

# **EXTRACTION OIL & GAS**

**WELD COUNTY, COLORADO (NAD 83)**

**SEC. 14 T2N R68W 6th P.M.**

**BYBEE 4**

**ORIGINAL WELLBORE**

**29 July, 2015**

**Plan: PROPOSAL #4**

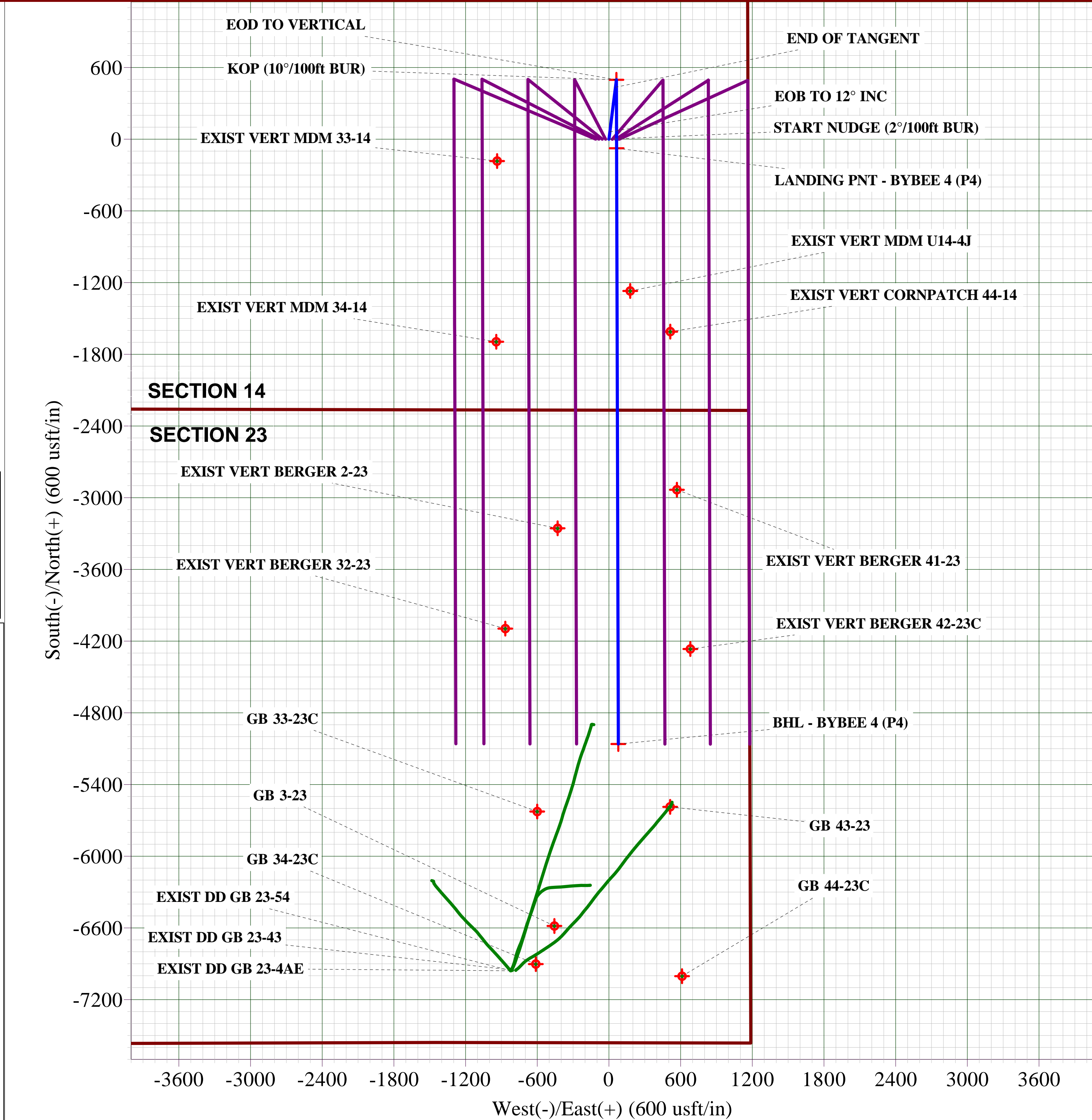
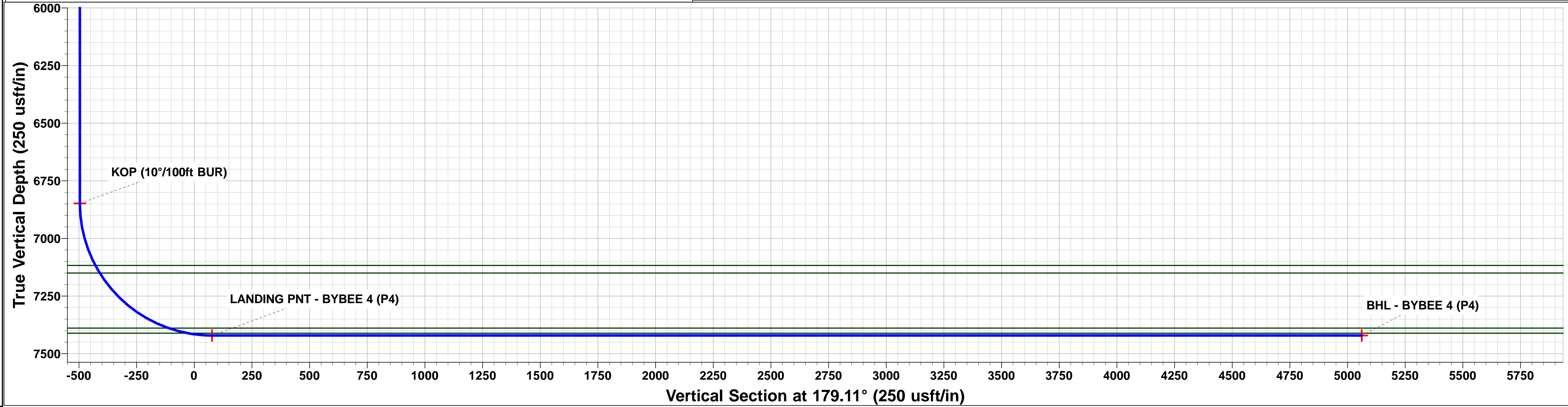
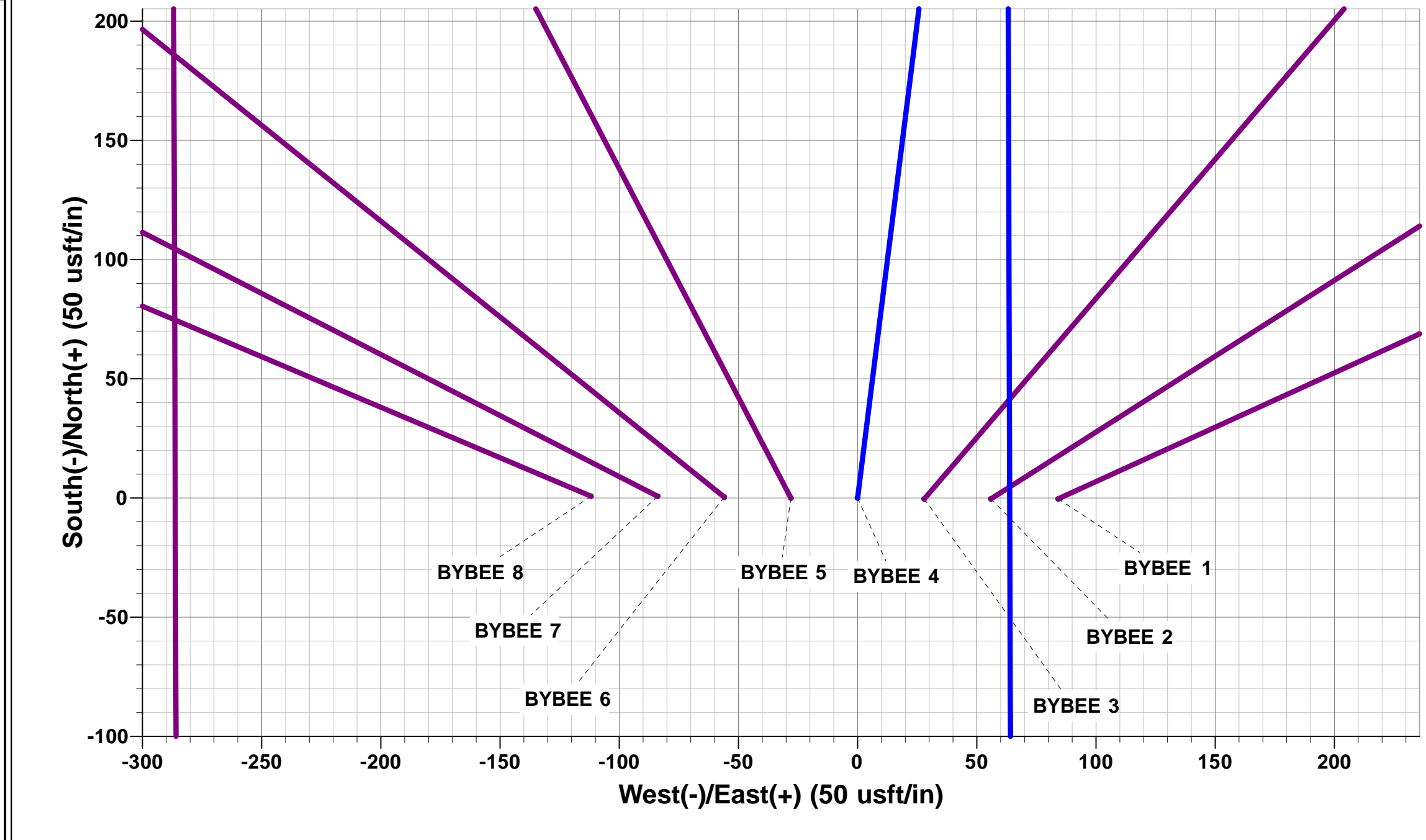
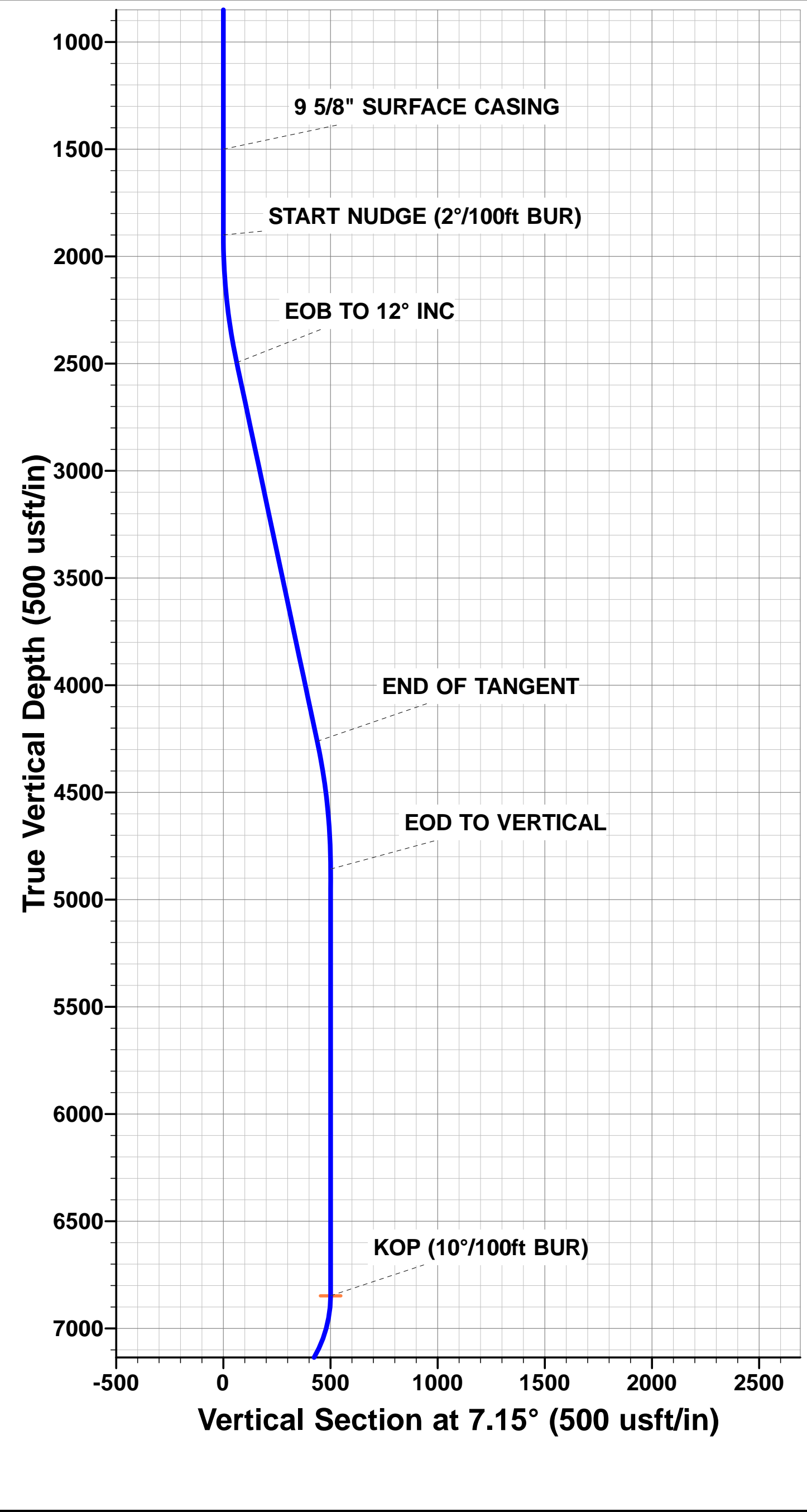




Project: WELD COUNTY, COLORADO (NAD 83)  
Site: SEC. 14 T2N R68W 6th P.M.  
Well: BYBEE 4  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #4

ANNOTATIONS									FORMATION TOP DETAILS		
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation	TVDPPath	MDPath	Formation
1500.0	1500.0	0.00	0.00	0.0	0.0	0.0	0.0	9 5/8" SURFACE CASING	3559.0	3587.1	PARKMAN
1900.0	1900.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)	4377.0	4422.9	SUSSEX
2495.7	2500.1	12.00	7.15	62.1	7.8	-62.0	62.6	EOB TO 12° INC	4933.0	4981.2	SHANNON
4262.3	4306.2	12.00	7.15	434.8	54.5	-433.9	438.2	END OF TANGENT	7117.0	7176.2	SHARON SPRINGS
4858.0	4906.2	0.00	7.15	496.9	62.3	-495.9	500.8	EOD TO VERTICAL	7150.0	7214.3	NIOBRARA
6848.0	6896.2	0.00	0.00	496.9	62.3	-495.9	500.8	KOP (10°/100ft BUR)	7389.0	7603.9	FT HAYS
7421.0	7796.3	90.00	179.83	-76.1	64.0	77.1	1073.8	LANDING PNT - BYBEE 4 (P4)	7411.0	7689.1	CODELL
7421.0	12781.4	90.00	179.84	-5061.1	78.6	5061.7	6058.8	BHL - BYBEE 4 (P4)			

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - BYBEE 4 (P4)	6848.0	496.9	62.3	40.139026	-104.964950
BHL - BYBEE 4 (P4)	7421.0	-5061.1	78.6	40.123769	-104.964892
LANDING PNT - BYBEE 4 (P4)	7421.0	-76.1	64.0	40.137453	-104.964944



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BYBEE 4
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4905.0usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4905.0usft
<b>Site:</b>	SEC. 14 T2N R68W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	BYBEE 4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #4		

<b>Project</b>	WELD COUNTY, COLORADO (NAD 83)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

<b>Site</b>	SEC. 14 T2N R68W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,293,444.96 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,149,614.50 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	1.10000ft
		<b>Latitude:</b>	40.137661
		<b>Longitude:</b>	-104.964872
		<b>Grid Convergence:</b>	0.35 °

<b>Well</b>	BYBEE 4		
<b>Well Position</b>	<b>+N/-S</b>	0.4 usft	<b>Northing:</b> 1,293,444.81 usft
	<b>+E/-W</b>	-84.2 usft	<b>Easting:</b> 3,149,530.35 usft
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b>	usft
		<b>Latitude:</b>	40.137662
		<b>Longitude:</b>	-104.965173
		<b>Ground Level:</b>	4,889.0 usft

<b>Wellbore</b>	ORIGINAL WELLBORE				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	29/07/2015	8.49	66.66	52,448

<b>Design</b>	PROPOSAL #4			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	7,421.0	0.0	0.0	179.11

<b>Plan Sections</b>											
MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100usf)	Turn Rate (°/100usf)	TFO (°)	Target
0.0	0.00	0.00	0.0	-4,905.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,900.0	0.00	0.00	1,900.0	-3,005.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,500.1	12.00	7.15	2,495.7	-2,409.3	62.1	7.8	2.00	2.00	0.00	7.15	
4,306.2	12.00	7.15	4,262.3	-642.7	434.8	54.5	0.00	0.00	0.00	0.00	
4,906.2	0.00	0.00	4,858.0	-47.0	496.9	62.3	2.00	-2.00	0.00	180.00	
6,896.2	0.00	0.00	6,848.0	1,943.0	496.9	62.3	0.00	0.00	0.00	0.00	KOP - BYBEE 4 (P4)
7,796.3	90.00	179.83	7,421.0	2,516.0	-76.1	64.0	10.00	10.00	19.98	179.83	LANDING PNT - BYBEE 4 (P4)
12,781.4	90.00	179.84	7,421.0	2,516.0	-5,061.1	78.6	0.00	0.00	0.00	116.49	BHL - BYBEE 4 (P4)

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BYBEE 4
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4905.0usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4905.0usft
<b>Site:</b>	SEC. 14 T2N R68W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	BYBEE 4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #4		

## Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	4,905.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,805.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,705.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,605.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,505.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,405.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,305.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	4,205.00	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	4,105.00	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	4,005.00	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,905.00	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,805.00	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	3,705.00	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	3,605.00	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	3,505.00	0.0	0.0	0.0	0.00	0.00	0.00
<b>9 5/8" SURFACE CASING</b>										
1,500.0	0.00	0.00	1,500.0	3,405.00	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	3,305.00	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	3,205.00	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	3,105.00	0.0	0.0	0.0	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
1,900.0	0.00	0.00	1,900.0	3,005.00	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	2.00	7.15	2,000.0	2,905.02	1.7	0.2	-1.7	2.00	2.00	0.00
2,100.0	4.00	7.15	2,099.8	2,805.16	6.9	0.9	-6.9	2.00	2.00	0.00
2,200.0	6.00	7.15	2,199.5	2,705.55	15.6	2.0	-15.5	2.00	2.00	0.00
2,300.0	8.00	7.15	2,298.7	2,606.30	27.7	3.5	-27.6	2.00	2.00	0.00
2,400.0	10.00	7.15	2,397.5	2,507.53	43.2	5.4	-43.1	2.00	2.00	0.00
2,500.0	12.00	7.15	2,495.6	2,409.38	62.1	7.8	-62.0	2.00	2.00	0.00
<b>EOB TO 12" INC</b>										
2,500.1	12.00	7.15	2,495.7	2,409.28	62.1	7.8	-62.0	1.56	1.56	0.00
2,600.0	12.00	7.15	2,593.4	2,311.56	82.7	10.4	-82.6	0.00	0.00	0.00
2,700.0	12.00	7.15	2,691.3	2,213.75	103.4	13.0	-103.2	0.00	0.00	0.00
2,800.0	12.00	7.15	2,789.1	2,115.93	124.0	15.5	-123.8	0.00	0.00	0.00
2,900.0	12.00	7.15	2,886.9	2,018.12	144.6	18.1	-144.3	0.00	0.00	0.00
3,000.0	12.00	7.15	2,984.7	1,920.31	165.3	20.7	-164.9	0.00	0.00	0.00
3,100.0	12.00	7.15	3,082.5	1,822.49	185.9	23.3	-185.5	0.00	0.00	0.00
3,200.0	12.00	7.15	3,180.3	1,724.68	206.5	25.9	-206.1	0.00	0.00	0.00
3,300.0	12.00	7.15	3,278.1	1,626.86	227.2	28.5	-226.7	0.00	0.00	0.00
3,400.0	12.00	7.15	3,376.0	1,529.05	247.8	31.1	-247.3	0.00	0.00	0.00
3,500.0	12.00	7.15	3,473.8	1,431.23	268.4	33.7	-267.9	0.00	0.00	0.00
<b>PARKMAN</b>										
3,587.1	12.00	7.15	3,559.0	1,346.00	286.4	35.9	-285.8	0.00	0.00	0.00
3,600.0	12.00	7.15	3,571.6	1,333.42	289.1	36.2	-288.5	0.00	0.00	0.00
3,700.0	12.00	7.15	3,669.4	1,235.61	309.7	38.8	-309.1	0.00	0.00	0.00
3,800.0	12.00	7.15	3,767.2	1,137.79	330.3	41.4	-329.7	0.00	0.00	0.00
3,900.0	12.00	7.15	3,865.0	1,039.98	351.0	44.0	-350.2	0.00	0.00	0.00
4,000.0	12.00	7.15	3,962.8	942.16	371.6	46.6	-370.8	0.00	0.00	0.00
4,100.0	12.00	7.15	4,060.7	844.35	392.2	49.2	-391.4	0.00	0.00	0.00
4,200.0	12.00	7.15	4,158.5	746.54	412.9	51.8	-412.0	0.00	0.00	0.00
4,300.0	12.00	7.15	4,256.3	648.72	433.5	54.4	-432.6	0.00	0.00	0.00
<b>END OF TANGENT</b>										
4,306.2	12.00	7.15	4,262.3	642.66	434.8	54.5	-433.9	0.00	0.00	0.00
4,400.0	10.12	7.15	4,354.4	550.60	452.6	56.8	-451.7	2.00	-2.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BYBEE 4
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4905.0usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4905.0usft
<b>Site:</b>	SEC. 14 T2N R68W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	BYBEE 4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #4		

## Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
<b>SUSSEX</b>										
4,422.9	9.67	7.15	4,377.0	528.00	456.5	57.2	-455.6	2.00	-2.00	0.00
4,500.0	8.12	7.15	4,453.1	451.87	468.4	58.7	-467.4	2.00	-2.00	0.00
4,600.0	6.12	7.15	4,552.3	352.65	480.7	60.3	-479.7	2.00	-2.00	0.00
4,700.0	4.12	7.15	4,651.9	253.06	489.5	61.4	-488.5	2.00	-2.00	0.00
4,800.0	2.12	7.15	4,751.8	153.21	494.9	62.1	-493.9	2.00	-2.00	0.00
4,900.0	0.12	7.15	4,851.8	53.23	496.9	62.3	-495.9	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
4,906.2	0.00	7.15	4,858.0	47.03	496.9	62.3	-495.9	2.00	-2.00	0.00
<b>SHANNON</b>										
4,981.2	0.00	0.00	4,933.0	-28.00	496.9	62.3	-495.9	0.00	0.00	0.00
5,000.0	0.00	0.00	4,951.8	-46.77	496.9	62.3	-495.9	0.00	0.00	0.00
5,100.0	0.00	0.00	5,051.8	-146.77	496.9	62.3	-495.9	0.00	0.00	0.00
5,200.0	0.00	0.00	5,151.8	-246.77	496.9	62.3	-495.9	0.00	0.00	0.00
5,300.0	0.00	0.00	5,251.8	-346.77	496.9	62.3	-495.9	0.00	0.00	0.00
5,400.0	0.00	0.00	5,351.8	-446.77	496.9	62.3	-495.9	0.00	0.00	0.00
5,500.0	0.00	0.00	5,451.8	-546.77	496.9	62.3	-495.9	0.00	0.00	0.00
5,600.0	0.00	0.00	5,551.8	-646.77	496.9	62.3	-495.9	0.00	0.00	0.00
5,700.0	0.00	0.00	5,651.8	-746.77	496.9	62.3	-495.9	0.00	0.00	0.00
5,800.0	0.00	0.00	5,751.8	-846.77	496.9	62.3	-495.9	0.00	0.00	0.00
5,900.0	0.00	0.00	5,851.8	-946.77	496.9	62.3	-495.9	0.00	0.00	0.00
6,000.0	0.00	0.00	5,951.8	-1,046.77	496.9	62.3	-495.9	0.00	0.00	0.00
6,100.0	0.00	0.00	6,051.8	-1,146.77	496.9	62.3	-495.9	0.00	0.00	0.00
6,200.0	0.00	0.00	6,151.8	-1,246.77	496.9	62.3	-495.9	0.00	0.00	0.00
6,300.0	0.00	0.00	6,251.8	-1,346.77	496.9	62.3	-495.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,351.8	-1,446.77	496.9	62.3	-495.9	0.00	0.00	0.00
6,500.0	0.00	0.00	6,451.8	-1,546.77	496.9	62.3	-495.9	0.00	0.00	0.00
6,600.0	0.00	0.00	6,551.8	-1,646.77	496.9	62.3	-495.9	0.00	0.00	0.00
6,700.0	0.00	0.00	6,651.8	-1,746.77	496.9	62.3	-495.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,751.8	-1,846.77	496.9	62.3	-495.9	0.00	0.00	0.00
<b>KOP (10°/100ft BUR)</b>										
6,896.2	0.00	0.00	6,848.0	-1,942.97	496.9	62.3	-495.9	0.00	0.00	0.00
6,900.0	0.38	179.83	6,851.8	-1,946.77	496.9	62.3	-495.9	9.91	9.91	0.00
7,000.0	10.38	179.83	6,951.2	-2,046.20	487.5	62.3	-486.5	10.00	10.00	0.00
7,100.0	20.38	179.83	7,047.5	-2,142.50	461.0	62.4	-460.0	10.00	10.00	0.00
<b>SHARON SPRINGS</b>										
7,176.2	28.00	179.83	7,117.0	-2,212.00	429.8	62.5	-428.8	10.00	10.00	0.00
7,200.0	30.37	179.83	7,137.7	-2,232.74	418.3	62.5	-417.2	10.00	10.00	0.00
<b>NIOBRARA</b>										
7,214.3	31.81	179.83	7,150.0	-2,245.00	410.9	62.6	-409.8	10.00	10.00	0.00
7,300.0	40.37	179.83	7,219.2	-2,314.17	360.4	62.7	-359.4	10.00	10.00	0.00
7,400.0	50.37	179.83	7,289.3	-2,384.33	289.4	62.9	-288.3	10.00	10.00	0.00
7,500.0	60.37	179.83	7,346.1	-2,441.08	207.2	63.2	-206.2	10.00	10.00	0.00
7,600.0	70.37	179.83	7,387.7	-2,482.70	116.4	63.4	-115.4	10.00	10.00	0.00
<b>FT HAYS</b>										
7,603.9	70.76	179.83	7,389.0	-2,484.00	112.7	63.5	-111.7	10.00	10.00	0.00
<b>CODELL</b>										
7,689.1	79.28	179.83	7,411.0	-2,506.00	30.5	63.7	-29.5	10.00	10.00	0.00
7,700.0	80.37	179.83	7,412.9	-2,507.93	19.8	63.7	-18.8	10.00	10.00	0.00
<b>LANDING PNT - BYBEE 4 (P4)</b>										
7,796.3	90.00	179.83	7,421.0	-2,516.00	-76.1	64.0	77.1	10.00	10.00	0.00
7,800.0	90.00	179.83	7,421.0	-2,516.00	-79.8	64.0	80.8	0.08	0.08	0.00
7,900.0	90.00	179.83	7,421.0	-2,516.00	-179.8	64.3	180.8	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BYBEE 4
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4905.0usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4905.0usft
<b>Site:</b>	SEC. 14 T2N R68W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	BYBEE 4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #4		

Planned Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,000.0	90.00	179.83	7,421.0	-2,515.99	-279.8	64.6	280.8	0.00	0.00	0.00
8,100.0	90.00	179.83	7,421.0	-2,515.99	-379.8	64.9	380.8	0.00	0.00	0.00
8,200.0	90.00	179.83	7,421.0	-2,515.98	-479.8	65.2	480.7	0.00	0.00	0.00
8,300.0	90.00	179.83	7,421.0	-2,515.98	-579.8	65.5	580.7	0.00	0.00	0.00
8,400.0	90.00	179.83	7,421.0	-2,515.97	-679.8	65.8	680.7	0.00	0.00	0.00
8,500.0	90.00	179.83	7,421.0	-2,515.97	-779.8	66.1	780.7	0.00	0.00	0.00
8,600.0	90.00	179.83	7,421.0	-2,515.97	-879.8	66.4	880.7	0.00	0.00	0.00
8,700.0	90.00	179.83	7,421.0	-2,515.96	-979.8	66.7	980.7	0.00	0.00	0.00
8,800.0	90.00	179.83	7,421.0	-2,515.96	-1,079.8	67.0	1,080.7	0.00	0.00	0.00
8,900.0	90.00	179.83	7,421.0	-2,515.96	-1,179.8	67.3	1,180.7	0.00	0.00	0.00
9,000.0	90.00	179.83	7,421.0	-2,515.96	-1,279.8	67.6	1,280.7	0.00	0.00	0.00
9,100.0	90.00	179.83	7,421.0	-2,515.95	-1,379.8	67.9	1,380.7	0.00	0.00	0.00
9,200.0	90.00	179.83	7,421.0	-2,515.95	-1,479.8	68.2	1,480.7	0.00	0.00	0.00
9,300.0	90.00	179.83	7,420.9	-2,515.95	-1,579.8	68.5	1,580.7	0.00	0.00	0.00
9,400.0	90.00	179.83	7,420.9	-2,515.95	-1,679.8	68.8	1,680.7	0.00	0.00	0.00
9,500.0	90.00	179.83	7,420.9	-2,515.95	-1,779.8	69.1	1,780.6	0.00	0.00	0.00
9,600.0	90.00	179.83	7,420.9	-2,515.94	-1,879.8	69.4	1,880.6	0.00	0.00	0.00
9,700.0	90.00	179.83	7,420.9	-2,515.94	-1,979.8	69.7	1,980.6	0.00	0.00	0.00
9,800.0	90.00	179.83	7,420.9	-2,515.94	-2,079.8	70.0	2,080.6	0.00	0.00	0.00
9,900.0	90.00	179.83	7,420.9	-2,515.94	-2,179.8	70.3	2,180.6	0.00	0.00	0.00
10,000.0	90.00	179.83	7,420.9	-2,515.94	-2,279.8	70.6	2,280.6	0.00	0.00	0.00
10,100.0	90.00	179.83	7,420.9	-2,515.94	-2,379.8	70.9	2,380.6	0.00	0.00	0.00
10,200.0	90.00	179.83	7,420.9	-2,515.94	-2,479.8	71.2	2,480.6	0.00	0.00	0.00
10,300.0	90.00	179.83	7,420.9	-2,515.94	-2,579.8	71.5	2,580.6	0.00	0.00	0.00
10,400.0	90.00	179.83	7,420.9	-2,515.94	-2,679.8	71.8	2,680.6	0.00	0.00	0.00
10,500.0	90.00	179.83	7,420.9	-2,515.94	-2,779.8	72.0	2,780.6	0.00	0.00	0.00
10,600.0	90.00	179.83	7,420.9	-2,515.94	-2,879.8	72.3	2,880.6	0.00	0.00	0.00
10,700.0	90.00	179.83	7,420.9	-2,515.94	-2,979.8	72.6	2,980.6	0.00	0.00	0.00
10,800.0	90.00	179.83	7,420.9	-2,515.94	-3,079.8	72.9	3,080.5	0.00	0.00	0.00
10,900.0	90.00	179.83	7,420.9	-2,515.94	-3,179.8	73.2	3,180.5	0.00	0.00	0.00
11,000.0	90.00	179.83	7,420.9	-2,515.94	-3,279.8	73.5	3,280.5	0.00	0.00	0.00
11,100.0	90.00	179.83	7,420.9	-2,515.95	-3,379.8	73.8	3,380.5	0.00	0.00	0.00
11,200.0	90.00	179.83	7,420.9	-2,515.95	-3,479.8	74.1	3,480.5	0.00	0.00	0.00
11,300.0	90.00	179.83	7,420.9	-2,515.95	-3,579.8	74.4	3,580.5	0.00	0.00	0.00
11,400.0	90.00	179.84	7,421.0	-2,515.95	-3,679.8	74.6	3,680.5	0.00	0.00	0.00
11,500.0	90.00	179.84	7,421.0	-2,515.95	-3,779.8	74.9	3,780.5	0.00	0.00	0.00
11,600.0	90.00	179.84	7,421.0	-2,515.96	-3,879.8	75.2	3,880.5	0.00	0.00	0.00
11,700.0	90.00	179.84	7,421.0	-2,515.96	-3,979.8	75.5	3,980.5	0.00	0.00	0.00
11,800.0	90.00	179.84	7,421.0	-2,515.96	-4,079.8	75.8	4,080.5	0.00	0.00	0.00
11,900.0	90.00	179.84	7,421.0	-2,515.97	-4,179.8	76.1	4,180.5	0.00	0.00	0.00
12,000.0	90.00	179.84	7,421.0	-2,515.97	-4,279.8	76.4	4,280.4	0.00	0.00	0.00
12,100.0	90.00	179.84	7,421.0	-2,515.97	-4,379.8	76.7	4,380.4	0.00	0.00	0.00
12,200.0	90.00	179.84	7,421.0	-2,515.98	-4,479.8	76.9	4,480.4	0.00	0.00	0.00
12,300.0	90.00	179.84	7,421.0	-2,515.98	-4,579.8	77.2	4,580.4	0.00	0.00	0.00
12,400.0	90.00	179.84	7,421.0	-2,515.98	-4,679.8	77.5	4,680.4	0.00	0.00	0.00
12,500.0	90.00	179.84	7,421.0	-2,515.99	-4,779.8	77.8	4,780.4	0.00	0.00	0.00
12,600.0	90.00	179.84	7,421.0	-2,515.99	-4,879.8	78.1	4,880.4	0.00	0.00	0.00
12,700.0	90.00	179.84	7,421.0	-2,516.00	-4,979.8	78.4	4,980.4	0.00	0.00	0.00
<b>BHL - BYBEE 4 (P4)</b>										
<b>12,781.4</b>	<b>90.00</b>	<b>179.84</b>	<b>7,421.0</b>	<b>-2,516.00</b>	<b>-5,061.1</b>	<b>78.6</b>	<b>5,061.7</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BYBEE 4
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4905.0usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4905.0usft
<b>Site:</b>	SEC. 14 T2N R68W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	BYBEE 4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #4		

Formations					
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,587.1	3,559.0	PARKMAN		0.00	
4,422.9	4,377.0	SUSSEX		0.00	
4,981.2	4,933.0	SHANNON		0.00	
7,176.2	7,117.0	SHARON SPRINGS		0.00	
7,214.3	7,150.0	NIOBRARA		0.00	
7,603.9	7,389.0	FT HAYS		0.00	
7,689.1	7,411.0	CODELL		0.00	

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,500.0	1,500.0	0.0	0.0	9 5/8" SURFACE CASING
1,900.0	1,900.0	0.0	0.0	START NUDGE (2°/100ft BUR)
2,500.1	2,495.7	62.1	7.8	EOB TO 12° INC
4,306.2	4,262.3	434.8	54.5	END OF TANGENT
4,906.2	4,858.0	496.9	62.3	EOD TO VERTICAL
6,896.2	6,848.0	496.9	62.3	KOP (10°/100ft BUR)
7,796.3	7,421.0	-76.1	64.0	LANDING PNT - BYBEE 4 (P4)
12,781.4	7,421.0	-5,061.1	78.6	BHL - BYBEE 4 (P4)