



SUMMARY OF ROUTINE CORE ANALYSES RESULTS

Vacuum Oven Dried at 180° F Net Confining Stress: 2,100 psi

Whiting Petroleum
Two Mile Creek 22-33M Well
Wildcat Field

Weld County, Colorado
File: CO-51715
Date: 12/12/2011

Core Number	Sample Number	Sample Depth, feet	Permeability, millidarcys		Porosity, percent		Grain Density, gm/cc	Fluid Saturations, percent			
			to Air	Klinkenberg	Ambient	NCS		Water	Oil	Total	
1	1-2(F)	5,552.10		+		12.7		2.67	15.2	64.3	79.5
1	1-9	5,559.10	0.0060		0.0024	14.1	14.0	2.70	14.3	52.3	66.6
1	1-15	5,565.60	0.025		0.013	12.8	12.7	2.69	32.4	40.2	72.6
1	1-23(F)	5,573.10		+		14.1		2.69	29.4	41.9	71.2
2	2-38	5,588.10	0.011		0.0053	13.3	13.3	2.70	30.9	43.1	74.0
2	2-43(F)	5,593.50		+		13.0		2.71	29.9	43.0	72.9
2	2-46(F)	5,596.50		+		11.4		2.70	45.7	31.5	77.3
2	2-52(F)	5,602.50		+		11.8		2.70	36.1	38.1	74.2
2	2-61(F)	5,611.50		+		11.0		2.68	39.9	43.3	83.2
2	2-65(F)	5,615.10		+		13.4		2.75	31.0	42.1	73.1
2	2-72(F)	5,622.40		+		12.2		2.70	27.1	47.1	74.3
2	2-76(F)	5,626.20		+		11.5		2.71	35.6	42.2	77.8
2	2-84(F)	5,634.50		+		10.7		2.65	18.3	60.1	78.3
2	2-94(F)	5,644.50		+		10.8		2.64	21.0	48.2	69.2
2	2-97(F)	5,647.50		+		9.1		2.57	20.2	74.3	94.5
2	2-101(f)	5,651.20	0.296		0.222	12.8	12.7	2.69	35.7	40.6	76.3
2	2-108(F)	5,658.10		+		11.2		2.66	33.1	40.3	73.5
2	2-113	5,663.85	0.084		0.041	9.4	9.3	2.60	35.3	63.3	98.6
2	2-116	5,666.10	0.040		0.022	12.6	12.6	2.67	29.1	45.9	75.0
2	2-126(F)	5,676.40		+		12.2		2.66	16.3	52.5	68.8
3	3-1(F)	5,679.15		+		7.8		2.62	36.4	39.0	75.4
3	3-5	5,683.40	0.0038		0.0013	12.5	12.4	2.67	22.6	50.0	72.6
3	3-13	5,691.30	0.020		0.011	12.5	12.4	2.68	32.4	44.2	76.6
3	3-15	5,693.20	0.023		0.012	10.3	10.3	2.64	37.9	43.3	81.1
3	3-17	5,695.70	0.017		0.0083	13.9	13.8	2.69	35.6	41.8	77.4
3	3-20(F)	5,698.50		+		12.7		2.68	39.3	33.9	73.2
3	3-22(F)	5,700.10		+		13.1		2.68	29.5	34.9	64.4
3	3-24(F)	5,702.70		+		12.2		2.63	30.1	55.4	85.5
3	3-28(F)	5,706.10		+		12.7		2.68	23.5	47.0	70.5
3	3-34	5,712.20	0.0090		0.0040	13.9	13.9	2.69	16.8	51.8	68.6
3	3-37	5,715.70	0.017		0.0085	12.3	12.2	2.68	26.6	46.8	73.4
3	3-41(F)	5,719.30		+		12.4		2.68	26.1	48.2	74.3
4	4-29(F)	5,800.60		+		7.7		2.67	31.4	46.3	77.7
4	4-60(F)	5,831.10		+		9.2		2.68	31.8	55.2	86.9
4	4-92	5,863.10	0.0012		0.0003	7.5	7.5	2.72	87.5	1.1	88.6
5	5-5	5,870.60		<0.0001		5.5	5.5	2.72	70.4	3.9	74.3
5	5-16	5,881.10	0.0006		0.0001	7.0	7.0	2.71	69.9	1.6	71.5
5	5-31	5,896.30	0.0014		0.0004	7.0	7.0	2.73	81.8	0.4	82.2
5	5-38	5,903.70	0.033		0.019	12.2	12.1	2.68	74.6	6.4	81.1
5	5-40(f)	5,905.30	0.103		0.069	11.9	11.9	2.67	77.3	8.9	86.1
5	5-41(f)	5,906.50	0.064		0.035	13.4	13.3	2.68	58.0	16.9	74.9
5	5-42	5,907.80	0.030		0.016	16.4	16.3	2.69	43.8	24.4	68.2
5	5-43	5,908.70	0.050		0.028	15.8	15.7	2.68	37.6	28.5	66.1
5	5-44	5,909.60	0.088		0.047	17.1	17.0	2.68	37.5	28.4	65.9
5	5-45	5,910.10	0.087		0.057	17.0	16.9	2.67	38.2	29.0	67.3



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			to Air	Klinkenberg	Ambient	NCS		Water	Oil	Total
5	5-46	5,911.60	0.124	0.085	14.9	14.8	2.66	29.7	34.3	64.1
5	5-47	5,912.40	0.050	0.029	15.4	15.3	2.66	46.7	24.3	71.0
8	8-42(f)	6,059.25	0.031	0.017	5.0	5.0	2.75	59.4	16.3	75.8
8	8-44(f)	6,061.40	0.096	0.064	2.6	2.6	2.71	36.0	22.1	58.2
8	8-44A(f)	6,061.60	0.033	0.019	3.4	3.4	2.70	54.4	19.1	73.5
8	8-46	6,063.30	0.0060	0.0024	6.8	6.8	2.73	42.4	29.8	72.2
8	8-52(F)	6,069.15		+	5.0		2.69	59.5	9.8	69.2
8	8-55	6,072.95	0.0017	0.0005	5.6	5.6	2.71	70.5	9.8	80.3
8	8-62(F)	6,079.25		+	6.3		2.68	65.2	4.8	70.0
8	8-64(F)	6,081.15		+	5.8		2.74	59.1	21.9	81.0
8	8-69(F)	6,086.60		+	7.3		2.70	61.8	19.0	80.8
8	8-72(F)	6,089.45		+	7.9		2.65	51.8	30.8	82.6
8	8-76(F)	6,093.25		+	7.5		2.70	39.9	40.0	79.9
8	8-83(F)	6,100.60		+	5.7		2.72	40.5	26.9	67.4
Average values:			0.047	0.029	10.7	11.1	2.68	40.5	34.8	75.3

- + Indicates the sample is unsuitable for this type of measurement
- (f) Indicates the sample has a visible fracture/lamination that may effect permeability
- (F) Indicates the sample is fractured into multiple pieces



PERMEABILITY AND FLUID SATURATIONS VERSUS POROSITY

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