STUDY OF HYDROCARBON - SHALE INTERACTION

PROGRESS REPORT #10

PART III . 2 1/2

APPENDIX B (continued)

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Date 8/18/1978

Sample ID : WV#6-MERC-1X:7369

Gas : Helium

Initials : DLW

Book : 1

Page : 49

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SAMPLE DATA

Weight : 4.17115 (grams)

Density : 2.57233 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

9.51499E-05 Vol Gas/Vol Rock/Torr

4.92067E-03 Vol Gas/Vol rock/PSI

7.23139E-02 Vol Gas/Vol Rock/ATM

1.65027E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : 2.53783 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
240.608	3.6076E-07	9.09401	1	0
525.471	7.93415E-07	5.85756	1	0
818.736	1.4124E-06	4.03682	1	0
889.733	1.52018E-06	4.33492	1	0

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RER

Date 8/18/1978

Sample ID : WV#6-MERC-1X-7369

Gas : Methane

Initials : DLW

Book : 1

Page : 49

SAMPLE DATA

Weight : 4.17115 (grams)

Density : 2.57233 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

1.61177E-03 Vol Gas/Vol Rock/Torr
8.33526E-02 Vol Gas/Vol rock/PSI
1.22495 Vol Gas/Vol Rock/ATM
2.79544E-08 Moles Gas/Gram Rock/Torr

UNCERTAINTY : .155062 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
219.38	7.98389E-06	411499	1	0
502.722	1.50825E-05	308841	2	7.57859
799.555	2.12577E-05	26907	2	9.77398
876.861	2.27782E-05	29038	2	885621

DIFFUSION

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Date 8/18/1978

Sample ID : WU#6-MERC-1X-7369

Gas : Methane

Initials : DLW

Book : 1

Page : 49

SAMPLE DATA

Weight : 4.17115 (grams)

Density : 2.57233 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 876.597

P equilibrium : 229.095

P o : 216.175

SPECIFIC DEGASIBILITY 1.34613E-06

UNCERTAINTY 1.13976 %

System d Moles/ dP 2.04441E-06

Date 8/18/1978

Sample ID : WU#6-MERC-1X-7369

Gas : Nitrogen

Initials : DLW

Book : 1

Page : 49

SAMPLE DATA

Weight : 4.17115 (grams)

Density : 2.57233 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

INTERNAL AREA

2.25257E-04 Moles/Gram
 8.75694E-05 Moles/ml.
 12.9794 ml. gas/ml. rock
 21.4332 Specific Area (sq. meters/gram)

UNCERTAINTY : 5.01695E-02 %

C : 2266.81

UNCERTAINTY IN C : 5.01714E-02 %

BAROMETRIC PRESSURE 742.061 mm Hg

DETAILED DATA 5 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
.160423	7.44803E-05	.203148	2	879534
.25.494	2.09806E-04	.101996	1	0
111.558	2.72863E-04	9.60611E-02	1	0
179.889	3.06632E-04	.098716	2	124398
235.718	3.32149E-04	.101899	1	0

Date 8/18/1978

Sample ID : WU#6-MERC-1X-7369

Gas : Nitrogen

Initials : DLW

Book : 1

Page : 49

SAMPLE DATA

Weight : 4.17115 (grams)

Density : 2.57233 (gm/cc)

Sample Temp : -196 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 235.021

P equilibrium : 60.8239

P o : 39.4443

SPECIFIC DEGASIBILITY 1.42036E-05

UNCERTAINTY 7.82105E-02 %

System d Moles/ dP 8.34174E-06

ISOTHERM

Page B157

Date 8/21/1978

Sample ID : WU#6-MERC-1X:7316

Gas : Helium

Initials : JCN

Book : 1

Page : 48

SAMPLE DATA

Weight : 5.0162 (grams)

Density : 2.63905 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

1.03314E-04 Vol Gas/Vol Rock/Torr
5.34288E-03 Vol Gas/Vol rock/PSI
7.85187E-02 Vol Gas/Vol Rock/ATM
1.74657E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : 2.00578 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
235.176	3.80841E-07	7.17686	1	0
527.177	8.56834E-07	4.51903	2	827734
815.513	1.4776E-06	3.21482	1	0
886.441	1.59122E-06	3.45033	1	0

ISOTHERM

Page B158

Date 8/21/1978

Sample ID : WU#6-MERC-1X-7316

Gas : Methane

Initials : JCN

Book : 1

Page : 48

SAMPLE DATA

Weight : 5.0162 (grams)

Density : 2.63905 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

6.23253E-04 Vol Gas/Vol Rock/Torr

3.22315E-02 Vol Gas/Vol rock/PSI

.473672 Vol Gas/Vol Rock/ATM

1.05363E-08 Moles Gas/Gram Rock/Torr

UNCERTAINTY : .339498 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
226.039	2.79567E-06	.979149	1	0
511.823	5.58739E-06	.694643	1	0
804.682	8.24966E-06	.577695	1	0
878.931	8.88063E-06	.620569	1	0

Date 8/21/1978

Sample ID : WV#6-MERC-1X-7316

Gas : Methane

Initials : JCN

Book : 1

Page : 48

SAMPLE DATA

Weight : 5.0162 (grams)

Density : 2.63905 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 878.405

P equilibrium : 220.619

P o : 216.023

SPECIFIC DEGASIBILITY 3.93203E-07

UNCERTAINTY 1.53104 %

System d Moles/ dP 2.06227E-06

Date 8/21/1978

Sample ID : WU#6-MERC-1X-7316

Gas : Nitrogen

Initials : JCN

Book : 1

Page : 48

SAMPLE DATA

Weight : 5.0162 (grams)

Density : 2.63905 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

INTERNAL AREA

1.05517E-04 Moles/Gram
 3.99829E-05 Moles/ml.
 6.2376 ml. gas/ml. rock
 10.0399 Specific Area (sq. meters/gram)

UNCERTAINTY : 8.70737E-02 %

C : 816.127

UNCERTAINTY IN C : .087266 %

BAROMETRIC PRESSURE 748.335 mm Hg

DETAILED DATA 5 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
-1.19445	5.99126E-05	.210112	1	0
65.3311	1.09242E-04	.162983	1	0
133.542	1.29269E-04	.168705	1	0
189.442	1.43881E-04	.175037	1	0
241.46	1.57102E-04	.179244	1	0

DIFFUSION

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Date 8/21/1978

Sample ID : WV#6-MERC-1X-7316

Gas : Nitrogen

Initials : JCN

Book : 1

Page : 48

SAMPLE DATA

Weight : 5.0162 (grams)

Density : 2.63905 (gm/cc)

Sample Temp : -196 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 240.842

P equilibrium : 48.862

P o : 37.3735

SPECIFIC DEGASIBILITY 7.77151E-06

UNCERTAINTY .125825 %

System d Moles/ dP 8.40098E-06

ISOTHERM

Page B162

Date 8/22/1978

Sample ID : WU#6-MERC-1X-7215

Gas : Helium

Initials : DLW

Book : 1

Page : 44

SAMPLE DATA

Weight : 4.48473 (grams)

Density : 2.592 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

1.00739E-04 Vol Gas/Vol Rock/Torr

5.20971E-03 Vol Gas/Vol rock/PSI

7.65616E-02 Vol Gas/Vol Rock/ATM

1.73395E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : 2.18757 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
275.387	4.77941E-07	6.38933	2	12.3444
549.76	8.87873E-07	4.87168	2	2.31357
823.515	1.4765E-06	3.59355	1	0
891.31	1.56606E-06	3.91567	2	3.16552

ISOTHERM

Page **B163**

Date 8/22/1978

Sample ID : WV#6-MERC-1X-7215

Gas : Methane

Initials : DLW

Book : 1

Page : 44

SAMPLE DATA

Weight : 4.48473 (grams)

Density : 2.592 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

3.15726E-04 Vol Gas/Vol Rock/Torr

1.63278E-02 Vol Gas/Vol rock/PSI

.239952 Vol Gas/Vol Rock/ATM

5.43436E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : .72828 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
-232.9	1.35553E-06	2.25519	2	2.89575
518.305	2.85015E-06	1.52075	2	2.33229
811.681	4.36424E-06	1.2195	2	165852
880.726	4.70772E-06	1.3073	1	0

DIFFUSION

Page B164

Date 8/22/1978

Sample ID : WV#6-MERC-1X-7215

Gas : Methane

Initials : DLW

Book : 1

Page : 44

SAMPLE DATA

Weight : 4.48473 (grams)

Density : 2.592 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 880.695

P equilibrium : 208.947

P o : 206.878

SPECIFIC DEGASIBILITY 2.0962E-07

UNCERTAINTY 2.63774 %

System d Moles/ dP 2.2267E-06

BET

Page B165

Date 8/22/1978

Sample ID : WU#6-MERC-1X-7215

Gas : Nitrogen

Initials : DLW

Book : 1

Page : 44

SAMPLE DATA

Weight : 4.48473 (grams)

Density : 2.592 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

INTERNAL AREA

6.67365E-05 Moles/Gram
2.57471E-05 Moles/ml.
3.87477 ml. gas/ml. rock
6.34997 Specific Area (sq. meters/gram)

UNCERTAINTY : .178952 %

C : 124.982

UNCERTAINTY IN C : .35446 %

BAROMETRIC PRESSURE 746.684 mm Hg

DETAILED DATA 5 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
12.6595	4.67092E-05	.30135	2	3.1277
84.7048	6.6952E-05	.297354	1	0
141.737	7.93982E-05	.307125	1	0
193.399	9.00728E-05	.312638	2	4.17039
244.176	1.00361E-04	.313735	2	7.39589

DIFFUSION

Page B166

Date 8/22/1978

Sample ID : WV#6-MERC-1X-7215

Gas : Nitrogen

Initials : DLW

Book : 1

Page : 44

SAMPLE DATA

Weight : 4.48473 (grams)

Density : 2.592 (gm/cc)

Sample Temp : -196 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 243.574

P equilibrium : 40.1513

P o : 33.0804

SPECIFIC DEGASIBILITY 5.33202E-06

UNCERTAINTY .147294 %

System d Moles/ dP 8.33387E-06

ISOTHERM

Page B167

Date 8/22/1978

Sample ID : WU#6-MERC-1X-7215

Gas : Helium

Initials : JCN

Book : 1

Page : 44

SAMPLE DATA

Weight : 5.41803 (grams)

Density : 2.592 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

9.16027E-05 Vol Gas/Vol Rock/Torr

4.73722E-03 Vol Gas/Vol rock/PSI

.069618 Vol Gas/Vol Rock/ATM

1.57669E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : 2.04261 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
235.996	3.26167E-07	7.74369	1	0
529.887	7.4043E-07	4.83254	1	0
819.598	1.37222E-06	3.19899	1	0
891.755	1.47042E-06	3.45049	1	0

ISOTHERM

Page 13168

Date 8/22/1978

Sample ID : WU#6-MERC-1X-7215

Gas : Methane

Initials : JCN

Book : 1

Page : 44

SAMPLE DATA

Weight : 5.41803 (grams)

Density : 2.592 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

3.20526E-04 Vol Gas/Vol Rock/Torr

.016576 Vol Gas/Vol rock/PSI

.2436 Vol Gas/Vol Rock/ATM

5.51698E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : .593996 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
233.105	1.48262E-06	1.70629	2	10.4071
517.382	2.89868E-06	1.2374	1	0
810.479	4.3981E-06	1.0014	1	0
881.481	4.6901E-06	1.0859	1	0

DIFFUSION

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Date 8/22/1978

Sample ID : WU#6-MERC-1X:7215

Gas : Methane

Initials : JCN

Book : 1

Page : 44

SAMPLE DATA

Weight : 5.41803 (grams)

Density : 2.592 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 881.147

P equilibrium : 210.147

P o : 207.653

SPECIFIC DEGASIBILITY 1.77486E-07

UNCERTAINTY 1.29298 %

System d Moles/ dP 2.04327E-06

BET

Page B170

Date 8/22/1978

Sample ID : WU#6-MERC-1X-7215

Gas : Nitrogen

Initials : JCN

Book : 1

Page : 44

SAMPLE DATA

Weight : 5.41803 (grams)

Density : 2.592 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

INTERNAL AREA

6.4267E-05 Moles/Gram
2.47944E-05 Moles/ml.
3.7314 ml. gas/ml. rock
6.11501 Specific Area (sq. meters/gram)

UNCERTAINTY : .145402 %

C : 181.352

UNCERTAINTY IN C : .19494 %

BAROMETRIC PRESSURE 747.757 mm Hg

DETAILED DATA 5 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
8.69294	4.44911E-05	.261863	2	.175178
81.521	6.55489E-05	.251388	1	0
140.429	7.73351E-05	.260989	1	0
192.604	8.69849E-05	.267957	2	.815076
241.945	9.64402E-05	.270238	2	1.17497

DIFFUSION

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Date 8/22/1978

Sample ID : WV#6-MERC-1X-7215

Gas : Nitrogen

Initials : JCN

Book : 1

Page : 44

SAMPLE DATA

Weight : 5.41803 (grams)

Density : 2.592 (gm/cc)

Sample Temp : -196 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 241.894

P equilibrium : 41.8345

P o : 33.3812

SPECIFIC DEGASIBILITY 5.47766E-06

UNCERTAINTY .147365 %

System d Moles/ dP 8.35133E-06

ISOTHERM

Page **B172**

Date 8/23/1978

Sample ID : COL GAS R017

Gas : Helium

Initials : JCN

Book : 1

Page : 47

SAMPLE DATA

Weight : 3.92079 (grams)

Density : 2.60504 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

1.20356E-04 Vol Gas/Vol Rock/Torr
6.22421E-03 Vol Gas/Vol rock/PSI
9.14707E-02 Vol Gas/Vol Rock/ATM
2.06123E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : 2.18722 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
233.162	4.99178E-07	7.00676	2	55.1726
519.071	9.99842E-07	4.9555	2	820312
813.123	1.71256E-06	3.54936	1	0
885.495	1.84327E-06	3.81145	2	28.1055

ISOTHERM

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Date 8/23/1978

Sample ID : COL GAS R017

Gas : Methane

Initials : JCN

Book : 1

Page : 47

SAMPLE DATA

Weight : 3.92079 (grams)

Density : 2.60504 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

5.86043E-04 Vol Gas/Vol Rock/Torr

3.03071E-02 Vol Gas/Vol rock/PSI

.445392 Vol Gas/Vol Rock/ATM

1.00366E-08 Moles Gas/Gram Rock/Torr

UNCERTAINTY : .456177 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
227.581	2.389E-06	1.46632	1	0
511.39	5.13145E-06	.967901	1	0
804.161	8.04796E-06	.757787	1	0
877.875	8.7304E-06	.807787	1	0

Date 8/23/1978

Sample ID : COL GAS R017

Gas : Methane

Initials : JCN

Book : 1

Page : 47

SAMPLE DATA

Weight : 3.92079 (grams)

Density : 2.60504 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

6.47731E-04 Vol Gas/Vol Rock/Torr

3.34973E-02 Vol Gas/Vol rock/PSI

.492275 Vol Gas/Vol Rock/ATM

1.10931E-08 Moles Gas/Gram Rock/Torr

UNCERTAINTY : .41222 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
227.308	2.73853E-06	1.27917	1	0
513.221	5.7937E-06	.857285	1	0
804.863	8.81098E-06	.692177	2	7.01533
878.554	9.5439E-06	.738947	2	2.57845

Date 8/23/1978

Sample ID : COL GAS R017

Gas : Methane

Initials : JCN

Book : 1

Page : 47

SAMPLE DATA

Weight : 3.92079 (grams)

Density : 2.60504 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 878.455

P equilibrium : 221.067

P o : 220.492

SPECIFIC DEGASIBILITY 3.12645E-08

UNCERTAINTY 1.97473 %

System d Moles/ dP 2.0667E-06

Date 8/23/1978

Sample ID : COL GAS R017

Gas : Nitrogen

Initials : JCN

Book : 1

Page : 47

SAMPLE DATA

Weight : 3.92079 (grams)

Density : 2.60504 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

INTERNAL AREA

2.14937E-04	Moles/Gram
8.2508E-05	Moles/ml.
12.5422	ml. gas/ml. rock
20.4512	Specific Area (sq.meters/gram)

UNCERTAINTY : 5.56645E-02 %

C : 2632.18

 UNCERTAINTY IN C : 5.5665E-02 %
 BAROMETRIC PRESSURE 743.988 mm Hg

DETAILED DATA 5 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
163609	7.90666E-05	1203637	1	0
35.0368	2.01177E-04	113194	1	0
118.029	2.57375E-04	108374	2	625357
179.108	2.9299E-04	109939	2	1.1794
232.304	3.23823E-04	111222	2	1.05729E-02

Date 8/23/1978

Sample ID : COL GAS R017

Gas : Nitrogen

Initials : JCN

Book : 1

Page : 47

SAMPLE DATA

Weight : 3.92079 (grams)

Density : 2.60504 (gm/cc)

Sample Temp : -196 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 231.705

P equilibrium : 63.527

P o : 49.5179

SPECIFIC DEGASIBILITY 1.88488E-05

UNCERTAINTY .360295 %

System d Moles/ dP 8.43651E-06

ISOTHERM

Page B178

Date 8/24/1978

Sample ID : WV#5-EGSP:3335

Gas : Helium

Initials : DLW

Book : 1

Page : 55

SAMPLE DATA

Weight : 5.6845 (grams)

Density : 2.42773 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

5.67573E-05 Vol Gas/Vol Rock/Torr

2.9352E-03 Vol Gas/Vol rock/PSI

4.31356E-02 Vol Gas/Vol Rock/ATM

1.04302E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : 2.93232 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
-240.91	1.95374E-07	12.3111	1	0
532.08	5.12231E-07	6.65209	1	0
820.306	9.03675E-07	4.62579	2	5.04005
890.595	9.82111E-07	4.91948	1	0

Date 8/24/1978

Sample ID : WV#5-EGSP-3335

Gas : Methane

Initials : DLW

Book : 1

Page : 55

SAMPLE DATA

Weight : 5.6845 (grams)

Density : 2.42773 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

.000212 Vol Gas/Vol Rock/Torr
1.09635E-02 Vol Gas/Vol rock/PSI
.16112 Vol Gas/Vol Rock/ATM
3.8959E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : .798026 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
234.693	7.62777E-07	3.15817	1	0
521.453	1.89263E-06	1.80471	1	0
813.461	3.28687E-06	1.27602	1	0
881.539	3.61835E-06	1.34036	1	0

DIFFUSION

Page B180

Date 8/24/1978

Sample ID : WU#5-EGSP:3335

Gas : Methane

Initials : DLW

Book : 1

Page : 55

SAMPLE DATA

Weight : 5.6845 (grams)

Density : 2.42773 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 880.986

P equilibrium : 203.176

P o : 199.735

SPECIFIC DEGASIBILITY 4.87397E-08

UNCERTAINTY .100206 %

System d Moles/ dP 2.03203E-06

Date 8/24/1978

Sample ID : WV#5-EGSP:3335

Gas : Nitrogen

Initials : DLW

Book : 1

Page : 55

SAMPLE DATA

Weight : 5.6845 (grams)

Density : 2.42773 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

INTERNAL AREA

2.58838E-05 Moles/Gram
 1.06617E-05 Moles/ml.
 1.40759 ml. gas/ml. rock
 2.46285 Specific Area (sq. meters/gram)

UNCERTAINTY : 6.63838 %

C : 6.27737

UNCERTAINTY IN C : 34.177 %
 BAROMETRIC PRESSURE 742.58 mm Hg

DETAILED DATA 5 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
34.5766	6.77279E-06	1.63961	1	0
93.4913	1.33373E-05	1.17761	1	0
145.159	1.89703E-05	1.0141	1	0
195.2	2.43579E-05	.912057	1	0
245.226	2.97766E-05	.834218	1	0

DIFFUSION

Page B182

Date 8/24/1978

Sample ID : WV#5-EGSP-3335

Gas : Nitrogen

Initials : DLW

Book : 1

Page : 55

SAMPLE DATA

Weight : 5.6845 (grams)

Density : 2.42773 (gm/cc)

Sample Temp. : -196 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 245.062

P equilibrium : 31.5181

P o : 31.3075

SPECIFIC DEGASIBILITY 1.02108E-07

UNCERTAINTY 2.20216 %

System d Moles/ dP 8.30239E-06

ISOTHERM

Page B183

Date 8/25/1978

Sample ID : WV#5-EGSP:3235

Gas : Helium

Initials : DLW

Book : 1

Page : 52

SAMPLE DATA

Weight : 5.32827 (grams)

Density : 2.67621 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

4.43224E-05 Vol Gas/Vol Rock/Torr

2.29213E-03 Vol Gas/Vol rock/PSI

.033685 Vol Gas/Vol Rock/ATM

7.38883E-10 Moles Gas/Gram Rock/Torr

UNCERTAINTY : 4.40893 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
241.847	1.51061E-07	16.9749	1	0
529.861	3.34459E-07	10.861	1	0
823.1	6.50127E-07	6.85485	1	0
891.326	7.05273E-07	7.30334	1	0

ISOTHERM

Page B184

Date 8/25/1978

Sample ID : WV#5-EGSP-3235

Gas : Methane

Initials : DLW

Book : 1

Page : 52

SAMPLE DATA

Weight : 5.32827 (grams)

Density : 2.87621 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

3.57989E-04 Vol Gas/Vol Rock/Torr

1.85133E-02 Vol Gas/Vol rock/PSI

.272071 Vol Gas/Vol Rock/ATM

5.9679E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : .555875 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
233.64	1.49676E-06	1.71582	2	.287289
519.794	3.13523E-06	1.16143	1	0
813.253	4.80342E-06	.93085	1	0
882.477	5.17886E-06	.998375	1	0

DIFFUSION

Page B185

Date 8/25/1978

Sample ID : WV#5-EGSP:3235

Gas : Methane

Initials : DLW

Book : 1

Page : 52

SAMPLE DATA

Weight : 5.32827 (grams)

Density : 2.67621 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 882.527

P equilibrium : 205.1

P o : 198.556

SPECIFIC DEGASIBILITY 4.37608E-07

UNCERTAINTY .959833 %

System d Moles/ dP 2.02425E-06

BET

Page B186

Date 8/25/1978

Sample ID : WV#5-EGSP:3235

Gas : Nitrogen

Initials : DLW

Book : 1

Page : 52

SAMPLE DATA

Weight : 5.32827 (grams)

Density : 2.67621 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

INTERNAL AREA

7.08047E-05 Moles/Gram
2.64571E-05 Moles/ml.
4.24453 ml. gas/ml. rock
6.73706 Specific Area (sq. meters/gram)

UNCERTAINTY : .141476 %

C : 112.607

UNCERTAINTY IN C : .190229 %

BAROMETRIC PRESSURE 740.901 mm Hg

DETAILED DATA 5 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
9.96631	4.40161E-05	.269128	1	0
81.4079	6.772E-05	.247409	1	0
138.011	8.20272E-05	.250186	1	0
189.97	9.52626E-05	.248776	1	0
240.033	1.08698E-04	.243784	1	0

DIFFUSION

Page B187

Date 8/25/1978

Sample ID : WV#5-EGSP-3235

Gas : Nitrogen

Initials : DLW

Book : 1

Page : 52

SAMPLE DATA

Weight : 5.32827 (grams)

Density : 2.67621 (gm/cc)

Sample Temp : -196 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 239.595

P equilibrium : 47.8738

P o : 32.6623

SPECIFIC DEGASIBILITY 8.84622E-06

UNCERTAINTY 7.97217E-02 %

System d Moles/ dP 8.27377E-06

ISOTHERM

Page B188

Date 8/26/1978

Sample ID : UW#5-EGSP-3135

Gas : Helium

Initials : JCN

Book : 1

Page : 53

SAMPLE DATA

Weight : 5.71336 (grams)

Density : 2.661 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

1.35735E-04 Vol Gas/Vol Rock/Torr

7.01954E-03 Vol Gas/Vol rock/PSI

.103159 Vol Gas/Vol Rock/ATM

2.27573E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : 1.35062 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
236.227	5.11152E-07	4.68661	1	0
521.993	1.14309E-06	2.96876	1	0
814.772	1.89069E-06	2.20199	1	0
889.446	2.0607E-06	2.3351	1	0

Date 8/26/1978

Sample ID : VW#5-EGSP:3135

Gas : Methane

Initials : JCN

Book : 1

Page : 53

SAMPLE DATA

Weight : 5.71336 (grams)

Density : 2.661 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

4.20008E-04 Vol Gas/Vol Rock/Torr

2.17207E-02 Vol Gas/Vol rock/PSI

.319206 Vol Gas/Vol Rock/ATM

7.04183E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : .441572 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
232.685	1.68929E-06	1.42036	1	0
518.58	3.63104E-06	.936927	1	0
809.109	5.69578E-06	.733403	1	0
881.058	6.17677E-06	.782042	1	0

Date 8/26/1978

Sample ID : UW#5-EGSP-3135

Gas : Methane

Initials : JCN

Book : 1

Page : 53

SAMPLE DATA

Weight : 5.71336 (grams)

Density : 2.661 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 879.684

P equilibrium : 213.589

P o : 210.415

SPECIFIC DEGASIBILITY 2.05243E-07

UNCERTAINTY 1.36261 %

System d Moles/ dP 2.04518E-06

Date 8/26/1978

Sample ID : UW#5-EGSP-3135

Gas : Nitrogen

Initials : JCN

Book : 1

Page : 53

SAMPLE DATA

Weight : 5.71336 (grams)

Density : 2.661 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

INTERNAL AREA

1.16932E-04 Moles/Gram
 4.3943E-05 Moles/ml.
 6.96992 ml. gas/ml. rock
 11.1261 Specific Area (sq. meters/gram)

UNCERTAINTY : 7.08192E-02 %

C : 554.537

UNCERTAINTY IN C : 7.09302E-02 %

BAROMETRIC PRESSURE 742.437 mm Hg

DETAILED DATA 5 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
1.09367	5.3008E-05	.208426	1	0
53.1692	1.12303E-04	.139142	1	0
126.857	1.39816E-04	.136894	1	0
183.538	1.5946E-04	.138612	1	0
234.465	1.77384E-04	.139326	1	0

Date 8/26/1978

Sample ID : UW#5-EGSP-3135

Gas : Nitrogen

Initials : JCN

Book : 1

Page : 53

SAMPLE DATA

Weight : 5.71336 (grams)

Density : 2.661 (gm/cc)

Sample Temp : -196 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 233.759

P equilibrium : 58.7747

P o : 35.3865

SPECIFIC DEGASIBILITY 1.45136E-05

UNCERTAINTY 7.78278E-02 %

System d Moles/ dP 8.36033E-06

ISOTHERM

Page B193

Date 8/28/1978

Sample ID : COL GAS B020

Gas : Helium

Initials : DLW

Book : 1

Page : 51

SAMPLE DATA

Weight : 5.29763 (grams)

Density : 2.66148 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

5.79988E-05 Vol Gas/Vol Rock/Torr

2.9994E-03 Vol Gas/Vol rock/PSI

4.40791E-02 Vol Gas/Vol Rock/ATM

9.7223E-10 Moles Gas/Gram Rock/Torr

UNCERTAINTY : 3.3662 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
239.845	1.99665E-07	12.9166	1	0
533.265	4.64858E-07	7.85956	1	0
824.044	8.45729E-07	5.29993	1	0
891.519	9.12577E-07	5.67694	1	0

ISOTHERM

Page B194

Date 8/28/1978

Sample ID : COL GAS B020

Gas : Methane

Initials : DLW

Book : 1

Page : 51

SAMPLE DATA

Weight : 5.29763 (grams)

Density : 2.66148 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

2.72414E-04 Vol Gas/Vol Rock/Torr

1.40878E-02 Vol Gas/Vol rock/PSI

.207034 Vol Gas/Vol Rock/ATM

4.56645E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : .728127 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
234.363	1.11176E-06	2.32335	1	0
523.521	2.36631E-06	1.54776	1	0
816.675	3.72964E-06	1.20582	1	0
882.746	4.01496E-06	1.29527	1	0

Date 8/28/1978

Sample ID : COL GAS B020

Gas : Methane

Initials : DLW

Book : 1

Page : 51

SAMPLE DATA

Weight : 5.29763 (grams)

Density : 2.66148 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 882.672

P equilibrium : 201.031

P o : 198.822

SPECIFIC DEGASIBILITY 1.65707E-07

UNCERTAINTY 2.04436 %

System d Moles/ dP 2.01963E-06

Date 8/28/1978

Sample ID : COL GAS B020

Gas : Nitrogen

Initials : DLW

Book : 1

Page : 51

SAMPLE DATA

Weight : 5.29763 (grams)

Density : 2.66148 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

INTERNAL AREA

8.43062E-05 Moles/Gram
 3.16764E-05 Moles/ml.
 5.0261 ml. gas/ml. rock
 8.02174 Specific Area (sq. meters/gram)

UNCERTAINTY : .109126 %

C : 234.861

UNCERTAINTY IN C : .115216 %

BAROMETRIC PRESSURE 738.999 mm Hg

DETAILED DATA 5 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
4.91514	5.21764E-05	.228456	1	0
75.1496	8.44588E-05	.199616	1	0
136.329	1.00901E-04	.20466	1	0
190.299	1.15041E-04	.207295	1	0
240.085	1.287E-04	.207184	1	0

Date 8/28/1978

Sample ID : COL GAS-B020

Gas : Nitrogen

Initials : DLW

Book : 1

Page : 51

SAMPLE DATA

Weight : 5.29763 (grams)

Density : 2.66148 (gm/cc)

Sample Temp : -196 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 239.631

P equilibrium : 48.6113

P o : 31.5742

SPECIFIC DEGASIBILITY 1.06021E-05

UNCERTAINTY 8.66104E-02 %

System d Moles/ dP 8.27097E-06

ISOTHERM

Page B198

Date 8/28/1978

Sample ID : WU#5-EGSP-3305

Gas : Helium

Initials : JCN

Book : 1

Page : 54

SAMPLE DATA

Weight : 5.19272 (grams)

Density : 2.64828 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

7.03773E-05 Vol Gas/Vol Rock/Torr
3.63956E-03 Vol Gas/Vol rock/PSI
5.34867E-02 Vol Gas/Vol Rock/ATM
1.18561E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : 2.8036 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
.244.041	2.58939E-07	10.1497	1	0
537.704	5.80696E-07	6.41171	1	0
824.293	1.02446E-06	4.45866	1	0
890.664	1.10023E-06	4.79835	1	0

ISOTHERM

Page B199

Date 8/28/1978

Sample ID : WV#5-EGSP-3305

Gas : Methane

Initials : JCN

Book : 1

Page : 54

SAMPLE DATA

Weight : 5.19272 (grams)

Density : 2.64828 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

2.56401E-04 Vol Gas/Vol Rock/Torr

1.32598E-02 Vol Gas/Vol rock/PSI

.194865 Vol Gas/Vol Rock/ATM

4.31946E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : .783381 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
235.471	1.03172E-06	2.55122	1	0
524.004	2.23167E-06	1.67235	1	0
817.366	3.54479E-06	1.29282	1	0
883.738	3.82185E-06	1.38661	1	0

DIFFUSION

Page B200

Date 8/28/1978

Sample ID : WU#5-EGSP-3305

Gas : Methane

Initials : JCN

Book : 1

Page : 54

SAMPLE DATA

Weight : 5.19272 (grams)

Density : 2.64828 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 883.311

P equilibrium : 198.499

P o : 197.029

SPECIFIC DEGASIBILITY 9.43653E-08

UNCERTAINTY 1.54187 %

System d Moles/ dP 2.01099E-06

BET

Page B201

Date 8/28/1978

Sample ID : WV#5-EGSP:3305

Gas : Nitrogen

Initials : JCN

Book : 1

Page : 54

SAMPLE DATA

Weight : 5.19272 (grams)

Density : 2.64828 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

INTERNAL AREA

9.85023E-06 Moles/Gram
3.71948E-06 Moles/ml
.584331 ml. gas/ml. rock
.93725 Specific Area (sq. meters/gram)

UNCERTAINTY : .207567 %

C : -2573.75

UNCERTAINTY IN C : -2.48335 %

BAROMETRIC PRESSURE 739.367 mm Hg

DETAILED DATA 5 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
5.05722	1.04734E-05	.250207	1	0
76.0937	1.22991E-05	.301454	1	0
136.079	1.18078E-05	.384721	1	0
188.591	1.1369E-05	.461552	1	0
238.333	1.10791E-05	.529725	1	0

Date 8/28/1978

Sample ID : WU#5-EGSP-3305

Gas : Nitrogen

Initials : JCN

Book : 1

Page : 54

SAMPLE DATA

Weight : 5.19272 (grams)

Density : 2.64828 (gm/cc)

Sample Temp : -196 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 238.18

P equilibrium : 48.099

P o : 31.8296

SPECIFIC DEGASIBILITY 1.10716E-05

UNCERTAINTY 9.36485E-02 %

System d Moles/ dP 8.25778E-06

ISOTHERM

Page B203

Date 8/29/1978

Sample ID : T-1-3106

Gas : Helium

Initials : DLW

Book : 2

Page : 28

SAMPLE DATA

Weight : 4.79243 (grams)

Density : 2.611 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .06 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

3.0991E-05 Vol Gas/Vol Rock/Torr
1.60269E-03 Vol Gas/Vol rock/PSI
2.35531E-02 Vol Gas/Vol Rock/ATM
5.29543E-10 Moles Gas/Gram Rock/Torr

UNCERTAINTY : 6.85122 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
239.955	7.93846E-08	35.9661	1	0
533.907	2.1085E-07	19.1834	1	0
821.669	4.98753E-07	9.94921	1	0
889.763	5.31255E-07	10.7956	1	0

ISOTHERM

Page B204

Date 8/29/1978

Sample ID : T-1-3106

Gas : Methane

Initials : DLW

Book : 2

Page : 28

SAMPLE DATA

Weight : 4.79243 (grams)

Density : 2.611 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .06 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

3.36802E-05 Vol Gas/Vol Rock/Torr

1.74177E-03 Vol Gas/Vol rock/PSI

.025597 Vol Gas/Vol Rock/ATM

5.75494E-10 Moles Gas/Gram Rock/Torr

UNCERTAINTY : 6.39197 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
236.414	8.44859E-08	33.8479	1	0
523.308	2.18624E-07	18.5462	2	13.4802
816.605	5.33295E-07	9.33581	2	30.9837
882.687	5.84259E-07	9.85385	2	6.79175

Date 8/29/1978

Sample ID : J-1-3106

Gas : Nitrogen

Initials : DLW

Book : 2

Page : 28

SAMPLE DATA

Weight : 4.79243 (grams)

Density : 2.611 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .06 (cm)

DATA COLLECTED

INTERNAL AREA

3.44522E-05	Moles/Gram
1.3195E-05	Moles/ml.
2.01499	ml. gas/ml. rock
3.27813	Specific Area (sq. meters/gram)

UNCERTAINTY : 35.7066 %

C : 3.01949

UNCERTAINTY IN C : 71.8942 %

BAROMETRIC PRESSURE 740.557 mm Hg

DETAILED DATA 5 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
36.1398	4.79262E-06	2.74863	1	0
93.2529	1.18963E-05	1.56616	1	0
145.78	1.83854E-05	1.24126	1	0
195.165	2.44603E-05	1.07741	1	0
244.75	3.05839E-05	.963477	1	0

Date 8/29/1978

Sample ID : T-1-3106

Gas : Methane

Initials : DLW

Book : 2

Page : 28

SAMPLE DATA

Weight : 4.79243 (grams)

Density : 2.611 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .06 (cm)

DATA COLLECTED

P initial : 882.62

P equilibrium : 201.778

P o : 201.627

SPECIFIC DEGASIBILITY 2.78476E-09

UNCERTAINTY 2.75194 %

System d Moles/ dP 2.04053E-06

DIFFUSION

Page B207

Date 8/29/1978

Sample ID : T-1-3106

Gas : Nitrogen

Initials : DLW

Book : 2

Page : 28

SAMPLE DATA

Weight : 4.79243 (grams)

Density : 2.611 (gm/cc)

Sample Temp : -196 (cent)

Particle Size : .06 (cm)

DATA COLLECTED

P initial : 244.736

P equilibrium : 31.1799

P o : 31.1486

SPECIFIC DEGASIBILITY 1.33846E-08

UNCERTAINTY 15.5984 %

System d Moles/ dP 8.35829E-06

ISOTHERM

Page B208

Date 8/30/1978

Sample ID : WV#5-EGSP:3035

Gas : Helium

Initials : ver

Book : 1

Page : 61

SAMPLE DATA

Weight : 5.2089 (grams)

Density : 2.65784 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

8.55086E-05 Vol Gas/Vol Rock/Torr
4.42207E-03 Vol Gas/Vol rock/PSI
6.49865E-02 Vol Gas/Vol Rock/ATM
1.43534E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : 2.34742 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
237.613	3.02118E-07	8.70222	1	0
522.631	6.87822E-07	5.4147	1	0
817.242	1.22501E-06	3.72985	1	0
887.369	1.32558E-06	3.98388	1	0

Date 8/30/1978

Sample ID : WU#5-EGSP-3035

Gas : Methane

Initials : wer

Book : 1

Page : 61

SAMPLE DATA

Weight : 5.2089 (grams)

Density : 2.65784 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

3.14378E-04 Vol Gas/Vol Rock/Torr

.016258 Vol Gas/Vol rock/PSI

.238927 Vol Gas/Vol Rock/ATM

5.2771E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : .646747 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
230.619	1.23118E-06	2.13869	1	0
519.05	2.69591E-06	1.38488	1	0
810.891	4.29862E-06	1.06648	1	0
880.128	4.65683E-06	1.13837	1	0

DIFFUSION

Page 8210

Date 8/30/1978

Sample ID : WV#5-EGSP:3035

Gas : Methane

Initials : wer

Book : 1

Page : 61

SAMPLE DATA

Weight : 5.2089 (grams)

Density : 2.65784 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 880.073

P equilibrium : 211.694

P o : 207.101

SPECIFIC DEGASIBILITY 3.17487E-07

UNCERTAINTY 1.04916 %

System d Moles/ dP 2.0497E-06

BET

Page B211

Date 8/30/1978

Sample ID : WU#5-EGSP-3035

Gas : Nitrogen

Initials : wer

Book : 1

Page : 61

SAMPLE DATA

Weight : 5.2089 (grams)

Density : 2.65784 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

INTERNAL AREA

7.88103E-05 Moles/Gram
2.9652E-05 Moles/ml.
4.69202 ml. gas/ml. rock
7.4988 Specific Area (sq. meters/gram)

UNCERTAINTY : .125499 %

C : 145.687

UNCERTAINTY IN C : .145965 %

BAROMETRIC PRESSURE 744.953 mm Hg

DETAILED DATA: 5 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
7.54454	4.81641E-05	.251652	1	0
77.7783	7.5683E-05	.22651	1	0
136.628	9.2162E-05	.227837	1	0
189.688	1.06789E-04	.227071	1	0
238.886	1.20448E-04	.225102	1	0

DIFFUSION

Page B312

Date 8/30/1978

Sample ID : WV#5-EGSP:3035

Gas : Nitrogen

Initials : wer

Book : 1

Page : 61

SAMPLE DATA

Weight : 5.2089 (grams)

Density : 2.65784 (gm/cc)

Sample Temp : -196 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 238.238

P equilibrium : 49.8594

P o : 36.0257

SPECIFIC DEGASIBILITY 7.06368E-06

UNCERTAINTY 5.63464E-02 %

System d Moles/ dP 8.37976E-06

ISOTHERM

Page B213

Date 8/30/1978

Sample ID : WV#5-EGSP:2935

Gas : Helium

Initials : WER

Book : 1

Page : 59

SAMPLE DATA

Weight : 5.03658 (grams)

Density : 2.47055 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

5.47324E-05 Vol Gas/Vol Rock/Torr
2.83048E-03 Vol Gas/Vol rock/PSI
4.15966E-02 Vol Gas/Vol Rock/ATM
9.88379E-10 Moles Gas/Gram Rock/Torr

UNCERTAINTY : 3.50465 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
.240.197	1.80936E-07	15.0182	1	0
526.27	4.27423E-07	9.00601	1	0
819.33	8.77914E-07	5.3792	1	0
892.496	9.69861E-07	5.62789	1	0

ISOTHERM

Page **B214**

Date 8/30/1978

Sample ID : WU#5-EGSP-2935

Gas : Methane

Initials : WER

Book : 1

Page : 59

SAMPLE DATA

Weight : 5.03658 (grams)

Density : 2.47055 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

3.42595E-04 Vol Gas/Vol Rock/Torr

1.77173E-02 Vol Gas/Vol rock/PSI

.260372 Vol Gas/Vol Rock/ATM

6.18671E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : .570448 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
233.616	1.3425E-06	2.02723	1	0
516.138	3.13143E-06	1.23224	1	0
810.458	4.97685E-06	.952031	1	0
879.53	5.67101E-06	.96614	1	0

DIFFUSION

Page B215

Date 8/30/1978

Sample ID : WU#5-EGSP:2935

Gas : Methane

Initials : WER

Book : 1

Page : 59

SAMPLE DATA

Weight : 5.03658 (grams)

Density : 2.47055 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 878.915

P equilibrium : 208.717

P o : 203.291

SPECIFIC DEGASIBILITY 9.6924E-08

UNCERTAINTY .111732 %

System d Moles/ dP 2.04262E-06

BET

Page B216

Date 8/30/1978

Sample ID : WV#5-EGSP-2935

Gas : Nitrogen

Initials : WER

Book : 1

Page : 59

SAMPLE DATA

Weight : 5.03658 (grams)

Density : 2.47055 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

INTERNAL AREA

3.01438E-05 Moles/Gram
1.22012E-05 Moles/ml.
1.66817 ml. gas/ml. rock
2.86818 Specific Area (sq. meters/gram)

UNCERTAINTY : 4.68651 %

C : 6.96952

UNCERTAINTY IN C : 26.9185 %

BAROMETRIC PRESSURE 742.549 mm Hg

DETAILED DATA 5 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
33.7344	8.40308E-06	1.49028	1	0
92.9746	1.6182E-05	1.09454	1	0
144.125	2.27334E-05	.954304	1	0
195.083	2.92698E-05	.855934	1	0
245.265	3.57118E-05	.784407	1	0

DIFFUSION

Page B217

Date 8/30/1978

Sample ID : WU#5-EGSP-2935

Gas : Nitrogen

Initials : WER

Book : 1

Page : 59

SAMPLE DATA

Weight : 5.03658 (grams)

Density : 2.47055 (gm/cc)

Sample Temp : -196 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 244.677

P equilibrium : 32.5342

P o : 32.3509

SPECIFIC DEGASIBILITY 7.76837E-08

UNCERTAINTY 1.43046 %

System d Moles/dP 8.39978E-06

ISOTHERM

Page B218

Date 9/ 1/1978

Sample ID : T-1-3106

Gas : Helium

Initials : DLW

Book : 1

Page : 56

SAMPLE DATA

Weight : 5.53133 (grams)

Density : 2.62789 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .06 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

4.34371E-05 Vol Gas/Vol Rock/Torr
2.24635E-03 Vol Gas/Vol rock/PSI
3.30122E-02 Vol Gas/Vol Rock/ATM
7.3744E-10 Moles Gas/Gram Rock/Torr

UNCERTAINTY : 4.39696 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
228.272	1.25942E-07	19.8151	1	0
515.528	3.12078E-07	11.3279	1	0
805.087	6.49117E-07	6.68114	1	0
882.8	7.07668E-07	7.08303	1	0

ISOTHERM

Page B219

Date 9/ 1/1978

Sample ID : T-1-3106

Gas : Methane

Initials : DLW

Book : 1

Page : 56

SAMPLE DATA

Weight : 5.53133 (grams)

Density : 2.62789 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .06 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

5.03474E-05 Vol Gas/Vol Rock/Torr

2.60371E-03 Vol Gas/Vol rock/PSI

.038264 Vol Gas/Vol Rock/ATM

8.54757E-10 Moles Gas/Gram Rock/Torr

UNCERTAINTY : 3.84525 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
227.227	1.44968E-07	17.2419	1	0
505.761	3.46847E-07	10.2169	2	13.9993
798.001	7.42185E-07	5.86259	2	29.5125
875.815	8.26665E-07	6.08648	2	8.49533

DIFFUSION

Page B220

Date 9/ 1/1978

Sample ID : T-1-3106

Gas : Methane

Initials : DLW

Book : 1

Page : 56

SAMPLE DATA

Weight : 5.53133 (grams)

Density : 2.62789 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .06 (cm)

DATA COLLECTED

P initial : 875.805

P equilibrium : 230.883

P o : 230.734

SPECIFIC DEGASIBILITY 2.1681E-09

UNCERTAINTY .80891 %

System d Moles/ dP 2.13671E-06

BET

Page B221

Date 9/ 1/1978

Sample ID : T-1-3106

Gas : Nitrogen

Initials : DLW

Book : 1

Page : 56

SAMPLE DATA

Weight : 5.53133 (grams)

Density : 2.62789 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .06 (cm)

DATA COLLECTED

INTERNAL AREA

4.27604E-05 Moles/Gram
1.62718E-05 Moles/ml.
2.51708 ml. gas/ml. rock
4.06865 Specific Area (sq. meters/gram)

UNCERTAINTY : 14.651 %

C : 2.87018

UNCERTAINTY IN C : 27.1275 %

BAROMETRIC PRESSURE 746.858 mm Hg

DETAILED DATA 5 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
34.9483	5.43472E-06	2.10017	1	0
91.4106	1.38942E-05	1.16186	1	0
142.722	2.15169E-05	.918958	1	0
192.774	2.89998E-05	.787387	1	0
242.924	3.65308E-05	.698902	1	0

DIFFUSION

Page B222

Date 9/ 1/1978

Sample ID : T-1-3106

Gas : Nitrogen

Initials : DLW

Book : 1

Page : 56

SAMPLE DATA

Weight : 5.53133 (grams)

Density : 2.62789 (gm/cc)

Sample Temp : -196 (cent)

Particle Size : .06 (cm)

DATA COLLECTED

P initial : 242.969

P equilibrium : 39.0215

P o : 38.9989

SPECIFIC DEGASIBILITY 1.39781E-09

UNCERTAINTY 21.596 %

System d Moles/ dP 8.71824E-06

ISOTHERM

Page **B223**

Date 9/ 2/1978

Sample ID : WV#5-EGSP:3355

Gas : Helium

Initials : PDS

Book : 1

Page : 62

SAMPLE DATA

Weight : 5.22981 (grams)

Density : 2.3588 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

3.8089E-05 Vol Gas/Vol Rock/Torr
1.96977E-03 Vol Gas/Vol rock/PSI
2.89476E-02 Vol Gas/Vol Rock/ATM
7.20412E-10 Moles Gas/Gram Rock/Torr

UNCERTAINTY : 4.57517 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
242.479	1.18913E-07	21.9197	1	0
533.508	3.22458E-07	11.4513	1	0
827.027	6.6446E-07	6.81784	1	0
894.62	6.94911E-07	7.5348	1	0

ISOTHERM

Page B224

Date 9/ 2/1978

Sample ID : WU#5-EGSP:3355

Gas : Methane

Initials : PDS

Book : 1

Page : 62

SAMPLE DATA

Weight : 5.22981 (grams)

Density : 2.3588 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

SLOPE OF ISOTHERM

4.50776E-04 Vol Gas/Vol Rock/Torr

2.33118E-02 Vol Gas/Vol rock/PSI

34259 Vol Gas/Vol Rock/ATM

8.52595E-09 Moles Gas/Gram Rock/Torr

UNCERTAINTY : .395077 %

DETAILED DATA 4 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
234.699	1.57574E-06	1.6567	1	0
523.849	3.58817E-06	1.03159	1	0
811.312	7.65199E-06	.593979	1	0
881.999	8.12635E-06	.646765	1	0

DIFFUSION

Page B225

Date 9/ 2/1978

Sample ID : WV#5-EGSP-3355

Gas : Methane

Initials : PDS

Book : 1

Page : 62

SAMPLE DATA

Weight : 5.22981 (grams)

Density : 2.3588 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 882.03

P equilibrium : 198.832

P o : 191.18

SPECIFIC DEGASIBILITY 9.03459E-08

UNCERTAINTY 3.68424E-02 %

System d Moles/dP 2.00339E-06

BET

Page B226

Date 9/ 2/1978

Sample ID : WV#5-EGSP:3355

Gas : Nitrogen

Initials : PDS

Book : 1

Page : 62

SAMPLE DATA

Weight : 5.22981 (grams)

Density : 2.3588 (gm/cc)

Sample Temp : 0 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

INTERNAL AREA

2.28394E-05	Moles/Gram
9.68263E-06	Moles/ml
1.20677	ml. gas/ml. rock
2.17317	Specific Area (sq.meters/gram)

UNCERTAINTY : 5.25974 %

C : 8.94637

UNCERTAINTY IN C : 40.4918 %

BAROMETRIC PRESSURE 741.34 mm Hg

DETAILED DATA 5 POINTS TAKEN

PRESSURE Torr	ADS GAS Moles/Gram	UNCERTAINTY %	FLAG	FLAG Parameter
0	0	0	0	0
34.2705	7.671E-06	1.57237	1	0
94.8	1.38996E-05	1.22734	1	0
145.525	1.88694E-05	1.10737	1	0
195.431	2.37652E-05	1.01535	1	0
246.325	2.87618E-05	.938073	1	0

Date 9/ 2/1978

Sample ID : WV#5-EGSP:3355

Gas : Nitrogen

Initials : PDS

Book : 1

Page : 62

SAMPLE DATA

Weight : 5.22981 (grams)

Density : 2.3588 (gm/cc)

Sample Temp : -196 (cent)

Particle Size : .085 (cm)

DATA COLLECTED

P initial : 246.362

P equilibrium : 28.4822

P o : 28.2418

SPECIFIC DEGASIBILITY 8.64097E-08

UNCERTAINTY .881749 %

System d Moles/ dP 8.21407E-06