

Hobbs

SCIENTIFIC DRILLING INTERNATIONAL
MIDLAND, TEXAS

PENNZOIL

Wellname : STATE 16 #5
Location :
:
:
Date Surveyed : 11-05-90
Job No. : 32M1190192
Survey Performed By : RICK EATON SINGLE SHOTS - JOE THOMPSON

This survey is correct to the best of my knowledge
and is supported by actual field data.

Rick Eaton
..... COMPANY REPRESENTATIVE

SCIENTIFIC DRILLING INTERNATIONAL

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No Interpolation

Plane of Vertical Section : N28.90°W
Latitude & Departure relate to : PLATFORM CENTER
Vertical Section Originates at : PLATFORM CENTER
Slot Coordinates : Lat 0.000ft
: Dep 0.000ft
Directions Referenced To : TRUE NORTH
Depth at Drill Floor : 0.00 ft

Calculation Method : MINIMUM CURVATURE

Magnetic Declination : 0° 0.000'E
Platform north : 0° 0' 0'' (T)
Grid convergence : +0.0000°

STATE 16 #5
LEA COUNTY, NEW MEXICO

SCIENTIFIC DRILLING INTERNATIONAL

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No Interpolation

MD	INC	DIR	TVD	+N/-S	+E/-W	VS D'LEG
ft	deg	deg	ft	ft	ft	ft °/100
0	0.00	N 0.00°E	0.00	0.00	0.00	0.00 0.0
100	0.50	S47.82°W	100.00	-0.29	-0.32	-0.10 0.5
200	0.90	S32.62°W	199.99	-1.25	-1.07	-0.57 0.4
300	1.18	S34.60°W	299.97	-2.76	-2.08	-1.41 0.3
400	1.67	S34.25°W	399.94	-4.81	-3.48	-2.53 0.5
500	1.68	S24.93°W	499.90	-7.34	-4.92	-4.05 0.3
600	1.27	S23.10°W	599.87	-9.69	-5.97	-5.60 0.4
700	1.22	S25.98°W	699.84	-11.67	-6.87	-6.89 0.1
800	0.98	S32.68°W	799.83	-13.34	-7.80	-7.91 0.3
900	0.75	S23.13°W	899.81	-14.67	-8.52	-8.72 0.3
1000	0.72	S27.40°W	999.81	-15.83	-9.07	-9.47 0.1
1100	0.68	S60.12°W	1099.80	-16.68	-9.87	-9.83 0.4
1200	0.80	S64.00°W	1199.79	-17.28	-11.01	-9.81 0.1
1300	0.93	S66.73°W	1299.78	-17.91	-12.39	-9.69 0.1
1400	0.98	S54.75°W	1399.77	-18.72	-13.83	-9.71 0.2
1500	1.07	S63.32°W	1499.75	-19.63	-15.36	-9.76 0.2
1600	1.03	S73.60°W	1599.73	-20.31	-17.06	-9.53 0.2
1700	1.08	S83.13°W	1699.72	-20.67	-18.86	-8.99 0.2
1800	1.13	S77.98°W	1799.70	-20.99	-20.76	-8.35 0.1
1900	0.82	S89.03°W	1899.68	-21.21	-22.44	-7.72 0.4
2000	0.62	S89.50°W	1999.68	-21.23	-23.69	-7.13 0.2
2100	0.48	N78.00°W	2099.67	-21.14	-24.64	-6.60 0.2
2200	0.28	S67.33°W	2199.67	-21.15	-25.28	-6.30 0.3
2300	0.18	S71.90°W	2299.67	-21.29	-25.65	-6.24 0.1
2400	0.13	S88.48°W	2399.67	-21.35	-25.92	-6.16 0.1
2500	0.07	S33.52°E	2499.67	-21.40	-26.00	-6.17 0.2
2600	0.28	S57.26°E	2599.67	-21.58	-25.76	-6.45 0.2
2700	0.58	S47.95°E	2699.66	-22.05	-25.18	-7.14 0.3
2800	1.08	S47.57°E	2799.65	-23.03	-24.10	-8.51 0.5
2900	1.48	S52.78°E	2899.63	-24.45	-22.38	-10.58 0.4
3000	0.97	S71.72°E	2999.60	-25.49	-20.55	-12.39 0.6
3100	0.83	N81.02°E	3099.59	-25.64	-19.03	-13.25 0.4
3200	0.85	N54.98°E	3199.58	-25.11	-17.71	-13.42 0.4
3300	0.95	N49.20°E	3299.57	-24.14	-16.47	-13.17 0.1
3400	1.37	N49.48°E	3399.55	-22.82	-14.94	-12.76 0.4
3500	1.07	N52.52°E	3499.53	-21.48	-13.29	-12.38 0.3
3600	1.22	N61.85°E	3599.51	-20.40	-11.61	-12.25 0.2
3700	1.48	N59.23°E	3699.48	-19.24	-9.56	-12.23 0.3
3800	1.62	N56.88°E	3799.44	-17.81	-7.26	-12.08 0.2
3900	1.37	N60.23°E	3899.41	-16.44	-5.04	-11.96 0.3

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No Interpolation

MD ft	INC deg	DIR deg	TVD ft	+N/-S ft	+E/-W ft	VS D'LEG ft °/100
4000	1.13	N51.03°E	3999.39	-15.23	-3.24	-11.77 0.3
4100	1.02	N50.17°E	4099.37	-14.04	-1.79	-11.43 0.1
4200	1.17	N45.37°E	4199.35	-12.75	-0.38	-10.98 0.2
4280	1.38	N43.80°E	4279.33	-11.48	0.87	-10.47 0.3
4458	1.31	N34.49°E	4457.28	-8.26	3.51	-8.92 0.1
4521	1.11	N33.70°E	4520.27	-7.16	4.25	-8.32 0.3
4615	0.79	N39.59°E	4614.25	-5.90	5.17	-7.66 0.4
4709	1.09	N74.25°E	4708.24	-5.16	6.44	-7.63 0.7
4803	0.25	N24.96°E	4802.23	-4.73	7.39	-7.71 1.0
4897	0.34	S66.03°E	4896.23	-4.66	7.73	-7.81 0.4
4990	0.34	S37.84°E	4989.23	-4.99	8.15	-8.31 0.2
5084	0.32	S81.76°E	5083.23	-5.25	8.58	-8.74 0.3
5178	0.77	S21.76°E	5177.23	-5.87	9.08	-9.53 0.7
5272	0.09	S38.31°W	5271.22	-6.51	9.27	-10.18 0.8
5366	0.03	N10.53°E	5365.22	-6.55	9.23	-10.19 0.1
5460	0.17	S48.21°W	5459.22	-6.62	9.13	-10.20 0.2
5554	0.34	N63.18°W	5553.22	-6.58	8.77	-10.00 0.3
5648	0.25	S49.64°W	5647.22	-6.59	8.37	-9.81 0.4
5836	0.20	N 5.54°W	5835.22	-6.53	8.02	-9.59 0.2
5929	0.40	N10.53°W	5928.22	-6.05	7.95	-9.14 0.2
6023	0.36	N12.36°W	6022.22	-5.44	7.83	-8.54 0.0
6117	0.18	N36.65°W	6116.22	-5.03	7.67	-8.11 0.2
6211	0.16	N36.99°W	6210.21	-4.81	7.51	-7.84 0.0
6399	0.12	N32.67°W	6398.21	-4.43	7.24	-7.38 0.0
6493	0.84	S53.25°W	6492.21	-4.76	6.64	-7.38 0.9
6587	0.20	S24.85°W	6586.21	-5.32	6.02	-7.57 0.7
6681	0.62	S36.10°W	6680.21	-5.88	5.65	-7.88 0.5
6775	0.49	N85.96°W	6774.20	-6.26	4.95	-7.88 0.6
6868	0.31	S28.91°W	6867.20	-6.46	4.43	-7.79 0.5
6962	0.52	S 6.58°W	6961.20	-7.10	4.26	-8.28 0.3
7056	0.31	S 9.67°W	7055.19	-7.78	4.17	-8.82 0.2
7150	0.35	N55.00°W	7149.19	-7.86	3.89	-8.76 0.6
7244	0.55	S11.58°E	7243.19	-8.14	3.74	-8.94 0.9
7338	0.49	S 9.07°W	7337.19	-8.98	3.77	-9.68 0.2
7432	0.45	S21.59°E	7431.19	-9.72	3.84	-10.37 0.3
7620	0.41	S26.45°W	7619.18	-11.01	3.81	-11.48 0.2
7714	0.25	S 3.81°E	7713.18	-11.51	3.68	-11.86 0.2
7807	0.28	S64.03°E	7806.18	-11.82	3.90	-12.23 0.3
7901	0.25	S24.49°E	7900.18	-12.10	4.19	-12.62 0.2
7995	0.60	S41.17°W	7994.17	-12.66	3.95	-12.99 0.6

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MD	INC	DIR	TVD	+N/-S	+E/-W	VS D'LEG	
ft	deg	deg	ft	ft	ft	ft °/100	
8089	0.25	S58.37°W	8088.17	-13.14	3.45	-13.17	0.4
8183	0.54	N82.16°W	8182.17	-13.19	2.84	-12.92	0.4
8277	0.84	S67.63°W	8276.16	-13.39	1.76	-12.57	0.5
8371	0.80	N85.97°W	8370.15	-13.60	0.47	-12.14	0.4
8465	0.91	N84.58°W	8464.14	-13.49	-0.93	-11.36	0.1
8559	0.63	N72.21°W	8558.13	-13.26	-2.16	-10.56	0.3
8590	0.71	N84.48°W	8589.13	-13.19	-2.52	-10.33	0.5
8655	0.79	N84.12°W	8654.13	-13.10	-3.36	-9.85	0.1
8747	0.71	S81.76°W	8746.12	-13.12	-4.56	-9.28	0.2
8838	0.51	S72.32°W	8837.11	-13.32	-5.50	-9.01	0.2
8930	0.40	N87.87°W	8929.11	-13.44	-6.21	-8.76	0.2
9033	2.06	N 9.71°E	9032.09	-11.60	-6.26	-7.13	2.1
9126	5.21	N 1.47°W	9124.89	-5.73	-6.09	-2.07	3.5
9219	5.10	N 5.65°W	9217.51	2.61	-6.60	5.47	0.4
9312	5.53	N 3.91°W	9310.11	11.19	-7.32	13.33	0.5
9406	4.85	N 3.68°W	9403.73	19.67	-7.88	21.03	0.7
9499	4.99	N 4.74°W	9496.38	27.63	-8.47	28.28	0.2
9592	3.67	N15.68°W	9589.12	34.53	-9.60	34.87	1.7
9685	2.30	N44.51°W	9682.00	38.72	-11.72	39.56	2.1
9778	1.58	S54.46°W	9774.96	39.31	-14.07	41.21	2.8
9872	1.03	S68.27°W	9868.93	38.24	-15.91	41.17	0.7
9965	1.78	S55.88°W	9961.90	37.12	-17.88	41.14	0.9
10058	1.64	S73.57°W	10054.86	35.94	-20.35	41.30	0.6
10151	1.40	S76.25°W	10147.83	35.29	-22.73	41.88	0.3
10244	1.45	S73.09°W	10240.80	34.68	-24.96	42.42	0.1
10338	1.01	S57.07°W	10334.78	33.88	-26.80	42.61	0.6
10431	1.03	S59.90°W	10427.76	33.02	-28.21	42.54	0.1
10524	1.33	S87.57°W	10520.75	32.55	-30.01	43.00	0.7
10617	1.10	S43.25°W	10613.73	31.86	-31.70	43.21	1.0
10710	1.15	S78.92°W	10706.71	31.03	-33.23	43.22	0.7
10804	0.50	N57.21°W	10800.70	31.07	-34.50	43.87	0.9
10897	0.41	N37.21°W	10893.70	31.55	-35.04	44.56	0.2
10990	1.26	N12.17°W	10986.69	32.82	-35.46	45.86	1.0
11093	2.50	N80.00°E	11089.65	34.31	-33.48	46.22	2.8
11277	2.00	N50.00°E	11273.51	37.07	-27.07	45.54	0.7
11402	1.75	N25.00°E	11398.45	40.21	-24.59	47.08	0.7
11500	1.50	N15.00°E	11496.41	42.80	-23.63	48.89	0.4

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No Interpolation

Origin of Bottom Hole Closure PLATFORM CENTRE
Bottom Hole Closure 49 ft N28.90°W

PEMIZOIL EXPLORATION & PRODUCTION COMPANY

STATE -16- Well #5

UNIT L, 2310' FSL & 900' FWL of

Section 16, T16S, R37E, Lea Co., NM

- 5 hrs - DST #1 11,458'-11,496'. Opened tool for 2" preflow w/good blow. Closed tool for 60" ISIP w/20# - had GTS after 12 mins. Re-opened tool for 77" FFP w/10# increasing to 190# maximum before dropping to 140#. Had oil to surface in 77 mins. Closed tool for 161" FSIP.
- 2 1/4 hrs - Released packers. Reversed out 29.25 bbls of 43⁰ API oil from DP to test tank.
- 4 1/4 hrs - TOH w/test tools
- 2 1/4 hrs - Lay dwn & load out test tools. Sampler data shown below.
- 3 3/4 hrs - TIH w/7 7/8" bit
- 1/4 hr - Wash to bottom - had 20' fill
- 3 hrs - Circ & cond hole to log
- 3/4 hrs - Began TOH to run "E" logs

Instrument Data

	TOP	BOTTOM
Depth	11484'	11490'
Temp.	170 ⁰ F	170 ⁰ F
IHP	5556	5490
IFP	338-338	311-311
ISIP	2624	2617
FFP	338-1684	311-1647
FSIP	2624	2617
FHP	5556	5490

Sampler Recovery: 8.7 cu.ft. gas & 1100 cc oil
@ 43⁰ API @ 1300 psig.