



Survey Report

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well HORSETAIL 08D-1704
Project:	Weld County, CO	TVD Reference:	18.5' KB @ 4976.7usft (UNIT 406)
Site:	S8-T10N-R57W	MD Reference:	18.5' KB @ 4976.7usft (UNIT 406)
Well:	HORSETAIL 08D-1704	North Reference:	True
Wellbore:	STK	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Project	Weld County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		S8-T10N-R57W			
Site Position:		Northing:	1,560,717.72 usft	Latitude:	40.859783
From:	Lat/Long	Easting:	3,477,578.15 usft	Longitude:	-103.773422
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.12 °

Well	HORSETAIL 08D-1704					
Well Position	+N/-S	0.0 usft	Northing:	1,560,656.79 usft	Latitude:	40.859761
	+E/-W	0.0 usft	Easting:	3,474,851.73 usft	Longitude:	-103.783281
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	4,958.2 usft

Wellbore	STK				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/20/2015	7.84	67.44	53,061

Design	FINAL				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	4,668.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	176.07	

Survey Program	Date	4/30/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
165.0	4,668.0	Survey #1 (OH)	ISCWSA MWD	MWD - ISCWSA	
4,762.0	16,045.0	Survey #1 (STK)	ISCWSA MWD	MWD - ISCWSA	

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
165.0	0.53	165.68	165.0	-0.7	0.2	0.8	0.32	0.32	
259.0	0.58	178.87	259.0	-1.6	0.3	1.7	0.15	0.05	
352.0	0.68	112.04	352.0	-2.3	0.8	2.4	0.75	0.11	
446.0	2.16	75.41	446.0	-2.1	3.1	2.3	1.77	1.57	
539.0	4.55	67.24	538.8	-0.2	8.2	0.8	2.61	2.57	
632.0	6.79	64.04	631.3	3.6	16.5	-2.5	2.43	2.41	
726.0	9.04	68.15	724.4	8.8	28.4	-6.8	2.47	2.39	
819.0	11.67	69.24	815.9	14.9	43.9	-11.8	2.84	2.83	
913.0	11.18	70.61	908.0	21.3	61.4	-17.0	0.60	-0.52	
1,006.0	10.07	70.92	999.5	26.9	77.6	-21.5	1.20	-1.19	
1,100.0	8.75	70.10	1,092.2	32.0	92.1	-25.6	1.41	-1.40	

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Wellbore:	STK	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
1,193.0	7.87	70.13	1,184.2	36.6	104.7	-29.3	0.95	-0.95	
1,287.0	9.53	62.82	1,277.1	42.3	117.7	-34.2	2.12	1.77	
1,380.0	8.99	62.31	1,368.9	49.2	131.0	-40.1	0.59	-0.58	
1,474.0	8.62	63.39	1,461.8	55.8	143.8	-45.8	0.43	-0.39	
1,567.0	8.28	66.35	1,553.8	61.6	156.2	-50.8	0.59	-0.37	
1,615.0	7.97	65.73	1,601.3	64.4	162.4	-53.1	0.67	-0.65	
1,674.0	7.56	68.13	1,659.8	67.5	169.7	-55.7	0.89	-0.69	
1,768.0	7.60	66.96	1,753.0	72.2	181.2	-59.7	0.17	0.04	
1,861.0	9.70	71.40	1,844.9	77.1	194.2	-63.7	2.37	2.26	
1,954.0	9.25	71.72	1,936.6	82.0	208.8	-67.5	0.49	-0.48	
2,048.0	11.50	72.85	2,029.1	87.1	224.9	-71.5	2.40	2.39	
2,141.0	11.41	71.13	2,120.2	92.8	242.5	-76.0	0.38	-0.10	
2,235.0	11.27	69.40	2,212.4	99.1	259.9	-81.0	0.39	-0.15	
2,328.0	10.82	66.70	2,303.7	105.7	276.4	-86.5	0.74	-0.48	
2,422.0	10.65	61.69	2,396.0	113.3	292.1	-93.0	1.01	-0.18	
2,515.0	10.08	58.89	2,487.5	121.6	306.7	-100.3	0.82	-0.61	
2,609.0	9.50	55.20	2,580.1	130.3	320.1	-108.1	0.91	-0.62	
2,702.0	10.61	57.93	2,671.7	139.2	333.6	-116.0	1.30	1.19	
2,796.0	11.33	64.44	2,764.0	147.8	349.3	-123.5	1.52	0.77	
2,890.0	11.48	62.05	2,856.1	156.2	365.9	-130.7	0.53	0.16	
2,983.0	10.88	60.97	2,947.4	164.7	381.7	-138.2	0.68	-0.65	
3,077.0	10.46	58.31	3,039.7	173.5	396.8	-146.0	0.69	-0.45	
3,171.0	10.57	69.58	3,132.2	181.0	412.1	-152.4	2.19	0.12	
3,264.0	8.98	66.10	3,223.8	186.9	426.7	-157.3	1.82	-1.71	
3,358.0	9.61	75.18	3,316.6	191.9	441.0	-161.3	1.70	0.67	
3,451.0	8.43	71.60	3,408.4	196.1	455.0	-164.4	1.40	-1.27	
3,545.0	10.85	79.10	3,501.1	199.9	470.2	-167.2	2.90	2.57	
3,639.0	10.41	76.93	3,593.5	203.5	487.2	-169.7	0.63	-0.47	
3,732.0	10.39	74.74	3,685.0	207.6	503.5	-172.6	0.43	-0.02	
3,826.0	9.99	73.34	3,777.5	212.2	519.4	-176.1	0.50	-0.43	
3,919.0	8.85	72.97	3,869.2	216.6	534.0	-179.5	1.23	-1.23	
4,013.0	9.52	71.75	3,962.0	221.1	548.3	-183.1	0.74	0.71	
4,107.0	8.11	72.34	4,054.9	225.6	562.0	-186.6	1.50	-1.50	
4,200.0	10.18	66.58	4,146.7	230.8	575.8	-190.9	2.43	2.23	
4,294.0	11.54	64.06	4,239.0	238.3	591.9	-197.2	1.53	1.45	
4,387.0	10.98	60.25	4,330.3	246.7	607.9	-204.5	1.00	-0.60	
4,481.0	9.95	54.95	4,422.7	255.8	622.4	-212.6	1.50	-1.10	
4,575.0	11.13	60.93	4,515.1	264.9	636.9	-220.7	1.71	1.26	
4,668.0	10.28	57.91	4,606.5	273.7	651.8	-228.4	1.09	-0.91	
4,762.0	8.54	51.63	4,699.2	282.5	664.4	-236.3	2.15	-1.85	
4,855.0	7.29	49.46	4,791.3	290.6	674.3	-243.7	1.38	-1.34	
4,949.0	12.69	47.83	4,883.9	301.4	686.5	-253.7	5.75	5.74	
5,042.0	10.20	64.43	4,975.0	311.8	701.5	-263.0	4.41	-2.68	
5,136.0	12.26	95.61	5,067.3	314.4	719.0	-264.5	6.72	2.19	
5,230.0	9.25	134.87	5,159.8	308.1	734.3	-257.1	8.22	-3.20	
5,323.0	12.32	176.87	5,251.3	292.9	740.1	-241.5	8.83	3.30	
5,417.0	18.83	191.87	5,341.8	268.0	737.5	-216.9	8.09	6.93	
5,511.0	26.26	190.51	5,428.6	232.7	730.6	-182.1	7.92	7.90	
5,605.0	35.89	192.46	5,509.0	185.2	720.8	-135.4	10.30	10.24	
5,698.0	40.14	190.55	5,582.2	129.1	709.5	-80.2	4.74	4.57	
5,792.0	50.85	183.44	5,648.1	62.7	701.7	-14.5	12.59	11.39	
5,823.0	55.01	182.76	5,666.8	38.0	700.4	10.1	13.53	13.42	
5,854.0	54.74	183.05	5,684.6	12.7	699.1	35.2	1.16	-0.87	

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Wellbore:	STK	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
5,886.0	56.40	179.82	5,702.7	-13.7	698.4	61.5	9.81	5.19	
5,917.0	58.58	176.60	5,719.3	-39.8	699.3	87.6	11.23	7.03	
5,948.0	59.63	175.23	5,735.3	-66.4	701.2	114.2	5.08	3.39	
5,979.0	62.73	174.19	5,750.2	-93.4	703.7	141.4	10.42	10.00	
6,010.0	66.39	173.09	5,763.5	-121.2	706.8	169.3	12.23	11.81	
6,041.0	69.42	172.50	5,775.2	-149.7	710.4	198.0	9.93	9.77	
6,073.0	70.99	172.79	5,786.0	-179.6	714.2	228.1	4.98	4.91	
6,104.0	72.90	175.91	5,795.6	-208.9	717.1	257.5	11.38	6.16	
6,135.0	76.59	178.20	5,803.8	-238.8	718.7	287.4	13.87	11.90	
6,166.0	77.39	177.58	5,810.8	-268.9	719.8	317.6	3.23	2.58	
6,197.0	78.02	176.79	5,817.4	-299.2	721.3	347.9	3.21	2.03	
6,260.0	79.34	176.38	5,829.7	-360.9	724.9	409.7	2.19	2.10	
6,294.8	80.71	177.30	5,835.8	-395.1	726.8	443.9	4.72	3.93	7" ICP (780' FNL, 1307' FWL)
6,355.0	83.08	178.88	5,844.2	-454.6	728.8	503.5	4.72	3.94	
6,450.0	86.26	179.00	5,853.1	-549.2	730.6	597.9	3.35	3.35	
6,544.0	85.73	179.91	5,859.6	-643.0	731.5	691.5	1.12	-0.56	
6,639.0	89.66	183.26	5,863.5	-737.8	728.8	786.0	5.43	4.14	
6,734.0	91.51	182.80	5,862.5	-832.7	723.8	880.3	2.01	1.95	
6,828.0	91.58	182.26	5,860.0	-926.5	719.7	973.7	0.58	0.07	
6,923.0	92.02	182.15	5,857.0	-1,021.4	716.0	1,068.1	0.48	0.46	
7,018.0	92.13	182.95	5,853.5	-1,116.3	711.8	1,162.4	0.85	0.12	
7,112.0	91.70	180.16	5,850.4	-1,210.2	709.2	1,255.9	3.00	-0.46	
7,207.0	92.06	179.92	5,847.3	-1,305.1	709.2	1,350.6	0.46	0.38	
7,302.0	92.25	179.99	5,843.7	-1,400.1	709.2	1,445.3	0.21	0.20	
7,397.0	91.48	179.48	5,840.6	-1,495.0	709.7	1,540.1	0.97	-0.81	
7,491.0	88.00	179.50	5,841.0	-1,589.0	710.5	1,633.9	3.70	-3.70	
7,586.0	86.70	179.18	5,845.4	-1,683.9	711.6	1,728.7	1.41	-1.37	
7,681.0	89.20	179.29	5,848.8	-1,778.8	712.9	1,823.4	2.63	2.63	
7,775.0	89.23	179.15	5,850.1	-1,872.8	714.2	1,917.3	0.15	0.03	
7,870.0	90.13	179.21	5,850.6	-1,967.8	715.5	2,012.2	0.95	0.95	
7,965.0	90.70	179.25	5,850.0	-2,062.8	716.8	2,107.0	0.60	0.60	
8,059.0	91.14	178.95	5,848.4	-2,156.7	718.3	2,200.9	0.57	0.47	
8,154.0	91.76	179.11	5,846.0	-2,251.7	719.9	2,295.7	0.67	0.65	
8,249.0	92.14	178.89	5,842.8	-2,346.6	721.5	2,390.5	0.46	0.40	
8,344.0	91.05	180.79	5,840.2	-2,441.6	721.8	2,485.3	2.31	-1.15	
8,438.0	90.97	181.18	5,838.5	-2,535.5	720.2	2,578.9	0.42	-0.09	
8,533.0	91.23	181.18	5,836.7	-2,630.5	718.2	2,673.5	0.27	0.27	
8,628.0	89.67	182.01	5,835.9	-2,725.5	715.6	2,768.1	1.86	-1.64	
8,722.0	88.78	181.89	5,837.2	-2,819.4	712.4	2,861.6	0.96	-0.95	
8,817.0	88.06	181.68	5,839.8	-2,914.3	709.4	2,956.1	0.79	-0.76	
8,912.0	90.61	182.73	5,840.9	-3,009.2	705.8	3,050.5	2.90	2.68	
9,006.0	90.37	182.31	5,840.1	-3,103.1	701.6	3,143.9	0.51	-0.26	
9,101.0	92.60	181.81	5,837.7	-3,198.0	698.2	3,238.3	2.41	2.35	
9,196.0	91.09	180.91	5,834.6	-3,293.0	696.0	3,332.9	1.85	-1.59	
9,291.0	91.38	180.57	5,832.6	-3,387.9	694.7	3,427.6	0.47	0.31	
9,385.0	88.43	179.14	5,832.7	-3,481.9	695.0	3,521.3	3.49	-3.14	
9,480.0	88.25	179.05	5,835.5	-3,576.9	696.5	3,616.2	0.21	-0.19	
9,575.0	88.61	179.17	5,838.1	-3,671.8	698.0	3,711.0	0.40	0.38	
9,669.0	88.32	178.78	5,840.6	-3,765.8	699.6	3,804.8	0.52	-0.31	
9,764.0	89.77	179.46	5,842.2	-3,860.7	701.1	3,899.7	1.69	1.53	
9,859.0	89.73	178.97	5,842.6	-3,955.7	702.4	3,994.5	0.52	-0.04	
9,953.0	90.77	180.50	5,842.2	-4,049.7	702.8	4,088.3	1.97	1.11	
10,048.0	90.33	179.39	5,841.3	-4,144.7	702.9	4,183.1	1.26	-0.46	

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10,143.0	89.57	177.63	5,841.3	-4,239.7	705.4	4,278.0	2.02	-0.80	
10,238.0	88.75	176.86	5,842.7	-4,334.6	710.0	4,373.0	1.18	-0.86	
10,332.0	88.35	177.65	5,845.1	-4,428.4	714.5	4,467.0	0.94	-0.43	
10,427.0	90.08	179.27	5,846.4	-4,523.4	717.0	4,561.9	2.49	1.82	
10,522.0	89.88	179.47	5,846.5	-4,618.4	718.1	4,656.7	0.30	-0.21	
10,616.0	90.01	179.11	5,846.5	-4,712.4	719.2	4,750.5	0.41	0.14	
10,711.0	90.11	178.90	5,846.4	-4,807.3	720.9	4,845.4	0.24	0.11	
10,806.0	90.55	179.70	5,845.9	-4,902.3	722.0	4,940.3	0.96	0.46	
10,900.0	90.22	178.85	5,845.3	-4,996.3	723.2	5,034.1	0.97	-0.35	
10,995.0	89.80	179.14	5,845.2	-5,091.3	724.9	5,129.0	0.54	-0.44	
11,089.0	89.96	178.79	5,845.4	-5,185.3	726.6	5,222.9	0.41	0.17	
11,183.0	89.78	178.77	5,845.7	-5,279.3	728.6	5,316.8	0.19	-0.19	
11,276.0	87.71	181.68	5,847.7	-5,372.2	728.2	5,409.5	3.84	-2.23	
11,370.0	88.57	182.63	5,850.7	-5,466.1	724.7	5,502.9	1.36	0.91	
11,463.0	89.93	183.13	5,852.0	-5,559.0	720.0	5,595.2	1.56	1.46	
11,556.0	93.35	182.95	5,849.3	-5,651.8	715.1	5,687.5	3.68	3.68	
11,650.0	91.00	181.73	5,845.7	-5,745.6	711.3	5,780.9	2.82	-2.50	
11,743.0	91.03	181.62	5,844.1	-5,838.6	708.5	5,873.4	0.12	0.03	
11,837.0	90.49	181.38	5,842.8	-5,932.6	706.1	5,967.0	0.63	-0.57	
11,930.0	90.42	180.66	5,842.1	-6,025.5	704.4	6,059.6	0.78	-0.08	
12,024.0	90.05	179.72	5,841.7	-6,119.5	704.1	6,153.4	1.07	-0.39	
12,117.0	90.11	179.50	5,841.6	-6,212.5	704.7	6,246.2	0.25	0.06	
12,211.0	90.29	179.44	5,841.3	-6,306.5	705.6	6,340.0	0.20	0.19	
12,304.0	89.59	180.98	5,841.4	-6,399.5	705.3	6,432.8	1.82	-0.75	
12,398.0	89.92	180.66	5,841.8	-6,493.5	703.9	6,526.5	0.49	0.35	
12,491.0	89.96	180.52	5,841.9	-6,586.5	703.0	6,619.2	0.16	0.04	
12,584.0	89.24	179.89	5,842.5	-6,679.5	702.6	6,711.9	1.03	-0.77	
12,678.0	90.41	179.11	5,842.8	-6,773.5	703.5	6,805.8	1.50	1.24	
12,772.0	89.88	177.18	5,842.6	-6,867.4	706.5	6,899.7	2.13	-0.56	
12,865.0	89.59	178.23	5,843.0	-6,960.4	710.2	6,992.7	1.17	-0.31	
12,959.0	88.52	179.83	5,844.5	-7,054.3	711.8	7,086.5	2.05	-1.14	
13,053.0	88.27	179.52	5,847.2	-7,148.3	712.3	7,180.3	0.42	-0.27	
13,146.0	89.44	181.82	5,849.0	-7,241.3	711.3	7,273.0	2.77	1.26	
13,240.0	88.21	181.19	5,851.0	-7,335.2	708.8	7,366.5	1.47	-1.31	
13,334.0	90.01	183.00	5,852.4	-7,429.1	705.4	7,460.0	2.72	1.91	
13,427.0	93.07	185.93	5,849.9	-7,521.8	698.1	7,551.9	4.55	3.29	
13,521.0	92.77	184.92	5,845.1	-7,615.2	689.2	7,644.6	1.12	-0.32	
13,614.0	91.52	182.91	5,841.6	-7,708.0	682.9	7,736.6	2.54	-1.34	
13,708.0	91.46	183.88	5,839.2	-7,801.8	677.3	7,829.8	1.03	-0.06	
13,802.0	91.20	182.70	5,837.0	-7,895.6	671.9	7,923.1	1.29	-0.28	
13,895.0	92.32	178.83	5,834.2	-7,988.5	670.7	8,015.7	4.33	1.20	
13,989.0	92.77	178.24	5,830.0	-8,082.4	673.1	8,109.5	0.79	0.48	
14,082.0	93.72	178.59	5,824.7	-8,175.2	675.7	8,202.3	1.09	1.02	
14,176.0	91.89	179.85	5,820.1	-8,269.1	676.9	8,296.0	2.36	-1.95	
14,270.0	89.86	180.69	5,818.7	-8,363.0	676.5	8,389.7	2.34	-2.16	
14,363.0	89.74	180.50	5,819.0	-8,456.0	675.5	8,482.5	0.24	-0.13	
14,457.0	89.50	179.70	5,819.6	-8,550.0	675.4	8,576.2	0.89	-0.26	
14,550.0	89.58	179.13	5,820.4	-8,643.0	676.3	8,669.1	0.62	0.09	
14,633.0	89.53	178.80	5,821.0	-8,726.0	677.8	8,751.9	0.40	-0.06	
14,727.0	90.39	178.78	5,821.1	-8,820.0	679.8	8,845.8	0.92	0.91	
14,821.0	89.05	179.48	5,821.5	-8,914.0	681.2	8,939.7	1.61	-1.43	
14,914.0	89.27	179.60	5,822.9	-9,007.0	682.0	9,032.5	0.27	0.24	
15,008.0	90.18	179.00	5,823.4	-9,101.0	683.1	9,126.4	1.16	0.97	

Survey Report

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well HORSETAIL 08D-1704
Project:	Weld County, CO	TVD Reference:	18.5' KB @ 4976.7usft (UNIT 406)
Site:	S8-T10N-R57W	MD Reference:	18.5' KB @ 4976.7usft (UNIT 406)
Well:	HORSETAIL 08D-1704	North Reference:	True
Wellbore:	STK	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
15,101.0	90.66	178.98	5,822.7	-9,193.9	684.8	9,219.2	0.52	0.52	
15,195.0	89.62	178.86	5,822.5	-9,287.9	686.5	9,313.1	1.11	-1.11	
15,288.0	90.24	179.15	5,822.6	-9,380.9	688.2	9,406.0	0.74	0.67	
15,382.0	91.10	179.39	5,821.5	-9,474.9	689.4	9,499.9	0.95	0.91	
15,476.0	90.06	180.10	5,820.5	-9,568.9	689.8	9,593.7	1.34	-1.11	
15,570.0	90.48	179.99	5,820.1	-9,662.9	689.7	9,687.4	0.46	0.45	
15,664.0	89.96	179.74	5,819.7	-9,756.9	689.9	9,781.2	0.61	-0.55	
15,757.0	90.16	179.17	5,819.6	-9,849.9	690.8	9,874.1	0.65	0.22	
15,851.0	89.93	178.88	5,819.5	-9,943.9	692.4	9,967.9	0.39	-0.24	
15,944.0	90.60	179.82	5,819.1	-10,036.9	693.5	10,060.8	1.24	0.72	
15,990.0	90.16	178.18	5,818.8	-10,082.8	694.3	10,106.7	3.69	-0.96	LAST STK SURVEY @ 15,990' MD (167' FSL, 1139 FWL)
16,045.0	90.16	178.18	5,818.7	-10,137.8	696.0	10,161.7	0.00	0.00	PTB @ 16,045' MD (112' FSL, 1139 FWL)

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
HORSETAIL 08D-1704 F	0.00	0.00	5,835.0	-10,148.0	711.1	1,550,524.50	3,475,759.11	40.831908	-103.780711
- hit/miss target									
- Shape									
- actual wellpath misses target center by 24.4usft at 16045.0usft MD (5818.7 TVD, -10137.8 N, 696.0 E)									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
6,294.8	5,835.8	7" ICP (780' FNL, 1307' FWL)	0	0	

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
15,990.0	5,818.8	-10,082.8	694.3	LAST STK SURVEY @ 15,990' MD (167' FSL, 1139 FWL)
16,045.0	5,818.7	-10,137.8	696.0	PTB @ 16,045' MD (112' FSL, 1139 FWL)

Checked By: _____ Approved By: _____ Date: _____