

A Gyrodata Directional Survey

FINAL DEFINITIVE COPY

for

BOPCO LP

Lease: POKER LAKE UNIT Well: 410H, 4 1/2 DRILLPIPE
Location: MCVAY DRILLING RIG 5, EDDY COUNTY, NEW MEXICO

Job Number: MD0514GDM526

Run Date: 22 May 2014

Report Generated: 27 May 2014 12:23

Surveyor: Charles Lee Tatum

Calculation Method: MINIMUM CURVATURE

Survey surface coordinates obtained from: Well Plan/Plot

Survey Latitude: 32.197522 deg. N Longitude: 103.778142 deg. W

Azimuth Correction:

Gyro: -0.30000 deg to Grid North

Depth Reference: Rotary Table

Air Gap (RKB to Ground / RKB to MSL): 19.50

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location

15-40964

A Gyrodata Directional Survey

BOPCO LP

Lease: POKER LAKE UNIT Well: 410H, 4 1/2 DRILLPIPE

Location: MCVAY DRILLING RIG 5, EDDY

Job Number: MD0514GDM526

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLE SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
0.00	0.00	0.00	0.00	0.00	0.0 0.0	0.00 N 0.00 E

0 - 7,408 FT. RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 4 1/2" DRILLPIPE						
ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO MCVAY DRILLING RIG #5 R.K.B. HEIGHT OF 19.5 FT.						

524.66	1.61	232.98	0.31	524.59	7.4 233.0	4.44 S 5.89 W
618.96	1.97	235.23	0.39	618.84	10.3 233.3	6.16 S 8.27 W
713.26	2.14	238.05	0.21	713.08	13.7 234.2	8.02 S 11.10 W
807.56	2.31	240.87	0.21	807.31	17.3 235.3	9.87 S 14.25 W
901.86	2.42	242.31	0.13	901.53	21.2 236.4	11.72 S 17.68 W
996.16	2.51	243.50	0.11	995.75	25.2 237.5	13.57 S 21.29 W
1090.46	2.17	243.55	0.36	1089.97	29.1 238.3	15.29 S 24.73 W
1184.76	0.73	231.42	1.55	1184.23	31.5 238.5	16.46 S 26.80 W
1279.06	0.65	231.18	0.08	1278.53	32.6 238.2	17.17 S 27.69 W
1373.35	0.60	235.71	0.07	1372.81	33.6 238.1	17.78 S 28.51 W
1467.65	0.48	244.38	0.15	1467.11	34.5 238.1	18.23 S 29.28 W
1561.95	0.32	243.91	0.17	1561.41	35.1 238.2	18.51 S 29.87 W
1656.25	0.13	232.48	0.21	1655.70	35.5 238.2	18.70 S 30.19 W
1750.55	0.09	144.64	0.16	1750.00	35.6 238.1	18.82 S 30.23 W
1844.85	0.14	121.42	0.07	1844.30	35.6 237.8	18.94 S 30.09 W
1939.15	0.15	111.50	0.03	1938.60	35.4 237.5	19.05 S 29.88 W
2033.45	0.14	110.37	0.01	2032.90	35.3 237.2	19.13 S 29.66 W

A Gyrodata Directional Survey

BOPCO LP

Lease: POKER LAKE UNIT Well: 410H, 4 1/2 DRILLPIPE

Location: MCVAY DRILLING RIG 5, EDDY

Job Number: MD0514GDM526

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
2127.75	0.02	91.47	0.13	2127.20	35.2 237.0	19.17 S 29.53 W
2222.05	0.01	270.75	0.03	2221.50	35.2 237.0	19.17 S 29.52 W
2316.34	0.01	216.29	0.01	2315.79	35.2 237.0	19.18 S 29.54 W
2410.64	0.06	163.34	0.06	2410.09	35.2 236.9	19.23 S 29.53 W
2504.94	0.10	154.12	0.04	2504.39	35.3 236.7	19.36 S 29.48 W
2599.24	0.11	157.17	0.01	2598.69	35.3 236.4	19.51 S 29.41 W
2693.54	0.11	159.02	0.00	2692.99	35.3 236.1	19.68 S 29.34 W
2787.84	0.08	150.11	0.04	2787.29	35.4 235.9	19.82 S 29.27 W
2882.14	0.10	151.92	0.02	2881.59	35.4 235.7	19.95 S 29.20 W
2976.44	0.10	141.65	0.02	2975.89	35.4 235.4	20.09 S 29.11 W
3070.74	0.19	119.39	0.11	3070.19	35.3 235.0	20.23 S 28.92 W
3165.03	0.33	97.52	0.18	3164.48	35.0 234.5	20.34 S 28.52 W
3259.33	0.32	88.92	0.05	3258.78	34.6 233.9	20.37 S 27.99 W
3353.63	0.20	80.90	0.13	3353.08	34.3 233.6	20.34 S 27.56 W
3447.93	0.22	74.48	0.03	3447.38	33.9 233.3	20.27 S 27.22 W
3542.23	0.29	93.18	0.11	3541.68	33.6 233.0	20.23 S 26.81 W
3636.53	0.52	109.23	0.27	3635.97	33.2 232.1	20.39 S 26.17 W
3730.83	0.77	115.85	0.28	3730.27	32.7 230.5	20.80 S 25.19 W
3825.13	0.99	117.61	0.24	3824.56	32.1 228.1	21.46 S 23.90 W
3919.43	1.01	124.95	0.14	3918.84	31.7 225.2	22.31 S 22.50 W
4013.73	0.41	157.54	0.74	4013.14	31.7 223.2	23.10 S 21.69 W
4108.02	0.38	180.74	0.17	4107.42	32.1 222.3	23.72 S 21.56 W

A Gyrodata Directional Survey

BOPCO LP

Lease: POKER LAKE UNIT Well: 410H, 4 1/2 DRILLPIPE

Location: MCVAY DRILLING RIG 5, EDDY

Job Number: MD0514GDM526

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
4202.32	0.45	146.62	0.27	4201.72	32.4 221.3	24.35 S 21.36 W
4296.62	0.28	135.92	0.19	4296.02	32.5 220.2	24.82 S 21.00 W
4390.92	0.12	154.31	0.18	4390.32	32.6 219.7	25.07 S 20.80 W
4485.22	0.09	236.83	0.15	4484.62	32.7 219.6	25.20 S 20.82 W
4579.52	0.14	231.55	0.05	4578.92	32.9 219.6	25.32 S 20.97 W
4673.82	0.16	222.28	0.03	4673.22	33.1 219.7	25.49 S 21.15 W
4768.12	0.20	218.32	0.04	4767.52	33.4 219.7	25.71 S 21.34 W
4862.42	0.22	208.40	0.04	4861.82	33.8 219.6	26.00 S 21.53 W
4956.72	0.21	195.32	0.05	4956.12	34.1 219.4	26.33 S 21.66 W
5051.02	0.28	193.26	0.07	5050.42	34.5 219.2	26.72 S 21.76 W
5145.31	0.23	190.53	0.05	5144.70	34.8 218.8	27.13 S 21.84 W
5239.61	0.13	191.80	0.11	5239.00	35.1 218.6	27.42 S 21.90 W
5333.91	0.09	196.93	0.04	5333.30	35.3 218.5	27.59 S 21.94 W
5428.21	0.10	184.04	0.02	5427.60	35.4 218.4	27.75 S 21.97 W
5522.51	0.11	202.63	0.04	5521.90	35.5 218.3	27.91 S 22.01 W
5616.81	0.11	207.58	0.01	5616.20	35.7 218.2	28.08 S 22.09 W
5711.11	0.04	179.13	0.08	5710.50	35.8 218.1	28.19 S 22.13 W
5805.41	0.20	57.19	0.24	5804.80	35.7 218.0	28.13 S 21.99 W
5899.71	0.38	53.00	0.19	5899.10	35.3 217.8	27.86 S 21.60 W
5994.01	0.41	55.87	0.04	5993.40	34.6 217.5	27.48 S 21.07 W
6088.30	0.17	96.91	0.32	6087.69	34.2 217.1	27.31 S 20.66 W

A Gyrodata Directional Survey

BOPCO LP

Lease: POKER LAKE UNIT Well: 410H, 4 1/2 DRILLPIPE

Location: MCVAY DRILLING RIG 5, EDDY

Job Number: MD0514GDM526

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
6182.60	0.21	139.93	0.15	6181.99	34.2 216.6	27.46 S 20.41 W
6276.90	0.23	158.07	0.08	6276.29	34.3 216.1	27.76 S 20.22 W
6371.20	0.27	153.41	0.05	6370.59	34.6 215.5	28.14 S 20.05 W
6465.50	0.38	152.60	0.12	6464.88	34.8 214.7	28.61 S 19.81 W
6559.80	0.40	157.32	0.04	6559.18	35.1 213.8	29.19 S 19.54 W
6654.10	0.48	163.63	0.10	6653.48	35.6 212.9	29.88 S 19.30 W
6748.40	0.56	175.80	0.14	6747.78	36.2 212.0	30.72 S 19.16 W
6842.70	0.67	181.30	0.13	6842.07	37.1 211.1	31.73 S 19.14 W
6936.99	0.63	170.27	0.14	6936.35	37.9 210.2	32.79 S 19.06 W
7031.29	0.72	171.36	0.10	7030.65	38.8 209.1	33.89 S 18.88 W
7125.59	0.83	179.10	0.16	7124.94	39.9 208.1	35.15 S 18.78 W
7219.89	0.83	178.10	0.02	7219.23	41.1 207.2	36.52 S 18.75 W
7314.19	1.04	171.57	0.25	7313.52	42.4 206.1	38.05 S 18.60 W
7408.49	1.10	164.82	0.15	7407.80	43.8 204.6	39.77 S 18.24 W

Final Station Closure: Distance: 437.5 ft. Az: 204.64 deg.

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: June 4, 2014

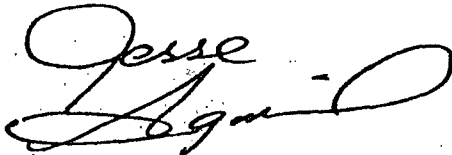
Attention: Kevin Burns

Re: BOPCO, LP
Well: Poker Lake Unit 410H
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>
Ben Hernandez	410H	7490 MD	5/15/2014	Measurement
MWD Supervisor		15832 MD	6/3/2014	While Drilling

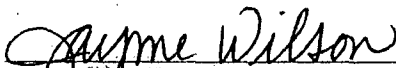
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

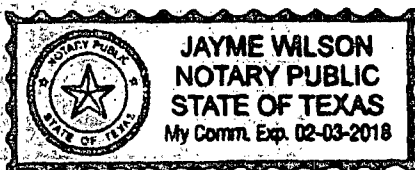


Jesse Aguilar
MWD Ops Coordinator

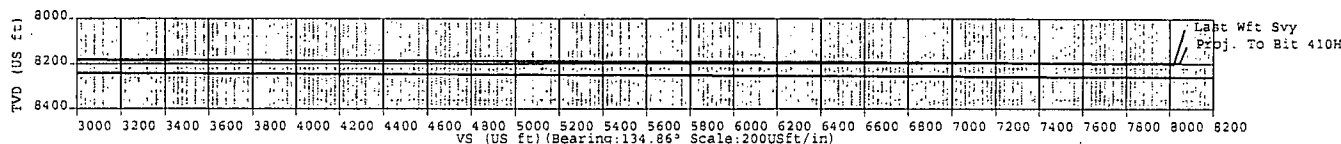
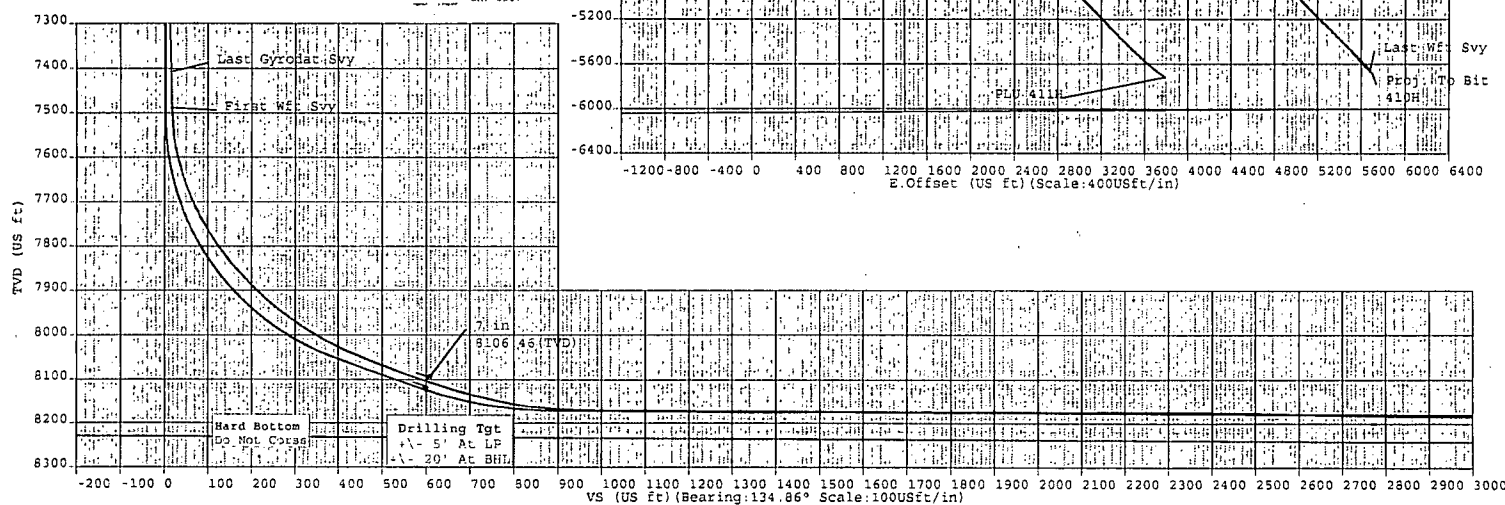
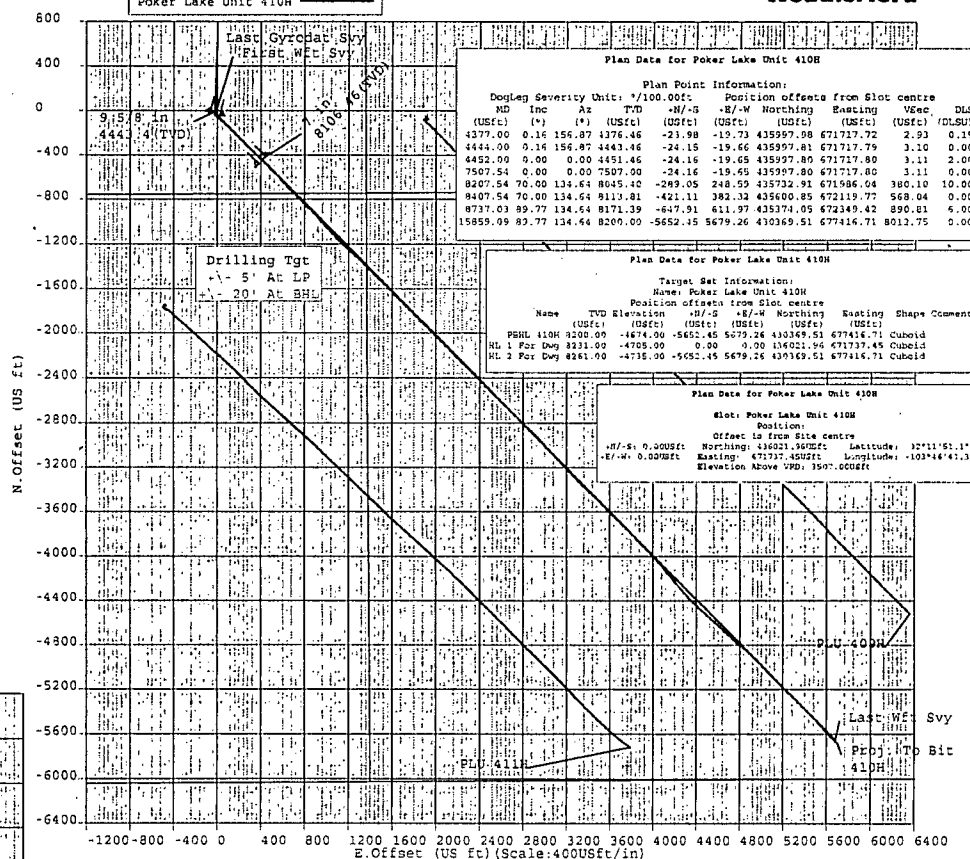
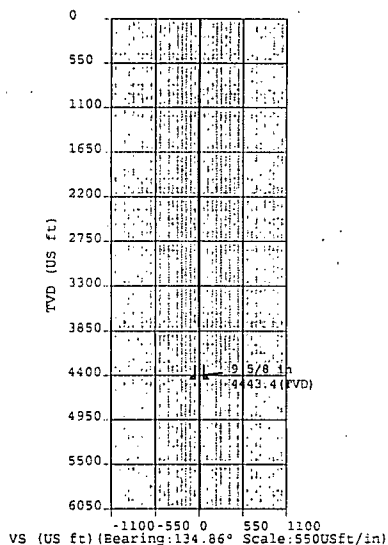
On this, the 4th day of June, 2014, before me a notary public, the undersigned officer, personally appeared Jesse Aguilar, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

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


Notary Public



Poker Lake Unit 410H	_____
Poker Lake Unit 411H	_____
Poker Lake Unit 409H	_____
Poker Lake Unit 410H	_____



Sign Off: Russell Joyner

5D Survey Report

BOPCO, L.P.**Field Name:** *Eddy Co, NM Nad27 NMEZ***Site Name:** *Poker Lake Unit 410H***Well Name:** *Poker Lake Unit 410H***Survey:** *Wft MWD Svy*

03 June 2014



Poker Lake Unit 410H

Field Name	Map Units : US ft		Company Name : BOPCO, L.P.	
Eddy Co, NM Nad27 NMEZ	Vertical Reference Datum (VRD) : Mean Sea Level			
	Projected Coordinate System : NAD27 / New Mexico East			
	Comment :			
Site Name	Units : US ft	North Reference : Grid	Convergence Angle : 0.30	
	Position	Northing : 436021.96 US ft	Latitude : 32°11'51.08"	
		Easting : 671737.45 US ft	Longitude : -103°46'41.31"	
Poker Lake Unit 410H	Elevation above Mean Sea Level: 3507.00 US ft			
Comment :				
Slot Name	Position (Offsets relative to Site Centre)			
	+N / -S : 0.00 US ft	Northing : 436021.96 US ft	Latitude : 32°11'51.08"	
		+E / -W : 0.00 US ft	Easting : 671737.45 US ft	Longitude : -103°46'41.31"
Poker Lake Unit 410H	Slot TVD Reference : Ground Elevation			
Elevation above Mean Sea Level : 3507.00 US ft				
Comment :				
Well Name	Type : Main well	UWI :		
	Rig Height <i>Drill Floor</i> : 19.00 US ft	Comment :		
	Relative to Mean Sea Level: 3526.00 US ft			
Poker Lake Unit 410H	Closure Distance : 8047.28 US ft	Closure Azimuth : 134.909°		
Vertical Section (Position of Origin Relative to Slot)				
+N / -S : 0.00 US ft +E / -W : 0.00 US ft Az : 134.86°				

Target Set

Name : Poker Lake Unit Number of Targets : 3
410H

Comment :

Target Name:	Position (Relative to Slot centre)			
PBHL 410H	+N / -S : 5652.45 US ft	Northing : 430369.51 US ft	Latitude : 32°10'54.85"	
	+E / -W : 5679.26 US ft	Easting : 677416.71 US ft	Longitude : -103°45'35.57"	
Shape:	TVD (Drill Floor) : 8200.00 US ft			
Cuboid	Orientation	Azimuth : 0.00°	Inclination : 0.00°	
	Dimensions	Length : 5.00 US ft	Breadth : 5.00 US ft	Height : 5.00 US ft
Target Name:	Position (Relative to Slot centre)			
HL-1 For Dwg	+N / -S : 0.00 US ft	Northing : 436021.96 US ft	Latitude : 32°11'51.08"	
	+E / -W : 0.00 US ft	Easting : 671737.45 US ft	Longitude : -103°46'41.31"	
Shape:	TVD (Drill Floor) : 8231.00 US ft			
Cuboid	Orientation	Azimuth : 134.86°	Inclination : -0.22°	
	Dimensions	Length : 6000.00 US ft	Breadth : 1.00 US ft	Height : 2.00 US ft

5D Survey Report

Target Name:	Position (Relative to Slot centre)		
HL2 For Dwg	+N / -S : 5652.45 US ft	Northing : 430369.51 US ft	Latitude : 32°10'54.85"
Shape:	+E / -W : 5679.26 US ft	Easting : 677416.71 US ft	Longitude : -103°45'35.57"
Cuboid	TVD (Drill Floor) : 8261.00 US ft		
	Orientation Azimuth : 134.86°	Inclination : -0.22°	
	Dimensions Length : 14230.00 US ft	Breadth : 1.00 US ft	Height : 2.00 US ft

Survey Name: Wft MWD Svy

Date : 23/May/2014

Survey Tool : MWD

Comment :

Company : Wft

Magnetic Model

Model Name: BGGM

Date: 20/Jun/2014

Field Strength:

Declination: 7.43°

Dip: 60.03°

48275.3 nT

Tie Point

MD: 7408.49

Inclination: 1.1

Azimuth: 164.82

TVD: 7407.8

North Offset: -39.7698

East Offset: -

18.2401

Casing Points (Relative to Slot centre, TVD relative to Drill Floor)

MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N. Offset (US ft)	E. Offset (US ft)	Northing (US ft)	Easting (US ft)	Name
8407.00	71.30	133.81	8106.46	-446.14	413.11	435575.82	672150.56	7 in

Well path created using minimum curvature**Survey Points (Relative to Slot centre, TVD relative to Drill Floor)**

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
7490.00	1.79	156.53	7489.28	-41.69	-17.53	16.98	0.00	435980.27	671719.92	First Wft Svy
7522.00	4.44	139.94	7521.23	-43.10	-16.53	18.68	8.66	435978.86	671720.92	
7553.00	7.93	131.41	7552.05	-45.43	-14.15	22.01	11.61	435976.53	671723.30	
7585.00	11.61	129.05	7583.58	-48.92	-10.00	27.42	11.57	435973.04	671727.45	
7616.00	15.20	128.41	7613.73	-53.41	-4.39	34.57	11.59	435968.55	671733.06	
7646.00	18.88	127.82	7642.41	-58.84	2.53	43.29	12.28	435963.12	671739.98	
7678.00	21.97	128.79	7672.39	-65.76	11.29	54.39	9.71	435956.20	671748.74	
7710.00	25.24	130.25	7701.71	-73.92	21.16	67.14	10.38	435948.04	671758.61	
7742.00	28.15	130.93	7730.30	-83.28	32.08	81.48	9.14	435938.68	671769.53	
7773.00	30.86	131.57	7757.28	-93.35	43.55	96.71	8.80	435928.61	671781.00	
7805.00	33.85	131.63	7784.30	-104.72	56.36	113.81	9.34	435917.24	671793.81	
7835.00	36.31	132.27	7808.85	-116.24	69.18	131.03	8.29	435905.72	671806.63	
7867.00	39.41	133.00	7834.11	-129.55	83.62	150.65	9.79	435892.41	671821.07	
7898.00	42.04	133.38	7857.61	-143.39	98.36	170.87	8.52	435878.57	671835.81	
7929.00	44.54	134.08	7880.17	-158.08	113.72	192.12	8.21	435863.88	671851.17	
7959.00	47.34	134.72	7901.03	-173.17	129.12	213.67	9.46	435848.79	671866.57	
7990.00	49.69	134.74	7921.56	-189.51	145.62	236.89	7.58	435832.45	671883.07	
8021.00	52.39	134.74	7941.05	-206.48	162.74	261.00	8.71	435815.48	671900.19	
8053.00	54.55	134.44	7960.10	-224.53	181.05	286.71	6.79	435797.43	671918.50	
8083.00	56.61	134.60	7977.06	-241.88	198.69	311.45	6.88	435780.08	671936.14	
8115.00	59.24	134.36	7994.05	-260.87	218.04	338.56	8.24	435761.09	671955.49	
8147.00	62.10	133.57	8009.72	-280.24	238.12	366.46	9.19	435741.72	671975.57	
8179.00	65.10	133.49	8023.95	-299.97	258.89	395.11	9.38	435721.99	671996.34	
8210.00	67.54	133.74	8036.40	-319.56	279.45	423.49	7.91	435702.40	672016.90	
8242.00	68.30	133.76	8048.43	-340.06	300.87	453.14	2.38	435681.90	672038.32	
8272.00	68.60	133.50	8059.45	-359.32	321.06	481.03	1.28	435662.64	672058.51	
8304.00	68.97	133.17	8071.03	-379.79	342.76	510.85	1.50	435642.17	672080.21	
8340.00	69.27	133.06	8083.86	-402.78	367.31	544.47	0.88	435619.18	672104.76	
8407.00	71.30	133.81	8106.46	-446.14	413.11	607.52	3.20	435575.82	672150.56	7 in
8456.00	72.78	134.34	8121.57	-478.56	446.60	654.13	3.20	435543.40	672184.05	
8488.00	75.00	134.46	8130.45	-500.07	468.56	684.87	6.95	435521.89	672206.01	
8519.00	76.34	136.19	8138.12	-521.43	489.68	714.90	6.92	435500.53	672227.13	

5D Survey Report

Survey Points (Relative to Slot Centre, TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Azi (°)	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
8551.00	77.17	137.20	8145.45	-544.09	511.04	746.03	4.02	435477.87	672248.49	
8582.00	78.23	138.06	8152.06	-566.47	531.45	776.29	4.36	435455.49	672268.90	
8614.00	80.89	138.52	8157.86	-589.96	552.39	807.70	8.43	435432.00	672289.84	
8646.00	83.81	138.74	8162.12	-613.76	573.35	839.34	9.15	435408.20	672310.80	
8677.00	85.37	138.57	8165.04	-636.93	593.73	870.13	5.06	435385.03	672331.18	
8709.00	86.35	137.55	8167.35	-660.67	615.06	902.00	4.41	435361.29	672352.51	
8741.00	88.21	136.56	8168.87	-684.07	636.84	933.94	6.58	435337.89	672374.29	
8773.00	88.46	133.61	8169.80	-706.71	659.42	965.92	9.25	435315.25	672396.87	
8804.00	90.06	134.00	8170.20	-728.17	681.79	996.91	5.31	435293.79	672419.24	
8900.00	89.26	134.55	8170.77	-795.19	750.53	1092.90	1.01	435226.77	672487.98	
8994.00	89.38	134.61	8171.88	-861.16	817.48	1186.90	0.14	435160.80	672554.93	
9089.00	88.70	135.05	8173.47	-928.13	884.84	1281.88	0.85	435093.83	672622.29	
9184.00	89.75	138.45	8174.76	-997.30	949.91	1376.81	3.75	435024.66	672687.36	
9279.00	90.80	136.11	8174.30	-1067.09	1014.36	1471.71	2.70	434954.87	672751.81	
9374.00	90.25	137.02	8173.43	-1136.07	1079.67	1566.66	1.12	434885.89	672817.12	
9470.00	89.07	131.40	8174.00	-1202.98	1148.45	1662.62	5.98	434818.98	672885.90	
9564.00	89.75	132.40	8174.97	-1265.76	1218.41	1756.48	1.29	434756.20	672955.86	
9658.00	90.68	131.95	8174.62	-1328.87	1288.07	1850.38	1.10	434693.09	673025.52	
9753.00	89.69	133.75	8174.31	-1393.47	1357.72	1945.32	2.16	434628.49	673095.17	
9848.00	89.51	134.07	8174.97	-1459.35	1426.16	2040.30	0.39	434562.61	673163.61	
9943.00	90.62	133.99	8174.87	-1525.38	1494.46	2135.29	1.17	434496.58	673231.91	
10038.00	90.25	134.54	8174.15	-1591.69	1562.49	2230.28	0.70	434430.27	673299.94	
10133.00	89.81	136.40	8174.10	-1659.41	1629.11	2325.27	2.01	434362.55	673366.56	
10228.00	89.57	133.89	8174.61	-1726.74	1696.10	2420.26	2.65	434295.22	673433.55	
10323.00	88.83	134.68	8175.94	-1793.07	1764.10	2515.24	1.14	434228.89	673501.55	
10418.00	88.40	135.73	8178.23	-1860.46	1831.02	2610.21	1.19	434161.50	673568.47	
10513.00	89.75	133.34	8179.77	-1927.08	1898.72	2705.19	2.89	434094.88	673636.17	
10608.00	89.01	135.07	8180.79	-1993.31	1966.82	2800.17	1.98	434028.65	673704.27	
10703.00	89.07	135.43	8182.39	-2060.76	2033.69	2895.16	0.38	433961.20	673771.14	
10798.00	89.32	132.89	8183.72	-2126.93	2101.83	2990.13	2.69	433895.03	673839.28	
10892.00	90.12	137.20	8184.18	-2193.44	2168.23	3084.11	4.66	433828.52	673905.68	
10987.00	89.26	134.08	8184.69	-2261.35	2234.64	3179.09	3.41	433760.61	673972.09	
11083.00	89.63	132.94	8185.62	-2327.44	2304.26	3275.05	1.25	433694.52	674041.71	
11179.00	91.60	135.56	8184.59	-2394.41	2373.01	3371.03	3.41	433627.55	674110.46	
11274.00	90.25	134.24	8183.06	-2461.46	2440.29	3466.01	1.99	433560.50	674177.74	
11369.00	90.19	133.47	8182.70	-2527.28	2508.79	3561.00	0.81	433494.68	674246.24	
11465.00	90.06	132.99	8182.49	-2593.03	2578.74	3656.96	0.52	433428.93	674316.19	
11560.00	90.74	134.63	8181.82	-2658.79	2647.29	3751.94	1.87	433363.17	674384.74	
11654.00	88.95	133.67	8182.08	-2724.26	2714.73	3845.92	2.16	433297.70	674452.18	
11750.00	90.37	134.63	8182.65	-2791.13	2783.61	3941.91	1.79	433230.83	674521.06	
11845.00	89.01	130.99	8183.16	-2855.67	2853.29	4036.83	4.09	433166.29	674590.74	
11940.00	89.01	135.05	8184.80	-2920.46	2922.72	4131.75	4.27	433101.50	674660.17	
12035.00	89.69	139.31	8185.88	-2990.12	2987.27	4226.64	4.54	433031.84	674724.72	
12130.00	88.70	134.93	8187.22	-3059.71	3051.89	4321.53	4.73	432962.25	674789.34	
12224.00	90.49	136.44	8187.88	-3126.97	3117.56	4415.51	2.49	432894.99	674855.01	
12319.00	90.37	136.44	8187.17	-3195.81	3183.02	4510.48	0.13	432826.15	674920.47	
12413.00	89.88	136.17	8186.96	-3263.77	3247.96	4604.45	0.60	432758.19	674985.41	
12508.00	89.20	133.24	8187.73	-3330.59	3315.47	4699.43	3.17	432691.37	675052.92	
12603.00	90.31	133.82	8188.13	-3396.02	3384.34	4794.40	1.32	432625.94	675121.79	
12699.00	89.29	132.44	8188.47	-3461.65	3454.40	4890.35	1.79	432560.31	675191.85	
12793.00	90.12	135.68	8188.95	-3527.00	3521.94	4984.33	3.56	432494.96	675259.39	
12888.00	89.20	134.23	8189.52	-3594.12	3589.16	5079.33	1.81	432427.84	675326.61	
12983.00	90.12	134.17	8190.08	-3660.35	3657.27	5174.32	0.97	432361.61	675394.72	
13078.00	89.51	133.11	8190.39	-3725.91	3726.02	5269.29	1.29	432296.05	675463.47	
13173.00	89.20	135.82	8191.46	-3792.45	3793.80	5364.28	2.87	432229.51	675531.25	
13268.00	90.88	135.61	8191.39	-3860.45	3860.13	5459.26	1.78	432161.51	675597.58	
13363.00	88.89	134.40	8191.58	-3927.63	3927.30	5554.25	2.45	432094.33	675664.75	
13458.00	90.25	136.16	8192.29	-3995.12	3994.14	5649.24	2.34	432026.84	675731.59	
13553.00	90.25	138.24	8191.88	-4064.82	4058.68	5744.16	2.19	431957.14	675796.13	

5D Survey Report

Survey Points (Relative to Slot centre, TVD relative to Drill Floor)										
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
13647.00	89.57	139.74	8192.03	-4135.75	4120.36	5837.91	1.75	431886.21	675857.81	
13742.00	89.88	139.69	8192.48	-4208.22	4181.79	5932.57	0.33	431813.74	675919.24	
13839.00	90.80	139.21	8191.91	-4281.92	4244.84	6029.25	1.07	431740.04	675982.29	
13935.00	89.07	137.16	8192.02	-4353.47	4308.84	6125.08	2.79	431668.49	676046.29	
14030.00	90.99	133.71	8191.97	-4421.14	4375.49	6220.06	4.16	431600.82	676112.94	
14126.00	89.94	131.33	8191.19	-4486.01	4446.24	6315.97	2.71	431535.95	676183.69	
14221.00	89.94	132.22	8191.29	-4549.30	4517.09	6410.83	0.94	431472.66	676254.54	
14315.00	89.03	132.09	8192.13	-4612.38	4586.77	6504.72	0.98	431409.58	676324.22	
14411.00	90.31	131.75	8192.68	-4676.52	4658.20	6600.59	1.38	431345.44	676395.65	
14505.00	89.32	131.74	8192.99	-4739.10	4728.33	6694.45	1.05	431282.86	676465.78	
14600.00	88.41	127.15	8194.87	-4799.43	4801.66	6788.98	4.92	431222.53	676539.11	
14695.00	89.69	132.74	8196.45	-4860.39	4874.45	6883.58	6.04	431161.57	676611.90	
14788.00	89.81	134.55	8196.85	-4924.58	4941.75	6976.55	1.95	431097.38	676679.20	
14882.00	89.20	136.46	8197.66	-4991.62	5007.62	7070.54	2.13	431030.34	676745.07	
14977.00	90.25	134.23	8198.12	-5059.20	5074.38	7165.53	2.59	430962.76	676811.83	
15072.00	90.06	133.63	8197.86	-5125.10	5142.80	7260.51	0.66	430896.86	676880.25	
15167.00	90.92	134.97	8197.05	-5191.45	5210.79	7355.50	1.68	430830.51	676948.24	
15262.00	89.01	134.73	8197.11	-5258.44	5278.13	7450.50	2.03	430763.52	677015.58	
15357.00	89.14	133.55	8198.64	-5324.59	5346.30	7545.48	1.25	430697.37	677083.75	
15452.00	91.48	134.19	8198.13	-5390.43	5414.78	7640.45	2.55	430631.53	677152.23	
15547.00	89.38	136.29	8197.42	-5457.87	5481.67	7735.44	3.13	430564.09	677219.12	
15642.00	91.18	136.88	8196.95	-5526.88	5546.95	7830.39	1.99	430495.08	677284.40	
15737.00	89.01	136.85	8196.79	-5596.20	5611.90	7925.33	2.28	430425.76	677349.35	
15832.00	90.68	132.48	8197.05	-5662.96	5679.45	8020.30	4.92	430359.00	677416.90	Last Wft Svy
15859.00	90.68	132.48	8196.73	-5681.19	5699.36	8047.27	0.00	430340.77	677436.81	Proj. To Bit 410H