

Methane Adsorption Isotherm Summary

Well: Glyde-1
Reservoir: Barney Creek
 Sample Number: AB-64348-20
 Sample Type: Shale
 Drill Depth, feet: 1148.29-1164.69
 Temperature, °F: 103.1

Pressure	Methane Storage Capacity, scf/ton	
psia	As-Received	
	Measured	Calculated
0.0	0.00	0.00
88.9	0.84	0.77
221.4	1.57	1.66
375.1	2.37	2.44
540.5	2.97	3.07
711.0	3.69	3.58
882.5	4.02	3.99

Parameters	Methane Langmuir Parameters (U.S. Units)
	As-Received
Slope:	0.13
Intercept:	104.23
Regression Coefficient (squared):	0.97
Intercept Variation, psia*ton/scf:	23.01
Slope Variation, ton/scf:	0.04
G_{sL} Variation, scf/ton:	2.24
P_L Variation, psia:	227.68
Langmuir Volume, scf/ton:	7.54
Langmuir Pressure, psia:	785.49
Langmuir Equation:	$V=7.5*P/(P+785.5)$
Pressure (Midpoint), psia:	519.00
Storage Capacity, scf/ton:	3.00

G_s Gas Storage Capacity

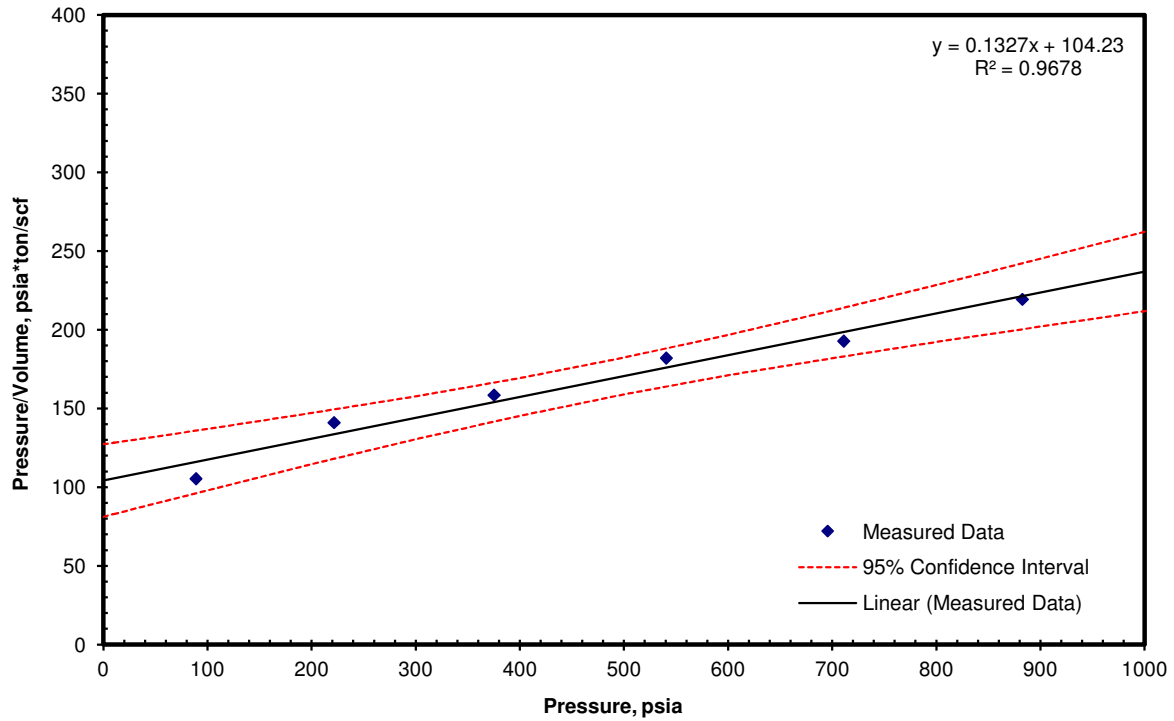
G_{sL} Langmuir Gas Storage Capacity

P_L Langmuir Pressure

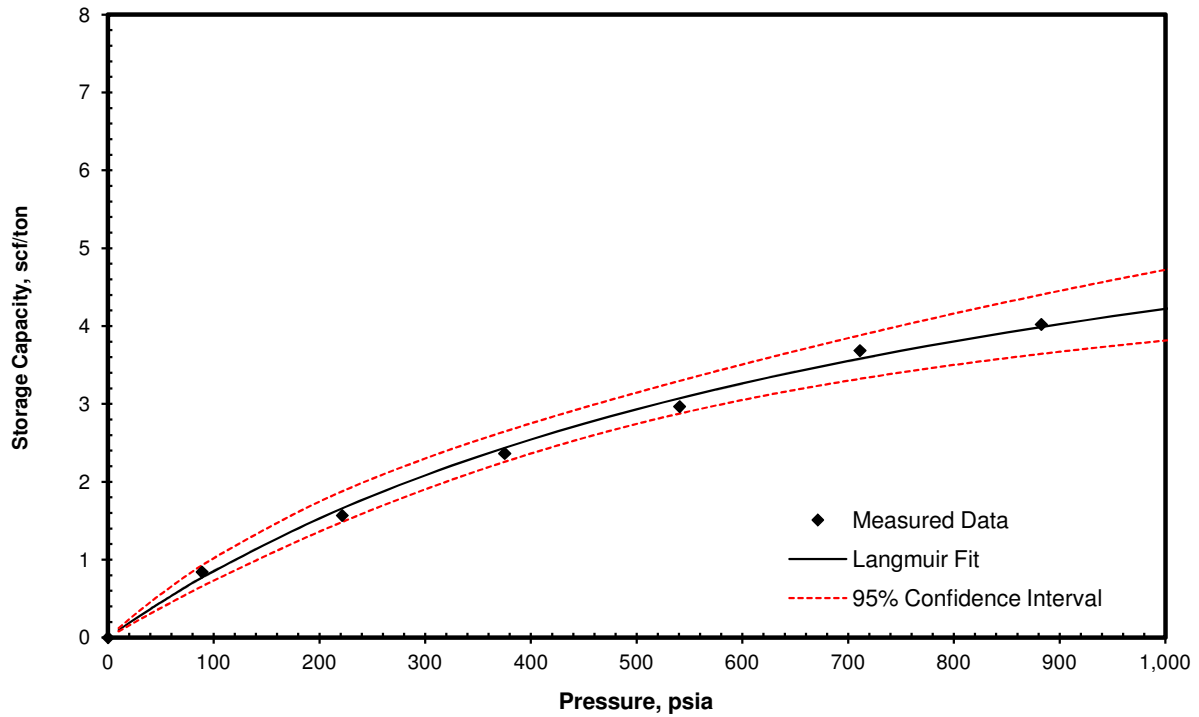
p Relevant Pressure (Reservoir Pressure)

Methane Adsorption Isotherm Summary Graphs

As-Received Langmuir Interpretation Graph



As-Received Langmuir Isotherm Graph



Methane Adsorption Isotherm Summary

Well: Glyde-1
Reservoir: Barney Creek
 Sample Number: AB-64348-20
 Sample Type: Shale
 Drill Depth, meters: 350.00-355.00
 Temperature, °C: 39.5

Pressure	Methane Storage Capacity, scc/gram	
MPa	As-Received	
	Measured	Calculated
0.0	0.00	0.00
0.6	0.03	0.02
1.5	0.05	0.05
2.6	0.07	0.08
3.7	0.09	0.10
4.9	0.12	0.11
6.1	0.13	0.12

Parameters	Methane Langmuir Parameters (S.I. Units)
	As-Received
Slope:	4.25
Intercept:	23.02
Regression Coefficient (squared):	0.97
Intercept Variation, Mpa*gram/scc:	5.08
Slope Variation, gram/scc:	1.36
G_{sL} Variation, scc/gram:	0.07
P_L Variation, MPa:	1.57
Langmuir Volume, scc/gram:	0.24
Langmuir Pressure, MPa:	5.42
Langmuir Equation:	$V=0.2*P/(P+5.4)$
Pressure (Midpoint), MPa:	3.58
Storage Capacity, scc/gram:	0.09

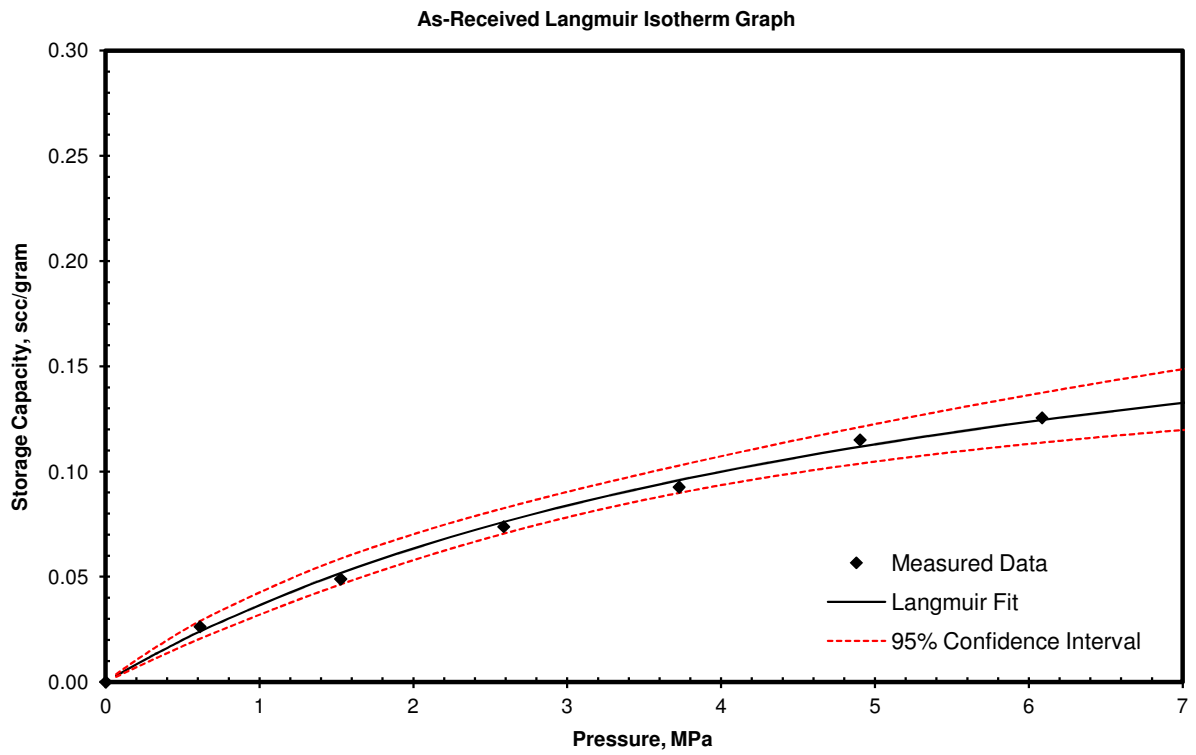
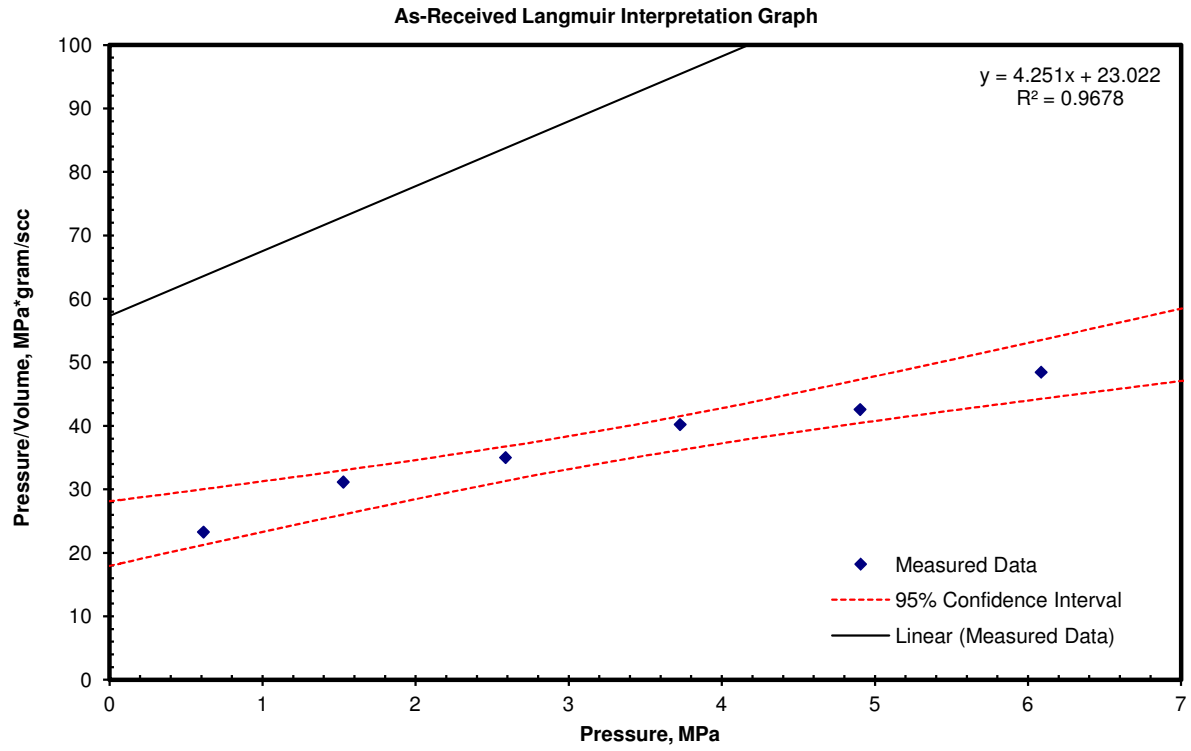
G_s Gas Storage Capacity

G_{sL} Langmuir Gas Storage Capacity

P_L Langmuir Pressure

p Relevant Pressure (Reservoir Pressure)

Methane Adsorption Isotherm Summary Graphs



Methane Adsorption Isotherm Summary

Well: Glyde-1
Reservoir: Barney Creek
 Sample Number: AB-64348-21
 Sample Type: Shale
 Drill Depth, feet: 1574.80-1591.20
 Temperature, °F: 103.1

Pressure	Methane Storage Capacity, scf/ton	
psia	As-Received	
	Measured	Calculated
0.0	0.00	0.00
120.0	0.82	0.81
295.5	1.90	1.90
502.5	3.05	3.07
723.8	4.09	4.20
951.7	5.22	5.25
1185.0	6.35	6.22

Parameters	Methane Langmuir Parameters (U.S. Units)
	As-Received
Slope:	0.04
Intercept:	143.81
Regression Coefficient (squared):	0.96
Intercept Variation, psia*ton/scf:	9.77
Slope Variation, ton/scf:	0.01
G_{sL} Variation, scf/ton:	7.47
P_L Variation, psia:	1037.93
Langmuir Volume, scf/ton:	25.44
Langmuir Pressure, psia:	3658.10
Langmuir Equation:	$V=25.4*P/(P+3,658.1)$
Pressure (Midpoint), psia:	706.00
Storage Capacity, scf/ton:	4.11

G_s Gas Storage Capacity

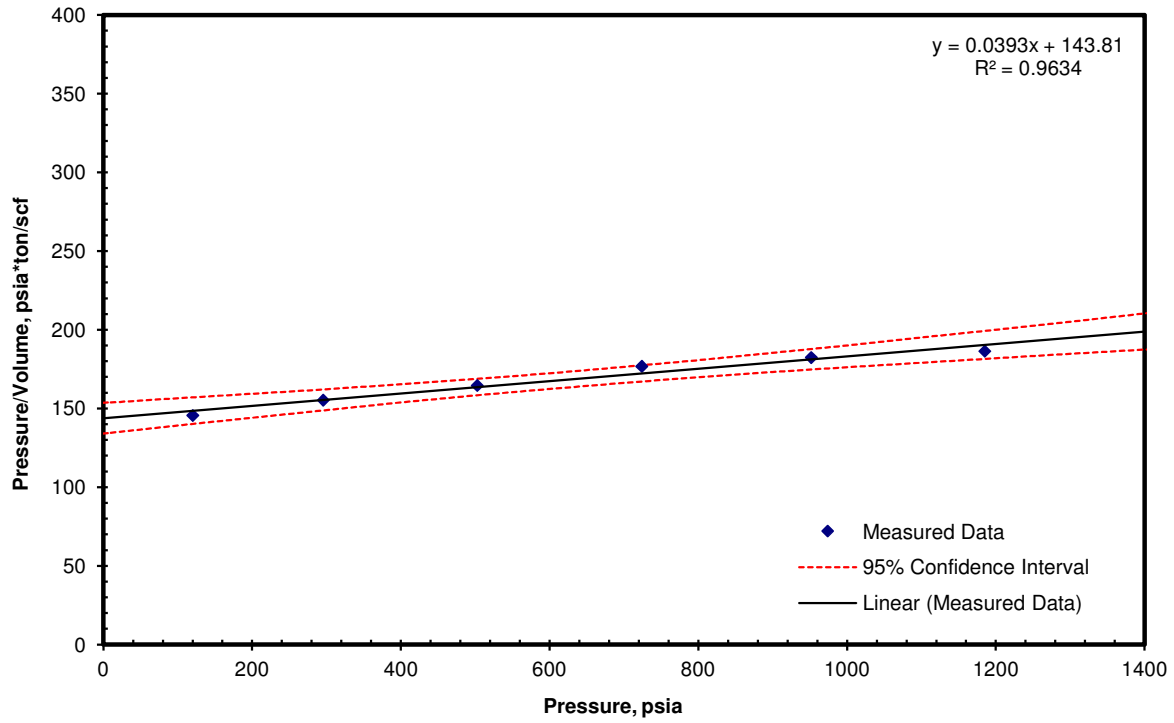
G_{sL} Langmuir Gas Storage Capacity

P_L Langmuir Pressure

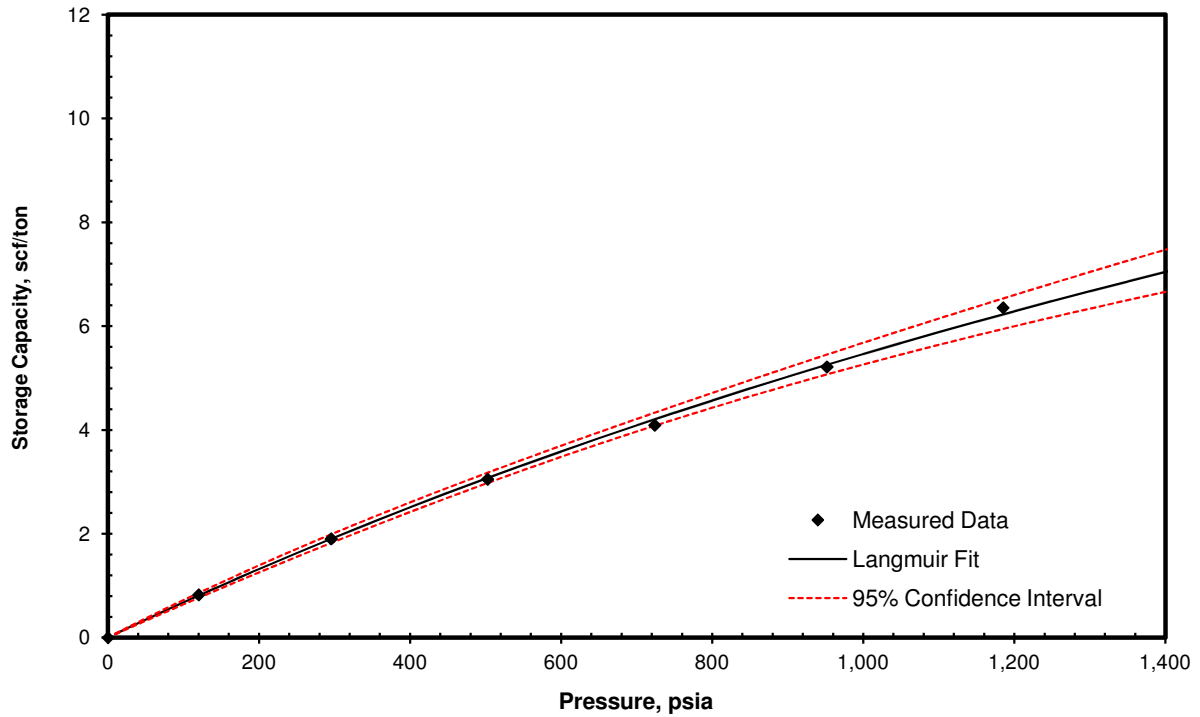
p Relevant Pressure (Reservoir Pressure)

Methane Adsorption Isotherm Summary Graphs

As-Received Langmuir Interpretation Graph



As-Received Langmuir Isotherm Graph



Methane Adsorption Isotherm Summary

Project: Glyde-1

Reservoir: Barney Creek

Sample Number: AB-64348-21

Sample Type: Shale

Drill Depth, metres: 480.00-485.00

Temperature, °C: 39.5

Pressure MPa	Methane Storage Capacity, scc/gram	
	As-Received	
	Measured	Calculated
0.0	0.00	0.00
0.8	0.03	0.03
2.0	0.06	0.06
3.5	0.10	0.10
5.0	0.13	0.13
6.6	0.16	0.16
8.2	0.20	0.19

Parameters	Methane Langmuir Parameters (S.I. Units)
	As-Received
Slope:	1.26
Intercept:	31.77
Regression Coefficient (squared):	0.96
Intercept Variation, Mpa*gram/scc:	2.16
Slope Variation, gram/scc:	0.43
G_{sL} Variation, scc/gram:	0.23
P_L Variation, MPa:	7.16
Langmuir Volume, scc/gram:	0.79
Langmuir Pressure, MPa:	25.22
Langmuir Equation:	$V=0.8*P/(P+25.2)$
Pressure (Midpoint), MPa:	4.87
Storage Capacity, scc/gram:	0.13

G_s Gas Storage Capacity

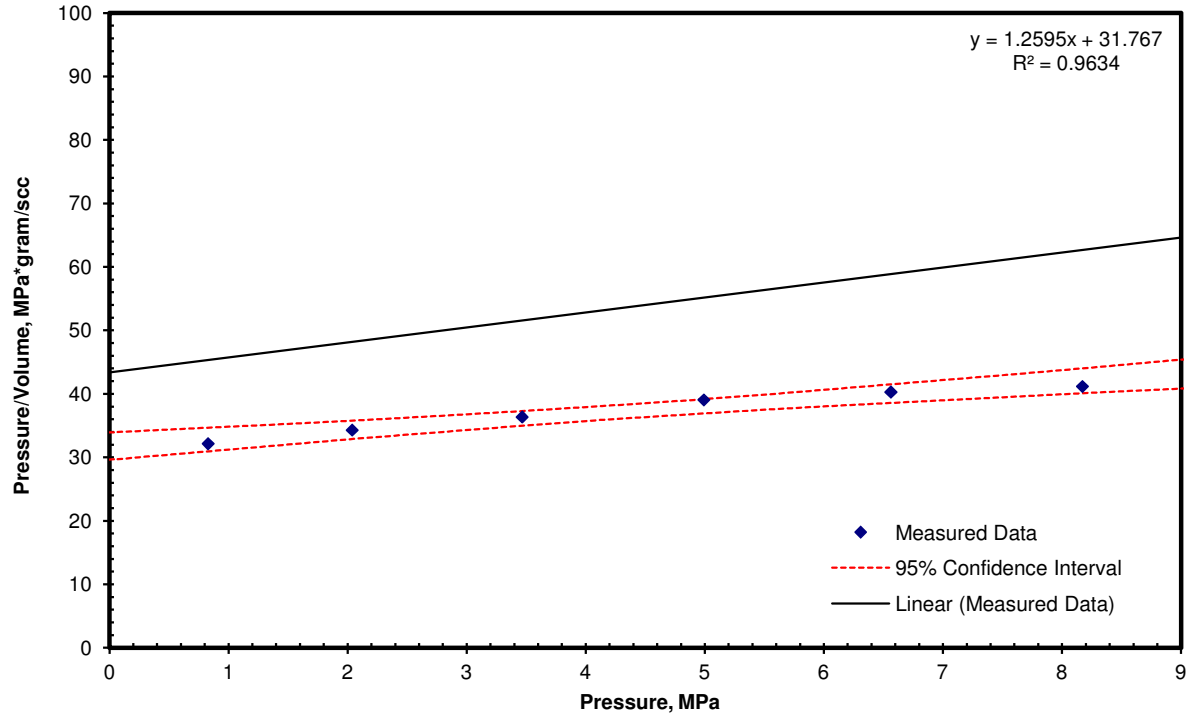
G_{sL} Langmuir Gas Storage Capacity

P_L Langmuir Pressure

p Relevant Pressure (Reservoir Pressure)

Methane Adsorption Isotherm Summary Graphs

As-Received Langmuir Interpretation Graph



As-Received Langmuir Isotherm Graph

