Quantachrome NovaWin - Data Acquisition and Reduction

 for NOVA instruments

 ?1994-2010, Quantachrome Instruments

 version 11.0

Analysis Report

Operator:open Date:2014/10/07 Operator:open Date:10/7/2014

Sample ID: L4 Filename: C:\QCdata\Physisorb\sttn\_B\_20141005-L4.qps

Sample Desc: Comment:

Sample weight: 0.0757 g Sample Volume: 0 cc

Outgas Time: 0.0 hrs OutgasTemp: 0.0 C

Analysis gas: Nitrogen Bath Temp: 77.3 K

Press. Tolerance:0.100/0.100 (ads/des)Equil time: 60/60 sec (ads/des) Equil timeout: 240/240 sec (ads/des)

Analysis Time: 450.3 min End of run: 2014/10/07 21:39:17 Instrument: Nova Station B

Cell ID: 4 F/W version: 0.00

Adsorbate Nitrogen Temperature 77.350K

 Molec. Wt.: 28.013 g Cross Section: 16.200 Ų Liquid Density: 0.808 g/cc

 Surface Area Data

MultiPoint BET 3.008e+00 m?g

Langmuir surface area 1.373e+00 m?g

BJH method cumulative adsorption surface area 8.736e+00 m?g

BJH method cumulative desorption surface area 1.011e+01 m?g

DH method cumulative adsorption surface area 8.857e+00 m?g

DH method cumulative desorption surface area 1.034e+01 m?g

t-method external surface area 3.008e+00 m?g

 Pore Volume Data

Total pore volume for pores with Diameter

less than 166.71 nm at P/Po = 0.988355 1.629e-02 cc/g

BJH method cumulative adsorption pore volume 1.914e-02 cc/g

BJH method cumulative desorption pore volume 1.723e-02 cc/g

DH method cumulative adsorption pore volume 1.869e-02 cc/g

DH method cumulative desorption pore volume 1.689e-02 cc/g

HK method cumulative pore volume 1.737e-04 cc/g

SF method cumulative pore volume 3.921e-01 cc/g

 Pore Size Data

Average pore Diameter 2.166e+01 nm

BJH method adsorption pore Diameter (Mode Dv(d)) 3.202e+00 nm

BJH method desorption pore Diameter (Mode Dv(d)) 2.427e+00 nm

DH method adsorption pore Diameter (Mode Dv(d)) 3.202e+00 nm

DH method desorption pore Diameter (Mode Dv(d)) 2.427e+00 nm

HK method pore Diameter (Mode) 1.407e+00 nm

SF method pore Diameter (Mode) 3.820e+00 nm

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 Average Pore Size summary

 Average pore Diameter = 2.16557e+01 nm

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 Relative Volume @ STP

 Pressure

 cc/g

 8.06600e-03 0.0820

 1.44960e-02 0.1165

 2.48670e-02 0.1541

 3.46990e-02 0.1918

 4.55160e-02 0.2011

 5.50340e-02 0.2054

 1.05773e-01 0.2074

 1.54492e-01 0.2706

 2.06407e-01 0.3894

 2.27287e-01 0.4618

 2.54949e-01 0.5618

 2.83119e-01 0.6859

 3.09445e-01 0.8118

 3.30379e-01 0.9220

 3.57919e-01 1.0626

 3.83991e-01 1.2291

 4.10317e-01 1.4145

 4.60657e-01 1.6994

 5.07917e-01 1.9886

 5.52987e-01 2.2967

 6.06453e-01 2.6662

 6.57500e-01 3.0684

 7.06811e-01 3.4532

 7.58057e-01 3.9284

 8.03535e-01 4.4246

 8.58676e-01 5.0318

 9.08601e-01 5.8104

 9.56659e-01 7.1803

 9.88355e-01 10.5290

 9.51528e-01 8.2526

 9.01718e-01 7.1711

 8.47483e-01 6.4859

 8.01530e-01 6.0399

 7.46788e-01 5.5023

 6.95111e-01 5.0882

 6.47890e-01 4.6988

 5.97358e-01 4.2929

 5.78407e-01 4.2038

 5.43799e-01 3.9677

 5.26738e-01 3.8806

 5.03615e-01 3.7535

 4.75030e-01 3.5669

 4.54719e-01 3.4747

 4.24544e-01 3.3009

 3.98195e-01 1.3558

 3.45551e-01 1.0225

 2.96056e-01 0.7502

 2.45063e-01 0.5532

 1.96006e-01 0.3606

 1.59003e-01 0.2803

 9.99960e-02 0.2001

 6.67450e-02 0.2044

 5.36250e-02 0.2021

 3.39750e-02 0.1885 Quantachrome NovaWin - Data Acquisition and Reduction

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 Total Pore Volume summary

 Total Pore Volume

 Total pore volume = 1.629e-02 cc/g

 for pores smaller than 166.7 nm (Diameter)

 at P/Po = 0.98835