



Analysis		Report	
Operator:	ASiQwin	Operator:	quantachrome
Sample ID:	ljsx-1	Date:	2021/10/21
Sample Desc:		Filename:	20211019-ljsx-1_iq1_phisy_st1_2021_10_21_07_54_32.qps
Sample Weight:	0.0332 g	Comment:	N2- micro/mesopore analysis-general
Outgas Time:	10.0 hrs	Instrument:	Autosorb iQ Station 1
Analysis gas:	Nitrogen	Outgas Temp.:	200 °C
Analysis Time:	26:55 hr:min	Non-ideality:	6.58e-05 1/Torr
Analysis Mode:	Standard	Bath temp.:	77.35 K
VoidVol. Mode:	He Measure	CellType:	9mm w/o rod
		VoidVol Remeasure:off	
		Warm Zone V:	14.8063 cc
		Cold Zone V:	6.30839 cc

Data Reduction Parameters

t-Method	Thermal Transpiration: on	Eff. mol. diameter (D): 3.54 Å	Eff. cell stem diam. (d): 4.0000 mm
BJH/DH method	Calc. method: de Boer		
HK method	Moving pt. avg.: off	Ignoring P-tags below 0.35 P/Po	
DFT method	Tabulated data interval: 1		
Adsorbate model	Calc. Model: N2 at 77 K on carbon (slit/cylindr. pores, QSDFT adsorption branch)		
	Rel. press. range: 0.0000 - 1.0000		Moving pt. avg: off
	Nitrogen	Temperature 77.350K	
	Molec. Wt.: 28.013	Cross Section: 16.200 Å²	Liquid Density: 0.808 g/cc
	Avg. Diameter: 0.300 nm	Polarizability: 1.460 (cc/molec) x 10 ⁻²⁴	Magn. Suscept.: 2.000
	Molec. Density: 6.700 (mol/cm²)x10 ¹⁴		
Adsorbent model	Carbon		
	Atom Diameter: 0.340 nm	Surf. Atom Dens.: 38.450 (mol/cm²)x10 ¹⁴	Polarizability: 1.020 (cc/molec)x10 ⁻²⁴
		Magn. Susc.: 13.500 (cc/molec)x10 ⁻²⁹	

Volume/Area summary

Surface Area Data

MultiPoint BET.....	1.193e+03 m²/g
Langmuir surface area.....	1.795e+03 m²/g
BJH method cumulative adsorption surface area.....	3.892e+02 m²/g
BJH method cumulative desorption surface area.....	6.043e+02 m²/g
DH method cumulative adsorption surface area.....	3.968e+02 m²/g
DH method cumulative desorption surface area.....	6.177e+02 m²/g
t-method external surface area.....	7.642e+02 m²/g
t-method micropore surface area.....	4.286e+02 m²/g
DFT cumulative surface area.....	1.121e+03 m²/g

Pore Volume Data

Total pore volume for pores with Diameter less than 380.43 nm at P/Po = 0.994944.....	1.364e+00 cc/g
BJH method cumulative adsorption pore volume.....	9.382e-01 cc/g
BJH method cumulative desorption pore volume.....	1.030e+00 cc/g
DH method cumulative adsorption pore volume.....	9.178e-01 cc/g
DH method cumulative desorption pore volume.....	1.012e+00 cc/g
t-method micropore volume.....	1.887e-01 cc/g
HK method micropore volume.....	4.856e-01 cc/g
SF method micropore volume.....	3.407e-01 cc/g
DFT method cumulative pore volume.....	1.210e+00 cc/g

Pore Size Data

Average pore Diameter	4.573e+00 nm
BJH method adsorption pore Diameter (Mode Dv(d)).....	3.408e+00 nm
BJH method desorption pore Diameter (Mode Dv(d)).....	3.823e+00 nm
DH method adsorption pore Diameter (Mode Dv(d)).....	3.408e+00 nm
DH method desorption pore Diameter (Mode Dv(d)).....	3.823e+00 nm
HK method pore Diameter (Mode).....	4.825e-01 nm
SF method pore Diameter (Mode).....	8.306e-01 nm
DFT pore Diameter (Mode).....	5.450e-01 nm



Analysis

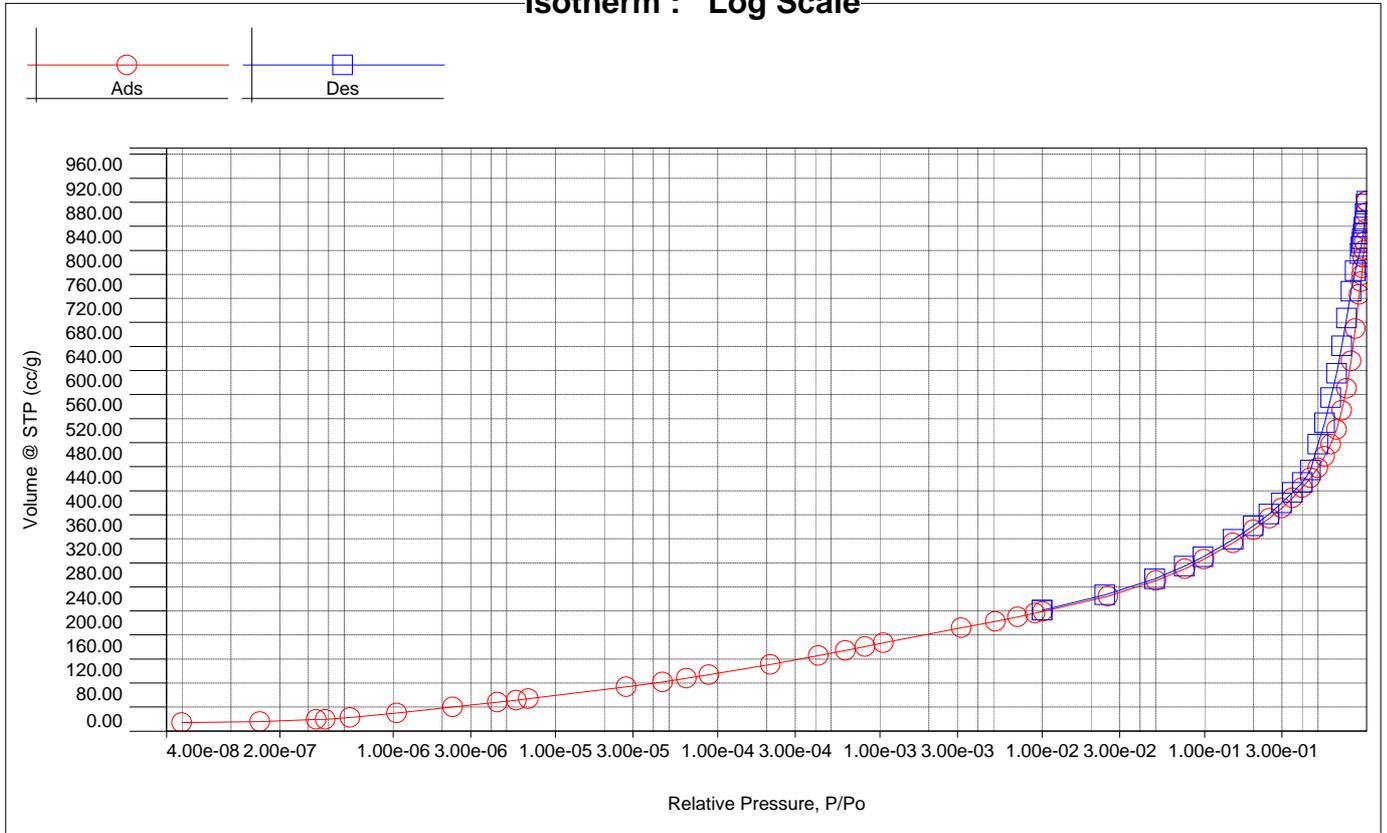
Operator: ASiQwin
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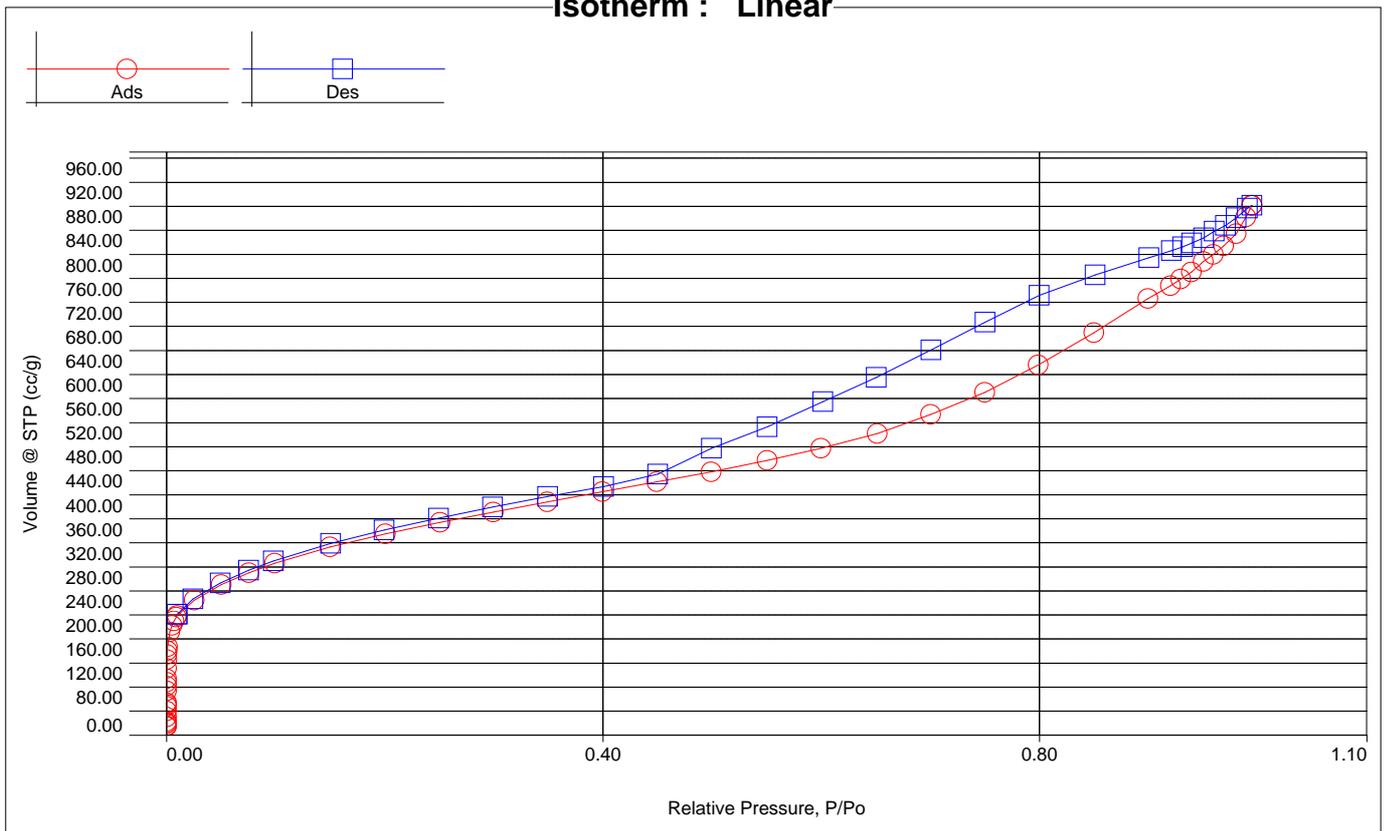
Report

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Isotherm : Log Scale



Isotherm : Linear





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Isotherm

Relative Pressure	Volume @ STP [cc/g]	Relative Pressure	Volume @ STP [cc/g]	Relative Pressure	Volume @ STP [cc/g]
4.97374e-08	13.9088	1.49943e-01	313.0276	9.60397e-01	838.8355
1.51162e-07	15.9819	2.00812e-01	335.0575	9.50416e-01	827.1931
3.35572e-07	19.3853	2.50823e-01	354.0254	9.39685e-01	818.7018
3.81073e-07	19.3928	2.99498e-01	370.8729	9.31462e-01	812.4108
5.41865e-07	22.8002	3.49032e-01	388.3366	9.21068e-01	805.9365
1.05145e-06	30.3337	3.99503e-01	404.8832	9.00327e-01	794.3665
2.32976e-06	40.2225	4.49549e-01	421.3088	8.51238e-01	765.5893
4.39820e-06	48.0509	4.99120e-01	438.1253	7.99857e-01	731.7040
5.76025e-06	51.4403	5.50447e-01	456.9259	7.50416e-01	687.4130
6.82205e-06	53.8929	5.99856e-01	477.2277	7.00599e-01	641.1486
2.72596e-05	73.3501	6.51354e-01	501.8931	6.50564e-01	595.4509
4.57458e-05	81.7498	7.00464e-01	533.4529	6.01633e-01	554.8199
6.41701e-05	87.6988	7.49914e-01	570.2873	5.50729e-01	512.6605
8.81488e-05	93.5565	7.99008e-01	616.0369	4.99432e-01	477.3650
2.11623e-04	110.8941	8.49934e-01	669.4443	4.50366e-01	434.3796
4.16489e-04	125.6278	8.99654e-01	726.3861	4.00783e-01	413.8012
6.11842e-04	134.3655	9.20056e-01	747.9540	3.49331e-01	397.1033
8.09576e-04	140.8248	9.29537e-01	758.9961	2.99078e-01	379.3974
1.05204e-03	146.8264	9.39413e-01	770.8176	2.49558e-01	361.0982
3.17621e-03	171.7513	9.50180e-01	788.4029	1.99675e-01	341.2535
5.13637e-03	182.7193	9.59262e-01	799.8683	1.50631e-01	319.0066
7.04034e-03	190.1875	9.68878e-01	814.3432	9.80181e-02	289.6747
9.04899e-03	196.2502	9.80332e-01	834.2288	7.53210e-02	274.2015
1.00474e-02	198.8479	9.89285e-01	861.9507	4.93849e-02	253.1580
2.54810e-02	224.6041	9.94944e-01	881.5481	2.43846e-02	226.3529
5.02801e-02	250.3126	9.90710e-01	876.6735	9.98605e-03	201.1440
7.56937e-02	270.4032	9.80313e-01	861.0629		
9.93465e-02	285.9524	9.70607e-01	847.9182		



Analysis

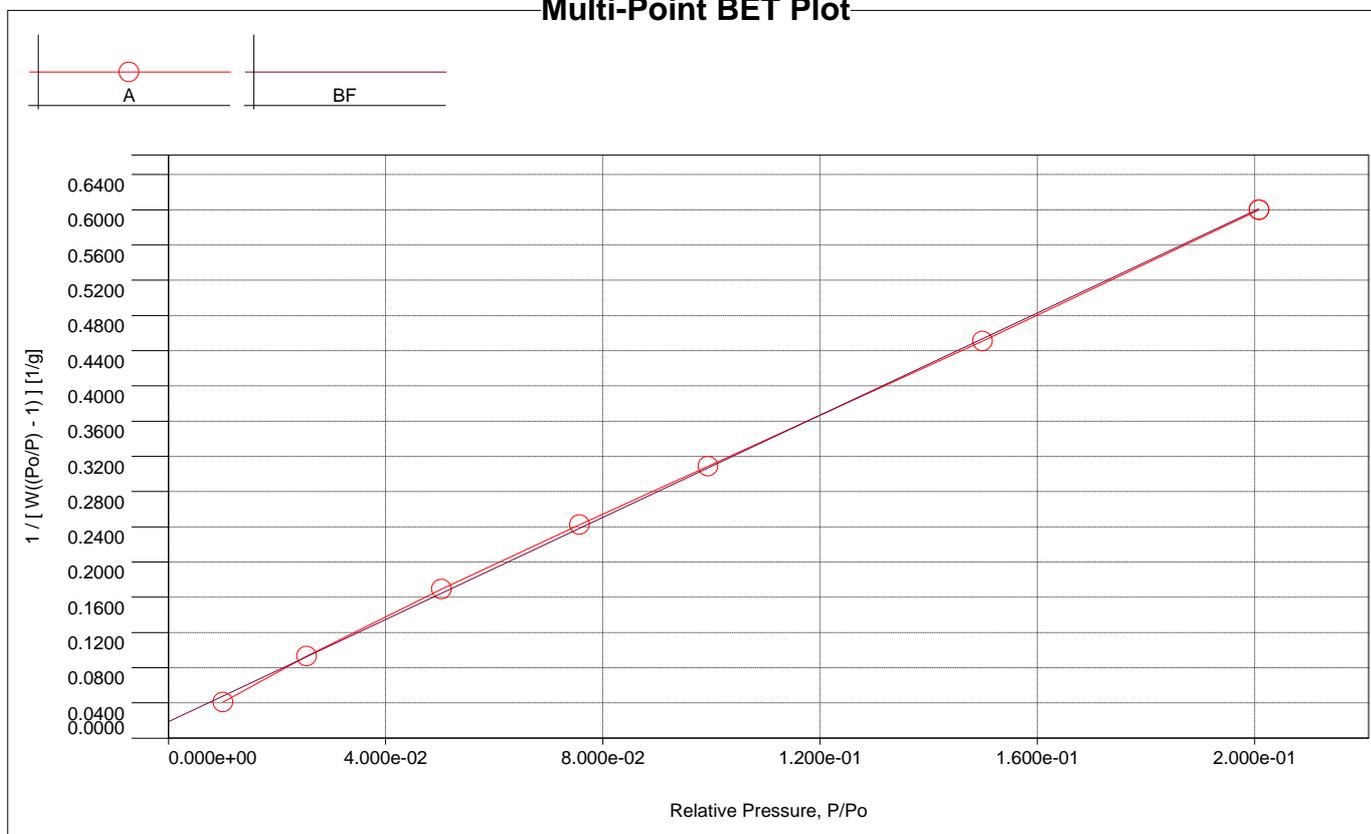
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Multi-Point BET Plot



Multi-Point BET

Relative Pressure [P/Po]	Volume @ STP [cc/g]	1 / [W((Po/P) - 1)] [1/g]	Relative Pressure [P/Po]	Volume @ STP [cc/g]	1 / [W((Po/P) - 1)] [1/g]
1.00474e-02	198.8479	4.0838e-02	9.93465e-02	285.9524	3.0864e-01
2.54810e-02	224.6041	9.3145e-02	1.49943e-01	313.0276	4.5087e-01
5.02801e-02	250.3126	1.6923e-01	2.00812e-01	335.0575	6.0003e-01
7.56937e-02	270.4032	2.4232e-01			

MBET summary

Slope =	2.901 1/g
Intercept =	1.870e-02 1/g
Correlation coefficient, r =	0.999790
C constant =	156.108
Surface Area =	1192.843 m ² /g



Analysis

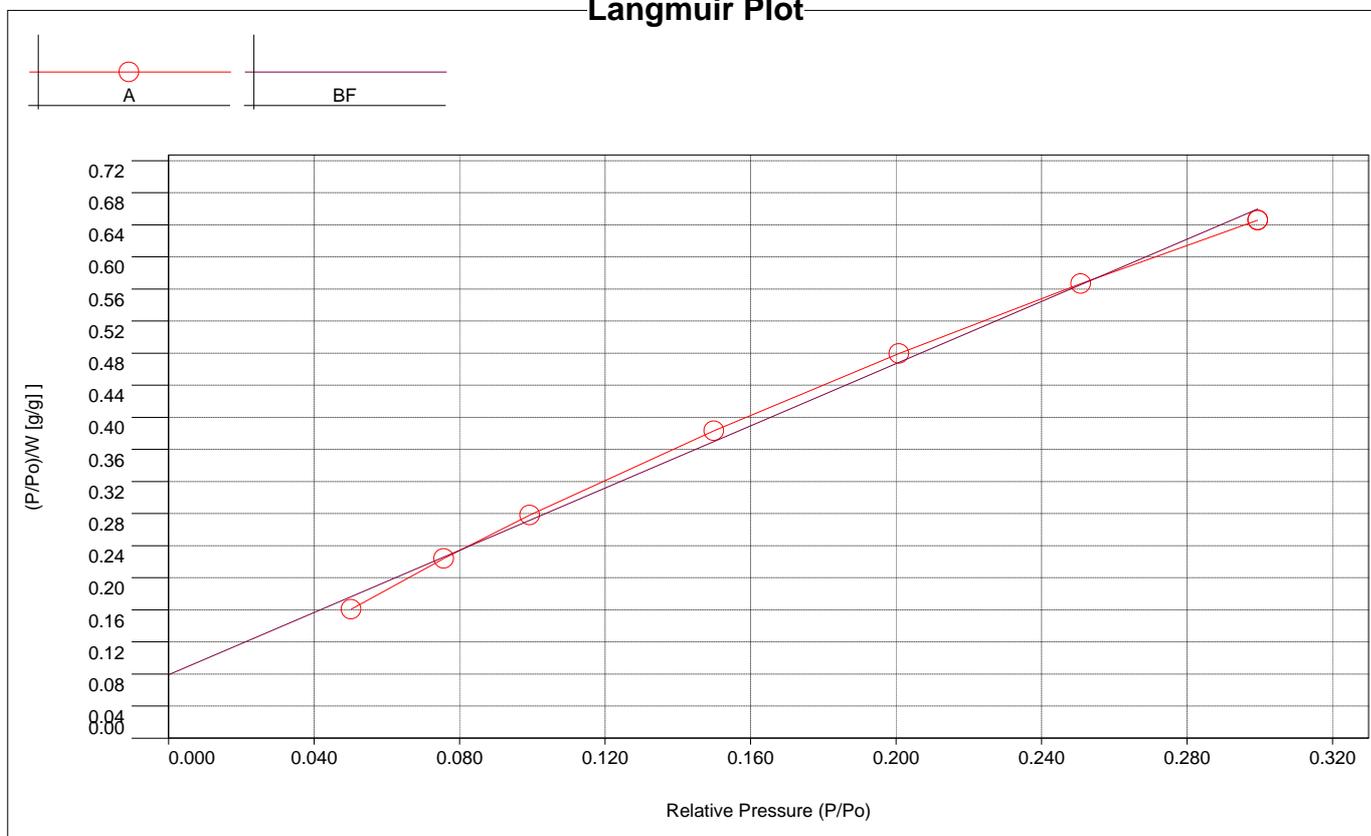
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Langmuir Plot



Langmuir

P/Po	P/Po/W [(g/g)]	P/Po	P/Po/W [(g/g)]
5.02801e-02	1.6072e-01	2.00812e-01	4.7954e-01
7.56937e-02	2.2397e-01	2.50823e-01	5.6687e-01
9.93465e-02	2.7798e-01	2.99498e-01	6.4613e-01
1.49943e-01	3.8326e-01		

Langmuir summary

Slope =	1.94009
Intercept =	0.07902
Correlation coefficient, r =	0.998
Surface Area =	1795.024 m ² /g



Analysis

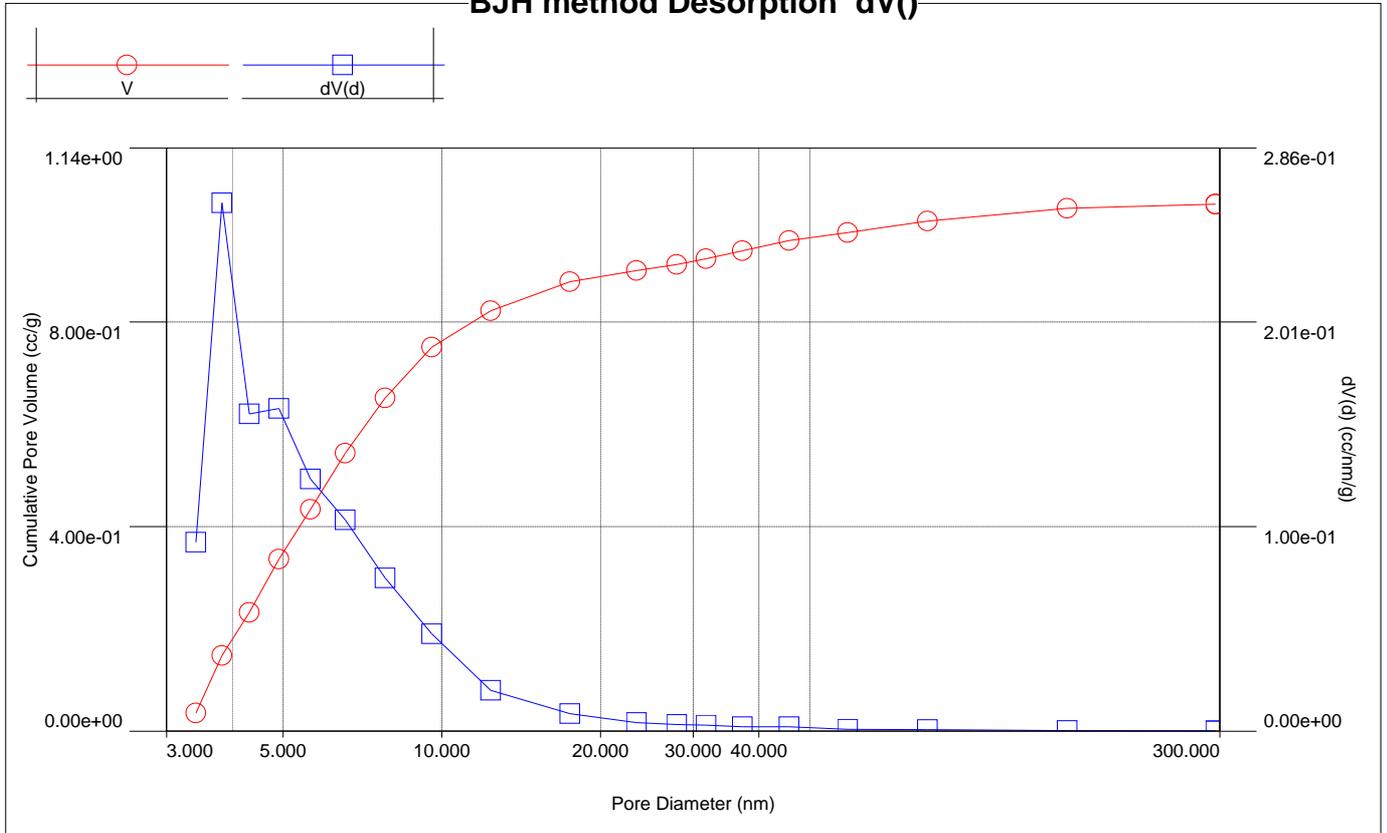
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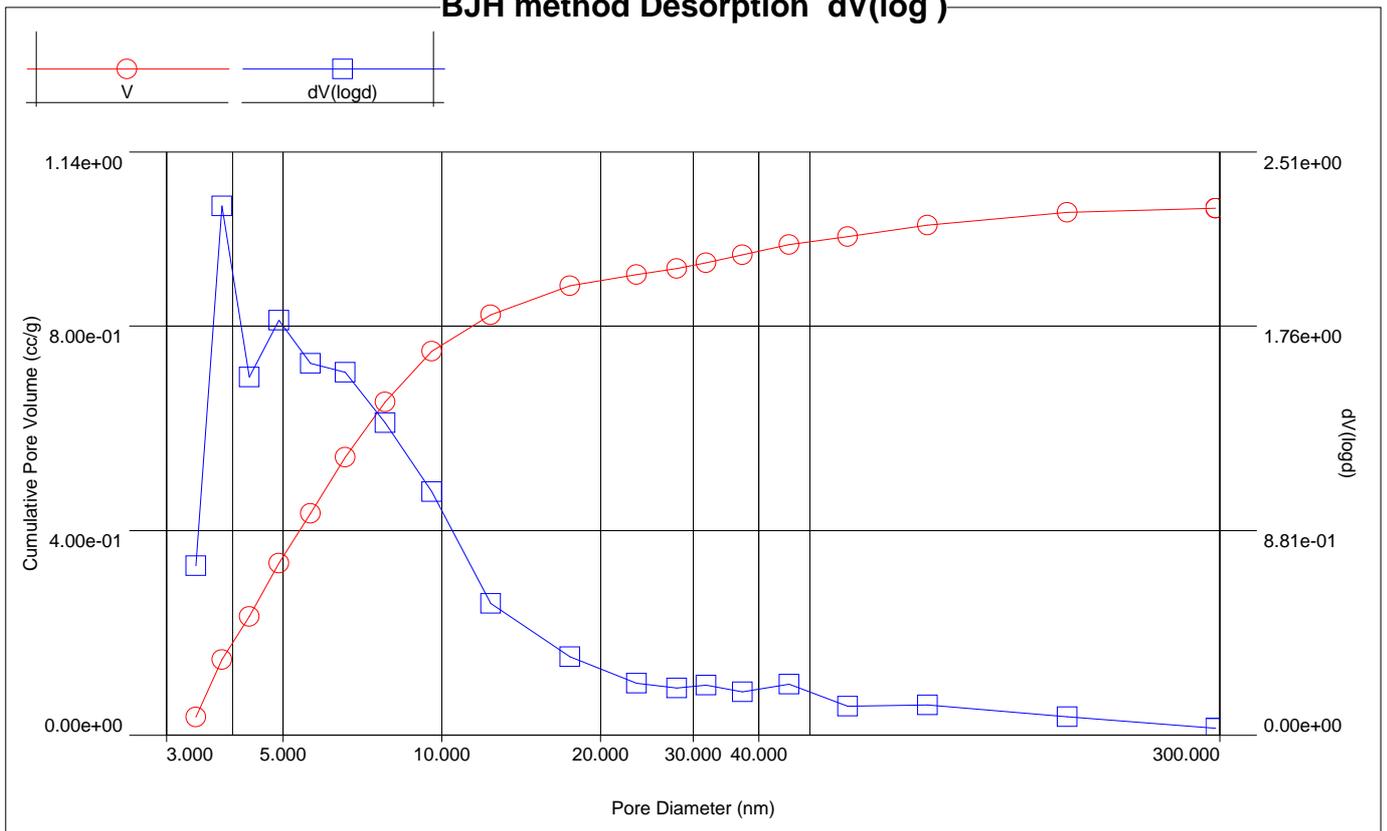
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BJH method Desorption dV()



BJH method Desorption dV(log)





Analysis

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Desorption

Diameter [nm]	Pore Volume [cc/g]	Pore Surf Area [m ² /g]	dV(d) [cc/nm/g]	dS(d) [m ² /nm/g]	dV(logd) [cc/g]	dS(logd) [cc/g]
3.4159	3.5120e-02	4.1125e+01	9.2745e-02	1.0860e+02	7.2872e-01	8.5334e+02
3.8227	1.4786e-01	1.5909e+02	2.5920e-01	2.7122e+02	2.2790e+00	2.3847e+03
4.3106	2.3200e-01	2.3718e+02	1.5556e-01	1.4435e+02	1.5420e+00	1.4309e+03
4.9097	3.3598e-01	3.2188e+02	1.5822e-01	1.2890e+02	1.7859e+00	1.4550e+03
5.6348	4.3399e-01	3.9146e+02	1.2359e-01	8.7735e+01	1.6009e+00	1.1364e+03
6.5587	5.4336e-01	4.5816e+02	1.0368e-01	6.3230e+01	1.5624e+00	9.5284e+02
7.8052	6.5131e-01	5.1349e+02	7.5064e-02	3.8469e+01	1.3452e+00	6.8941e+02
9.5683	7.5104e-01	5.5518e+02	4.7760e-02	1.9966e+01	1.0481e+00	4.3814e+02
12.3906	8.2223e-01	5.7816e+02	2.0018e-02	6.4622e+00	5.6717e-01	1.8310e+02
17.4979	8.7870e-01	5.9107e+02	8.4815e-03	1.9389e+00	3.3756e-01	7.7166e+01
23.4353	9.0043e-01	5.9478e+02	4.1655e-03	7.1099e-01	2.2385e-01	3.8207e+01
27.9301	9.1236e-01	5.9649e+02	3.1622e-03	4.5287e-01	2.0305e-01	2.9080e+01
31.7608	9.2385e-01	5.9793e+02	2.9547e-03	3.7211e-01	2.1581e-01	2.7179e+01
37.1947	9.3907e-01	5.9957e+02	2.1810e-03	2.3454e-01	1.8624e-01	2.0028e+01
45.6034	9.5964e-01	6.0137e+02	2.0911e-03	1.8341e-01	2.1872e-01	1.9184e+01
58.9709	9.7525e-01	6.0243e+02	9.2358e-04	6.2647e-02	1.2455e-01	8.4480e+00
83.5116	9.9730e-01	6.0349e+02	6.8525e-04	3.2822e-02	1.3012e-01	6.2325e+00
153.9531	1.0226e+00	6.0415e+02	2.3287e-04	6.0505e-03	7.9000e-02	2.0526e+00
294.3640	1.0304e+00	6.0425e+02	4.4971e-05	6.1109e-04	2.9592e-02	4.0211e-01

BJH desorption summary

Surface Area = 604.251 m²/g
 Pore Volume = 1.030 cc/g
 Pore Diameter Dv(d) = 3.823 nm



Analysis

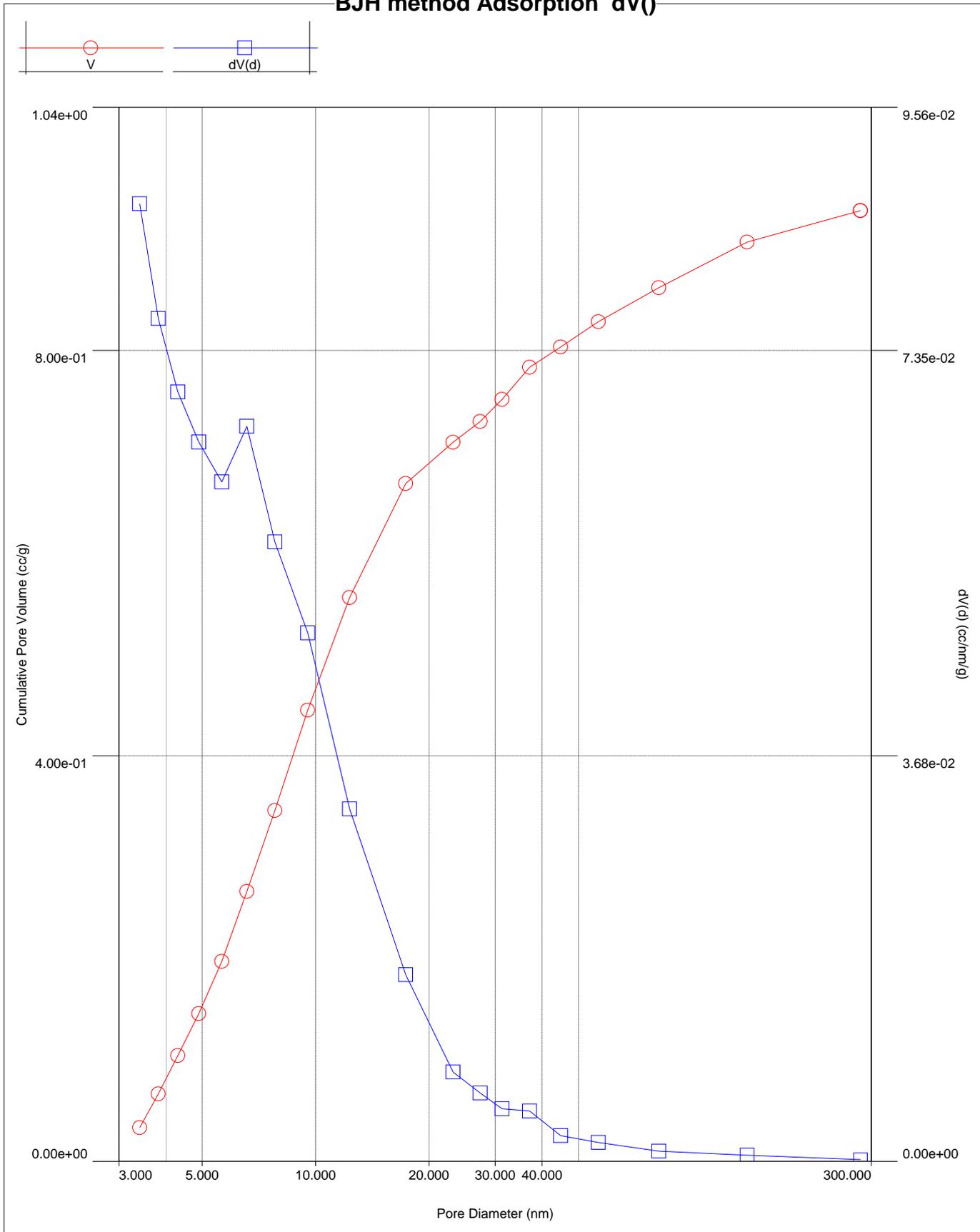
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BJH method Adsorption dV()





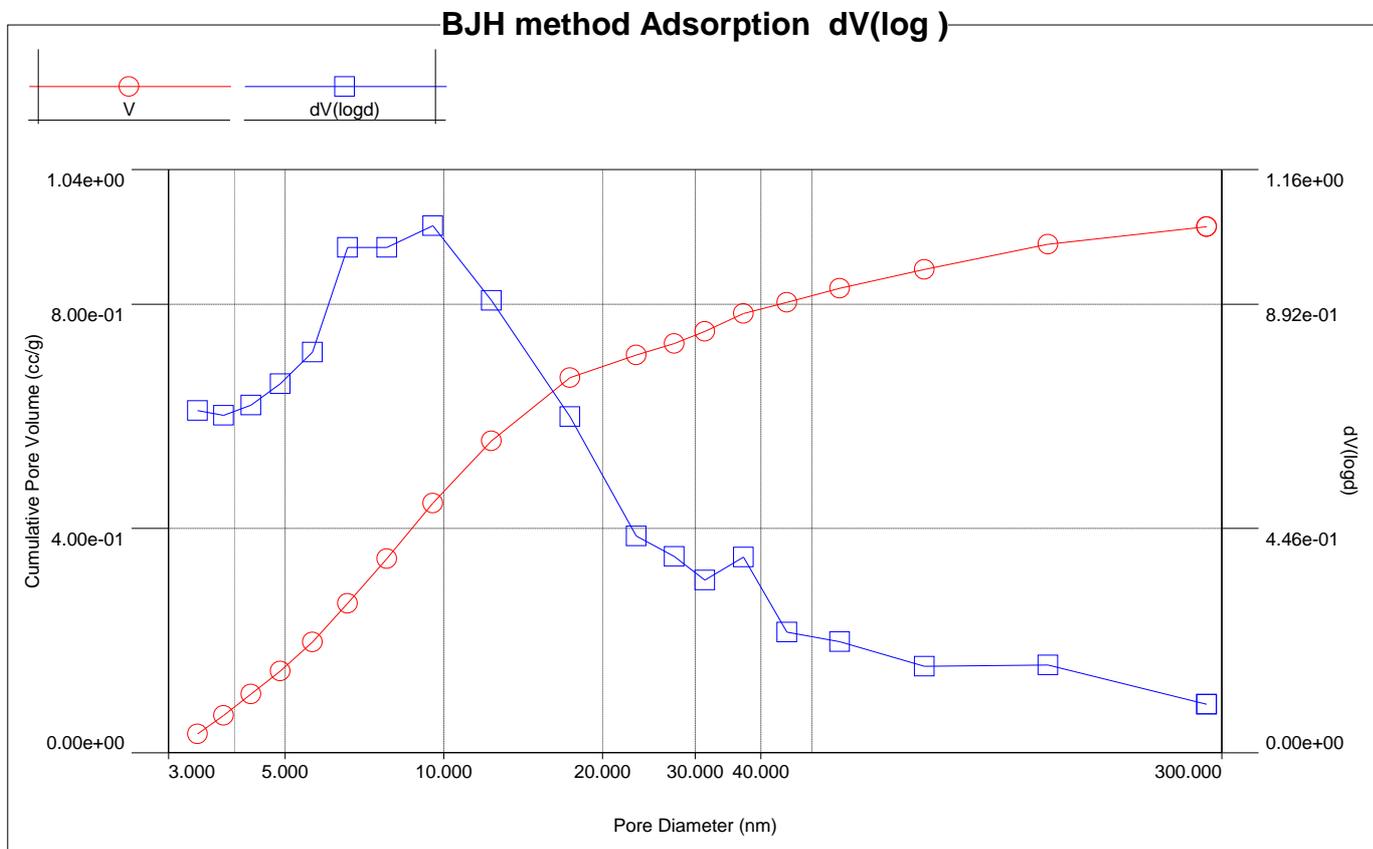
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Adsorption

Diameter [nm]	Pore Volume [cc/g]	Pore Surf Area [m ² /g]	dV(d) [cc/nm/g]	dS(d) [m ² /nm/g]	dV(logd) [cc/g]	dS(logd) [cc/g]
3.4080	3.3102e-02	3.8853e+01	8.6861e-02	1.0195e+02	6.8090e-01	7.9918e+02
3.8178	6.6633e-02	7.3983e+01	7.6440e-02	8.0087e+01	6.7123e-01	7.0326e+02
4.3075	1.0437e-01	1.0902e+02	6.9796e-02	6.4813e+01	6.9135e-01	6.4200e+02
4.8953	1.4579e-01	1.4287e+02	6.5236e-02	5.3305e+01	7.3430e-01	6.0000e+02
5.6293	1.9712e-01	1.7934e+02	6.1618e-02	4.3784e+01	7.9722e-01	5.6649e+02
6.5643	2.6625e-01	2.2147e+02	6.6656e-02	4.0617e+01	1.0054e+00	6.1265e+02
7.7950	3.4626e-01	2.6253e+02	5.6180e-02	2.8829e+01	1.0055e+00	5.1599e+02
9.5377	4.4503e-01	3.0395e+02	4.7921e-02	2.0098e+01	1.0483e+00	4.3965e+02
12.3090	5.5630e-01	3.4011e+02	3.1959e-02	1.0385e+01	8.9972e-01	2.9238e+02
17.3714	6.6876e-01	3.6600e+02	1.6929e-02	3.8981e+00	6.6880e-01	1.5400e+02
23.2104	7.0956e-01	3.7303e+02	8.1031e-03	1.3965e+00	4.3136e-01	7.4339e+01
27.3815	7.3007e-01	3.7603e+02	6.2024e-03	9.0607e-01	3.9057e-01	5.7057e+01
31.2974	7.5167e-01	3.7879e+02	4.7742e-03	6.1017e-01	3.4345e-01	4.3895e+01
37.0292	7.8342e-01	3.8222e+02	4.5746e-03	4.9416e-01	3.8890e-01	4.2010e+01
44.8309	8.0359e-01	3.8402e+02	2.3283e-03	2.0774e-01	2.3959e-01	2.1377e+01
56.4739	8.2855e-01	3.8579e+02	1.7075e-03	1.2094e-01	2.2080e-01	1.5639e+01
81.7396	8.6188e-01	3.8742e+02	9.2800e-04	4.5413e-02	1.7182e-01	8.4080e+00
140.3194	9.0702e-01	3.8871e+02	5.5560e-04	1.5838e-02	1.7438e-01	4.9709e+00
280.6850	9.3817e-01	3.8915e+02	1.5617e-04	2.2255e-03	9.6529e-02	1.3756e+00

BJH adsorption summary

Surface Area = 389.151 m²/g
Pore Volume = 0.938 cc/g
Pore Diameter Dv(d) = 3.408 nm



Analysis

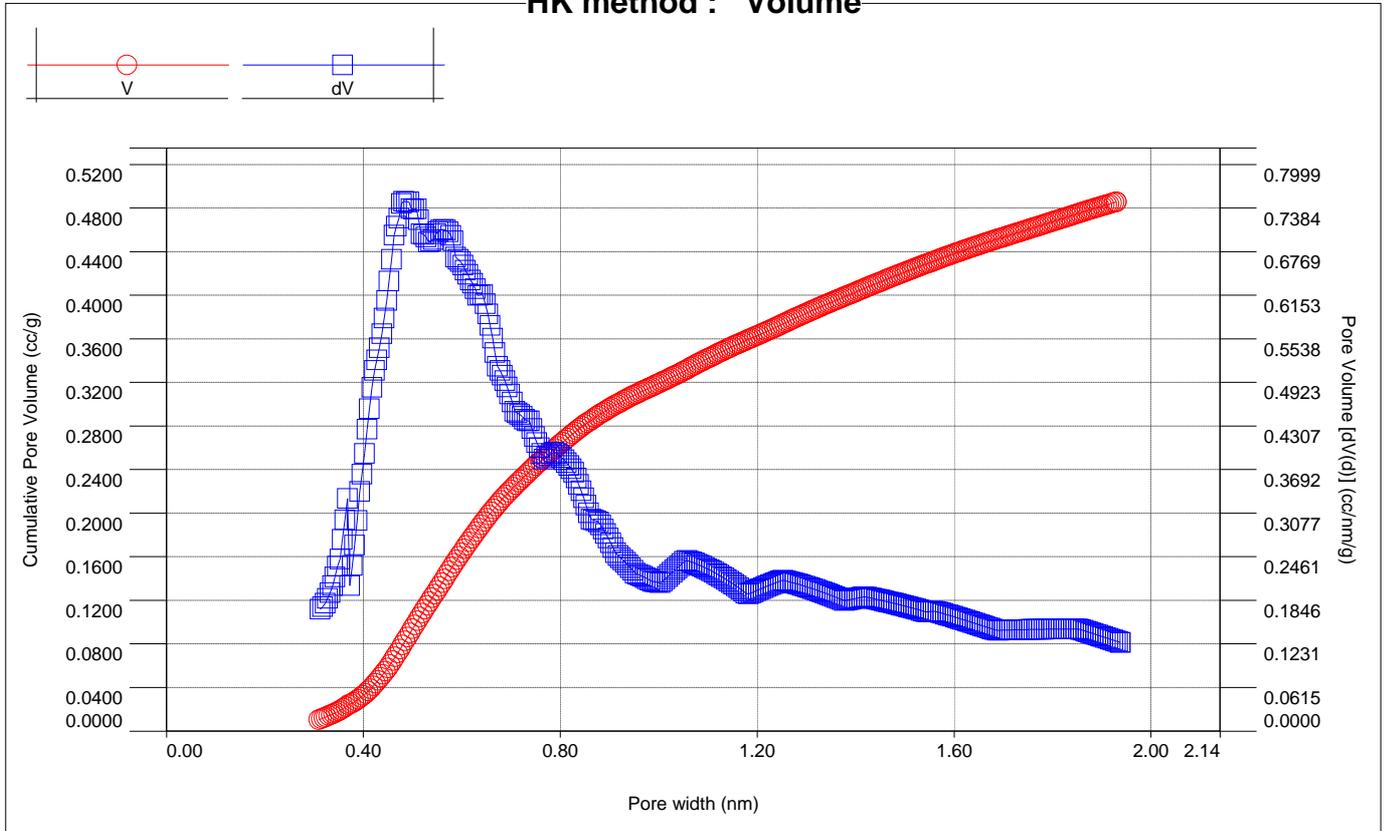
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HK method : Volume



Pore Size Distribution

Pore width [nm]	dV() [cc/nm/g]	Pore width [nm]	dV() [cc/nm/g]
0.3125	0.17181	0.4575	0.66573
0.3175	0.17565	0.4625	0.69997
0.3225	0.18066	0.4675	0.71280
0.3275	0.18713	0.4725	0.72417
0.3325	0.19545	0.4775	0.74484
0.3375	0.20530	0.4825	0.74789
0.3425	0.21754	0.4875	0.74696
0.3475	0.23303	0.4925	0.74682
0.3525	0.24256	0.4975	0.73737
0.3575	0.27058	0.5025	0.73687
0.3625	0.29840	0.5075	0.73714
0.3675	0.32849	0.5125	0.72169
0.3725	0.20544	0.5175	0.70217
0.3775	0.23377	0.5225	0.70100
0.3825	0.26255	0.5275	0.69728
0.3875	0.29738	0.5325	0.69039
0.3925	0.33817	0.5375	0.69163
0.3975	0.36261	0.5425	0.69388
0.4025	0.39172	0.5475	0.70183
0.4075	0.42624	0.5525	0.70515
0.4125	0.45496	0.5575	0.70737
0.4175	0.48511	0.5625	0.70824
0.4225	0.50886	0.5675	0.70747
0.4275	0.52392	0.5725	0.70475
0.4325	0.54115	0.5775	0.69971
0.4375	0.56073	0.5825	0.69198
0.4425	0.58283	0.5875	0.66910
0.4475	0.60762	0.5925	0.66611
0.4525	0.63523	0.5975	0.66278

Continued on next page



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Pore Size Distribution continued

Pore width [nm]	dV() [cc/nm/g]	Pore width [nm]	dV() [cc/nm/g]
0.6025	0.65762	0.9325	0.23805
0.6075	0.65076	0.9375	0.23449
0.6125	0.64450	0.9425	0.23076
0.6175	0.63640	0.9475	0.22687
0.6225	0.63194	0.9525	0.22280
0.6275	0.62444	0.9575	0.22109
0.6325	0.61484	0.9625	0.21973
0.6375	0.61592	0.9675	0.21827
0.6425	0.61600	0.9725	0.21670
0.6475	0.60326	0.9775	0.21502
0.6525	0.58884	0.9825	0.21323
0.6575	0.57261	0.9875	0.21133
0.6625	0.55444	0.9925	0.21067
0.6675	0.53419	0.9975	0.21018
0.6725	0.51491	1.0025	0.20960
0.6775	0.50918	1.0075	0.21164
0.6825	0.50246	1.0125	0.21478
0.6875	0.49469	1.0175	0.21790
0.6925	0.48578	1.0225	0.22102
0.6975	0.47567	1.0275	0.22413
0.7025	0.46428	1.0325	0.22722
0.7075	0.45152	1.0375	0.23029
0.7125	0.44936	1.0425	0.23336
0.7175	0.44705	1.0475	0.23641
0.7225	0.44403	1.0525	0.23944
0.7275	0.44024	1.0575	0.24105
0.7325	0.43804	1.0625	0.23980
0.7375	0.43772	1.0675	0.23849
0.7425	0.42709	1.0725	0.23712
0.7475	0.41555	1.0775	0.23569
0.7525	0.40712	1.0825	0.23420
0.7575	0.39992	1.0875	0.23265
0.7625	0.39205	1.0925	0.23105
0.7675	0.38361	1.0975	0.22938
0.7725	0.38632	1.1025	0.22765
0.7775	0.38887	1.1075	0.22587
0.7825	0.39127	1.1125	0.22402
0.7875	0.39348	1.1175	0.22212
0.7925	0.39215	1.1225	0.22016
0.7975	0.38933	1.1275	0.21813
0.8025	0.38619	1.1325	0.21605
0.8075	0.38271	1.1375	0.21391
0.8125	0.37887	1.1425	0.21171
0.8175	0.37466	1.1475	0.20945
0.8225	0.37008	1.1525	0.20713
0.8275	0.36511	1.1575	0.20476
0.8325	0.35721	1.1625	0.20232
0.8375	0.34837	1.1675	0.19983
0.8425	0.33904	1.1725	0.19728
0.8475	0.32921	1.1775	0.19467
0.8525	0.31886	1.1825	0.19341
0.8575	0.30800	1.1875	0.19494
0.8625	0.29906	1.1925	0.19645
0.8675	0.29810	1.1975	0.19795
0.8725	0.29670	1.2025	0.19943
0.8775	0.29513	1.2075	0.20089
0.8825	0.29069	1.2125	0.20235
0.8875	0.28488	1.2175	0.20378
0.8925	0.27880	1.2225	0.20520
0.8975	0.27246	1.2275	0.20661
0.9025	0.26585	1.2325	0.20799
0.9075	0.25896	1.2375	0.20937
0.9125	0.25180	1.2425	0.21072
0.9175	0.24774	1.2475	0.21207
0.9225	0.24467	1.2525	0.21312
0.9275	0.24144	1.2575	0.21225

Continued on next page



Analysis

Operator: ASiQwin
Sample ID: ljx-1

Date:2021/10/21
Filename:

Report

Operator: quantachrome
Date:2021/10/25
20211019-ljx-1_iq1_phisy_st1_2021_10_21_07_54_32.qps

Pore Size Distribution continued

Pore width [nm]	dV() [cc/nm/g]	Pore width [nm]	dV() [cc/nm/g]
1.2625	0.21135	1.5925	0.16285
1.2675	0.21043	1.5975	0.16180
1.2725	0.20948	1.6025	0.16075
1.2775	0.20850	1.6075	0.15970
1.2825	0.20751	1.6125	0.15863
1.2875	0.20648	1.6175	0.15756
1.2925	0.20543	1.6225	0.15648
1.2975	0.20435	1.6275	0.15539
1.3025	0.20325	1.6325	0.15430
1.3075	0.20213	1.6375	0.15320
1.3125	0.20098	1.6425	0.15209
1.3175	0.19981	1.6475	0.15098
1.3225	0.19861	1.6525	0.14986
1.3275	0.19739	1.6575	0.14873
1.3325	0.19614	1.6625	0.14760
1.3375	0.19487	1.6675	0.14646
1.3425	0.19358	1.6725	0.14531
1.3475	0.19227	1.6775	0.14416
1.3525	0.19093	1.6825	0.14300
1.3575	0.18957	1.6875	0.14225
1.3625	0.18818	1.6925	0.14236
1.3675	0.18678	1.6975	0.14247
1.3725	0.18535	1.7025	0.14258
1.3775	0.18418	1.7075	0.14268
1.3825	0.18489	1.7125	0.14278
1.3875	0.18558	1.7175	0.14287
1.3925	0.18627	1.7225	0.14296
1.3975	0.18695	1.7275	0.14305
1.4025	0.18761	1.7325	0.14313
1.4075	0.18827	1.7375	0.14321
1.4125	0.18891	1.7425	0.14328
1.4175	0.18954	1.7475	0.14335
1.4225	0.18905	1.7525	0.14342
1.4275	0.18833	1.7575	0.14348
1.4325	0.18760	1.7625	0.14354
1.4375	0.18685	1.7675	0.14359
1.4425	0.18609	1.7725	0.14365
1.4475	0.18532	1.7775	0.14369
1.4525	0.18453	1.7825	0.14374
1.4575	0.18373	1.7875	0.14378
1.4625	0.18292	1.7925	0.14382
1.4675	0.18210	1.7975	0.14385
1.4725	0.18126	1.8025	0.14388
1.4775	0.18041	1.8075	0.14391
1.4825	0.17955	1.8125	0.14393
1.4875	0.17868	1.8175	0.14395
1.4925	0.17779	1.8225	0.14397
1.4975	0.17690	1.8275	0.14399
1.5025	0.17599	1.8325	0.14400
1.5075	0.17507	1.8375	0.14401
1.5125	0.17414	1.8425	0.14401
1.5175	0.17319	1.8475	0.14402
1.5225	0.17224	1.8525	0.14402
1.5275	0.17128	1.8575	0.14310
1.5325	0.17030	1.8625	0.14200
1.5375	0.16931	1.8675	0.14089
1.5425	0.16831	1.8725	0.13978
1.5475	0.16843	1.8775	0.13867
1.5525	0.16874	1.8825	0.13756
1.5575	0.16905	1.8875	0.13645
1.5625	0.16893	1.8925	0.13533
1.5675	0.16794	1.8975	0.13421
1.5725	0.16693	1.9025	0.13309
1.5775	0.16592	1.9075	0.13196
1.5825	0.16491	1.9125	0.13084
1.5875	0.16388	1.9175	0.12971

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Analysis

Operator: ASiQwin
Sample ID: ljsx-1

Date:2021/10/21
Filename:

Report

Operator: quantachrome
Date:2021/10/25
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Pore Size Distribution continued

Pore width [nm]	dV() [cc/nm/g]	Pore width [nm]	dV() [cc/nm/g]
1.9225	0.12858	1.9325	0.12631
1.9275	0.12745	1.9375	0.12518

HK summary

Mode : 0.483 nm
Micropore Volume : 0.486 cc/g



Analysis

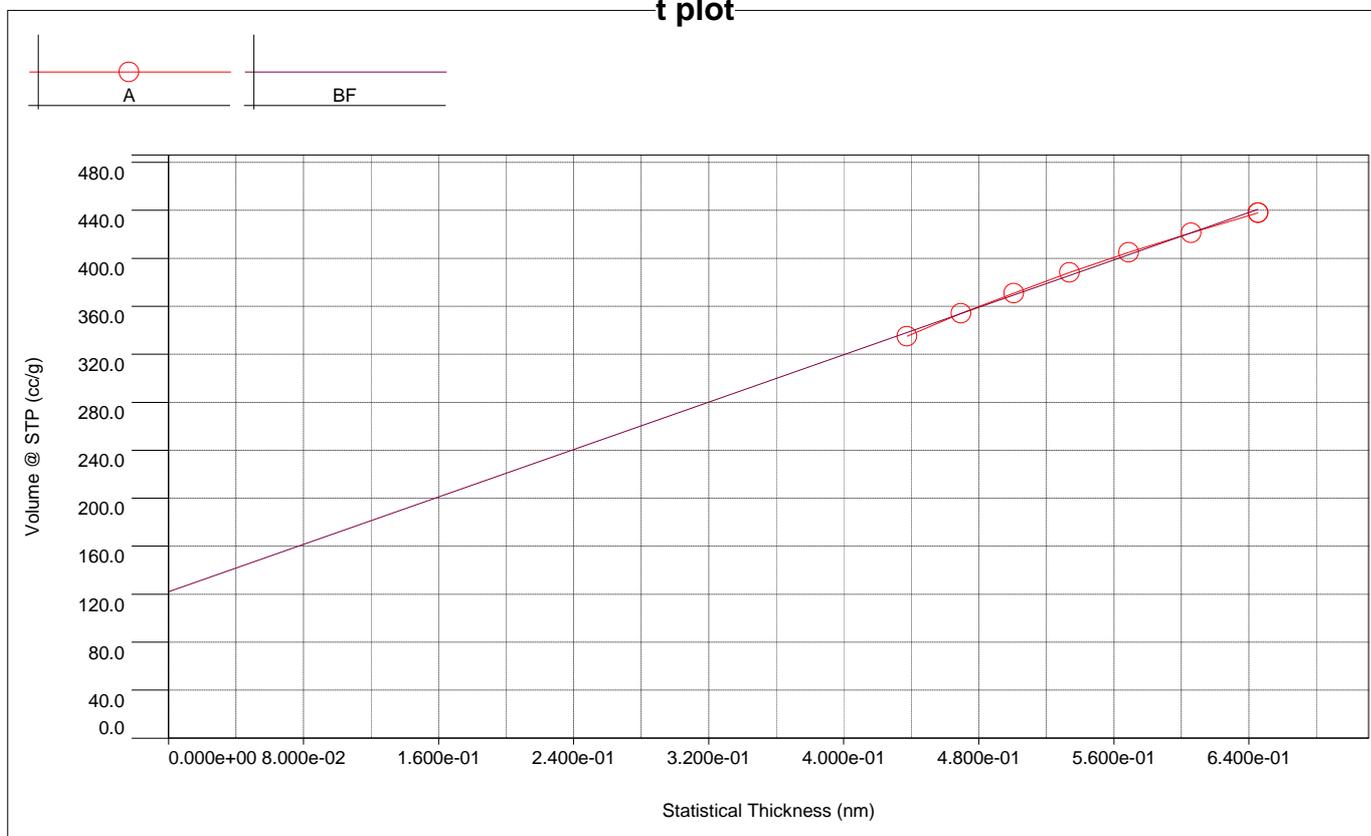
Operator: ASiQwin
 Sample ID: ljsx-1

Date: 2021/10/21
 Filename:

Report

Operator: quantachrome
 Date: 2021/10/25
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t plot



t-Plot Method Micropore Analysis

Relative Pressure	Thickness [(nm)]	Volume @ STP [(cc/g)]	Relative Pressure	Thickness [(nm)]	Volume @ STP [(cc/g)]
2.008124e-01	4.3741e-01	335.058	3.995029e-01	5.6876e-01	404.883
2.508226e-01	4.6951e-01	354.025	4.495487e-01	6.0579e-01	421.309
2.994981e-01	5.0089e-01	370.873	4.991198e-01	6.4546e-01	438.125
3.490321e-01	5.3371e-01	388.337			

V-t method summary

Thickness method: DeBoer	
Slope =	49.407
Intercept =	122.019
Correlation coefficient, r =	0.998189
Micropore volume =	0.189 cc/g
Micropore area =	428.603 m ² /g
External surface area =	764.240 m ² /g



Analysis

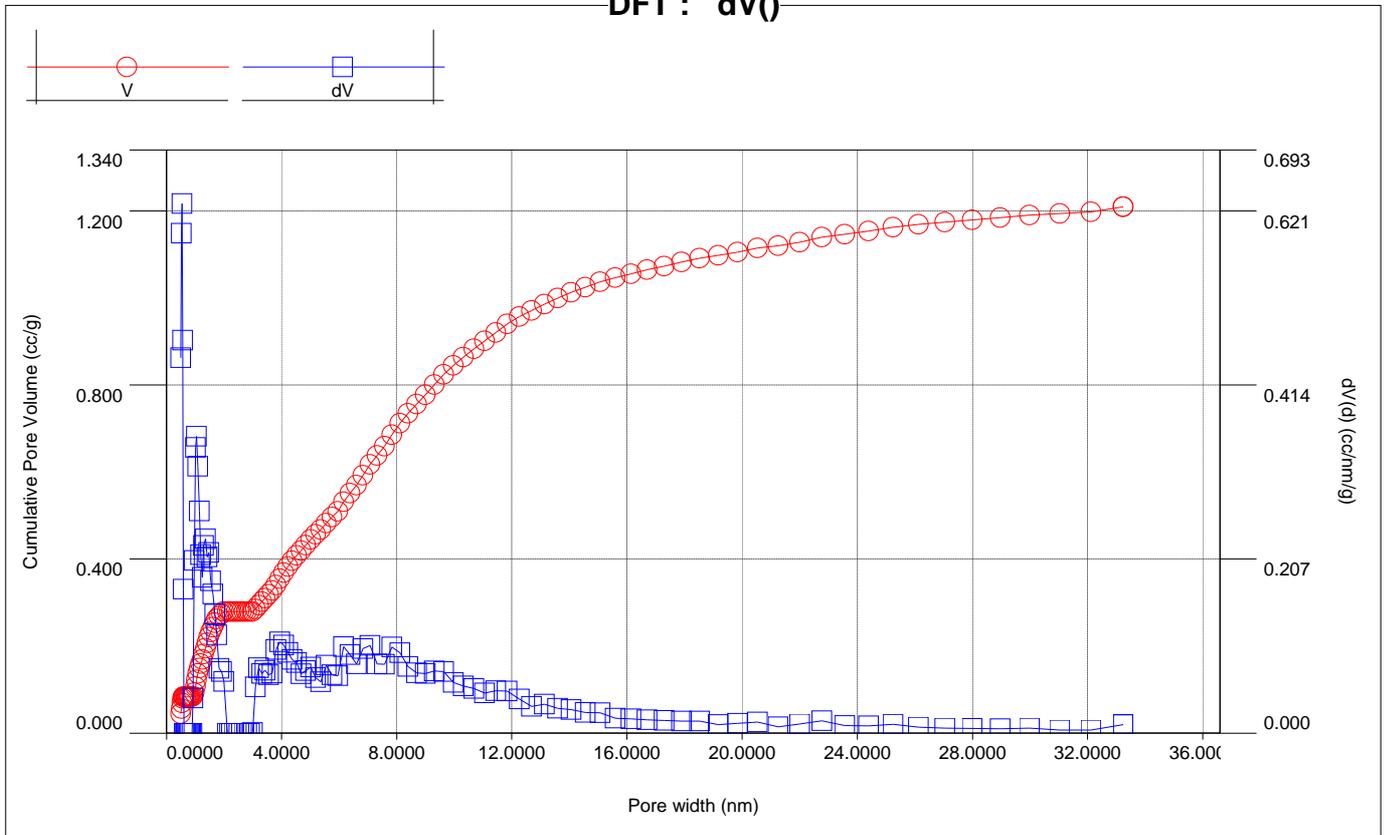
Operator: ASiQwin
 Sample ID: ljx-1

Date: 2021/10/21
 Filename:

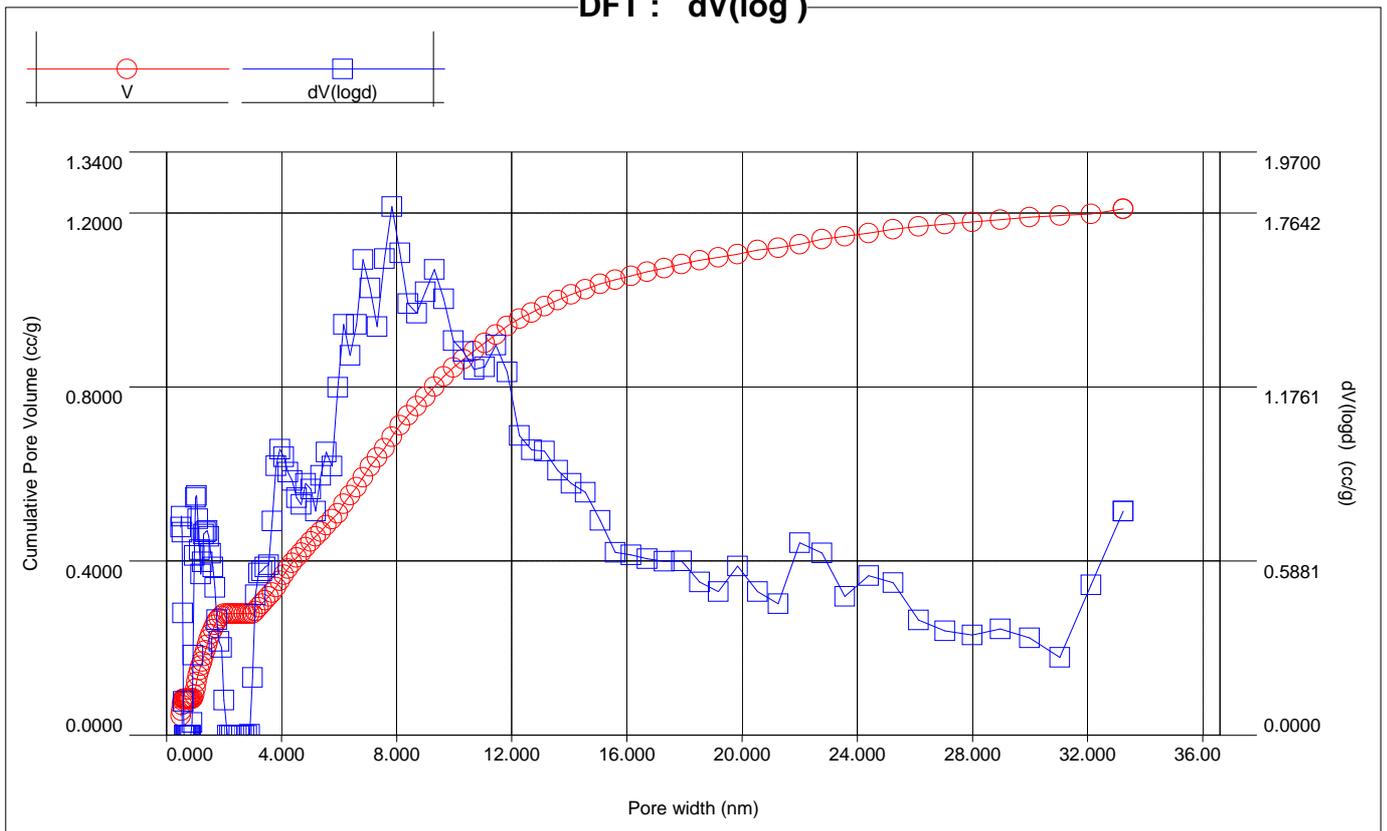
Report

Operator: quantachrome
 Date: 2021/10/25
 20211019-ljx-1_iq1_phisy_st1_2021_10_21_07_54_32.qps

DFT : dV()



DFT : dV(log)





Analysis

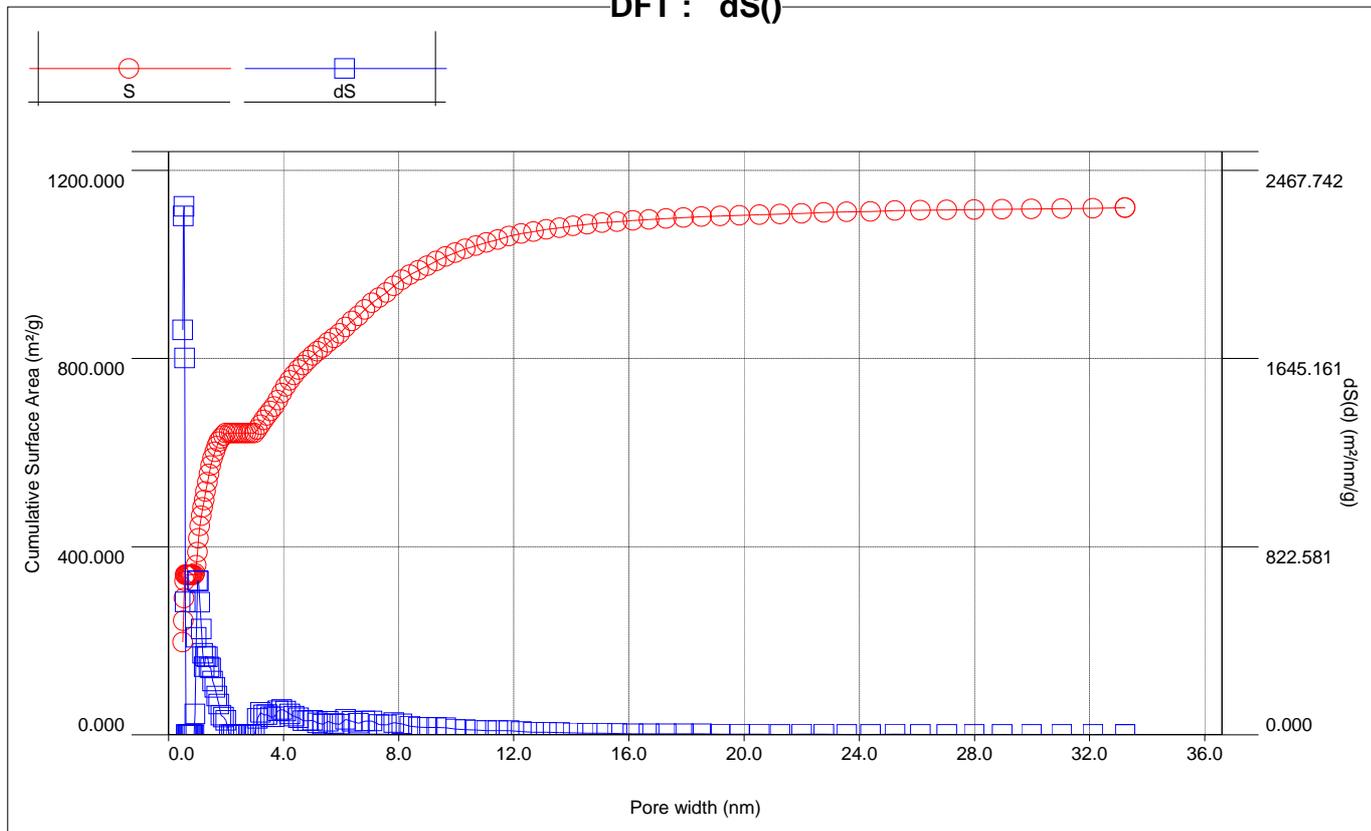
Operator: ASiQwin
Sample ID: ljx-1

Date: 2021/10/21
Filename:

Report

Operator: quantachrome
Date: 2021/10/25
 20211019-ljx-1_iq1_phisy_st1_2021_10_21_07_54_32.qps

DFT : dS()





Analysis

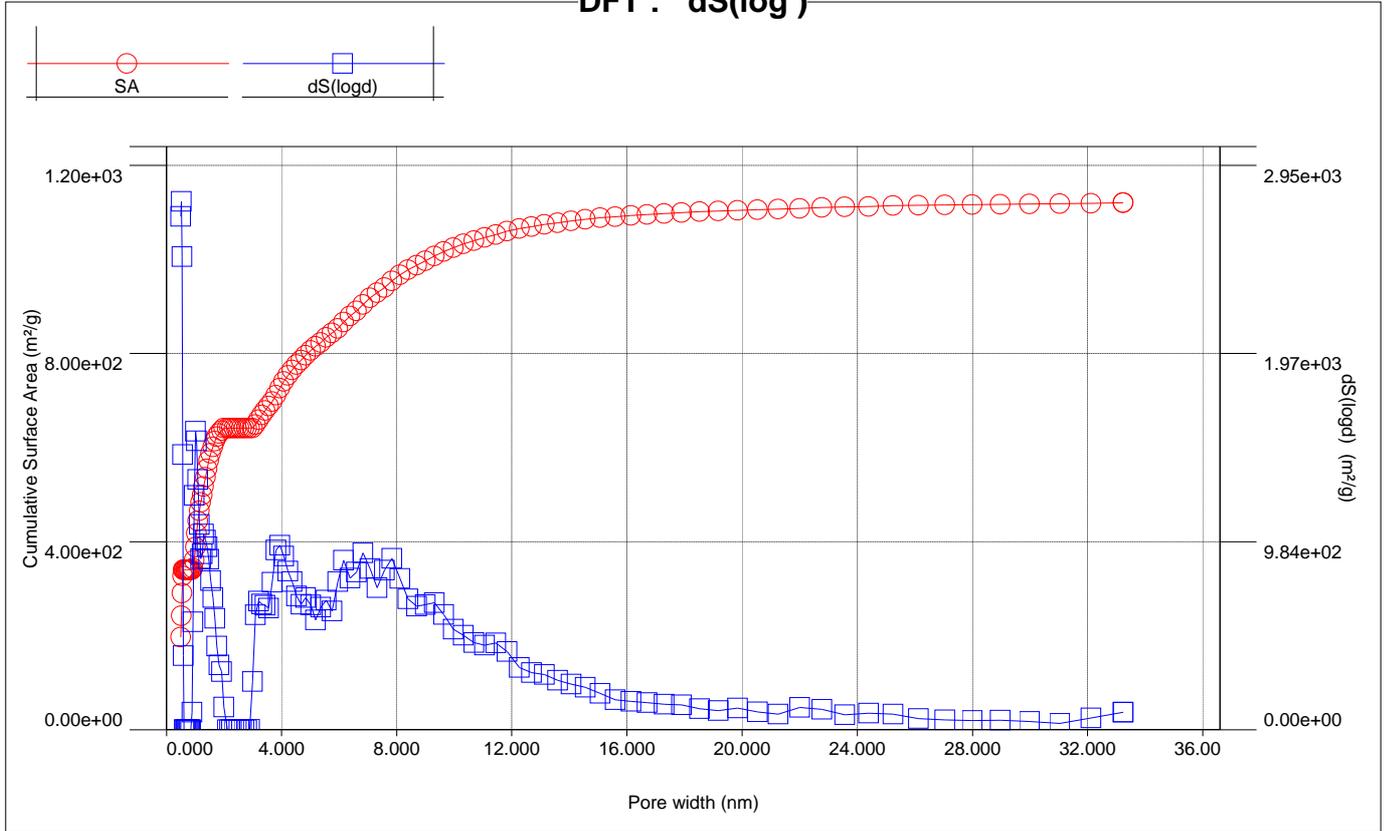
Operator: ASiQwin
 Sample ID: ljx-1

Date: 2021/10/21
 Filename:

Report

Operator: quantachrome
 Date: 2021/10/25
 20211019-ljx-1_iq1_phisy_st1_2021_10_21_07_54_32.qps

DFT : dS(log)



Pore Size Distribution

Pore width [nm]	Cumulative Pore Volume [cc/g]	Cumulative Surface Area [m²/g]	dV(d) [cc/nm/g]	dS(d) [m²/nm/g]
0.5040	4.4105e-02	1.9663e+02	4.4618e-01	1.7706e+03
0.5240	5.5992e-02	2.4200e+02	5.9438e-01	2.2686e+03
0.5450	6.9213e-02	2.9052e+02	6.2957e-01	2.3103e+03
0.5670	7.9484e-02	3.2675e+02	4.6688e-01	1.6468e+03
0.5900	8.3421e-02	3.4009e+02	1.7116e-01	5.8022e+02
0.6140	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.6400	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.6660	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.6940	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.7230	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.7530	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.7850	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.8180	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.8520	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.8890	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.9260	8.4962e-02	3.4342e+02	4.1635e-02	8.9925e+01
0.9660	9.3169e-02	3.6041e+02	2.0518e-01	4.2481e+02
1.0070	1.0708e-01	3.8805e+02	3.3937e-01	6.7403e+02
1.0510	1.2260e-01	4.1758e+02	3.5273e-01	6.7123e+02
1.0960	1.3687e-01	4.4362e+02	3.1710e-01	5.7865e+02
1.1440	1.4954e-01	4.6577e+02	2.6391e-01	4.6139e+02
1.1930	1.5993e-01	4.8318e+02	2.1194e-01	3.5530e+02
1.2450	1.6954e-01	4.9863e+02	1.8498e-01	2.9716e+02
1.2990	1.8158e-01	5.1716e+02	2.2286e-01	3.4312e+02
1.3560	1.9473e-01	5.3656e+02	2.3080e-01	3.4041e+02
1.4160	2.0730e-01	5.5431e+02	2.0941e-01	2.9578e+02
1.4780	2.2061e-01	5.7232e+02	2.1471e-01	2.9053e+02
1.5430	2.3236e-01	5.8755e+02	1.8071e-01	2.3423e+02

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Analysis

Operator: ASiQwin
 Sample ID: ljx-1

Date: 2021/10/21
 Filename:

Report

Operator: quantachrome
 Date: 2021/10/25
 20211019-ljx-1_iq1_phisy_st1_2021_10_21_07_54_32.qps

Pore Size Distribution continued

Pore width [nm]	Cumulative Pore Volume [cc/g]	Cumulative Surface Area [m ² /g]	dV(d) [cc/nm/g]	dS(d) [m ² /nm/g]
1.6110	2.4360e-01	6.0151e+02	1.6540e-01	2.0533e+02
1.6820	2.5365e-01	6.1345e+02	1.4144e-01	1.6818e+02
1.7560	2.6229e-01	6.2330e+02	1.1685e-01	1.3309e+02
1.8340	2.6830e-01	6.2985e+02	7.6988e-02	8.3956e+01
1.9150	2.7422e-01	6.3603e+02	7.3097e-02	7.6341e+01
2.0000	2.7945e-01	6.4126e+02	6.1524e-02	6.1524e+01
2.1206	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.1948	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.2717	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.3512	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.4335	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.5186	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.6068	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.6980	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.7925	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.8902	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.9914	2.7952e-01	6.4135e+02	6.7966e-04	9.0865e-01
3.0961	2.8528e-01	6.4880e+02	5.5039e-02	7.1108e+01
3.2044	2.9368e-01	6.5928e+02	7.7541e-02	9.6793e+01
3.3166	3.0164e-01	6.6888e+02	7.0915e-02	8.5528e+01
3.4326	3.1028e-01	6.7895e+02	7.4451e-02	8.6756e+01
3.5528	3.1861e-01	6.8832e+02	6.9311e-02	7.8035e+01
3.6771	3.2746e-01	6.9796e+02	7.1241e-02	7.7497e+01
3.8058	3.4022e-01	7.1137e+02	9.9123e-02	1.0418e+02
3.9390	3.5464e-01	7.2601e+02	1.0827e-01	1.0995e+02
4.0769	3.6908e-01	7.4018e+02	1.0473e-01	1.0275e+02
4.2196	3.8274e-01	7.5313e+02	9.5711e-02	9.0730e+01
4.3673	3.9565e-01	7.6495e+02	8.7394e-02	8.0044e+01
4.5201	4.0845e-01	7.7628e+02	8.3770e-02	7.4131e+01
4.6784	4.1961e-01	7.8582e+02	7.0564e-02	6.0333e+01
4.8421	4.3176e-01	7.9585e+02	7.4154e-02	6.1257e+01
5.0116	4.4504e-01	8.0646e+02	7.8396e-02	6.2572e+01
5.1870	4.5659e-01	8.1537e+02	6.5841e-02	5.0774e+01
5.3690	4.6771e-01	8.2364e+02	6.1052e-02	4.5485e+01
5.5560	4.8279e-01	8.3451e+02	8.0677e-02	5.8083e+01
5.7510	4.9627e-01	8.4388e+02	6.9127e-02	4.8080e+01
5.9520	5.0996e-01	8.5308e+02	6.8122e-02	4.5781e+01
6.1600	5.3136e-01	8.6698e+02	1.0287e-01	6.6799e+01
6.3760	5.5146e-01	8.7958e+02	9.3033e-02	5.8364e+01
6.5990	5.6974e-01	8.9067e+02	8.2010e-02	4.9710e+01
6.8300	5.9291e-01	9.0424e+02	1.0029e-01	5.8732e+01
7.0690	6.1777e-01	9.1830e+02	1.0402e-01	5.8861e+01
7.3170	6.3812e-01	9.2943e+02	8.2039e-02	4.4849e+01
7.5730	6.5907e-01	9.4049e+02	8.1849e-02	4.3232e+01
7.8379	6.8621e-01	9.5434e+02	1.0243e-01	5.2276e+01
8.1122	7.1242e-01	9.6727e+02	9.5583e-02	4.7131e+01
8.3961	7.3491e-01	9.7798e+02	7.9192e-02	3.7728e+01
8.6900	7.5599e-01	9.8768e+02	7.1731e-02	3.3018e+01
8.9941	7.7752e-01	9.9726e+02	7.0815e-02	3.1494e+01
9.3089	8.0074e-01	1.0072e+03	7.3759e-02	3.1694e+01
9.6347	8.2455e-01	1.0171e+03	7.3084e-02	3.0342e+01
9.9720	8.4481e-01	1.0253e+03	6.0065e-02	2.4093e+01
10.3210	8.6438e-01	1.0328e+03	5.6069e-02	2.1730e+01
10.6820	8.8353e-01	1.0400e+03	5.3045e-02	1.9864e+01
11.0560	9.0131e-01	1.0464e+03	4.7550e-02	1.7203e+01
11.4430	9.2074e-01	1.0532e+03	5.0184e-02	1.7542e+01
11.8436	9.4070e-01	1.0600e+03	4.9841e-02	1.6833e+01
12.2581	9.5739e-01	1.0654e+03	4.0271e-02	1.3141e+01
12.6871	9.7097e-01	1.0697e+03	3.1635e-02	9.9739e+00
13.1312	9.8621e-01	1.0743e+03	3.4317e-02	1.0454e+01
13.5908	9.9965e-01	1.0783e+03	2.9263e-02	8.6126e+00
14.0664	1.0129e+00	1.0821e+03	2.7909e-02	7.9364e+00
14.5588	1.0251e+00	1.0854e+03	2.4666e-02	6.7768e+00
15.0683	1.0374e+00	1.0887e+03	2.4266e-02	6.4418e+00
15.5957	1.0468e+00	1.0911e+03	1.7660e-02	4.5291e+00
16.1416	1.0559e+00	1.0934e+03	1.6782e-02	4.1590e+00

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Analysis

Operator: ASiQwin
Sample ID: ljx-1

Date:2021/10/21
Filename:

Report

Operator: quantachrome
Date:2021/10/25
 20211019-ljx-1_iq1_phisy_st1_2021_10_21_07_54_32.qps

Pore Size Distribution continued

Pore width [nm]	Cumulative Pore Volume [cc/g]	Cumulative Surface Area [m ² /g]	dV(d) [cc/nm/g]	dS(d) [m ² /nm/g]
16.7065	1.0649e+00	1.0955e+03	1.5981e-02	3.8263e+00
17.2912	1.0737e+00	1.0975e+03	1.5039e-02	3.4790e+00
17.8964	1.0825e+00	1.0995e+03	1.4461e-02	3.2321e+00
18.5228	1.0913e+00	1.1014e+03	1.4113e-02	3.0477e+00
19.1711	1.0980e+00	1.1028e+03	1.0226e-02	2.1335e+00
19.8421	1.1058e+00	1.1044e+03	1.1727e-02	2.3643e+00
20.5366	1.1150e+00	1.1062e+03	1.3265e-02	2.5836e+00
21.2553	1.1203e+00	1.1072e+03	7.3312e-03	1.3797e+00
21.9993	1.1283e+00	1.1086e+03	1.0751e-02	1.9546e+00
22.7693	1.1397e+00	1.1106e+03	1.4823e-02	2.6041e+00
23.5662	1.1467e+00	1.1118e+03	8.7665e-03	1.4880e+00
24.3910	1.1537e+00	1.1130e+03	8.5191e-03	1.3970e+00
25.2447	1.1628e+00	1.1144e+03	1.0641e-02	1.6861e+00
26.1282	1.1691e+00	1.1154e+03	7.1335e-03	1.0921e+00
27.0427	1.1744e+00	1.1162e+03	5.8020e-03	8.5816e-01
27.9892	1.1796e+00	1.1169e+03	5.5029e-03	7.8646e-01
28.9689	1.1845e+00	1.1176e+03	4.9919e-03	6.8929e-01
29.9828	1.1904e+00	1.1184e+03	5.7567e-03	7.6801e-01
31.0322	1.1943e+00	1.1189e+03	3.7944e-03	4.8903e-01
32.1183	1.1982e+00	1.1193e+03	3.5643e-03	4.4395e-01
33.2424	1.2095e+00	1.1207e+03	1.0061e-02	1.2106e+00

Pore Size Distribution (log)

Pore width [nm]	Cumulative Pore Volume [cc/g]	Cumulative Surface Area [m ² /g]	dV(log d) [cc/g]	dS(log d) [m ² /g]
0.5040	4.4105e-02	1.9663e+02	7.0337e-01	2.6846e+03
0.5240	5.5992e-02	2.4200e+02	7.3922e-01	2.7642e+03
0.5450	6.9213e-02	2.9052e+02	6.8587e-01	2.4743e+03
0.5670	7.9484e-02	3.2675e+02	4.1236e-01	1.4388e+03
0.5900	8.3421e-02	3.4009e+02	1.1383e-01	3.8586e+02
0.6140	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.6400	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.6660	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.6940	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.7230	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.7530	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.7850	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.8180	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.8520	8.3421e-02	3.4009e+02	0.0000e+00	0.0000e+00
0.8890	8.3421e-02	3.4009e+02	4.2589e-02	9.1985e+01
0.9260	8.4962e-02	3.4342e+02	2.7021e-01	5.6325e+02
0.9660	9.3169e-02	3.6041e+02	6.0743e-01	1.2254e+03
1.0070	1.0708e-01	3.8805e+02	8.0366e-01	1.5609e+03
1.0510	1.2260e-01	4.1758e+02	8.0991e-01	1.5109e+03
1.0960	1.3687e-01	4.4362e+02	7.3153e-01	1.3086e+03
1.1440	1.4954e-01	4.6577e+02	6.2592e-01	1.0740e+03
1.1930	1.5993e-01	4.8318e+02	5.4442e-01	8.9436e+02
1.2450	1.6954e-01	4.9863e+02	5.8572e-01	9.1918e+02
1.2990	1.8158e-01	5.1716e+02	6.7915e-01	1.0227e+03
1.3560	1.9473e-01	5.3656e+02	6.8672e-01	9.9190e+02
1.4160	2.0730e-01	5.5431e+02	6.9162e-01	9.5578e+02
1.4780	2.2061e-01	5.7232e+02	6.7175e-01	8.9104e+02
1.5430	2.3236e-01	5.8755e+02	6.1444e-01	7.7998e+02
1.6110	2.4360e-01	6.0151e+02	5.6831e-01	6.9149e+02
1.6820	2.5365e-01	6.1345e+02	4.9932e-01	5.8215e+02
1.7560	2.6229e-01	6.2330e+02	3.8996e-01	4.3640e+02
1.8340	2.6830e-01	6.2985e+02	3.1681e-01	3.3823e+02
1.9150	2.7422e-01	6.3603e+02	2.9631e-01	3.0330e+02
2.0000	2.7945e-01	6.4126e+02	1.1806e-01	1.1806e+02
2.1206	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.1948	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00

Continued on next page



Analysis

Operator: ASiQwin
Sample ID: ljx-1

Date:2021/10/21
Filename:

Report

Operator: quantachrome
Date:2021/10/25
Filename: 20211019-ljx-1_iq1_phisy_st1_2021_10_21_07_54_32.qps

Pore Size Distribution (log) continued

Pore width [nm]	Cumulative Pore Volume [cc/g]	Cumulative Surface Area [m ² /g]	dV(log d) [cc/g]	dS(log d) [m ² /g]
2.2717	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.3512	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.4335	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.5186	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.6068	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.6980	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.7925	2.7945e-01	6.4126e+02	0.0000e+00	0.0000e+00
2.8902	2.7945e-01	6.4126e+02	2.3009e-03	3.0761e+00
2.9914	2.7952e-01	6.4135e+02	1.9514e-01	2.5222e+02
3.0961	2.8528e-01	6.4880e+02	4.7406e-01	6.0018e+02
3.2044	2.9368e-01	6.5928e+02	5.4738e-01	6.7204e+02
3.3166	3.0164e-01	6.6888e+02	5.5540e-01	6.5805e+02
3.4326	3.1028e-01	6.7895e+02	5.6791e-01	6.5079e+02
3.5528	3.1861e-01	6.8832e+02	5.7515e-01	6.3626e+02
3.6771	3.2746e-01	6.9796e+02	7.2340e-01	7.7122e+02
3.8058	3.4022e-01	7.1137e+02	9.0960e-01	9.3885e+02
3.9390	3.5464e-01	7.2601e+02	9.6588e-01	9.6423e+02
4.0769	3.6908e-01	7.4018e+02	9.4027e-01	9.0737e+02
4.2196	3.8274e-01	7.5313e+02	8.8901e-01	8.2889e+02
4.3673	3.9565e-01	7.6495e+02	8.6048e-01	7.7484e+02
4.5201	4.0845e-01	7.7628e+02	8.0214e-01	6.9865e+02
4.6784	4.1961e-01	7.8582e+02	7.7996e-01	6.5512e+02
4.8421	4.3176e-01	7.9585e+02	8.5099e-01	6.9057e+02
5.0116	4.4504e-01	8.0646e+02	8.3113e-01	6.5294e+02
5.1870	4.5659e-01	8.1537e+02	7.5742e-01	5.7439e+02
5.3690	4.6771e-01	8.2364e+02	8.7777e-01	6.4128e+02
5.5560	4.8279e-01	8.3451e+02	9.5699e-01	6.7796e+02
5.7510	4.9627e-01	8.4388e+02	9.0875e-01	6.2131e+02
5.9520	5.0996e-01	8.5308e+02	1.1760e+00	7.7407e+02
6.1600	5.3136e-01	8.6698e+02	1.3884e+00	8.8675e+02
6.3760	5.5146e-01	8.7958e+02	1.2838e+00	7.9245e+02
6.5990	5.6974e-01	8.9067e+02	1.3877e+00	8.2526e+02
6.8300	5.9291e-01	9.0424e+02	1.6073e+00	9.2487e+02
7.0690	6.1777e-01	9.1830e+02	1.5113e+00	8.4214e+02
7.3170	6.3812e-01	9.2943e+02	1.3808e+00	7.4189e+02
7.5730	6.5907e-01	9.4049e+02	1.6101e+00	8.3422e+02
7.8379	6.8621e-01	9.5434e+02	1.7861e+00	8.9639e+02
8.1122	7.1242e-01	9.6727e+02	1.6300e+00	7.9118e+02
8.3961	7.3491e-01	9.7798e+02	1.4579e+00	6.8320e+02
8.6900	7.5599e-01	9.8768e+02	1.4263e+00	6.4529e+02
8.9941	7.7752e-01	9.9726e+02	1.4979e+00	6.5447e+02
9.3089	8.0074e-01	1.0072e+03	1.5739e+00	6.6473e+02
9.6347	8.2455e-01	1.0171e+03	1.4747e+00	6.0273e+02
9.9720	8.4481e-01	1.0253e+03	1.3328e+00	5.2572e+02
10.3210	8.6438e-01	1.0328e+03	1.2962e+00	4.9396e+02
10.6820	8.8353e-01	1.0400e+03	1.2362e+00	4.5537e+02
11.0560	9.0131e-01	1.0464e+03	1.2448e+00	4.4242e+02
11.4430	9.2074e-01	1.0532e+03	1.3179e+00	4.5280e+02
11.8436	9.4070e-01	1.0600e+03	1.2267e+00	4.0793e+02
12.2581	9.5739e-01	1.0654e+03	1.0129e+00	3.2551e+02
12.6871	9.7097e-01	1.0697e+03	9.6420e-01	2.9856e+02
13.1312	9.8621e-01	1.0743e+03	9.6007e-01	2.8782e+02
13.5908	9.9965e-01	1.0783e+03	8.9439e-01	2.5881e+02
14.0664	1.0129e+00	1.0821e+03	8.5069e-01	2.3800e+02
14.5588	1.0251e+00	1.0854e+03	8.2021e-01	2.2151e+02
15.0683	1.0374e+00	1.0887e+03	7.2550e-01	1.8979e+02
15.5957	1.0468e+00	1.0911e+03	6.1826e-01	1.5591e+02
16.1416	1.0559e+00	1.0934e+03	6.0873e-01	1.4832e+02
16.7065	1.0649e+00	1.0955e+03	5.9645e-01	1.4042e+02
17.2912	1.0737e+00	1.0975e+03	5.8719e-01	1.3354e+02
17.8964	1.0825e+00	1.0995e+03	5.8873e-01	1.2935e+02
18.5228	1.0913e+00	1.1014e+03	5.1770e-01	1.1018e+02
19.1711	1.0980e+00	1.1028e+03	4.8521e-01	9.9381e+01
19.8421	1.1058e+00	1.1044e+03	5.7164e-01	1.1314e+02
20.5366	1.1150e+00	1.1062e+03	4.8466e-01	9.3237e+01
21.2553	1.1203e+00	1.1072e+03	4.4402e-01	8.1853e+01

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