	Chrysotile				TAOS
G2	55	B52	CM		4	MF	4.72	0.1	47.2	Chrysotile				TAOS
G2	55	B52	CM		5	MF	4.71	0.1	47.1	Chrysotile				TAOS
G2	55	B52	CM		6	MF	4.52	0.1	45.2	Chrysotile				TAOS
G2	55	B52	CM		7	MF	0.87	0.1	8.7	Chrysotile				TAOS
G2	55	B52	CM		8	MF	0.73	0.1	7.3	Chrysotile				TAOS
G2	55	B52	CM		9	MR	9	4	2.2	Chrysotile				TAOS
G2	56	C51				NSD								



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Job Number: 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S26
Client Sample No: 14394179
Description: OCSF-04-AIR-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C53				NSD							
G1	2	C54				NSD							
G1	3	B51				NSD							
G1	4	B52				NSD							
G1	5	C51				NSD							
G1	6	C52				NSD							
G1	7	E51				NSD							
G1	8	E52				NSD							
G1	9	F51				NSD							
G1	10	F52				NSD							
G1	11	K51				NSD							
G1	12	B43				NSD							
G1	13	B44				NSD							
G1	14	C43				NSD							
G1	15	C44				NSD							
G1	16	E43				NSD							
G1	17	E44				NSD							
G1	18	F43				NSD							
G1	19	F44				NSD							
G1	20	G43				NSD							
G1	21	G44				NSD							
G1	22	H43				NSD							
G1	23	H44				NSD							
G1	24	K43				NSD							
G1	25	B41				NSD							
G1	26	B42				NSD							
G1	27	C41				NSD							
G1	28	C42				NSD							
G1	29	E41				NSD							
G1	30	E42				NSD							
G1	31	F41				NSD							
G1	32	F42				NSD							
G1	33	G41				NSD							
G1	34	G42				NSD							
G1	35	H41				NSD							
G2	36	C61				NSD							
G2	37	C62				NSD							
G2	38	E61				NSD							



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Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S26
Client Sample No: 14394179
Description: OCSP-04-AIR-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	39	E62				NSD							
G2	40	C54				NSD							
G2	41	E53				NSD							
G2	42	E54				NSD							
G2	43	F54				NSD							
G2	44	B51				NSD							
G2	45	B52				NSD							
G2	46	C51				NSD							
G2	47	C52				NSD							
G2	48	E51				NSD							
G2	49	E52				NSD							
G2	50	F51				NSD							
G2	51	F52				NSD							
G2	52	G51				NSD							
G2	53	G52				NSD							
G2	54	B43				NSD							
G2	55	B44				NSD							
G2	56	C43				NSD							
G2	57	C44				NSD							
G2	58	E43				NSD							

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Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S27
Client Sample No: 14394180
Description: OCSF-04-AIR-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	1	F61				NSD								
G1	2	F62				NSD								
G1	3	G61				NSD								
G1	4	G62				NSD								
G1	5	H61				NSD								
G1	6	C53				NSD								
G1	7	C54				NSD								
G1	8	E53				NSD								
G1	9	E54				NSD								
G1	10	F53				NSD								
G1	11	F54				NSD								
G1	12	G53				NSD								
G1	13	G54				NSD								
G1	14	H53				NSD								
G1	15	B52				NSD								
G1	16	C51				NSD								
G1	17	C52				NSD								
G1	18	F52				NSD								
G1	19	G51				NSD								
G1	20	G52				NSD								
G1	21	H51				NSD								
G1	22	H52				NSD								
G1	23	K51				NSD								
G1	24	B44				NSD								
G1	25	C43				NSD								
G1	26	C44				NSD								
G1	27	G43				NSD								
G1	28	G44				NSD								
G1	29	H43				NSD								
G1	30	H44				NSD								
G1	31	K43				NSD								
G1	32	K44	CD	1	1	F	1.21	0.25	4.8	Chrysotile				TAOS, PAOS
							ItemType	ItemNum			Confirmed		Comment	
							Diffraction	H38119DF			TH 1/20/2015		0.53 nm ROW SPACING	
							Brightfield	H38119BF						
G2	33	B52				NSD								
G2	34	C51				NSD								
G2	35	C52				NSD								



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Report Number: 141014R02
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Lab/Cor Sample No: S27
Client Sample No: 14394180
Description: OCSP-04-AIR-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	36	E51				NSD							
G2	37	E52				NSD							
G2	38	F51				NSD							
G2	39	F52				NSD							
G2	40	G51				NSD							
G2	41	G52				NSD							
G2	42	H51				NSD							
G2	43	H52				NSD							
G2	44	K51				NSD							
G2	45	B43				NSD							
G2	46	B44				NSD							
G2	47	C43				NSD							
G2	48	C44				NSD							
G2	49	E43				NSD							
G2	50	E44				NSD							
G2	51	F43				NSD							
G2	52	F44				NSD							
G2	53	G43				NSD							
G2	54	G44				NSD							
G2	55	H43				NSD							
G2	56	H44				NSD							
G2	57	K43				NSD							

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Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S28
Client Sample No: 14394181
Description: OCSF-05-ABS-01

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	1	C62				NSD								
G1	2	E61				NSD								
G1	3	E62				NSD								
G1	4	F61				NSD								
G1	5	F62				NSD								
G1	6	G61				NSD								
G1	7	G62				NSD								
G1	8	H61				NSD								
G1	9	C53				NSD								
G1	10	C54				NSD								
G1	11	E53				NSD								
G1	12	E54				NSD								
G1	13	F53				NSD								
G1	14	F54	CD	1		MD 6-6	12.42	9.46	1.3	Chrysotile				PAOS
G1	14	F54	CD		1	MF	11.07	0.15	73.8	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
						Diffraction	H38110DF				TH 1/20/2015	0.53 nm ROW SPACING		
						Brightfield	H38110BF							
G1	14	F54	CM		2	MF	10.75	0.15	71.7	Chrysotile				TAOS
G1	14	F54	CM		3	MF	8.84	0.1	88.4	Chrysotile				TAOS
G1	14	F54	CM		4	MF	7.93	0.1	79.3	Chrysotile				TAOS
G1	14	F54	CM		5	MF	6.88	0.1	68.8	Chrysotile				TAOS
G1	14	F54	CM		6	MF	5.82	0.1	58.2	Chrysotile				TAOS
G1	14	F54	CM		7	MR	12	9	1.3	Chrysotile				TAOS
G1	15	G53				NSD								
G1	16	G54				NSD								
G1	17	B51	CD	2		MD 3-0	3.29	2.95	1.1	Chrysotile				PAOS
G1	17	B51	CM		8	MF	2.08	0.05	41.6	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
						Brightfield	H38111BF							
G1	17	B51	CM		9	MF	1.71	0.05	34.2	Chrysotile				TAOS
G1	17	B51	CM		10	MF	0.92	0.09	10.2	Chrysotile				TAOS
G1	17	B51	CD	3		MD 7-1	12.78	9.79	1.3	Chrysotile				PAOS
G1	17	B51	CD		11	MF	5.05	0.14	36.1	Chrysotile				TAOS
						ItemType	ItemNum				Confirmed	Comment		
						Diffraction	H38112DF				TH 1/20/2015	0.53 nm ROW SPACING		
						Brightfield	H38112BF							
G1	17	B51	CM		12	MF	4.52	0.15	30.1	Chrysotile				TAOS

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Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S28
Client Sample No: 14394181
Description: OSCP-05-ABS-01

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	17	B51	CM		13	MF	4.15	0.15	27.7	Chrysotile			TAOS
G1	17	B51	CM		14	MF	3.85	0.15	25.7	Chrysotile			TAOS
G1	17	B51	CM		15	MF	2.98	0.1	29.8	Chrysotile			TAOS
G1	17	B51	CM		16	MF	1.19	0.1	11.9	Chrysotile			TAOS
G1	17	B51	CM		17	MF	0.87	0.1	8.7	Chrysotile			TAOS
G1	17	B51	CM		18	MR	7	6	1.2	Chrysotile			TAOS
G1	17	B51	CM	4	19	F	1.66	0.25	6.6	Chrysotile			TAOS, PAOS
						ItemType	ItemNum		Confirmed		Comment		
						Brightfield	H38113BF						
G1	17	B51	CM	5	20	F	0.85	0.15	5.7	Chrysotile		See image H38113BF	TAOS, PAOS
G1	17	B51	CM	6	21	F	1.102	0.1	11	Chrysotile		See image H38113BF	TAOS, PAOS
G1	18	B52				NSD							
G1	19	C51				NSD							
G1	20	C52				NSD							
G1	21	E51				NSD							
G1	22	E52				NSD							
G1	23	F51				NSD							
G1	24	F52				NSD							
G1	25	G51				NSD							
G1	26	G52				NSD							
G1	27	B43				NSD							
G1	28	B44				NSD							
G1	29	C43				NSD							
G1	30	C44				NSD							
G1	31	E43				NSD							
G1	32	E44				NSD							
G1	33	F43				NSD							
G1	34	F44				NSD							
G1	35	G43				NSD							
G1	36	G44				NSD							
G1	37	B41	CD	7		MD 3-0	3.05	1.85	1.6	Chrysotile			PAOS
G1	37	B41	CD		22	MF	1.59	0.05	31.8	Chrysotile			TAOS
						ItemType	ItemNum		Confirmed		Comment		
						Diffraction	H38114DF		TH 1/20/2015		0.53 nm ROW SPACING		
						Brightfield	H38114BF						
G1	37	B41	CM		23	MF	0.96	0.1	9.6	Chrysotile			TAOS

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Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S28
Client Sample No: 14394181
Description: OCSF-05-ABS-01

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	37	B41	CM		24	MF	0.74	0.1	7.4	Chrysotile			TAOS
G1	37	B41	CM	8		MD 1-0	1.29	0.24	5.4	Chrysotile			PAOS
G1	37	B41	CM		25	MF	1.21	0.1	12.1	Chrysotile			TAOS
						ItemType	ItemNum		Confirmed		Comment		
						Brightfield	H38115BF						
G1	37	B41	CM	9		MD 1-0	0.84	0.15	5.6	Chrysotile			PAOS
G1	37	B41	CM		26	MF	0.84	0.05	16.8	Chrysotile		See image H38115BF	TAOS
G1	37	B41	CM	10		MD 2-0	1.21	0.5	2.4	Chrysotile			PAOS
G1	37	B41	CM		27	MF	1.21	0.05	24.2	Chrysotile			TAOS
						ItemType	ItemNum		Confirmed		Comment		
						Brightfield	H38116BF						
G1	37	B41	CM		28	MF	0.65	0.05	13	Chrysotile			TAOS
G1	38	B42				NSD							
G1	39	C41				NSD							
G1	40	C42	CM	11		MD 2-0	5.01	4.46	1.1	Chrysotile			PAOS
G1	40	C42	CM		29	MF	4.6	0.05	92	Chrysotile			TAOS
						ItemType	ItemNum		Confirmed		Comment		
						Brightfield	H38117BF						
G1	40	C42	CM		30	MF	0.63	0.06	10.5	Chrysotile			TAOS
G1	40	C42	CM		31	MR	5	2.5	2	Chrysotile			TAOS
G1	41	E41				NSD							
G1	42	E42				NSD							
G1	43	F41				NSD							
G1	44	F42				NSD							
G1	45	G41	CM	12		MD 2-0	8.52	4.14	2.1	Chrysotile			PAOS
G1	45	G41	CM		32	MF	2.4	0.05	48	Chrysotile			TAOS
						ItemType	ItemNum		Confirmed		Comment		
						Brightfield	H38118BF						
G1	45	G41	CM		33	MF	2.34	0.25	9.4	Chrysotile			TAOS
G1	46	G42				NSD							
G1	47	H41				NSD							
G1	48	H42				NSD							
G1	49	C33				NSD							
G1	50	C34				NSD							
G2	51	C62				NSD							
G2	52	E61				NSD							
G2	53	E62				NSD							



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Description: OCSF-05-ABS-01

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	54	F61				NSD							
G2	55	F62				NSD							
G2	56	G61				NSD							
G2	57	B54				NSD							
G2	58	C53				NSD							
G2	59	C54				NSD							
G2	60	E53				NSD							
G2	61	F53				NSD							
G2	62	F54				NSD							
G2	63	G53				NSD							
G2	64	G54				NSD							
G2	65	B52				NSD							
G2	66	C51				NSD							
G2	67	C52				NSD							
G2	68	E51				NSD							
G2	69	E52				NSD							
G2	70	F51				NSD							
G2	71	F52				NSD							
G2	72	G51				NSD							
G2	73	G52				NSD							
G2	74	H51				NSD							
G2	75	H52				NSD							
G2	76	K51				NSD							
G2	77	K52				NSD							
G2	78	B43				NSD							
G2	79	B44				NSD							
G2	80	C43				NSD							
G2	81	C44				NSD							
G2	82	E43				NSD							
G2	83	E44				NSD							
G2	84	F43				NSD							
G2	85	F44				NSD							



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ISO 10312 - Direct Raw Data

Job Number: 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S29
Client Sample No: 14394182
Description: OCSP-05-ABS-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C62				NSD							
G1	2	E61				NSD							
G1	3	E62				NSD							
G1	4	F61				NSD							
G1	5	F62				NSD							
G1	6	G61				NSD							
G1	7	B54				NSD							
G1	8	C53				NSD							
G1	9	C54				NSD							
G1	10	E53				NSD							
G1	11	E54				NSD							
G1	12	F53				NSD							
G1	13	F54				NSD							
G1	14	G53				NSD							
G1	15	H54				NSD							
G1	16	B51				NSD							
G1	17	B52				NSD							
G1	18	C51				NSD							
G1	19	C52				NSD							
G1	20	E51				NSD							
G1	21	E52				NSD							
G1	22	F51				NSD							
G1	23	B43				NSD							
G1	24	B44				NSD							
G1	25	C43				NSD							
G1	26	C44				NSD							
G1	27	E43				NSD							
G1	28	E44				NSD							
G1	29	F43				NSD							
G1	30	F44				NSD							
G1	31	B41				NSD							
G1	32	B42				NSD							
G1	33	C41				NSD							
G1	34	E41				NSD							
G1	35	E42				NSD							
G1	36	F41				NSD							
G1	37	F42				NSD							
G1	38	G41				NSD							



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Job Number: 141014 **SEA**
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Project Name: SFP-078A
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Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S29
Client Sample No: 14394182
Description: OCSP-05-ABS-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	39	C61				NSD							
G2	40	C62				NSD							
G2	41	E61				NSD							
G2	42	E62				NSD							
G2	43	F61				NSD							
G2	44	F62				NSD							
G2	45	G61				NSD							
G2	46	G62				NSD							
G2	47	H61				NSD							
G2	48	C53				NSD							
G2	49	C54				NSD							
G2	50	E53				NSD							
G2	51	E54				NSD							



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Project Name: SFP-078A
Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S30
Client Sample No: 14394183
Description: OCSP-05-ABS-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C61				NSD							
G1	2	C62				NSD							
G1	3	E61				NSD							
G1	4	E62				NSD							
G1	5	F61				NSD							
G1	6	F62				NSD							
G1	7	G61				NSD							
G1	8	G62				NSD							
G1	9	H61				NSD							
G1	10	B54				NSD							
G1	11	C53				NSD							
G1	12	C54				NSD							
G1	13	E53				NSD							
G1	14	E54				NSD							
G1	15	F53				NSD							
G1	16	F54				NSD							
G1	17	G53				NSD							
G1	18	G54				NSD							
G1	19	H53				NSD							
G1	20	H54				NSD							
G1	21	E52				NSD							
G1	22	F51				NSD							
G1	23	F52				NSD							
G1	24	G51				NSD							
G1	25	G52				NSD							
G1	26	H51				NSD							
G1	27	H52				NSD							
G1	28	K51				NSD							
G1	29	E44				NSD							
G1	30	F43				NSD							
G2	31	E63				NSD							
G2	32	E64				NSD							
G2	33	F63				NSD							
G2	34	F64				NSD							
G2	35	G63				NSD							
G2	36	G64				NSD							
G2	37	C61				NSD							
G2	38	C62				NSD							



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Lab/Cor Sample No: S30
Client Sample No: 14394183
Description: OCSP-05-ABS-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	39	E61				NSD							
G2	40	E62				NSD							
G2	41	F61				NSD							
G2	42	F62				NSD							
G2	43	G61				NSD							
G2	44	G62				NSD							
G2	45	H61				NSD							
G2	46	H62				NSD							
G2	47	C53				NSD							
G2	48	C54				NSD							
G2	49	E53				NSD							



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Project Name: SFP-078A
Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S31
Client Sample No: 14394186
Description: OCSP-05-AIR-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C61				NSD							
G1	2	C62				NSD							
G1	3	E61				NSD							
G1	4	E62				NSD							
G1	5	G62				NSD							
G1	6	H61				NSD							
G1	7	B54				NSD							
G1	8	C53				NSD							
G1	9	C54				NSD							
G1	10	E53				NSD							
G1	11	E54				NSD							
G1	12	F53				NSD							
G1	13	F54				NSD							
G1	14	H54				NSD							
G1	15	B51				NSD							
G1	16	B52				NSD							
G1	17	C51				NSD							
G1	18	C52				NSD							
G1	19	E51				NSD							
G1	20	E52				NSD							
G1	21	F51				NSD							
G1	22	F52				NSD							
G1	23	K51				NSD							
G1	24	B43				NSD							
G1	25	B44				NSD							
G1	26	C43				NSD							
G1	27	C44				NSD							
G1	28	E43				NSD							
G1	29	E44				NSD							
G1	30	F43				NSD							
G1	31	F44				NSD							
G1	32	K43				NSD							
G1	33	B41				NSD							
G1	34	B42				NSD							
G1	35	C41				NSD							
G1	36	C42				NSD							
G1	37	E41				NSD							
G1	38	E42				NSD							



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Lab/Cor Sample No: S31
Client Sample No: 14394186
Description: OCSP-05-AIR-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	39	F41				NSD							
G1	40	F42				NSD							
G1	41	G41				NSD							
G1	42	G42				NSD							
G1	43	B33				NSD							
G1	44	B34				NSD							
G1	45	C33				NSD							
G1	46	C34				NSD							
G1	47	E33				NSD							
G1	48	E34				NSD							
G1	49	F33				NSD							
G1	50	F34				NSD							
G1	51	G33				NSD							
G1	52	G34				NSD							
G1	53	H34				NSD							
G1	54	K33				NSD							
G1	55	B32				NSD							
G1	56	C31				NSD							
G1	57	C32				NSD							
G1	58	E31				NSD							
G1	59	E32				NSD							
G1	60	F31				NSD							
G1	61	F32				NSD							
G1	62	G31				NSD							
G1	63	G32				NSD							
G1	64	H31				NSD							
G1	65	H32				NSD							
G1	66	B24				NSD							
G1	67	C23				NSD							
G1	68	C24				NSD							
G1	69	E23				NSD							
G1	70	E24				NSD							
G1	71	F23				NSD							
G1	72	F24				NSD							
G1	73	G23				NSD							
G1	74	G24				NSD							
G1	75	H23				NSD							
G2	76	C61				NSD							

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ISO 10312 - Direct Raw Data**Job Number:** 141014**SEA****Report Number:** 141014R02**Client:** Alion Science and Technology**Date Received:** 12/11/2014**Project Name:** SFP-078A**Project No.:** 10-100614-135155-0009**Lab/Cor Sample No:** S31**Client Sample No:** 14394186**Description:** OSCP-05-AIR-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	77	C62				NSD							
G2	78	E61				NSD							
G2	79	E62				NSD							
G2	80	F61				NSD							
G2	81	F62				NSD							
G2	82	G61				NSD							
G2	83	G62				NSD							
G2	84	H61				NSD							
G2	85	B54				NSD							
G2	86	C53				NSD							
G2	87	C54				NSD							
G2	88	F53				NSD							
G2	89	F54				NSD							
G2	90	G54				NSD							
G2	91	H53				NSD							
G2	92	H54				NSD							
G2	93	B51				NSD							
G2	94	F51				NSD							
G2	95	F52				NSD							
G2	96	G51				NSD							
G2	97	K51				NSD							
G2	98	B43				NSD							
G2	99	C43	CD	1	1	MC 1-0	2.39	0.63	3.8	Chrysotile			TAOS, PAOS
						ItemType	ItemNum		Confirmed		Comment		
						Diffraction	H38137DF		TH 1/21/2015		0.53 nm ROW SPACING		
						Brightfield	H38137BF						
G2	99	C43	CD	2		MD 5-1	7.65	5.59	1.4	Chrysotile			PAOS
G2	99	C43	CD		2	MB	5.38	0.55	9.8	Chrysotile			TAOS, PCMEF-NIOSH, PCMEF-ISO, PCMEFmodNIOSH
						ItemType	ItemNum		Confirmed		Comment		
						Diffraction	H38138DF		TH 1/21/2015		0.53 nm ROW SPACING		
						Brightfield	H38138BF						
G2	99	C43	CM		3	MF	3.12	0.15	20.8	Chrysotile			TAOS
G2	99	C43	CM		4	MF	2.55	0.15	17	Chrysotile			TAOS
G2	99	C43	CM		5	MF	1.64	0.15	10.9	Chrysotile			TAOS
G2	99	C43	CM		6	MF	1.13	0.1	11.3	Chrysotile			TAOS
G2	99	C43	CM		7	MR	5.25	3.12	1.7	Chrysotile			TAOS
G2	100	F44				NSD							



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ISO 10312 - Direct Raw Data

Job Number: 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S31
Client Sample No: 14394186
Description: OCSF-05-AIR-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	101	G43				NSD							
G2	102	G44				NSD							
G2	103	H43				NSD							
G2	104	H44				NSD							
G2	105	K43				NSD							
G2	106	B41				NSD							
G2	107	B42				NSD							
G2	108	C41				NSD							
G2	109	E41				NSD							
G2	110	E42				NSD							
G2	111	F41				NSD							
G2	112	F42				NSD							
G2	113	G41				NSD							
G2	114	G42				NSD							
G2	115	H41				NSD							
G2	116	H42				NSD							
G2	117	K41				NSD							
G2	118	B33				NSD							
G2	119	B34				NSD							
G2	120	C33				NSD							
G2	121	C34				NSD							
G2	122	E33				NSD							
G2	123	F33				NSD							
G2	124	F34				NSD							
G2	125	G33				NSD							
G2	126	G34				NSD							
G2	127	H33				NSD							
G2	128	H34				NSD							
G2	129	K33				NSD							
G2	130	B32				NSD							
G2	131	C31				NSD							
G2	132	C32				NSD							
G2	133	E31				NSD							
G2	134	E32				NSD							
G2	135	F31				NSD							
G2	136	F32				NSD							
G2	137	G31				NSD							
G2	138	G32				NSD							



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Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S31
Client Sample No: 14394186
Description: OCSP-05-AIR-02

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	139	H31				NSD							
G2	140	H32				NSD							
G2	141	B24				NSD							
G2	142	C23				NSD							
G2	143	C24				NSD							
G2	144	E23				NSD							
G2	145	E24				NSD							
G2	146	F23				NSD							
G2	147	F24				NSD							

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Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009**Report Number:** 141014R02
Date Received: 12/11/2014**Lab/Cor Sample No:** S32
Client Sample No: 14394187
Description: OCSF-05-AIR-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count	Categories
G1	1	C61				NSD								
G1	2	C62				NSD								
G1	3	E61				NSD								
G1	4	E62				NSD								
G1	5	F61				NSD								
G1	6	F62				NSD								
G1	7	G61				NSD								
G1	8	G62				NSD								
G1	9	H61				NSD								
G1	10	B54				NSD								
G1	11	C53				NSD								
G1	12	C54				NSD								
G1	13	E53				NSD								
G1	14	E54				NSD								
G1	15	F53				NSD								
G1	16	F54				NSD								
G1	17	G53				NSD								
G1	18	G54				NSD								
G1	19	H53				NSD								
G1	20	H54	CDQ	1		MD 5-0	7.66	5.41	1.4	Chrysotile				PAOS
G1	20	H54	CDQ		1	MB	2.53	0.22	11.5	Chrysotile				TAOS
							ItemType	ItemNum		Confirmed		Comment		
							Diffraction	H38149DF		TH 1/21/2015		0.53 nm ROW SPACING		
							Brightfield	H38149BF						
							Spectra	H38149SP						
G1	20	H54	CM		2	MF	1.63	0.15	10.9	Chrysotile				TAOS
G1	20	H54	CM		3	MF	0.7	0.1	7	Chrysotile				TAOS
G1	20	H54	CM		4	MF	0.68	0.1	6.8	Chrysotile				TAOS
G1	20	H54	CM		5	MF	0.64	0.1	6.4	Chrysotile				TAOS
G1	20	H54	CM		6	MR	7	5.25	1.3	Chrysotile				TAOS
G1	21	B51				NSD								
G1	22	B52				NSD								
G1	23	C51				NSD								
G1	24	C52				NSD								
G1	25	E51				NSD								
G1	26	E52				NSD								
G1	27	F51				NSD								
G1	28	F52				NSD								



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Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S32
Client Sample No: 14394187
Description: OCSF-05-AIR-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	29	G51				NSD							
G1	30	G52				NSD							
G1	31	H51				NSD							
G1	32	H52				NSD							
G1	33	K51				NSD							
G1	34	B43				NSD							
G1	35	B44				NSD							
G1	36	C43				NSD							
G1	37	C44				NSD							
G1	38	E43				NSD							
G1	39	E44				NSD							
G1	40	F43				NSD							
G1	41	F44				NSD							
G1	42	G43				NSD							
G1	43	G44				NSD							
G1	44	H43				NSD							
G1	45	H44				NSD							
G1	46	K43				NSD							
G1	47	B41				NSD							
G1	48	B42				NSD							
G1	49	C41				NSD							
G1	50	C42				NSD							
G1	51	E41				NSD							
G1	52	E42				NSD							
G1	53	F41				NSD							
G1	54	F42				NSD							
G1	55	G41				NSD							
G1	56	G42				NSD							
G1	57	H41				NSD							
G1	58	K41				NSD							
G1	59	B33				NSD							
G1	60	B34				NSD							
G1	61	C33				NSD							
G1	62	C34				NSD							
G1	63	E33				NSD							
G1	64	E34				NSD							
G1	65	F33				NSD							
G1	66	F34				NSD							



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ISO 10312 - Direct Raw Data

Job Number: 141014 **SEA**
Client: Alion Science and Technology
Project Name: SFP-078A
Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S32
Client Sample No: 14394187
Description: OCSP-05-AIR-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	67	G33				NSD							
G1	68	G34				NSD							
G1	69	H33				NSD							
G1	70	B31				NSD							
G1	71	B32				NSD							
G1	72	C31				NSD							
G1	73	C32				NSD							
G1	74	E31				NSD							
G1	75	E32				NSD							
G1	76	F31				NSD							
G1	77	F32				NSD							
G1	78	G31				NSD							
G1	79	G32				NSD							
G1	80	H31				NSD							
G1	81	H32				NSD							
G1	82	B24				NSD							
G1	83	C23				NSD							
G1	84	C24				NSD							
G1	85	E23				NSD							
G1	86	E24				NSD							
G1	87	F23				NSD							
G1	88	F24				NSD							
G1	89	G23				NSD							
G1	90	G24				NSD							
G1	91	H23				NSD							
G2	92	C61				NSD							
G2	93	C62				NSD							
G2	94	F61				NSD							
G2	95	F62				NSD							
G2	96	G61				NSD							
G2	97	G62				NSD							
G2	98	H61				NSD							
G2	99	B54				NSD							
G2	100	C53				NSD							
G2	101	C54				NSD							
G2	102	E53				NSD							
G2	103	E54				NSD							
G2	104	F53				NSD							



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Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S32
Client Sample No: 14394187
Description: OCSP-05-AIR-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	105	F54				NSD							
G2	106	G53				NSD							
G2	107	G54				NSD							
G2	108	H53				NSD							
G2	109	H54				NSD							
G2	110	B51				NSD							
G2	111	B52				NSD							
G2	112	E51				NSD							
G2	113	E52				NSD							
G2	114	F51				NSD							
G2	115	F52				NSD							
G2	116	G51				NSD							
G2	117	G52				NSD							
G2	118	H51				NSD							
G2	119	B43				NSD							
G2	120	B44				NSD							
G2	121	C43				NSD							
G2	122	C44				NSD							
G2	123	E43				NSD							
G2	124	E44				NSD							
G2	125	F43				NSD							
G2	126	F44				NSD							
G2	127	G43				NSD							
G2	128	G44				NSD							
G2	129	H43				NSD							
G2	130	H44				NSD							
G2	131	K43				NSD							
G2	132	A42				NSD							
G2	133	B41				NSD							
G2	134	B42				NSD							
G2	135	C41				NSD							
G2	136	C42				NSD							
G2	137	E41				NSD							
G2	138	E42				NSD							
G2	139	F41				NSD							
G2	140	F42				NSD							
G2	141	G41				NSD							
G2	142	G42				NSD							



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Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S32
Client Sample No: 14394187
Description: OCSP-05-AIR-03

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	143	H41				NSD							
G2	144	H42				NSD							
G2	145	K41				NSD							
G2	146	B33				NSD							
G2	147	B34				NSD							
G2	148	C33				NSD							
G2	149	C34				NSD							
G2	150	E33				NSD							
G2	151	E34				NSD							
G2	152	F33				NSD							
G2	153	F34				NSD							
G2	154	G33				NSD							
G2	155	G34				NSD							
G2	156	H33				NSD							
G2	157	H34				NSD							



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Project No.: 10-100614-135155-0009

Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S33
Client Sample No: 14394188
Description: OCSP-05-AIR-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	1	C62				NSD							
G1	2	E61				NSD							
G1	3	E62				NSD							
G1	4	F61				NSD							
G1	5	F62				NSD							
G1	6	G61				NSD							
G1	7	G62				NSD							
G1	8	H61				NSD							
G1	9	C53				NSD							
G1	10	C54				NSD							
G1	11	E53				NSD							
G1	12	E54				NSD							
G1	13	F53				NSD							
G1	14	F54				NSD							
G1	15	G53				NSD							
G1	16	G54				NSD							
G1	17	H53				NSD							
G1	18	H54				NSD							
G1	19	B52				NSD							
G1	20	C51				NSD							
G1	21	C52				NSD							
G1	22	E51				NSD							
G1	23	E52				NSD							
G1	24	F51				NSD							
G1	25	F52				NSD							
G1	26	G51				NSD							
G1	27	G52				NSD							
G1	28	H51				NSD							
G1	29	H52				NSD							
G1	30	K51				NSD							
G1	31	B43				NSD							
G1	32	B44				NSD							
G1	33	C43				NSD							
G1	34	C44				NSD							
G1	35	E43				NSD							
G1	36	E44				NSD							
G1	37	F43				NSD							
G1	38	F44				NSD							



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Report Number: 141014R02
Date Received: 12/11/2014

Lab/Cor Sample No: S33
Client Sample No: 14394188
Description: OCSF-05-AIR-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	39	G43				NSD							
G1	40	G44				NSD							
G1	41	H43				NSD							
G1	42	H44				NSD							
G1	43	K43				NSD							
G1	44	K44				NSD							
G1	45	B41				NSD							
G1	46	B42				NSD							
G1	47	C41				NSD							
G1	48	C42				NSD							
G1	49	E41				NSD							
G1	50	E42				NSD							
G1	51	F41				NSD							
G1	52	F42				NSD							
G1	53	G41				NSD							
G1	54	G42				NSD							
G1	55	H41				NSD							
G1	56	H42				NSD							
G1	57	K41				NSD							
G1	58	K42				NSD							
G1	59	B33				NSD							
G1	60	B34				NSD							
G1	61	C33				NSD							
G1	62	C34				NSD							
G1	63	E33				NSD							
G1	64	E34				NSD							
G1	65	F33				NSD							
G1	66	F34				NSD							
G1	67	G33				NSD							
G1	68	G34				NSD							
G1	69	K33				NSD							
G1	70	B31				NSD							
G1	71	B32				NSD							
G1	72	C31				NSD							
G1	73	C32				NSD							
G1	74	E31				NSD							
G1	75	E32				NSD							
G1	76	F31				NSD							



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Client Sample No: 14394188
Description: OCSP-05-AIR-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G1	77	F32				NSD							
G1	78	G31				NSD							
G1	79	G32				NSD							
G1	80	H31				NSD							
G1	81	H32				NSD							
G1	82	K31				NSD							
G1	83	B24				NSD							
G1	84	C23				NSD							
G1	85	C24				NSD							
G1	86	E23				NSD							
G1	87	E24				NSD							
G1	88	F23				NSD							
G1	89	F24				NSD							
G1	90	G23				NSD							
G1	91	G24				NSD							
G1	92	H23				NSD							
G1	93	H24				NSD							
G2	94	C62				NSD							
G2	95	E61				NSD							
G2	96	E62				NSD							
G2	97	F61				NSD							
G2	98	F62				NSD							
G2	99	G61				NSD							
G2	100	G62				NSD							
G2	101	H61				NSD							
G2	102	C53				NSD							
G2	103	C54				NSD							
G2	104	E53				NSD							
G2	105	E54				NSD							
G2	106	F53				NSD							
G2	107	F54				NSD							
G2	108	G53				NSD							
G2	109	G54				NSD							
G2	110	H53				NSD							
G2	111	H54				NSD							
G2	112	C52				NSD							
G2	113	E51				NSD							
G2	114	E52				NSD							



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Lab/Cor Sample No: S33
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Description: OCSP-05-AIR-04

Gr	No.	Loc.	ID	Prim	Tot	Class	Length	Width	Aspect	Analyte	Elements	Comment	Count Categories
G2	115	F51				NSD							
G2	116	F52				NSD							
G2	117	G51				NSD							
G2	118	G52				NSD							
G2	119	H51				NSD							
G2	120	H52				NSD							
G2	121	K51				NSD							
G2	122	K52				NSD							
G2	123	B43				NSD							
G2	124	E43				NSD							
G2	125	E44				NSD							
G2	126	F43				NSD							
G2	127	F44				NSD							
G2	128	G43				NSD							
G2	129	G44				NSD							
G2	130	H43				NSD							
G2	131	H44				NSD							
G2	132	K43				NSD							
G2	133	K44				NSD							
G2	134	B41				NSD							
G2	135	B42				NSD							
G2	136	C41				NSD							
G2	137	C42				NSD							
G2	138	E41				NSD							
G2	139	E42				NSD							
G2	140	F41				NSD							
G2	141	F42				NSD							
G2	142	G41				NSD							
G2	143	G42				NSD							
G2	144	H41				NSD							
G2	145	H42				NSD							
G2	146	K41				NSD							
G2	147	K42				NSD							
G2	148	B33				NSD							
G2	149	B34				NSD							
G2	150	C33				NSD							
G2	151	C34				NSD							
G2	152	E33				NSD							



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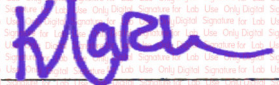
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Count Categories					
PAOS	Primary Asb & Libby-Other Amph Structures	PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMEFmodNIO	PCM Equivalent Fibers - 0.25-3.0, > 5 & 3:1	PCMEF-NIOSH	PCM Equivalent Fibers-NIOSH	PCMES-ISO	PCM Equivalent Structures-ISO
PCMESmodNIO	PCM Equivalent Structures - 0.25-3.0, > 5 & 3:1	PCMES-NIOSH	PCM Equivalent Structures-NIOSH	TAOS	Total Asb & Libby-OtherAmph Structures
TAS	Total Asbestos Structures				

Reviewed by:


X

Kate March
QC Manager