

# Mercury Porosimetry Analysis

for  
ABC Company

on  
1/30/2009

by  
POROUS MATERIALS, INC. ANALYTICAL SERVICES DIVISION  
20 DUTCH MILL ROAD  
ITHACA, NY 14850 USA  
PHONE (607)-257-5544 or 1-800-TALK-PMI

File: D:\Sample\ABC\_Company\21507\_089-c.pdt

Sample ID: 21507\_089

Operator: TLM

Lot Number: 11231

PMI Test Number: T101

Purchase Order Number: 1005581

Sample Weight = 2.4906 g

Liquid = MERCURY

Mercury Contact Angle = 140 Degrees

Mercury Surface Tension = 480 Dynes/cm

Cumulative pore volume in cc/g of sample

% total pore volume = % of total cumulative pore volume belonging to pores of diameter > D

Average pressure = square root of  $P(I) \cdot P(I-1)$

Pore size distribution function is equal to  $dV/d\log P$

Surface area assumes cylindrical pores

Pressure PSIA	Pore Diameter Microns	Cumulative Pore Vol. cc/g	% of total Pore Vol. PSIA	Average Pressure dlogP	dV ----- m2/g	Cumulative Surf. area
1.923	110.861	0	0	1.923	0.013	0
2.066	103.2321	0.0004	0.418	1.993	0.012	0
2.209	96.5208	0.0008	0.783	2.136	0.017	0
2.388	89.3108	0.0013	1.361	2.297	0.023	0.0001
2.567	83.0826	0.002	2.096	2.475	0.03	0.0001
2.786	76.5297	0.0031	3.196	2.674	0.038	0.0001
3.01	70.8526	0.0044	4.52	2.896	0.045	0.0002
3.241	65.7851	0.0058	6.031	3.123	0.05	0.0003
3.491	61.0869	0.0074	7.718	3.364	0.056	0.0004
3.805	56.0437	0.0095	9.889	3.644	0.064	0.0005
4.14	51.5026	0.0119	12.34	3.969	0.076	0.0007
4.48	47.5981	0.0145	15.056	4.307	0.09	0.0009
4.873	43.7562	0.0178	18.463	4.672	0.1	0.0012
5.324	40.0496	0.0216	22.45	5.094	0.103	0.0016
5.775	36.9242	0.0252	26.212	5.545	0.1	0.002
6.292	33.8913	0.029	30.079	6.028	0.095	0.0024
6.856	31.1011	0.0325	33.741	6.568	0.087	0.0028
7.471	28.5434	0.0357	37.117	7.157	0.078	0.0032
8.184	26.0542	0.0388	40.334	7.819	0.069	0.0037
8.918	23.9116	0.0414	42.998	8.543	0.06	0.0041
9.756	21.8578	0.0438	45.448	9.327	0.053	0.0045
10.651	20.0197	0.0458	47.558	10.194	0.047	0.0049
11.651	18.3025	0.0476	49.468	11.14	0.043	0.0053
12.745	16.7303	0.0493	51.194	12.186	0.039	0.0057
13.965	15.2692	0.0509	52.808	13.341	0.036	0.0061

15.488	13.7676	0.0525	54.47	14.707	0.031	0.0065
17.328	12.3055	0.054	56.039	16.382	0.026	0.007
19.482	10.9449	0.0553	57.403	18.374	0.021	0.0074
21.943	9.7177	0.0564	58.546	20.676	0.018	0.0079
24.716	8.6275	0.0573	59.51	23.288	0.016	0.0083
27.794	7.6719	0.0581	60.338	26.21	0.014	0.0087
31.336	6.8048	0.0588	61.099	29.512	0.013	0.0091
35.654	5.9806	0.0596	61.854	33.425	0.012	0.0095
40.128	5.3139	0.0602	62.49	37.825	0.011	0.0099
45.208	4.7167	0.0607	63.066	42.592	0.01	0.0104
51.533	4.1378	0.0613	63.641	48.267	0.01	0.0109
59.253	3.5987	0.0619	64.252	55.258	0.01	0.0115
68.039	3.134	0.0625	64.896	63.494	0.01	0.0122
77.607	2.7476	0.0631	65.506	72.665	0.009	0.013
89.014	2.3955	0.0636	66.07	83.115	0.007	0.0139
102.13	2.0879	0.0641	66.534	95.347	0.006	0.0147
116.163	1.8356	0.0644	66.902	108.921	0.006	0.0154
135.292	1.5761	0.0648	67.297	125.363	0.006	0.0163
156.917	1.3589	0.0652	67.669	145.704	0.006	0.0173
182.841	1.1662	0.0655	68.054	169.383	0.006	0.0185
212.592	1.003	0.0659	68.434	197.156	0.005	0.0198
251.162	0.849	0.0663	68.832	231.074	0.005	0.0215
290.22	0.7347	0.0666	69.137	269.985	0.004	0.023
337.406	0.632	0.0669	69.416	312.925	0.004	0.0245
373.274	0.5713	0.067	69.612	354.887	0.005	0.0258
415.529	0.5132	0.0673	69.863	393.835	0.006	0.0276
461.867	0.4617	0.0676	70.166	438.086	0.007	0.03
522.275	0.4083	0.068	70.557	491.143	0.007	0.0335
605.005	0.3525	0.0684	71.029	562.12	0.007	0.0382
684.353	0.3116	0.0688	71.425	643.457	0.008	0.0429
767.502	0.2778	0.0692	71.817	724.736	0.009	0.048
861.4	0.2475	0.0696	72.269	813.097	0.011	0.0546
979.31	0.2177	0.0702	72.888	918.465	0.013	0.0649
1093.181	0.1951	0.0708	73.544	1034.68	0.015	0.0772
1218.82	0.175	0.0716	74.3	1154.292	0.017	0.0929
1369.058	0.1558	0.0724	75.174	1291.757	0.017	0.1133
1529.503	0.1394	0.0732	76.009	1447.059	0.016	0.1352
1732.003	0.1231	0.074	76.884	1627.607	0.014	0.1609
1960.163	0.1088	0.0748	77.646	1842.555	0.012	0.1863
2237.342	0.0953	0.0755	78.359	2094.172	0.012	0.2132
2576.918	0.0827	0.0762	79.093	2401.135	0.012	0.2451
2964.028	0.0719	0.0769	79.882	2763.704	0.014	0.2844
3401.178	0.0627	0.0778	80.732	3175.088	0.015	0.3332
3917.298	0.0544	0.0786	81.658	3650.127	0.015	0.3943
4452.317	0.0479	0.0795	82.521	4176.248	0.015	0.4594
5106.908	0.0418	0.0804	83.452	4768.393	0.015	0.5396
5821.689	0.0366	0.0812	84.35	5452.598	0.016	0.628
6592.995	0.0323	0.0821	85.259	6195.35	0.019	0.7298
7439.613	0.0287	0.0831	86.272	7003.523	0.022	0.8579
8414.399	0.0253	0.0842	87.477	7912.008	0.024	1.0302
9540.683	0.0224	0.0856	88.86	8959.861	0.026	1.254
10681.005	0.02	0.0869	90.198	10094.755	0.028	1.4981
12013.34	0.0177	0.0883	91.69	11327.601	0.031	1.8035
13594.575	0.0157	0.0899	93.396	12779.524	0.033	2.1973
15380.982	0.0139	0.0917	95.212	14460.218	0.032	2.6718
17187.258	0.0124	0.0932	96.823	16259.056	0.028	3.1449
19383.564	0.011	0.0947	98.319	18252.406	0.019	3.6384
21588.753	0.0099	0.0956	99.26	20456.465	0.01	3.9861
24128.043	0.0088	0.0961	99.782	22823.111	0.004	4.2015
26971.959	0.0079	0.0963	99.966	25510.402	0.001	4.2859
29700.387	0.0072	0.0963	99.997	28303.315	0	4.302

30211.259	0.0071	0.0963	100	29954.734	0	4.3036
35417.95	0.006	0.0963	100	32711.173	0	4.3036
42154.652	0.0051	0.0963	100	38639.764	0	4.3036
48411.702	0.0044	0.0963	100	45174.976	0	4.3036
52151.013	0.0041	0.0963	100	50246.585	0	4.3036

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## Summary Sheet

for  
**ABC Company**  
on  
1/30/2009

**File:** D:\Sample\ABC\_Company\21507\_089-c.pdt  
**Sample ID:** 21507\_089  
**Operator:** TLM  
**Lot Number:** 11231  
**PMI Test Number:** T101  
**Purchase Order Number:** 1005581

Total intrusion volume = 0.0963 cc/g  
Total Surf. area = 4.3036 m2/g  
Median Pore Diameter (Based on Volume) = 17.818 Microns  
Median Pore Diameter (Based on Surface Area) = 0.0159 Microns  
Standard Deviation (Based on Volume) = 0.0346 Microns  
Standard Deviation (Based on Surface Area) = 0.0063 Microns  
Average Pore Diameter (4V/S) = 0.0895 Microns

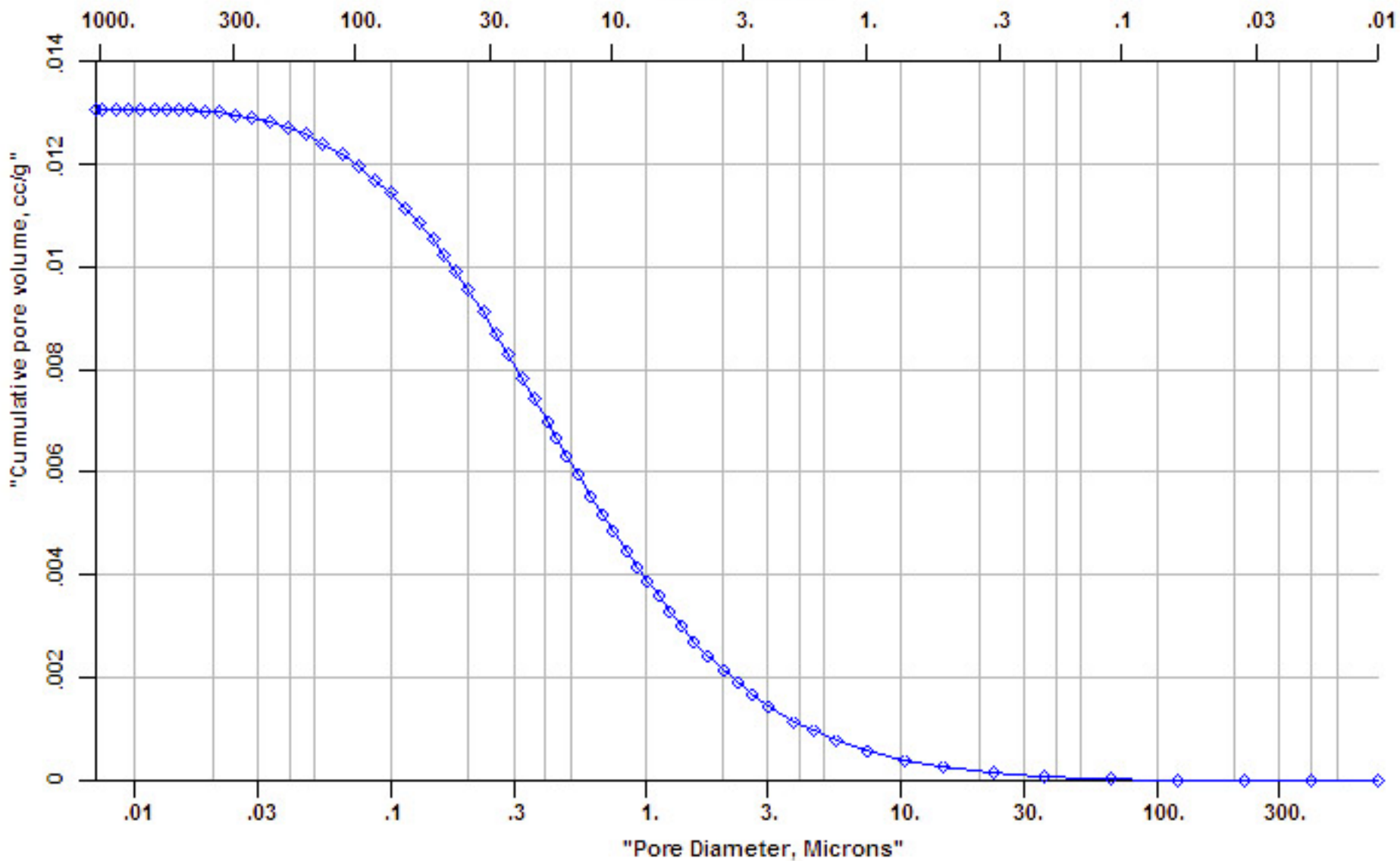
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Diameter of maximum value of dV/dlogD = 40.04959

"Pore Volume x Diameter"

"Sample 1"

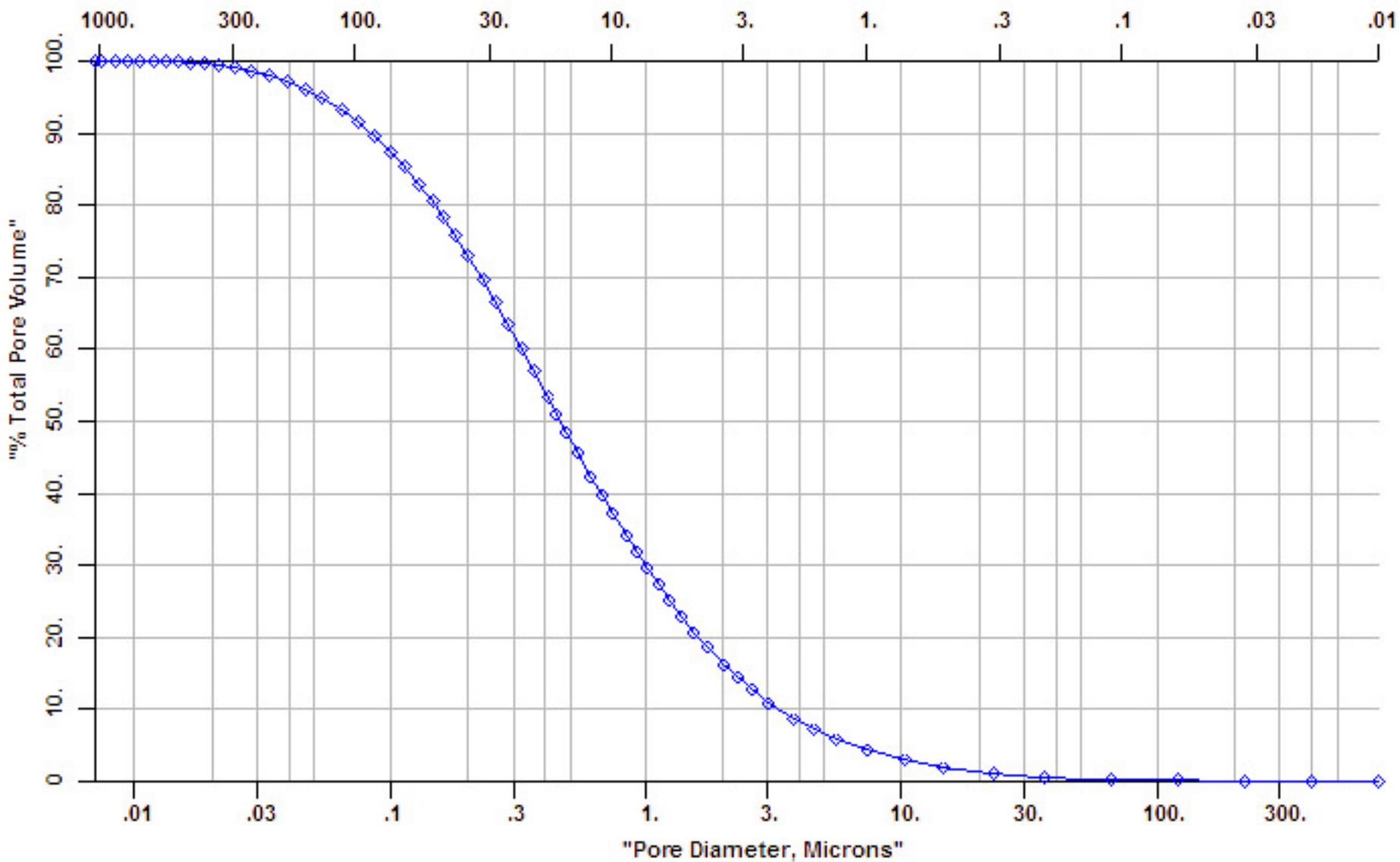
"Pressure, PSIA"



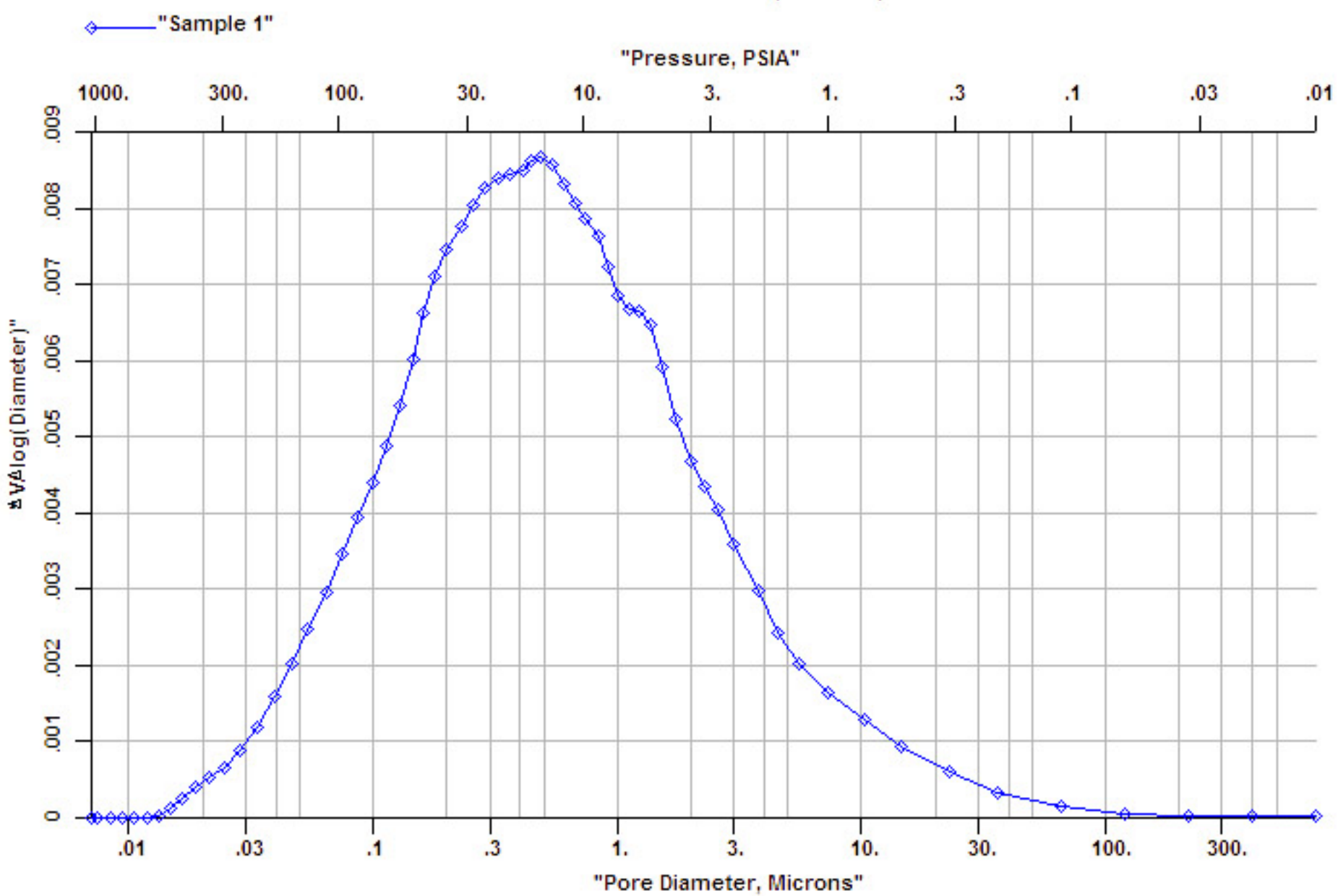
"% Total Pore Volume"

"Sample 1"

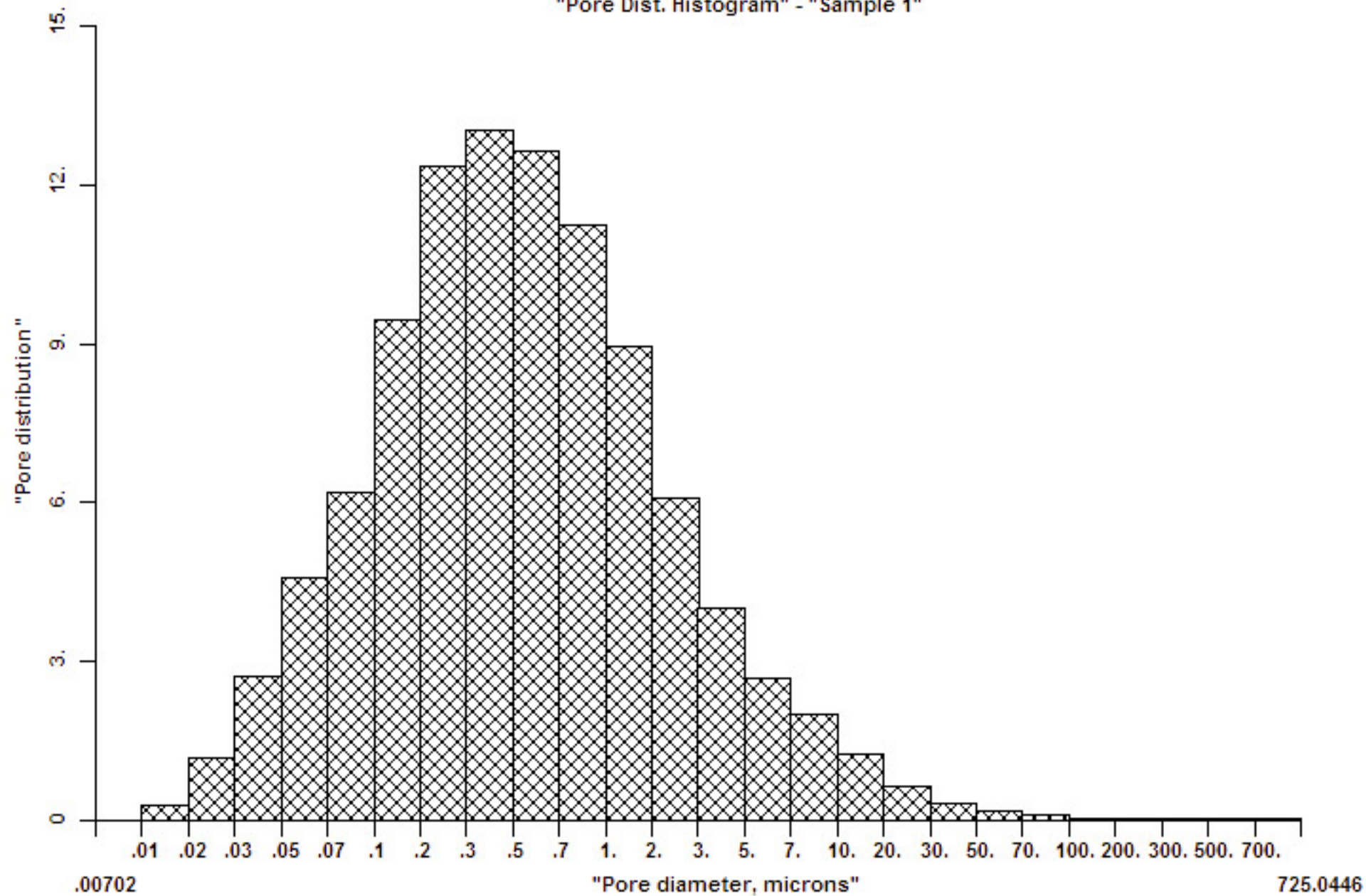
"Pressure, PSIA"



# "Pore Distribution (Diameter)"



"Pore Dist. Histogram" - "Sample 1"

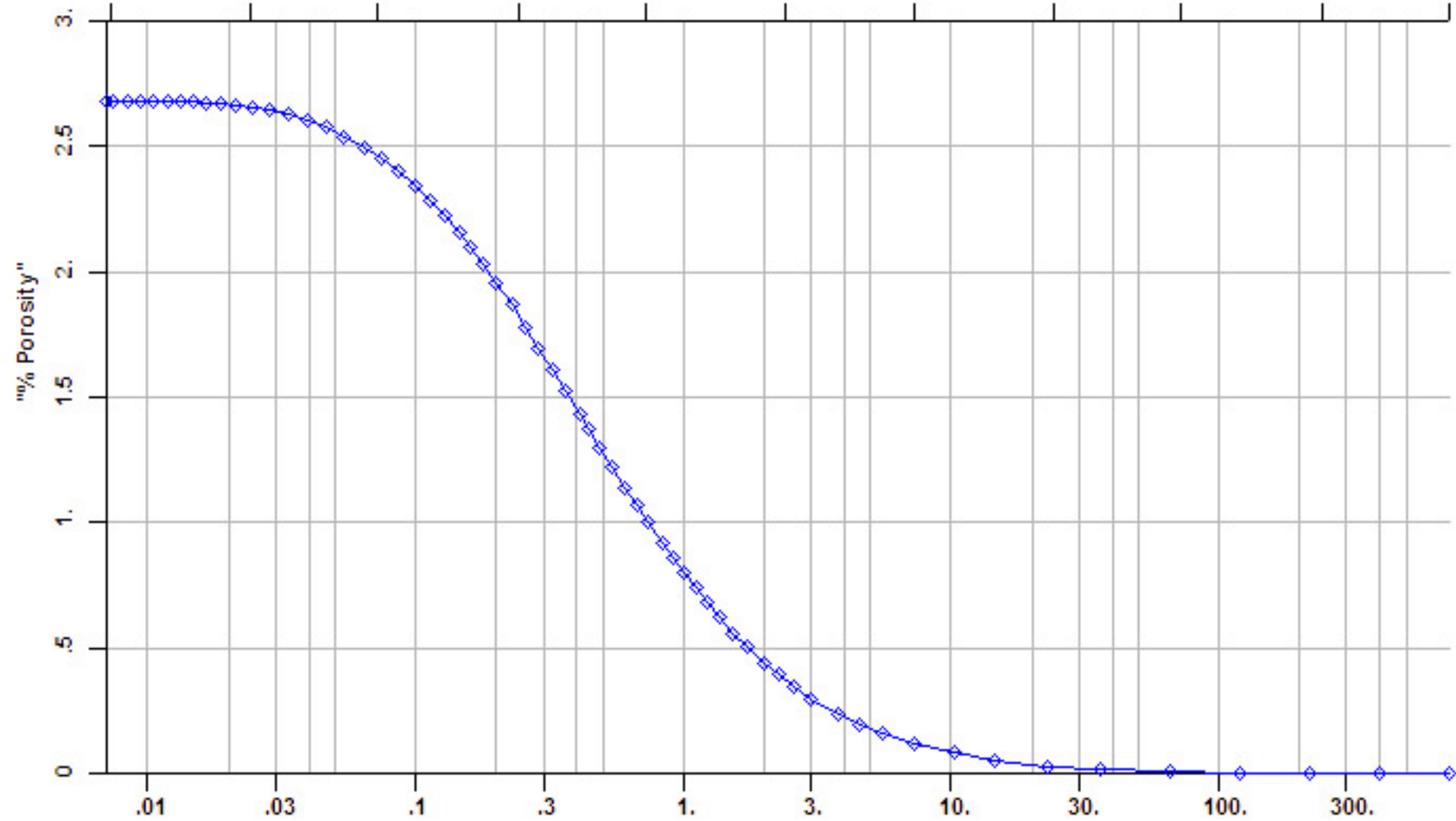


"% Porosity"

"Sample 1"

"Pressure, PSIA"

1000. 300. 100. 30. 10. 3. 1. .3 .1 .03 .01



"Pore Diameter, Microns"

"Cumulative Surface Area \*"

"Sample 1"

"Pressure, PSIA"

