

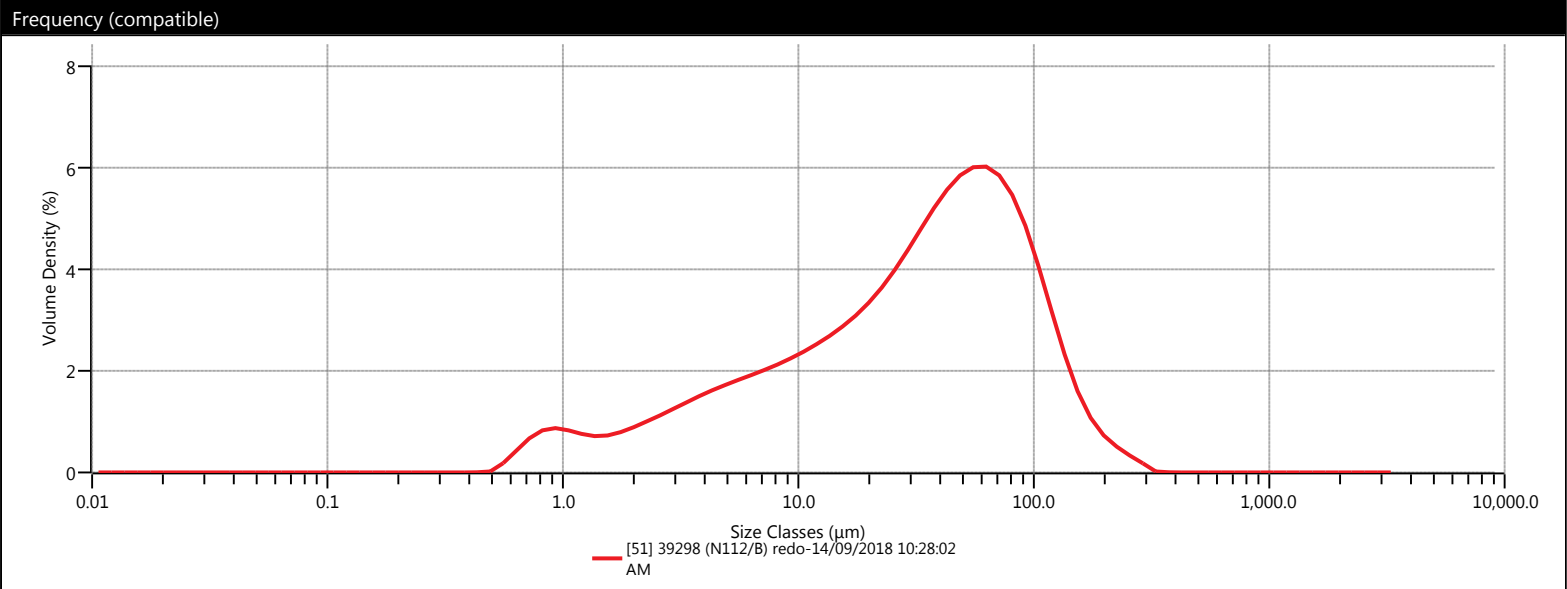
Analysis - Under

Measurement Details	
Sample Name	39298 (N112/B) redo
SOP File Name	ERTH321 ash.msop
Lab Number	
Operator Name	instrument

Measurement Details	
Analysis Date Time	14/09/2018 10:28:02 AM
Measurement Date Time	14/09/2018 10:28:02 AM
Result Source	Measurement

Analysis	
Particle Name	Sediment
Particle Refractive Index	1.500
Particle Absorption Index	0.200
Dispersant Name	Water
Dispersant Refractive Index	1.330
Scattering Model	Mie
Analysis Model	General Purpose
Weighted Residual	1.11 %
Laser Obscuration	14.72 %

Result	
Concentration	0.0183 %
Span	2.939
Uniformity	0.949
Specific Surface Area	706.7 m ² /kg
D [3,2]	8.49 µm
D [4,3]	46.1 µm
Dv (10)	3.41 µm
Dv (50)	34.3 µm
Dv (90)	104 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	19.48	88.0	84.90	350	100.00	1410	100.00
0.0600	0.00	15.6	30.58	105	90.18	420	100.00	1680	100.00
0.120	0.00	31.0	46.81	125	94.15	500	100.00	2000	100.00
0.240	0.00	37.0	52.47	149	96.71	590	100.00	2380	100.00
0.490	0.00	44.0	58.58	177	98.22	710	100.00	2830	100.00
0.980	2.43	53.0	65.66	210	99.13	840	100.00	3360	100.00
2.00	6.04	63.0	72.47	250	99.66	1000	100.00		
3.90	11.29	74.0	78.71	300	99.96	1190	100.00		

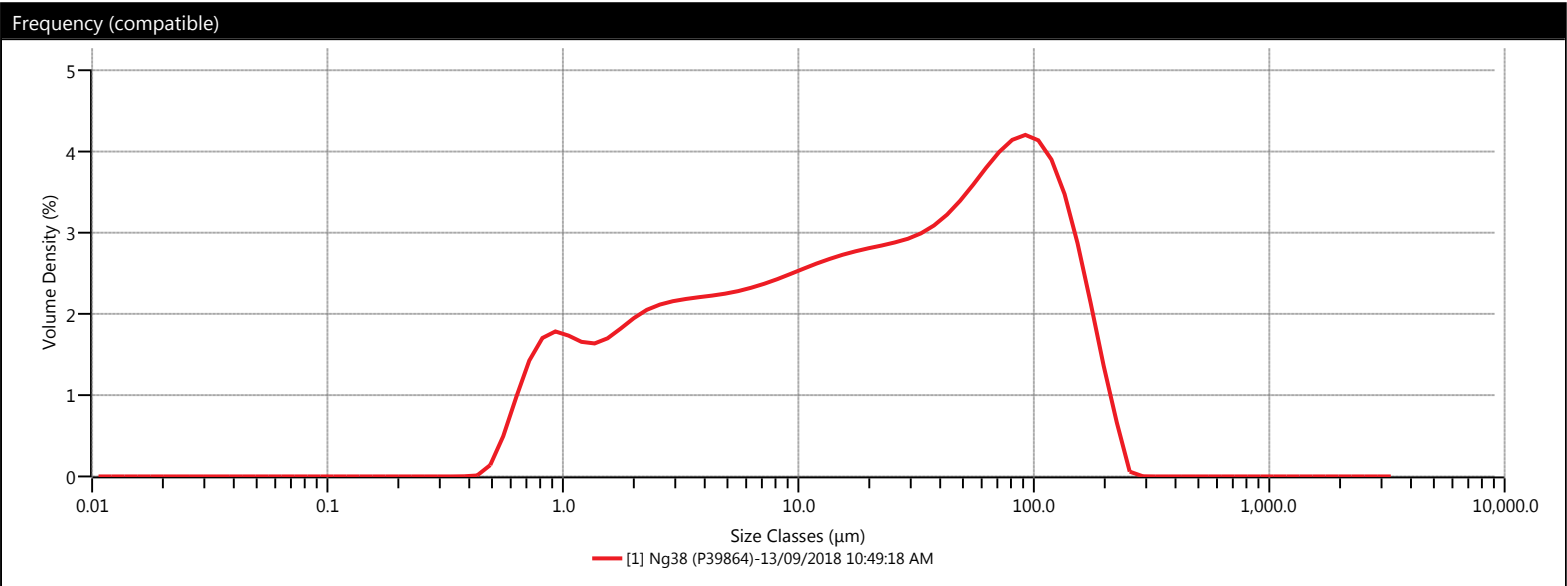
Analysis - Under

Measurement Details	
Sample Name	Ng38 (P39864)
SOP File Name	ERTH321 ash.msop
Lab Number	
Operator Name	instrument

Measurement Details	
Analysis Date Time	13/09/2018 10:49:18 AM
Measurement Date Time	13/09/2018 10:49:18 AM
Result Source	Measurement

Analysis	
Particle Name	Sediment
Particle Refractive Index	1.500
Particle Absorption Index	0.200
Dispersant Name	Water
Dispersant Refractive Index	1.330
Scattering Model	Mie
Analysis Model	General Purpose
Weighted Residual	0.94 %
Laser Obscuration	20.35 %

Result	
Concentration	0.0154 %
Span	5.699
Uniformity	1.754
Specific Surface Area	1229 m ² /kg
D [3,2]	4.88 µm
D [4,3]	43.3 µm
Dv (10)	1.50 µm
Dv (50)	20.9 µm
Dv (90)	121 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	33.00	88.0	81.50	350	100.00	1410	100.00
0.0600	0.00	15.6	44.67	105	86.34	420	100.00	1680	100.00
0.120	0.00	31.0	57.39	125	90.89	500	100.00	2000	100.00
0.240	0.00	37.0	60.87	149	94.79	590	100.00	2380	100.00
0.490	0.05	44.0	64.45	177	97.64	710	100.00	2830	100.00
0.980	5.33	53.0	68.56	210	99.40	840	100.00	3360	100.00
2.00	13.38	63.0	72.70	250	100.00	1000	100.00		
3.90	22.64	74.0	76.83	300	100.00	1190	100.00		

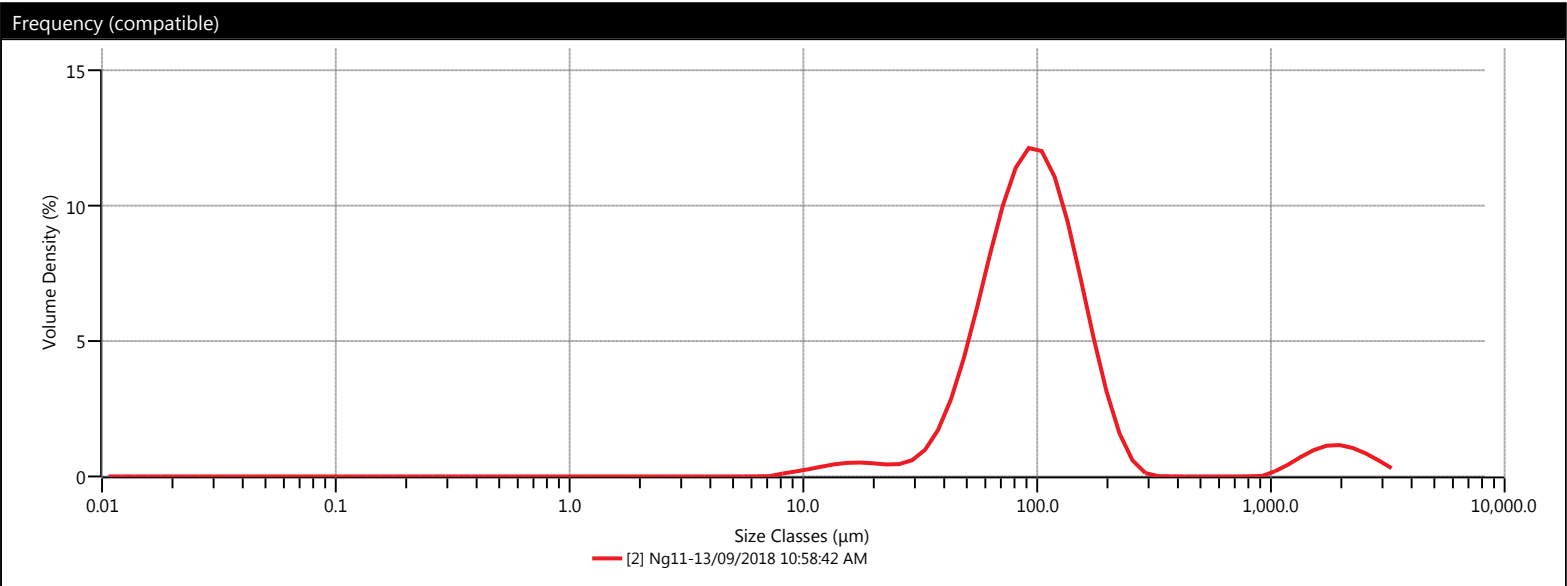
Analysis - Under

Measurement Details
Sample Name Ng11
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 10:58:42 AM
Measurement Date Time 13/09/2018 10:58:42 AM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.43 %
Laser Obscuration 1.22 %

Result
Concentration 0.0122 %
Span 1.486
Uniformity 1.562
Specific Surface Area 76.72 m²/kg
D [3,2] 78.2 µm
D [4,3] 215 µm
Dv (10) 48.7 µm
Dv (50) 95.9 µm
Dv (90) 191 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	0.02	88.0	43.16	350	93.81	1410	94.85
0.0600	0.00	15.6	1.38	105	57.18	420	93.81	1680	95.98
0.120	0.00	31.0	3.58	125	70.22	500	93.81	2000	97.29
0.240	0.00	37.0	4.89	149	80.71	590	93.81	2380	98.52
0.490	0.00	44.0	7.46	177	87.80	710	93.81	2830	99.42
0.980	0.00	53.0	12.65	210	91.89	840	93.81	3360	99.92
2.00	0.00	63.0	20.52	250	93.43	1000	93.84		
3.90	0.00	74.0	30.35	300	93.79	1190	94.16		

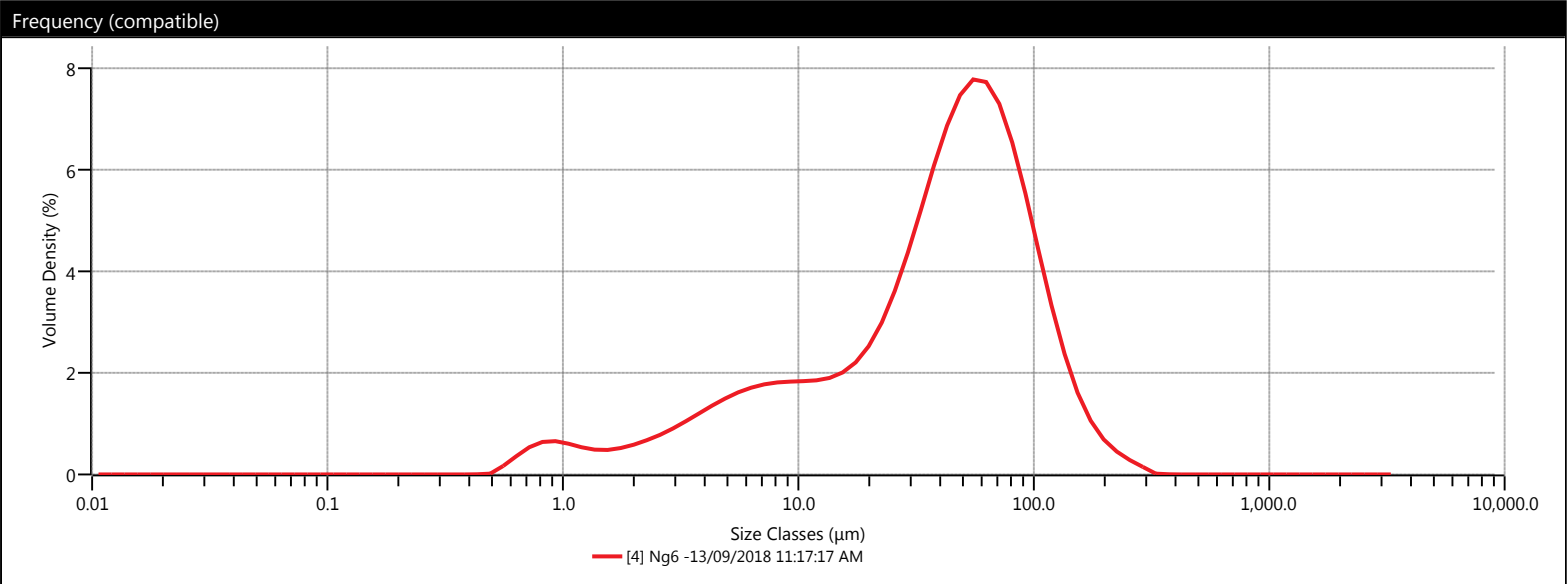
Analysis - Under

Measurement Details
Sample Name Ng6
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 11:17:17 AM
Measurement Date Time 13/09/2018 11:17:17 AM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.50 %
Laser Obscuration 14.96 %

Result
Concentration 0.0233 %
Span 2.327
Uniformity 0.738
Specific Surface Area 564.7 m²/kg
D [3,2] 10.6 µm
D [4,3] 50.6 µm
Dv (10) 4.77 µm
Dv (50) 43.0 µm
Dv (90) 105 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	15.35	88.0	84.15	350	100.00	1410	100.00
0.0600	0.00	15.6	23.78	105	90.05	420	100.00	1680	100.00
0.120	0.00	31.0	37.40	125	94.26	500	100.00	2000	100.00
0.240	0.00	37.0	43.67	149	96.87	590	100.00	2380	100.00
0.490	0.00	44.0	51.04	177	98.38	710	100.00	2830	100.00
0.980	1.93	53.0	60.06	210	99.25	840	100.00	3360	100.00
2.00	4.40	63.0	68.85	250	99.72	1000	100.00		
3.90	8.21	74.0	76.72	300	99.97	1190	100.00		

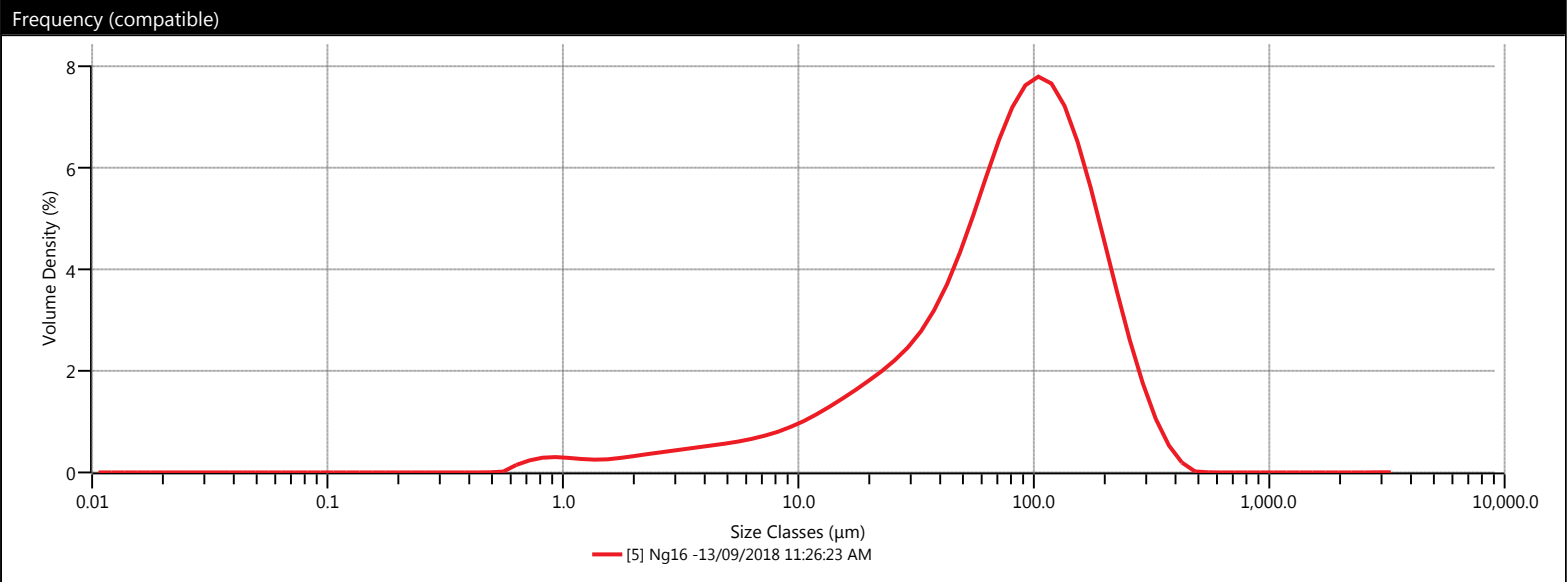
Analysis - Under

Measurement Details	
Sample Name	Ng16
SOP File Name	ERTH321 ash.msop
Lab Number	
Operator Name	instrument

Measurement Details	
Analysis Date Time	13/09/2018 11:26:23 AM
Measurement Date Time	13/09/2018 11:26:23 AM
Result Source	Measurement

Analysis	
Particle Name	Sediment
Particle Refractive Index	1.500
Particle Absorption Index	0.200
Dispersant Name	Water
Dispersant Refractive Index	1.330
Scattering Model	Mie
Analysis Model	General Purpose
Weighted Residual	0.24 %
Laser Obscuration	13.49 %

Result	
Concentration	0.0396 %
Span	2.262
Uniformity	0.693
Specific Surface Area	291.7 m²/kg
D [3,2]	20.6 µm
D [4,3]	96.0 µm
Dv (10)	13.1 µm
Dv (50)	81.6 µm
Dv (90)	198 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	6.67	88.0	53.60	350	99.39	1410	100.00
0.0600	0.00	15.6	11.55	105	62.50	420	99.90	1680	100.00
0.120	0.00	31.0	20.40	125	71.30	500	100.00	2000	100.00
0.240	0.00	37.0	23.71	149	79.48	590	100.00	2380	100.00
0.490	0.00	44.0	27.62	177	86.35	710	100.00	2830	100.00
0.980	0.80	53.0	32.84	210	91.81	840	100.00	3360	100.00
2.00	2.07	63.0	38.89	250	95.65	1000	100.00		
3.90	3.88	74.0	45.50	300	98.20	1190	100.00		

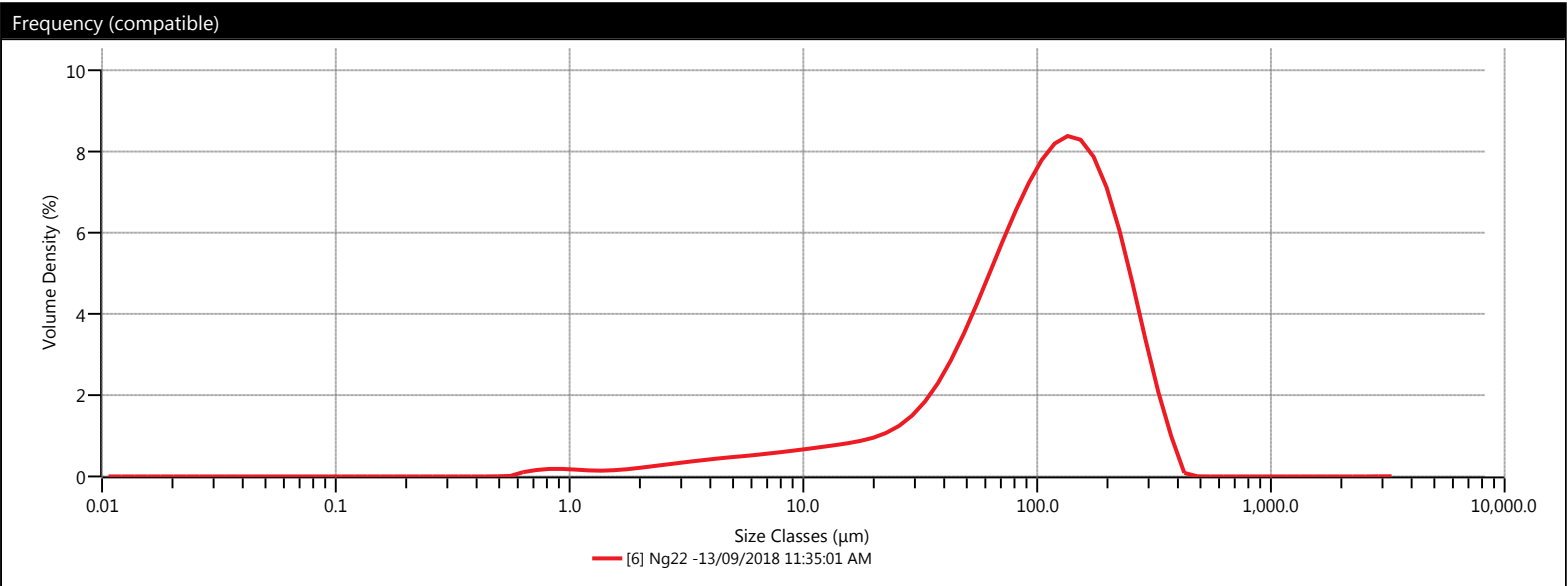
Analysis - Under

Measurement Details
Sample Name Ng22
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 11:35:01 AM
Measurement Date Time 13/09/2018 11:35:01 AM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.24 %
Laser Obscuration 15.33 %

Result
Concentration 0.0631 %
Span 2.008
Uniformity 0.606
Specific Surface Area 209.5 m²/kg
D [3,2] 28.6 µm
D [4,3] 120 µm
Dv (10) 21.7 µm
Dv (50) 107 µm
Dv (90) 236 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	4.90	88.0	40.65	350	99.12	1410	100.00
0.0600	0.00	15.6	8.06	105	49.25	420	100.00	1680	100.00
0.120	0.00	31.0	12.98	125	58.44	500	100.00	2000	100.00
0.240	0.00	37.0	15.22	149	68.04	590	100.00	2380	100.00
0.490	0.00	44.0	18.15	177	77.18	710	100.00	2830	100.00
0.980	0.52	53.0	22.37	210	85.40	840	100.00	3360	100.00
2.00	1.27	63.0	27.50	250	91.99	1000	100.00		
3.90	2.64	74.0	33.29	300	96.79	1190	100.00		

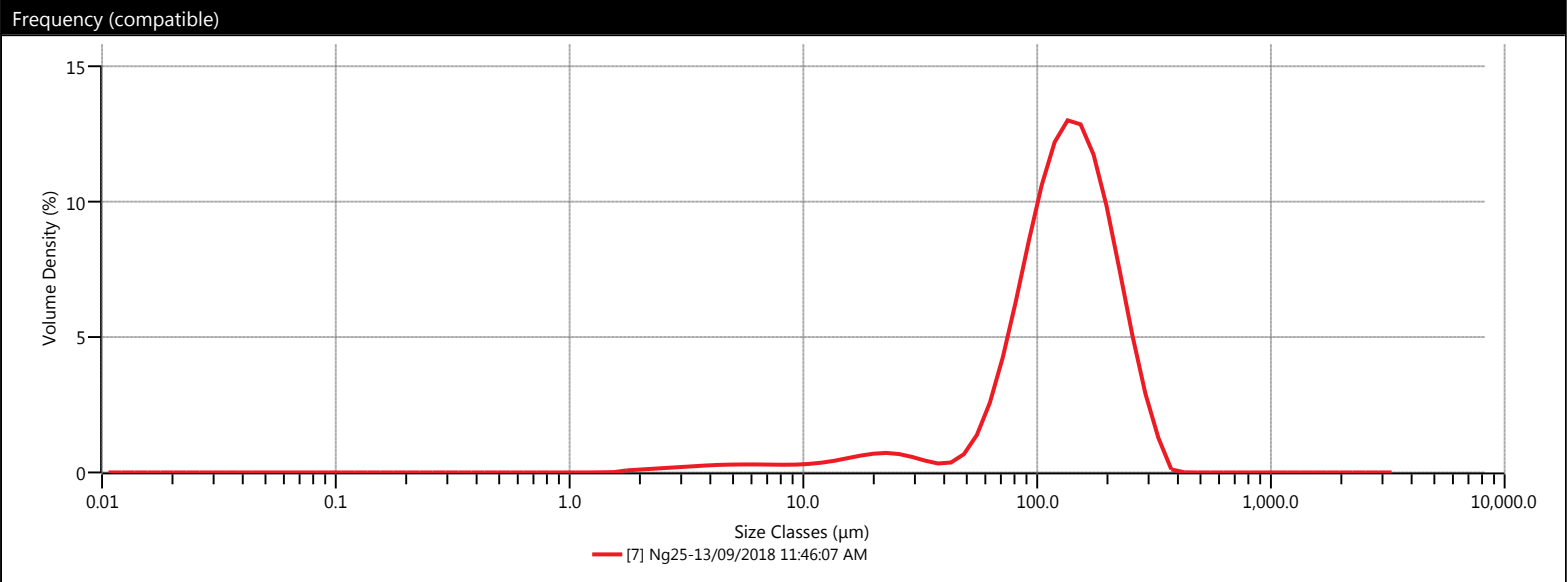
Analysis - Under

Measurement Details
Sample Name Ng25
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 11:46:07 AM
Measurement Date Time 13/09/2018 11:46:07 AM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.42 %
Laser Obscuration 13.64 %

Result
Concentration 0.1157 %
Span 1.262
Uniformity 0.394
Specific Surface Area 96.20 m²/kg
D [3,2] 62.4 µm
D [4,3] 138 µm
Dv (10) 61.6 µm
Dv (50) 132 µm
Dv (90) 228 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	2.18	88.0	21.19	350	99.96	1410	100.00
0.0600	0.00	15.6	3.79	105	31.97	420	100.00	1680	100.00
0.120	0.00	31.0	6.69	125	45.31	500	100.00	2000	100.00
0.240	0.00	37.0	7.16	149	60.21	590	100.00	2380	100.00
0.490	0.00	44.0	7.53	177	74.17	710	100.00	2830	100.00
0.980	0.00	53.0	8.35	210	85.81	840	100.00	3360	100.00
2.00	0.11	63.0	10.38	250	93.75	1000	100.00		
3.90	0.90	74.0	14.15	300	98.37	1190	100.00		

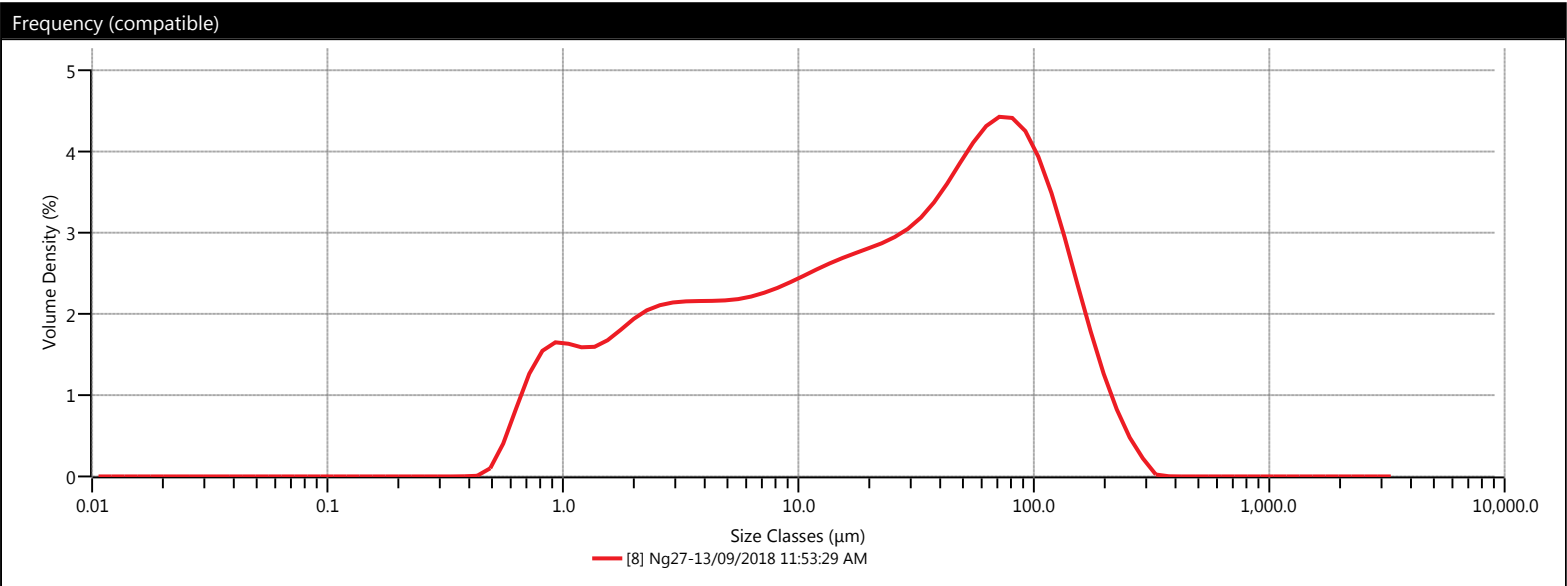
Analysis - Under

Measurement Details
Sample Name Ng27
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 11:53:29 AM
Measurement Date Time 13/09/2018 11:53:29 AM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.78 %
Laser Obscuration 16.80 %

Result
Concentration 0.0131 %
Span 5.039
Uniformity 1.605
Specific Surface Area 1162 m ² /kg
D [3,2] 5.16 μm
D [4,3] 44.0 μm
Dv (10) 1.61 μm
Dv (50) 22.9 μm
Dv (90) 117 μm



Result									
Size (μm)	% Volume Under	Size (μm)	% Volume Under	Size (μm)	% Volume Under	Size (μm)	% Volume Under	Size (μm)	% Volume Under
0.0500	0.00	7.80	31.69	88.0	82.55	350	100.00	1410	100.00
0.0600	0.00	15.6	43.00	105	87.33	420	100.00	1680	100.00
0.120	0.00	31.0	55.86	125	91.49	500	100.00	2000	100.00
0.240	0.00	37.0	59.59	149	94.78	590	100.00	2380	100.00
0.490	0.03	44.0	63.54	177	97.13	710	100.00	2830	100.00
0.980	4.73	53.0	68.21	210	98.70	840	100.00	3360	100.00
2.00	12.57	63.0	72.94	250	99.55	1000	100.00		
3.90	21.74	74.0	77.56	300	99.95	1190	100.00		

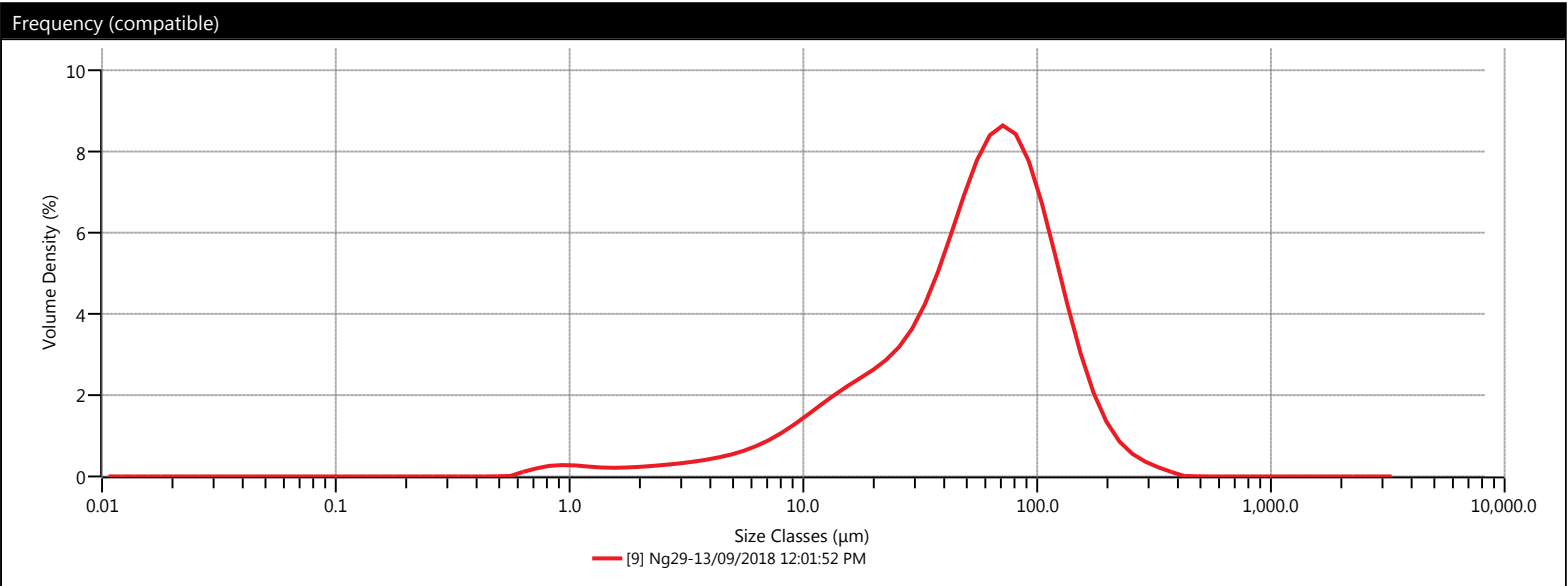
Analysis - Under

Measurement Details	
Sample Name	Ng29
SOP File Name	ERTH321 ash.msop
Lab Number	
Operator Name	instrument

Measurement Details	
Analysis Date Time	13/09/2018 12:01:52 PM
Measurement Date Time	13/09/2018 12:01:52 PM
Result Source	Measurement

Analysis	
Particle Name	Sediment
Particle Refractive Index	1.500
Particle Absorption Index	0.200
Dispersant Name	Water
Dispersant Refractive Index	1.330
Scattering Model	Mie
Analysis Model	General Purpose
Weighted Residual	0.31 %
Laser Obscuration	13.20 %

Result	
Concentration	0.0372 %
Span	2.046
Uniformity	0.648
Specific Surface Area	300.5 m²/kg
D [3,2]	20.0 µm
D [4,3]	66.3 µm
Dv (10)	12.0 µm
Dv (50)	57.3 µm
Dv (90)	129 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	6.09	88.0	73.70	350	99.90	1410	100.00
0.0600	0.00	15.6	13.45	105	82.23	420	100.00	1680	100.00
0.120	0.00	31.0	26.38	125	88.99	500	100.00	2000	100.00
0.240	0.00	37.0	31.49	149	93.64	590	100.00	2380	100.00
0.490	0.00	44.0	37.74	177	96.53	710	100.00	2830	100.00
0.980	0.69	53.0	46.05	210	98.23	840	100.00	3360	100.00
2.00	1.77	63.0	55.14	250	99.12	1000	100.00		
3.90	3.13	74.0	64.16	300	99.65	1190	100.00		

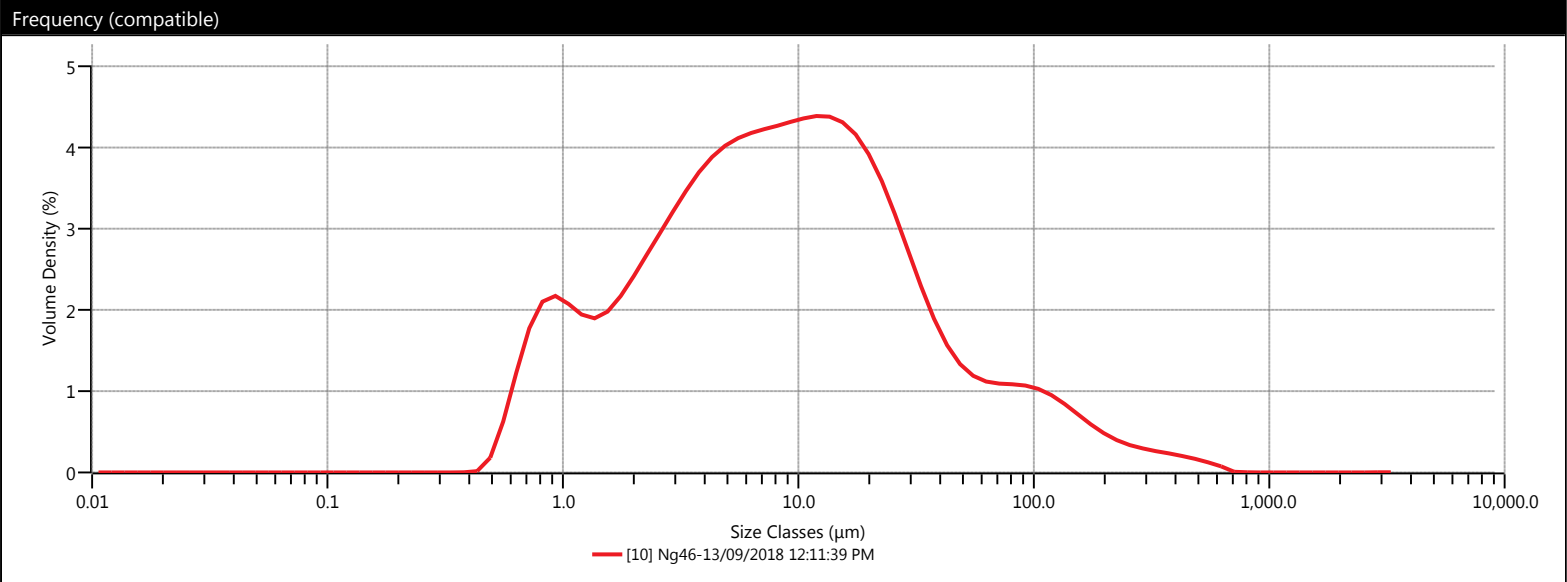
Analysis - Under

Measurement Details
Sample Name Ng46
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 12:11:39 PM
Measurement Date Time 13/09/2018 12:11:39 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.95 %
Laser Obscuration 32.89 %

Result
Concentration 0.0205 %
Span 6.230
Uniformity 2.490
Specific Surface Area 1607 m ² /kg
D [3,2] 3.73 µm
D [4,3] 24.3 µm
Dv (10) 1.27 µm
Dv (50) 8.35 µm
Dv (90) 53.3 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	48.10	88.0	93.65	350	99.32	1410	100.00
0.0600	0.00	15.6	67.76	105	94.86	420	99.59	1680	100.00
0.120	0.00	31.0	83.84	125	95.98	500	99.80	2000	100.00
0.240	0.00	37.0	86.38	149	96.93	590	99.94	2380	100.00
0.490	0.06	44.0	88.31	177	97.67	710	100.00	2830	100.00
0.980	6.61	53.0	89.96	210	98.24	840	100.00	3360	100.00
2.00	16.14	63.0	91.26	250	98.68	1000	100.00		
3.90	29.66	74.0	92.42	300	99.05	1190	100.00		

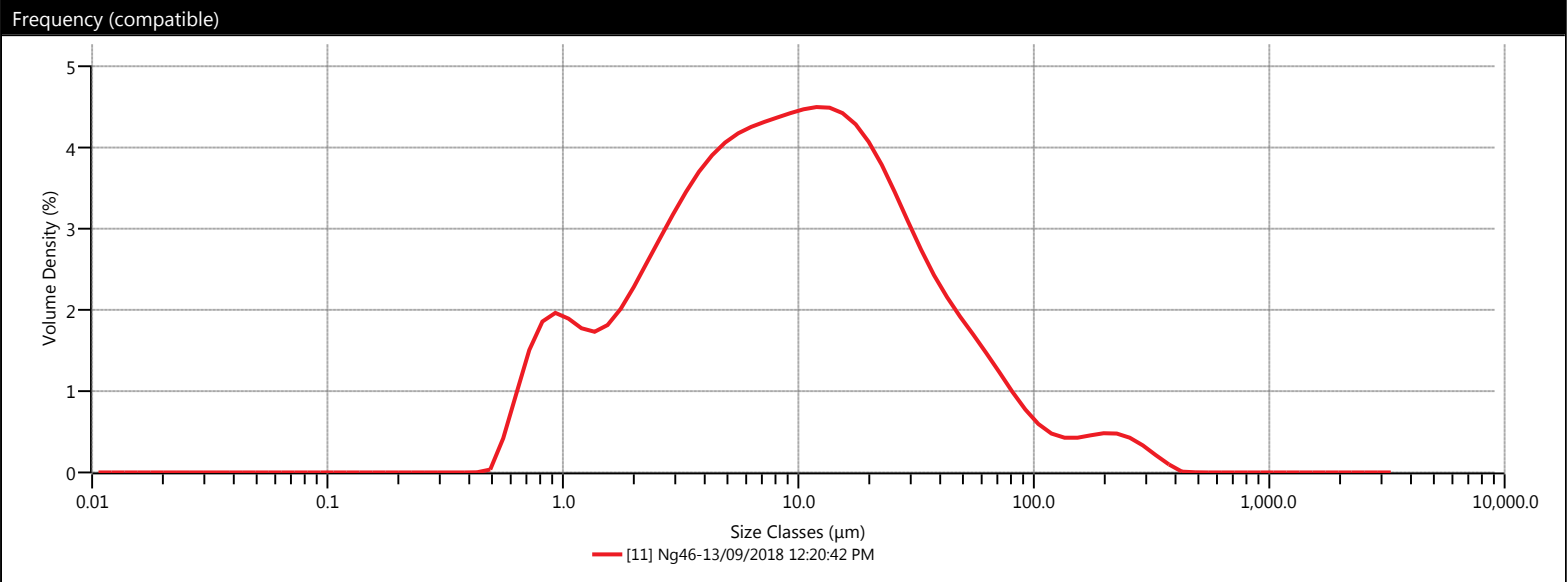
Analysis - Under

Measurement Details	
Sample Name	Ng46
SOP File Name	ERTH321 ash.msop
Lab Number	
Operator Name	instrument

Measurement Details	
Analysis Date Time	13/09/2018 12:20:42 PM
Measurement Date Time	13/09/2018 12:20:42 PM
Result Source	Measurement

Analysis	
Particle Name	Sediment
Particle Refractive Index	1.500
Particle Absorption Index	0.200
Dispersant Name	Water
Dispersant Refractive Index	1.330
Scattering Model	Mie
Analysis Model	General Purpose
Weighted Residual	1.00 %
Laser Obscuration	12.46 %

Result	
Concentration	0.0073 %
Span	5.140
Uniformity	1.953
Specific Surface Area	1478 m ² /kg
D [3,2]	4.06 µm
D [4,3]	21.2 µm
Dv (10)	1.44 µm
Dv (50)	8.89 µm
Dv (90)	47.2 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	46.24	88.0	95.78	350	99.91	1410	100.00
0.0600	0.00	15.6	66.39	105	96.59	420	100.00	1680	100.00
0.120	0.00	31.0	83.42	125	97.17	500	100.00	2000	100.00
0.240	0.00	37.0	86.50	149	97.66	590	100.00	2380	100.00
0.490	0.00	44.0	89.08	177	98.15	710	100.00	2830	100.00
0.980	5.49	53.0	91.43	210	98.69	840	100.00	3360	100.00
2.00	14.26	63.0	93.25	250	99.22	1000	100.00		
3.90	27.55	74.0	94.64	300	99.67	1190	100.00		

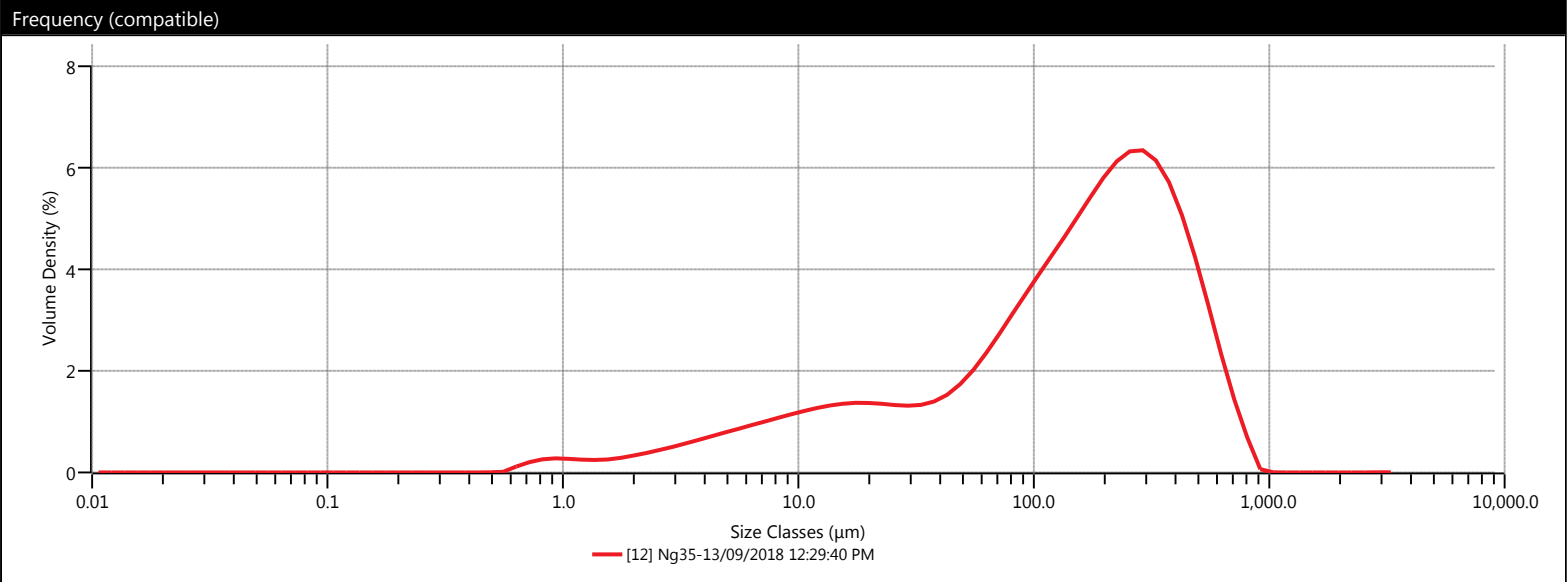
Analysis - Under

Measurement Details
Sample Name Ng35
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 12:29:40 PM
Measurement Date Time 13/09/2018 12:29:40 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.29 %
Laser Obscuration 11.06 %

Result
Concentration 0.0339 %
Span 2.777
Uniformity 0.867
Specific Surface Area 274.2 m²/kg
D [3,2] 21.9 µm
D [4,3] 200 µm
Dv (10) 10.4 µm
Dv (50) 160 µm
Dv (90) 454 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	7.91	88.0	33.41	350	80.79	1410	100.00
0.0600	0.00	15.6	13.44	105	37.62	420	87.42	1680	100.00
0.120	0.00	31.0	19.48	125	42.33	500	92.68	2000	100.00
0.240	0.00	37.0	21.03	149	47.71	590	96.40	2380	100.00
0.490	0.00	44.0	22.68	177	53.58	710	98.84	2830	100.00
0.980	0.70	53.0	24.77	210	59.95	840	99.89	3360	100.00
2.00	1.94	63.0	27.19	250	66.98	1000	100.00		
3.90	4.05	74.0	29.90	300	74.54	1190	100.00		

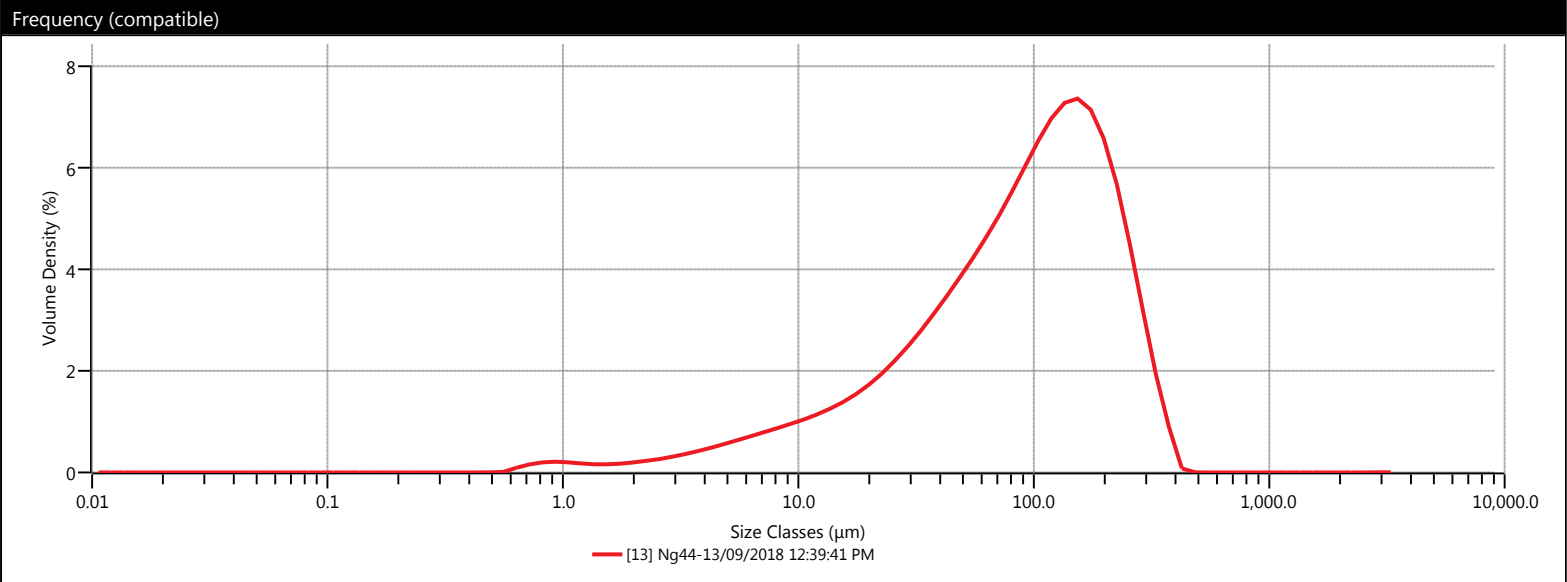
Analysis - Under

Measurement Details
Sample Name Ng44
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 12:39:41 PM
Measurement Date Time 13/09/2018 12:39:41 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.28 %
Laser Obscuration 11.12 %

Result
Concentration 0.0393 %
Span 2.298
Uniformity 0.713
Specific Surface Area 237.2 m²/kg
D [3,2] 25.3 µm
D [4,3] 111 µm
Dv (10) 14.8 µm
Dv (50) 94.5 µm
Dv (90) 232 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	5.54	88.0	47.19	350	99.20	1410	100.00
0.0600	0.00	15.6	10.48	105	54.38	420	100.00	1680	100.00
0.120	0.00	31.0	19.12	125	62.16	500	100.00	2000	100.00
0.240	0.00	37.0	22.44	149	70.52	590	100.00	2380	100.00
0.490	0.00	44.0	26.19	177	78.72	710	100.00	2830	100.00
0.980	0.54	53.0	30.84	210	86.27	840	100.00	3360	100.00
2.00	1.35	63.0	35.79	250	92.47	1000	100.00		
3.90	2.66	74.0	40.94	300	97.01	1190	100.00		

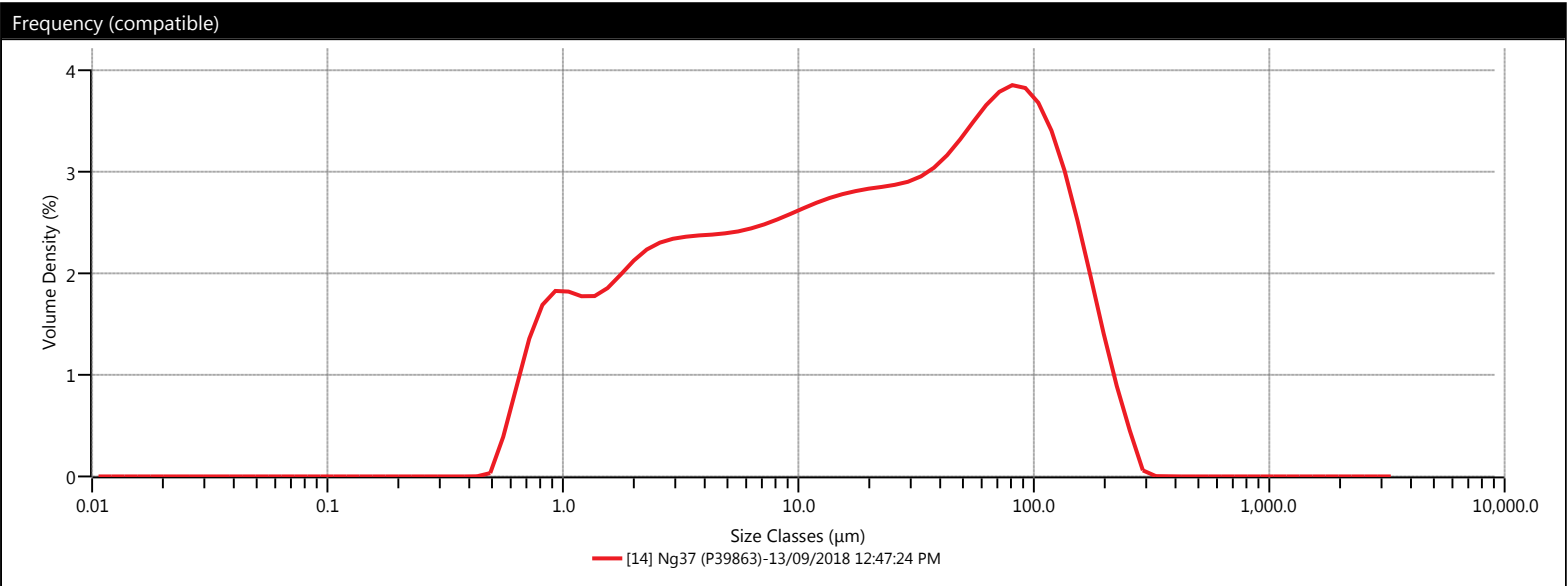
Analysis - Under

Measurement Details	
Sample Name	Ng37 (P39863)
SOP File Name	ERTH321 ash.msop
Lab Number	
Operator Name	instrument

Measurement Details	
Analysis Date Time	13/09/2018 12:47:24 PM
Measurement Date Time	13/09/2018 12:47:24 PM
Result Source	Measurement

Analysis	
Particle Name	Sediment
Particle Refractive Index	1.500
Particle Absorption Index	0.200
Dispersant Name	Water
Dispersant Refractive Index	1.330
Scattering Model	Mie
Analysis Model	General Purpose
Weighted Residual	0.91 %
Laser Obscuration	11.73 %

Result	
Concentration	0.0082 %
Span	6.293
Uniformity	1.932
Specific Surface Area	1247 m ² /kg
D [3,2]	4.81 µm
D [4,3]	42.0 µm
Dv (10)	1.50 µm
Dv (50)	18.6 µm
Dv (90)	119 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	34.72	88.0	82.79	350	100.00	1410	100.00
0.0600	0.00	15.6	46.75	105	87.15	420	100.00	1680	100.00
0.120	0.00	31.0	59.52	125	91.14	500	100.00	2000	100.00
0.240	0.00	37.0	62.95	149	94.53	590	100.00	2380	100.00
0.490	0.00	44.0	66.46	177	97.07	710	100.00	2830	100.00
0.980	5.02	53.0	70.48	210	98.82	840	100.00	3360	100.00
2.00	13.71	63.0	74.50	250	99.72	1000	100.00		
3.90	23.75	74.0	78.43	300	99.99	1190	100.00		

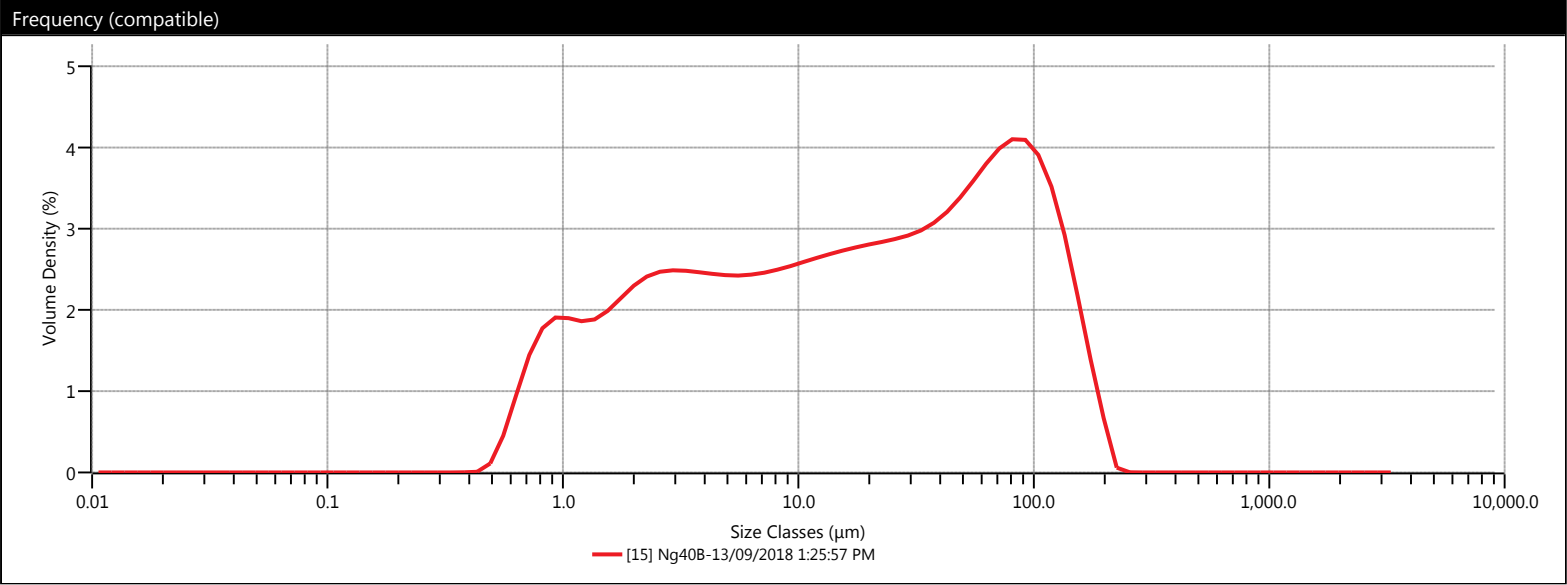
Analysis - Under

Measurement Details
Sample Name Ng40B
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 1:25:57 PM
Measurement Date Time 13/09/2018 1:25:57 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 1.08 %
Laser Obscuration 12.52 %

Result
Concentration 0.0084 %
Span 6.109
Uniformity 1.866
Specific Surface Area 1320 m ² /kg
D [3,2] 4.54 µm
D [4,3] 37.7 µm
Dv (10) 1.42 µm
Dv (50) 17.3 µm
Dv (90) 107 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	36.37	88.0	84.89	350	100.00	1410	100.00
0.0600	0.00	15.6	48.18	105	89.55	420	100.00	1680	100.00
0.120	0.00	31.0	60.88	125	93.72	500	100.00	2000	100.00
0.240	0.00	37.0	64.34	149	96.97	590	100.00	2380	100.00
0.490	0.04	44.0	67.89	177	99.01	710	100.00	2830	100.00
0.980	5.41	53.0	71.99	210	99.98	840	100.00	3360	100.00
2.00	14.65	63.0	76.13	250	100.00	1000	100.00		
3.90	25.33	74.0	80.26	300	100.00	1190	100.00		

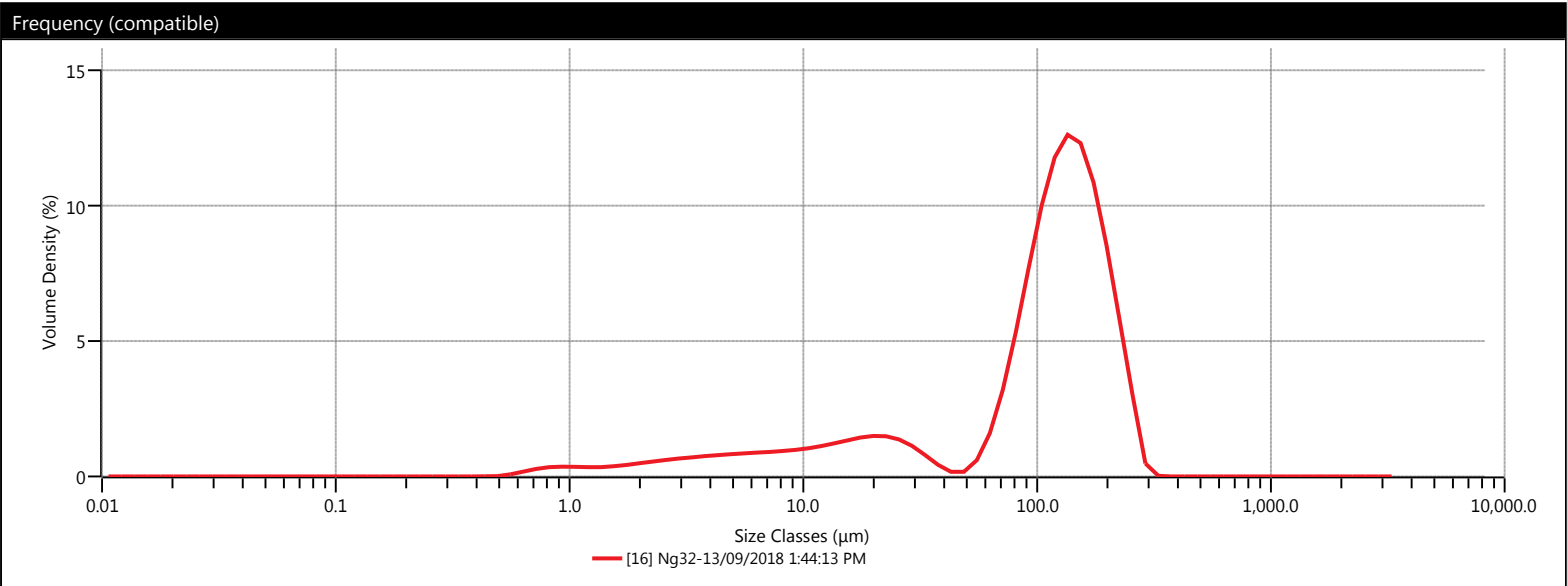
Analysis - Under

Measurement Details
Sample Name Ng32
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 1:44:13 PM
Measurement Date Time 13/09/2018 1:44:13 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.59 %
Laser Obscuration 12.19 %

Result
Concentration 0.0309 %
Span 1.633
Uniformity 0.464
Specific Surface Area 337.8 m²/kg
D [3,2] 17.8 µm
D [4,3] 114 µm
Dv (10) 8.72 µm
Dv (50) 118 µm
Dv (90) 202 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	9.32	88.0	31.47	350	100.00	1410	100.00
0.0600	0.00	15.6	14.26	105	41.41	420	100.00	1680	100.00
0.120	0.00	31.0	20.46	125	54.21	500	100.00	2000	100.00
0.240	0.00	37.0	21.27	149	68.65	590	100.00	2380	100.00
0.490	0.00	44.0	21.59	177	81.84	710	100.00	2830	100.00
0.980	1.00	53.0	21.82	210	92.15	840	100.00	3360	100.00
2.00	2.75	63.0	22.88	250	98.08	1000	100.00		
3.90	5.50	74.0	25.56	300	99.95	1190	100.00		

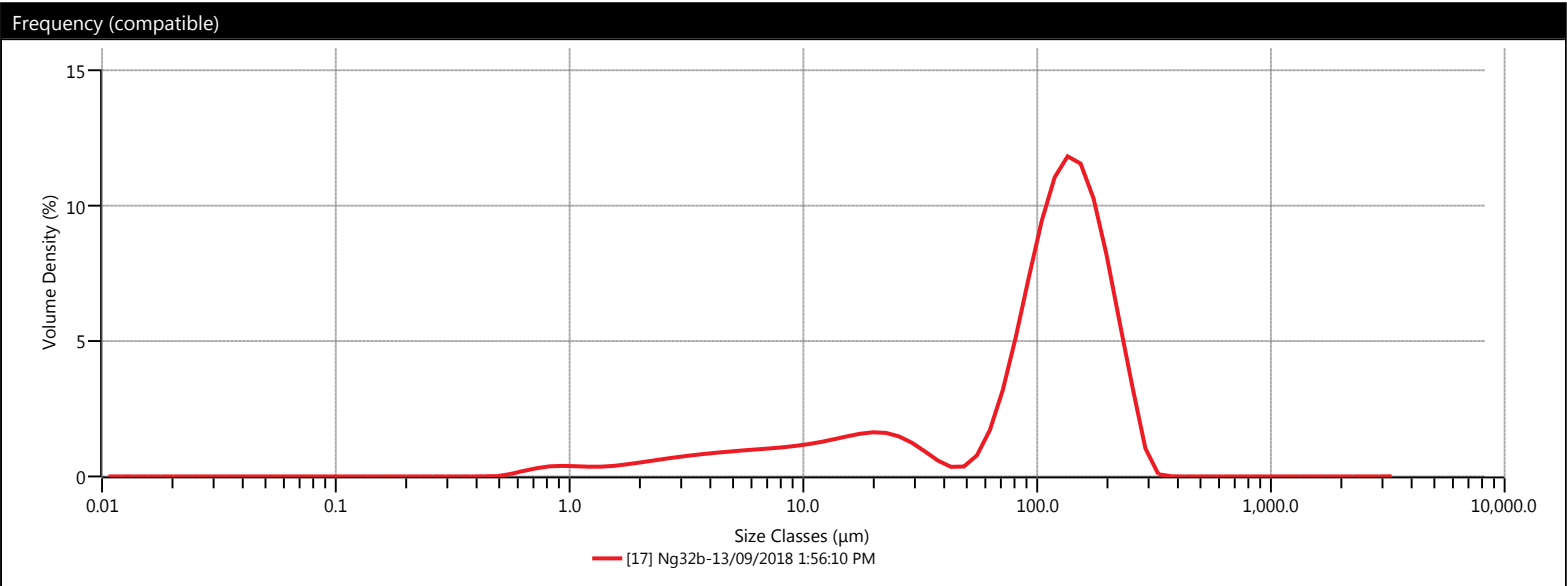
Analysis - Under

Measurement Details
Sample Name Ng32b
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 1:56:10 PM
Measurement Date Time 13/09/2018 1:56:10 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.48 %
Laser Obscuration 12.48 %

Result
Concentration 0.0294 %
Span 1.703
Uniformity 0.503
Specific Surface Area 365.0 m²/kg
D [3,2] 16.4 µm
D [4,3] 111 µm
Dv (10) 7.52 µm
Dv (50) 116 µm
Dv (90) 204 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	10.25	88.0	34.26	350	100.00	1410	100.00
0.0600	0.00	15.6	15.87	105	43.67	420	100.00	1680	100.00
0.120	0.00	31.0	22.65	125	55.68	500	100.00	2000	100.00
0.240	0.00	37.0	23.62	149	69.21	590	100.00	2380	100.00
0.490	0.00	44.0	24.12	177	81.62	710	100.00	2830	100.00
0.980	1.10	53.0	24.58	210	91.46	840	100.00	3360	100.00
2.00	2.94	63.0	25.81	250	97.39	1000	100.00		
3.90	5.94	74.0	28.53	300	99.81	1190	100.00		

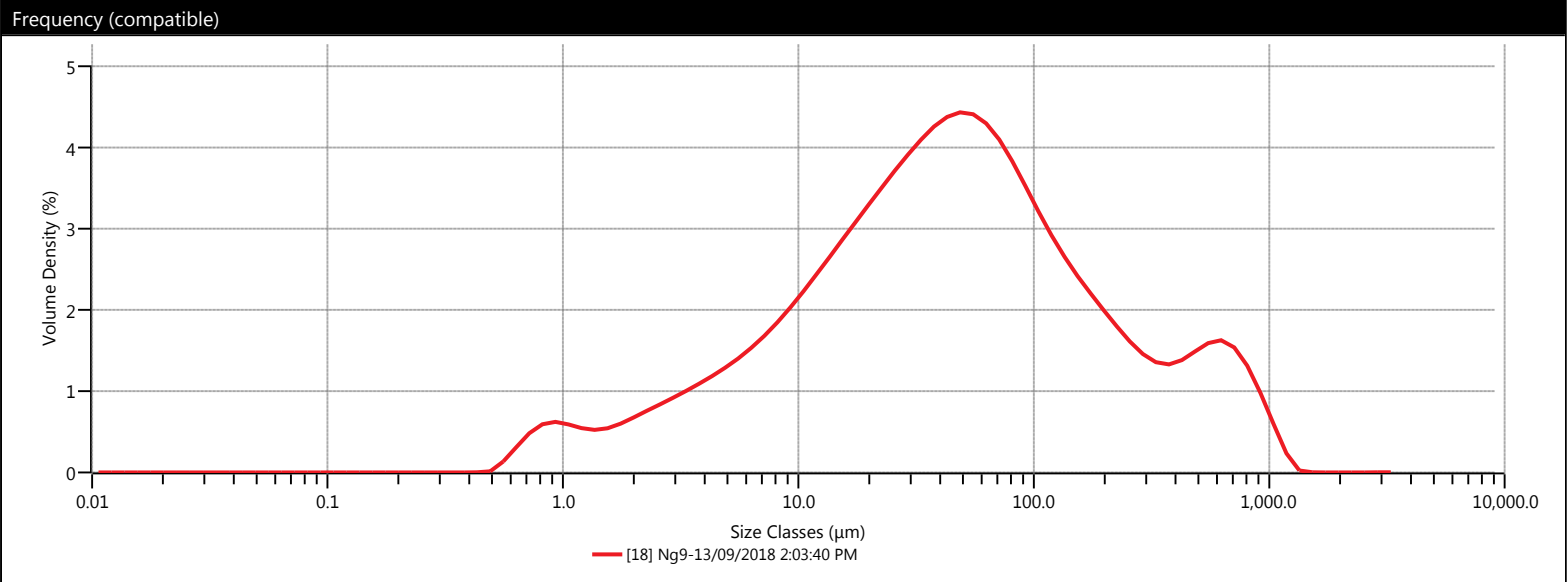
Analysis - Under

Measurement Details
Sample Name Ng9
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 2:03:40 PM
Measurement Date Time 13/09/2018 2:03:40 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.46 %
Laser Obscuration 13.25 %

Result
Concentration 0.0209 %
Span 8.063
Uniformity 2.342
Specific Surface Area 548.0 m²/kg
D [3,2] 10.9 µm
D [4,3] 119 µm
Dv (10) 4.86 µm
Dv (50) 43.5 µm
Dv (90) 355 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	14.68	88.0	69.39	350	89.87	1410	100.00
0.0600	0.00	15.6	25.18	105	73.32	420	91.46	1680	100.00
0.120	0.00	31.0	40.67	125	76.76	500	93.10	2000	100.00
0.240	0.00	37.0	45.45	149	79.77	590	94.81	2380	100.00
0.490	0.00	44.0	50.34	177	82.37	710	96.75	2830	100.00
0.980	1.75	53.0	55.72	210	84.67	840	98.29	3360	100.00
2.00	4.41	63.0	60.65	250	86.67	1000	99.40		
3.90	8.28	74.0	65.04	300	88.49	1190	99.91		

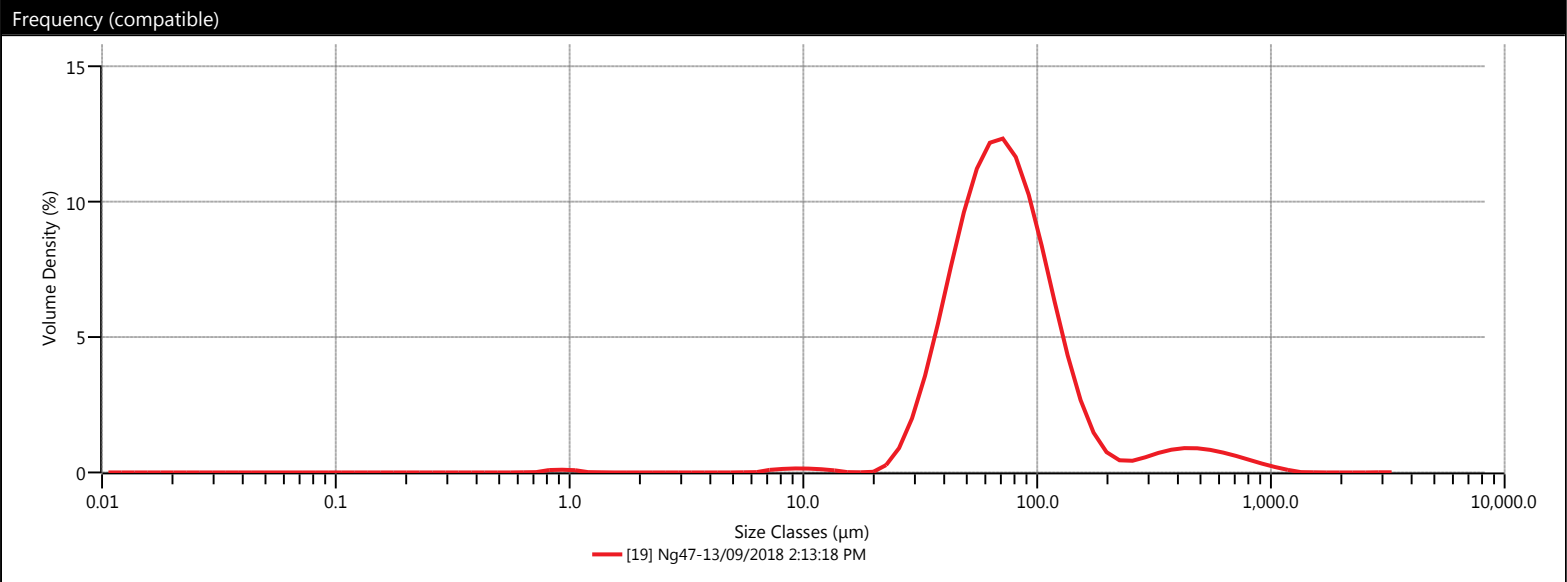
Analysis - Under

Measurement Details
Sample Name Ng47
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 2:13:18 PM
Measurement Date Time 13/09/2018 2:13:18 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.35 %
Laser Obscuration 12.42 %

Result
Concentration 0.0959 %
Span 1.546
Uniformity 0.744
Specific Surface Area 107.8 m²/kg
D [3,2] 55.7 µm
D [4,3] 104 µm
Dv (10) 39.2 µm
Dv (50) 71.3 µm
Dv (90) 149 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	0.33	88.0	66.23	350	95.08	1410	100.00
0.0600	0.00	15.6	0.82	105	77.26	420	96.10	1680	100.00
0.120	0.00	31.0	3.33	125	85.24	500	97.11	2000	100.00
0.240	0.00	37.0	7.96	149	89.96	590	98.02	2380	100.00
0.490	0.00	44.0	15.44	177	92.29	710	98.86	2830	100.00
0.980	0.15	53.0	26.91	210	93.31	840	99.42	3360	100.00
2.00	0.23	63.0	40.07	250	93.80	1000	99.79		
3.90	0.23	74.0	53.04	300	94.38	1190	99.96		

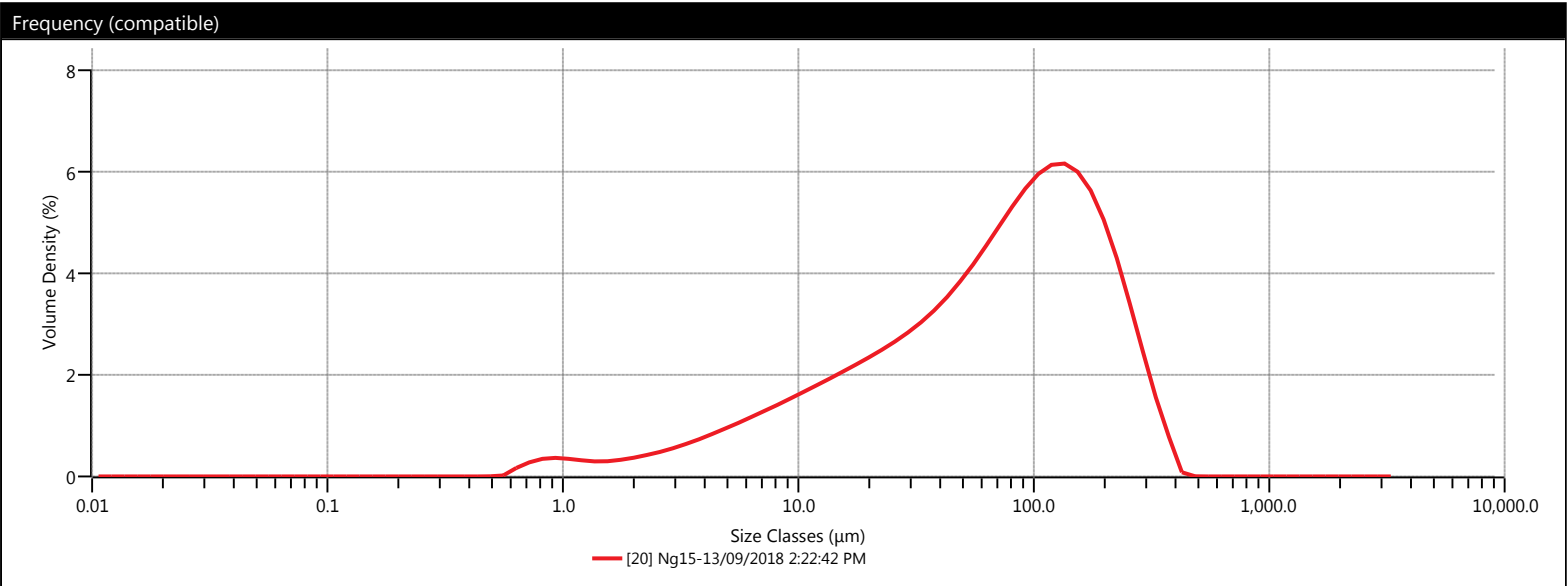
Analysis - Under

Measurement Details
Sample Name Ng15
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 2:22:42 PM
Measurement Date Time 13/09/2018 2:22:42 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.32 %
Laser Obscuration 16.14 %

Result
Concentration 0.0389 %
Span 2.814
Uniformity 0.881
Specific Surface Area 359.6 m²/kg
D [3,2] 16.7 µm
D [4,3] 94.2 µm
Dv (10) 8.20 µm
Dv (50) 73.2 µm
Dv (90) 214 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	9.54	88.0	56.33	350	99.29	1410	100.00
0.0600	0.00	15.6	17.30	105	63.00	420	99.99	1680	100.00
0.120	0.00	31.0	28.37	125	69.93	500	100.00	2000	100.00
0.240	0.00	37.0	31.94	149	76.98	590	100.00	2380	100.00
0.490	0.00	44.0	35.79	177	83.56	710	100.00	2830	100.00
0.980	0.95	53.0	40.43	210	89.40	840	100.00	3360	100.00
2.00	2.44	63.0	45.30	250	94.09	1000	100.00		
3.90	4.78	74.0	50.34	300	97.55	1190	100.00		

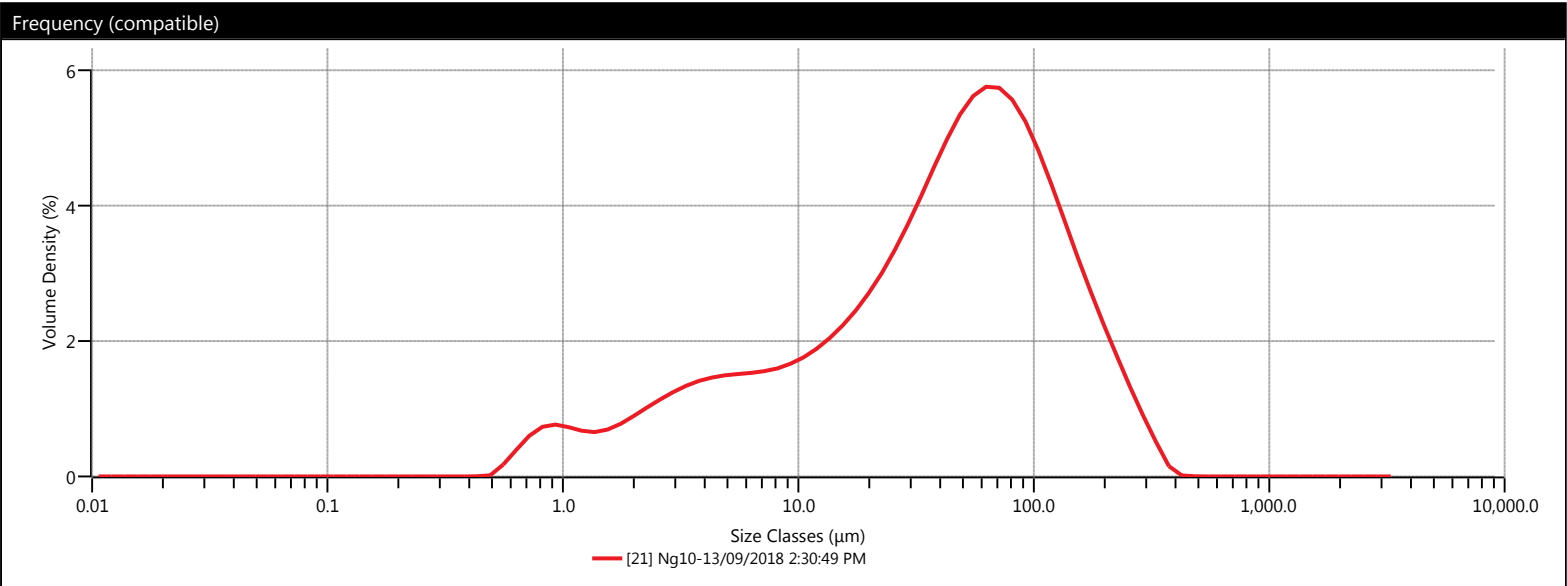
Analysis - Under

Measurement Details
Sample Name Ng10
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 2:30:49 PM
Measurement Date Time 13/09/2018 2:30:49 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.49 %
Laser Obscuration 13.07 %

Result
Concentration 0.0178 %
Span 3.256
Uniformity 1.016
Specific Surface Area 636.7 m²/kg
D [3,2] 9.42 µm
D [4,3] 62.7 µm
Dv (10) 3.61 µm
Dv (50) 44.6 µm
Dv (90) 149 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	17.54	88.0	74.77	350	99.88	1410	100.00
0.0600	0.00	15.6	25.87	105	80.64	420	100.00	1680	100.00
0.120	0.00	31.0	39.22	125	85.75	500	100.00	2000	100.00
0.240	0.00	37.0	44.12	149	90.01	590	100.00	2380	100.00
0.490	0.00	44.0	49.54	177	93.39	710	100.00	2830	100.00
0.980	2.18	53.0	56.00	210	96.04	840	100.00	3360	100.00
2.00	5.53	63.0	62.42	250	97.96	1000	100.00		
3.90	10.71	74.0	68.47	300	99.28	1190	100.00		

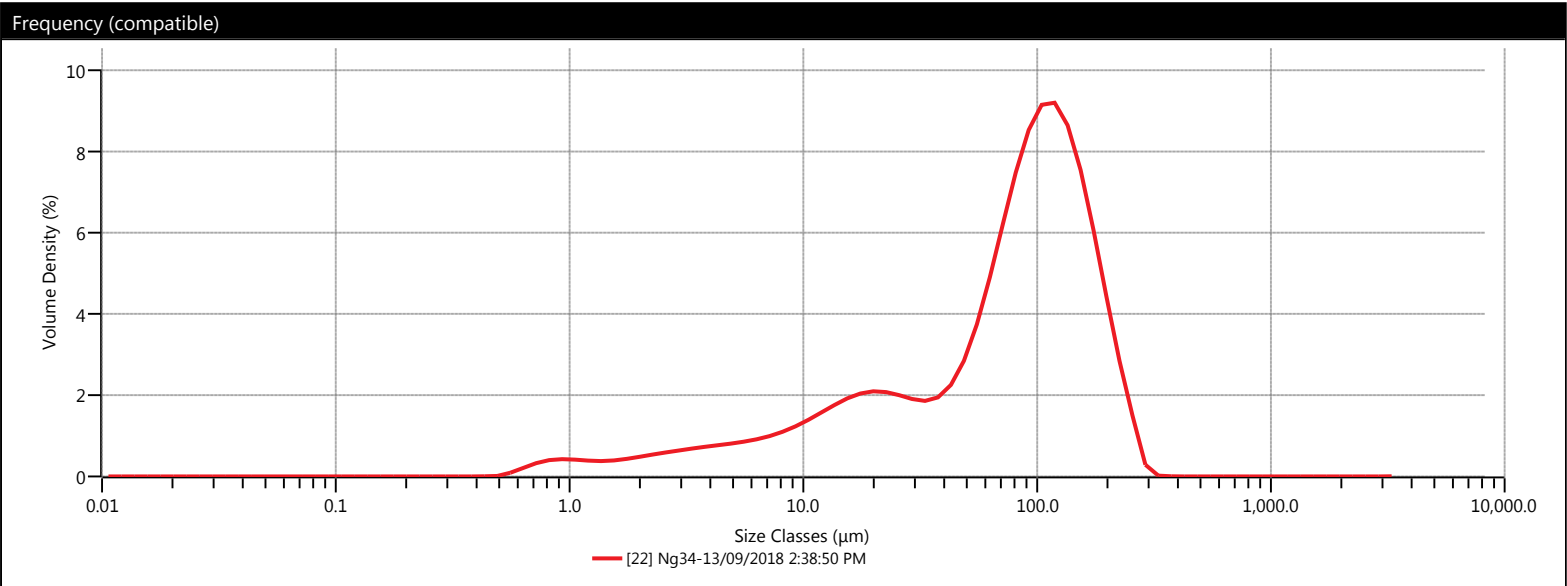
Analysis - Under

Measurement Details
Sample Name Ng34
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 2:38:50 PM
Measurement Date Time 13/09/2018 2:38:50 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.33 %
Laser Obscuration 18.74 %

Result
Concentration 0.0433 %
Span 1.979
Uniformity 0.613
Specific Surface Area 385.9 m²/kg
D [3,2] 15.5 µm
D [4,3] 87.5 µm
Dv (10) 8.15 µm
Dv (50) 83.9 µm
Dv (90) 174 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	9.69	88.0	52.47	350	100.00	1410	100.00
0.0600	0.00	15.6	16.36	105	62.63	420	100.00	1680	100.00
0.120	0.00	31.0	25.42	125	73.14	500	100.00	2000	100.00
0.240	0.00	37.0	27.58	149	82.90	590	100.00	2380	100.00
0.490	0.00	44.0	29.94	177	90.65	710	100.00	2830	100.00
0.980	1.18	53.0	33.36	210	96.09	840	100.00	3360	100.00
2.00	3.08	63.0	38.07	250	99.00	1000	100.00		
3.90	5.77	74.0	44.08	300	99.96	1190	100.00		

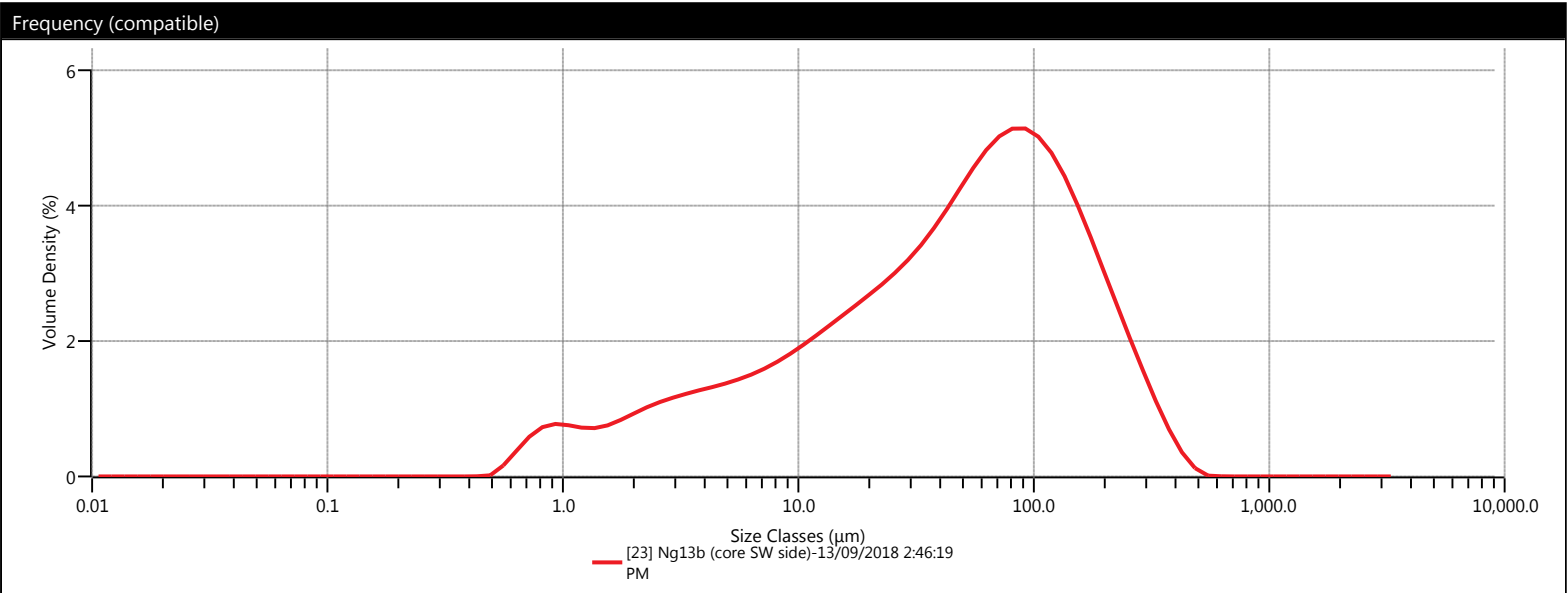
Analysis - Under

Measurement Details	
Sample Name	Ng13b (core SW side)
SOP File Name	ERTH321 ash.msop
Lab Number	
Operator Name	instrument

Measurement Details	
Analysis Date Time	13/09/2018 2:46:19 PM
Measurement Date Time	13/09/2018 2:46:19 PM
Result Source	Measurement

Analysis	
Particle Name	Sediment
Particle Refractive Index	1.500
Particle Absorption Index	0.200
Dispersant Name	Water
Dispersant Refractive Index	1.330
Scattering Model	Mie
Analysis Model	General Purpose
Weighted Residual	0.50 %
Laser Obscuration	12.96 %

Result	
Concentration	0.0178 %
Span	3.658
Uniformity	1.151
Specific Surface Area	631.7 m ² /kg
D [3,2]	9.50 µm
D [4,3]	74.0 µm
Dv (10)	3.61 µm
Dv (50)	48.8 µm
Dv (90)	182 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	17.17	88.0	68.61	350	99.01	1410	100.00
0.0600	0.00	15.6	26.26	105	74.50	420	99.73	1680	100.00
0.120	0.00	31.0	38.86	125	80.05	500	99.98	2000	100.00
0.240	0.00	37.0	42.87	149	85.07	590	100.00	2380	100.00
0.490	0.00	44.0	47.19	177	89.34	710	100.00	2830	100.00
0.980	2.15	53.0	52.34	210	92.89	840	100.00	3360	100.00
2.00	5.73	63.0	57.60	250	95.66	1000	100.00		
3.90	10.65	74.0	62.81	300	97.80	1190	100.00		

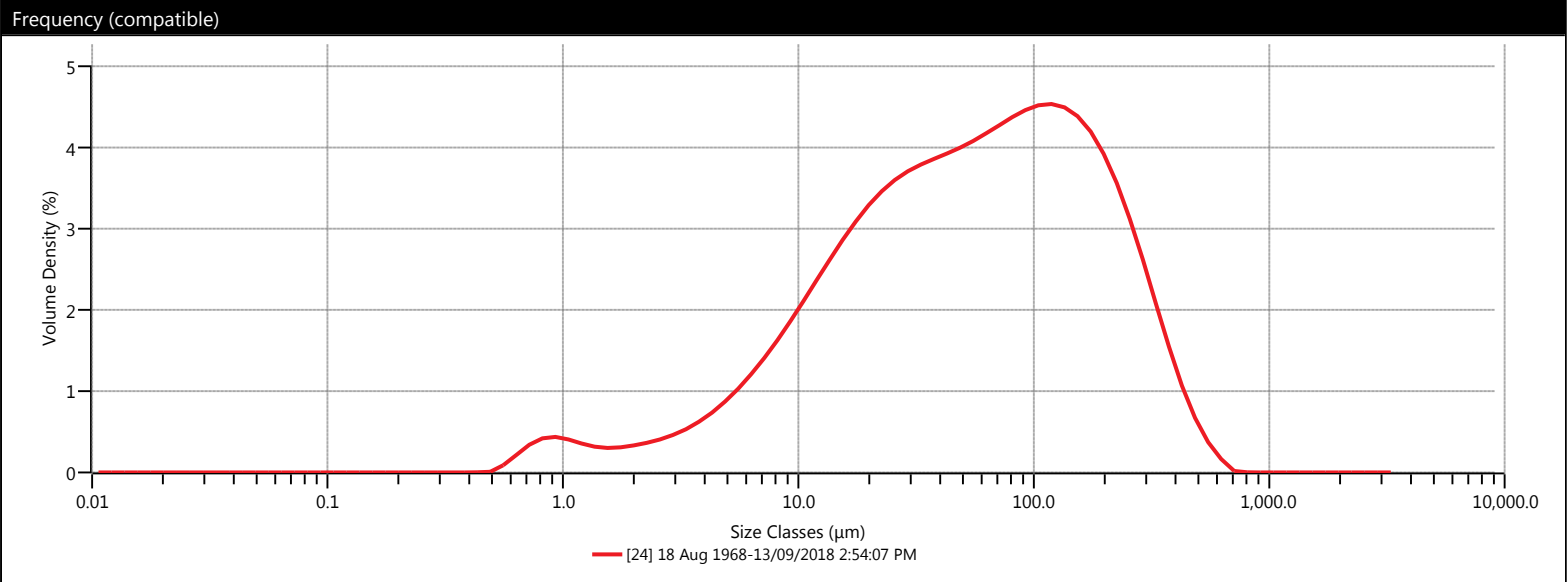
Analysis - Under

Measurement Details	
Sample Name	18 Aug 1968
SOP File Name	ERTH321 ash.msop
Lab Number	
Operator Name	instrument

Measurement Details	
Analysis Date Time	13/09/2018 2:54:07 PM
Measurement Date Time	13/09/2018 2:54:07 PM
Result Source	Measurement

Analysis	
Particle Name	Sediment
Particle Refractive Index	1.500
Particle Absorption Index	0.200
Dispersant Name	Water
Dispersant Refractive Index	1.330
Scattering Model	Mie
Analysis Model	General Purpose
Weighted Residual	0.28 %
Laser Obscuration	16.36 %

Result	
Concentration	0.0359 %
Span	4.055
Uniformity	1.264
Specific Surface Area	400.1 m²/kg
D [3,2]	15.0 µm
D [4,3]	94.2 µm
Dv (10)	8.17 µm
Dv (50)	56.3 µm
Dv (90)	237 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	9.51	88.0	62.42	350	96.77	1410	100.00
0.0600	0.00	15.6	19.53	105	67.59	420	98.47	1680	100.00
0.120	0.00	31.0	34.72	125	72.75	500	99.43	2000	100.00
0.240	0.00	37.0	39.12	149	77.89	590	99.87	2380	100.00
0.490	0.00	44.0	43.52	177	82.73	710	100.00	2830	100.00
0.980	1.23	53.0	48.38	210	87.21	840	100.00	3360	100.00
2.00	2.80	63.0	53.02	250	91.16	1000	100.00		
3.90	4.78	74.0	57.48	300	94.57	1190	100.00		

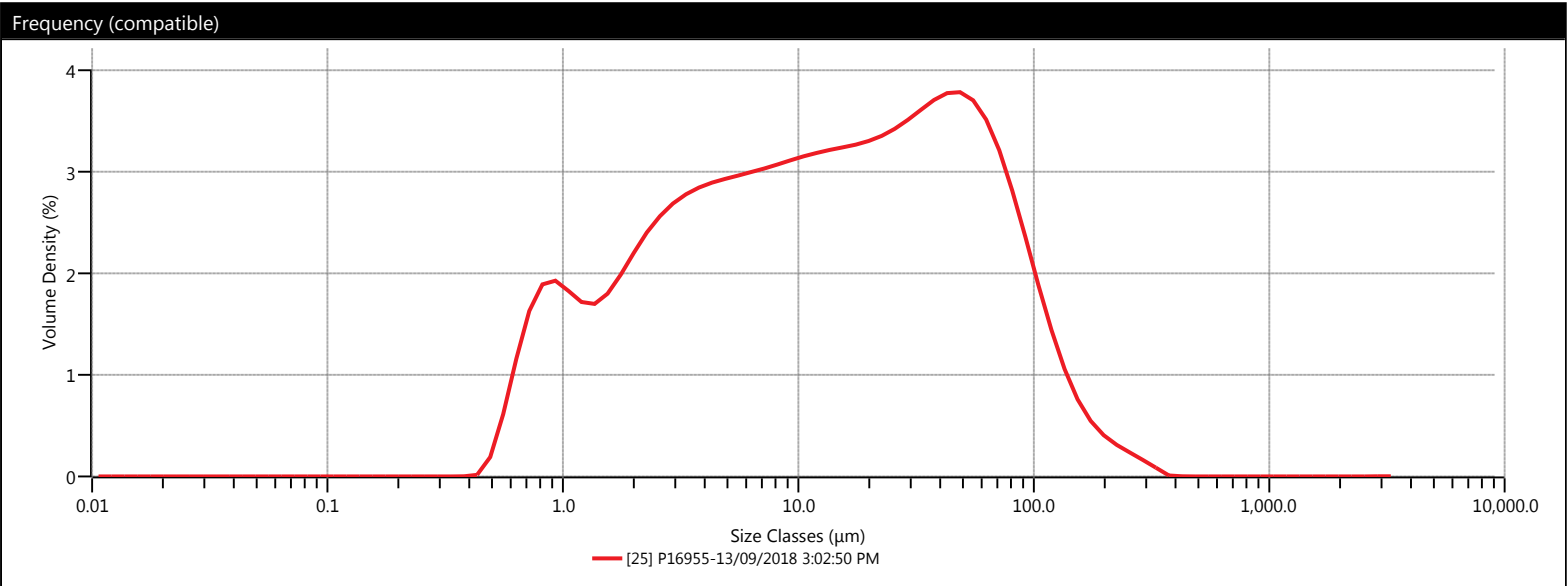
Analysis - Under

Measurement Details
Sample Name P16955
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 3:02:50 PM
Measurement Date Time 13/09/2018 3:02:50 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.85 %
Laser Obscuration 18.97 %

Result
Concentration 0.0124 %
Span 5.710
Uniformity 1.848
Specific Surface Area 1408 m ² /kg
D [3,2] 4.26 µm
D [4,3] 28.9 µm
Dv (10) 1.38 µm
Dv (50) 13.1 µm
Dv (90) 76.1 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	39.39	88.0	92.61	350	100.00	1410	100.00
0.0600	0.00	15.6	53.69	105	95.12	420	100.00	1680	100.00
0.120	0.00	31.0	68.76	125	96.93	500	100.00	2000	100.00
0.240	0.00	37.0	72.96	149	98.10	590	100.00	2380	100.00
0.490	0.07	44.0	77.20	177	98.83	710	100.00	2830	100.00
0.980	6.06	53.0	81.79	210	99.33	840	100.00	3360	100.00
2.00	14.62	63.0	85.90	250	99.66	1000	100.00		
3.90	25.98	74.0	89.40	300	99.89	1190	100.00		

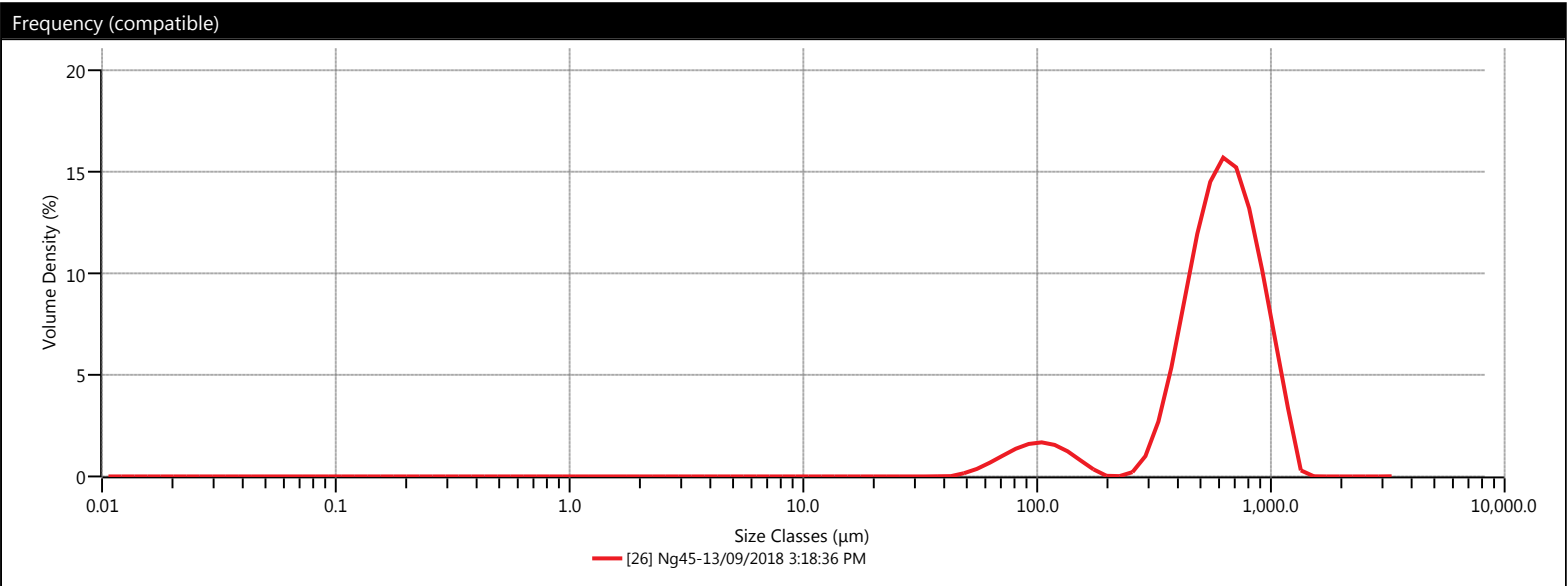
Analysis - Under

Measurement Details
Sample Name Ng45
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 3:18:36 PM
Measurement Date Time 13/09/2018 3:18:36 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 1.05 %
Laser Obscuration 7.01 %

Result
Concentration 0.3784 %
Span 1.056
Uniformity 0.331
Specific Surface Area 14.81 m²/kg
D [3,2] 405 µm
D [4,3] 615 µm
Dv (10) 311 µm
Dv (50) 610 µm
Dv (90) 955 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	0.00	88.0	3.17	350	12.01	1410	100.00
0.0600	0.00	15.6	0.00	105	5.06	420	19.33	1680	100.00
0.120	0.00	31.0	0.00	125	6.90	500	31.29	2000	100.00
0.240	0.00	37.0	0.00	149	8.25	590	46.62	2380	100.00
0.490	0.00	44.0	0.00	177	8.90	710	65.56	2830	100.00
0.980	0.00	53.0	0.18	210	9.00	840	81.01	3360	100.00
2.00	0.00	63.0	0.72	250	9.05	1000	92.55		
3.90	0.00	74.0	1.65	300	9.72	1190	98.71		

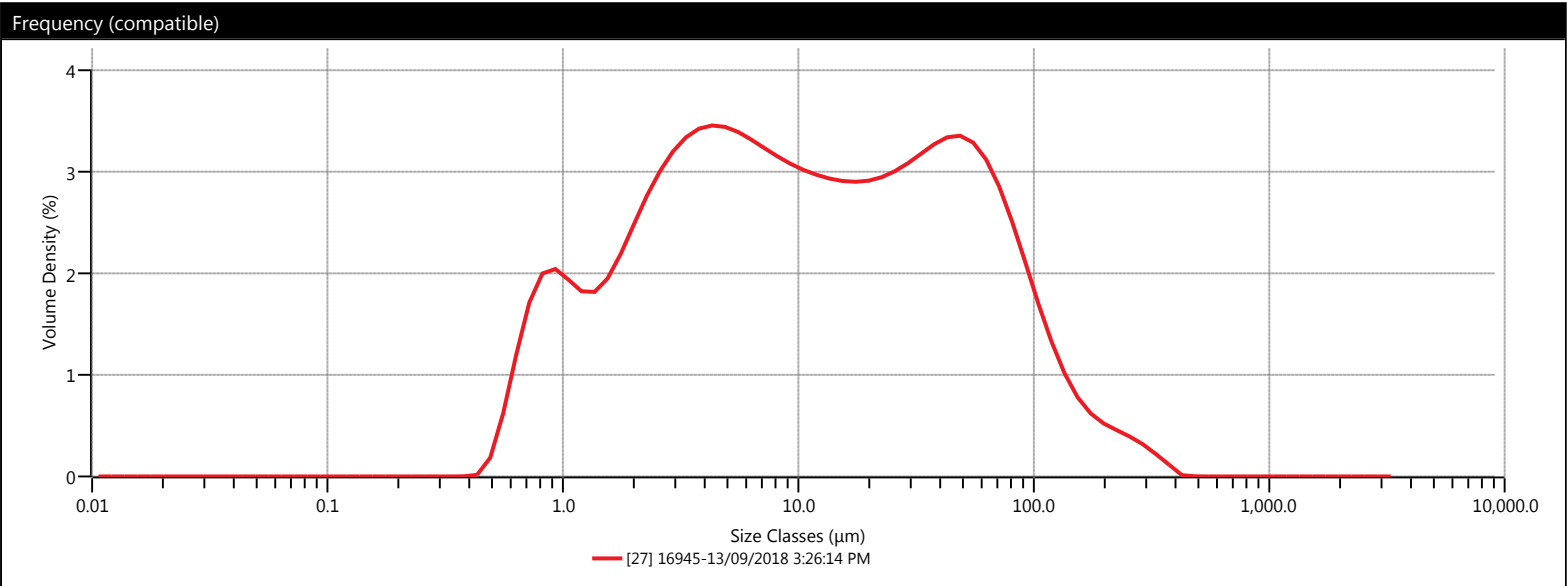
Analysis - Under

Measurement Details
Sample Name 16945
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 3:26:14 PM
Measurement Date Time 13/09/2018 3:26:14 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.93 %
Laser Obscuration 16.55 %

Result
Concentration 0.0099 %
Span 7.226
Uniformity 2.392
Specific Surface Area 1511 m ² /kg
D [3,2] 3.97 µm
D [4,3] 28.7 µm
Dv (10) 1.32 µm
Dv (50) 10.4 µm
Dv (90) 76.2 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	44.25	88.0	92.30	350	99.89	1410	100.00
0.0600	0.00	15.6	57.88	105	94.55	420	100.00	1680	100.00
0.120	0.00	31.0	71.17	125	96.20	500	100.00	2000	100.00
0.240	0.00	37.0	74.87	149	97.33	590	100.00	2380	100.00
0.490	0.07	44.0	78.62	177	98.12	710	100.00	2830	100.00
0.980	6.35	53.0	82.69	210	98.73	840	100.00	3360	100.00
2.00	15.60	63.0	86.34	250	99.23	1000	100.00		
3.90	29.01	74.0	89.45	300	99.65	1190	100.00		

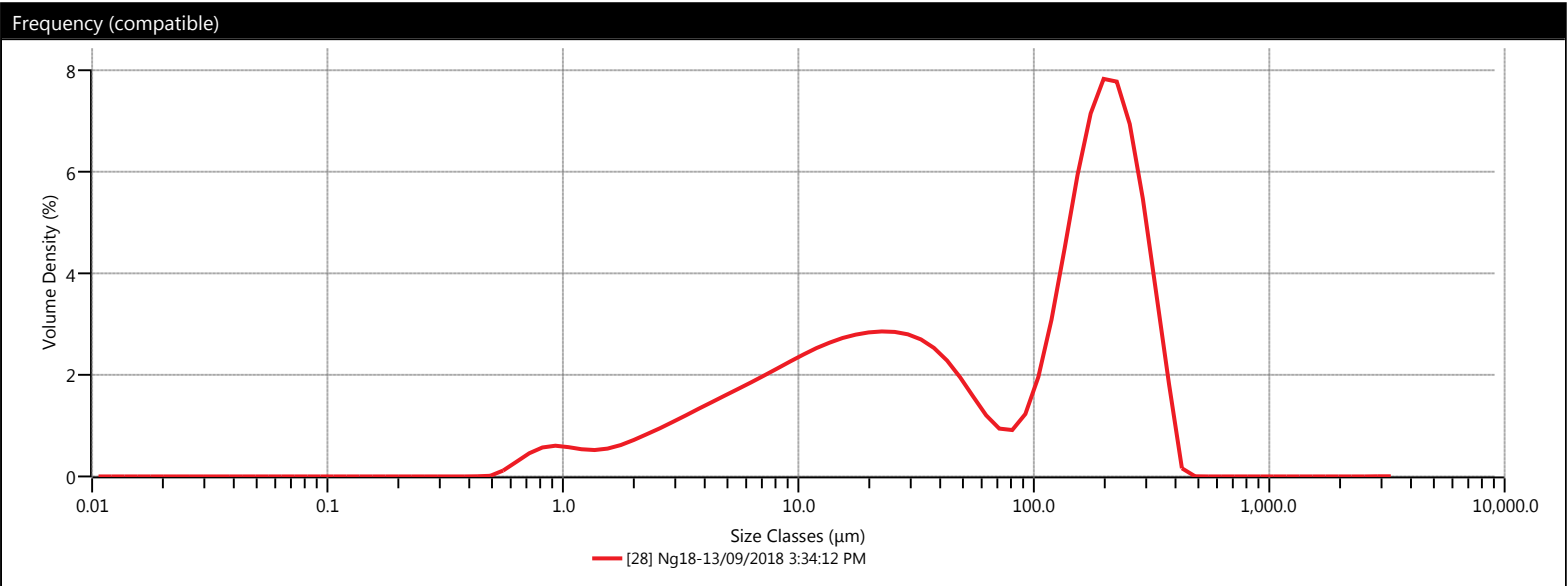
Analysis - Under

Measurement Details
Sample Name Ng18
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 3:34:12 PM
Measurement Date Time 13/09/2018 3:34:12 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.62 %
Laser Obscuration 12.94 %

Result
Concentration 0.0202 %
Span 4.210
Uniformity 1.489
Specific Surface Area 550.5 m²/kg
D [3,2] 10.9 µm
D [4,3] 111 µm
Dv (10) 4.43 µm
Dv (50) 62.5 µm
Dv (90) 268 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	16.59	88.0	52.18	350	98.36	1410	100.00
0.0600	0.00	15.6	27.61	105	53.88	420	100.00	1680	100.00
0.120	0.00	31.0	40.26	125	56.92	500	100.00	2000	100.00
0.240	0.00	37.0	43.34	149	62.27	590	100.00	2380	100.00
0.490	0.00	44.0	46.06	177	69.61	710	100.00	2830	100.00
0.980	1.66	53.0	48.46	210	78.20	840	100.00	3360	100.00
2.00	4.32	63.0	50.06	250	86.90	1000	100.00		
3.90	8.81	74.0	51.14	300	94.29	1190	100.00		

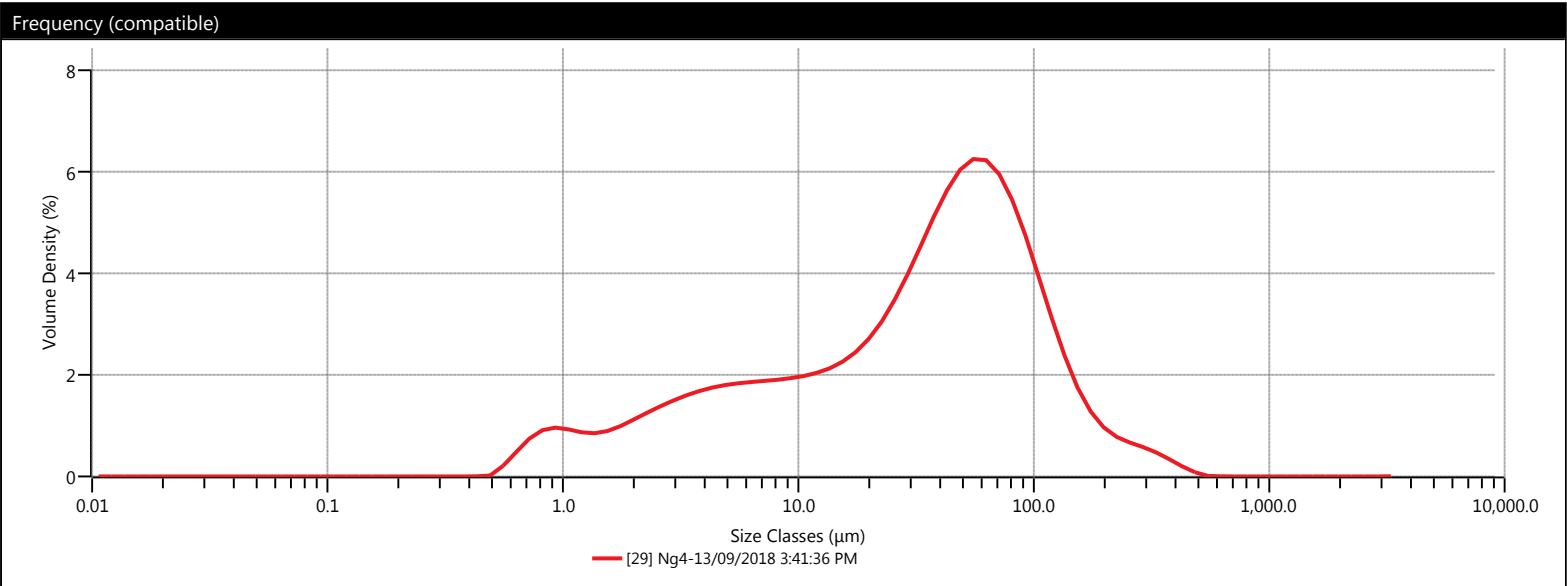
Analysis - Under

Measurement Details
Sample Name Ng4
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 3:41:36 PM
Measurement Date Time 13/09/2018 3:41:36 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.57 %
Laser Obscuration 13.95 %

Result
Concentration 0.0160 %
Span 2.989
Uniformity 1.024
Specific Surface Area 764.2 m²/kg
D [3,2] 7.85 µm
D [4,3] 51.9 µm
Dv (10) 2.85 µm
Dv (50) 37.2 µm
Dv (90) 114 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	21.50	88.0	82.85	350	99.47	1410	100.00
0.0600	0.00	15.6	30.67	105	87.98	420	99.84	1680	100.00
0.120	0.00	31.0	44.39	125	91.87	500	99.98	2000	100.00
0.240	0.00	37.0	49.81	149	94.50	590	100.00	2380	100.00
0.490	0.00	44.0	55.92	177	96.21	710	100.00	2830	100.00
0.980	2.71	53.0	63.22	210	97.37	840	100.00	3360	100.00
2.00	7.01	63.0	70.28	250	98.23	1000	100.00		
3.90	13.26	74.0	76.67	300	98.97	1190	100.00		

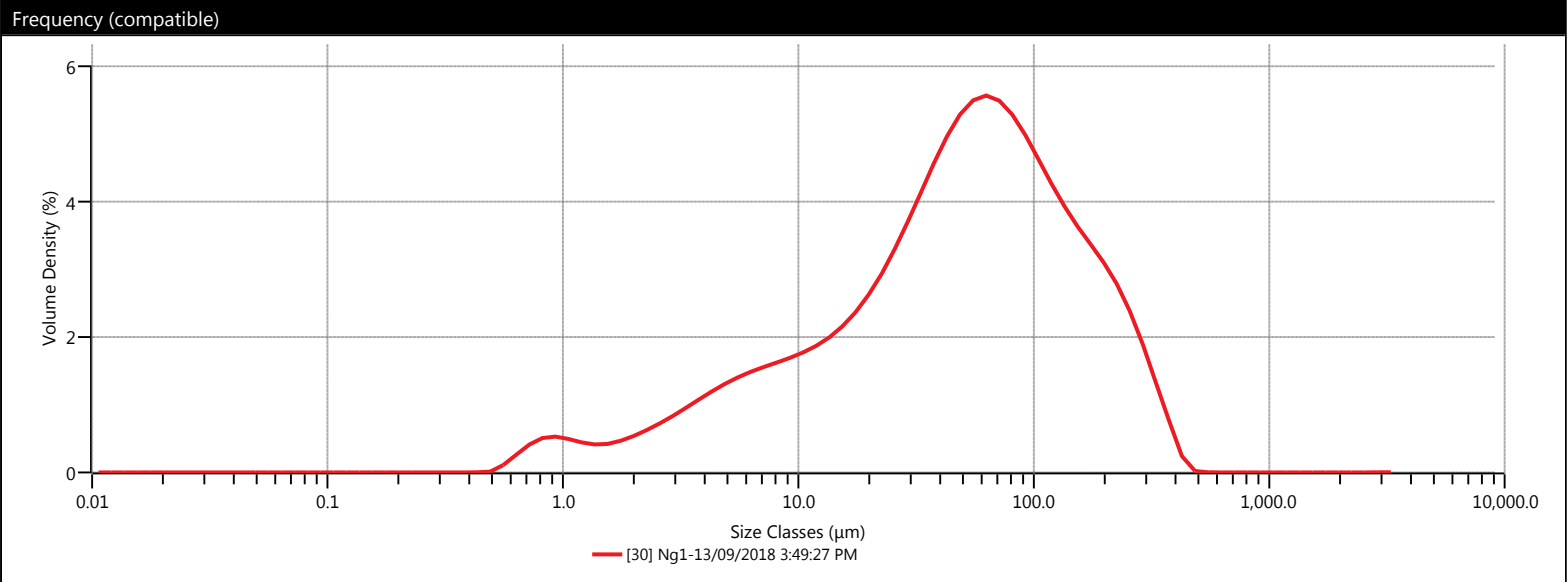
Analysis - Under

Measurement Details
Sample Name Ng1
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 3:49:27 PM
Measurement Date Time 13/09/2018 3:49:27 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.42 %
Laser Obscuration 14.82 %

Result
Concentration 0.0266 %
Span 3.620
Uniformity 1.079
Specific Surface Area 484.5 m²/kg
D [3,2] 12.4 µm
D [4,3] 76.2 µm
Dv (10) 5.54 µm
Dv (50) 50.8 µm
Dv (90) 190 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	13.37	88.0	69.53	350	99.14	1410	100.00
0.0600	0.00	15.6	21.68	105	75.12	420	99.89	1680	100.00
0.120	0.00	31.0	34.77	125	80.12	500	100.00	2000	100.00
0.240	0.00	37.0	39.67	149	84.58	590	100.00	2380	100.00
0.490	0.00	44.0	45.08	177	88.53	710	100.00	2830	100.00
0.980	1.49	53.0	51.47	210	92.07	840	100.00	3360	100.00
2.00	3.60	63.0	57.72	250	95.15	1000	100.00		
3.90	7.10	74.0	63.54	300	97.69	1190	100.00		

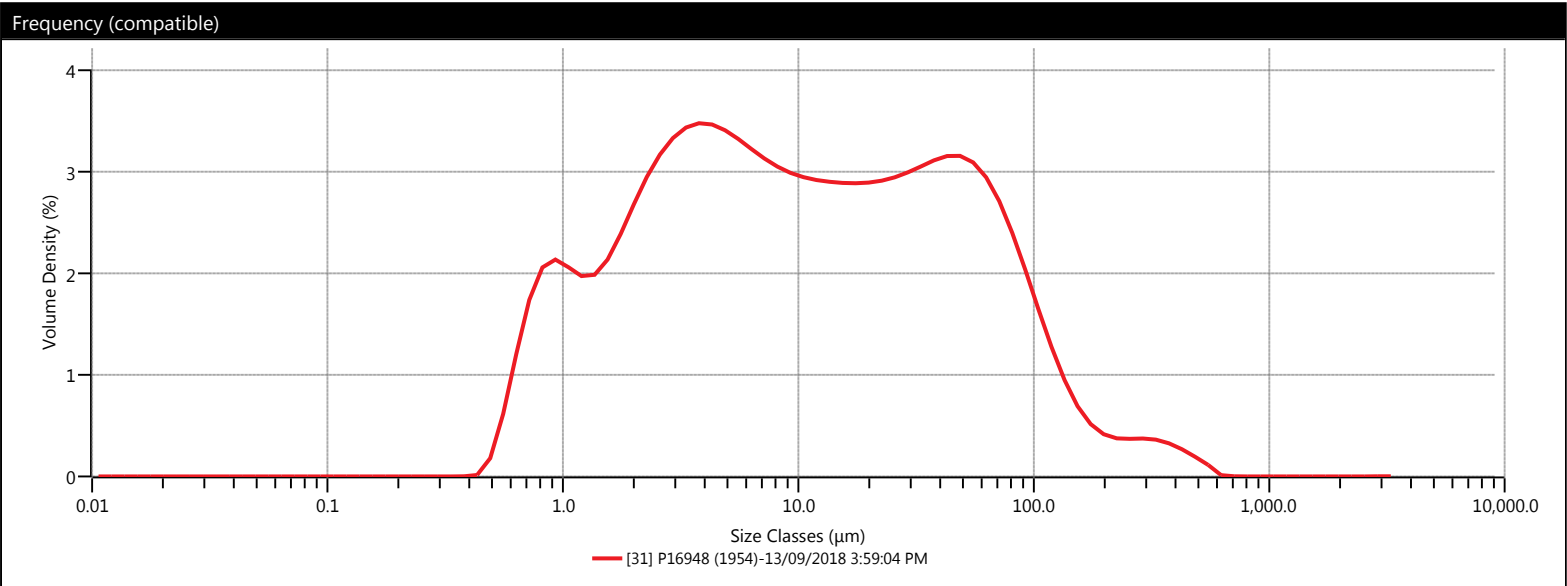
Analysis - Under

Measurement Details
Sample Name P16948 (1954)
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 3:59:04 PM
Measurement Date Time 13/09/2018 3:59:04 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.92 %
Laser Obscuration 19.39 %

Result
Concentration 0.0114 %
Span 7.751
Uniformity 2.754
Specific Surface Area 1562 m ² /kg
D [3,2] 3.84 µm
D [4,3] 30.6 µm
Dv (10) 1.28 µm
Dv (50) 9.79 µm
Dv (90) 77.2 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	45.52	88.0	92.01	350	99.23	1410	100.00
0.0600	0.00	15.6	58.87	105	94.19	420	99.60	1680	100.00
0.120	0.00	31.0	71.98	125	95.78	500	99.86	2000	100.00
0.240	0.00	37.0	75.52	149	96.83	590	100.00	2380	100.00
0.490	0.06	44.0	79.07	177	97.51	710	100.00	2830	100.00
0.980	6.48	53.0	82.90	210	98.00	840	100.00	3360	100.00
2.00	16.52	63.0	86.34	250	98.42	1000	100.00		
3.90	30.52	74.0	89.28	300	98.86	1190	100.00		

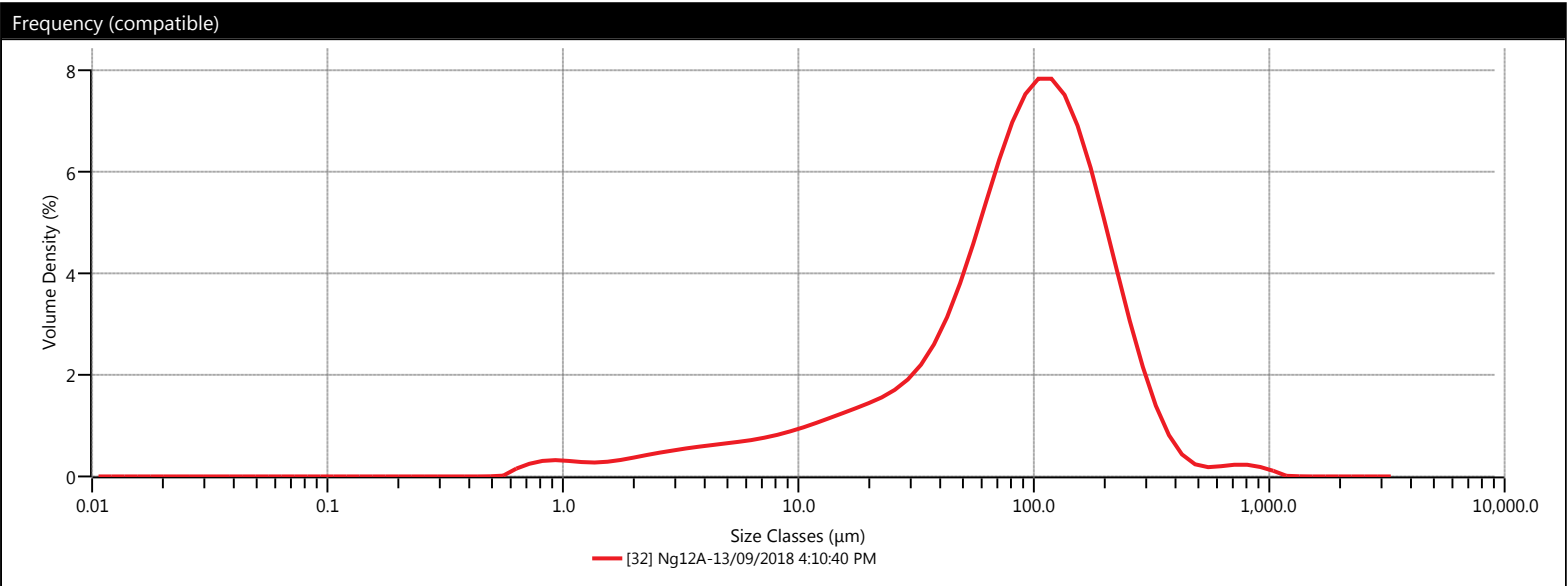
Analysis - Under

Measurement Details
Sample Name Ng12A
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 4:10:40 PM
Measurement Date Time 13/09/2018 4:10:40 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.27 %
Laser Obscuration 13.07 %

Result
Concentration 0.0371 %
Span 2.315
Uniformity 0.749
Specific Surface Area 301.6 m²/kg
D [3,2] 19.9 µm
D [4,3] 110 µm
Dv (10) 11.9 µm
Dv (50) 89.6 µm
Dv (90) 219 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	7.47	88.0	49.11	350	97.81	1410	100.00
0.0600	0.00	15.6	12.04	105	57.96	420	98.65	1680	100.00
0.120	0.00	31.0	19.04	125	66.91	500	99.01	2000	100.00
0.240	0.00	37.0	21.68	149	75.45	590	99.20	2380	100.00
0.490	0.00	44.0	24.93	177	82.80	710	99.46	2830	100.00
0.980	0.85	53.0	29.49	210	88.81	840	99.71	3360	100.00
2.00	2.24	63.0	35.03	250	93.20	1000	99.92		
3.90	4.38	74.0	41.26	300	96.27	1190	100.00		

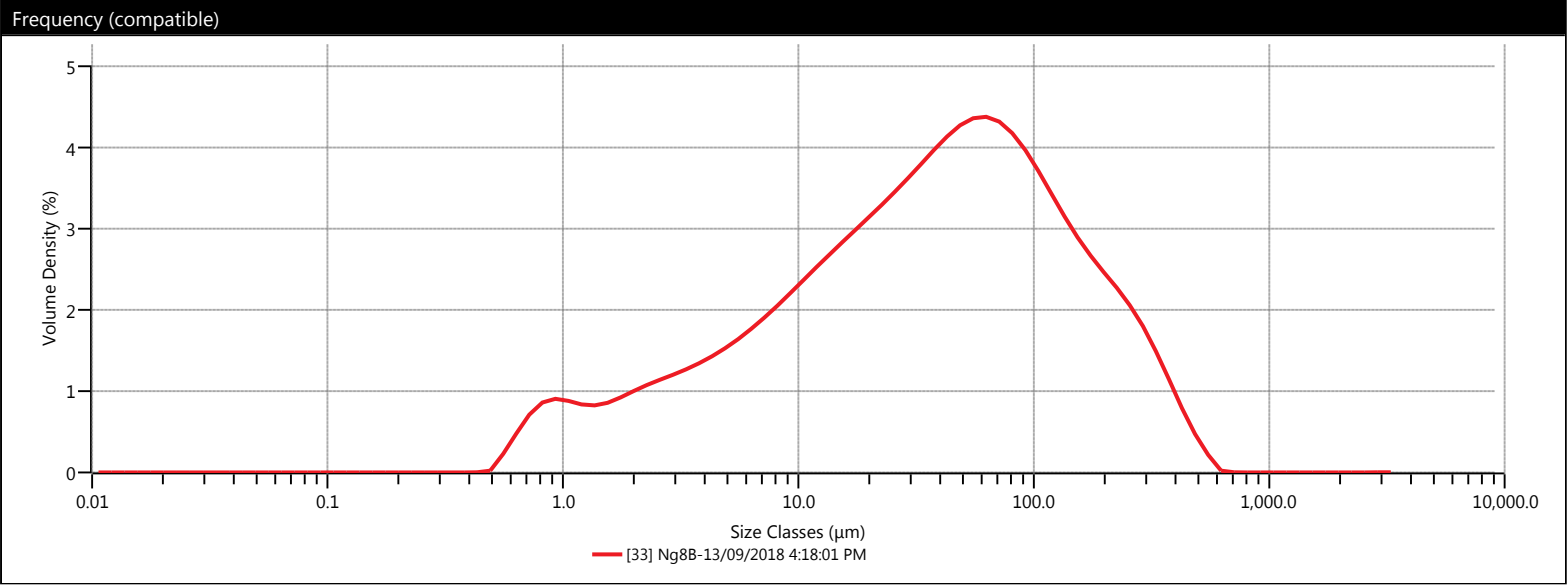
Analysis - Under

Measurement Details	
Sample Name	Ng8B
SOP File Name	ERTH321 ash.msop
Lab Number	
Operator Name	instrument

Measurement Details	
Analysis Date Time	13/09/2018 4:18:01 PM
Measurement Date Time	13/09/2018 4:18:01 PM
Result Source	Measurement

Analysis	
Particle Name	Sediment
Particle Refractive Index	1.500
Particle Absorption Index	0.200
Dispersant Name	Water
Dispersant Refractive Index	1.330
Scattering Model	Mie
Analysis Model	General Purpose
Weighted Residual	0.47 %
Laser Obscuration	25.93 %

Result	
Concentration	0.0340 %
Span	5.001
Uniformity	1.522
Specific Surface Area	719.4 m²/kg
D [3,2]	8.34 µm
D [4,3]	71.7 µm
Dv (10)	3.14 µm
Dv (50)	37.9 µm
Dv (90)	193 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	19.30	88.0	73.36	350	97.77	1410	100.00
0.0600	0.00	15.6	30.29	105	77.83	420	99.03	1680	100.00
0.120	0.00	31.0	44.92	125	81.85	500	99.73	2000	100.00
0.240	0.00	37.0	49.36	149	85.42	590	100.00	2380	100.00
0.490	0.00	44.0	53.95	177	88.56	710	100.00	2830	100.00
0.980	2.61	53.0	59.13	210	91.37	840	100.00	3360	100.00
2.00	6.69	63.0	64.06	250	93.91	1000	100.00		
3.90	11.83	74.0	68.63	300	96.20	1190	100.00		

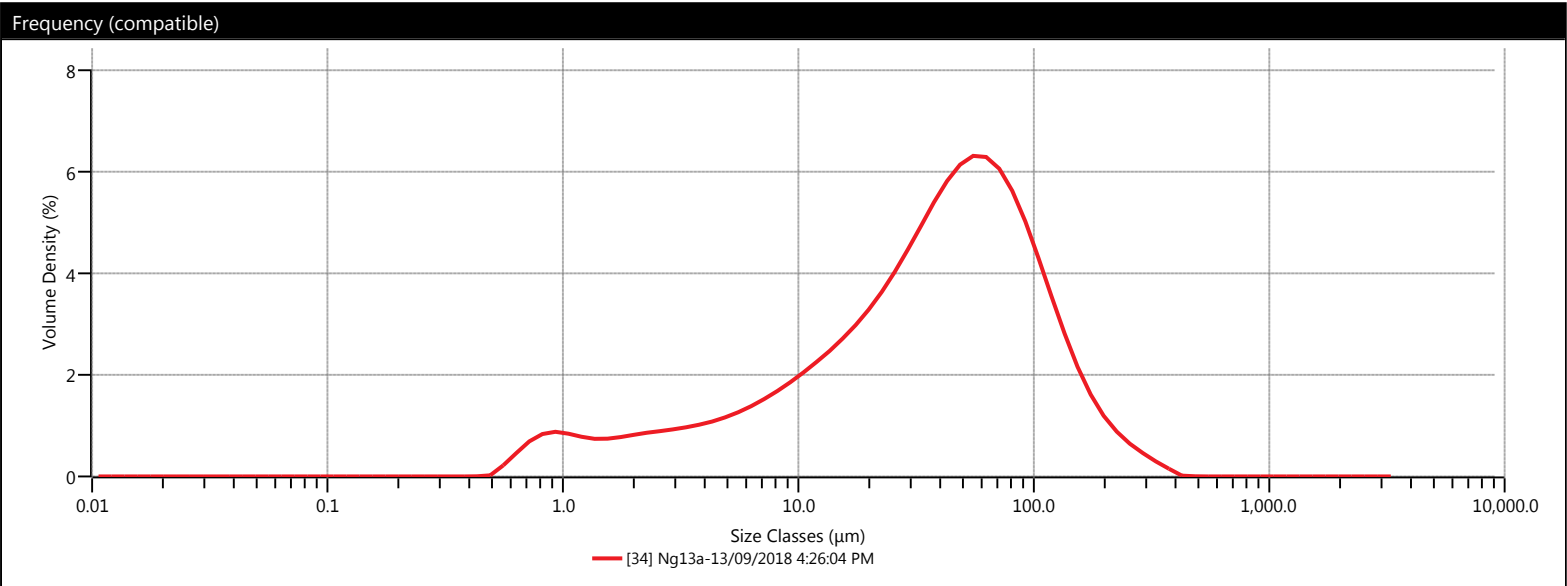
Analysis - Under

Measurement Details
Sample Name Ng13a
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 4:26:04 PM
Measurement Date Time 13/09/2018 4:26:04 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.46 %
Laser Obscuration 16.45 %

Result
Concentration 0.0223 %
Span 2.898
Uniformity 0.931
Specific Surface Area 659.3 m²/kg
D [3,2] 9.10 µm
D [4,3] 53.4 µm
Dv (10) 3.82 µm
Dv (50) 39.6 µm
Dv (90) 119 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	15.94	88.0	81.41	350	99.86	1410	100.00
0.0600	0.00	15.6	25.64	105	86.89	420	100.00	1680	100.00
0.120	0.00	31.0	41.78	125	91.23	500	100.00	2000	100.00
0.240	0.00	37.0	47.61	149	94.36	590	100.00	2380	100.00
0.490	0.00	44.0	53.98	177	96.49	710	100.00	2830	100.00
0.980	2.52	53.0	61.41	210	97.95	840	100.00	3360	100.00
2.00	6.15	63.0	68.54	250	98.89	1000	100.00		
3.90	10.15	74.0	75.02	300	99.54	1190	100.00		

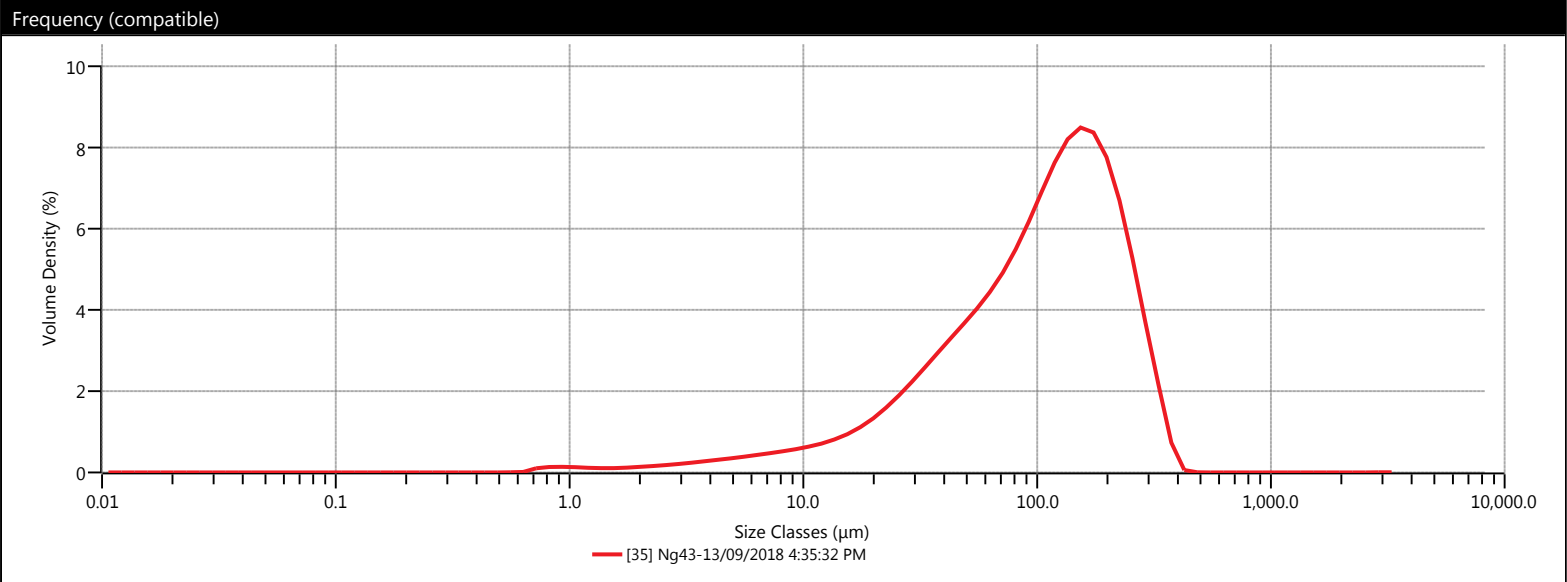
Analysis - Under

Measurement Details
Sample Name Ng43
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 4:35:32 PM
Measurement Date Time 13/09/2018 4:35:32 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.25 %
Laser Obscuration 14.60 %

Result
Concentration 0.0720 %
Span 1.962
Uniformity 0.612
Specific Surface Area 171.3 m²/kg
D [3,2] 35.0 µm
D [4,3] 122 µm
Dv (10) 23.6 µm
Dv (50) 110 µm
Dv (90) 239 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	3.46	88.0	40.56	350	99.38	1410	100.00
0.0600	0.00	15.6	6.54	105	48.00	420	100.00	1680	100.00
0.120	0.00	31.0	13.61	125	56.42	500	100.00	2000	100.00
0.240	0.00	37.0	16.70	149	65.87	590	100.00	2380	100.00
0.490	0.00	44.0	20.25	177	75.40	710	100.00	2830	100.00
0.980	0.31	53.0	24.67	210	84.30	840	100.00	3360	100.00
2.00	0.84	63.0	29.40	250	91.60	1000	100.00		
3.90	1.72	74.0	34.37	300	96.88	1190	100.00		

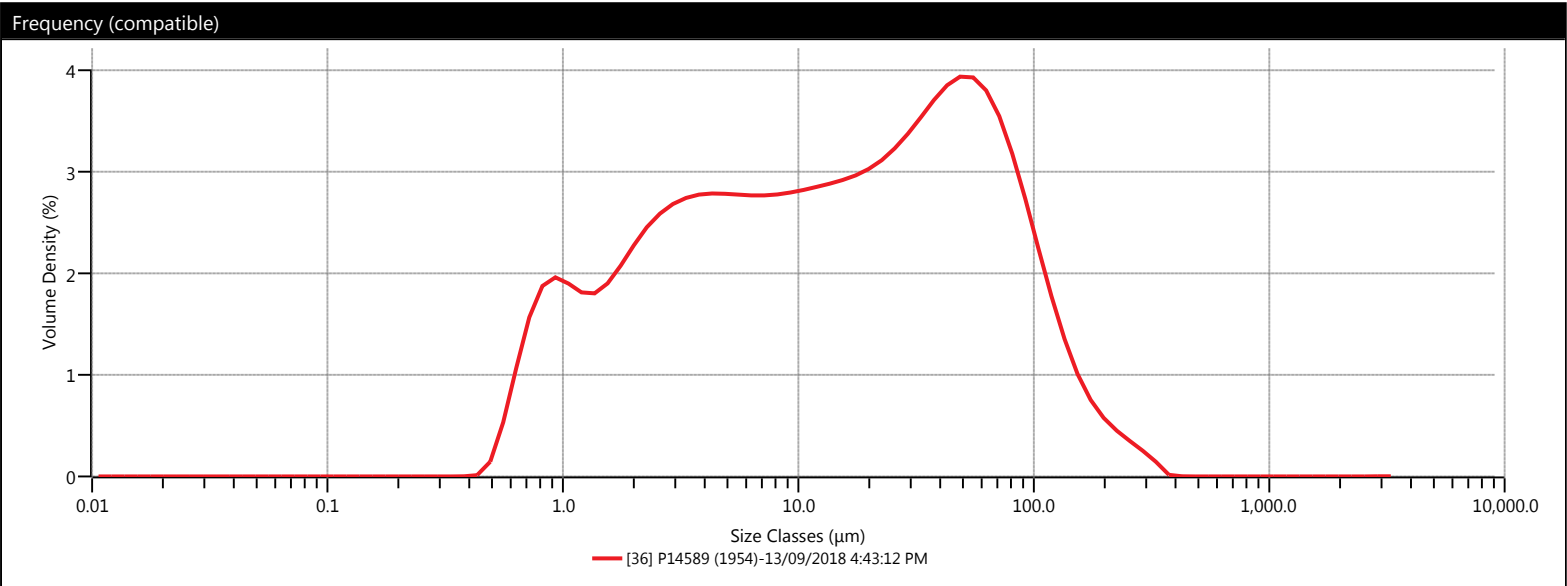
Analysis - Under

Measurement Details
Sample Name P14589 (1954)
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 4:43:12 PM
Measurement Date Time 13/09/2018 4:43:12 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.90 %
Laser Obscuration 20.75 %

Result
Concentration 0.0139 %
Span 5.837
Uniformity 1.915
Specific Surface Area 1387 m ² /kg
D [3,2] 4.33 µm
D [4,3] 32.3 µm
Dv (10) 1.38 µm
Dv (50) 14.3 µm
Dv (90) 85.0 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	38.77	88.0	90.65	350	99.99	1410	100.00
0.0600	0.00	15.6	51.61	105	93.59	420	100.00	1680	100.00
0.120	0.00	31.0	65.62	125	95.79	500	100.00	2000	100.00
0.240	0.00	37.0	69.75	149	97.29	590	100.00	2380	100.00
0.490	0.05	44.0	74.04	177	98.29	710	100.00	2830	100.00
0.980	5.84	53.0	78.81	210	98.98	840	100.00	3360	100.00
2.00	14.82	63.0	83.20	250	99.47	1000	100.00		
3.90	26.21	74.0	87.04	300	99.82	1190	100.00		

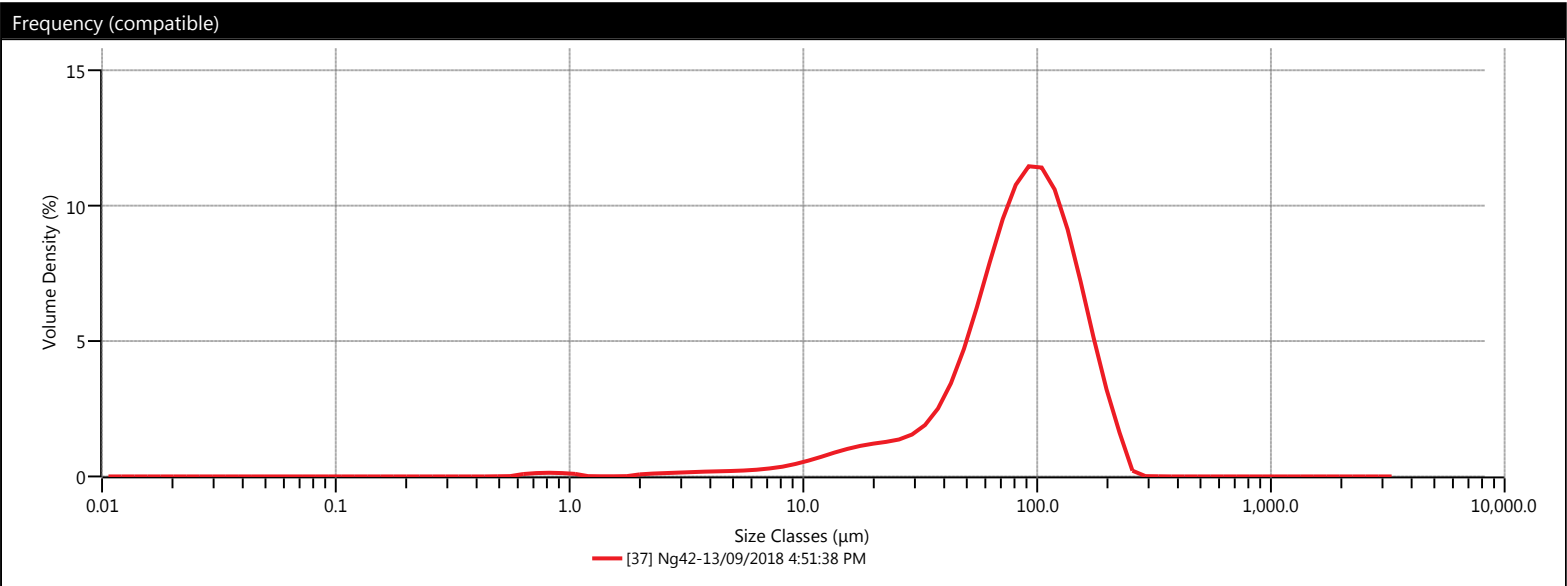
Analysis - Under

Measurement Details	
Sample Name	Ng42
SOP File Name	ERTH321 ash.msop
Lab Number	
Operator Name	instrument

Measurement Details	
Analysis Date Time	13/09/2018 4:51:38 PM
Measurement Date Time	13/09/2018 4:51:38 PM
Result Source	Measurement

Analysis	
Particle Name	Sediment
Particle Refractive Index	1.500
Particle Absorption Index	0.200
Dispersant Name	Water
Dispersant Refractive Index	1.330
Scattering Model	Mie
Analysis Model	General Purpose
Weighted Residual	0.31 %
Laser Obscuration	12.09 %

Result	
Concentration	0.0662 %
Span	1.495
Uniformity	0.447
Specific Surface Area	154.9 m²/kg
D [3,2]	38.7 µm
D [4,3]	91.0 µm
Dv (10)	28.6 µm
Dv (50)	86.4 µm
Dv (90)	158 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	2.11	88.0	51.39	350	100.00	1410	100.00
0.0600	0.00	15.6	5.06	105	64.65	420	100.00	1680	100.00
0.120	0.00	31.0	10.79	125	77.10	500	100.00	2000	100.00
0.240	0.00	37.0	13.13	149	87.29	590	100.00	2380	100.00
0.490	0.00	44.0	16.49	177	94.31	710	100.00	2830	100.00
0.980	0.38	53.0	22.11	210	98.47	840	100.00	3360	100.00
2.00	0.50	63.0	29.89	250	99.95	1000	100.00		
3.90	1.08	74.0	39.29	300	100.00	1190	100.00		

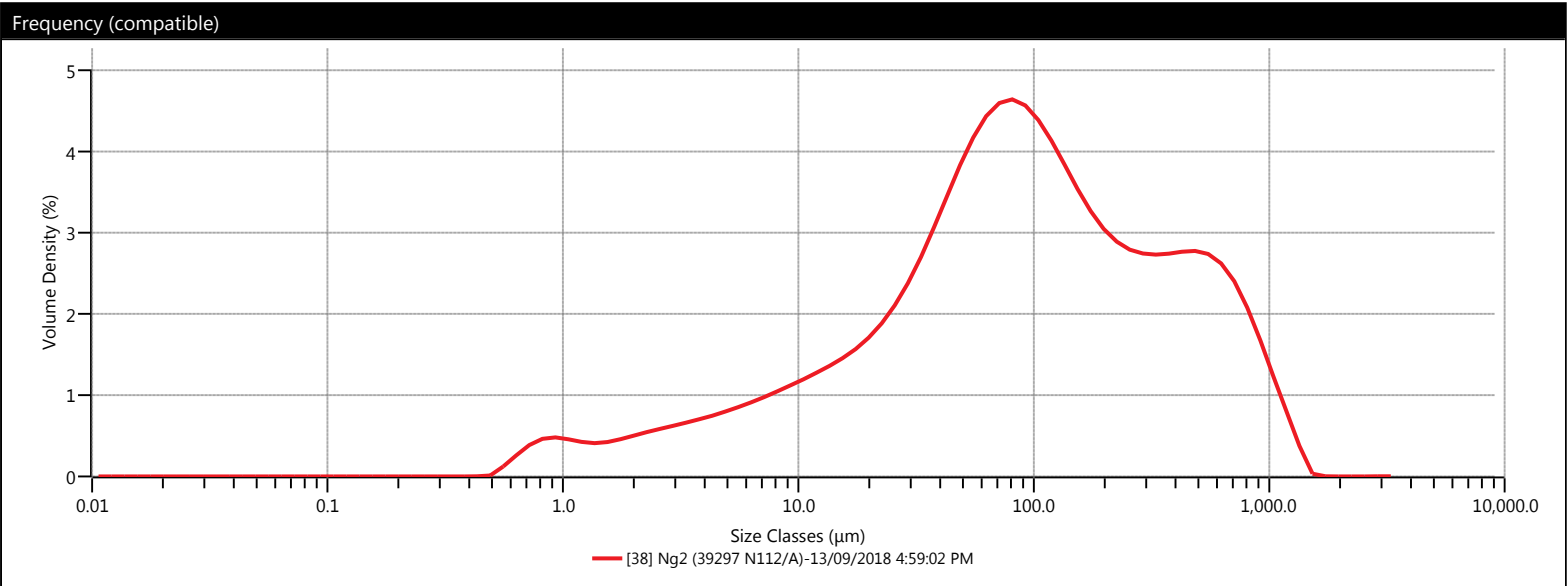
Analysis - Under

Measurement Details	
Sample Name	Ng2 (39297 N112/A)
SOP File Name	ERTH321 ash.msop
Lab Number	
Operator Name	instrument

Measurement Details	
Analysis Date Time	13/09/2018 4:59:02 PM
Measurement Date Time	13/09/2018 4:59:02 PM
Result Source	Measurement

Analysis	
Particle Name	Sediment
Particle Refractive Index	1.500
Particle Absorption Index	0.200
Dispersant Name	Water
Dispersant Refractive Index	1.330
Scattering Model	Mie
Analysis Model	General Purpose
Weighted Residual	0.29 %
Laser Obscuration	15.70 %

Result	
Concentration	0.0351 %
Span	6.418
Uniformity	1.813
Specific Surface Area	396.6 m²/kg
D [3,2]	15.1 µm
D [4,3]	193 µm
Dv (10)	7.84 µm
Dv (50)	86.8 µm
Dv (90)	565 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	9.97	88.0	50.40	350	81.37	1410	99.96
0.0600	0.00	15.6	15.54	105	55.60	420	84.64	1680	100.00
0.120	0.00	31.0	24.01	125	60.41	500	87.80	2000	100.00
0.240	0.00	37.0	27.23	149	64.77	590	90.77	2380	100.00
0.490	0.00	44.0	30.93	177	68.61	710	93.86	2830	100.00
0.980	1.40	53.0	35.55	210	72.07	840	96.29	3360	100.00
2.00	3.45	63.0	40.38	250	75.33	1000	98.19		
3.90	6.10	74.0	45.16	300	78.62	1190	99.39		

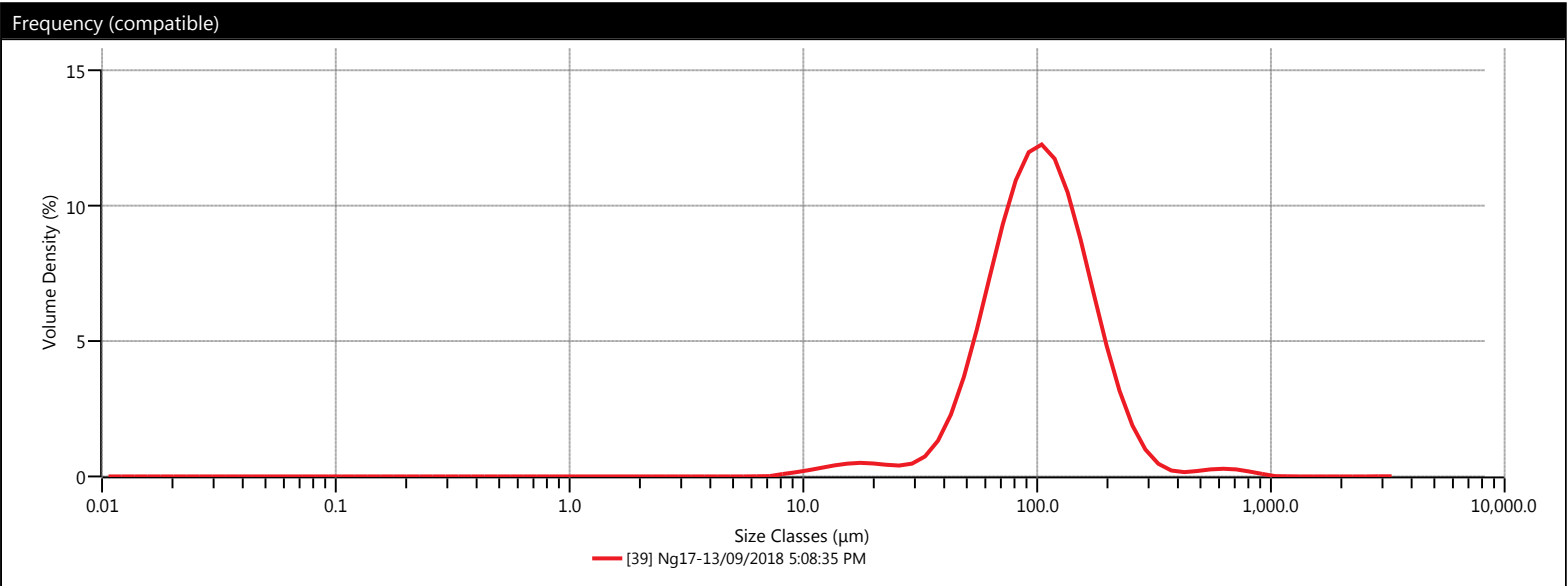
Analysis - Under

Measurement Details
Sample Name Ng17
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 5:08:35 PM
Measurement Date Time 13/09/2018 5:08:35 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.39 %
Laser Obscuration 11.74 %

Result
Concentration 0.1296 %
Span 1.361
Uniformity 0.470
Specific Surface Area 73.96 m²/kg
D [3,2] 81.1 µm
D [4,3] 117 µm
Dv (10) 52.1 µm
Dv (50) 101 µm
Dv (90) 190 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	0.01	88.0	38.93	350	98.63	1410	100.00
0.0600	0.00	15.6	1.23	105	52.94	420	98.86	1680	100.00
0.120	0.00	31.0	3.26	125	66.58	500	99.06	2000	100.00
0.240	0.00	37.0	4.24	149	78.37	590	99.32	2380	100.00
0.490	0.00	44.0	6.27	177	87.19	710	99.66	2830	100.00
0.980	0.00	53.0	10.63	210	93.18	840	99.89	3360	100.00
2.00	0.00	63.0	17.61	250	96.45	1000	100.00		
3.90	0.00	74.0	26.66	300	98.08	1190	100.00		

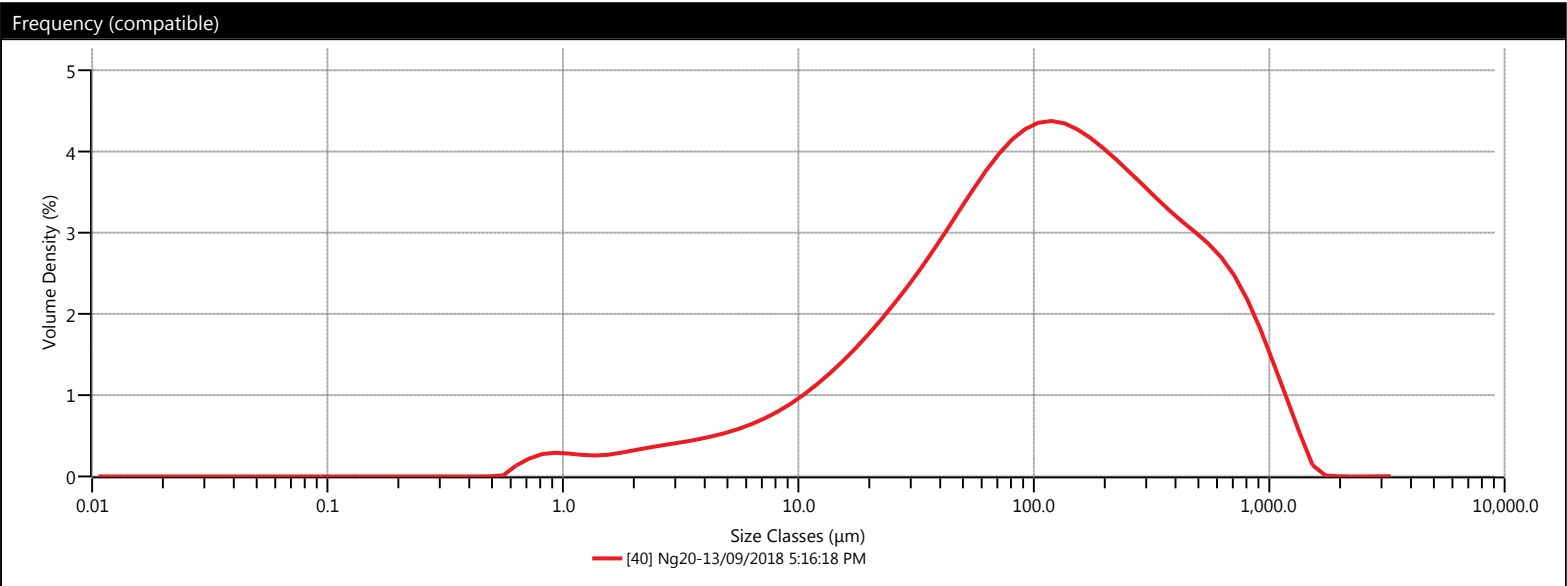
Analysis - Under

Measurement Details	
Sample Name	Ng20
SOP File Name	ERTH321 ash.msop
Lab Number	
Operator Name	instrument

Measurement Details	
Analysis Date Time	13/09/2018 5:16:18 PM
Measurement Date Time	13/09/2018 5:16:18 PM
Result Source	Measurement

Analysis	
Particle Name	Sediment
Particle Refractive Index	1.500
Particle Absorption Index	0.200
Dispersant Name	Water
Dispersant Refractive Index	1.330
Scattering Model	Mie
Analysis Model	General Purpose
Weighted Residual	0.24 %
Laser Obscuration	14.47 %

Result	
Concentration	0.0461 %
Span	5.129
Uniformity	1.513
Specific Surface Area	270.9 m²/kg
D [3,2]	22.1 µm
D [4,3]	217 µm
Dv (10)	13.5 µm
Dv (50)	113 µm
Dv (90)	592 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	6.43	88.0	42.99	350	79.46	1410	99.85
0.0600	0.00	15.6	11.26	105	47.96	420	83.32	1680	100.00
0.120	0.00	31.0	19.81	125	52.94	500	86.82	2000	100.00
0.240	0.00	37.0	22.84	149	57.92	590	89.94	2380	100.00
0.490	0.00	44.0	26.14	177	62.67	710	93.12	2830	100.00
0.980	0.76	53.0	30.12	210	67.22	840	95.64	3360	100.00
2.00	2.04	63.0	34.21	250	71.61	1000	97.70		
3.90	3.76	74.0	38.31	300	75.97	1190	99.09		

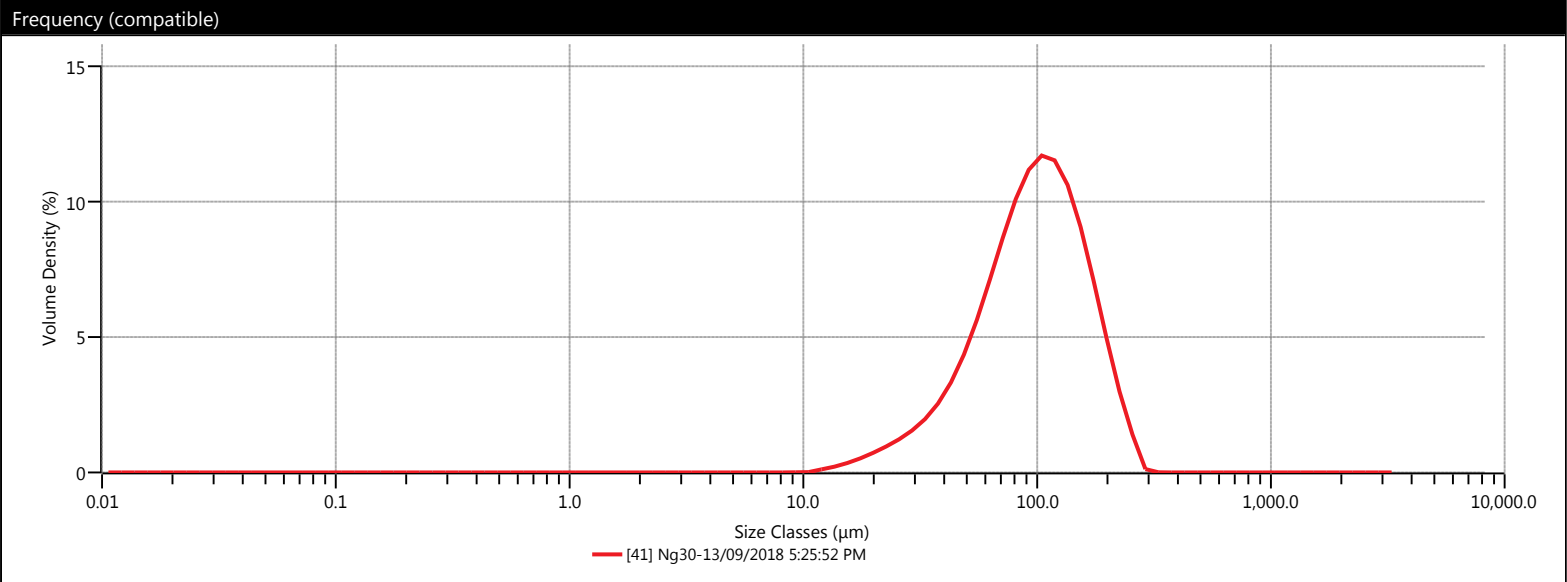
Analysis - Under

Measurement Details
Sample Name Ng30
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 5:25:52 PM
Measurement Date Time 13/09/2018 5:25:52 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.31 %
Laser Obscuration 2.88 %

Result
Concentration 0.0287 %
Span 1.370
Uniformity 0.419
Specific Surface Area 78.17 m²/kg
D [3,2] 76.8 µm
D [4,3] 105 µm
Dv (10) 43.2 µm
Dv (50) 97.6 µm
Dv (90) 177 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	0.00	88.0	42.42	350	100.00	1410	100.00
0.0600	0.00	15.6	0.43	105	55.60	420	100.00	1680	100.00
0.120	0.00	31.0	4.64	125	68.86	500	100.00	2000	100.00
0.240	0.00	37.0	7.06	149	80.82	590	100.00	2380	100.00
0.490	0.00	44.0	10.38	177	90.02	710	100.00	2830	100.00
0.980	0.00	53.0	15.58	210	96.22	840	100.00	3360	100.00
2.00	0.00	63.0	22.58	250	99.22	1000	100.00		
3.90	0.00	74.0	31.09	300	100.00	1190	100.00		

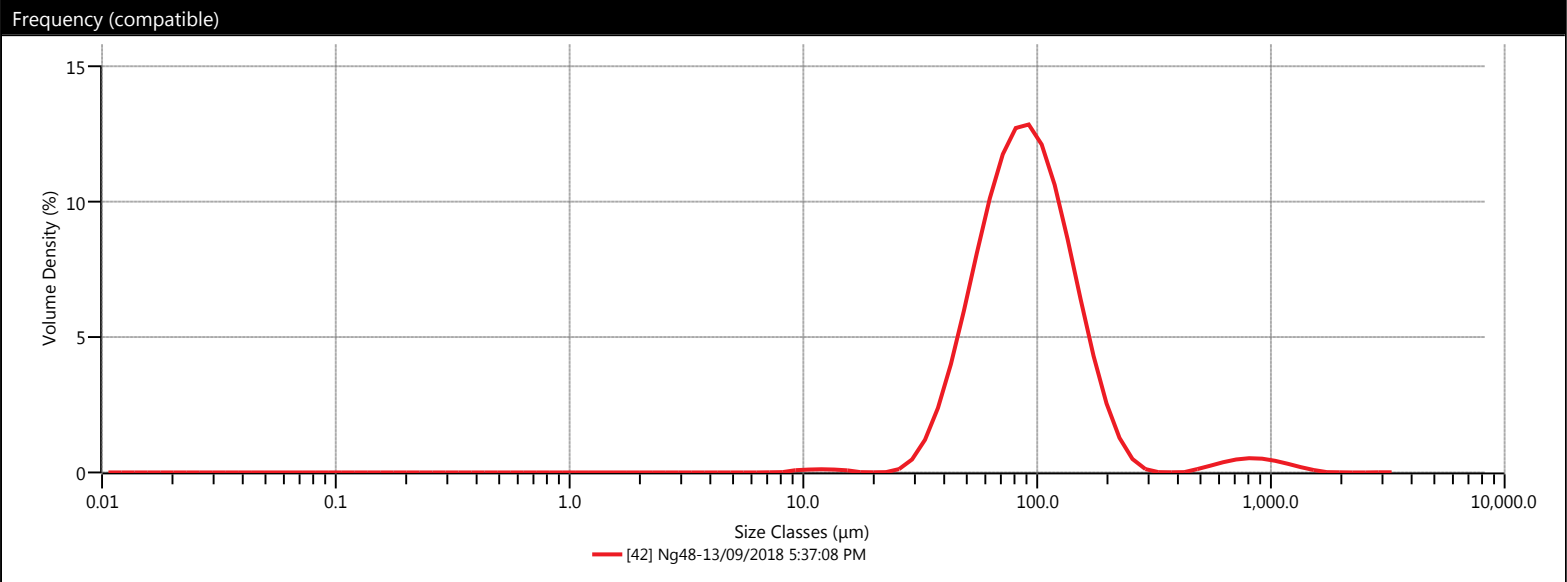
Analysis - Under

Measurement Details
Sample Name Ng48
SOP File Name ERTH321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 13/09/2018 5:37:08 PM
Measurement Date Time 13/09/2018 5:37:08 PM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.30 %
Laser Obscuration 3.23 %

Result
Concentration 0.0335 %
Span 1.284
Uniformity 0.598
Specific Surface Area 75.36 m²/kg
D [3,2] 79.6 µm
D [4,3] 117 µm
Dv (10) 49.1 µm
Dv (50) 88.6 µm
Dv (90) 163 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	0.00	88.0	49.38	350	97.27	1410	99.91
0.0600	0.00	15.6	0.38	105	63.96	420	97.27	1680	100.00
0.120	0.00	31.0	0.86	125	76.69	500	97.34	2000	100.00
0.240	0.00	37.0	2.54	149	86.25	590	97.59	2380	100.00
0.490	0.00	44.0	6.17	177	92.34	710	98.09	2830	100.00
0.980	0.00	53.0	13.25	210	95.69	840	98.65	3360	100.00
2.00	0.00	63.0	23.31	250	96.93	1000	99.22		
3.90	0.00	74.0	35.07	300	97.25	1190	99.65		

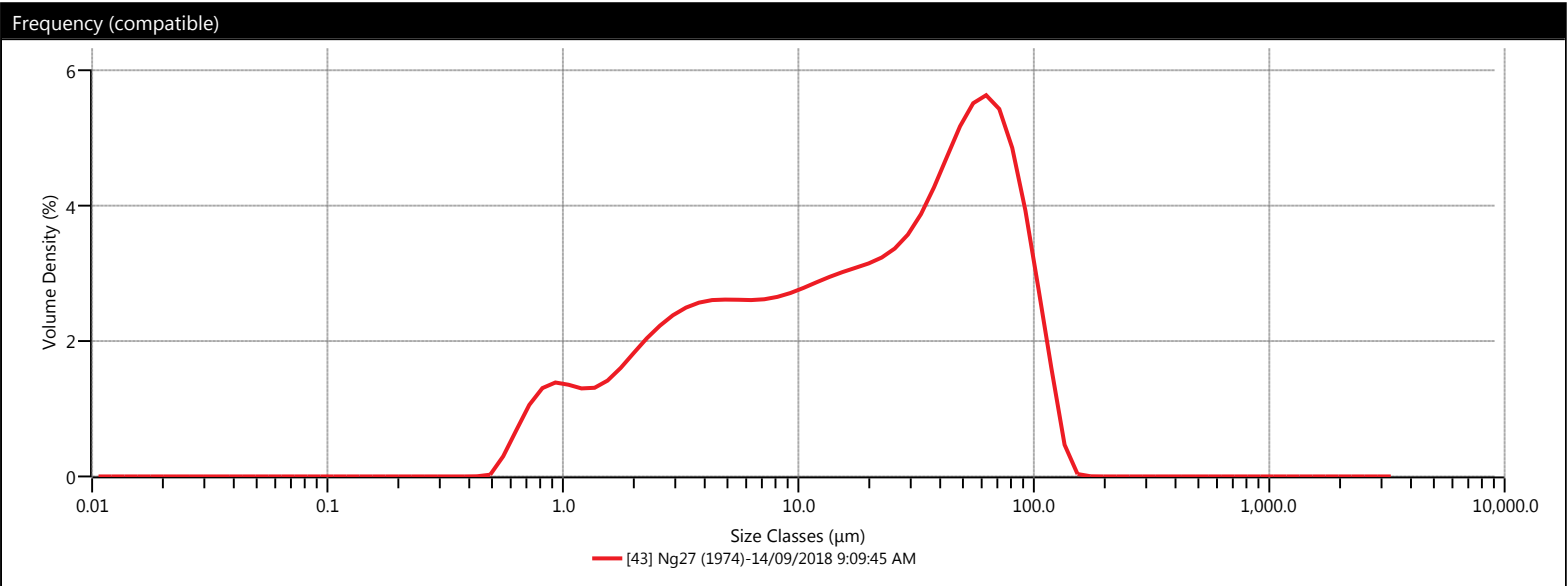
Analysis - Under

Measurement Details	
Sample Name	Ng27 (1974)
SOP File Name	ERTH321 ash.msop
Lab Number	
Operator Name	instrument

Measurement Details	
Analysis Date Time	14/09/2018 9:09:45 AM
Measurement Date Time	14/09/2018 9:09:45 AM
Result Source	Measurement

Analysis	
Particle Name	Sediment
Particle Refractive Index	1.500
Particle Absorption Index	0.200
Dispersant Name	Water
Dispersant Refractive Index	1.330
Scattering Model	Mie
Analysis Model	General Purpose
Weighted Residual	1.28 %
Laser Obscuration	15.27 %

Result	
Concentration	0.0124 %
Span	3.882
Uniformity	1.243
Specific Surface Area	1088 m ² /kg
D [3,2]	5.51 µm
D [4,3]	31.6 µm
Dv (10)	1.91 µm
Dv (50)	19.9 µm
Dv (90)	79.3 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	32.30	88.0	93.21	350	100.00	1410	100.00
0.0600	0.00	15.6	45.06	105	97.25	420	100.00	1680	100.00
0.120	0.00	31.0	59.66	125	99.53	500	100.00	2000	100.00
0.240	0.00	37.0	64.24	149	100.00	590	100.00	2380	100.00
0.490	0.00	44.0	69.34	177	100.00	710	100.00	2830	100.00
0.980	3.87	53.0	75.58	210	100.00	840	100.00	3360	100.00
2.00	10.53	63.0	81.88	250	100.00	1000	100.00		
3.90	20.49	74.0	87.70	300	100.00	1190	100.00		

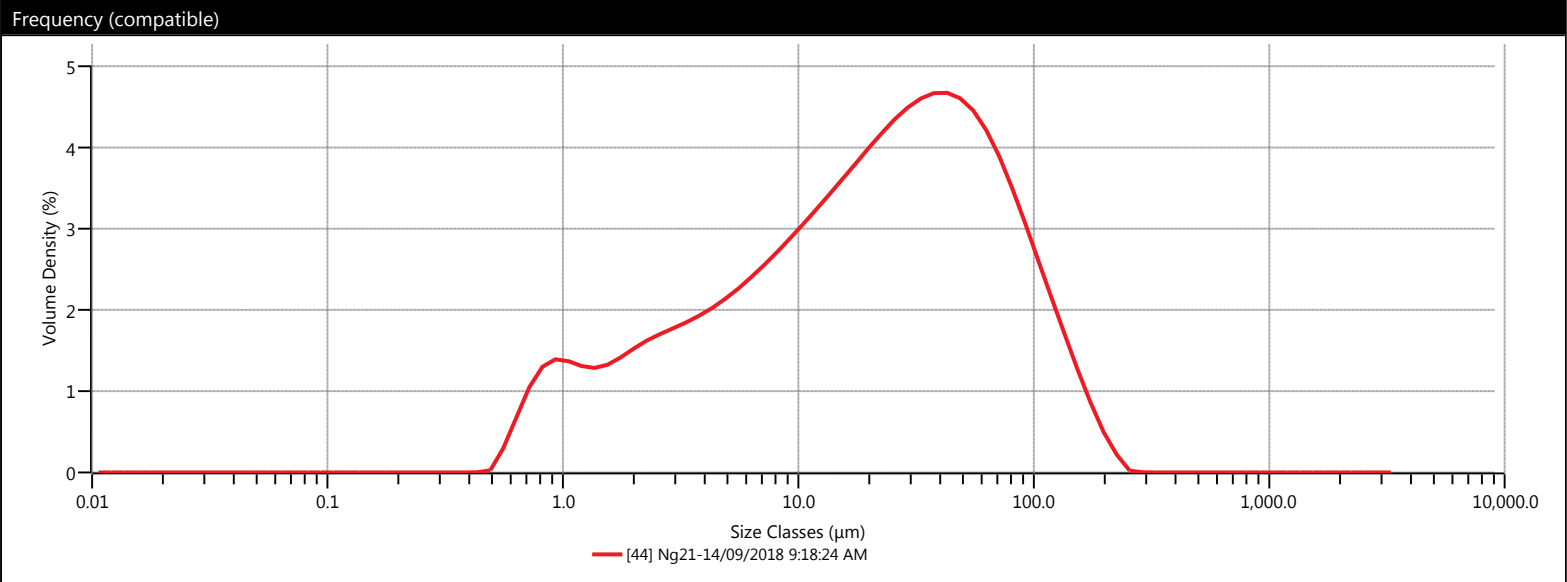
Analysis - Under

Measurement Details
Sample Name Ng21
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 14/09/2018 9:18:24 AM
Measurement Date Time 14/09/2018 9:18:24 AM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.86 %
Laser Obscuration 15.39 %

Result
Concentration 0.0133 %
Span 4.033
Uniformity 1.261
Specific Surface Area 1023 m ² /kg
D [3,2] 5.87 µm
D [4,3] 34.7 µm
Dv (10) 1.97 µm
Dv (50) 21.2 µm
Dv (90) 87.6 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	28.05	88.0	90.09	350	100.00	1410	100.00
0.0600	0.00	15.6	42.24	105	93.42	420	100.00	1680	100.00
0.120	0.00	31.0	60.72	125	96.05	500	100.00	2000	100.00
0.240	0.00	37.0	66.07	149	97.94	590	100.00	2380	100.00
0.490	0.00	44.0	71.36	177	99.14	710	100.00	2830	100.00
0.980	3.85	53.0	76.96	210	99.80	840	100.00	3360	100.00
2.00	10.17	63.0	81.89	250	100.00	1000	100.00		
3.90	17.77	74.0	86.11	300	100.00	1190	100.00		

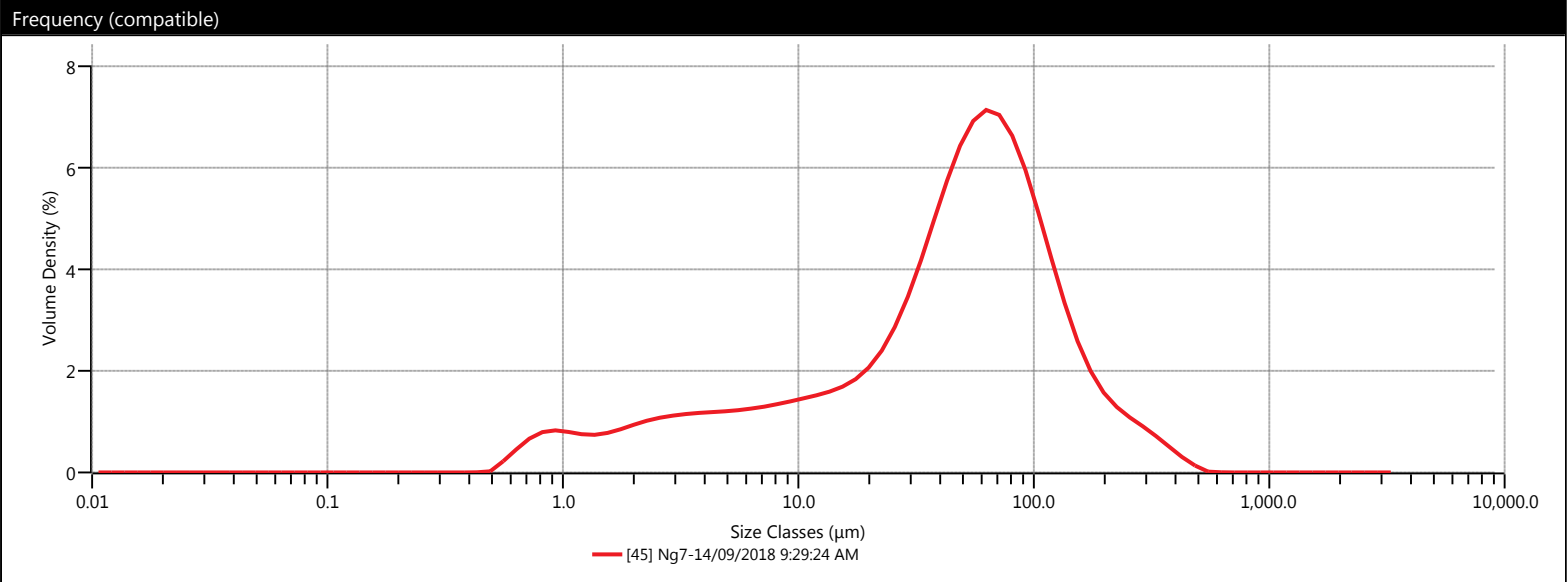
Analysis - Under

Measurement Details
Sample Name Ng7
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 14/09/2018 9:29:24 AM
Measurement Date Time 14/09/2018 9:29:24 AM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.45 %
Laser Obscuration 20.01 %

Result
Concentration 0.0285 %
Span 2.741
Uniformity 0.895
Specific Surface Area 642.2 m²/kg
D [3,2] 9.34 µm
D [4,3] 64.7 µm
Dv (10) 3.48 µm
Dv (50) 49.4 µm
Dv (90) 139 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	16.46	88.0	75.99	350	99.19	1410	100.00
0.0600	0.00	15.6	23.21	105	82.51	420	99.74	1680	100.00
0.120	0.00	31.0	34.19	125	87.66	500	99.97	2000	100.00
0.240	0.00	37.0	39.23	149	91.38	590	100.00	2380	100.00
0.490	0.00	44.0	45.32	177	93.96	710	100.00	2830	100.00
0.980	2.43	53.0	53.07	210	95.84	840	100.00	3360	100.00
2.00	6.13	63.0	61.01	250	97.25	1000	100.00		
3.90	10.88	74.0	68.48	300	98.43	1190	100.00		

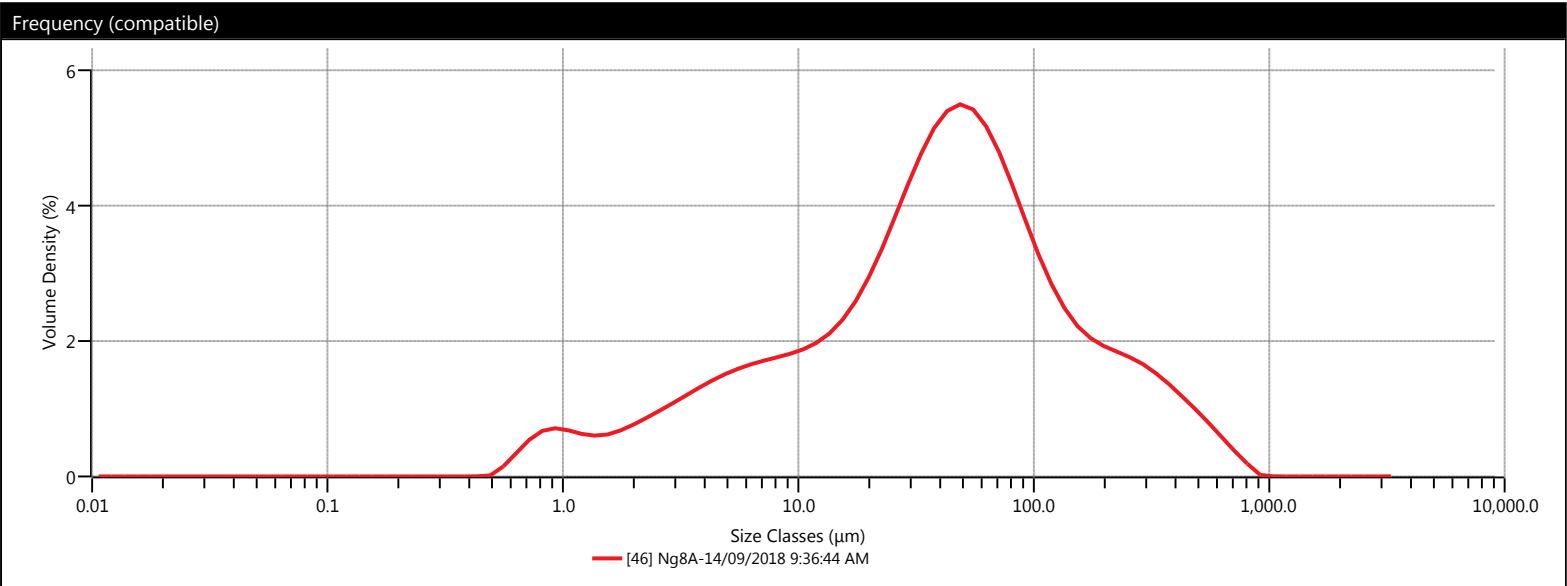
Analysis - Under

Measurement Details	
Sample Name	Ng8A
SOP File Name	ERTH321 ash.msop
Lab Number	
Operator Name	instrument

Measurement Details	
Analysis Date Time	14/09/2018 9:36:44 AM
Measurement Date Time	14/09/2018 9:36:44 AM
Result Source	Measurement

Analysis	
Particle Name	Sediment
Particle Refractive Index	1.500
Particle Absorption Index	0.200
Dispersant Name	Water
Dispersant Refractive Index	1.330
Scattering Model	Mie
Analysis Model	General Purpose
Weighted Residual	0.41 %
Laser Obscuration	14.97 %

Result	
Concentration	0.0218 %
Span	5.082
Uniformity	1.552
Specific Surface Area	600.1 m ² /kg
D [3,2]	10.0 µm
D [4,3]	81.7 µm
Dv (10)	4.10 µm
Dv (50)	41.6 µm
Dv (90)	216 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	16.67	88.0	74.75	350	95.36	1410	100.00
0.0600	0.00	15.6	25.51	105	78.89	420	96.93	1680	100.00
0.120	0.00	31.0	40.38	125	82.29	500	98.16	2000	100.00
0.240	0.00	37.0	45.99	149	85.10	590	99.06	2380	100.00
0.490	0.00	44.0	51.98	177	87.50	710	99.68	2830	100.00
0.980	1.97	53.0	58.64	210	89.68	840	99.97	3360	100.00
2.00	5.01	63.0	64.67	250	91.76	1000	100.00		
3.90	9.57	74.0	69.86	300	93.80	1190	100.00		

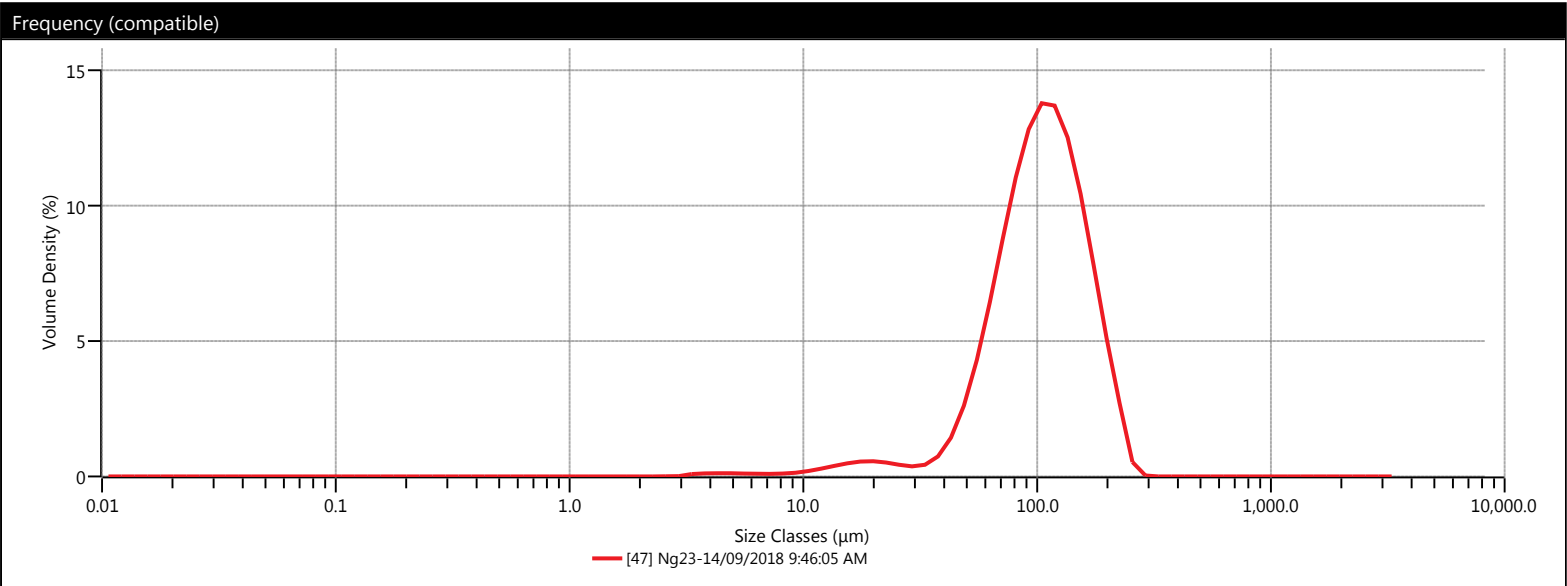
Analysis - Under

Measurement Details
Sample Name Ng23
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 14/09/2018 9:46:05 AM
Measurement Date Time 14/09/2018 9:46:05 AM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.42 %
Laser Obscuration 4.14 %

Result
Concentration 0.0409 %
Span 1.141
Uniformity 0.352
Specific Surface Area 79.22 m²/kg
D [3,2] 75.7 µm
D [4,3] 109 µm
Dv (10) 55.4 µm
Dv (50) 104 µm
Dv (90) 174 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	0.62	88.0	35.21	350	100.00	1410	100.00
0.0600	0.00	15.6	1.75	105	50.52	420	100.00	1680	100.00
0.120	0.00	31.0	3.93	125	66.25	500	100.00	2000	100.00
0.240	0.00	37.0	4.49	149	80.32	590	100.00	2380	100.00
0.490	0.00	44.0	5.70	177	90.73	710	100.00	2830	100.00
0.980	0.00	53.0	8.79	210	97.27	840	100.00	3360	100.00
2.00	0.00	63.0	14.55	250	99.80	1000	100.00		
3.90	0.14	74.0	22.85	300	100.00	1190	100.00		

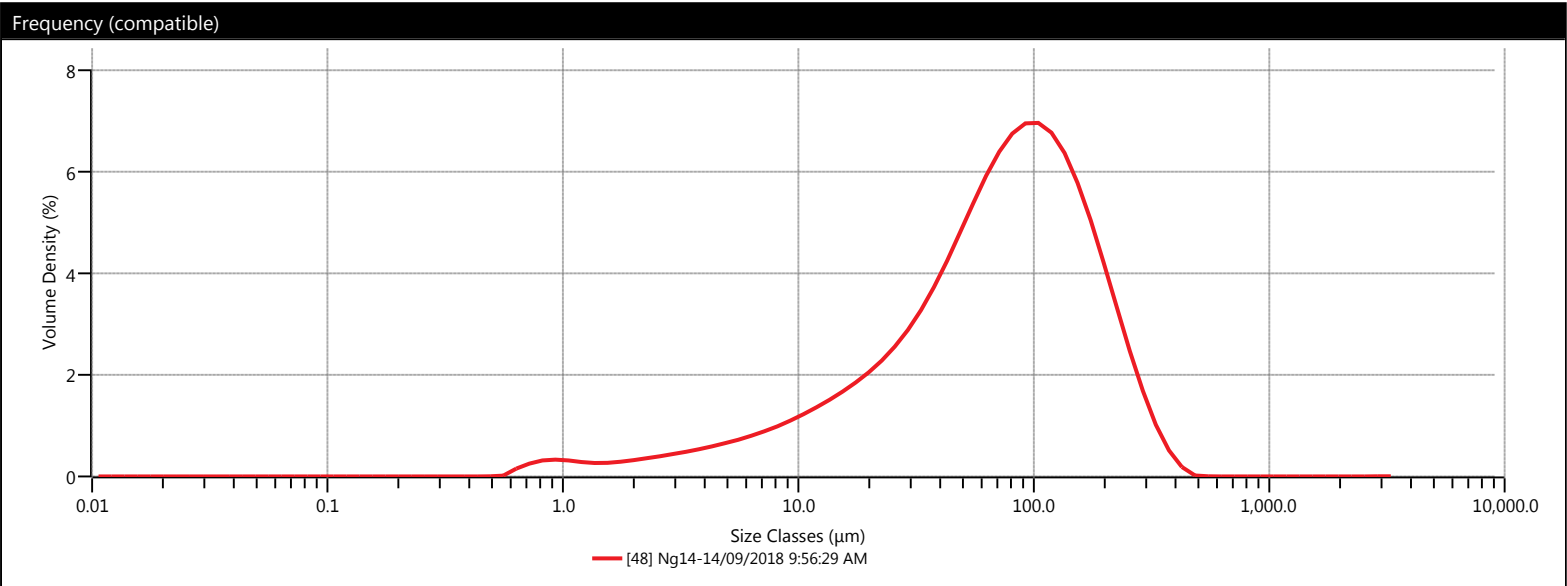
Analysis - Under

Measurement Details
Sample Name Ng14
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 14/09/2018 9:56:29 AM
Measurement Date Time 14/09/2018 9:56:29 AM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.25 %
Laser Obscuration 11.20 %

Result
Concentration 0.0301 %
Span 2.491
Uniformity 0.767
Specific Surface Area 315.0 m²/kg
D [3,2] 19.0 µm
D [4,3] 90.4 µm
Dv (10) 11.2 µm
Dv (50) 73.2 µm
Dv (90) 194 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	7.35	88.0	58.06	350	99.41	1410	100.00
0.0600	0.00	15.6	13.19	105	66.11	420	99.91	1680	100.00
0.120	0.00	31.0	23.37	125	73.91	500	100.00	2000	100.00
0.240	0.00	37.0	27.27	149	81.13	590	100.00	2380	100.00
0.490	0.00	44.0	31.80	177	87.27	710	100.00	2830	100.00
0.980	0.86	53.0	37.59	210	92.24	840	100.00	3360	100.00
2.00	2.20	63.0	43.90	250	95.82	1000	100.00		
3.90	4.06	74.0	50.45	300	98.26	1190	100.00		

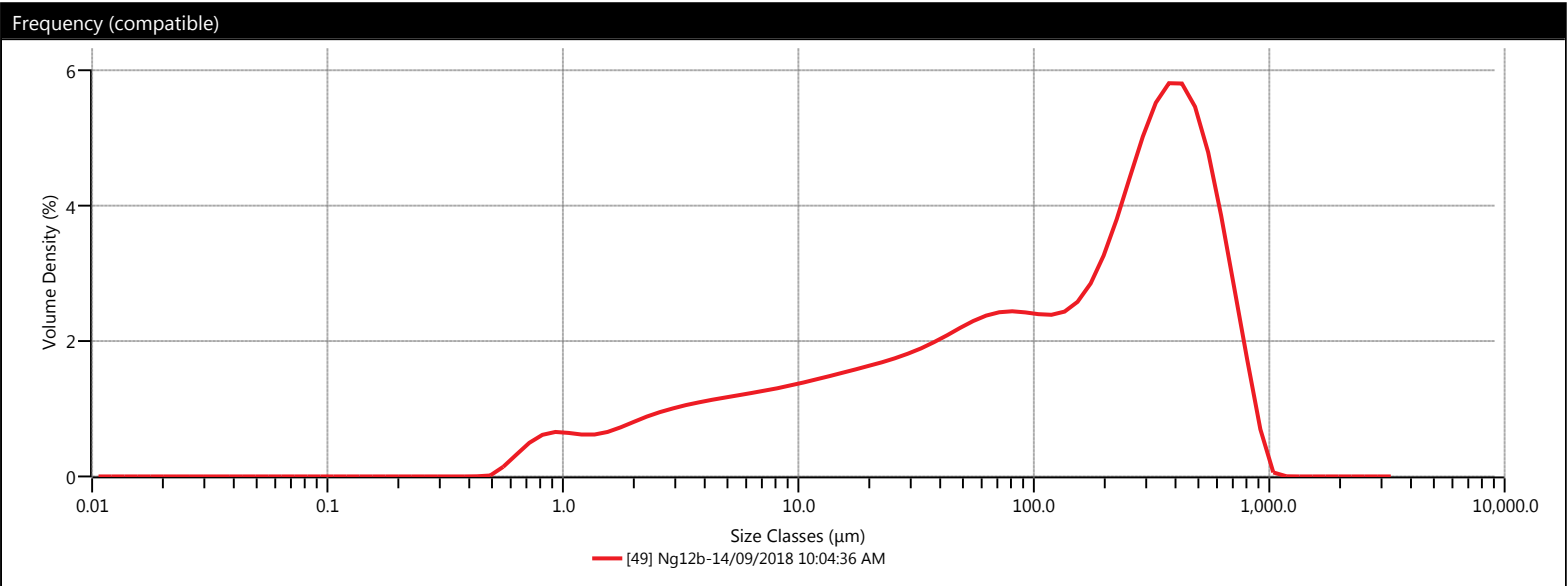
Analysis - Under

Measurement Details	
Sample Name	Ng12b
SOP File Name	ERTH321 ash.msop
Lab Number	
Operator Name	instrument

Measurement Details	
Analysis Date Time	14/09/2018 10:04:36 AM
Measurement Date Time	14/09/2018 10:04:36 AM
Result Source	Measurement

Analysis	
Particle Name	Sediment
Particle Refractive Index	1.500
Particle Absorption Index	0.200
Dispersant Name	Water
Dispersant Refractive Index	1.330
Scattering Model	Mie
Analysis Model	General Purpose
Weighted Residual	0.45 %
Laser Obscuration	16.39 %

Result	
Concentration	0.0283 %
Span	4.051
Uniformity	1.330
Specific Surface Area	514.1 m²/kg
D [3,2]	11.7 µm
D [4,3]	213 µm
Dv (10)	4.37 µm
Dv (50)	133 µm
Dv (90)	542 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	14.58	88.0	43.56	350	73.99	1410	100.00
0.0600	0.00	15.6	20.95	105	46.34	420	80.92	1680	100.00
0.120	0.00	31.0	28.48	125	49.06	500	87.35	2000	100.00
0.240	0.00	37.0	30.68	149	51.87	590	92.64	2380	100.00
0.490	0.00	44.0	32.99	177	54.90	710	96.86	2830	100.00
0.980	1.82	53.0	35.64	210	58.40	840	99.19	3360	100.00
2.00	4.91	63.0	38.27	250	62.87	1000	100.00		
3.90	9.16	74.0	40.80	300	68.51	1190	100.00		

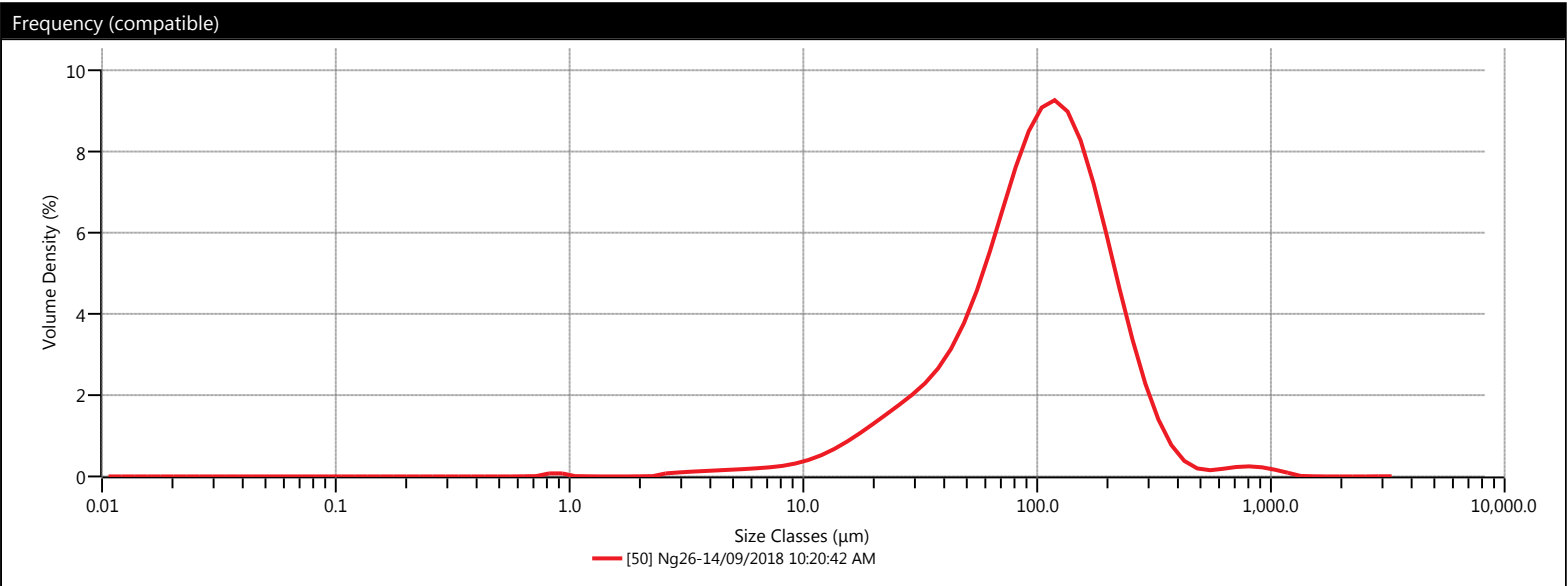
Analysis - Under

Measurement Details
Sample Name Ng26
SOP File Name ERT321 ash.msop
Lab Number
Operator Name instrument

Measurement Details
Analysis Date Time 14/09/2018 10:20:42 AM
Measurement Date Time 14/09/2018 10:20:42 AM
Result Source Measurement

Analysis
Particle Name Sediment
Particle Refractive Index 1.500
Particle Absorption Index 0.200
Dispersant Name Water
Dispersant Refractive Index 1.330
Scattering Model Mie
Analysis Model General Purpose
Weighted Residual 0.27 %
Laser Obscuration 9.03 %

Result
Concentration 0.0660 %
Span 1.888
Uniformity 0.629
Specific Surface Area 110.6 m²/kg
D [3,2] 54.2 µm
D [4,3] 123 µm
Dv (10) 30.7 µm
Dv (50) 103 µm
Dv (90) 224 µm



Result									
Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under	Size (µm)	% Volume Under
0.0500	0.00	7.80	1.28	88.0	41.31	350	97.79	1410	100.00
0.0600	0.00	15.6	3.48	105	51.40	420	98.58	1680	100.00
0.120	0.00	31.0	10.11	125	61.92	500	98.88	2000	100.00
0.240	0.00	37.0	12.85	149	72.13	590	99.04	2380	100.00
0.490	0.00	44.0	16.13	177	80.91	710	99.29	2830	100.00
0.980	0.13	53.0	20.66	210	87.96	840	99.56	3360	100.00
2.00	0.13	63.0	26.24	250	92.92	1000	99.81		
3.90	0.46	74.0	32.74	300	96.22	1190	99.96		