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Sample: PS3
Operator:
Submitter:
File: C:\2020\DATA\PS3.SMP

Started:	11/22/2011 11:49:12AM	Analysis Adsorptive:	N2
Completed:	11/22/2011 5:10:47PM	Analysis Bath Temp.:	-195.475 °C
Report Time:	3/5/2012 1:50:41PM	Thermal Correction:	No
Sample Mass:	0.2400 g	Warm Free Space:	15.4967 cm^3 Measured
Cold Free Space:	46.0606 cm^3	Equilibration Interval:	5 s
Low Pressure Dose:	None	Automatic Degas:	Yes

Summary Report

Surface Area

Single point surface area at P/Po = 0.314100945:	29.0717 m^2/g
BET Surface Area:	29.3361 m^2/g
BJH Adsorption cumulative surface area of pores between 17.000 Å and 3000.000 Å diameter:	28.229 m^2/g
BJH Desorption cumulative surface area of pores between 17.000 Å and 3000.000 Å diameter:	31.8426 m^2/g

Pore Volume

Single point adsorption total pore volume of pores less than 9.544 Å diameter at P/Po = 0.011134608:	0.007509 cm^3/g
BJH Adsorption cumulative volume of pores between 17.000 Å and 3000.000 Å diameter:	0.217574 cm^3/g
BJH Desorption cumulative volume of pores between 17.000 Å and 3000.000 Å diameter:	0.217804 cm^3/g

Pore Size

Adsorption average pore width (4V/A by BET):	10.2379 Å
BJH Adsorption average pore diameter (4V/A):	308.294 Å
BJH Desorption average pore diameter (4V/A):	273.601 Å

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Equilibration Interval: 5 s
Automatic Degas: Yes

Isotherm Tabular Report

Relative Pressure (P/Po)	Absolute Pressure (mmHg)	Quantity Adsorbed (cm³/g STP)	Elapsed Time (h:min)	Saturation Pressure (mmHg)
			01:24	789.770264
0.011134608	8.792478	4.8542	01:40	
0.057130960	45.112801	6.3624	01:42	
0.095857926	75.691696	7.0182	01:44	
0.140157979	110.671043	7.6321	01:45	
0.183655847	145.014984	8.1801	01:47	
0.226424743	178.783722	8.7012	01:48	
0.270613467	213.670929	9.2234	01:50	
0.314100945	248.005463	9.7365	01:51	
0.357119917	281.966827	10.2486	01:53	
0.400472001	316.192871	10.7778	01:54	
0.444827875	351.210815	11.3430	01:55	
0.489412292	386.404968	11.9401	01:57	
0.533505838	421.214172	12.5968	01:58	
0.578199750	456.492493	13.3265	02:00	
0.622377139	491.366272	14.1512	02:01	
0.666983491	526.573181	15.1502	02:03	
0.711509471	561.715332	16.3631	02:05	
0.755603378	596.515076	17.9379	02:07	
0.799706344	631.320679	20.1994	02:09	
0.822201006	649.066833	21.8046	02:11	
0.842787230	665.305786	23.6948	02:13	
0.863637771	681.746460	26.1376	02:16	
0.883883116	697.708496	29.5914	02:19	
0.905322436	714.605469	34.8684	02:23	
0.925871926	730.792053	42.4798	02:28	
0.946513586	747.036011	54.3680	02:35	
0.963969818	760.763916	71.9657	02:42	
0.987496347	779.085083	141.8279	03:16	
0.966870503	762.783997	136.2769	03:20	
			03:25	788.883911
0.953694346	752.354126	100.3155	03:41	
0.926732644	731.084473	57.5133	04:03	
0.905630560	714.437378	45.4249	04:12	
0.886524750	699.365112	38.0254	04:17	
0.866816391	683.817505	32.1808	04:22	
0.842414597	664.567322	27.1374	04:26	
0.822964727	649.223633	24.2924	04:29	
0.801104117	631.978149	22.0153	04:31	
0.756302440	596.634827	19.0023	04:34	
0.712822689	562.334351	17.1350	04:36	
0.668397721	527.288208	15.7729	04:37	
0.623094614	491.549316	14.7276	04:39	
0.578496572	456.366638	13.8811	04:41	
0.533110371	420.562195	13.1419	04:42	
0.488627531	385.470398	12.5041	04:43	
0.444296644	350.498474	11.8899	04:45	
0.399618602	315.252686	11.3003	04:46	
0.356476799	281.218811	10.7625	04:48	

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Low Pressure Dose: None

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Analysis Bath Temp.: -195.475 °C
Thermal Correction: No
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Equilibration Interval: 5 s
Automatic Degas: Yes

Isotherm Tabular Report

Relative Pressure (P/Po)	Absolute Pressure (mmHg)	Quantity Adsorbed (cm³/g STP)	Elapsed Time (h:min)	Saturation Pressure (mmHg)
0.313055384	246.964355	10.2428	04:49	
0.269906385	212.924805	9.7279	04:51	
0.226638664	178.791595	9.2054	04:53	
0.183334095	144.629318	8.6717	04:55	
0.140136316	110.551285	8.1013	04:56	
0.096809059	76.371109	7.4641	04:59	
0.053352818	42.089180	6.6504	05:01	
0.008861256	6.990502	4.9091	05:05	

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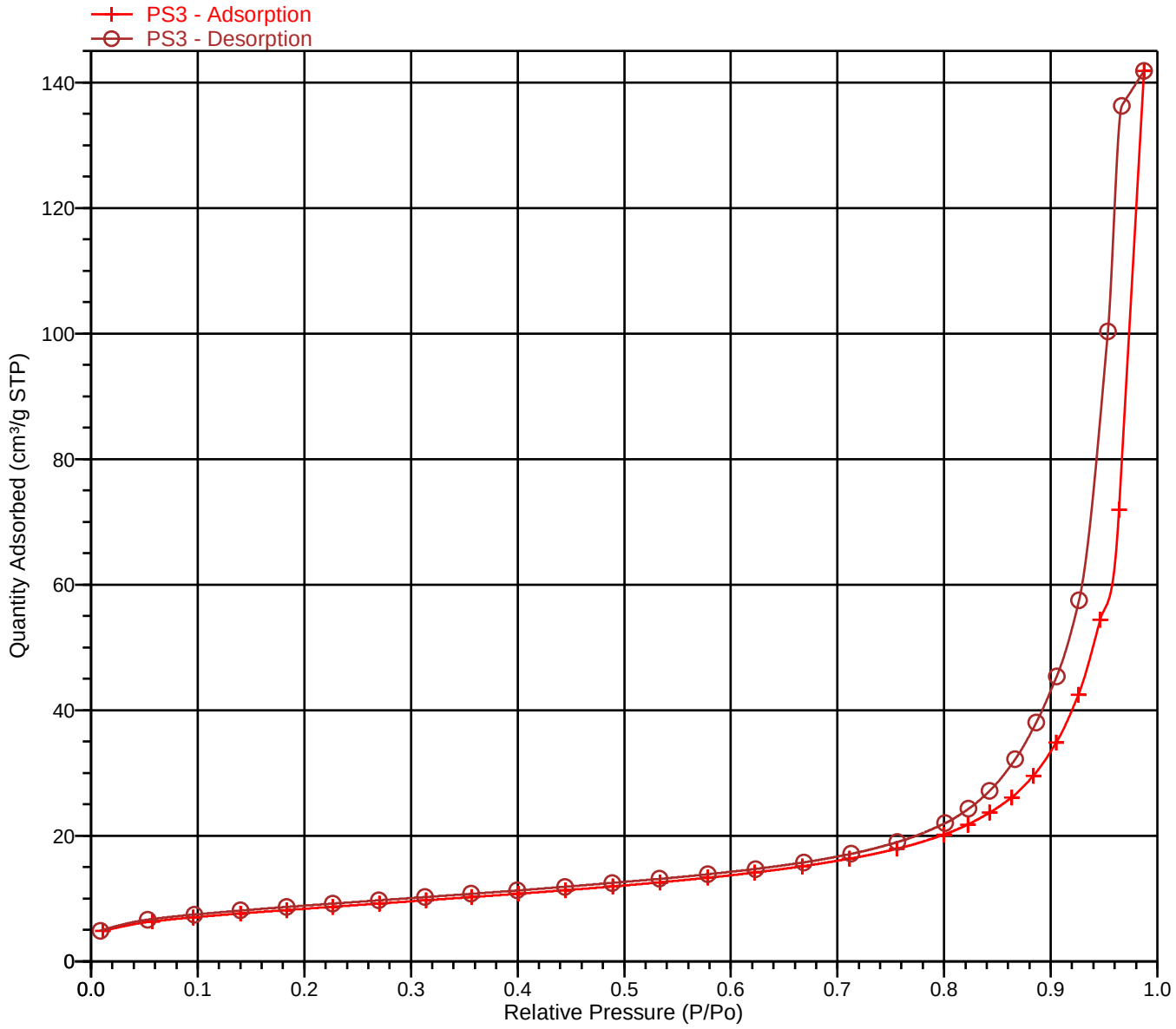
Isotherm Linear Plot



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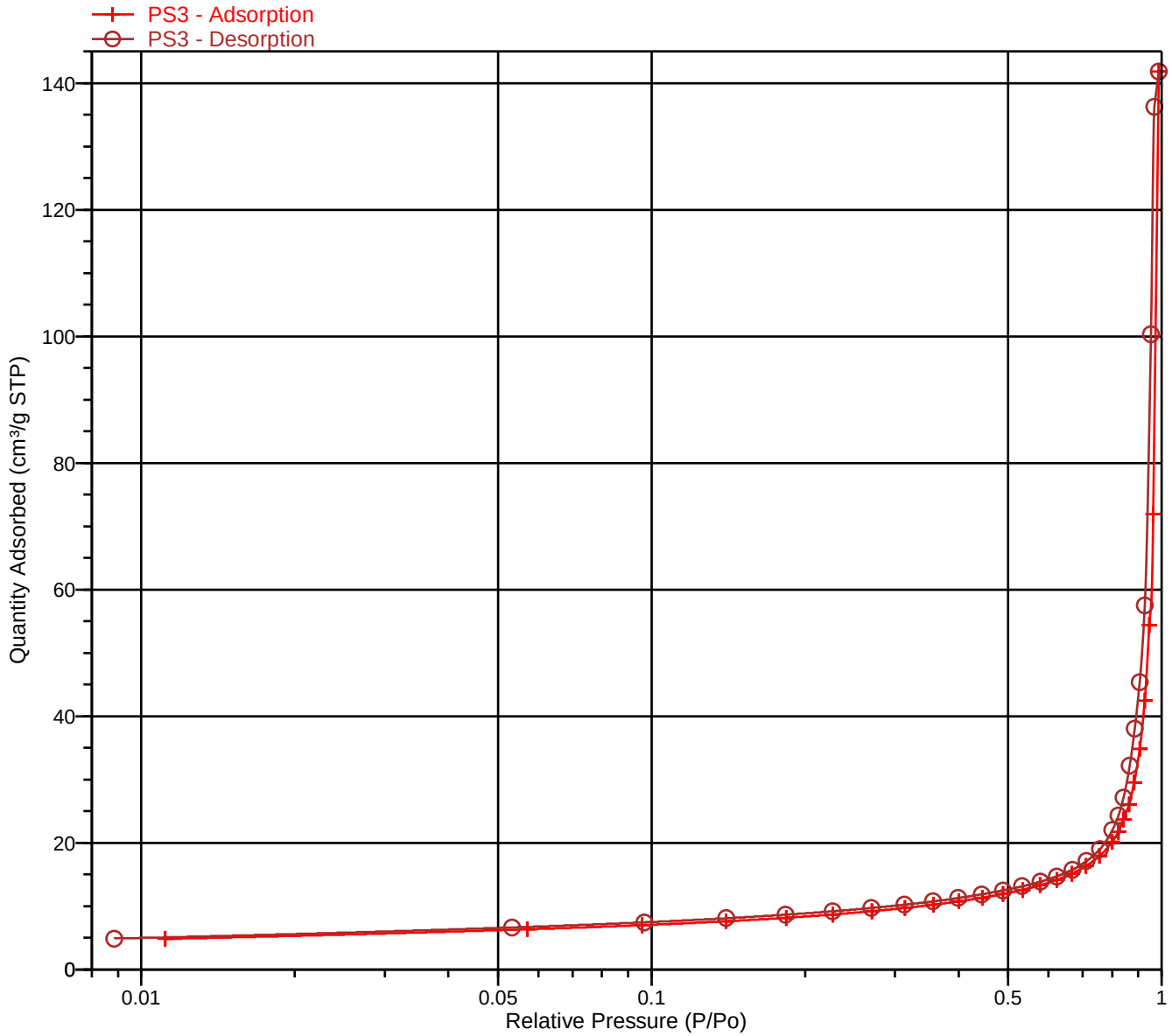
Isotherm Log Plot



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BET Surface Area Report

BET Surface Area: 29.3361 ± 0.2648 m²/g
Slope: 0.147690 ± 0.001310 g/cm³ STP
Y-Intercept: 0.000701 ± 0.000282 g/cm³ STP
C: 211.735548
Qm: 6.7390 cm³/g STP
Correlation Coefficient: 0.9997249
Molecular Cross-Sectional Area: 0.1620 nm²

Relative Pressure (P/Po)	Quantity Adsorbed (cm³/g STP)	1/[Q(Po/P - 1)]
0.011134608	4.8542	0.002320
0.057130960	6.3624	0.009524
0.095857926	7.0182	0.015106
0.140157979	7.6321	0.021358
0.183655847	8.1801	0.027503
0.226424743	8.7012	0.033639
0.270613467	9.2234	0.040226
0.314100945	9.7365	0.047033
0.357119917	10.2486	0.054202

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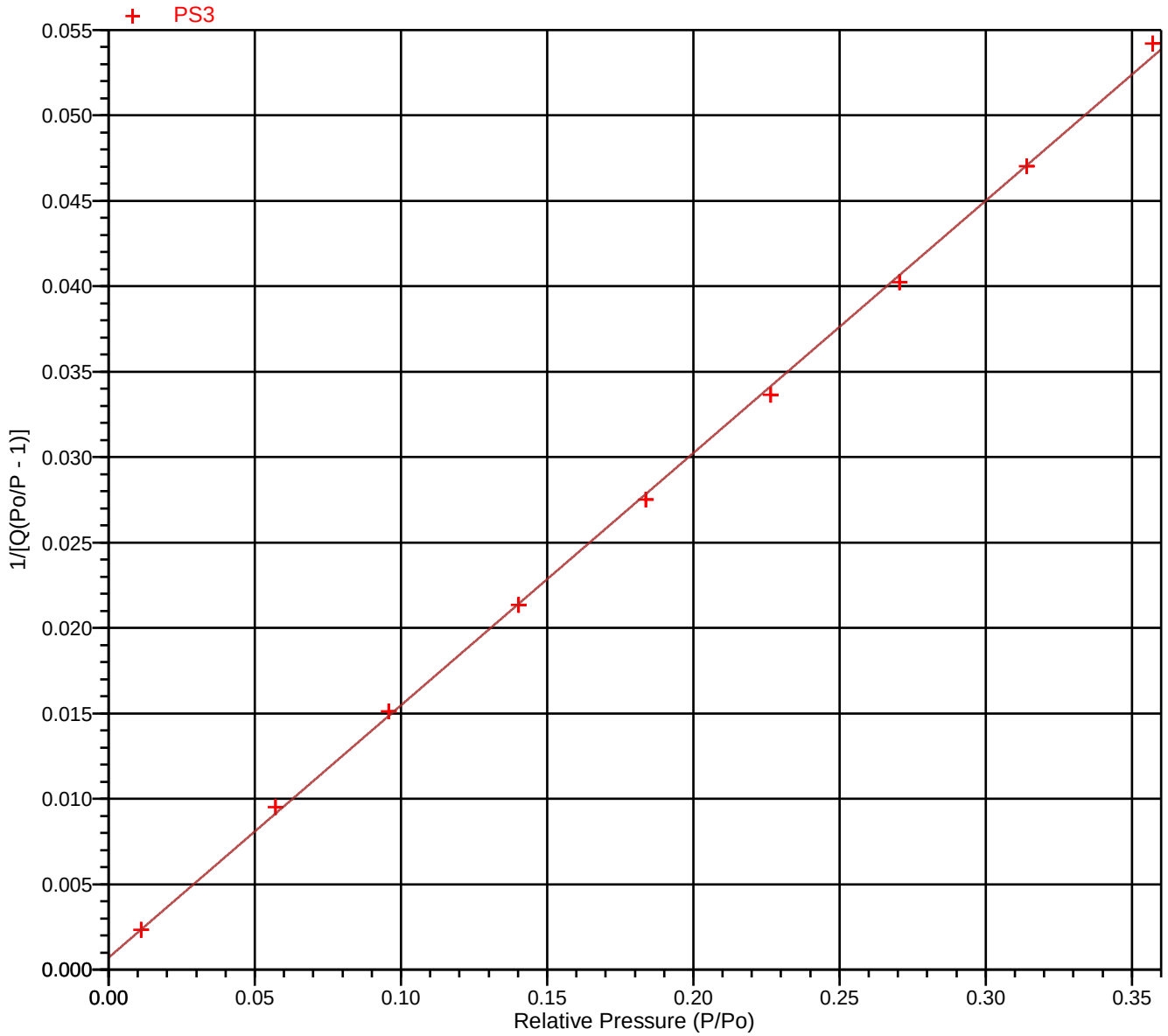
Low Pressure Dose:	None	Automatic Degas:	Yes

BET Surface Area Plot



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Thermal Correction: No
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Equilibration Interval: 5 s
Automatic Degas: Yes

BJH Adsorption Pore Distribution Report

Faas Correction
Harkins and Jura
t = [13.99 / (0.034 - log(P/Po))] ^ 0.5

Diameter Range: 17.000 Å to 3000.000 Å
Adsorbate Property Factor: 9.53000 Å
Density Conversion Factor: 0.0015468
Fraction of Pores Open at Both Ends: 0.00

Pore Diameter Range (Å)	Average Diameter (Å)	Incremental Pore Volume (cm³/g)	Cumulative Pore Volume (cm³/g)	Incremental Pore Area (m²/g)	Cumulative Pore Area (m²/g)
1551.9 - 552.3	657.9	0.119729	0.119729	7.279	7.279
552.3 - 377.2	431.4	0.030565	0.150294	2.834	10.113
377.2 - 275.7	310.1	0.020922	0.171216	2.699	12.812
275.7 - 218.0	239.7	0.013424	0.184640	2.240	15.053
218.0 - 179.1	194.4	0.009177	0.193817	1.888	16.941
179.1 - 153.3	164.1	0.005821	0.199638	1.419	18.360
153.3 - 133.6	142.0	0.003856	0.203494	1.087	19.446
133.6 - 118.4	125.0	0.002855	0.206349	0.913	20.360
118.4 - 105.3	111.0	0.002259	0.208608	0.814	21.174
105.3 - 86.4	93.8	0.002811	0.211419	1.199	22.372
86.4 - 72.9	78.4	0.001571	0.212990	0.801	23.174
72.9 - 62.8	67.0	0.000968	0.213958	0.578	23.752
62.8 - 54.9	58.2	0.000673	0.214631	0.462	24.214
54.9 - 48.5	51.3	0.000431	0.215062	0.336	24.551
48.5 - 43.2	45.5	0.000320	0.215382	0.281	24.832
43.2 - 38.8	40.8	0.000281	0.215663	0.275	25.107
38.8 - 35.0	36.7	0.000201	0.215864	0.219	25.327
35.0 - 31.6	33.1	0.000213	0.216077	0.258	25.584
31.6 - 28.7	30.0	0.000211	0.216288	0.281	25.866
28.7 - 26.1	27.2	0.000223	0.216511	0.328	26.194
26.1 - 23.6	24.7	0.000246	0.216758	0.399	26.593
23.6 - 21.3	22.3	0.000262	0.217020	0.470	27.063
21.3 - 19.2	20.1	0.000286	0.217306	0.570	27.633
19.2 - 17.0	18.0	0.000268	0.217574	0.597	28.229

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Analysis Bath Temp.: -195.475 °C
Thermal Correction: No
Warm Free Space: 15.4967 cm³ Measured
Equilibration Interval: 5 s
Automatic Degas: Yes

BJH Desorption Pore Distribution Report

Faas Correction
Harkins and Jura
t = [13.99 / (0.034 - log(P/Po))] ^ 0.5

Diameter Range: 17.000 Å to 3000.000 Å
Adsorbate Property Factor: 9.53000 Å
Density Conversion Factor: 0.0015468
Fraction of Pores Open at Both Ends: 0.00

Pore Diameter Range (Å)	Average Diameter (Å)	Incremental Pore Volume (cm³/g)	Cumulative Pore Volume (cm³/g)	Incremental Pore Area (m²/g)	Cumulative Pore Area (m²/g)
1551.0 - 598.2	715.2	0.009421	0.009421	0.527	0.527
598.2 - 432.5	488.2	0.063234	0.072655	5.181	5.708
432.5 - 277.9	321.3	0.078112	0.150767	9.723	15.431
277.9 - 217.7	240.1	0.021654	0.172421	3.607	19.039
217.7 - 182.2	196.6	0.013142	0.185564	2.674	21.713
182.2 - 156.0	166.9	0.010314	0.195878	2.472	24.185
156.0 - 132.4	142.1	0.008587	0.204465	2.418	26.602
132.4 - 118.0	124.3	0.004542	0.209007	1.462	28.064
118.0 - 105.2	110.8	0.003271	0.212278	1.181	29.245
105.2 - 85.7	93.3	0.003504	0.215783	1.503	30.748
85.7 - 72.4	77.8	0.001432	0.217215	0.736	31.484
72.4 - 62.2	66.4	0.000549	0.217764	0.331	31.815
62.2 - 54.1	57.5	0.000040	0.217804	0.028	31.843

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BJH Desorption dV/dD Pore Volume

Harkins and Jura : Faas Correction