

PETROLEUM DEVELOPMENT CORP Weld County CO

Well Name: **Chesnut 28M-423**

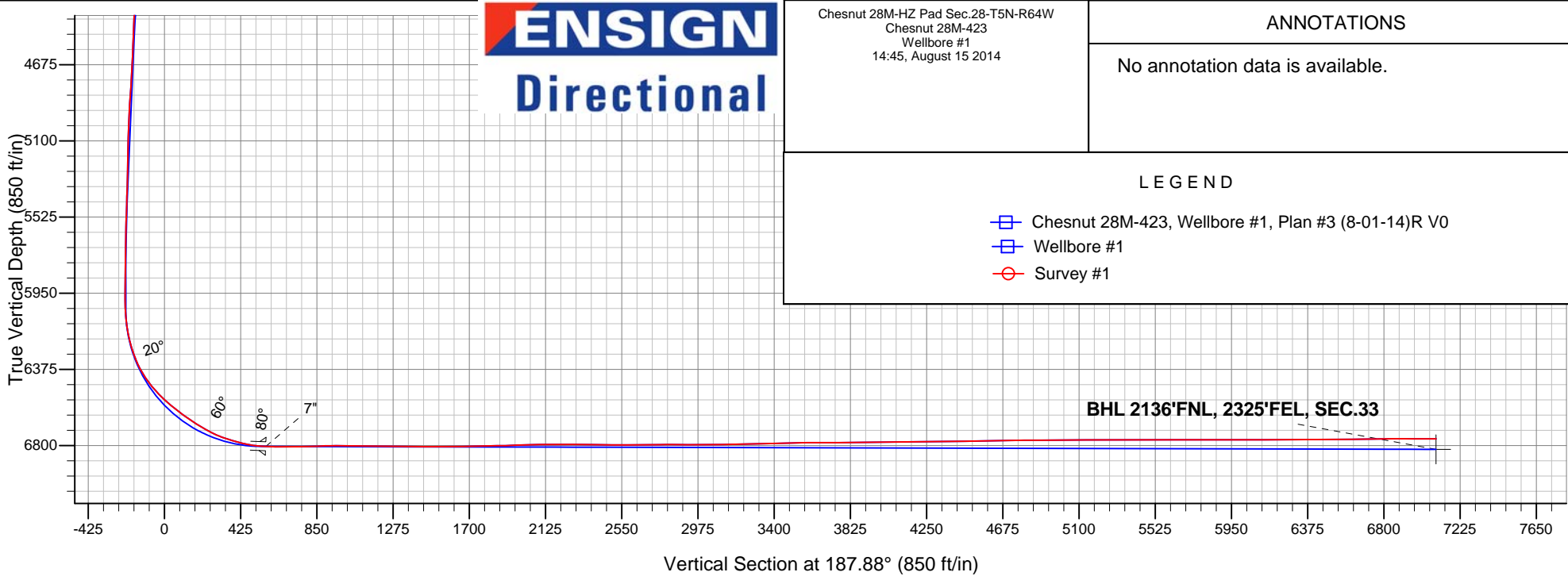
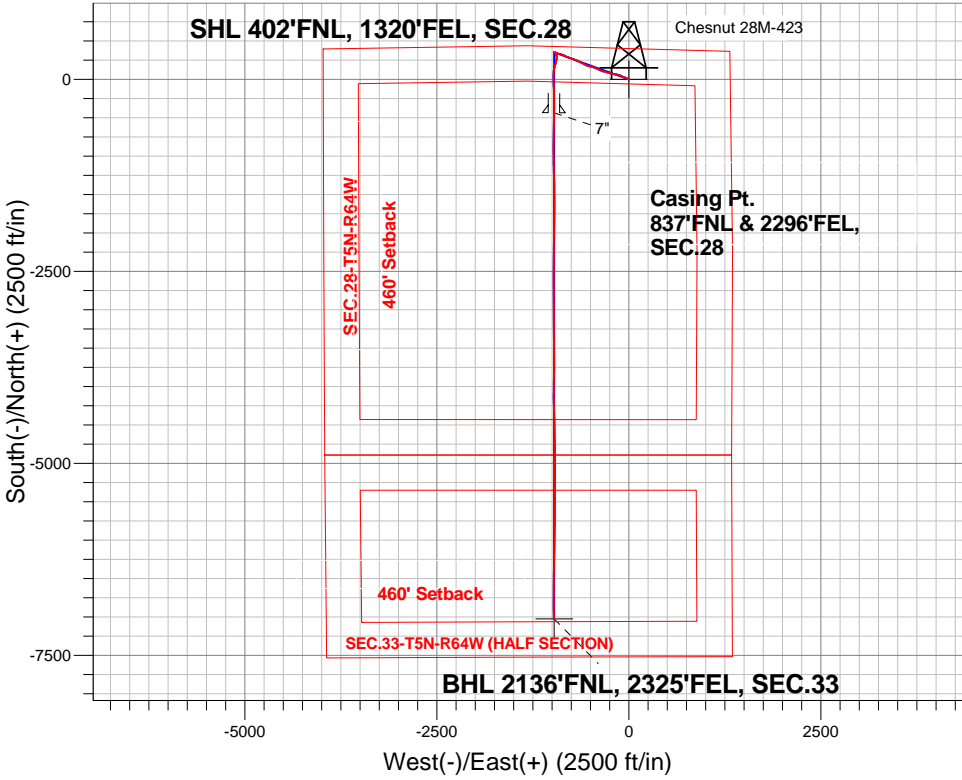
Surface Location: Chesnut 28M-HZ Pad Sec.28-T5N-R64W  
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4620.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1381399.01	3264674.47	40.376450	-104.549990	
Ensign 121 RKB - 13.5' WELL @ 4633.5ft (Ensign 121 RKB - 13.5')						

FINAL SURVEY

Projected Bottom Hole Location  
13946'MD 6763'TVD 7024'S & 977'W of SHL  
90.1 degree Incl @ 178.5 degree AZM





# **PETROLEUM DEVELOPMENT CORP Weld County CO**

**SEC.28-T5N-R64W**

**Chesnut 28M-HZ Pad Sec.28-T5N-R64W**

**Chesnut 28M-423**

**Wellbore #1**

**Survey: Survey #1**

## **Standard Survey Report**

**15 August, 2014**

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Chesnut 28M-423
<b>Project:</b>	SEC.28-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4633.5ft (Ensign 121 RKB - 13.5')
<b>Site:</b>	Chesnut 28M-HZ Pad Sec.28-T5N-R64W	<b>MD Reference:</b>	WELL @ 4633.5ft (Ensign 121 RKB - 13.5')
<b>Well:</b>	Chesnut 28M-423	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

<b>Project</b>	SEC.28-T5N-R64W, Weld County, Colorado		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

Site	Chesnut 28M-HZ Pad Sec.28-T5N-R64W				
Site Position:		Northing:	1,381,420.67 ft	Latitude:	40.376510
From:	Lat/Long	Easting:	3,264,654.74 ft	Longitude:	-104.550060
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.61 °

Well	Chesnut 28M-423					
Well Position	+N-S	0.0 ft	Northing:	1,381,399.01 ft	Latitude:	40.376450
	+E-W	0.0 ft	Easting:	3,264,674.47 ft	Longitude:	-104.549990
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,620.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	8/1/2014	8.32	66.96	52,813

<b>Design</b>	Wellbore #1				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	187.88	

<b>Survey Program</b>	<b>Date</b>	8/15/2014			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
156.0	13,946.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
1.0	0.00	84.80	1.0	0.0	0.0	0.0	0.26	0.26	0.00	
<b>SHL 402'FNL, 1320'FEL, SEC.28</b>										
156.0	0.40	84.80	156.0	0.0	0.5	-0.1	0.26	0.26	0.00	
248.0	0.10	355.10	248.0	0.2	0.9	-0.3	0.45	-0.33	-97.50	
340.0	0.60	85.00	340.0	0.3	1.3	-0.5	0.66	0.54	97.72	
430.0	1.40	305.70	430.0	1.0	0.9	-1.1	2.11	0.89	-154.78	
521.0	3.30	295.40	520.9	2.7	-2.4	-2.4	2.13	2.09	-11.32	
612.0	3.90	289.70	611.7	4.9	-7.6	-3.8	0.77	0.66	-6.26	
702.0	5.50	294.80	701.4	7.7	-14.4	-5.7	1.84	1.78	5.67	
794.0	8.00	295.00	792.8	12.3	-24.2	-8.9	2.72	2.72	0.22	
888.0	9.80	290.30	885.6	17.8	-37.7	-12.5	2.06	1.91	-5.00	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Chesnut 28M-423
<b>Project:</b>	SEC.28-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4633.5ft (Ensign 121 RKB - 13.5')
<b>Site:</b>	Chesnut 28M-HZ Pad Sec.28-T5N-R64W	<b>MD Reference:</b>	WELL @ 4633.5ft (Ensign 121 RKB - 13.5')
<b>Well:</b>	Chesnut 28M-423	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,000.0	11.00	289.60	995.8	24.7	-56.7	-16.7	1.08	1.07	-0.63
1,096.0	13.50	296.20	1,089.6	32.8	-75.4	-22.1	2.98	2.60	6.88
1,186.0	15.50	295.90	1,176.7	42.6	-95.6	-29.1	2.22	2.22	-0.33
1,277.0	16.20	287.30	1,264.3	51.7	-118.7	-35.0	2.69	0.77	-9.45
1,368.0	15.70	286.20	1,351.8	58.9	-142.6	-38.8	0.64	-0.55	-1.21
1,459.0	12.90	281.10	1,440.0	64.3	-164.4	-41.2	3.37	-3.08	-5.60
1,550.0	12.80	279.20	1,528.7	67.9	-184.3	-42.0	0.48	-0.11	-2.09
1,641.0	12.10	281.30	1,617.5	71.4	-203.6	-42.8	0.92	-0.77	2.31
1,731.0	12.10	281.80	1,705.5	75.2	-222.1	-44.0	0.12	0.00	0.56
1,823.0	11.60	285.70	1,795.6	79.6	-240.5	-45.9	1.03	-0.54	4.24
1,914.0	11.50	285.40	1,884.7	84.5	-258.0	-48.3	0.13	-0.11	-0.33
2,005.0	10.80	283.20	1,974.0	88.9	-275.1	-50.3	0.90	-0.77	-2.42
2,096.0	11.30	288.70	2,063.3	93.7	-291.8	-52.8	1.28	0.55	6.04
2,187.0	11.70	286.90	2,152.5	99.2	-309.1	-55.9	0.59	0.44	-1.98
2,278.0	12.00	281.50	2,241.6	103.8	-327.2	-57.9	1.26	0.33	-5.93
2,370.0	12.00	288.90	2,331.6	108.8	-345.6	-60.4	1.67	0.00	8.04
2,461.0	11.80	294.30	2,420.6	115.7	-363.0	-64.8	1.24	-0.22	5.93
2,552.0	11.90	296.60	2,509.7	123.7	-379.9	-70.4	0.53	0.11	2.53
2,644.0	11.90	294.50	2,599.7	131.9	-397.0	-76.2	0.47	0.00	-2.28
2,735.0	11.60	289.20	2,688.8	138.8	-414.2	-80.7	1.23	-0.33	-5.82
2,827.0	12.70	294.30	2,778.7	146.0	-432.2	-85.3	1.67	1.20	5.54
2,917.0	12.10	290.80	2,866.6	153.4	-450.0	-90.2	1.07	-0.67	-3.89
3,008.0	13.40	292.20	2,955.4	160.8	-468.7	-95.0	1.47	1.43	1.54
3,100.0	13.30	278.10	3,044.9	166.3	-489.0	-97.7	3.53	-0.11	-15.33
3,192.0	12.40	288.00	3,134.6	170.9	-508.9	-99.4	2.58	-0.98	10.76
3,284.0	12.00	282.40	3,224.6	176.0	-527.6	-101.9	1.36	-0.43	-6.09
3,375.0	11.90	290.80	3,313.6	181.3	-545.6	-104.8	1.91	-0.11	9.23
3,466.0	11.30	300.60	3,402.8	189.2	-562.1	-110.3	2.26	-0.66	10.77
3,561.0	11.60	295.00	3,495.9	198.0	-578.8	-116.7	1.21	0.32	-5.89
3,657.0	11.80	292.60	3,589.9	205.8	-596.6	-122.0	0.55	0.21	-2.50
3,752.0	12.90	298.70	3,682.7	214.7	-614.8	-128.3	1.79	1.16	6.42
3,847.0	13.30	295.40	3,775.2	224.4	-634.0	-135.3	0.89	0.42	-3.47
3,942.0	13.10	291.90	3,867.7	233.1	-653.9	-141.2	0.87	-0.21	-3.68
4,037.0	12.70	294.10	3,960.3	241.4	-673.4	-146.8	0.67	-0.42	2.32
4,133.0	12.50	291.50	4,054.0	249.5	-692.7	-152.2	0.63	-0.21	-2.71
4,228.0	11.40	293.40	4,146.9	257.0	-710.9	-157.1	1.23	-1.16	2.00
4,323.0	11.20	292.90	4,240.1	264.3	-728.0	-162.0	0.23	-0.21	-0.53
4,418.0	12.00	289.60	4,333.1	271.2	-745.8	-166.4	1.09	0.84	-3.47
4,514.0	11.20	285.70	4,427.2	277.1	-764.2	-169.7	1.17	-0.83	-4.06
4,609.0	10.50	290.30	4,520.5	282.6	-781.2	-172.8	1.17	-0.74	4.84
4,704.0	11.60	290.60	4,613.7	289.0	-798.2	-176.8	1.16	1.16	0.32
4,799.0	10.80	295.40	4,706.9	296.2	-815.2	-181.5	1.29	-0.84	5.05
4,895.0	11.20	296.20	4,801.2	304.1	-831.7	-187.2	0.45	0.42	0.83
4,990.0	11.90	296.20	4,894.2	312.5	-848.8	-193.2	0.74	0.74	0.00
5,085.0	11.40	289.90	4,987.3	320.1	-866.4	-198.2	1.44	-0.53	-6.63
5,180.0	11.30	287.10	5,080.4	326.0	-884.1	-201.6	0.59	-0.11	-2.95
5,275.0	10.30	281.00	5,173.7	330.3	-901.3	-203.6	1.60	-1.05	-6.42
5,371.0	9.70	283.40	5,268.3	333.9	-917.6	-204.8	0.76	-0.63	2.50
5,466.0	9.60	289.00	5,361.9	338.3	-932.9	-207.1	0.99	-0.11	5.89
5,561.0	8.20	289.20	5,455.8	343.1	-946.8	-210.0	1.47	-1.47	0.21
5,656.0	6.90	294.50	5,550.0	347.7	-958.4	-212.9	1.55	-1.37	5.58
5,751.0	4.80	292.40	5,644.5	351.6	-967.3	-215.6	2.22	-2.21	-2.21
5,847.0	3.40	281.00	5,740.2	353.6	-973.8	-216.7	1.68	-1.46	-11.88
5,942.0	1.10	345.60	5,835.1	355.1	-976.8	-217.7	3.25	-2.42	68.00

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<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
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6,037.0	1.20	321.20	5,930.1	356.7	-977.6	-219.3	0.52	0.11	-25.68
6,132.0	5.90	120.80	6,025.0	355.0	-974.0	-218.0	7.41	4.95	168.00
6,227.0	10.40	135.60	6,119.0	346.4	-963.8	-210.9	5.19	4.74	15.58
6,322.0	17.00	152.50	6,211.3	327.9	-951.4	-194.3	8.06	6.95	17.79
6,417.0	20.80	171.30	6,301.2	298.9	-942.4	-166.8	7.51	4.00	19.79
6,513.0	30.00	189.70	6,388.0	258.2	-943.9	-126.3	12.53	9.58	19.17
6,608.0	39.50	197.50	6,466.0	205.8	-957.0	-72.6	11.02	10.00	8.21
6,703.0	46.30	192.50	6,535.6	143.4	-973.6	-8.5	8.00	7.16	-5.26
6,798.0	52.50	182.30	6,597.5	72.0	-982.5	63.4	10.43	6.53	-10.74
6,845.0	54.40	180.40	6,625.5	34.3	-983.4	100.9	5.19	4.04	-4.04
6,893.0	55.50	179.00	6,653.0	-5.0	-983.2	139.8	3.31	2.29	-2.92
6,940.0	57.70	177.40	6,678.9	-44.2	-982.0	178.5	5.48	4.68	-3.40
6,989.0	60.40	176.50	6,704.1	-86.2	-979.7	219.7	5.73	5.51	-1.84
7,036.0	63.10	176.70	6,726.3	-127.5	-977.3	260.3	5.76	5.74	0.43
7,084.0	68.00	178.10	6,746.2	-171.1	-975.3	303.3	10.55	10.21	2.92
7,131.0	72.60	179.00	6,762.0	-215.3	-974.2	346.9	9.95	9.79	1.91
7,179.0	73.90	179.50	6,775.9	-261.3	-973.6	392.4	2.89	2.71	1.04
7,226.0	76.30	181.10	6,788.0	-306.7	-973.8	437.4	6.07	5.11	3.40
7,275.0	80.90	181.10	6,797.6	-354.7	-974.8	485.1	9.39	9.39	0.00
7,331.0	86.80	180.40	6,803.6	-410.4	-975.5	540.3	10.61	10.54	-1.25
7,356.0	87.72	180.40	6,804.8	-435.3	-975.7	565.1	3.66	3.66	0.00
7"									
7,402.0	89.40	180.40	6,806.0	-481.3	-976.0	610.7	3.66	3.66	0.00
7,465.0	89.70	180.60	6,806.5	-544.3	-976.5	673.1	0.57	0.48	0.32
7,561.0	91.00	181.10	6,805.9	-640.3	-977.9	768.4	1.45	1.35	0.52
7,656.0	92.30	181.30	6,803.2	-735.2	-979.9	862.7	1.38	1.37	0.21
7,751.0	90.10	181.10	6,801.2	-830.2	-981.9	957.0	2.33	-2.32	-0.21
7,842.0	89.00	179.50	6,801.9	-921.2	-982.4	1,047.2	2.13	-1.21	-1.76
7,933.0	90.00	179.90	6,802.7	-1,012.2	-981.9	1,137.3	1.18	1.10	0.44
8,024.0	89.20	177.40	6,803.3	-1,103.1	-979.8	1,227.1	2.88	-0.88	-2.75
8,115.0	88.80	179.20	6,804.9	-1,194.1	-977.1	1,316.8	2.03	-0.44	1.98
8,206.0	89.50	179.20	6,806.3	-1,285.1	-975.8	1,406.8	0.77	0.77	0.00
8,296.0	90.30	179.70	6,806.4	-1,375.1	-974.9	1,495.8	1.05	0.89	0.56
8,388.0	90.70	179.40	6,805.6	-1,467.1	-974.2	1,586.8	0.54	0.43	-0.33
8,478.0	91.30	179.20	6,804.0	-1,557.0	-973.1	1,675.8	0.70	0.67	-0.22
8,570.0	90.70	179.20	6,802.4	-1,649.0	-971.8	1,766.7	0.65	-0.65	0.00
8,661.0	90.80	180.10	6,801.2	-1,740.0	-971.3	1,856.8	1.00	0.11	0.99
8,752.0	91.80	179.90	6,799.2	-1,831.0	-971.3	1,946.9	1.12	1.10	-0.22
8,849.0	92.10	181.30	6,795.9	-1,927.9	-972.3	2,043.1	1.48	0.31	1.44
8,940.0	90.80	181.80	6,793.6	-2,018.9	-974.8	2,133.5	1.53	-1.43	0.55
9,031.0	88.80	181.30	6,793.9	-2,109.8	-977.2	2,223.9	2.27	-2.20	-0.55
9,122.0	90.60	181.10	6,794.4	-2,200.8	-979.1	2,314.3	1.99	1.98	-0.22
9,213.0	88.80	180.90	6,794.8	-2,291.8	-980.7	2,404.6	1.99	-1.98	-0.22
9,304.0	89.40	180.10	6,796.3	-2,382.8	-981.5	2,494.9	1.10	0.66	-0.88
9,395.0	90.00	179.20	6,796.7	-2,473.7	-981.0	2,584.9	1.19	0.66	-0.99
9,487.0	90.90	180.80	6,796.0	-2,565.7	-981.0	2,676.0	2.00	0.98	1.74
9,578.0	91.00	180.20	6,794.5	-2,656.7	-981.7	2,766.3	0.67	0.11	-0.66
9,669.0	89.10	179.20	6,794.4	-2,747.7	-981.3	2,856.3	2.36	-2.09	-1.10
9,761.0	90.30	179.50	6,794.9	-2,839.7	-980.2	2,947.3	1.34	1.30	0.33
9,854.0	90.10	179.50	6,794.6	-2,932.7	-979.4	3,039.3	0.22	-0.22	0.00
9,944.0	90.70	179.70	6,794.0	-3,022.7	-978.8	3,128.4	0.70	0.67	0.22
10,034.0	91.00	179.70	6,792.6	-3,112.7	-978.3	3,217.5	0.33	0.33	0.00
10,126.0	91.70	179.70	6,790.5	-3,204.7	-977.8	3,308.5	0.76	0.76	0.00

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<b>Project:</b>	SEC.28-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4633.5ft (Ensign 121 RKB - 13.5')
<b>Site:</b>	Chesnut 28M-HZ Pad Sec.28-T5N-R64W	<b>MD Reference:</b>	WELL @ 4633.5ft (Ensign 121 RKB - 13.5')
<b>Well:</b>	Chesnut 28M-423	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,217.0	91.50	180.20	6,787.9	-3,295.6	-977.8	3,398.6	0.59	-0.22	0.55
10,309.0	91.50	178.80	6,785.5	-3,387.6	-977.0	3,489.6	1.52	0.00	-1.52
10,401.0	90.10	179.00	6,784.2	-3,479.6	-975.2	3,580.4	1.54	-1.52	0.22
10,492.0	90.10	179.50	6,784.1	-3,570.6	-974.0	3,670.4	0.55	0.00	0.55
10,583.0	90.50	179.70	6,783.6	-3,661.5	-973.4	3,760.5	0.49	0.44	0.22
10,678.0	90.10	180.90	6,783.1	-3,756.5	-973.9	3,854.6	1.33	-0.42	1.26
10,772.0	91.20	181.30	6,782.0	-3,850.5	-975.7	3,948.0	1.25	1.17	0.43
10,868.0	91.20	180.90	6,780.0	-3,946.5	-977.5	4,043.3	0.42	0.00	-0.42
10,963.0	90.70	180.80	6,778.4	-4,041.5	-978.9	4,137.5	0.54	-0.53	-0.11
11,058.0	90.30	180.20	6,777.6	-4,136.4	-979.7	4,231.7	0.76	-0.42	-0.63
11,153.0	90.00	179.90	6,777.4	-4,231.4	-979.8	4,325.9	0.45	-0.32	-0.32
11,248.0	90.70	177.90	6,776.8	-4,326.4	-978.0	4,419.7	2.23	0.74	-2.11
11,344.0	91.30	177.10	6,775.1	-4,422.3	-973.8	4,514.1	1.04	0.63	-0.83
11,439.0	91.00	178.30	6,773.2	-4,517.2	-970.0	4,607.6	1.30	-0.32	1.26
11,534.0	90.70	178.50	6,771.8	-4,612.2	-967.4	4,701.3	0.38	-0.32	0.21
11,629.0	90.90	178.80	6,770.5	-4,707.1	-965.1	4,795.0	0.38	0.21	0.32
11,724.0	89.90	180.40	6,769.8	-4,802.1	-964.5	4,889.0	1.99	-1.05	1.68
11,819.0	90.70	180.20	6,769.3	-4,897.1	-964.9	4,983.2	0.87	0.84	-0.21
11,915.0	90.30	181.10	6,768.5	-4,993.1	-966.0	5,078.4	1.03	-0.42	0.94
12,010.0	89.70	180.20	6,768.5	-5,088.1	-967.1	5,172.7	1.14	-0.63	-0.95
12,105.0	90.10	179.90	6,768.6	-5,183.1	-967.2	5,266.8	0.53	0.42	-0.32
12,200.0	90.90	179.70	6,767.8	-5,278.1	-966.9	5,360.8	0.87	0.84	-0.21
12,295.0	89.50	179.50	6,767.5	-5,373.1	-966.2	5,454.8	1.49	-1.47	-0.21
12,390.0	90.00	179.20	6,767.9	-5,468.1	-965.1	5,548.8	0.61	0.53	-0.32
12,486.0	90.10	180.20	6,767.8	-5,564.1	-964.6	5,643.8	1.05	0.10	1.04
12,581.0	89.40	180.90	6,768.2	-5,659.1	-965.5	5,738.0	1.04	-0.74	0.74
12,676.0	90.70	180.90	6,768.1	-5,754.1	-967.0	5,832.3	1.37	1.37	0.00
12,771.0	90.00	182.00	6,767.6	-5,849.0	-969.4	5,926.7	1.37	-0.74	1.16
12,866.0	90.20	180.80	6,767.4	-5,944.0	-971.8	6,021.1	1.28	0.21	-1.26
12,961.0	89.50	180.80	6,767.6	-6,039.0	-973.1	6,115.4	0.74	-0.74	0.00
13,057.0	90.00	179.90	6,768.1	-6,135.0	-973.7	6,210.6	1.07	0.52	-0.94
13,152.0	90.70	180.90	6,767.5	-6,230.0	-974.3	6,304.7	1.28	0.74	1.05
13,247.0	90.70	180.60	6,766.3	-6,325.0	-975.6	6,399.0	0.32	0.00	-0.32
13,342.0	90.40	181.10	6,765.4	-6,419.9	-977.0	6,493.3	0.61	-0.32	0.53
13,437.0	89.50	180.40	6,765.5	-6,514.9	-978.2	6,587.5	1.20	-0.95	-0.74
13,533.0	91.60	180.60	6,764.6	-6,610.9	-979.1	6,682.7	2.20	2.19	0.21
13,627.0	91.20	180.40	6,762.3	-6,704.9	-979.9	6,775.9	0.48	-0.43	-0.21
13,723.0	89.90	180.40	6,761.4	-6,800.9	-980.6	6,871.1	1.35	-1.35	0.00
13,818.0	89.10	179.20	6,762.2	-6,895.9	-980.2	6,965.2	1.52	-0.84	-1.26
13,891.0	90.10	178.50	6,762.7	-6,968.9	-978.8	7,037.2	1.67	1.37	-0.96
13,946.0	90.10	178.50	6,762.6	-7,023.8	-977.3	7,091.5	0.00	0.00	0.00

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,356.0	6,804.8	7"	7	7-1/2

Checked By: _____	Approved By: _____	Date: _____
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