

30-015- 42574



Weatherford

Evaluation, Drilling & Intervention
10000 West County Rd. 116
P.O. Box 61028
Midland, TX USA 79711
Tel. (432) 561-8892 Fax (432) 561-8895

BOPCO, LP
PO Box 2760
Midland, TX 79702

Date: December 5, 2014

Attention: Brian Braun

Re: BOPCO, LP
Well: Poker Lake Unit 456H
Eddy County, New Mexico

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

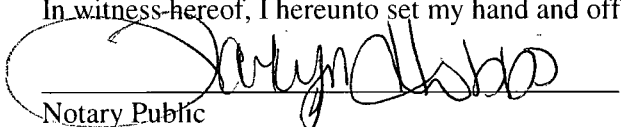
<u>Name & Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Justin Nguyen	456H	1398 MD	11/15/2014	Measurement
MWD Supervisor		14107 MD	12/4/2014	While Drilling

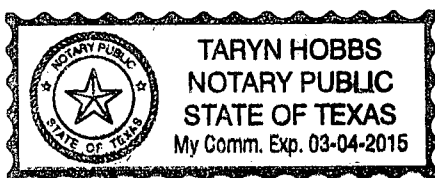
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Jesse Aguilar
MWD Ops Coordinator

On this, the 24th day of December, 2014, before me a notary public, the undersigned officer, personally appeared JESSE AGUILAR, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness-whereof, I hereunto set my hand and official seal.


Notary Public



NM OIL CONSERVATION
ARTESIA DISTRICT

SEP 08 2016

RECEIVED

5D Survey Report**BOPCO, L.P.**

Field Name: *Eddy Co, NM Nad27 NMEZ*
Site Name: *Poker Lake Unit 455, 456H Pad*
Well Name: *PLU 456H*
Survey: *Wft MWD Svy*

04 December 2014



5D Survey Report

PLU 456H

Field Name Eddy Co, NM Nad27 NMEZ	Map Units : US ft		Company Name : BOPCO, L.P.	
	Vertical Reference Datum (VRD) : Mean Sea Level			
	Projected Coordinate System : NAD27 / New Mexico East			
	Comment :			
Site Name Poker Lake Unit 455, 456H Pad	Units : US ft	North Reference : Grid	Convergence Angle : 0.25	
	Position	Northing : 405350.90 US ft	Latitude : 32° 6' 48.82"	
		Easting : 644904.90 US ft	Longitude : -103° 51' 55.13"	
	Elevation above Mean Sea Level: 3301.00 US ft			
Comment :				
Slot Name PLU 456H	Position (Offsets relative to Site Centre)			
	+N / -S : 40.00 US ft	Northing : 405390.90 US ft	Latitude : 32° 6' 49.22"	
	+E / -W : -0.20 US ft	Easting : 644904.70 US ft	Longitude : -103° 51' 55.13"	
	Slot TVD Reference : Ground Elevation			
Elevation above Mean Sea Level : 3301.00 US ft				
Comment :				
Well Name PLU 456H	Type : Main well		UWI :	
	Rig Height Kelly Bushing : 17.00 US ft		Comment :	
	Relative to Mean Sea Level: 3318.00 US ft			
	Closure Distance : 6842.06 US ft		Closure Azimuth : 89.6356°	
Vertical Section (Position of Origin Relative to Slot)				
+N / -S : 0.00 US ft +E / -W : 0.00 US ft Az : 89.68°				

Survey Name : Wft MWD Svy

Date : 16/Nov/2014 **Survey Tool :** MWD **Comment :** **Company :** Wft

Magnetic Model

Model Name: BGGM **Date:** 30/Oct/2014 **Field Strength:** 48159.9 nT **Declination:** 7.47° **Dip:** 59.94°

Tie Point

MD: 1343 **Inclination:** 2.07 **Azimuth:** 248.12 **TVD:** 1342.87 **North Offset:** -8.88657 **East Offset:** -6.54552

Casing Points (Relative to Slot centre, TVD relative to Kelly Bushing)

MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	Name
3935.00	0.49	52.20	3934.60	-2.13	-4.23	405388.77	644900.47	9 5/8 in
7947.00	72.16	91.26	7629.90	-11.46	616.71	405379.44	645521.41	7 in

Well path created using minimum curvature

Survey Points (Relative to Slot centre, TVD relative to Kelly Bushing)

MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
1398.00	2.43	251.37	1397.82	-9.63	-8.57	-8.63	0.00	405381.27	644896.13	First Wft Svy 456H
1461.00	1.96	241.67	1460.78	-10.57	-10.79	-10.84	0.95	405380.33	644893.91	
1556.00	1.07	217.59	1555.75	-12.04	-12.76	-12.82	1.13	405378.86	644891.94	
1746.00	0.31	195.53	1745.73	-13.94	-13.98	-14.05	0.42	405376.96	644890.72	
1936.00	0.07	26.05	1935.73	-14.33	-14.06	-14.14	0.20	405376.57	644890.64	

5D Survey Report

Survey Points (Relative to Slot centre, TVD relative to Kelly Bushing)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N. Offset (US ft)	E. Offset (US ft)	VS (US ft)	DLS (%/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
2125.00	0.22	70.28	2124.73	-14.11	-13.67	-13.75	0.09	405376.79	644891.03	
2315.00	0.21	71.63	2314.73	-13.87	-13.00	-13.07	0.01	405377.03	644891.70	
2505.00	0.20	57.88	2504.73	-13.59	-12.39	-12.46	0.03	405377.31	644892.31	
2695.00	0.20	351.94	2694.73	-13.08	-12.15	-12.22	0.11	405377.82	644892.55	
2885.00	0.22	350.17	2884.72	-12.40	-12.26	-12.33	0.01	405378.50	644892.44	
3075.00	0.87	5.44	3074.71	-10.60	-12.19	-12.25	0.35	405380.30	644892.51	
3265.00	1.22	10.75	3264.68	-7.18	-11.67	-11.71	0.19	405383.72	644893.03	
3450.00	1.27	40.97	3449.64	-3.69	-9.96	-9.98	0.35	405387.21	644894.74	
3637.00	0.87	93.00	3636.61	-2.20	-7.18	-7.20	0.54	405388.70	644897.52	
3824.00	0.50	99.64	3823.60	-2.41	-4.96	-4.98	0.20	405388.49	644899.74	
3855.00	0.35	74.37	3854.60	-2.41	-4.74	-4.75	0.76	405388.49	644899.96	
3935.00	0.49	52.20	3934.60	-2.13	-4.23	-4.24	0.27	405388.77	644900.47	9 5/8 in
4008.00	0.66	41.68	4007.59	-1.63	-3.70	-3.71	0.27	405389.27	644901.00	
4164.00	0.53	19.79	4163.58	-0.28	-2.86	-2.86	0.17	405390.62	644901.84	
4351.00	0.43	43.15	4350.58	1.05	-2.09	-2.08	0.12	405391.95	644902.61	
4538.00	0.41	7.05	4537.57	2.22	-1.52	-1.51	0.14	405393.12	644903.18	
4725.00	0.36	10.22	4724.57	3.47	-1.34	-1.32	0.03	405394.37	644903.36	
4911.00	0.25	76.09	4910.57	4.14	-0.84	-0.82	0.19	405395.04	644903.86	
5100.00	0.21	105.29	5099.56	4.15	-0.11	-0.08	0.06	405395.05	644904.59	
5380.00	0.25	7.02	5379.56	4.62	0.46	0.49	0.12	405395.52	644905.16	
5661.00	0.25	6.79	5660.56	5.83	0.61	0.64	0.00	405396.73	644905.31	
5942.00	0.16	132.23	5941.56	6.18	0.97	1.01	0.13	405397.08	644905.67	
6225.00	0.49	162.04	6224.55	4.76	1.64	1.67	0.13	405395.66	644906.34	
6508.00	0.66	154.59	6507.54	2.14	2.71	2.72	0.07	405393.04	644907.41	
6788.00	0.71	135.26	6787.52	-0.55	4.62	4.62	0.08	405390.35	644909.32	
6925.00	0.70	137.31	6924.51	-1.77	5.79	5.78	0.02	405389.13	644910.49	
6982.00	1.29	123.25	6981.50	-2.37	6.56	6.55	1.11	405388.53	644911.26	
7014.00	3.51	100.09	7013.47	-2.74	7.83	7.81	7.43	405388.16	644912.53	
7045.00	6.49	90.23	7044.35	-2.92	10.52	10.50	9.97	405387.98	644915.22	
7077.00	9.62	85.28	7076.03	-2.70	14.99	14.97	10.01	405388.20	644919.69	
7108.00	12.48	83.92	7106.45	-2.14	20.90	20.89	9.26	405388.76	644925.60	
7139.00	15.32	84.55	7136.54	-1.39	28.31	28.30	9.17	405389.51	644933.01	
7169.00	18.24	85.40	7165.26	-0.64	36.94	36.93	9.77	405390.26	644941.64	
7200.00	21.27	86.32	7194.44	0.11	47.39	47.39	9.83	405391.01	644952.09	
7232.00	24.64	85.61	7223.90	0.99	59.84	59.84	10.57	405391.89	644964.54	
7263.00	27.44	86.13	7251.75	1.97	73.41	73.42	9.06	405392.87	644978.11	
7294.00	30.04	87.68	7278.93	2.77	88.29	88.30	8.72	405393.67	644992.99	
7326.00	32.47	90.96	7306.28	2.95	104.89	104.90	9.27	405393.85	645009.59	
7388.00	37.36	92.70	7357.11	1.78	140.34	140.35	8.05	405392.68	645045.04	
7419.00	40.24	91.38	7381.27	1.10	159.75	159.75	9.67	405392.00	645064.45	
7450.00	43.32	90.89	7404.38	0.69	180.40	180.40	9.99	405391.59	645085.10	
7482.00	46.32	90.95	7427.08	0.33	202.95	202.95	9.38	405391.23	645107.65	
7513.00	49.38	91.48	7447.88	-0.16	225.92	225.92	9.95	405390.74	645130.62	
7544.00	52.66	90.49	7467.37	-0.57	250.01	250.01	10.87	405390.33	645154.71	
7576.00	55.92	90.91	7486.05	-0.89	275.99	275.98	10.24	405390.01	645180.69	
7608.00	59.14	90.98	7503.23	-1.34	302.98	302.97	10.06	405389.56	645207.68	
7638.00	62.29	91.57	7517.90	-1.92	329.14	329.12	10.64	405388.98	645233.84	
7669.00	65.16	92.19	7531.62	-2.83	356.92	356.89	9.43	405388.07	645261.62	
7733.00	68.90	92.02	7556.59	-5.00	415.79	415.76	5.85	405385.90	645320.49	
7795.00	69.43	91.88	7578.65	-6.97	473.70	473.66	0.88	405383.93	645378.40	
7875.00	69.86	92.02	7606.47	-9.52	548.66	548.60	0.56	405381.38	645453.36	
7947.00	72.16	91.26	7629.90	-11.46	616.71	616.64	3.35	405379.44	645521.41	7 in
7972.00	72.96	91.00	7637.39	-11.94	640.56	640.48	3.35	405378.96	645545.26	
8002.00	77.03	89.43	7645.16	-12.04	669.53	669.45	14.48	405378.86	645574.23	
8032.00	80.58	89.49	7650.98	-11.76	698.95	698.87	11.83	405379.14	645603.65	
8063.00	83.13	88.45	7655.37	-11.21	729.63	729.56	8.87	405379.69	645634.33	
8093.00	84.61	88.88	7658.58	-10.52	759.45	759.38	5.14	405380.38	645664.15	
8124.00	83.91	88.45	7661.68	-9.80	790.29	790.22	2.65	405381.10	645694.99	
8154.00	86.36	89.70	7664.22	-9.32	820.17	820.11	9.16	405381.58	645724.87	

5D Survey Report

Survey Points (Relative to Slot centre, TVD relative to Kelly Bushing)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
8184.00	88.60	90.84	7665.54	-9.46	850.14	850.07	8.38	405381.44	645754.84	
8214.00	88.88	90.86	7666.20	-9.90	880.13	880.06	0.94	405381.00	645784.83	
8245.00	89.02	90.75	7666.77	-10.34	911.12	911.05	0.57	405380.56	645815.82	
8336.00	92.03	90.95	7665.93	-11.69	1002.10	1002.02	3.31	405379.21	645906.80	
8427.00	91.33	90.08	7663.27	-12.50	1093.05	1092.96	1.23	405378.40	645997.75	
8517.00	88.25	89.91	7663.60	-12.50	1183.04	1182.95	3.43	405378.40	646087.74	
8608.00	90.42	90.49	7664.65	-12.81	1274.03	1273.94	2.47	405378.09	646178.73	
8699.00	90.63	90.25	7663.82	-13.40	1365.02	1364.93	0.35	405377.50	646269.72	
8790.00	87.48	88.06	7665.32	-12.06	1455.98	1455.89	4.22	405378.84	646360.68	
8881.00	87.90	87.85	7668.99	-8.82	1546.85	1546.78	0.52	405382.08	646451.55	
8972.00	90.56	89.53	7670.21	-6.74	1637.81	1637.74	3.46	405384.16	646542.51	
9063.00	86.78	88.46	7672.32	-5.14	1728.75	1728.70	4.32	405385.76	646633.45	
9156.00	84.82	87.33	7679.13	-1.74	1821.43	1821.39	2.43	405389.16	646726.13	
9250.00	87.20	89.13	7685.67	1.16	1915.15	1915.13	3.17	405392.06	646819.85	
9343.00	87.76	88.40	7689.76	3.16	2008.04	2008.02	0.99	405394.06	646912.74	
9437.00	88.39	88.00	7692.92	6.11	2101.94	2101.94	0.79	405397.01	647006.64	
9531.00	90.14	88.94	7694.13	8.62	2195.89	2195.90	2.11	405399.52	647100.59	
9625.00	90.35	88.46	7693.72	10.75	2289.87	2289.89	0.56	405401.65	647194.57	
9718.00	89.65	89.51	7693.72	12.40	2382.85	2382.88	1.36	405403.30	647287.55	
9812.00	90.63	90.95	7693.49	12.02	2476.84	2476.87	1.85	405402.92	647381.54	
9874.00	88.60	90.11	7693.91	11.45	2538.84	2538.86	3.54	405402.35	647443.54	
9999.00	87.20	89.57	7698.49	11.80	2663.75	2663.77	1.20	405402.70	647568.45	
10092.00	85.94	89.65	7704.06	12.43	2756.58	2756.60	1.36	405403.33	647661.28	
10185.00	87.55	89.30	7709.34	13.28	2849.42	2849.45	1.77	405404.18	647754.12	
10278.00	85.52	88.99	7714.96	14.67	2942.24	2942.27	2.21	405405.57	647846.94	
10372.00	86.29	88.48	7721.67	16.74	3035.97	3036.02	0.98	405407.64	647940.67	
10465.00	88.67	89.19	7725.76	18.62	3128.86	3128.91	2.67	405409.52	648033.56	
10558.00	90.00	89.75	7726.84	19.48	3221.84	3221.90	1.55	405410.38	648126.54	
10651.00	88.74	89.39	7727.86	20.18	3314.83	3314.89	1.41	405411.08	648219.53	
10746.00	87.41	89.02	7731.05	21.50	3409.77	3409.83	1.45	405412.40	648314.47	
10838.00	88.32	89.12	7734.48	22.99	3501.69	3501.76	1.00	405413.89	648406.39	
10932.00	89.72	89.20	7736.09	24.37	3595.66	3595.74	1.49	405415.27	648500.36	
11025.00	90.21	88.54	7736.14	26.20	3688.65	3688.73	0.88	405417.10	648593.35	
11118.00	89.79	88.23	7736.14	28.82	3781.61	3781.71	0.56	405419.72	648686.31	
11212.00	87.97	88.77	7737.98	31.28	3875.55	3875.67	2.02	405422.18	648780.25	
11306.00	88.88	90.50	7740.56	31.88	3969.51	3969.63	2.08	405422.78	648874.21	
11399.00	89.93	91.51	7741.53	30.25	4062.49	4062.60	1.57	405421.15	648967.19	
11492.00	90.63	91.47	7741.08	27.83	4155.46	4155.55	0.75	405418.73	649060.16	
11587.00	89.37	90.62	7741.08	26.10	4250.44	4250.52	1.60	405417.00	649155.14	
11680.00	90.07	91.59	7741.53	24.31	4343.42	4343.49	1.29	405415.21	649248.12	
11773.00	88.88	91.30	7742.38	21.96	4436.38	4436.44	1.32	405412.86	649341.08	
11866.00	88.67	90.19	7744.37	20.75	4529.35	4529.40	1.21	405411.65	649434.05	
11960.00	88.11	89.49	7747.01	21.02	4623.31	4623.36	0.95	405411.92	649528.01	
12053.00	87.41	89.54	7750.65	21.80	4716.24	4716.29	0.75	405412.70	649620.94	
12147.00	88.18	89.41	7754.26	22.66	4810.16	4810.22	0.83	405413.56	649714.86	
12240.00	87.97	89.27	7757.39	23.73	4903.11	4903.16	0.27	405414.63	649807.81	
12333.00	88.88	90.14	7759.94	24.21	4996.07	4996.12	1.35	405415.11	649900.77	
12427.00	92.45	89.22	7758.85	24.74	5090.04	5090.10	3.92	405415.64	649994.74	
12520.00	93.36	88.02	7754.14	26.97	5182.89	5182.96	1.62	405417.87	650087.59	
12614.00	89.93	86.98	7751.44	31.07	5276.75	5276.84	3.81	405421.97	650181.45	
12708.00	88.60	86.68	7752.65	36.27	5370.60	5370.72	1.45	405427.17	650275.30	
12801.00	87.48	87.94	7755.83	40.63	5463.44	5463.58	1.81	405431.53	650368.14	
12894.00	87.62	89.88	7759.80	42.40	5556.33	5556.48	2.09	405433.30	650461.03	
12987.00	87.27	90.14	7763.95	42.38	5649.24	5649.39	0.47	405433.28	650553.94	
13080.00	87.34	90.16	7768.32	42.14	5742.13	5742.28	0.08	405433.04	650646.83	
13173.00	85.80	90.68	7773.89	41.46	5834.96	5835.10	1.75	405432.36	650739.66	
13267.00	87.13	91.54	7779.68	39.64	5928.76	5928.89	1.68	405430.54	650833.46	
13361.00	88.60	90.67	7783.18	37.83	6022.68	6022.79	1.82	405428.73	650927.38	
13454.00	88.81	92.77	7785.29	35.04	6115.61	6115.71	2.27	405425.94	651020.31	

5D Survey Report

Survey Points (Relative to Slot centre, TVD relative to Kelly Bushing)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
13547.00	87.76	91.62	7788.07	31.48	6208.49	6208.57	1.67	405422.38	651113.19	
13641.00	87.62	89.18	7791.86	30.82	6302.41	6302.48	2.60	405421.72	651207.11	
13734.00	88.18	89.73	7795.27	31.71	6395.34	6395.42	0.84	405422.61	651300.04	
13827.00	91.54	88.90	7795.49	32.82	6488.32	6488.40	3.72	405423.72	651393.02	
13920.00	93.36	88.84	7791.52	34.65	6581.21	6581.30	1.96	405425.55	651485.91	
14014.00	89.86	88.45	7788.88	36.87	6675.13	6675.24	3.75	405427.77	651579.83	
14107.00	87.76	87.44	7790.81	40.21	6768.05	6768.17	2.51	405431.11	651672.75	Last Wft Svy 456H
14181.00	87.76	87.44	7793.70	43.51	6841.92	6842.05	0.00	405434.41	651746.62	Proj. To Bit 456H

Poker Lake Unit 456H
Eddy Co, NM



PLU 456H	_____
PLU 455H	_____
PLU 456H	_____

Plan Point Information:

Plan Point Information:									
EqLog	Severity	Unit	*100,000		Position	Officer	Item	Plot	Count
PS	Ino	Ac	TVD	-17.7	E-W	Working	Earning	Vowc	DLP
									(DLP)
5525.00	70.00	137.31	6924.51	-1.79	5.75	405369.13	644910.94	5.78	0.00
5580.00	70.00	137.31	6968.51	-2.25	6.32	405848.56	644941.03	6.31	0.00
5635.00	70.00	137.31	7012.51	-2.71	6.89	406327.99	644971.12	6.80	0.00
7700.30	70.00	89.62	7933.19	-5.12	38.2	453837.30	642628.15	35.3	4.00
7900.30	70.00	89.62	7966.56	-2.32	671.23	405851.57	645475.08	571.36	0.00
8100.30	70.00	89.62	8000.00	-2.32	671.23	405851.57	645475.08	571.36	0.00
14179.44	88.61	61.95	7829.00	35.92	10.00	405326.30	651776.10	6542.21	0.00

Target Set Information:

Target Set Information:									
Name: ELO 456H									
Position offset from slat centre									
Name	TVD	TVD SS	E/W	North	East	Shp	Comment		
	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)			
PHL 456H	7809.00	-4391.00	31.50	6442.10	405429.00	651746.20	Cutoid		
HE - Fcl Dwg	7764.00	-4446.00	4.90	871.54	403295.00	645776.24	Cutoid		
HE - Fcl Dwg	7809.00	-4391.00	31.50	6442.10	405429.00	651746.20	Cutoid		

Slot: PLU 456H

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Slot: PLU 456H
Position:
Offset is from Site Centre
+N/-S: 40.00USft Northing: 465190.90USft Latitude: 31°6'49.2"
+E/-W: -0.10USft Easting: 644904.70USft Longitude: -103°51'55.1"
Elevation Above VRD: 3301.00USft

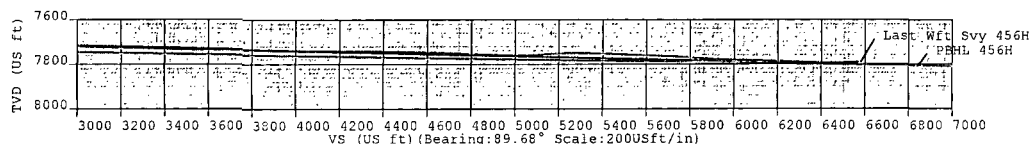
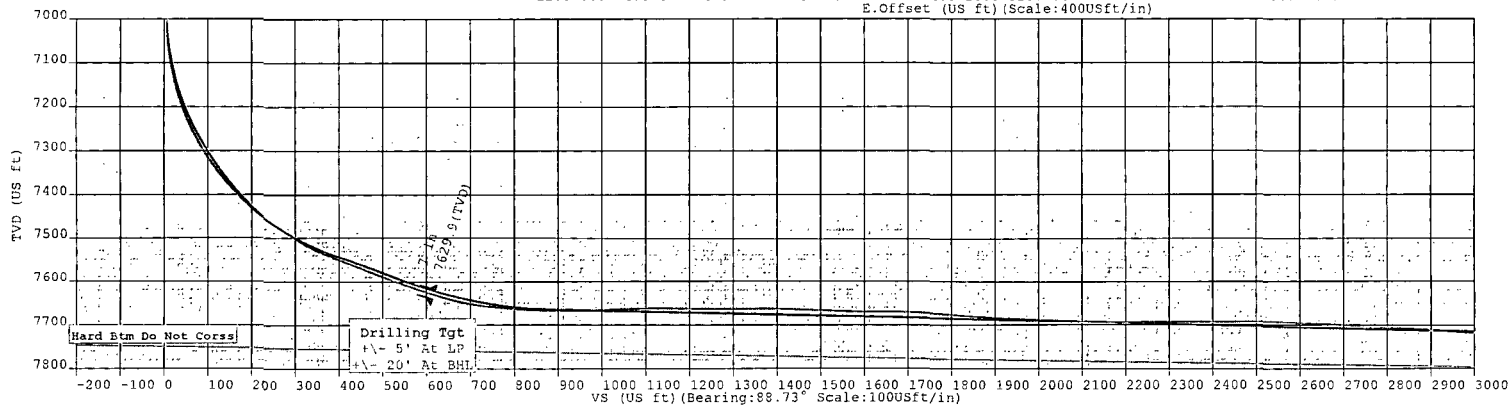
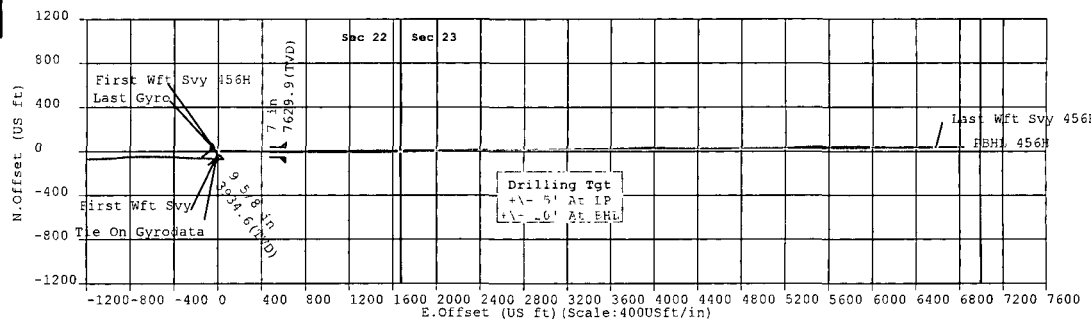
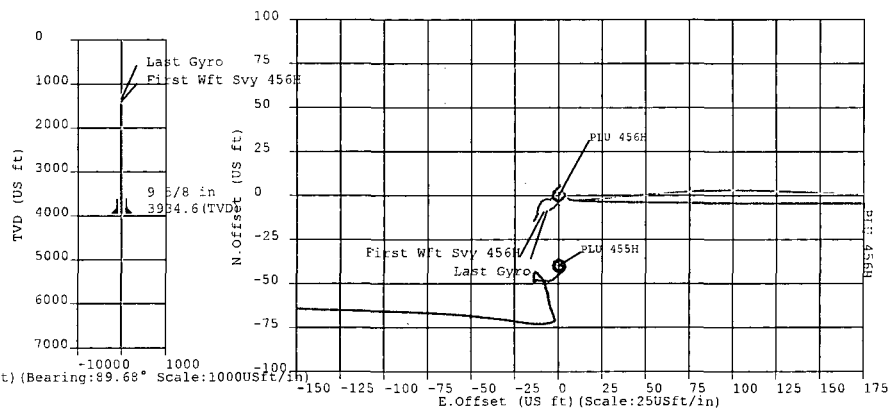
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Well: PLU 456H
 Date: 11/14/2011

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Well: FLD 450H
Tag: Main-M-11
File Number:
File Folder: 75
Plan: FLD/V1
Vertical Section: Position offset of origin from UIC center:
-D/E: 0.000000 Azimuth: 89.66
-E/W: 0.000000
Key-List Parameters:
Model: Field Strength: Elevation: Dip: Date:
EGM: 48150(MT) 7.47 59.34 2014-10-30

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Sign Off: Russell Joyner