



A GYRO TECHNOLOGIES INC. COMPANY

PO Box 261021
Corpus Christi, Texas 78426
(361) 767-0602 • (800) 606-GYRO • Fax (361) 767-0612

April 10, 2013

Devon Energy Production Co., LP
333 West Sheridan Ave
Oklahoma City, Oklahoma 73102-5010

Attn: Patti Riechers

Re: **Bootes 15 Fed Com No 002H**

Please find enclosed a copy of the survey from 0' to 8,495' ran on the above referenced well.

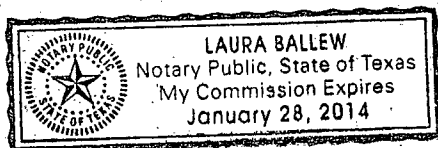
If I can be of any further service, please do not hesitate to call me at 800-606-4976.

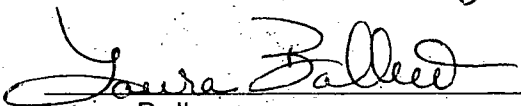
Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §
§
COUNTY OF NUECES §

This instrument was acknowledged before me on the 10th day of April, A.D., 2013, by Keith Havelka.




Laura Ballew
Notary Public, State of Texas



Company: DEVON ENERGY PRODUCTION CO., LP
Lease/Well: BOOTES 15 FED COM/No 002H



Rig Name: MCVAY #10
State/County: NEW MEXICO/EDDY
Latitude: 32.67, Longitude: -103.85
GRID North is 0.26 Degrees East of True North
VS-Azi: 179.60 Degrees

Depth Reference : RKB=20'

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gyrobootes15fedcom#2h.ut

Minimum Curvature Method

Report Date/Time: 4/11/2013 / 08:12

Vaughn Energy Services

Conway, AR

501-730-0602

Surveyor: Michael Komarek

Bootes 15 Fed Com No 002H / API 30-015-40408

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.62	259.18	100.00	-0.10	-0.53	0.10	0.54	259.18	0.62
200.00	0.64	253.64	199.99	-0.36	-1.61	0.35	1.65	257.29	0.07
300.00	0.66	246.96	299.99	-0.75	-2.68	0.73	2.78	254.41	0.08
400.00	0.84	236.49	399.98	-1.38	-3.83	1.35	4.07	250.16	0.23
500.00	0.86	238.38	499.97	-2.18	-5.08	2.14	5.53	246.77	0.03
600.00	0.79	230.08	599.96	-3.02	-6.25	2.97	6.94	244.22	0.14
700.00	0.89	225.69	699.94	-4.00	-7.33	3.95	8.36	241.37	0.12
800.00	0.77	219.89	799.93	-5.07	-8.32	5.01	9.75	238.67	0.15
900.00	0.72	216.12	899.93	-6.09	-9.13	6.03	10.98	236.28	0.07
1000.00	0.78	212.54	999.92	-7.17	-9.86	7.10	12.20	233.98	0.07
1100.00	0.76	216.93	1099.91	-8.28	-10.63	8.20	13.47	232.09	0.06
1200.00	0.70	208.68	1199.90	-9.35	-11.32	9.27	14.68	230.46	0.12
1300.00	0.43	208.66	1299.89	-10.21	-11.79	10.13	15.60	229.12	0.27
1400.00	0.32	162.75	1399.89	-10.80	-11.89	10.72	16.06	227.75	0.31
1500.00	0.48	94.14	1499.89	-11.10	-11.39	11.02	15.90	225.75	0.47
1600.00	1.13	60.10	1599.88	-10.64	-10.12	10.56	14.68	223.58	0.78
1700.00	1.85	60.78	1699.85	-9.36	-7.86	9.30	12.22	220.02	0.72
1800.00	2.35	63.95	1799.78	-7.67	-4.61	7.64	8.94	211.00	0.51

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	2.39	64.30	1899.69	-5.86	-0.89	5.86	5.93	188.61	0.05
2000.00	2.36	64.29	1999.61	-4.07	2.85	4.08	4.96	144.98	0.03
2100.00	2.37	62.52	2099.52	-2.22	6.54	2.26	6.91	108.71	0.07
2200.00	2.41	65.52	2199.44	-0.39	10.29	0.46	10.30	92.16	0.13
2300.00	1.95	70.22	2299.36	1.06	13.81	-0.96	13.85	85.62	0.49
2400.00	1.73	74.04	2399.31	2.05	16.86	-1.93	16.99	83.07	0.25
2500.00	1.46	80.04	2499.27	2.68	19.56	-2.55	19.75	82.19	0.32
2600.00	1.33	86.04	2599.24	2.98	21.97	-2.83	22.18	82.27	0.19
2700.00	0.75	90.00	2699.23	3.06	23.78	-2.90	23.98	82.66	0.58
2800.00	0.44	109.71	2799.22	2.93	24.80	-2.76	24.98	83.26	0.36
2900.00	0.12	171.26	2899.22	2.69	25.18	-2.52	25.33	83.89	0.40
3000.00	0.09	216.42	2999.22	2.52	25.15	-2.35	25.28	84.27	0.09
3100.00	0.22	313.12	3099.22	2.59	24.97	-2.41	25.10	84.09	0.25
3200.00	0.31	337.97	3199.22	2.97	24.73	-2.79	24.90	83.16	0.15
3300.00	0.37	335.62	3299.22	3.51	24.49	-3.34	24.74	81.85	0.06
3400.00	0.39	345.52	3399.21	4.13	24.28	-3.96	24.63	80.35	0.07
3500.00	0.48	341.72	3499.21	4.86	24.06	-4.69	24.55	78.59	0.09
3600.00	0.55	336.43	3599.21	5.69	23.74	-5.52	24.41	76.52	0.08
3700.00	0.50	343.84	3699.20	6.54	23.43	-6.38	24.32	74.39	0.08
3800.00	0.68	338.20	3799.20	7.51	23.09	-7.35	24.28	71.98	0.19
3900.00	0.95	336.48	3899.19	8.82	22.54	-8.66	24.20	68.63	0.27
4000.00	1.16	326.24	3999.17	10.42	21.64	-10.27	24.02	64.30	0.29
4100.00	1.20	321.71	4099.15	12.08	20.43	-11.94	23.74	59.41	0.10
4200.00	1.10	323.95	4199.13	13.68	19.22	-13.55	23.59	54.55	0.10
4300.00	1.11	314.88	4299.11	15.14	17.96	-15.02	23.50	49.87	0.18
4400.00	1.18	320.14	4399.09	16.62	16.62	-16.50	23.50	45.01	0.12
4500.00	1.19	319.27	4499.07	18.19	15.29	-18.08	23.76	40.04	0.02
4600.00	1.42	320.22	4599.04	19.93	13.81	-19.83	24.25	34.73	0.23
4700.00	1.18	321.04	4699.02	21.69	12.37	-21.60	24.97	29.70	0.24
4800.00	1.02	316.61	4799.00	23.14	11.11	-23.06	25.67	25.65	0.19
4900.00	0.90	319.41	4898.99	24.37	9.99	-24.30	26.34	22.29	0.13
5000.00	0.79	322.10	4998.97	25.51	9.06	-25.45	27.07	19.55	0.11
5100.00	0.59	329.64	5098.97	26.50	8.38	-26.44	27.79	17.54	0.23
5200.00	0.57	335.94	5198.96	27.40	7.91	-27.34	28.52	16.11	0.07
5300.00	0.55	328.29	5298.96	28.26	7.46	-28.21	29.23	14.78	0.08
5400.00	0.55	326.74	5398.95	29.08	6.94	-29.03	29.89	13.42	0.01
5500.00	0.52	329.86	5498.95	29.87	6.45	-29.83	30.56	12.17	0.04
5600.00	0.52	331.92	5598.94	30.67	6.00	-30.62	31.25	11.08	0.02
5700.00	0.46	337.21	5698.94	31.43	5.64	-31.39	31.94	10.16	0.07

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5800.00	0.55	334.92	5798.94	32.24	5.28	-32.20	32.67	9.29	0.09
5900.00	0.54	325.85	5898.93	33.07	4.81	-33.03	33.41	8.27	0.09
6000.00	0.58	331.48	5998.93	33.90	4.30	-33.87	34.17	7.23	0.06
6100.00	0.62	335.13	6098.92	34.83	3.84	-34.80	35.04	6.29	0.06
6200.00	0.64	339.61	6198.92	35.84	3.42	-35.82	36.00	5.44	0.05
6300.00	0.72	345.57	6298.91	36.97	3.06	-36.95	37.10	4.74	0.11
6400.00	0.75	346.79	6398.90	38.22	2.76	-38.20	38.32	4.13	0.03
6500.00	0.73	342.16	6498.89	39.46	2.41	-39.44	39.53	3.50	0.06
6600.00	0.88	342.15	6598.88	40.79	1.98	-40.78	40.84	2.79	0.15
6700.00	0.75	344.18	6698.87	42.15	1.57	-42.14	42.18	2.14	0.14
6800.00	0.71	341.76	6798.86	43.36	1.20	-43.35	43.38	1.59	0.05
6900.00	0.47	336.89	6898.86	44.33	0.85	-44.32	44.33	1.09	0.24
7000.00	0.56	341.45	6998.85	45.17	0.53	-45.17	45.17	0.67	0.10
7100.00	0.56	335.63	7098.85	46.09	0.17	-46.08	46.09	0.21	0.06
7200.00	0.60	341.19	7198.84	47.02	-0.20	-47.02	47.03	359.76	0.06
7300.00	0.09	29.66	7298.84	47.59	-0.33	-47.59	47.59	359.61	0.54
7400.00	0.44	119.06	7398.84	47.48	0.05	-47.47	47.48	0.06	0.45
7500.00	0.23	142.52	7498.84	47.13	0.50	-47.12	47.13	0.61	0.24
7600.00	1.10	204.35	7598.83	46.09	0.23	-46.09	46.09	0.29	1.01
7700.00	1.09	204.51	7698.81	44.35	-0.56	-44.35	44.35	359.28	0.01
7800.00	1.24	222.29	7798.79	42.68	-1.68	-42.69	42.71	357.74	0.39
7900.00	1.39	238.40	7898.77	41.25	-3.44	-41.27	41.39	355.23	0.40
8000.00	1.43	234.89	7998.74	39.89	-5.49	-39.93	40.27	352.16	0.10
8100.00	0.95	232.39	8098.72	38.67	-7.17	-38.72	39.33	349.49	0.48
8200.00	0.71	258.23	8198.71	38.04	-8.43	-38.09	38.96	347.50	0.44
8300.00	0.86	277.49	8298.70	38.01	-9.78	-38.08	39.25	345.56	0.30
8400.00	0.81	274.24	8398.69	38.16	-11.24	-38.24	39.78	343.59	0.07
8495.00	1.03	268.96	8493.67	38.19	-12.76	-38.28	40.27	341.52	0.24