

# BONANZA CREEK ENERGY OPERATING

Well Name: **State North Platte P-T-26HNC**

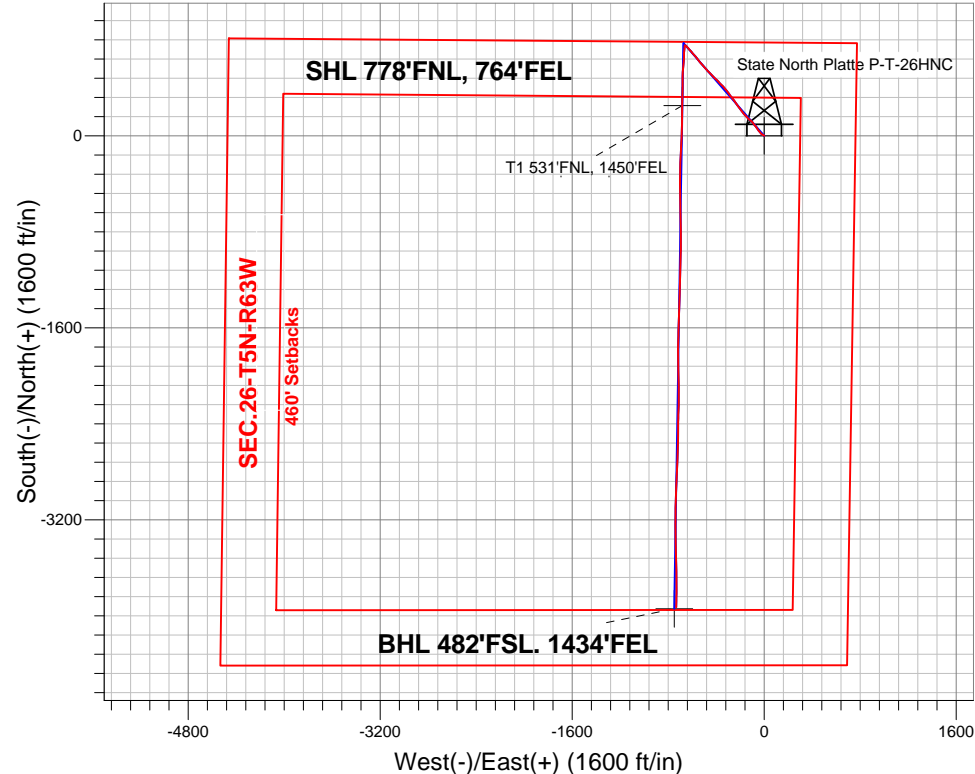
Surface Location: State North Platte 41-26 Pad Sec.26-T5N-R63W  
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4563.0

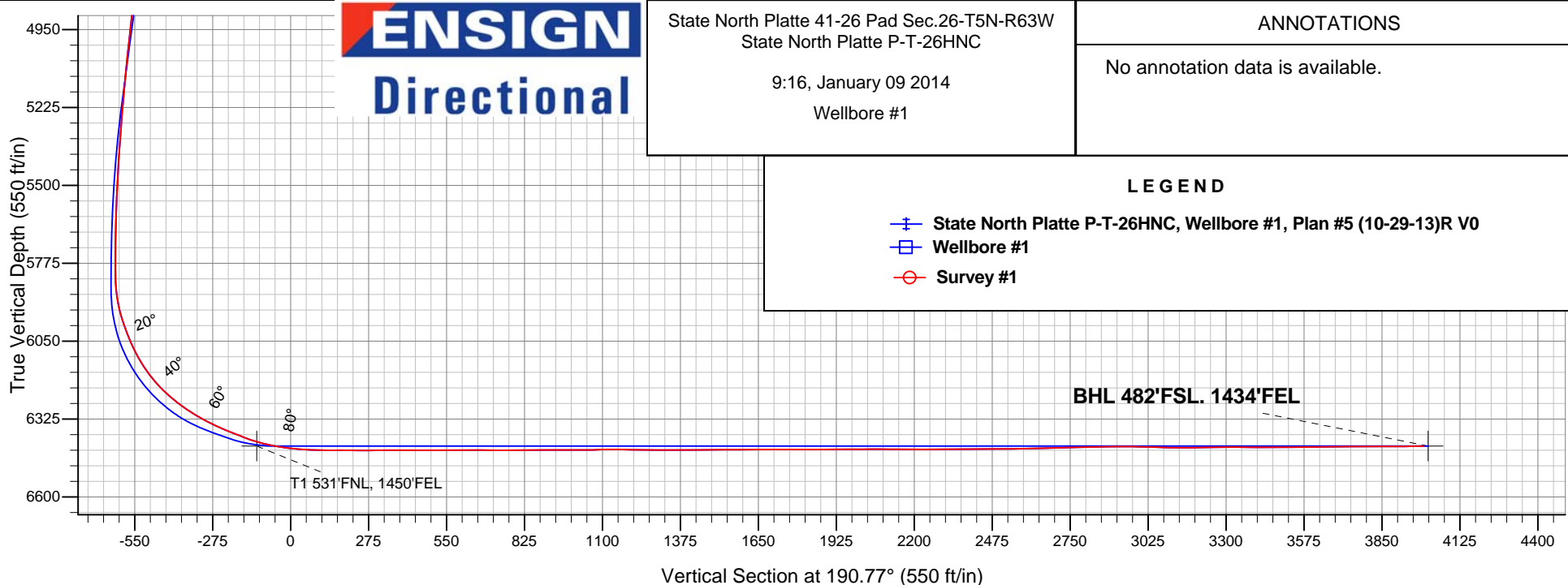
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1381468.27	3307465.38	40.375280	-104.396410	
RKB - 15' WELL @ 4578.0ft (RKB - 15')						

## FINAL SURVEY

Projected Bottom Hole Location  
10941'MD 6420'TVD 3930'S & 734'W of SHL  
91.2 degree Incl @ 182.6 degree AZM



**ENSIGN**  
**Directional**



State North Platte 41-26 Pad Sec.26-T5N-R63W  
State North Platte P-T-26HNC

9:16, January 09 2014

Wellbore #1

### ANNOTATIONS

No annotation data is available.

### LEGEND

- State North Platte P-T-26HNC, Wellbore #1, Plan #5 (10-29-13)R V0
- Wellbore #1
- Survey #1



# **BONANZA CREEK ENERGY OPERATING**

**SEC.26-T5N-R63W**

**State North Platte 41-26 Pad Sec.26-T5N-R63W**

**State North Platte P-T-26HNC**

**Wellbore #1**

**Survey: Survey #1**

## **Standard Survey Report**

**09 January, 2014**

<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well State North Platte P-T-26HNC
<b>Project:</b>	SEC.26-T5N-R63W	<b>TVD Reference:</b>	WELL @ 4578.0ft (RKB - 15')
<b>Site:</b>	State North Platte 41-26 Pad Sec.26-T5N-R63W	<b>MD Reference:</b>	WELL @ 4578.0ft (RKB - 15')
<b>Well:</b>	State North Platte P-T-26HNC	<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.26-T5N-R63W, Weld County, CO		
<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

<b>Site</b>	State North Platte 41-26 Pad Sec.26-T5N-R63W		
<b>Site Position:</b>		<b>Northing:</b>	1,381,428.21 ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,307,465.88 ft
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	40.375170
		<b>Longitude:</b>	-104.396410
		<b>Grid Convergence:</b>	0.71 °

<b>Well</b>	State North Platte P-T-26HNC		
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>
			ft
			<b>Latitude:</b>
			40.375280
			<b>Longitude:</b>
			-104.396410
			<b>Ground Level:</b>
			4,563.0 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	10/29/2013	8.34	67.01	52,909

<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	190.77	

<b>Survey Program</b>	<b>Date</b>	11/8/2013			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
115.0	10,941.0	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	
2.0	0.02	2.20	2.0	0.0	0.0	0.0	1.13	1.13	0.00	
<b>SHL 778'FNL, 764'FEL</b>										
115.0	1.30	2.20	115.0	1.3	0.1	-1.3	1.13	1.13	0.00	
235.0	0.90	312.40	235.0	3.3	-0.6	-3.1	0.83	-0.33	-41.50	
360.0	1.00	300.30	360.0	4.5	-2.3	-4.0	0.18	0.08	-9.68	
425.0	1.10	300.30	424.9	5.1	-3.3	-4.4	0.15	0.15	0.00	
543.0	1.50	265.20	542.9	5.6	-5.8	-4.4	0.74	0.34	-29.75	
665.0	3.70	297.10	664.8	7.2	-10.9	-5.1	2.09	1.80	26.15	
788.0	6.70	308.60	787.3	13.5	-20.0	-9.5	2.57	2.44	9.35	
911.0	9.90	318.60	909.0	25.9	-32.6	-19.4	2.84	2.60	8.13	
1,034.0	12.00	324.70	1,029.7	44.3	-47.0	-34.7	1.95	1.71	4.96	
1,156.0	14.50	324.20	1,148.5	67.0	-63.3	-54.0	2.05	2.05	-0.41	

<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well State North Platte P-T-26HNC
<b>Project:</b>	SEC.26-T5N-R63W	<b>TVD Reference:</b>	WELL @ 4578.0ft (RKB - 15')
<b>Site:</b>	State North Platte 41-26 Pad Sec.26-T5N-R63W	<b>MD Reference:</b>	WELL @ 4578.0ft (RKB - 15')
<b>Well:</b>	State North Platte P-T-26HNC	<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)
1,278.0	16.10	322.60	1,266.1	92.9	-82.5	-75.8	1.36	1.31	-1.31
1,402.0	15.00	318.60	1,385.6	118.5	-103.6	-97.1	1.24	-0.89	-3.23
1,525.0	12.00	310.70	1,505.2	138.8	-123.8	-113.3	2.86	-2.44	-6.42
1,647.0	11.40	307.90	1,624.7	154.5	-142.9	-125.1	0.68	-0.49	-2.30
1,781.0	11.40	320.00	1,756.0	172.8	-161.9	-139.5	1.78	0.00	9.03
1,903.0	12.00	322.60	1,875.5	192.1	-177.3	-155.6	0.65	0.49	2.13
2,026.0	11.50	319.80	1,995.9	211.6	-193.0	-171.8	0.62	-0.41	-2.28
2,149.0	11.50	324.40	2,116.5	231.0	-208.1	-188.0	0.75	0.00	3.74
2,272.0	10.50	328.60	2,237.2	250.5	-221.0	-204.8	1.04	-0.81	3.41
2,394.0	10.50	326.30	2,357.2	269.2	-233.0	-221.0	0.34	0.00	-1.89
2,518.0	11.30	321.40	2,478.9	288.1	-246.9	-236.9	0.99	0.65	-3.95
2,642.0	13.60	322.60	2,600.0	309.2	-263.3	-254.6	1.87	1.85	0.97
2,767.0	14.40	322.80	2,721.3	333.3	-281.6	-274.8	0.64	0.64	0.16
2,892.0	12.40	325.30	2,842.9	356.7	-298.7	-294.6	1.67	-1.60	2.00
3,016.0	12.90	322.30	2,963.9	378.6	-314.7	-313.1	0.67	0.40	-2.42
3,142.0	11.40	316.30	3,087.1	398.7	-331.9	-329.7	1.55	-1.19	-4.76
3,267.0	11.60	317.00	3,209.5	416.8	-349.0	-344.3	0.20	0.16	0.56
3,392.0	11.40	315.60	3,332.0	434.9	-366.2	-358.8	0.27	-0.16	-1.12
3,517.0	13.40	315.80	3,454.1	454.1	-385.0	-374.2	1.60	1.60	0.16
3,640.0	15.70	314.40	3,573.2	475.9	-406.8	-391.6	1.89	1.87	-1.14
3,765.0	15.40	315.60	3,693.6	499.6	-430.5	-410.4	0.35	-0.24	0.96
3,888.0	13.20	315.30	3,812.8	521.3	-451.8	-427.7	1.79	-1.79	-0.24
4,013.0	10.80	315.80	3,935.0	539.8	-470.0	-442.5	1.92	-1.92	0.40
4,138.0	8.90	320.50	4,058.2	555.7	-484.3	-455.4	1.65	-1.52	3.76
4,264.0	10.80	320.40	4,182.3	572.3	-498.1	-469.2	1.51	1.51	-0.08
4,390.0	10.80	317.20	4,306.1	590.1	-513.6	-483.7	0.48	0.00	-2.54
4,514.0	10.80	317.20	4,427.9	607.1	-529.4	-497.5	0.00	0.00	0.00
4,639.0	11.90	322.50	4,550.4	625.9	-545.2	-513.0	1.21	0.88	4.24
4,764.0	12.20	321.90	4,672.7	646.5	-561.2	-530.3	0.26	0.24	-0.48
4,890.0	12.40	318.10	4,795.8	667.1	-578.4	-547.3	0.66	0.16	-3.02
5,015.0	10.50	318.20	4,918.3	685.6	-595.0	-562.3	1.52	-1.52	0.08
5,138.0	9.40	318.60	5,039.5	701.5	-609.1	-575.3	0.90	-0.89	0.33
5,262.0	8.00	319.10	5,162.0	715.6	-621.4	-586.9	1.13	-1.13	0.40
5,387.0	7.10	321.10	5,285.9	728.2	-632.0	-597.3	0.75	-0.72	1.60
5,513.0	6.80	315.10	5,411.0	739.5	-642.2	-606.5	0.62	-0.24	-4.76
5,636.0	4.30	317.50	5,533.4	748.1	-650.4	-613.4	2.04	-2.03	1.95
5,761.0	2.50	302.90	5,658.2	753.0	-655.9	-617.2	1.59	-1.44	-11.68
5,865.0	1.50	278.50	5,762.1	754.4	-659.1	-618.0	1.24	-0.96	-23.46
5,885.0	1.50	280.30	5,782.1	754.5	-659.6	-618.0	0.24	0.00	9.00
5,916.0	1.20	260.10	5,813.1	754.5	-660.3	-617.9	1.80	-0.97	-65.16
5,947.0	2.70	206.10	5,844.1	753.8	-661.0	-617.1	7.16	4.84	-174.19
5,978.0	5.80	193.40	5,875.0	751.6	-661.7	-614.8	10.39	10.00	-40.97
6,008.0	9.50	188.20	5,904.8	747.7	-662.4	-610.8	12.53	12.33	-17.33
6,039.0	13.40	186.40	5,935.1	741.6	-663.1	-604.7	12.63	12.58	-5.81
6,070.0	16.70	185.90	5,965.1	733.6	-664.0	-596.6	10.65	10.65	-1.61
6,101.0	19.60	186.90	5,994.5	724.0	-665.1	-587.0	9.41	9.35	3.23
6,131.0	21.30	186.10	6,022.6	713.6	-666.3	-576.6	5.74	5.67	-2.67
6,160.0	23.10	185.00	6,049.5	702.7	-667.3	-565.7	6.37	6.21	-3.79
6,192.0	25.90	181.70	6,078.6	689.5	-668.1	-552.5	9.74	8.75	-10.31
6,223.0	29.60	179.00	6,106.0	675.0	-668.1	-538.3	12.60	11.94	-8.71
6,254.0	33.00	180.10	6,132.5	658.9	-668.0	-522.5	11.12	10.97	3.55
6,285.0	35.90	184.10	6,158.1	641.4	-668.7	-505.2	11.86	9.35	12.90
6,317.0	39.30	186.10	6,183.4	622.0	-670.4	-485.8	11.29	10.63	6.25
6,348.0	43.20	186.20	6,206.7	601.7	-672.6	-465.4	12.58	12.58	0.32

<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well State North Platte P-T-26HNC
<b>Project:</b>	SEC.26-T5N-R63W	<b>TVD Reference:</b>	WELL @ 4578.0ft (RKB - 15')
<b>Site:</b>	State North Platte 41-26 Pad Sec.26-T5N-R63W	<b>MD Reference:</b>	WELL @ 4578.0ft (RKB - 15')
<b>Well:</b>	State North Platte P-T-26HNC	<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)
6,380.0	46.50	185.20	6,229.4	579.2	-674.9	-442.9	10.55	10.31	-3.13
6,411.0	49.90	184.30	6,250.1	556.2	-676.8	-419.9	11.18	10.97	-2.90
6,442.0	53.00	183.20	6,269.4	532.0	-678.4	-395.9	10.38	10.00	-3.55
6,473.0	56.30	181.80	6,287.3	506.7	-679.5	-370.9	11.26	10.65	-4.52
6,505.0	58.70	180.80	6,304.5	479.7	-680.1	-344.3	7.95	7.50	-3.13
6,536.0	59.80	180.30	6,320.4	453.1	-680.3	-318.0	3.81	3.55	-1.61
6,568.0	62.90	179.90	6,335.7	425.0	-680.4	-290.4	9.75	9.69	-1.25
6,598.0	66.00	180.30	6,348.6	398.0	-680.4	-263.8	10.40	10.33	1.33
6,630.0	68.10	181.80	6,361.1	368.5	-681.0	-234.8	7.85	6.56	4.69
6,661.0	68.40	181.70	6,372.6	339.7	-681.8	-206.4	1.01	0.97	-0.32
6,691.0	68.20	181.00	6,383.7	311.9	-682.5	-178.9	2.27	-0.67	-2.33
6,722.0	70.30	180.60	6,394.7	282.9	-682.9	-150.3	6.88	6.77	-1.29
6,753.0	73.60	179.90	6,404.3	253.4	-683.0	-121.3	10.86	10.65	-2.26
6,759.0	74.20	179.86	6,405.9	247.7	-683.0	-115.7	10.02	10.00	-0.65
T1 531°FNL, 1450°FEL									
6,784.0	76.70	179.70	6,412.2	223.4	-682.9	-91.9	10.02	10.00	-0.64
6,816.0	79.10	180.10	6,418.9	192.2	-682.9	-61.2	7.60	7.50	1.25
6,847.0	80.90	180.40	6,424.3	161.6	-683.0	-31.2	5.88	5.81	0.97
6,878.0	83.40	181.00	6,428.6	130.9	-683.4	-1.0	8.29	8.06	1.94
6,910.0	85.80	181.70	6,431.6	99.1	-684.1	30.5	7.81	7.50	2.19
6,997.0	90.80	183.10	6,434.1	12.2	-687.8	116.5	5.97	5.75	1.61
7,029.0	89.60	182.90	6,434.0	-19.7	-689.4	148.2	3.80	-3.75	-0.63
7,060.0	88.50	182.70	6,434.5	-50.7	-691.0	178.9	3.61	-3.55	-0.65
7,091.0	88.90	182.70	6,435.3	-81.6	-692.4	209.6	1.29	1.29	0.00
7,122.0	89.10	182.50	6,435.8	-112.6	-693.8	240.2	0.91	0.65	-0.65
7,154.0	90.30	182.90	6,436.0	-144.6	-695.3	271.9	3.95	3.75	1.25
7,185.0	91.20	183.10	6,435.6	-175.5	-696.9	302.6	2.97	2.90	0.65
7,216.0	90.80	182.40	6,435.0	-206.5	-698.4	333.3	2.60	-1.29	-2.26
7,248.0	89.40	181.00	6,435.0	-238.5	-699.4	364.9	6.19	-4.38	-4.38
7,279.0	89.90	181.00	6,435.1	-269.5	-699.9	395.5	1.61	1.61	0.00
7,310.0	90.80	181.00	6,435.0	-300.5	-700.5	426.0	2.90	2.90	0.00
7,341.0	90.40	180.60	6,434.6	-331.5	-700.9	456.6	1.82	-1.29	-1.29
7,372.0	89.30	180.10	6,434.7	-362.5	-701.1	487.0	3.90	-3.55	-1.61
7,404.0	89.30	179.70	6,435.1	-394.4	-701.0	518.5	1.25	0.00	-1.25
7,435.0	91.00	180.40	6,435.0	-425.4	-701.1	548.9	5.93	5.48	2.26
7,465.0	91.10	179.70	6,434.5	-455.4	-701.1	578.4	2.36	0.33	-2.33
7,496.0	90.50	179.00	6,434.0	-486.4	-700.7	608.8	2.97	-1.94	-2.26
7,528.0	89.80	178.30	6,434.0	-518.4	-700.0	640.1	3.09	-2.19	-2.19
7,557.0	88.80	178.80	6,434.3	-547.4	-699.2	668.4	3.86	-3.45	1.72
7,589.0	89.10	179.20	6,434.9	-579.4	-698.7	699.7	1.56	0.94	1.25
7,620.0	89.70	179.40	6,435.2	-610.4	-698.3	730.1	2.04	1.94	0.65
7,651.0	90.10	179.00	6,435.3	-641.4	-697.9	760.5	1.82	1.29	-1.29
7,682.0	90.90	178.80	6,435.0	-672.4	-697.3	790.8	2.66	2.58	-0.65
7,713.0	91.00	179.00	6,434.5	-703.4	-696.7	821.2	0.72	0.32	0.65
7,745.0	90.20	178.80	6,434.2	-735.4	-696.1	852.5	2.58	-2.50	-0.63
7,776.0	90.10	179.70	6,434.1	-766.4	-695.7	882.8	2.92	-0.32	2.90
7,807.0	90.70	180.10	6,433.9	-797.4	-695.6	913.3	2.33	1.94	1.29
7,838.0	90.00	179.60	6,433.7	-828.4	-695.5	943.7	2.77	-2.26	-1.61
7,870.0	89.20	179.60	6,433.9	-860.4	-695.3	975.1	2.50	-2.50	0.00
7,901.0	89.50	179.90	6,434.2	-891.4	-695.2	1,005.5	1.37	0.97	0.97
7,932.0	90.70	180.40	6,434.2	-922.4	-695.3	1,036.0	4.19	3.87	1.61
7,962.0	91.70	180.30	6,433.6	-952.4	-695.4	1,065.5	3.35	3.33	-0.33
7,993.0	91.70	180.80	6,432.6	-983.3	-695.7	1,096.0	1.61	0.00	1.61
8,025.0	90.70	181.70	6,432.0	-1,015.3	-696.4	1,127.6	4.20	-3.13	2.81

<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well State North Platte P-T-26HNC
<b>Project:</b>	SEC.26-T5N-R63W	<b>TVD Reference:</b>	WELL @ 4578.0ft (RKB - 15')
<b>Site:</b>	State North Platte 41-26 Pad Sec.26-T5N-R63W	<b>MD Reference:</b>	WELL @ 4578.0ft (RKB - 15')
<b>Well:</b>	State North Platte P-T-26HNC	<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)	
8,056.0	89.80	181.30	6,431.8	-1,046.3	-697.2	1,158.2	3.18	-2.90	-1.29	
8,087.0	88.50	181.80	6,432.3	-1,077.3	-698.1	1,188.7	4.49	-4.19	1.61	
8,119.0	88.50	182.00	6,433.1	-1,109.3	-699.1	1,220.4	0.62	0.00	0.63	
8,150.0	88.70	181.80	6,433.9	-1,140.2	-700.2	1,251.0	0.91	0.65	-0.65	
8,181.0	89.50	181.70	6,434.4	-1,171.2	-701.1	1,281.6	2.60	2.58	-0.32	
8,212.0	89.50	181.30	6,434.6	-1,202.2	-701.9	1,312.2	1.29	0.00	-1.29	
8,243.0	90.30	181.30	6,434.7	-1,233.2	-702.6	1,342.8	2.58	2.58	0.00	
8,274.0	91.30	181.30	6,434.3	-1,264.2	-703.3	1,373.3	3.23	3.23	0.00	
8,306.0	90.60	181.80	6,433.7	-1,296.2	-704.2	1,404.9	2.69	-2.19	1.56	
8,337.0	90.60	182.00	6,433.4	-1,327.2	-705.2	1,435.5	0.65	0.00	0.65	
8,368.0	90.70	181.50	6,433.1	-1,358.1	-706.2	1,466.2	1.64	0.32	-1.61	
8,399.0	90.00	181.10	6,432.9	-1,389.1	-706.9	1,496.7	2.60	-2.26	-1.29	
8,429.0	89.50	181.30	6,433.0	-1,419.1	-707.5	1,526.3	1.80	-1.67	0.67	
8,461.0	90.10	181.30	6,433.1	-1,451.1	-708.2	1,557.9	1.88	1.88	0.00	
8,492.0	90.80	181.10	6,432.9	-1,482.1	-708.9	1,588.4	2.35	2.26	-0.65	
8,523.0	90.70	181.10	6,432.5	-1,513.1	-709.5	1,619.0	0.32	-0.32	0.00	
8,554.0	90.10	182.00	6,432.3	-1,544.1	-710.3	1,649.6	3.49	-1.94	2.90	
8,585.0	89.70	182.00	6,432.3	-1,575.1	-711.4	1,680.2	1.29	-1.29	0.00	
8,616.0	89.50	182.00	6,432.5	-1,606.0	-712.5	1,710.9	0.65	-0.65	0.00	
8,647.0	89.80	181.80	6,432.7	-1,637.0	-713.5	1,741.5	1.16	0.97	-0.65	
8,678.0	90.70	181.80	6,432.6	-1,668.0	-714.5	1,772.1	2.90	2.90	0.00	
8,710.0	91.00	181.70	6,432.1	-1,700.0	-715.5	1,803.7	0.99	0.94	-0.31	
8,741.0	90.00	181.00	6,431.8	-1,731.0	-716.2	1,834.3	3.94	-3.23	-2.26	
8,774.0	89.80	180.80	6,431.9	-1,764.0	-716.7	1,866.8	0.86	-0.61	-0.61	
8,803.0	89.60	180.80	6,432.0	-1,793.0	-717.1	1,895.4	0.69	-0.69	0.00	
8,835.0	90.20	180.30	6,432.1	-1,825.0	-717.4	1,926.9	2.44	1.88	-1.56	
8,866.0	91.10	179.90	6,431.7	-1,856.0	-717.5	1,957.3	3.18	2.90	-1.29	
8,898.0	90.30	179.00	6,431.4	-1,888.0	-717.2	1,988.7	3.76	-2.50	-2.81	
8,929.0	90.00	178.70	6,431.3	-1,919.0	-716.5	2,019.0	1.37	-0.97	-0.97	
8,960.0	90.50	178.30	6,431.1	-1,950.0	-715.7	2,049.3	2.07	1.61	-1.29	
8,991.0	89.50	178.10	6,431.1	-1,980.9	-714.8	2,079.6	3.29	-3.23	-0.65	
9,023.0	90.10	178.30	6,431.2	-2,012.9	-713.8	2,110.8	1.98	1.88	0.63	
9,054.0	90.00	178.80	6,431.2	-2,043.9	-713.0	2,141.1	1.64	-0.32	1.61	
9,085.0	89.80	180.10	6,431.3	-2,074.9	-712.7	2,171.5	4.24	-0.65	4.19	
9,117.0	90.10	180.30	6,431.3	-2,106.9	-712.8	2,203.0	1.13	0.94	0.63	
9,146.0	90.20	179.70	6,431.2	-2,135.9	-712.8	2,231.5	2.10	0.34	-2.07	
9,178.0	89.30	179.90	6,431.4	-2,167.9	-712.7	2,262.9	2.88	-2.81	0.63	
9,209.0	89.30	180.30	6,431.7	-2,198.9	-712.7	2,293.3	1.29	0.00	1.29	
9,240.0	90.00	181.50	6,431.9	-2,229.9	-713.2	2,323.9	4.48	2.26	3.87	
9,271.0	91.00	181.80	6,431.7	-2,260.9	-714.1	2,354.5	3.37	3.23	0.97	
9,303.0	91.40	181.50	6,431.0	-2,292.9	-715.0	2,386.1	1.56	1.25	-0.94	
9,334.0	90.50	181.30	6,430.5	-2,323.9	-715.8	2,416.7	2.97	-2.90	-0.65	
9,366.0	89.70	181.00	6,430.4	-2,355.8	-716.4	2,448.2	2.67	-2.50	-0.94	
9,396.0	89.80	180.60	6,430.6	-2,385.8	-716.8	2,477.8	1.37	0.33	-1.33	
9,428.0	90.00	180.40	6,430.6	-2,417.8	-717.1	2,509.2	0.88	0.63	-0.63	
9,458.0	91.00	180.30	6,430.3	-2,447.8	-717.3	2,538.8	3.35	3.33	-0.33	
9,489.0	90.90	181.10	6,429.8	-2,478.8	-717.7	2,569.3	2.60	-0.32	2.58	
9,521.0	91.20	181.50	6,429.2	-2,510.8	-718.4	2,600.8	1.56	0.94	1.25	
9,552.0	91.30	181.10	6,428.6	-2,541.8	-719.1	2,631.4	1.33	0.32	-1.29	
9,583.0	92.00	180.40	6,427.7	-2,572.8	-719.5	2,661.9	3.19	2.26	-2.26	
9,614.0	91.90	180.80	6,426.6	-2,603.8	-719.8	2,692.4	1.33	-0.32	1.29	
9,644.0	91.90	181.10	6,425.6	-2,633.7	-720.3	2,722.0	1.00	0.00	1.00	
9,675.0	91.50	181.50	6,424.7	-2,664.7	-721.0	2,752.5	1.82	-1.29	1.29	
9,707.0	90.70	182.20	6,424.1	-2,696.7	-722.1	2,784.1	3.32	-2.50	2.19	

<b>Company:</b>	BONANZA CREEK ENERGY OPERATING	<b>Local Co-ordinate Reference:</b>	Well State North Platte P-T-26HNC
<b>Project:</b>	SEC.26-T5N-R63W	<b>TVD Reference:</b>	WELL @ 4578.0ft (RKB - 15')
<b>Site:</b>	State North Platte 41-26 Pad Sec.26-T5N-R63W	<b>MD Reference:</b>	WELL @ 4578.0ft (RKB - 15')
<b>Well:</b>	State North Platte P-T-26HNC	<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)
9,738.0	90.30	182.90	6,423.8	-2,727.7	-723.5	2,814.8	2.60	-1.29	2.26
9,769.0	91.10	182.90	6,423.4	-2,758.6	-725.0	2,845.5	2.58	2.58	0.00
9,800.0	91.50	182.90	6,422.7	-2,789.6	-726.6	2,876.2	1.29	1.29	0.00
9,832.0	90.80	182.70	6,422.1	-2,821.5	-728.2	2,907.9	2.28	-2.19	-0.63
9,862.0	89.80	182.70	6,421.9	-2,851.5	-729.6	2,937.6	3.33	-3.33	0.00
9,893.0	89.30	182.40	6,422.2	-2,882.5	-730.9	2,968.3	1.88	-1.61	-0.97
9,924.0	88.70	182.50	6,422.7	-2,913.4	-732.3	2,998.9	1.96	-1.94	0.32
9,955.0	88.50	182.40	6,423.5	-2,944.4	-733.6	3,029.6	0.72	-0.65	-0.32
9,986.0	88.70	182.00	6,424.2	-2,975.4	-734.8	3,060.3	1.44	0.65	-1.29
10,017.0	88.90	181.50	6,424.9	-3,006.3	-735.7	3,090.9	1.74	0.65	-1.61
10,049.0	89.10	181.50	6,425.5	-3,038.3	-736.6	3,122.4	0.63	0.63	0.00
10,080.0	89.20	181.00	6,425.9	-3,069.3	-737.2	3,153.0	1.64	0.32	-1.61
10,111.0	90.20	180.80	6,426.1	-3,100.3	-737.7	3,183.6	3.29	3.23	-0.65
10,142.0	91.50	181.00	6,425.6	-3,131.3	-738.2	3,214.1	4.24	4.19	0.65
10,172.0	91.70	180.40	6,424.8	-3,161.3	-738.6	3,243.6	2.11	0.67	-2.00
10,204.0	91.10	180.10	6,424.0	-3,193.3	-738.7	3,275.1	2.10	-1.88	-0.94
10,235.0	90.10	179.70	6,423.7	-3,224.3	-738.7	3,305.5	3.47	-3.23	-1.29
10,265.0	89.30	180.30	6,423.8	-3,254.3	-738.7	3,335.0	3.33	-2.67	2.00
10,296.0	89.00	180.10	6,424.3	-3,285.3	-738.8	3,365.5	1.16	-0.97	-0.65
10,328.0	89.80	180.10	6,424.6	-3,317.3	-738.8	3,396.9	2.50	2.50	0.00
10,359.0	90.20	179.70	6,424.6	-3,348.3	-738.8	3,427.3	1.82	1.29	-1.29
10,390.0	90.00	179.20	6,424.6	-3,379.3	-738.5	3,457.7	1.74	-0.65	-1.61
10,422.0	90.30	178.80	6,424.5	-3,411.3	-737.9	3,489.1	1.56	0.94	-1.25
10,453.0	90.80	178.70	6,424.2	-3,442.3	-737.3	3,519.4	1.64	1.61	-0.32
10,484.0	90.70	178.00	6,423.8	-3,473.2	-736.4	3,549.7	2.28	-0.32	-2.26
10,515.0	90.40	178.50	6,423.5	-3,504.2	-735.4	3,579.9	1.88	-0.97	1.61
10,546.0	90.20	178.80	6,423.3	-3,535.2	-734.7	3,610.2	1.16	-0.65	0.97
10,578.0	90.20	178.30	6,423.2	-3,567.2	-733.9	3,641.5	1.56	0.00	-1.56
10,609.0	90.70	177.40	6,423.0	-3,598.2	-732.7	3,671.7	3.32	1.61	-2.90
10,640.0	90.90	178.00	6,422.5	-3,629.2	-731.5	3,701.9	2.04	0.65	1.94
10,670.0	90.80	179.40	6,422.1	-3,659.1	-730.8	3,731.2	4.68	-0.33	4.67
10,702.0	90.80	179.70	6,421.6	-3,691.1	-730.5	3,762.6	0.94	0.00	0.94
10,733.0	90.70	178.80	6,421.2	-3,722.1	-730.1	3,793.0	2.92	-0.32	-2.90
10,764.0	89.80	179.20	6,421.1	-3,753.1	-729.6	3,823.4	3.18	-2.90	1.29
10,795.0	89.40	180.80	6,421.3	-3,784.1	-729.6	3,853.8	5.32	-1.29	5.16
10,827.0	89.90	181.50	6,421.5	-3,816.1	-730.2	3,885.4	2.69	1.56	2.19
10,858.0	90.00	181.00	6,421.5	-3,847.1	-730.9	3,915.9	1.64	0.32	-1.61
10,889.0	91.20	181.80	6,421.2	-3,878.1	-731.7	3,946.5	4.65	3.87	2.58
10,941.0	91.20	182.60	6,420.1	-3,930.0	-733.7	3,997.9	1.54	0.00	1.54

BHL 470°FSL. 1450°FEL

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_