



PDF
Complete

Your complimentary
use period has ended.
Thank you for using
PDF Complete.

micromeritics®

CS INSTRUMENT CORPORATION

al: 825

Port: 2/1

Page 1

[Click Here to upgrade to
Unlimited Pages and Expanded Features](#)

Operator: yv
Submitter: ruby
File: C:\9500\DATA\000-155.SMP

LP Analysis Time: 11/12/2008 18:48:16
HP Analysis Time: 12/12/2008 10:33:51
Report Time: 12/12/2008 15:46:47

Sample Weight: 2.0700 g
Correction Type: Formula
Show Neg. Int: No

Summary Report

Penetrometer parameters

Penetrometer:	#s/n - (09) 5 Bulb, 1.131 Stem, Solid		
Pen. Constant:	22.065 $\mu\text{L/pF}$	Pen. Weight:	60.3400 g
Stem Volume:	1.1310 mL	Max. Head Pressure:	0.030682 MPa
Pen. Volume:	6.8500 mL	Assembly Weight:	134.5100 g

Hg Parameters

Adv. Contact Angle:	130.000 degrees	Rec. Contact Angle:	130.000 degrees
Hg Surface Tension:	485.000 dynes/cm	Hg Density:	13.5335 g/mL

User Parameters

Param 1:	0.000	Param 2:	0.000	Param 3:	0.000
----------	-------	----------	-------	----------	-------

Low Pressure:

Evacuation Pressure:	100 μmHg
Evacuation Time:	5 mins
Mercury Filling Pressure:	0.0042 MPa
Equilibration Time:	20 secs

High Pressure:

Equilibration Time:	60 secs
---------------------	---------

Blank Correction by Formula

(From Pressure 0.0007 to 413.6854 MPa)

Intrusion Data Summary

Total Intrusion Volume =	0.2974 mL/g
Total Pore Area =	5.171 m^2/g
Median Pore Diameter (Volume) =	1.2538 μm
Median Pore Diameter (Area) =	0.0300 μm
Average Pore Diameter (4V/A) =	0.2301 μm
Apparent (skeletal) Density =	2.2825 g/mL
Porosity =	40.4336 %
Stem Volume Used =	55 %



PDF
Complete

Your complimentary
use period has ended.
Thank you for using
PDF Complete.

micromeritics®

CS INSTRUMENT CORPORATION

al: 825

Port: 2/1

Page 2

[Click Here to upgrade to
Unlimited Pages and Expanded Features](#)

Operator: yv
Submitter: ruby
File: C:\9500\DATA\000-155.SMP

LP Analysis Time: 11/12/2008 18:48:16
HP Analysis Time: 12/12/2008 10:33:51
Report Time: 12/12/2008 15:46:47

Sample Weight: 2.0700 g
Correction Type: Formula
Show Neg. Int: No

Tabular Report

Pressure (MPa)	Pore Diameter (μm)	Cumulative Pore Volume (mL/g)	dV/dD Pore Volume (mL/g/ μm)	dV/dlogD Pore Volume (mL/g)
0.0042	299.2455	0.0000	0.000×10^0	0.000×10^0
0.0095	130.7710	0.0051	3.051×10^{-5}	1.430×10^{-2}
0.0111	111.9247	0.0060	4.363×10^{-5}	1.217×10^{-2}
0.0129	96.7625	0.0070	7.026×10^{-5}	1.685×10^{-2}
0.0148	84.0319	0.0102	2.466×10^{-4}	5.125×10^{-2}
0.0171	72.8092	0.0158	5.046×10^{-4}	9.096×10^{-2}
0.0198	62.8572	0.0178	1.972×10^{-4}	3.074×10^{-2}
0.0230	54.2115	0.0205	3.091×10^{-4}	4.159×10^{-2}
0.0267	46.7685	0.0229	3.264×10^{-4}	3.788×10^{-2}
0.0315	39.6093	0.0256	3.811×10^{-4}	3.782×10^{-2}
0.0367	34.0172	0.0283	4.746×10^{-4}	4.015×10^{-2}
0.0427	29.1790	0.0326	8.962×10^{-4}	6.508×10^{-2}
0.0497	25.0999	0.0361	8.568×10^{-4}	5.344×10^{-2}
0.0578	21.5654	0.0392	8.830×10^{-4}	4.735×10^{-2}
0.0677	18.4279	0.0435	1.352×10^{-3}	6.213×10^{-2}
0.0789	15.8021	0.0466	1.210×10^{-3}	4.759×10^{-2}
0.0921	13.5452	0.0498	1.391×10^{-3}	4.691×10^{-2}
0.1075	11.6028	0.0528	1.530×10^{-3}	4.421×10^{-2}
0.1253	9.9522	0.0558	1.868×10^{-3}	4.627×10^{-2}
0.1470	8.4806	0.0589	2.108×10^{-3}	4.465×10^{-2}
0.1716	7.2675	0.0623	2.727×10^{-3}	4.934×10^{-2}
0.2002	6.2299	0.0655	3.152×10^{-3}	4.889×10^{-2}
0.2472	5.0443	0.0678	1.882×10^{-3}	2.434×10^{-2}
0.3173	3.9305	0.0734	5.048×10^{-3}	5.189×10^{-2}
0.4026	3.0971	0.0801	8.052×10^{-3}	6.484×10^{-2}
0.5202	2.3972	0.0897	1.376×10^{-2}	8.654×10^{-2}
0.6697	1.8622	0.1039	2.649×10^{-2}	1.292×10^{-1}
0.8524	1.4629	0.1285	6.173×10^{-2}	2.352×10^{-1}
1.0921	1.1419	0.1623	1.052×10^{-1}	3.140×10^{-1}
1.3935	0.8949	0.1903	1.133×10^{-1}	2.643×10^{-1}
1.7860	0.6982	0.2087	9.380×10^{-2}	1.712×10^{-1}
2.2767	0.5477	0.2214	8.384×10^{-2}	1.197×10^{-1}
2.9101	0.4285	0.2311	8.199×10^{-2}	9.170×10^{-2}
3.7158	0.3356	0.2397	9.209×10^{-2}	8.061×10^{-2}



[Click Here to upgrade to
Unlimited Pages and Expanded Features](#)

Operator: yv
Submitter: ruby
File: C:\9500\DATA\000-155.SMP

LP Analysis Time: 11/12/2008 18:48:16
HP Analysis Time: 12/12/2008 10:33:51
Report Time: 12/12/2008 15:46:47

Sample Weight: 2.0700 g
Correction Type: Formula
Show Neg. Int: No

Tabular Report

Pressure (MPa)	Pore Diameter (μm)	Cumulative Pore Volume (mL/g)	dV/dD Pore Volume (mL/g/ μm)	dV/dlogD Pore Volume (mL/g)
4.7488	0.2626	0.2476	1.076×10^{-1}	7.376×10^{-2}
6.0616	0.2057	0.2549	1.288×10^{-1}	6.908×10^{-2}
7.7353	0.1612	0.2613	1.448×10^{-1}	6.086×10^{-2}
9.8749	0.1263	0.2670	1.634×10^{-1}	5.381×10^{-2}
12.6052	0.0989	0.2720	1.824×10^{-1}	4.705×10^{-2}
16.0873	0.0775	0.2763	2.019×10^{-1}	4.080×10^{-2}
20.5263	0.0608	0.2800	2.213×10^{-1}	3.506×10^{-2}
26.1866	0.0476	0.2833	2.516×10^{-1}	3.123×10^{-2}
33.4301	0.0373	0.2862	2.789×10^{-1}	2.713×10^{-2}
42.6642	0.0292	0.2888	3.128×10^{-1}	2.384×10^{-2}
54.4531	0.0229	0.2908	3.292×10^{-1}	1.966×10^{-2}
69.4908	0.0179	0.2926	3.501×10^{-1}	1.638×10^{-2}
88.6910	0.0141	0.2940	3.642×10^{-1}	1.335×10^{-2}
113.1720	0.0110	0.2949	2.936×10^{-1}	8.435×10^{-3}
144.4214	0.0086	0.2960	4.500×10^{-1}	1.013×10^{-2}
184.3307	0.0068	0.2968	4.661×10^{-1}	8.223×10^{-3}
219.9817	0.0057	0.2974	5.153×10^{-1}	7.357×10^{-3}
187.0308	0.0067	0.2958	1.590×10^0	2.253×10^{-2}
147.7423	0.0084	0.2958	0.000×10^0	0.000×10^0
116.6441	0.0107	0.2958	0.000×10^0	0.000×10^0
92.1011	0.0135	0.2958	0.000×10^0	0.000×10^0
72.7141	0.0171	0.2958	0.000×10^0	0.000×10^0
57.3941	0.0217	0.2958	0.000×10^0	0.000×10^0
45.3749	0.0275	0.2958	0.000×10^0	0.000×10^0
35.7646	0.0349	0.2958	0.000×10^0	0.000×10^0
28.2285	0.0442	0.2958	0.000×10^0	0.000×10^0
22.3470	0.0558	0.2952	5.367×10^{-2}	6.149×10^{-3}
17.6615	0.0706	0.2941	7.020×10^{-2}	1.017×10^{-2}
13.8920	0.0898	0.2927	7.304×10^{-2}	1.342×10^{-2}
10.9823	0.1135	0.2911	6.896×10^{-2}	1.607×10^{-2}
8.6329	0.1444	0.2892	6.249×10^{-2}	1.847×10^{-2}
6.8396	0.1823	0.2872	5.320×10^{-2}	1.993×10^{-2}
5.4011	0.2309	0.2857	2.901×10^{-2}	1.374×10^{-2}
4.2719	0.2919	0.2839	3.084×10^{-2}	1.848×10^{-2}



PDF
Complete

Your complimentary
use period has ended.
Thank you for using
PDF Complete.

micromeritics®

CS INSTRUMENT CORPORATION

al: 825

Port: 2/1

Page 4

[Click Here to upgrade to
Unlimited Pages and Expanded Features](#)

Operator: yv
Submitter: ruby
File: C:\9500\DATA\000-155.SMP

LP Analysis Time: 11/12/2008 18:48:16
HP Analysis Time: 12/12/2008 10:33:51
Report Time: 12/12/2008 15:46:47

Sample Weight: 2.0700 g
Correction Type: Formula
Show Neg. Int: No

Tabular Report

Pressure (MPa)	Pore Diameter (μm)	Cumulative Pore Volume (mL/g)	dV/dD Pore Volume (mL/g/ μm)	dV/dlogD Pore Volume (mL/g)
3.3809	0.3688	0.2816	2.951×10^{-2}	2.234×10^{-2}
2.6688	0.4673	0.2788	2.821×10^{-2}	2.703×10^{-2}
2.1081	0.5915	0.2755	2.667×10^{-2}	3.236×10^{-2}
1.6679	0.7477	0.2715	2.542×10^{-2}	3.902×10^{-2}
1.3194	0.9451	0.2669	2.359×10^{-2}	4.577×10^{-2}
1.0407	1.1983	0.2616	2.075×10^{-2}	5.097×10^{-2}
0.8238	1.5136	0.2560	1.771×10^{-2}	5.503×10^{-2}
0.6513	1.9146	0.2505	1.369×10^{-2}	5.378×10^{-2}
0.5108	2.4413	0.2455	9.558×10^{-3}	4.770×10^{-2}
0.4089	3.0499	0.2409	7.655×10^{-3}	4.820×10^{-2}
0.3246	3.8415	0.2364	5.592×10^{-3}	4.417×10^{-2}
0.2591	4.8123	0.2314	5.137×10^{-3}	5.096×10^{-2}
0.3116	4.0024	0.2314	0.000×10^0	0.000×10^0
0.3937	3.1673	0.2314	0.000×10^0	0.000×10^0
0.4982	2.5030	0.2317	4.616×10^{-4}	2.999×10^{-3}
0.6305	1.9777	0.2325	1.477×10^{-3}	7.583×10^{-3}
0.8045	1.5500	0.2340	3.501×10^{-3}	1.415×10^{-2}
1.0211	1.2212	0.2365	7.660×10^{-3}	2.432×10^{-2}
1.2928	0.9646	0.2402	1.418×10^{-2}	3.552×10^{-2}
1.6490	0.7562	0.2446	2.122×10^{-2}	4.184×10^{-2}
2.0840	0.5984	0.2495	3.108×10^{-2}	4.825×10^{-2}
2.6462	0.4712	0.2548	4.201×10^{-2}	5.148×10^{-2}
3.3569	0.3715	0.2604	5.528×10^{-2}	5.339×10^{-2}
4.2529	0.2932	0.2658	6.917×10^{-2}	5.268×10^{-2}
5.3875	0.2315	0.2708	8.117×10^{-2}	4.880×10^{-2}
6.8222	0.1828	0.2752	8.999×10^{-2}	4.272×10^{-2}
8.6492	0.1442	0.2789	9.735×10^{-2}	3.648×10^{-2}
10.9636	0.1137	0.2821	1.043×10^{-1}	3.082×10^{-2}
13.8870	0.0898	0.2848	1.114×10^{-1}	2.599×10^{-2}
17.5887	0.0709	0.2870	1.180×10^{-1}	2.173×10^{-2}
22.2799	0.0560	0.2890	1.334×10^{-1}	1.939×10^{-2}
28.2189	0.0442	0.2908	1.532×10^{-1}	1.758×10^{-2}
35.7577	0.0349	0.2924	1.685×10^{-1}	1.527×10^{-2}
45.2881	0.0275	0.2937	1.814×10^{-1}	1.297×10^{-2}



PDF
Complete

Your complimentary
use period has ended.
Thank you for using
PDF Complete.

micromeritics®

CS INSTRUMENT CORPORATION

al: 825

Port: 2/1

Page 5

[Click Here to upgrade to
Unlimited Pages and Expanded Features](#)

Operator: yv
Submitter: ruby
File: C:\9500\DATA\000-155.SMP

LP Analysis Time: 11/12/2008 18:48:16
HP Analysis Time: 12/12/2008 10:33:51
Report Time: 12/12/2008 15:46:47

Sample Weight: 2.0700 g
Correction Type: Formula
Show Neg. Int: No

Tabular Report

Pressure (MPa)	Pore Diameter (μm)	Cumulative Pore Volume (mL/g)	dV/dD Pore Volume (mL/g/ μm)	dV/dlogD Pore Volume (mL/g)
57.3692	0.0217	0.2948	1.867×10^{-1}	1.054×10^{-2}
72.6629	0.0172	0.2954	1.431×10^{-1}	6.377×10^{-3}
92.0549	0.0135	0.2960	1.534×10^{-1}	5.399×10^{-3}
116.6103	0.0107	0.2963	9.368×10^{-2}	2.602×10^{-3}
147.7077	0.0084	0.2963	0.000×10^0	0.000×10^0
187.1192	0.0067	0.2963	0.000×10^0	0.000×10^0
219.9813	0.0057	0.2963	0.000×10^0	0.000×10^0



PDF
Complete

Your complimentary
use period has ended.
Thank you for using
PDF Complete.

micromeritics®

CS INSTRUMENT CORPORATION

al: 825

Port: 2/1

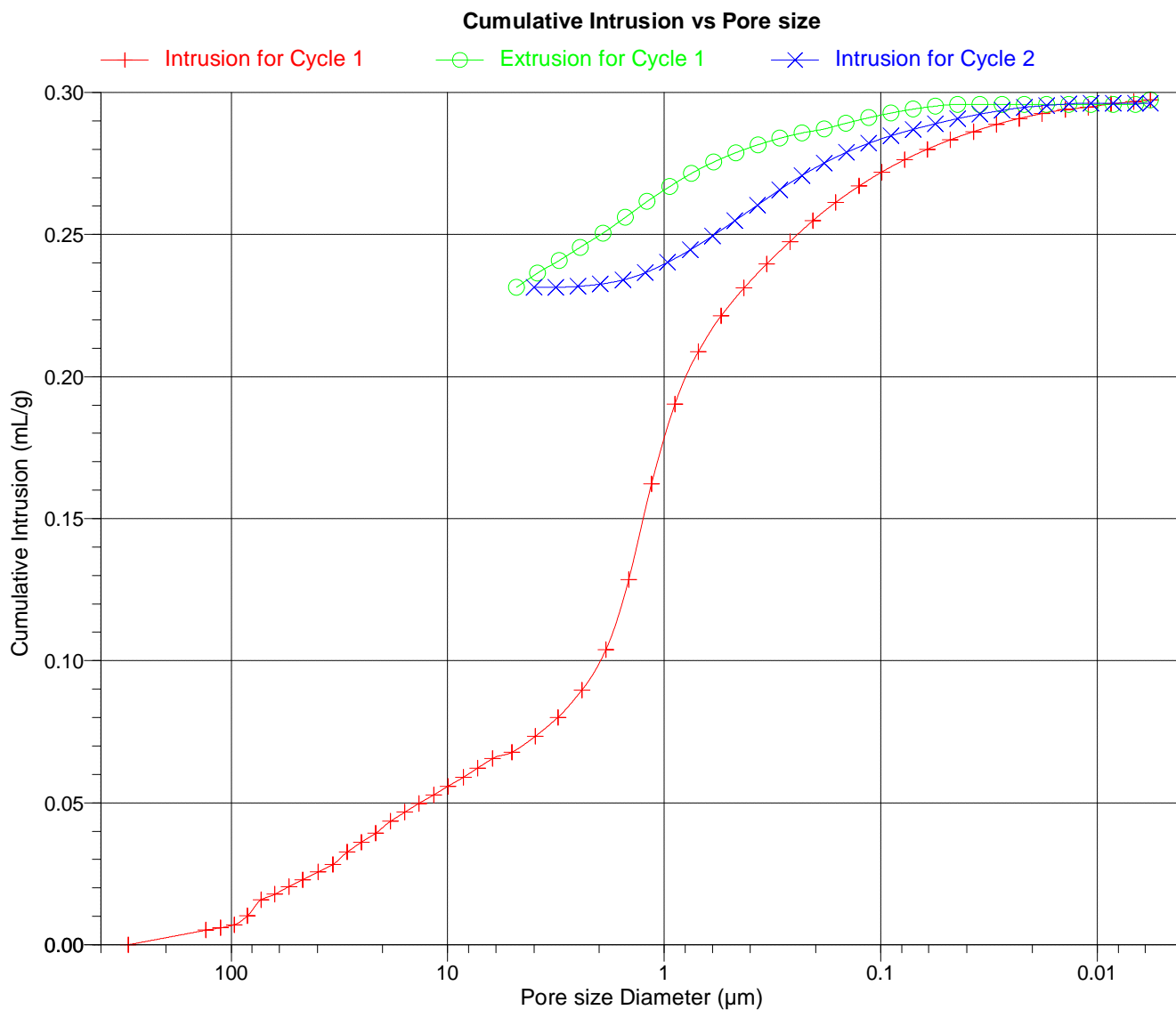
Page 6

[Click Here to upgrade to
Unlimited Pages and Expanded Features](#)

Operator: yv
Submitter: ruby
File: C:\9500\DATA\000-155.SMP

LP Analysis Time: 11/12/2008 18:48:16
HP Analysis Time: 12/12/2008 10:33:51
Report Time: 12/12/2008 15:46:47

Sample Weight: 2.0700 g
Correction Type: Formula
Show Neg. Int: No





PDF
Complete

Your complimentary
use period has ended.
Thank you for using
PDF Complete.

micromeritics®

CS INSTRUMENT CORPORATION

al: 825

Port: 2/1

Page 7

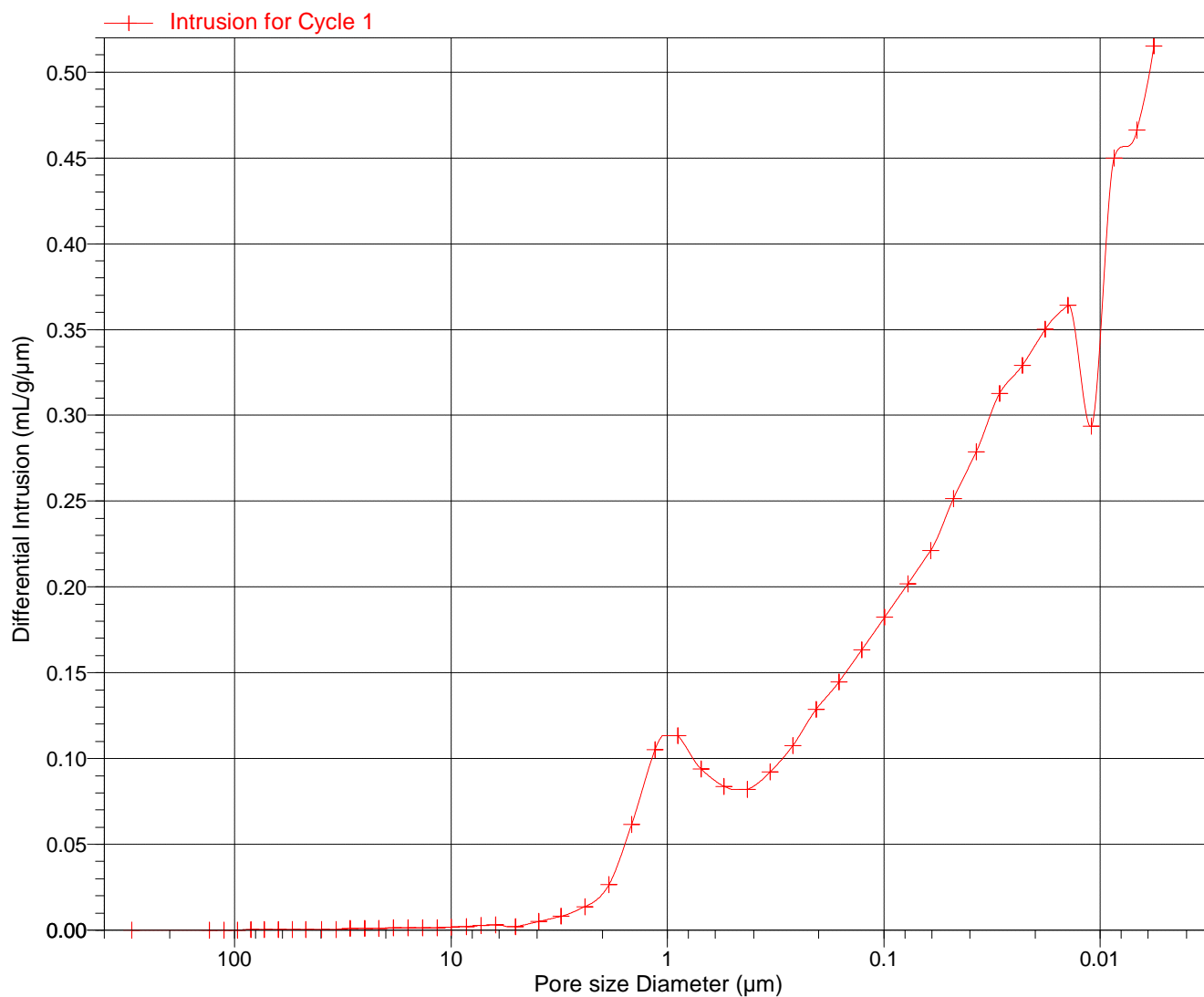
[Click Here to upgrade to
Unlimited Pages and Expanded Features](#)

Operator: yv
Submitter: ruby
File: C:\9500\DATA\000-155.SMP

LP Analysis Time: 11/12/2008 18:48:16
HP Analysis Time: 12/12/2008 10:33:51
Report Time: 12/12/2008 15:46:47

Sample Weight: 2.0700 g
Correction Type: Formula
Show Neg. Int: No

Differential Intrusion vs Pore size



[Click Here to upgrade to Unlimited Pages and Expanded Features](#)

Operator: yv
Submitter: ruby
File: C:\9500\DATA\000-155.SMP

LP Analysis Time: 11/12/2008 18:48:16
HP Analysis Time: 12/12/2008 10:33:51
Report Time: 12/12/2008 15:46:47

Sample Weight: 2.0700 g
Correction Type: Formula
Show Neg. Int: No

Log Differential Intrusion vs Pore size

