

# Methane Adsorption Isotherm

**Duvernay**

**Sample ID: 9314**

**Raw Basis**

**Well: 100/07-03-047-11W5/00**

**Depth: 11146.7 feet**

**TOC = 2.80%**

Sample Weight = 246.24 g

Particle Size = -12 Mesh

Temperature = 203.0°F (95.0°C)

As-Received Moisture = 0.20%

## Methane Adsorption

Pressure		Gas Content (Raw Basis)	
(psia)	(MPa)	(scf/ton)	(scc/gm)
69	0.48	4.1	0.13
125	0.86	7.2	0.22
241	1.66	9.8	0.31
463	3.19	16.7	0.52
906	6.25	23.0	0.72
1,572	10.84	28.9	0.90
2,310	15.93	35.9	1.12
3,186	21.97	42.8	1.34
4,170	28.75	47.4	1.48

## Langmuir Coefficients

$$V = 57.3 * P / (P + 1,142.2)$$

PL		VL (Raw Basis)	
(psia)	(MPa)	(scf/ton)	(scc/gm)
1,142.2	7.88	57.3	1.8

