

**Barber #12 Log Analysis
Sec 7-T20S-R37E
Lea County, NM**

Depth	GRAPI	LLD	RHOB	PE	MODEL			CALC GRAIN DENSITY		NET POR INTVL USED IN 3/01 SHADED	Sw CALC RHOMA POR	PHI-hw CALC RHOMA	DEL h	TOTAL ZONE h	BWV
					SD/DOL	LS/DOL	DOL/LS	RHOMA SD/DOL LOG PE	RHOMA LS/DOL CALCULATED						
6361.5	90	34.2	2.62	3.28					2.86	12.8%	28.3%	0.064	0.5		0.036
6362	87	29.4	2.61	3.34					2.85	13.2%	29.5%	0.066	0.5		0.039
6362.5	76	26.4	2.60	3.33					2.85	13.7%	30.2%	0.068	0.5		0.041
6363	65	25.1	2.59	3.16					2.87	14.7%	28.7%	0.074	0.5		0.042
6363.5	59	24.9	2.57	3.14					2.87	15.8%	26.9%	0.079	0.5		0.043
6364	56	25.3	2.55	3.25					2.86	16.7%	25.2%	0.084	0.5		0.042
6364.5	52	26.2	2.53	3.32					2.86	17.5%	23.7%	0.087	0.5		0.041
6365	45	27.4	2.52	3.14					2.87	18.7%	21.7%	0.093	0.5		0.041
6365.5	40	28.3	2.52	3.14					2.87	18.5%	21.6%	0.093	0.5		0.040
6366	36	28.7	2.53	3.14					2.87	18.0%	22.0%	0.090	0.5		0.040
6366.5	37	28.1	2.54	3.33					2.85	17.0%	23.6%	0.085	0.5		0.040
6367	41	26.9	2.56	3.46					2.84	15.5%	26.3%	0.078	0.5		0.041
6367.5	51	25.8	2.58	3.46					2.84	14.5%	28.8%	0.073	0.5		0.042
6368	58	24.7	2.59	3.36					2.85	14.0%	30.6%	0.070	0.5		0.043
6368.5	61	23.8	2.60	3.28					2.86	14.1%	30.8%	0.071	0.5		0.044
6369	59	24.7	2.59	3.30					2.86	14.2%	30.0%	0.071	0.5		0.043
6369.5	61	26.7	2.59	3.22					2.86	14.9%	27.6%	0.074	0.5		0.041
6370	72	30.3	2.58	3.14					2.87	15.4%	25.0%	0.077	0.5	9	0.039
6370.5	95	35.4	2.59	2.81			SH					1.397			
6383	91	431.3	2.64	4.20					2.78	8.0%	12.8%	0.040	0.5		0.010
6383.5	93	424.0	2.63	4.28					2.78	8.3%	12.4%	0.042	0.5		0.010
6384	85	411.9	2.62	4.13					2.79	9.3%	11.2%	0.047	0.5		0.010
6384.5	66	400.2	2.62	3.81					2.81	10.8%	9.8%	0.054	0.5		0.011
6385	57	393.2	2.62	3.57					2.83	11.9%	9.0%	0.060	0.5		0.011
6385.5	53	375.8	2.63	3.77					2.82	10.3%	10.6%	0.051	0.5	3	0.011
6386	63	362.5	2.65	4.38					2.77			0.293			
6388.5	91	260.6	2.61	4.28					2.78	9.2%	14.2%	0.046	0.5		0.013
6389	83	243.9	2.62	4.30					2.77	8.9%	15.2%	0.045	0.5		0.014
6389.5	75	229.4	2.63	4.31					2.77	8.4%	16.7%	0.042	0.5		0.014

**BEFORE THE
OIL CONSERVATION COMMISSION**
Case No.12605 Denovo Exhibit No.
Submitted By: **Sapient Energy Corp.** **31-F**
Hearing Date: November 6, 2001

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Depth	GRAPI	LLD	RHOB	PE	MODEL			CALC GRAIN DENSITY		NET POR INTVL USED IN 3/01 SHADED	Rw	Sw CALC RHOMA POR	PHI-h w CALC RHOMA	DEL h	TOTAL ZONE h	BVW
					SD/DOL	LS/DOL	DOL/LS	RHOMA SD/DOL LOG PE	RHOMA LS/DOL CALCULATED							
6390	69	217.4	2.64	4.04					2.80	8.7%		16.6%	0.043	0.5	2	0.014
6390.5	62	210.4	2.66	3.55					2.84				0.176			
6402	90	14.1	2.64	2.77				2.81		9.4%		60.4%	0.047	0.5		0.057
6402.5	85	13.5	2.62	2.74				2.80		10.2%		56.7%	0.051	0.5		0.058
6403	84	13.2	2.60	2.43				2.75		8.9%		65.6%	0.044	0.5		0.058
6403.5	87	13.2	2.58	2.21				2.72		8.1%		72.2%	0.040	0.5		0.058
6404	88	13.7	2.57	2.27				2.73		9.0%		63.5%	0.045	0.5		0.057
6404.5	80	14.0	2.57	2.37				2.74		9.8%		58.2%	0.049	0.5		0.057
6405	71	15.2	2.58	2.58				2.78		11.2%		48.4%	0.056	0.5		0.054
6405.5	64	16.6	2.59	2.91				2.83		13.5%		38.6%	0.067	0.5		0.052
6406	62	18.2	2.61	3.25					2.86			36.1%	0.069	0.5		0.050
6406.5	65	20.2	2.62	3.45					2.84			38.8%	0.061	0.5		0.047
6407	67	23.8	2.63	3.47					2.84			38.0%	0.057	0.5		0.044
6407.5	66	28.0	2.61	3.53					2.84			32.4%	0.062	0.5		0.040
6408	61	33.0	2.59	3.61					2.83			27.4%	0.067	0.5		0.037
6408.5	55	38.9	2.54	3.54					2.84			21.3%	0.080	0.5		0.034
6409	50	45.8	2.53	3.25					2.86			17.4%	0.090	0.5		0.031
6409.5	46	56.7	2.53	3.14					2.87			15.4%	0.091	0.5		0.028
6410	45	72.1	2.54	3.14					2.87			14.2%	0.088	0.5		0.025
6410.5	48	91.8	2.56	3.14					2.87			13.5%	0.082	0.5		0.022
6411	49	118.5	2.59	3.49					2.84			14.0%	0.070	0.5		0.019
6411.5	49	143.7	2.61	4.06					2.79			16.8%	0.053	0.5		0.018
6412	49	160.9	2.62	4.24					2.76			18.6%	0.045	0.5		0.017
6412.5	51	176.7	2.63	4.35					2.77			20.5%	0.039	0.5	11	0.016
6413	53	183.0	2.64	4.37					2.77				1.354			
6414	48	186.0	2.61	4.48					2.76			18.2%	0.043	0.5		0.016
6414.5	41	183.2	2.58	4.37					2.77			14.7%	0.053	0.5		0.016
6415	38	180.2	2.56	4.29					2.78			13.0%	0.061	0.5		0.016
6415.5	37	170.4	2.56	4.32					2.77			13.7%	0.059	0.5		0.016

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					SD/DOL	LS/DOL	DOL/LS	RHOMA SD/DOL LOG PE	RHOMA LS/DOL CALCULATED						
6416	37	159.1	2.60	4.34					2.77	9.7%	17.4%	0.048	0.5		0.017
6416.5	36	149.7	2.64	4.11					2.79	8.6%	20.2%	0.043	0.5	3	0.017
6417	38	143.0	2.68	3.56					2.84			0.308			
6422	51	138.2	2.64	4.30					2.77	7.3%	24.6%	0.037	0.5		0.018
6422.5	53	143.6	2.64	4.54					2.75	6.8%	26.1%	0.034	0.5		0.018
6423	53	145.3	2.63	4.63					2.75	6.9%	25.6%	0.034	0.5		0.018
6423.5	56	143.0	2.64	4.70					2.74	5.7%	31.1%	0.029	0.5	2	0.018
6424	64	126.8	2.68	4.67					2.74			0.133			
					AVERAGE or TOTAL VALUES					12.2%	26.7%	3.660		30	0.032