



30-015-38059

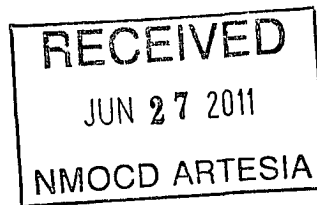
Scientific Drilling

Gyroscopic Survey Report
for
DEVON ENERGY

Well Location	EDDY COUNTY, NEW MEXICO
Well Name	SPUD 16 STATE #9H
Rig Name	H & P #416
Survey Date	12/15/2010
Latitude	32.30 deg
North Reference	Grid North
Grid Correction	-0.18 deg
Depth Reference	RKB
Calculation Method	Minimum Curvature
Section (VS) Ref	0.00N (ft), 0.00E (ft), 358.89Azim (deg)
Definitive Survey	FINAL OUTRUN
Operator	LEO GARZA

Comments

ZERO REFERENCE IS AT K.B. OF 25'.





Survey Report

Well Name: SPUD 16 STATE #9H

Survey: FINAL OUTFUN

Survey Date: 12/15/2010

MD	Inc	Azim	TVD	VS	Northing	Easting	DLS	Closure Distance	Closure Angle
ft	deg	deg	ft	ft	ft	ft	deg/100ft	ft	deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid	0.00	0.00
100.00	0.11	202.79	100.00	-0.09	-0.09	-0.04	0.11	0.09	202.79
200.00	0.10	235.96	200.00	-0.22	-0.22	-0.15	0.06	0.27	213.34
300.00	0.24	220.85	300.00	-0.42	-0.43	-0.36	0.14	0.56	219.66
400.00	0.20	199.97	400.00	-0.74	-0.75	-0.55	0.09	0.93	216.25
500.00	0.39	167.66	500.00	-1.24	-1.25	-0.54	0.25	1.36	203.25
600.00	0.52	156.04	599.99	-2.00	-2.00	-0.28	0.15	2.02	188.04
700.00	0.65	144.93	699.99	-2.88	-2.87	0.22	0.17	2.88	175.54
800.00	0.61	147.94	799.98	-3.80	-3.79	0.83	0.05	3.88	167.63
900.00	0.55	149.39	899.98	-4.68	-4.65	1.36	0.06	4.85	163.72
1000.00	0.37	187.80	999.97	-5.42	-5.39	1.56	0.35	5.61	163.86
1100.00	0.33	202.35	1099.97	-6.00	-5.98	1.41	0.10	6.14	166.76
1200.00	0.34	233.57	1199.97	-6.44	-6.42	1.06	0.18	6.51	170.61
1300.00	0.35	247.28	1299.97	-6.72	-6.71	0.54	0.08	6.73	175.37
1400.00	0.38	245.16	1399.97	-6.97	-6.97	-0.04	0.03	6.97	180.31
1500.00	0.37	233.83	1499.97	-7.28	-7.30	-0.60	0.07	7.32	184.67
1600.00	0.56	211.87	1599.96	-7.88	-7.90	-1.12	0.26	7.98	188.03
1700.00	0.57	216.71	1699.96	-8.69	-8.72	-1.67	0.05	8.88	190.87
1800.00	0.81	215.39	1799.95	-9.65	-9.70	-2.38	0.23	9.99	193.80
1900.00	0.90	234.50	1899.94	-10.66	-10.73	-3.43	0.30	11.26	197.72
2000.00	0.79	229.19	1999.93	-11.54	-11.63	-4.59	0.13	12.50	201.52
2100.00	1.00	213.70	2099.92	-12.69	-12.80	-5.59	0.32	13.97	203.58
2200.00	1.40	152.70	2199.90	-14.50	-14.61	-5.51	1.26	15.62	200.66
2300.00	2.12	141.96	2299.85	-17.08	-17.15	-3.81	0.79	17.57	192.53
2400.00	2.11	154.71	2399.78	-20.24	-20.28	-1.88	0.47	20.37	185.31
2500.00	3.14	153.13	2499.68	-24.38	-24.38	0.14	1.02	24.39	179.67
2600.00	3.92	147.44	2599.49	-29.76	-29.70	3.21	0.86	29.88	173.82
2700.00	4.36	146.47	2699.23	-35.88	-35.75	7.15	0.45	36.46	168.69
2800.00	3.76	147.03	2798.97	-41.88	-41.67	11.04	0.60	43.11	165.17
2900.00	3.23	151.75	2898.79	-47.17	-46.90	14.15	0.60	48.99	163.21
3000.00	2.93	155.98	2998.64	-52.03	-51.72	16.53	0.37	54.29	162.28
3100.00	2.73	155.35	3098.52	-56.56	-56.21	18.56	0.21	59.20	161.73
3200.00	2.51	152.29	3198.42	-60.70	-60.31	20.57	0.26	63.73	161.17
3300.00	2.24	150.66	3298.33	-64.38	-63.96	22.55	0.28	67.81	160.58
3400.00	1.99	148.29	3398.26	-67.60	-67.14	24.42	0.27	71.44	160.01
3500.00	1.68	156.93	3498.21	-70.45	-69.96	25.90	0.42	74.60	159.68
3600.00	1.39	158.46	3598.18	-72.95	-72.44	26.92	0.29	77.28	159.61
3700.00	1.35	159.78	3698.15	-75.20	-74.68	27.78	0.05	79.68	159.60
3800.00	0.94	168.79	3798.13	-77.12	-76.59	28.34	0.44	81.67	159.69



Survey Report

Well Name:		SPUD 16 STATE #9H							
Survey:		FINAL OUTFUN							
Survey Date:		12/15/2010							
MD	Inc	Azim	TVD	VS	Northing	Easting	DLS	Closure Distance	Closure Angle
ft	deg	deg	ft	ft	ft	ft	deg/100ft	ft	deg
3900.00	0.82	175.51	3898.12	-78.65	-78.11	28.56	0.16	83.17	159.91
4000.00	0.78	173.68	3998.11	-80.03	-79.49	28.69	0.05	84.51	160.15
4100.00	1.40	149.16	4098.09	-81.77	-81.21	29.39	0.76	86.37	160.11
4200.00	0.60	173.92	4198.07	-83.34	-82.78	30.07	0.89	88.07	160.04
4300.00	0.61	176.46	4298.07	-84.40	-83.83	30.16	0.03	89.09	160.21
4400.00	0.59	176.46	4398.06	-85.44	-84.87	30.22	0.02	90.09	160.40
4500.00	0.54	177.40	4498.06	-86.43	-85.86	30.28	0.04	91.04	160.58
4600.00	0.48	180.27	4598.05	-87.32	-86.75	30.30	0.07	91.89	160.75
4700.00	0.49	186.35	4698.05	-88.16	-87.59	30.25	0.05	92.67	160.95
4800.00	0.48	185.55	4798.05	-89.00	-88.43	30.16	0.01	93.43	161.17
4900.00	0.51	213.03	4898.04	-89.79	-89.23	29.88	0.24	94.09	161.49
5000.00	0.53	215.40	4998.04	-90.53	-89.97	29.37	0.03	94.65	161.92
5100.00	0.58	219.21	5098.03	-91.29	-90.75	28.78	0.07	95.20	162.41
5200.00	0.56	215.88	5198.03	-92.07	-91.54	28.17	0.04	95.77	162.90
5300.00	0.54	217.31	5298.02	-92.83	-92.32	27.59	0.02	96.35	163.36
5400.00	0.73	220.32	5398.02	-93.68	-93.18	26.89	0.19	96.98	163.90
5500.00	0.75	220.62	5498.01	-94.64	-94.16	26.06	0.02	97.70	164.53
5600.00	0.72	218.19	5598.00	-95.62	-95.15	25.24	0.04	98.44	165.14
5700.00	0.75	222.27	5697.99	-96.58	-96.13	24.41	0.06	99.18	165.75
5800.00	0.73	216.29	5797.98	-97.56	-97.12	23.59	0.08	99.95	166.35
5900.00	0.64	210.65	5897.98	-98.54	-98.12	22.93	0.12	100.76	166.84
6000.00	0.67	223.56	5997.97	-99.43	-99.02	22.25	0.15	101.49	167.34
6100.00	0.61	204.74	6097.96	-100.32	-99.92	21.63	0.22	102.23	167.79
6200.00	0.65	197.19	6197.96	-101.33	-100.94	21.24	0.09	103.15	168.12
6300.00	0.69	199.02	6297.95	-102.44	-102.05	20.87	0.05	104.17	168.44
6400.00	0.77	207.71	6397.94	-103.60	-103.22	20.36	0.14	105.21	168.84
6500.00	0.96	203.24	6497.93	-104.95	-104.59	19.72	0.20	106.43	169.32
6600.00	0.97	213.95	6597.92	-106.41	-106.06	18.91	0.18	107.73	169.89
6700.00	0.98	202.12	6697.90	-107.89	-107.56	18.12	0.20	109.07	170.44
6800.00	1.15	209.38	6797.89	-109.54	-109.23	17.30	0.22	110.59	171.00
6900.00	0.92	204.49	6897.87	-111.14	-110.84	16.47	0.25	112.06	171.55
7000.00	0.52	208.14	6997.86	-112.26	-111.97	15.93	0.40	113.10	171.90
7100.00	0.81	175.89	7097.85	-113.36	-113.07	15.76	0.46	114.16	172.06
7200.00	1.31	163.78	7197.84	-115.16	-114.87	16.13	0.54	116.00	172.01
7300.00	1.60	178.12	7297.81	-117.66	-117.36	16.50	0.47	118.51	172.00
7400.00	2.02	170.13	7397.76	-120.80	-120.49	16.85	0.49	121.67	172.04
7500.00	2.21	177.13	7497.69	-124.47	-124.16	17.24	0.32	125.35	172.09
7600.00	2.68	186.94	7597.60	-128.71	-128.41	17.06	0.63	129.53	172.43



Survey Report

Well Name: SPUD 16 STATE #9H

Survey: FINAL OUTRUN

Survey Date: 12/15/2010

MD ft	Inc deg	Azim deg	TVD ft	VS ft	Northing ft	Easting ft	DLS deg/100ft	Closure Distance ft	Closure Angle deg
7700.00	2.92	187.85	7697.48	-133.54	-133.25	16.43	0.24	134.26	172.97
7800.00	2.77	192.74	7797.35	-138.40	-138.13	15.55	0.28	139.00	173.58
7900.00	2.53	199.32	7897.25	-142.82	-142.57	14.28	0.39	143.28	174.28
8000.00	2.06	194.31	7997.17	-146.62	-146.39	13.11	0.51	146.98	174.88
8100.00	2.35	184.91	8097.09	-150.39	-150.18	12.49	0.46	150.69	175.25
8175.00	2.12	151.99	8172.04	-153.16	-152.93	13.01	1.71	153.48	175.14