

# Methane Adsorption Isotherm

**Duvernay**  
**Sample ID: 9261**  
**Raw Basis**

**Well: 100/10-24-072-23W5/00**  
**Depth: 9256 feet**  
**TOC = 4.03%**

Sample Weight = 231.88 g	As-Received Moisture = 0.26%
Particle Size = -12 Mesh	
Temperature = 185.0°F (85.0°C)	

## Methane Adsorption

Pressure		Gas Content (Raw Basis)	
(psia)	(MPa)	(scf/ton)	(scc/gm)
128	0.88	2.1	0.07
236	1.63	4.1	0.13
460	3.17	6.7	0.21
900	6.21	10.1	0.32
1,335	9.20	13.1	0.41
1,897	13.08	14.7	0.46
2,533	17.46	16.1	0.50
3,316	22.86	18.4	0.57
4,041	27.86	19.2	0.60

## Langmuir Coefficients

$$V = 25.3 * P / (P + 1,316.5)$$

PL		VL (Raw Basis)	
(psia)	(MPa)	(scf/ton)	(scc/gm)
1,316.5	9.08	25.3	0.8

