



A GYRO TECHNOLOGIES INC. COMPANY

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

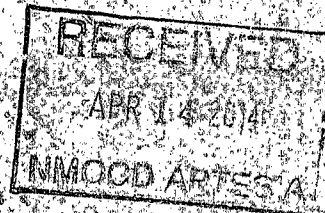
February 6, 2014

30-015-40791

BOPCO, LP
P O Box 2760
Midland, TX 79702

Attn: Drilling Department

RE: Poker Lake Unit 322H



Please find enclosed a copy of the survey from 0.00' to 6805.00' 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



Company: Bopco
Lease/Well: Poker Lake Unit/322H
Location: 22 mile E dir from Malaga
Rig Name: McVay 5
State/County: New Mexico/Eddy
Latitude: 32.24, Longitude: -103.90
GRID North is 0.23 Degrees East of True North
VS-Azi: 0.00 Degrees



Depth Reference : RKB = 19 Feet

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: ...lake unit 322h_gyro survey.ut

Minimum Curvature Method

Report Date/Time: 2/6/2014 / 10:32

Vaughn Energy Services

Midland, Texas

432-563-5444

Surveyor: Gene Helss

Poker Lake Unit 322H / API 30-015-40791



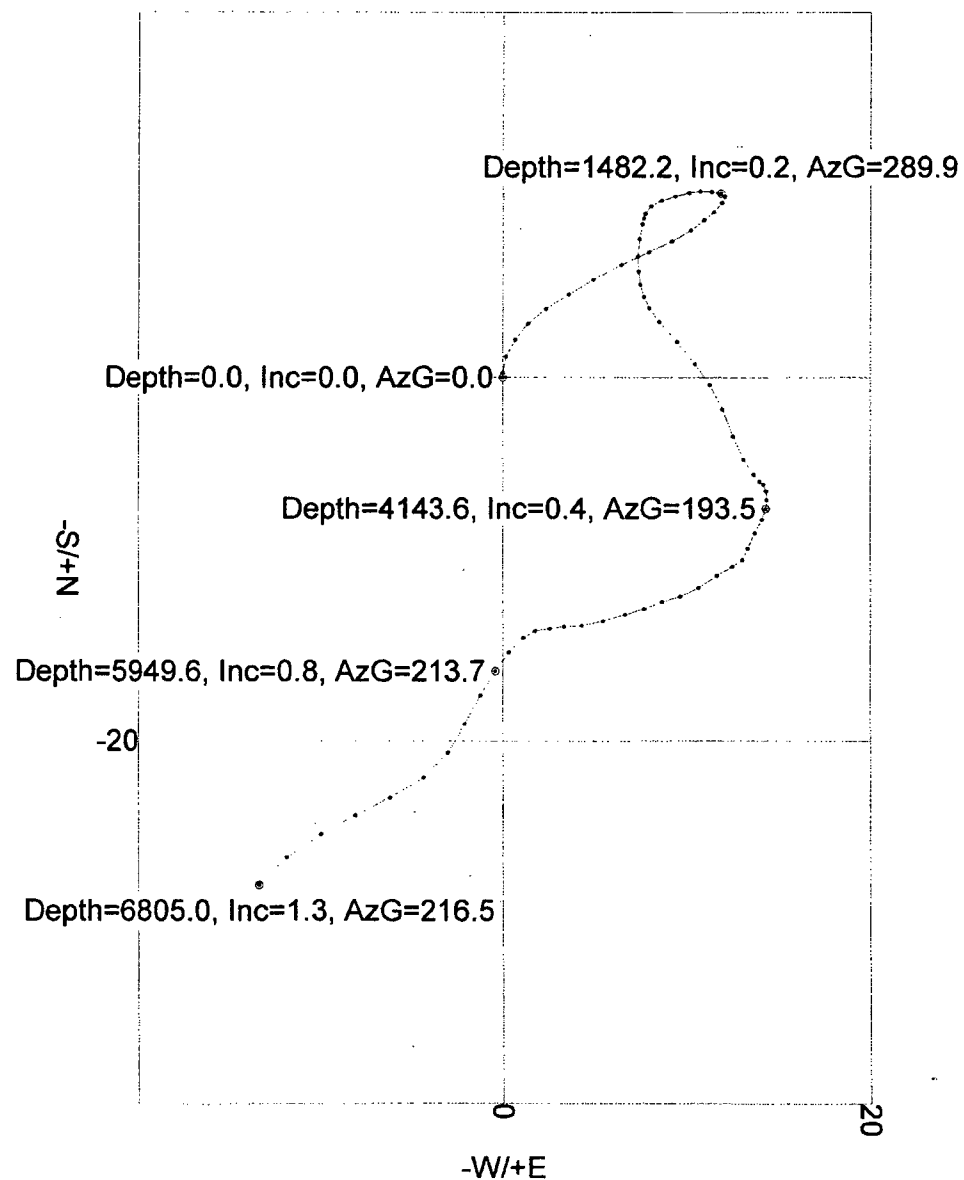
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
56.45	0.53	358.39	56.45	0.26	-0.01	0.26	0.26	358.39	0.94
151.50	0.57	24.03	151.49	1.13	0.17	1.13	1.15	8.74	0.26
246.55	0.70	31.36	246.54	2.06	0.67	2.06	2.17	17.99	0.16
341.60	0.69	44.84	341.58	2.96	1.37	2.96	3.26	24.87	0.17
436.65	0.86	54.24	436.62	3.78	2.35	3.78	4.45	31.87	0.22
532.70	0.88	61.35	532.66	4.55	3.58	4.55	5.79	38.17	0.12
626.75	1.02	55.41	626.70	5.38	4.90	5.38	7.28	42.37	0.18
721.80	1.07	69.12	721.73	6.17	6.43	6.17	8.91	46.17	0.27
816.85	0.93	60.81	816.77	6.86	7.93	6.86	10.49	49.13	0.21
911.90	0.74	69.08	911.81	7.46	9.18	7.46	11.83	50.90	0.24
1006.95	0.70	50.32	1006.85	8.05	10.20	8.05	13.00	51.72	0.25
1102.00	0.42	55.25	1101.90	8.62	10.94	8.62	13.93	51.75	0.30
1197.05	0.39	46.21	1196.94	9.05	11.46	9.05	14.60	51.71	0.07
1292.10	0.39	36.36	1291.99	9.54	11.89	9.54	15.24	51.27	0.07
1387.15	0.13	337.95	1387.04	9.90	12.04	9.90	15.59	50.58	0.36
1482.20	0.21	289.94	1482.09	10.06	11.83	10.06	15.53	49.64	0.17
1577.25	0.41	275.30	1577.14	10.15	11.33	10.15	15.21	48.15	0.22
1672.30	0.34	269.88	1672.19	10.18	10.71	10.18	14.78	46.46	0.09

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
1767.35	0.41	253.81	1767.24	10.08	10.11	10.08	14.28	45.06	0.13
1862.40	0.51	258.32	1862.28	9.90	9.37	9.90	13.63	43.40	0.11
1957.45	0.46	245.96	1957.33	9.66	8.61	9.66	12.94	41.69	0.12
2052.50	0.32	234.30	2052.38	9.35	8.04	9.35	12.34	40.69	0.16
2147.55	0.31	202.45	2147.43	8.96	7.73	8.96	11.83	40.78	0.18
2242.60	0.02	131.83	2242.48	8.71	7.64	8.71	11.59	41.25	0.32
2337.65	0.40	195.23	2337.52	8.39	7.56	8.39	11.29	42.05	0.41
2432.70	0.60	188.80	2432.57	7.58	7.40	7.58	10.59	44.32	0.22
2527.75	0.54	180.87	2527.62	6.64	7.32	6.64	9.89	47.77	0.10
2622.80	0.47	174.14	2622.66	5.81	7.35	5.81	9.37	51.70	0.10
2717.85	0.41	168.35	2717.71	5.09	7.46	5.09	9.03	55.71	0.08
2812.90	0.43	156.71	2812.76	4.43	7.67	4.43	8.86	59.99	0.09
2908.95	0.38	154.12	2908.81	3.82	7.95	3.82	8.82	64.36	0.06
3003.00	0.76	138.26	3002.85	3.07	8.50	3.07	9.04	70.14	0.44
3098.05	1.03	140.50	3097.89	1.94	9.47	1.94	9.66	78.41	0.28
3193.10	0.84	141.02	3192.93	0.74	10.45	0.74	10.47	85.96	0.20
3288.15	0.86	149.59	3287.97	-0.42	11.25	-0.42	11.26	92.16	0.14
3383.20	0.96	155.72	3383.00	-1.77	11.94	-1.77	12.07	98.41	0.14
3478.25	0.94	162.03	3478.04	-3.23	12.51	-3.23	12.92	104.47	0.11
3573.30	0.75	147.86	3573.08	-4.49	13.08	-4.49	13.83	108.96	0.30
3668.35	0.47	144.58	3668.12	-5.34	13.63	-5.34	14.64	111.38	0.29
3763.40	0.15	123.87	3763.17	-5.72	13.96	-5.72	15.09	112.29	0.36
3858.45	0.19	134.52	3858.22	-5.90	14.17	-5.90	15.35	112.60	0.05
3953.50	0.31	171.37	3953.27	-6.26	14.32	-6.26	15.63	113.61	0.20
4048.55	0.27	179.38	4048.32	-6.73	14.36	-6.73	15.86	115.12	0.06
4143.60	0.36	193.51	4143.37	-7.24	14.29	-7.24	16.02	116.87	0.12
4238.65	0.39	200.93	4238.42	-7.83	14.11	-7.83	16.14	119.04	0.06
4333.70	0.62	213.75	4333.46	-8.56	13.71	-8.56	16.16	121.99	0.26
4428.75	0.53	193.88	4428.51	-9.41	13.32	-9.41	16.31	125.26	0.23
4523.80	0.37	221.70	4523.56	-10.07	13.01	-10.07	16.45	127.73	0.28
4618.85	0.43	247.62	4618.60	-10.43	12.48	-10.43	16.26	129.89	0.20
4713.90	0.74	234.98	4713.65	-10.92	11.64	-10.92	15.96	133.16	0.36
4808.95	0.71	236.49	4808.69	-11.60	10.65	-11.60	15.74	137.46	0.04
4904.00	0.65	254.66	4903.73	-12.07	9.64	-12.07	15.44	141.40	0.24
4999.05	0.58	251.02	4998.78	-12.37	8.66	-12.37	15.10	144.99	0.08
5094.10	0.68	245.22	5093.82	-12.76	7.70	-12.76	14.90	148.90	0.12
5189.15	0.67	260.63	5188.87	-13.09	6.64	-13.09	14.67	153.11	0.19
5284.20	0.82	249.01	5283.91	-13.42	5.45	-13.42	14.48	157.89	0.22
5379.25	0.64	268.33	5378.95	-13.68	4.29	-13.68	14.33	162.60	0.31

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
5474.30	0.49	265.06	5474.00	-13.73	3.34	-13.73	14.13	166.31	0.16
5559.35	0.57	259.72	5559.04	-13.84	2.56	-13.84	14.07	169.51	0.11
5664.40	0.29	261.22	5664.09	-13.97	1.78	-13.97	14.08	172.74	0.27
5759.45	0.65	230.41	5759.14	-14.35	1.12	-14.35	14.39	175.52	0.45
5854.50	0.71	219.17	5854.18	-15.15	0.34	-15.15	15.15	178.72	0.15
5949.55	0.83	213.70	5949.22	-16.18	-0.42	-16.18	16.18	181.47	0.15
6044.60	1.06	210.74	6044.26	-17.51	-1.25	-17.51	17.56	184.08	0.25
6139.65	1.07	206.29	6139.29	-19.06	-2.09	-19.06	19.18	186.26	0.09
6234.70	1.12	211.78	6234.32	-20.65	-2.97	-20.65	20.86	188.20	0.12
6329.75	1.31	237.50	6329.35	-22.02	-4.37	-22.02	22.45	191.24	0.60
6424.80	1.28	241.46	6424.38	-23.10	-6.22	-23.10	23.93	195.06	0.10
6519.80	1.27	243.76	6519.36	-24.07	-8.09	-24.07	25.40	198.57	0.05
6614.90	1.37	238.78	6614.43	-25.13	-10.00	-25.13	27.05	201.71	0.16
6709.95	1.37	233.10	6709.45	-26.40	-11.88	-26.40	28.95	204.23	0.14
6805.00	1.25	216.53	6804.48	-27.92	-13.41	-27.92	30.97	205.66	0.42



Vaughn Energy Services
Midland, Texas
432-563-5444
Surveyor: Gene Heiss
Poker Lake Unit 322H / API 30-015-40791



VES Survey Date: 01/13/2014