



# **CMS-300 CONVENTIONAL PLUG ANALYSIS**

**Vecta Oil and Gas**  
Snowmass 44-32  
Wildcat  
Cheyenne County, Colorado

**CL File Number: DEN-120133**

**Date: 10/24/12**

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Analyst(s): NR

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Sample Number	Depth (ft)	Net Confining Stress (psig)	Porosity (%)	Permeability		b(air) psi	Beta ft(-1)	Alpha (microns)	Saturation		Grain Density (g/cm3)	Footnote
				Klinkenberg	Kair				Oil	Water		
				(md)	(md)				% Pore Volume			
1	5579.55	800	11.13	.044	.097	33.24	8.56E+12	1.15E+03	0.0	86.1	2.729	
2	5580.45	800	11.26	.077	.092	5.06	1.37E+13	3.41E+03	0.0	84.4	2.704	
3	5581.70	800	7.36	.043	.095	33.19	8.53E+12	1.15E+03	0.0	77.6	2.680	
4	5582.30	800	5.71	.017	.025	13.33	2.63E+14	1.43E+04	0.0	32.4	2.674	
5	5583.50	800	9.19	.062	.129	28.57	4.97E+12	9.47E+02	0.0	79.4	2.704	
6	5584.50	800	9.55	.042	.054	7.55	1.32E+12	1.72E+02	0.0	79.7	2.679	
7	5585.40	800	9.62	.081	.104	7.35	4.47E+12	1.16E+03	0.0	78.7	2.676	
8	5586.35	800	3.29	***	***	***	***	***	0.0	27.9	2.695	(5)
9	5587.60	800	11.08	.230	.258	2.96	3.75E+11	2.77E+02	0.0	83.1	2.712	
10	5588.40	800	13.14	.045	.099	32.44	7.84E+12	1.11E+03	0.0	82.5	2.696	
11	5589.55	800	9.49	.017	.045	49.40	4.19E+13	2.16E+03	0.0	87.6	2.723	
12	5591.40	800	11.34	.145	.165	3.35	6.02E+12	2.77E+03	0.0	77.0	2.674	
13	5592.40	800	10.90	.175	.204	4.07	3.08E+11	1.72E+02	0.0	76.8	2.686	
14	5594.35	800	6.22	***	***	***	***	***	0.0	49.5	2.660	(5)
15	5596.55	800	10.69	.030	.072	38.66	1.49E+13	1.40E+03	0.0	87.0	2.691	
16	5599.45	800	12.14	.023	.058	43.53	2.32E+13	1.64E+03	0.0	87.9	2.717	
17	5608.50	800	4.88	.026	.031	5.37	5.34E+13	4.35E+03	0.0	61.7	2.670	
18	5609.35	800	4.46	.013	.018	11.23	2.58E+14	1.09E+04	0.0	53.0	2.681	
19	5610.30	800	12.76	.410	.621	11.88	2.53E+11	3.29E+02	0.0	76.2	2.706	(1)

**Footnotes :**

(1) : Denotes fractured or chipped sample. Permeability and/or porosity may be optimistic.

(2) : Sample permeability below the measurement range of CMS-300 equipment at indicated net confining stress (NCS). Data unavailable.





### Permeability vs. Porosity at 800 psi NCS

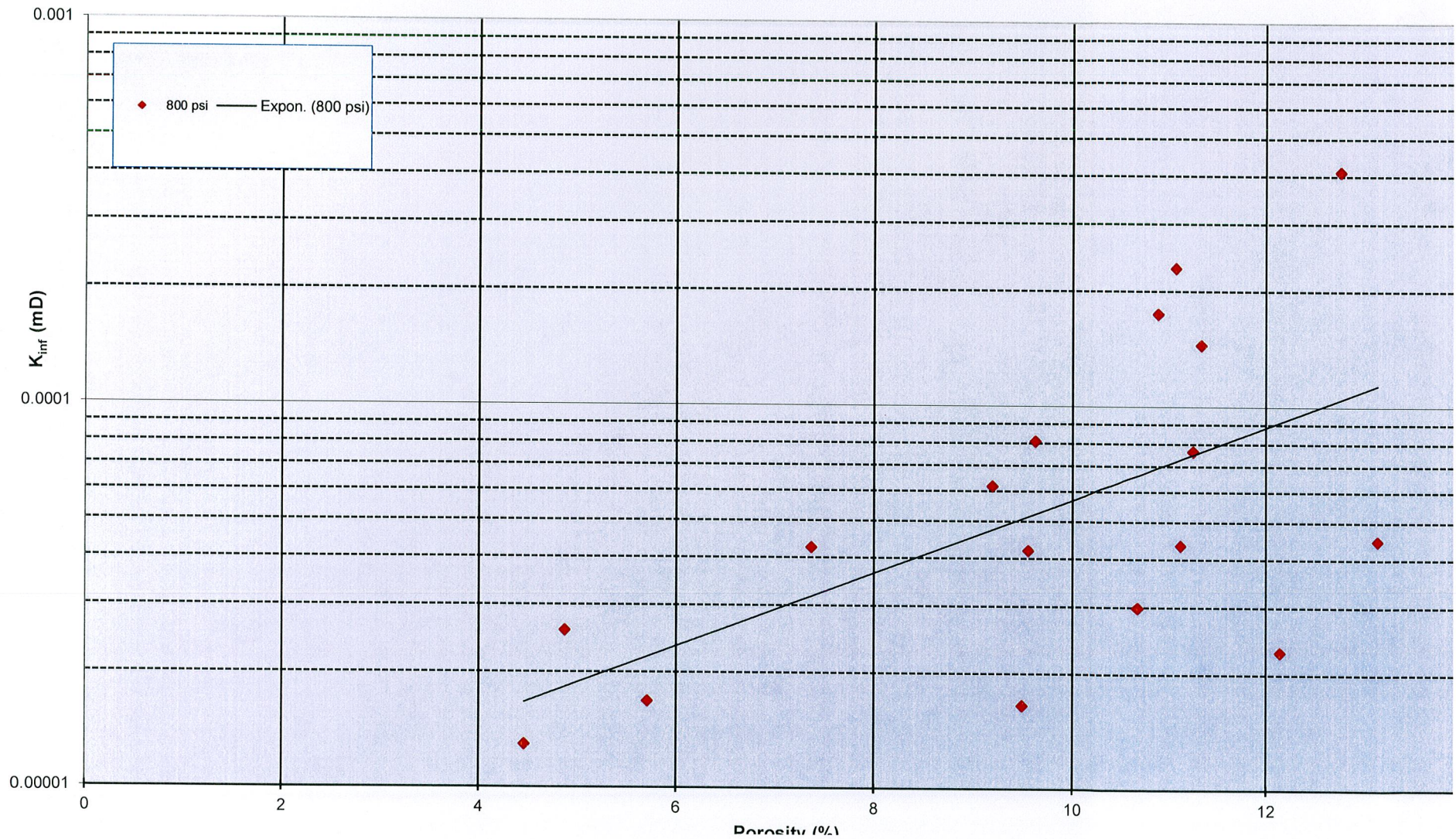


Figure 1