

Sample: CU  
Operator: W.S  
Submitter: s/n 212  
File: C:\MicroActive for ASAP 2460\data\UES\CU.SMP

Started: 2016/11/24 5:52:51	Analysis Adsorptive: N2
Completed: 2016/11/24 11:31:45	Analysis Bath Temp.: -195.800 °C
Report Time: 2016/11/24 14:28:12	Thermal Correction: No
Sample Mass: 0.6050 g	Warm Free Space: 17.9701 cm <sup>3</sup> Measured
Cold Free Space: 50.9056 cm <sup>3</sup>	Equilibration Interval: 10 s
Low Pressure Dose: 20.0000 cm <sup>3</sup> /g STP	Sample Density: 1.000 g/cm <sup>3</sup>
Automatic Degas: No	

### Summary Report

#### Surface Area

BET Surface Area: 185.3436 m<sup>2</sup>/g  
Langmuir Surface Area: 213.4853 m<sup>2</sup>/g  
t-Plot Micropore Area: 164.6321 m<sup>2</sup>/g

#### Pore Volume

t-Plot micropore volume: 0.062718 cm<sup>3</sup>/g  
BJH Adsorption cumulative volume of pores  
between 1.7000 nm and 300.0000 nm diameter: 0.009792 cm<sup>3</sup>/g  
BJH Desorption cumulative volume of pores  
between 1.7000 nm and 300.0000 nm diameter: 0.009779 cm<sup>3</sup>/g

#### Pore Size

BJH Adsorption average pore diameter (4V/A): 3.6056 nm  
BJH Desorption average pore diameter (4V/A): 3.3849 nm

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**BJH Adsorption Pore Distribution Report**

Faas Correction

Harkins and Jura

$$t = [ 13.99 / ( 0.034 - \log(P/P_0) ) ] ^{0.5}$$

Diameter Range: 1.7000 nm to 300.0000 nm

Adsorbate Property Factor: 0.95300 nm

Density Conversion Factor: 0.0015468

Fraction of Pores Open at Both Ends: 0.00

Pore Diameter Range (nm)	Average Diameter (nm)	Incremental Pore Volume (cm <sup>3</sup> /g)	Cumulative Pore Volume (cm <sup>3</sup> /g)	Incremental Pore Area (m <sup>2</sup> /g)	Cumulative Pore Area (m <sup>2</sup> /g)
337.8 - 181.3	215.8	0.000481	0.000481	0.009	0.009
181.3 - 96.2	114.4	0.000473	0.000954	0.017	0.025
96.2 - 66.0	75.4	0.000314	0.001268	0.017	0.042
66.0 - 50.1	55.8	0.000257	0.001525	0.018	0.061
50.1 - 39.9	43.8	0.000251	0.001776	0.023	0.083
39.9 - 27.2	31.1	0.000454	0.002229	0.058	0.142
27.2 - 20.7	23.0	0.000343	0.002572	0.060	0.201
20.7 - 16.7	18.2	0.000268	0.002841	0.059	0.260
16.7 - 14.0	15.1	0.000215	0.003056	0.057	0.317
14.0 - 12.1	12.9	0.000167	0.003223	0.052	0.369
12.1 - 10.6	11.2	0.000152	0.003375	0.054	0.423
10.6 - 9.4	10.0	0.000111	0.003485	0.044	0.467
9.4 - 8.5	8.9	0.000111	0.003596	0.050	0.517
8.5 - 7.7	8.1	0.000096	0.003692	0.048	0.565
7.7 - 7.1	7.4	0.000087	0.003779	0.047	0.612
7.1 - 6.5	6.8	0.000087	0.003866	0.051	0.663
6.5 - 6.0	6.2	0.000074	0.003940	0.048	0.711
6.0 - 5.6	5.8	0.000068	0.004008	0.047	0.758
5.6 - 5.2	5.4	0.000064	0.004072	0.048	0.806
5.2 - 4.9	5.0	0.000119	0.004191	0.095	0.900
4.9 - 4.6	4.7	0.000081	0.004272	0.069	0.969
4.6 - 4.3	4.4	0.000093	0.004365	0.084	1.053
4.3 - 4.0	4.2	0.000098	0.004463	0.094	1.148
4.0 - 3.8	3.9	0.000105	0.004568	0.107	1.255
3.8 - 3.6	3.7	0.000125	0.004693	0.135	1.390
3.6 - 3.4	3.5	0.000138	0.004831	0.158	1.548
3.4 - 3.2	3.3	0.000160	0.004991	0.194	1.742
3.2 - 3.0	3.1	0.000169	0.005161	0.217	1.959
3.0 - 2.9	3.0	0.000192	0.005352	0.259	2.217
2.9 - 2.7	2.8	0.000231	0.005584	0.330	2.548
2.7 - 2.6	2.7	0.000270	0.005854	0.407	2.955
2.6 - 2.4	2.5	0.000298	0.006152	0.474	3.428
2.4 - 2.3	2.4	0.000344	0.006496	0.578	4.007
2.3 - 2.2	2.2	0.000394	0.006889	0.701	4.707
2.2 - 2.1	2.1	0.000473	0.007362	0.891	5.598
2.1 - 1.9	2.0	0.000591	0.007954	1.181	6.779

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1.9 - 1.8	1.9	0.000760	0.008713	1.618	8.397
1.8 - 1.7	1.7	0.001078	0.009792	2.465	10.863