

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

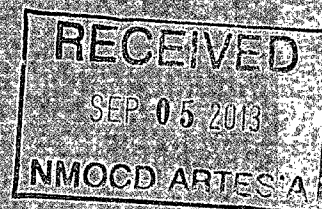
3005 41083

May 31, 2013

BOPCO, LP
P O Box 2760
Midland, TX 79702

Attn: Drilling Department

RE: Poker Lake Unit No. 394 *H*



Please find enclosed a copy of the survey from 0.00' to 7306.12' 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/ 394H

Rig Name: McVay #5
State/County: New Mexico/Eddy
Latitude: 32.20, Longitude: -103.81
GRID North is 0.28 Degrees East of True North
VS-Azi: 134.78 Degrees



Depth Reference : RKB= 17 Feet

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: poker lake field #394h.ut

Minimum Curvature Method

Report Date/Time: 5/31/2013 / 14:48

Vaughn Energy Services

Midland, Texas

432-563-5444

Survey Engineer: Logan Henry

Poker Lake Unit No. 394 / API 30-015-41083

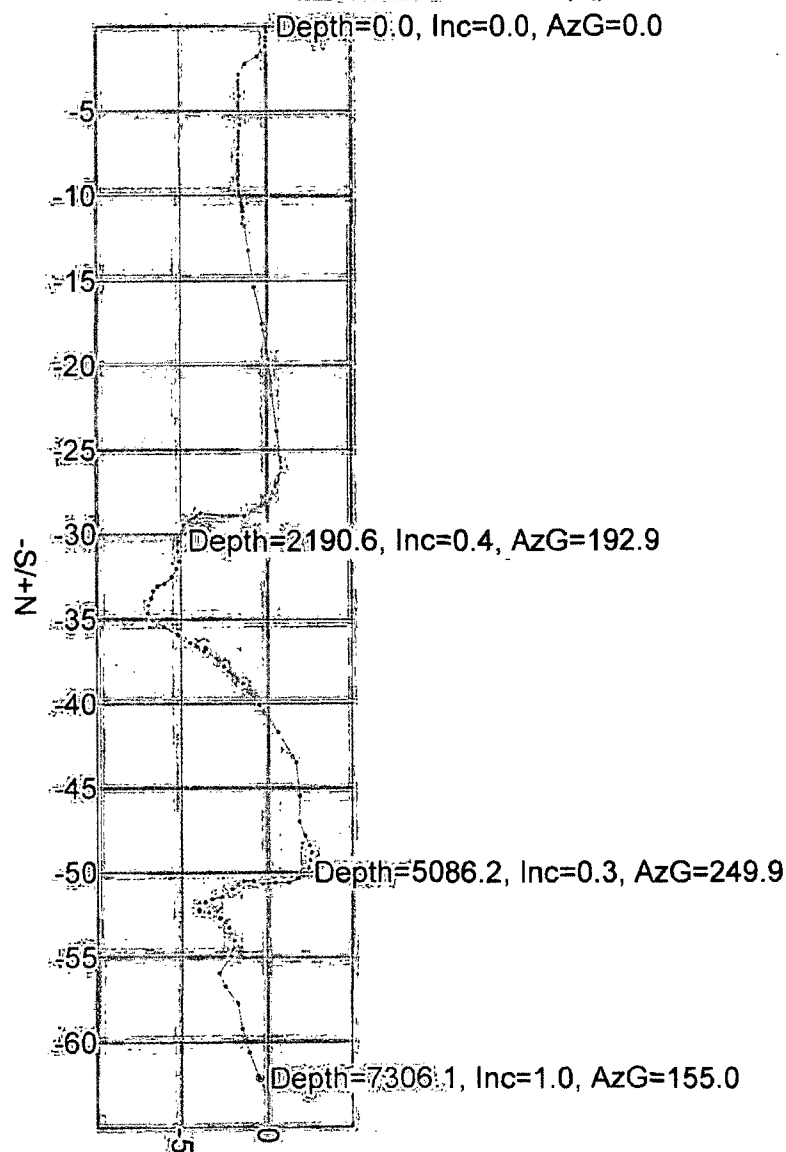
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
67.12	0.52	178.72	67.12	-0.31	0.01	0.22	0.31	178.72	0.78
163.64	0.52	187.86	163.64	-1.18	-0.04	0.80	1.18	182.10	0.09
260.16	0.55	250.63	260.15	-1.77	-0.54	0.86	1.85	196.99	0.58
356.68	0.50	225.90	356.67	-2.21	-1.28	0.65	2.56	210.02	0.24
453.20	0.43	188.93	453.18	-2.86	-1.64	0.85	3.30	209.76	0.31
549.72	1.03	174.64	549.70	-4.09	-1.61	1.74	4.39	201.52	0.65
646.24	1.03	181.50	646.20	-5.82	-1.55	3.00	6.02	194.95	0.13
742.76	1.05	185.57	742.71	-7.56	-1.66	4.15	7.75	192.39	0.08
839.28	1.11	173.06	839.21	-9.37	-1.64	5.44	9.52	189.90	0.25
935.80	1.14	170.96	935.71	-11.25	-1.37	6.95	11.33	186.95	0.05
1032.32	1.23	173.57	1032.21	-13.23	-1.10	8.53	13.27	184.77	0.11
1128.84	1.33	169.69	1128.70	-15.36	-0.79	10.26	15.38	182.94	0.14
1225.36	1.28	164.16	1225.20	-17.50	-0.29	12.12	17.50	180.96	0.14
1321.88	1.27	175.25	1321.70	-19.60	0.09	13.87	19.60	179.74	0.26
1418.40	1.31	174.63	1418.19	-21.76	0.28	15.53	21.76	179.26	0.05
1514.92	1.26	170.90	1514.69	-23.91	0.55	17.23	23.92	178.68	0.10
1611.44	1.32	174.61	1611.18	-26.07	0.83	18.95	26.08	178.19	0.11
1707.96	1.25	225.92	1707.68	-27.91	0.17	19.78	27.91	179.64	1.16

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
1804.48	0.94	247.50	1804.18	-28.94	-1.32	19.45	28.97	182.60	0.53
1901.00	0.76	296.81	1900.69	-28.96	-2.62	18.54	29.08	185.17	0.75
1997.52	0.83	262.96	1997.21	-28.75	-3.88	17.50	29.01	187.69	0.48
2094.04	0.82	204.57	2093.72	-29.47	-4.86	17.31	29.87	189.37	0.83
2190.56	0.38	192.92	2190.23	-30.40	-5.22	17.71	30.85	189.74	0.48
2287.08	0.37	169.15	2286.75	-31.02	-5.23	18.13	31.46	189.58	0.16
2383.60	0.33	174.55	2383.27	-31.60	-5.15	18.61	32.02	189.25	0.05
2480.12	0.30	228.73	2479.79	-32.05	-5.31	18.80	32.49	189.41	0.30
2576.64	0.41	200.78	2576.31	-32.54	-5.63	18.93	33.02	189.81	0.21
2673.16	0.34	258.46	2672.82	-32.92	-6.03	18.91	33.47	190.38	0.38
2769.68	0.22	235.36	2769.34	-33.08	-6.46	18.71	33.71	191.05	0.17
2866.20	0.24	207.53	2865.86	-33.36	-6.71	18.74	34.03	191.37	0.11
2962.72	0.27	189.49	2962.38	-33.76	-6.84	18.93	34.45	191.45	0.09
3059.24	0.26	203.34	3058.90	-34.19	-6.96	19.14	34.89	191.51	0.07
3155.76	0.31	165.72	3155.42	-34.64	-6.98	19.44	35.33	191.40	0.20
3252.28	0.33	129.67	3251.94	-35.07	-6.70	19.94	35.70	190.82	0.21
3348.80	0.56	119.53	3348.45	-35.48	-6.08	20.68	36.00	189.72	0.25
3445.32	0.53	120.16	3444.97	-35.94	-5.28	21.56	36.32	188.36	0.04
3541.84	0.55	121.16	3541.49	-36.40	-4.50	22.45	36.68	187.05	0.03
3638.36	0.58	121.60	3638.00	-36.90	-3.68	23.38	37.08	185.70	0.03
3734.88	0.75	323.85	3734.52	-36.65	-3.63	23.23	36.83	185.66	1.35
3831.40	0.89	143.50	3831.03	-36.74	-3.56	23.35	36.91	185.54	1.70
3927.92	0.87	131.94	3927.54	-37.83	-2.57	24.82	37.91	183.89	0.18
4024.44	0.89	130.22	4024.05	-38.80	-1.46	26.29	38.83	182.16	0.03
4120.96	1.07	152.92	4120.56	-40.08	-0.48	27.89	40.09	180.69	0.44
4217.48	1.24	141.54	4217.06	-41.71	0.58	29.79	41.71	179.20	0.30
4314.00	1.26	156.62	4313.56	-43.50	1.65	31.82	43.53	177.82	0.34
4410.52	1.23	191.84	4410.05	-45.49	1.86	33.36	45.53	177.66	0.78
4507.04	0.65	159.59	4506.56	-47.02	1.84	34.43	47.08	177.76	0.79
4603.56	0.44	156.15	4603.08	-47.88	2.18	35.28	47.93	177.39	0.22
4700.08	0.28	143.73	4699.60	-48.41	2.47	35.85	48.47	177.08	0.19
4796.60	0.26	187.71	4796.11	-48.81	2.58	36.21	48.88	176.97	0.21
4893.12	0.33	189.20	4892.63	-49.30	2.51	36.51	49.37	177.09	0.08
4989.64	0.22	197.80	4989.15	-49.76	2.40	36.76	49.82	177.23	0.12
5086.16	0.29	249.95	5085.67	-50.02	2.12	36.74	50.07	177.57	0.24
5182.68	0.39	203.00	5182.19	-50.41	1.76	36.76	50.44	178.00	0.30
5279.20	0.51	277.49	5278.71	-50.65	1.21	36.54	50.67	178.63	0.57
5375.72	0.46	262.23	5375.22	-50.65	0.40	35.96	50.65	179.54	0.14
5472.24	0.37	270.47	5471.74	-50.70	-0.29	35.50	50.70	180.33	0.11

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
5568.76	0.35	309.87	5568.26	-50.51	-0.83	34.99	50.51	180.95	0.25
5665.28	0.48	242.66	5664.78	-50.50	-1.42	34.57	50.52	181.61	0.49
5761.80	0.49	227.22	5761.29	-50.97	-2.08	34.43	51.01	182.34	0.13
5858.32	0.44	236.15	5857.81	-51.45	-2.69	34.34	51.52	182.99	0.09
5954.84	0.31	290.06	5954.33	-51.57	-3.24	34.02	51.67	183.60	0.37
6051.36	0.38	210.09	6050.85	-51.75	-3.65	33.86	51.88	184.03	0.46
6147.88	0.28	231.83	6147.37	-52.18	-4.00	33.92	52.33	184.38	0.16
6244.40	0.23	80.90	6243.89	-52.29	-3.99	34.00	52.45	184.36	0.52
6340.92	0.46	104.31	6340.40	-52.36	-3.42	34.45	52.47	183.74	0.27
6437.44	0.43	134.89	6436.92	-52.71	-2.79	35.14	52.78	183.03	0.24
6533.96	0.44	141.37	6533.44	-53.25	-2.31	35.88	53.30	182.48	0.05
6630.48	0.56	167.56	6629.96	-54.01	-1.97	36.64	54.04	182.09	0.26
6727.00	0.66	213.07	6726.47	-54.94	-2.17	37.15	54.98	182.26	0.50
6823.52	0.81	215.59	6822.98	-55.95	-2.87	37.38	56.03	182.94	0.16
6920.04	0.90	107.15	6919.50	-56.73	-2.55	38.15	56.79	182.57	1.43
7016.56	0.91	175.60	7016.01	-57.72	-1.77	39.40	57.75	181.75	1.05
7113.08	0.90	163.40	7112.51	-59.21	-1.49	40.65	59.23	181.44	0.20
7209.60	0.87	163.94	7209.02	-60.64	-1.07	41.95	60.65	181.01	0.04
7306.12	1.03	154.97	7305.53	-62.13	-0.50	43.41	62.13	180.46	0.23

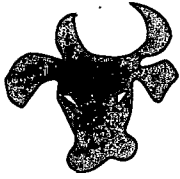


Vaughn Energy Services
Midland, Texas
432-563-5444
Survey Engineer: Logan Henry
Poker Lake Unit No. 394 / API 30-015-41083



-W/+E

VES Survey Date: 05/23/2013



Bopco L P

Eddy County, NM (NAD27 NME)

Poker Lake Unit

#394H

Wellbore #1 / Job #1310421

Survey: Phoenix MWD Surveys

Phoenix Final Survey Report

29 May, 2013



PHOENIX
TECHNOLOGY SERVICES



Phoenix Technology Services
Phoenix Final Survey Report



Company:	Bopco L P	Local Co-ordinate Reference:	Well #394H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3487.00usft (McVay 5)
Site:	Poker Lake Unit	MD Reference:	KB @ 3487.00usft (McVay 5)
Well:	#394H	North Reference:	Grid
Wellbore:	Wellbore #1 / Job #1310421	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (McVay 5)	Database:	GCR DB

Project:	Eddy County, NM (NAD27 NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	Poker Lake Unit		
Site Position:		Northing:	435,896.68 usft
From:	Map	Easting:	646,110.12 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"
		Latitude:	32° 11' 51.053521 N
		Longitude:	103° 51' 39.561423 W
		Grid Convergence:	0.25 °

Well:	#394H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 11' 54.645774 N
		Longitude:	103° 48' 30.749748 W
		Ground Level:	3,468.00 usft

Wellbore:	Wellbore #1 / Job #1310421		
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Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010_14	04/08/13	7.47	60.08	48,393

Design:	Surveys (McVay 5)		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			134.78

Survey Program	Date: 05/29/13		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
67.12	7,306.12	VES Gyro Survey (Wellbore #1 / Job #131	ISCWSA-GYRO-3
7,423.00	8,337.00	Phoenix MWD Surveys (Wellbore #1 / Job	MWD
			Description
			Biaxial Semi-Cont. Gyro
			MWD - Standard

Survey	MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
	7,306.12	1.03	154.97	7,305.53	-62.13	-0.51	43.40	0.00
Tie-on to VES Gyro	7,423.00	4.70	146.90	7,422.24	-67.09	2.55	49.07	3.15
First Phoenix MWD Survey	7,455.00	7.30	151.50	7,454.07	-69.98	4.24	52.30	8.26
	7,486.00	11.30	146.10	7,484.65	-74.23	6.87	57.17	13.19
	7,517.00	14.90	144.80	7,514.84	-80.01	10.87	64.07	11.65
	7,549.00	18.20	143.30	7,545.51	-87.38	16.23	73.07	10.40
	7,580.00	21.00	141.70	7,574.71	-95.62	22.56	83.37	9.20
	7,611.00	23.60	140.10	7,603.39	-104.75	29.99	95.07	8.61
	7,643.00	26.50	135.40	7,632.38	-114.75	39.11	108.59	10.98



Phoenix Technology Services
Phoenix Final Survey Report



Company:	Bopco L P	Local Co-ordinate Reference:	Well #394H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3487.00usft (McVay 5)
Site:	Poker Lake Unit	MD Reference:	KB @ 3487.00usft (McVay 5)
Well:	#394H	North Reference:	Grid
Wellbore:	Wellbore #1 / Job #1310421	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (McVay 5)	Database:	GCR DB

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
7,674.00	29.80	131.00	7,659.71	-124.73	49.79	123.19	12.57	
7,706.00	33.80	129.60	7,686.91	-135.62	62.65	140.00	12.71	
7,738.00	36.90	130.30	7,713.00	-147.51	76.84	158.45	9.77	
7,769.00	40.10	131.00	7,737.26	-160.09	91.47	177.69	10.42	
7,800.00	43.20	131.00	7,760.42	-173.60	107.02	198.25	10.00	
7,831.00	45.80	132.00	7,782.53	-188.00	123.29	219.94	8.69	
7,862.00	48.00	132.60	7,803.71	-203.23	140.03	242.55	7.24	
7,893.00	50.60	132.40	7,823.92	-219.11	157.36	266.03	8.40	
7,924.00	52.40	132.30	7,843.22	-235.45	175.29	290.27	5.81	
7,955.00	54.40	131.90	7,861.70	-252.14	193.75	315.13	6.53	
7,986.00	56.20	131.90	7,879.35	-269.16	212.72	340.58	5.81	
8,017.00	58.60	131.70	7,896.05	-286.56	232.19	366.66	7.76	
8,048.00	62.00	131.50	7,911.41	-304.44	252.32	393.54	10.98	
8,079.00	63.20	130.70	7,925.67	-322.53	273.06	421.01	4.50	
8,110.00	62.60	130.20	7,939.80	-340.43	294.06	448.52	2.41	
8,141.00	62.20	129.70	7,954.16	-358.07	315.12	475.90	1.93	
8,172.00	61.90	129.60	7,968.69	-375.54	336.21	503.17	1.01	
8,203.00	61.50	129.20	7,983.39	-392.87	357.30	530.35	1.72	
8,234.00	61.00	128.70	7,998.30	-409.96	378.43	557.39	2.15	
8,265.00	60.70	128.40	8,013.40	-426.83	399.61	584.30	1.28	
Last Phoenix MWD Survey								
8,337.00	60.70	128.40	8,048.63	-465.83	448.81	646.70	0.00	
Projection to TD								

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,306.12	7,305.53	-62.13	-0.51	Tie-on to VES Gyro
7,423.00	7,422.24	-67.09	2.55	First Phoenix MWD Survey
8,265.00	8,013.40	-426.83	399.61	Last Phoenix MWD Survey
8,337.00	8,048.63	-465.83	448.81	Projection to TD

Checked By: _____ Approved By: _____ Date: _____

BOPCO, L.P.

Poker Lake Unit 394H
Eddy Co, NM

KB ELEV: 3487
GL ELEV: 3468

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	8274.00	60.70	128.40	8017.80	-431.70	405.76	0.00	0.00	592.10	
2	8317.00	60.70	128.40	8038.84	-454.99	435.14	0.00	0.00	629.37	
3	8547.45	90.04	134.73	8096.47	-601.86	599.51	13.00	12.76	849.49	
4	14622.69	90.04	134.73	8092.00	-4877.63	4915.33	0.00	0.00	6924.72	PBHL

SITE DETAILS

Poker Lake Unit 394H
Site Centre Northing: 436334.90
Easting: 662332.17
Ground Level: 3468.00
Positional Uncertainty: 0.00
Convergence: 0.28

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
PLU 394H	0.00	0.00	436334.90	662332.17	32°11'54.646N	103°48'30.750W	N/A

TARGET DETAILS

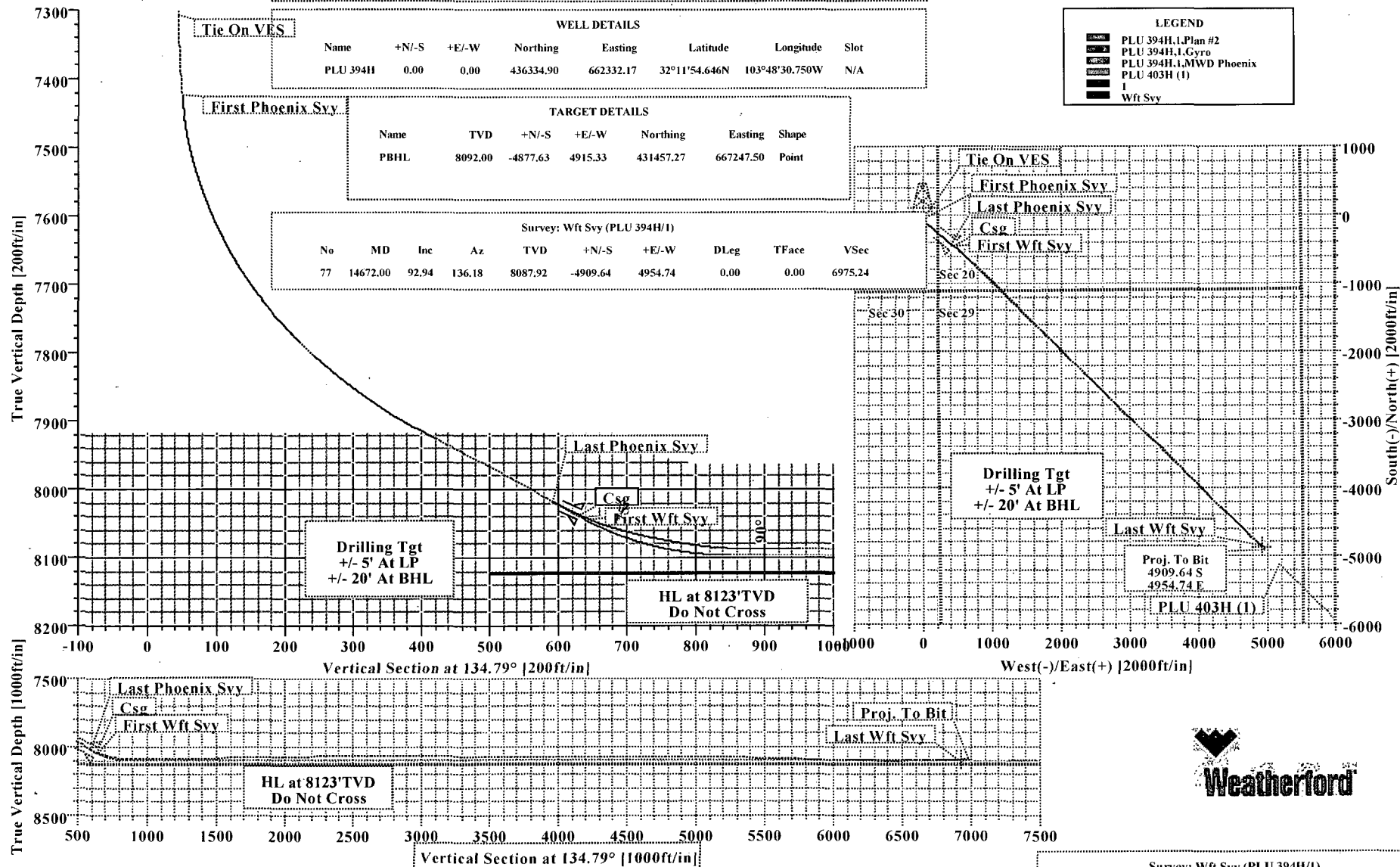
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	8092.00	-4877.63	4915.33	431457.27	667247.50	Point

Survey: Wft Svy (PLU 394H/1)

No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
77	14672.00	92.94	136.18	8087.92	-4909.64	4954.74	0.00	0.00	6975.24

LEGEND

- PLU 394H, I, Plan #2
- PLU 394H, I, Gyro
- PLU 394H, I, MWD Phoenix
- PLU 403H (1)
- 1
- Wft Svy



Survey: Wft Svy (PLU 394H/1)

Created By: Russell W. Joyner

Date: 6/17/2013

Weatherford

Wft Survey Report X Y's.



Weatherford

Company: BORCO, L.P.	Date: 6/17/2013	Time: 05:20:00	Page: 1
Field: Eddy County, NM (Nad27)	Co-ordinate(NE) Reference: Well: PLU 394H Grid North		
Site: Poker Lake Unit 394H	Vertical (TVD) Reference: SITE 3487.0		
Well: PLU-394H	Section (VS) Reference: Well (0.00N 0.00E 134.79Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Survey: Wft Svy	Start Date: 6/2/2013
Company: Weatherford	Engineer: Russell W. Joyner
Tool: MWD;MWD - Standard	Tied-to: User Defined

Site: Poker Lake Unit 394H
Site Position: Northing: 436334.90 ft Latitude: 32 11 54.646 N
From: Map Easting: 662332.17 ft Longitude: 103 48 30.750 W
Position Uncertainty: 0.00 ft North Reference: Grid
Ground Level: 3468.00 ft Grid Convergence: 0.28 deg

Well: PLU 394H		Slot Name:						
Well Position:	+N/-S	0.00 ft	Northing:	436334.90 ft	Latitude:	32	11	54.646 N
	+E/-W	0.00 ft	Easting :	662332.17 ft	Longitude:	103	48	30.750 W
Position Uncertainty:		0.00 ft						

Wellpath: 1	Drilled From: Surface
Current Datum: SITE	Tie-on Depth: 0.00 ft
Magnetic Data: 5/31/2013	Above System Datum: Mean Sea Level
Field Strength: 48404 nT	Declination: 7.45 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 60.07 deg
ft	+N/-S Direction
	ft deg
0.00	0.00 0.00 134.79

Survey											
MD	Incl	Azim	TVD	N/S	E/W	DLS	VS	MapN	MapE	Comment	
ft	deg	deg	ft	ft	ft	deg/100ft	ft	ft	ft		
7306.12	1.03	154.97	7305.53	-62.13	-0.51	0.00	43.41	436272.77	662331.66	Tie On VES	
7423.00	4.70	146.90	7422.24	-67.09	2.55	3.15	49.08	436267.81	662334.72	First Phoenix S	
8274.00	60.70	128.40	8017.80	-431.70	405.76	6.61	592.10	435903.20	662737.93	Last Phoenix S	
8334.00	67.67	130.64	8043.91	-466.07	447.38	12.09	645.85	435868.83	662779.55	First Wft Svy	
8365.00	72.43	129.62	8054.49	-484.84	469.65	15.66	674.89	435850.06	662801.82		
8397.00	76.17	129.49	8063.15	-504.46	493.40	11.69	705.56	435830.44	662825.57		
8428.00	77.39	130.63	8070.24	-523.88	516.50	5.32	735.63	435811.02	662848.67		
8459.00	80.09	130.85	8076.29	-543.72	539.53	8.74	765.96	435791.18	662871.70		
8490.00	81.66	131.11	8081.21	-563.79	562.64	5.13	796.50	435771.11	662894.81		
8521.00	84.40	131.29	8084.97	-584.06	585.79	8.86	827.20	435750.84	662917.96		
8552.00	86.71	131.69	8087.37	-604.53	608.94	7.56	858.06	435730.37	662941.11		
8582.00	89.51	132.38	8088.36	-624.61	631.20	9.61	888.00	435710.29	662963.37		
8612.00	90.77	133.37	8088.29	-645.02	653.19	5.34	917.99	435689.88	662985.36		
8643.00	90.98	134.83	8087.81	-666.59	675.45	4.76	948.98	435668.31	663007.62		
8737.00	91.19	134.16	8086.03	-732.46	742.48	0.75	1042.96	435602.44	663074.65		
8831.00	89.51	133.58	8085.46	-797.60	810.25	1.89	1136.94	435537.30	663142.42		
8925.00	89.37	133.15	8086.38	-862.14	878.58	0.48	1230.91	435472.76	663210.75		
9019.00	89.58	132.62	8087.24	-926.10	947.45	0.61	1324.85	435408.80	663279.62		
9112.00	93.36	135.11	8084.85	-990.51	1014.47	4.87	1417.78	435344.39	663346.64		
9207.00	92.52	135.61	8079.98	-1058.02	1081.13	1.03	1512.65	435276.88	663413.30		
9300.00	91.89	135.67	8076.40	-1124.46	1146.10	0.68	1605.57	435210.44	663478.27		
9394.00	90.14	135.38	8074.74	-1191.52	1211.95	1.89	1699.55	435143.38	663544.12		
9488.00	88.53	133.69	8075.83	-1257.44	1278.94	2.48	1793.53	435077.46	663611.11		
9582.00	89.30	133.10	8077.61	-1322.01	1347.23	1.03	1887.49	435012.89	663679.40		
9676.00	92.24	134.33	8076.34	-1386.95	1415.16	3.39	1981.45	434947.95	663747.33		
9770.00	93.29	135.26	8071.81	-1453.10	1481.79	1.49	2075.34	434881.80	663813.96		
9863.00	91.68	136.32	8067.78	-1519.70	1546.57	2.07	2168.23	434815.20	663878.74		
9957.00	90.00	135.72	8066.40	-1587.33	1611.83	1.90	2262.20	434747.57	663944.00		
10050.00	90.35	136.57	8066.11	-1654.39	1676.27	0.99	2355.17	434680.51	664008.44		
10144.00	91.40	136.31	8064.68	-1722.50	1741.04	1.15	2449.12	434612.40	664073.21		

Weatherford

Wft Survey Report X Y's.



Weatherford

Company: BOPCO, L.P.	Date: 6/17/2013	Time: 05:20:00	Page: 2
Field: Eddy County, NM (Nad:27)	Co-ordinate(NE) Reference: Well: PLU 394H	Grid North	
Site: Poker Lake Unit 394H	Vertical (TVD) Reference: SITE 3487.0		
Well: PLU 394H	Section (VS) Reference: Well (0.00N 0.00E 134.79Azi)		
Wellpath: 1	Survey Calculations Method: Minimum Curvature	Db: Sybase	

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
10238.00	90.77	134.76	8062.90	-1789.57	1806.87	1.78	2543.09	434545.33	664139.04	
10331.00	89.51	135.87	8062.67	-1855.69	1872.26	1.81	2636.08	434479.21	664204.43	
10423.00	90.28	135.52	8062.84	-1921.53	1936.52	0.92	2728.07	434413.37	664268.69	
10516.00	89.79	135.36	8062.78	-1987.79	2001.77	0.55	2821.07	434347.11	664333.94	
10609.00	90.07	135.58	8062.90	-2054.09	2066.99	0.38	2914.06	434280.81	664399.16	
10702.00	88.81	135.21	8063.81	-2120.30	2132.30	1.41	3007.05	434214.60	664464.47	
10795.00	90.14	134.80	8064.66	-2186.06	2198.05	1.50	3100.04	434148.84	664530.22	
10889.00	88.32	134.69	8065.92	-2252.22	2264.80	1.94	3194.03	434082.68	664596.97	
10982.00	88.81	133.85	8068.25	-2317.12	2331.37	1.05	3286.99	434017.78	664663.54	
11075.00	90.21	133.10	8069.05	-2381.10	2398.86	1.71	3379.96	433953.80	664731.03	
11169.00	89.58	134.14	8069.22	-2445.95	2466.90	1.29	3473.94	433888.95	664799.07	
11262.00	88.95	135.57	8070.41	-2511.53	2532.82	1.68	3566.93	433823.37	664864.99	
11355.00	87.69	135.18	8073.14	-2577.69	2598.12	1.42	3659.88	433757.21	664930.22	
11448.00	89.44	135.81	8075.47	-2644.00	2663.29	2.00	3752.84	433690.90	664995.46	
11541.00	90.70	135.85	8075.35	-2710.70	2728.09	1.36	3845.83	433624.20	665060.26	
11634.00	90.63	136.53	8074.27	-2777.81	2792.47	0.73	3938.79	433557.09	665124.64	
11727.00	90.56	135.17	8073.31	-2844.53	2857.24	1.46	4031.77	433490.37	665189.41	
11822.00	90.21	133.58	8072.67	-2910.97	2925.14	1.71	4126.76	433423.93	665257.31	
11915.00	89.30	134.39	8073.07	-2975.55	2992.05	1.31	4219.75	433359.35	665324.22	
12009.00	89.23	133.75	8074.27	-3040.93	3059.59	0.68	4313.73	433293.97	665391.76	
12102.00	88.81	132.67	8075.86	-3104.59	3127.36	1.25	4406.68	433230.31	665459.53	
12196.00	91.47	132.37	8075.63	-3168.11	3196.63	2.85	4500.60	433166.79	665528.80	
12291.00	91.40	133.40	8073.26	-3232.74	3266.22	1.09	4595.52	433102.16	665598.39	
12384.00	92.03	133.54	8070.47	-3296.70	3333.68	0.69	4688.45	433038.20	665665.85	
12478.00	90.28	133.70	8068.58	-3361.53	3401.71	1.87	4782.41	432973.37	665733.88	
12572.00	88.88	133.69	8069.27	-3426.46	3469.67	1.49	4876.38	432908.44	665801.84	
12665.00	88.53	134.95	8071.37	-3491.42	3536.19	1.41	4969.36	432843.48	665868.36	
12759.00	88.32	134.68	8073.95	-3557.65	3602.85	0.36	5063.32	432777.25	665935.02	
12853.00	89.30	135.61	8075.90	-3624.27	3669.13	1.44	5157.30	432710.63	666001.30	
12947.00	91.26	136.34	8075.44	-3691.85	3734.46	2.23	5251.27	432643.05	666066.63	
13042.00	89.09	136.25	8075.15	-3760.53	3800.09	2.29	5346.23	432574.37	666132.26	
13135.00	87.20	136.32	8078.16	-3827.71	3864.33	2.03	5439.15	432507.19	666196.50	
13227.00	87.83	135.83	8082.15	-3893.91	3928.09	0.87	5531.04	432440.99	666260.26	
13319.00	88.53	136.72	8085.08	-3960.36	3991.64	1.23	5622.96	432374.54	666323.81	
13413.00	89.16	137.02	8086.97	-4028.94	4055.89	0.74	5716.88	432305.96	666388.06	
13505.00	88.46	134.98	8088.88	-4095.11	4119.79	2.34	5808.83	432239.79	666451.96	
13598.00	88.88	134.31	8091.04	-4160.44	4185.93	0.85	5901.80	432174.46	666518.10	
13692.00	89.23	133.22	8092.59	-4225.45	4253.81	1.22	5995.77	432109.45	666585.98	
13786.00	89.58	134.04	8093.57	-4290.31	4321.84	0.95	6089.75	432044.59	666654.01	
13881.00	87.76	134.33	8095.77	-4356.50	4389.95	1.94	6184.71	431978.40	666722.12	
13975.00	88.53	133.62	8098.81	-4421.73	4457.56	1.11	6278.65	431913.17	666789.73	
14069.00	89.30	134.36	8100.59	-4487.00	4525.17	1.14	6372.63	431847.90	666857.34	
14161.00	92.45	134.20	8099.19	-4551.22	4591.02	3.43	6464.60	431783.68	666923.19	
14255.00	91.12	133.73	8096.26	-4616.44	4658.65	1.50	6558.54	431718.46	666990.82	
14349.00	89.02	133.08	8096.15	-4681.03	4726.93	2.34	6652.51	431653.87	667059.10	
14443.00	90.77	133.58	8096.32	-4745.53	4795.31	1.94	6746.47	431589.37	667127.48	
14537.00	91.82	136.70	8094.19	-4812.13	4861.59	3.50	6840.44	431522.77	667193.76	
14604.00	92.94	136.18	8091.41	-4860.64	4907.72	1.84	6907.35	431474.26	667239.89	Last Wft Svy
14672.00	92.94	136.18	8087.92	-4909.64	4954.74	0.00	6975.24	431425.26	667286.91	Proj. To Bit

Weatherford

Wft Survey Report X Y's.



Weatherford

Company: BOPCO, L.P.	Date: 6/17/2013	Time: 05:20:00	Page: 3
Field: Eddy County, NM (Nad 27)	Co-ordinate(NE) Reference: Well: PLU 394H, Grid North		
Site: Poker Lake Unit 394H	Vertical (TVD) Reference: SITE 3487.0		
Well: PLU 394H	Section (VS) Reference: Well (0.00N:0.00E:134.79Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Annotation

MD ft	TVD ft	
7306.12	7305.53	Tie On VES
7423.00	7422.24	First Phoenix Svy
8274.00	8017.80	Last Phoenix Svy
8334.00	8043.91	First Wft Svy
14604.00	8091.41	Last Wft Svy
14672.00	8087.92	Proj. To Bit