

# **EXTRACTION OIL & GAS**

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

**SW SW SEC 7 T10N R61W 6th P.M.**

**CARSON 4**

**ORIGINAL WELLBORE**

**02 July, 2015**

**Plan: PROPOSAL #2**



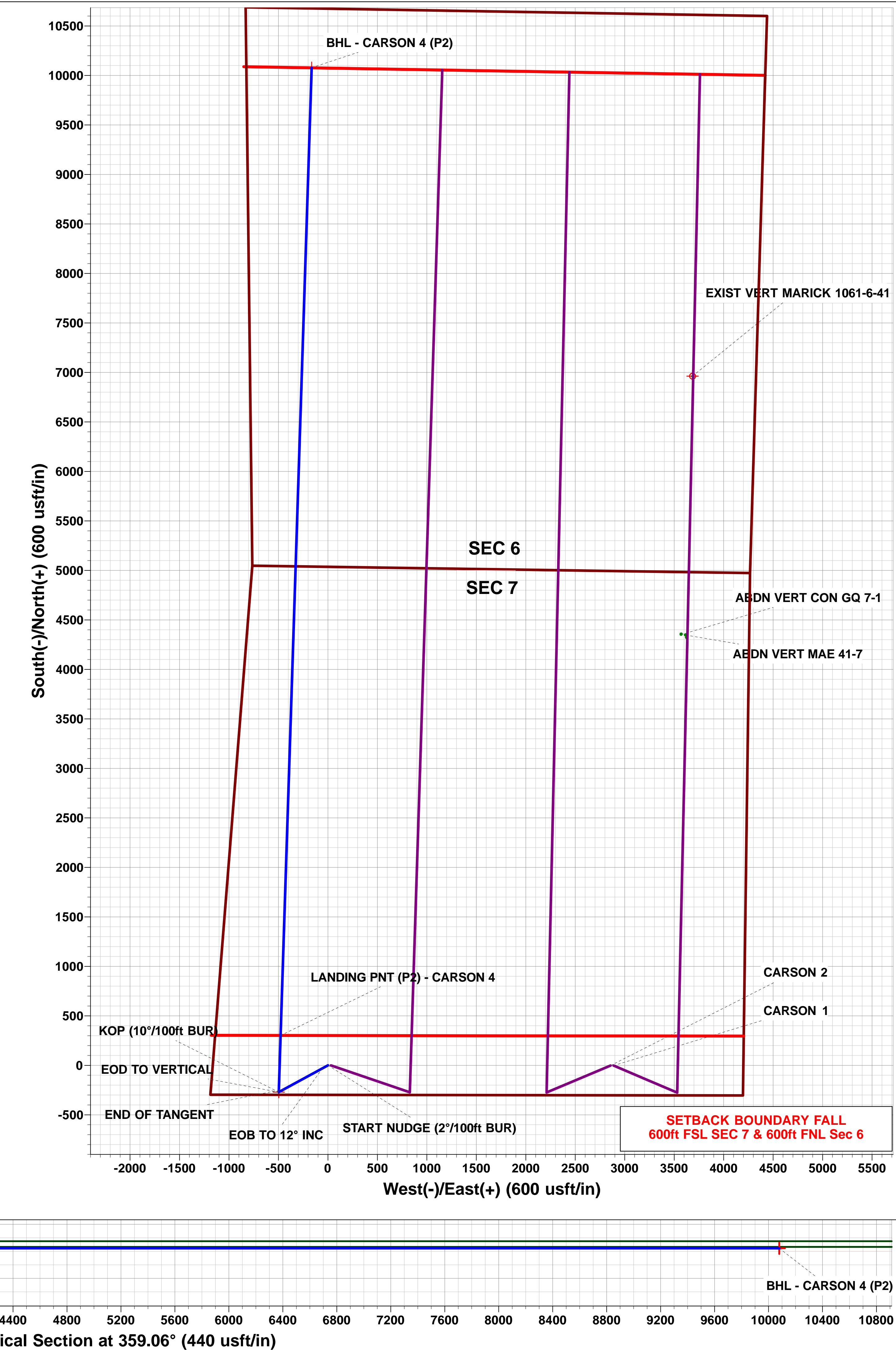
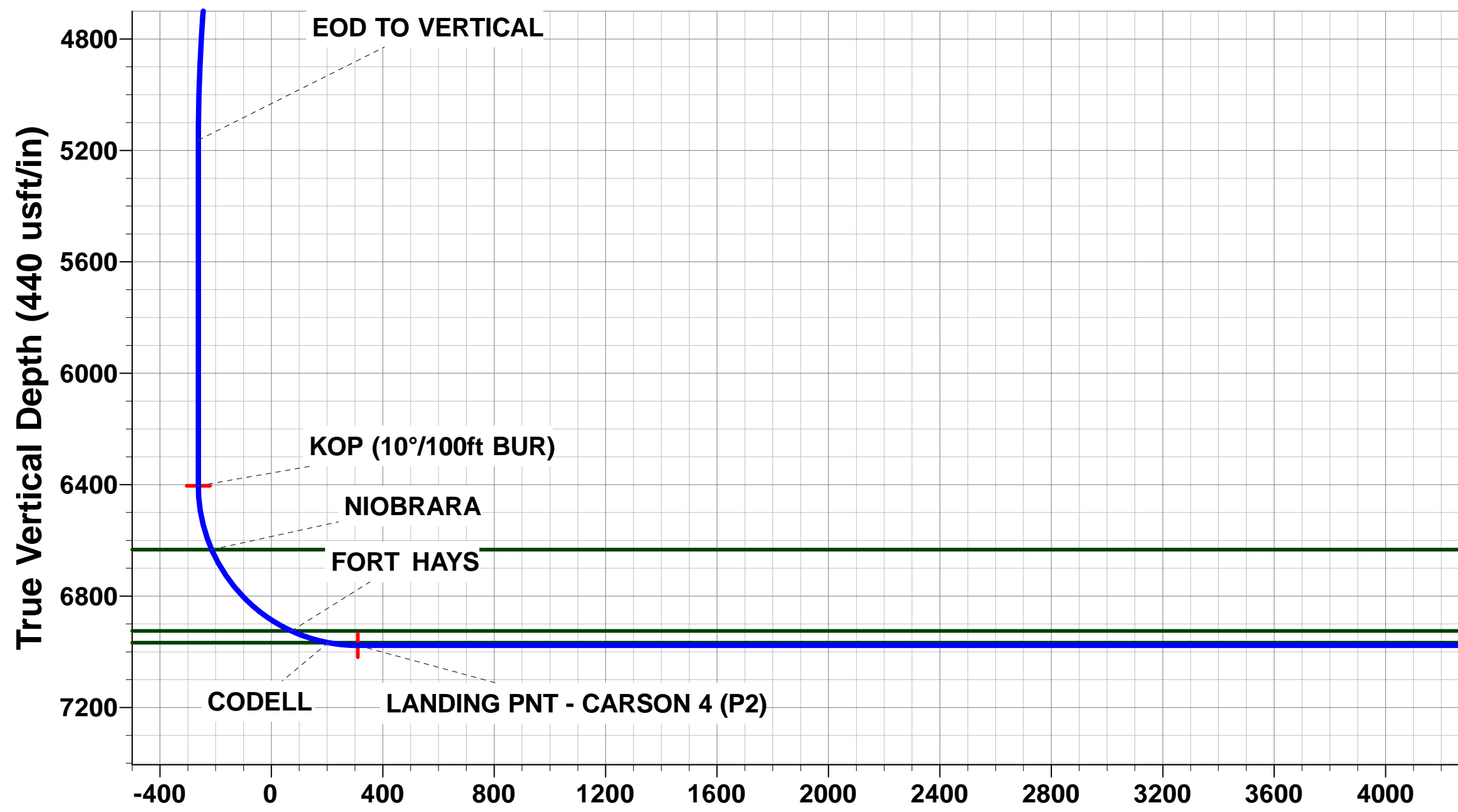
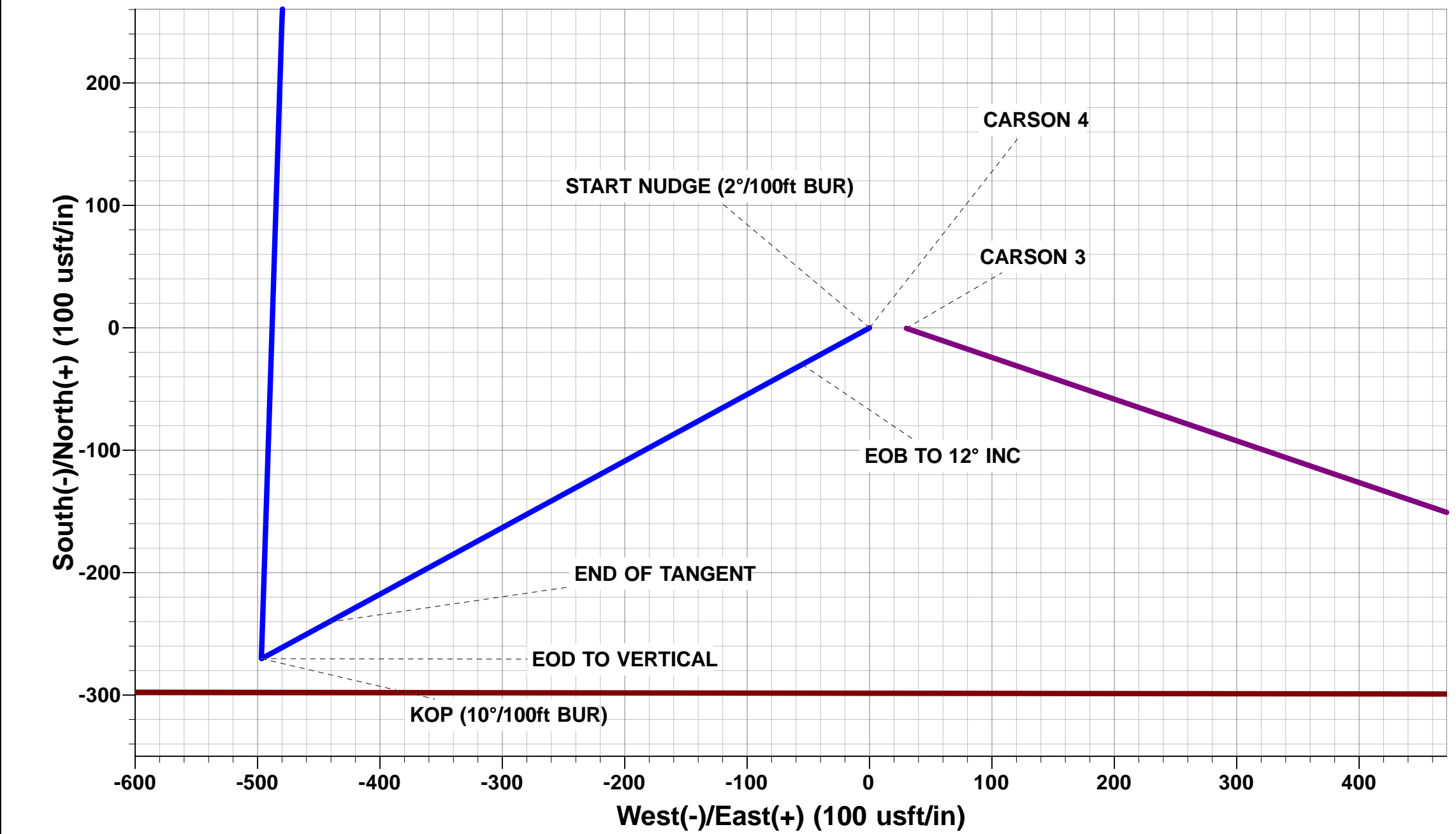
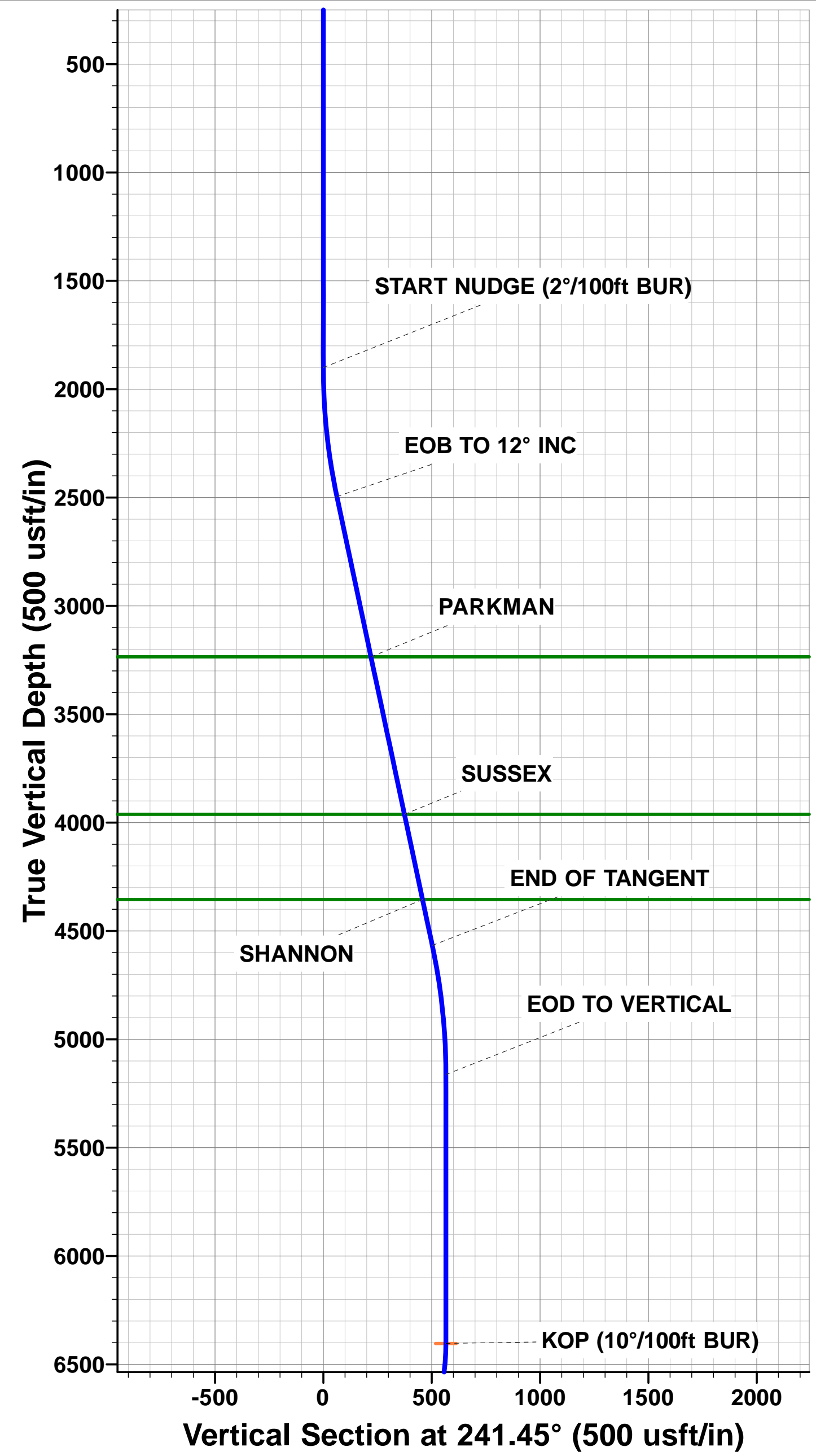


Project: WELD COUNTY, COLORADO (NAD 83)  
Site: SW SW SEC 7 T10N R61W 6th P.M.  
Well: CARSON 4  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #2

ANNOTATIONS								
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation
1900.0	1900.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
2495.6	2500.0	12.00	241.45	-29.9	-55.0	-29.0	62.6	EOB TO 12° INC
4567.3	4618.0	12.00	241.45	-240.4	-441.8	-233.1	503.0	END OF TANGENT
5163.0	5218.0	0.00	241.45	-270.3	-496.8	-262.1	565.6	EOD TO VERTICAL
6404.0	6459.0	0.00	0.00	-270.3	-496.8	-262.1	565.6	KOP (10°/100ft BUR)
6977.0	7359.1	90.00	1.84	302.4	-478.4	310.2	1138.6	LANDING PNT (P2) - CARSON 4
6977.0	17139.4	90.00	1.83	10077.7	-164.8	10079.0	10918.9	BHL (P2) - CARSON 4

PROPOSED LOCAL COORDINATES:  
  
SHL: 298ft FSL & 1161ft FWL Sec 7  
  
LANDING PNT: 600ft FSL & 660ft FWL Sec 7  
  
BHL: 600ft FNL & 660ft FWL Sec 6

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - CARSON 4 (P2)	6404.0	-270.3	-496.8	40.841569	-104.257039
BHL - CARSON 4 (P2)	6977.0	10077.7	-164.8	40.869971	-104.255840
LANDING PNT - CARSON 4 (P2)	6977.0	302.4	-478.4	40.843141	-104.256973



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well CARSON 4
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 5072.0usft (SAV 802)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 5072.0usft (SAV 802)
<b>Site:</b>	SW SW SEC 7 T10N R61W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	CARSON 4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

<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>	SW SW SEC 7 T10N R61W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,552,119.67 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,344,434.29 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	1.10000ft
		<b>Latitude:</b>	40.842310
		<b>Longitude:</b>	-104.255135
		<b>Grid Convergence:</b>	0.80 °

<b>Well</b>	CARSON 4		
<b>Well Position</b>	<b>+N/-S</b>	0.4 usft	<b>Northing:</b>
	<b>+E/-W</b>	-30.2 usft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>
			<b>Latitude:</b>
			<b>Longitude:</b>
			<b>Ground Level:</b>

<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	24/06/2015	8.18	67.34	52,898

<b>Design</b>	PROPOSAL #2			
<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>
	6,977.0	0.0	0.0	359.06

<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	-5,072.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,900.0	0.00	0.00	1,900.0	-3,172.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,500.0	12.00	241.45	2,495.6	-2,576.4	-29.9	-55.0	2.00	2.00	0.00	241.45	
4,618.0	12.00	241.45	4,567.4	-504.6	-240.4	-441.8	0.00	0.00	0.00	0.00	
5,218.0	0.00	0.00	5,163.0	91.0	-270.3	-496.8	2.00	-2.00	0.00	180.00	
6,459.0	0.00	0.00	6,404.0	1,332.0	-270.3	-496.8	0.00	0.00	0.00	0.00	KOP - CARSON 4 (
7,359.1	90.00	1.84	6,977.0	1,905.0	302.4	-478.4	10.00	10.00	0.20	1.84	LANDING PNT - C/
17,139.4	90.00	1.83	6,977.0	1,905.0	10,077.7	-164.8	0.00	0.00	0.00	-104.82	BHL - CARSON 4 (

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well CARSON 4
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 5072.0usft (SAV 802)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 5072.0usft (SAV 802)
<b>Site:</b>	SW SW SEC 7 T10N R61W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	CARSON 4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

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	5,072.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,972.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,872.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,772.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,672.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,572.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,472.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	4,372.00	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	4,272.00	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	4,172.00	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	4,072.00	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,972.00	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	3,872.00	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	3,772.00	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	3,672.00	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	3,572.00	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	3,472.00	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	3,372.00	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	3,272.00	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	3,172.00	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	2.00	241.45	2,000.0	3,072.02	-0.8	-1.5	-0.8	2.00	2.00	0.00
2,100.0	4.00	241.45	2,099.8	2,972.16	-3.3	-6.1	-3.2	2.00	2.00	0.00
2,200.0	6.00	241.45	2,199.5	2,872.55	-7.5	-13.8	-7.3	2.00	2.00	0.00
2,300.0	8.00	241.45	2,298.7	2,773.30	-13.3	-24.5	-12.9	2.00	2.00	0.00
2,400.0	10.00	241.45	2,397.5	2,674.53	-20.8	-38.2	-20.2	2.00	2.00	0.00
<b>EOB TO 12° INC</b>										
2,500.0	12.00	241.45	2,495.6	2,576.38	-29.9	-55.0	-29.0	2.00	2.00	0.00
2,600.0	12.00	241.45	2,593.4	2,478.56	-39.9	-73.3	-38.7	0.00	0.00	0.00
2,700.0	12.00	241.45	2,691.3	2,380.75	-49.8	-91.5	-48.3	0.00	0.00	0.00
2,800.0	12.00	241.45	2,789.1	2,282.93	-59.7	-109.8	-57.9	0.00	0.00	0.00
2,900.0	12.00	241.45	2,886.9	2,185.12	-69.7	-128.0	-67.6	0.00	0.00	0.00
3,000.0	12.00	241.45	2,984.7	2,087.30	-79.6	-146.3	-77.2	0.00	0.00	0.00
3,100.0	12.00	241.45	3,082.5	1,989.49	-89.5	-164.6	-86.8	0.00	0.00	0.00
3,200.0	12.00	241.45	3,180.3	1,891.67	-99.5	-182.8	-96.5	0.00	0.00	0.00
<b>PARKMAN</b>										
3,255.9	12.00	241.45	3,235.0	1,837.00	-105.0	-193.0	-101.9	0.00	0.00	0.00
3,300.0	12.00	241.45	3,278.1	1,793.86	-109.4	-201.1	-106.1	0.00	0.00	0.00
3,400.0	12.00	241.45	3,376.0	1,696.04	-119.3	-219.4	-115.7	0.00	0.00	0.00
3,500.0	12.00	241.45	3,473.8	1,598.23	-129.3	-237.6	-125.4	0.00	0.00	0.00
3,600.0	12.00	241.45	3,571.6	1,500.41	-139.2	-255.9	-135.0	0.00	0.00	0.00
3,700.0	12.00	241.45	3,669.4	1,402.60	-149.2	-274.1	-144.7	0.00	0.00	0.00
3,800.0	12.00	241.45	3,767.2	1,304.79	-159.1	-292.4	-154.3	0.00	0.00	0.00
3,900.0	12.00	241.45	3,865.0	1,206.97	-169.0	-310.7	-163.9	0.00	0.00	0.00
<b>SUSSEX</b>										
3,999.1	12.00	241.45	3,962.0	1,110.00	-178.9	-328.8	-173.5	0.00	0.00	0.00
4,000.0	12.00	241.45	3,962.8	1,109.16	-179.0	-328.9	-173.6	0.00	0.00	0.00
4,100.0	12.00	241.45	4,060.7	1,011.34	-188.9	-347.2	-183.2	0.00	0.00	0.00
4,200.0	12.00	241.45	4,158.5	913.53	-198.8	-365.5	-192.8	0.00	0.00	0.00
4,300.0	12.00	241.45	4,256.3	815.71	-208.8	-383.7	-202.5	0.00	0.00	0.00
4,400.0	12.00	241.45	4,354.1	717.90	-218.7	-402.0	-212.1	0.00	0.00	0.00
<b>SHANNON</b>										
4,400.9	12.00	241.45	4,355.0	717.00	-218.8	-402.2	-212.2	0.00	0.00	0.00
4,500.0	12.00	241.45	4,451.9	620.08	-228.7	-420.3	-221.7	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well CARSON 4
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<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 5072.0usft (SAV 802)
<b>Site:</b>	SW SW SEC 7 T10N R61W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	CARSON 4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

## 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)
4,600.0	12.00	241.45	4,549.7	522.27	-238.6	-438.5	-231.4	0.00	0.00	0.00
<b>END OF TANGENT</b>										
<b>4,618.0</b>	<b>12.00</b>	<b>241.45</b>	<b>4,567.3</b>	<b>504.66</b>	<b>-240.4</b>	<b>-441.8</b>	<b>-233.1</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
4,700.0	10.36	241.45	4,647.8	424.22	-248.0	-455.8	-240.5	2.00	-2.00	0.00
4,800.0	8.36	241.45	4,746.4	325.56	-255.7	-470.1	-248.0	2.00	-2.00	0.00
4,900.0	6.36	241.45	4,845.6	226.39	-261.9	-481.3	-254.0	2.00	-2.00	0.00
5,000.0	4.36	241.45	4,945.2	126.83	-266.3	-489.5	-258.3	2.00	-2.00	0.00
5,100.0	2.36	241.45	5,045.0	27.01	-269.1	-494.7	-261.0	2.00	-2.00	0.00
5,200.0	0.36	241.45	5,145.0	-72.96	-270.3	-496.8	-262.1	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
<b>5,218.0</b>	<b>0.00</b>	<b>241.45</b>	<b>5,163.0</b>	<b>-90.96</b>	<b>-270.3</b>	<b>-496.8</b>	<b>-262.1</b>	<b>2.00</b>	<b>-2.00</b>	<b>0.00</b>
5,300.0	0.00	0.00	5,245.0	-172.96	-270.3	-496.8	-262.1	0.00	0.00	0.00
5,400.0	0.00	0.00	5,345.0	-272.96	-270.3	-496.8	-262.1	0.00	0.00	0.00
5,500.0	0.00	0.00	5,445.0	-372.96	-270.3	-496.8	-262.1	0.00	0.00	0.00
5,600.0	0.00	0.00	5,545.0	-472.96	-270.3	-496.8	-262.1	0.00	0.00	0.00
5,700.0	0.00	0.00	5,645.0	-572.96	-270.3	-496.8	-262.1	0.00	0.00	0.00
5,800.0	0.00	0.00	5,745.0	-672.96	-270.3	-496.8	-262.1	0.00	0.00	0.00
5,900.0	0.00	0.00	5,845.0	-772.96	-270.3	-496.8	-262.1	0.00	0.00	0.00
6,000.0	0.00	0.00	5,945.0	-872.96	-270.3	-496.8	-262.1	0.00	0.00	0.00
6,100.0	0.00	0.00	6,045.0	-972.96	-270.3	-496.8	-262.1	0.00	0.00	0.00
6,200.0	0.00	0.00	6,145.0	-1,072.96	-270.3	-496.8	-262.1	0.00	0.00	0.00
6,300.0	0.00	0.00	6,245.0	-1,172.96	-270.3	-496.8	-262.1	0.00	0.00	0.00
6,400.0	0.00	0.00	6,345.0	-1,272.96	-270.3	-496.8	-262.1	0.00	0.00	0.00
<b>KOP (10°/100ft BUR)</b>										
<b>6,459.0</b>	<b>0.00</b>	<b>0.00</b>	<b>6,404.0</b>	<b>-1,331.96</b>	<b>-270.3</b>	<b>-496.8</b>	<b>-262.1</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
6,500.0	4.10	1.84	6,444.9	-1,372.93	-268.8	-496.8	-260.7	9.99	9.99	0.00
6,600.0	14.10	1.84	6,543.5	-1,471.54	-253.1	-496.2	-244.9	10.00	10.00	0.00
<b>NIOBRARA</b>										
<b>6,694.6</b>	<b>23.56</b>	<b>1.84</b>	<b>6,633.0</b>	<b>-1,561.00</b>	<b>-222.6</b>	<b>-495.3</b>	<b>-214.4</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,700.0	24.09	1.84	6,637.9	-1,565.92	-220.4	-495.2	-212.3	10.00	10.00	0.00
6,800.0	34.09	1.84	6,725.2	-1,653.19	-171.9	-493.6	-163.8	10.00	10.00	0.00
6,900.0	44.09	1.84	6,802.7	-1,730.71	-108.9	-491.6	-100.9	10.00	10.00	0.00
7,000.0	54.09	1.84	6,868.1	-1,796.11	-33.5	-489.2	-25.5	10.00	10.00	0.00
7,100.0	64.09	1.84	6,919.4	-1,847.41	52.2	-486.4	60.1	10.00	10.00	0.00
<b>FORT HAYS</b>										
<b>7,113.1</b>	<b>65.40</b>	<b>1.84</b>	<b>6,925.0</b>	<b>-1,853.00</b>	<b>64.0</b>	<b>-486.1</b>	<b>72.0</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
7,200.0	74.09	1.84	6,955.1	-1,883.05	145.4	-483.4	153.3	10.00	10.00	0.00
<b>CODELL</b>										
<b>7,251.9</b>	<b>79.28</b>	<b>1.84</b>	<b>6,967.0</b>	<b>-1,895.00</b>	<b>195.9</b>	<b>-481.8</b>	<b>203.7</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
7,300.0	84.09	1.84	6,974.0	-1,901.95	243.4	-480.3	251.3	10.00	10.00	0.00
<b>LANDING PNT (P2) - CARSON 4</b>										
<b>7,359.1</b>	<b>90.00</b>	<b>1.84</b>	<b>6,977.0</b>	<b>-1,905.00</b>	<b>302.4</b>	<b>-478.4</b>	<b>310.2</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
7,400.0	90.00	1.84	6,977.0	-1,905.00	343.3	-477.1	351.0	0.00	0.00	0.00
7,500.0	90.00	1.84	6,977.0	-1,905.00	443.2	-473.9	450.9	0.00	0.00	0.00
7,600.0	90.00	1.84	6,977.0	-1,905.00	543.2	-470.7	550.8	0.00	0.00	0.00
7,700.0	90.00	1.84	6,977.0	-1,904.99	643.1	-467.4	650.7	0.00	0.00	0.00
7,800.0	90.00	1.84	6,977.0	-1,904.99	743.1	-464.2	750.6	0.00	0.00	0.00
7,900.0	90.00	1.84	6,977.0	-1,904.99	843.0	-461.0	850.4	0.00	0.00	0.00
8,000.0	90.00	1.84	6,977.0	-1,904.99	943.0	-457.8	950.3	0.00	0.00	0.00
8,100.0	90.00	1.84	6,977.0	-1,904.99	1,042.9	-454.6	1,050.2	0.00	0.00	0.00
8,200.0	90.00	1.84	6,977.0	-1,904.99	1,142.9	-451.4	1,150.1	0.00	0.00	0.00
8,300.0	90.00	1.84	6,977.0	-1,904.99	1,242.8	-448.2	1,250.0	0.00	0.00	0.00
8,400.0	90.00	1.84	6,977.0	-1,904.98	1,342.8	-445.0	1,349.9	0.00	0.00	0.00



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well CARSON 4
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 5072.0usft (SAV 802)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 5072.0usft (SAV 802)
<b>Site:</b>	SW SW SEC 7 T10N R61W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	CARSON 4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

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)
8,500.0	90.00	1.84	6,977.0	-1,904.98	1,442.7	-441.7	1,449.7	0.00	0.00	0.00
8,600.0	90.00	1.84	6,977.0	-1,904.98	1,542.7	-438.5	1,549.6	0.00	0.00	0.00
8,700.0	90.00	1.84	6,977.0	-1,904.98	1,642.6	-435.3	1,649.5	0.00	0.00	0.00
8,800.0	90.00	1.84	6,977.0	-1,904.98	1,742.6	-432.1	1,749.4	0.00	0.00	0.00
8,900.0	90.00	1.84	6,977.0	-1,904.98	1,842.5	-428.9	1,849.3	0.00	0.00	0.00
9,000.0	90.00	1.84	6,977.0	-1,904.98	1,942.5	-425.7	1,949.2	0.00	0.00	0.00
9,100.0	90.00	1.84	6,977.0	-1,904.97	2,042.4	-422.5	2,049.0	0.00	0.00	0.00
9,200.0	90.00	1.84	6,977.0	-1,904.97	2,142.3	-419.3	2,148.9	0.00	0.00	0.00
9,300.0	90.00	1.84	6,977.0	-1,904.97	2,242.3	-416.1	2,248.8	0.00	0.00	0.00
9,400.0	90.00	1.84	6,977.0	-1,904.97	2,342.2	-412.9	2,348.7	0.00	0.00	0.00
9,500.0	90.00	1.84	6,977.0	-1,904.97	2,442.2	-409.6	2,448.6	0.00	0.00	0.00
9,600.0	90.00	1.84	6,977.0	-1,904.97	2,542.1	-406.4	2,548.5	0.00	0.00	0.00
9,700.0	90.00	1.84	6,977.0	-1,904.97	2,642.1	-403.2	2,648.3	0.00	0.00	0.00
9,800.0	90.00	1.84	6,977.0	-1,904.97	2,742.0	-400.0	2,748.2	0.00	0.00	0.00
9,900.0	90.00	1.84	6,977.0	-1,904.97	2,842.0	-396.8	2,848.1	0.00	0.00	0.00
10,000.0	90.00	1.84	6,977.0	-1,904.97	2,941.9	-393.6	2,948.0	0.00	0.00	0.00
10,100.0	90.00	1.84	6,977.0	-1,904.97	3,041.9	-390.4	3,047.9	0.00	0.00	0.00
10,200.0	90.00	1.84	6,977.0	-1,904.96	3,141.8	-387.2	3,147.7	0.00	0.00	0.00
10,300.0	90.00	1.84	6,977.0	-1,904.96	3,241.8	-384.0	3,247.6	0.00	0.00	0.00
10,400.0	90.00	1.84	6,977.0	-1,904.96	3,341.7	-380.8	3,347.5	0.00	0.00	0.00
10,500.0	90.00	1.84	6,977.0	-1,904.96	3,441.7	-377.6	3,447.4	0.00	0.00	0.00
10,600.0	90.00	1.84	6,977.0	-1,904.96	3,541.6	-374.3	3,547.3	0.00	0.00	0.00
10,700.0	90.00	1.84	6,977.0	-1,904.96	3,641.6	-371.1	3,647.2	0.00	0.00	0.00
10,800.0	90.00	1.84	6,977.0	-1,904.96	3,741.5	-367.9	3,747.0	0.00	0.00	0.00
10,900.0	90.00	1.84	6,977.0	-1,904.96	3,841.5	-364.7	3,846.9	0.00	0.00	0.00
11,000.0	90.00	1.84	6,977.0	-1,904.96	3,941.4	-361.5	3,946.8	0.00	0.00	0.00
11,100.0	90.00	1.84	6,977.0	-1,904.96	4,041.4	-358.3	4,046.7	0.00	0.00	0.00
11,200.0	90.00	1.84	6,977.0	-1,904.96	4,141.3	-355.1	4,146.6	0.00	0.00	0.00
11,300.0	90.00	1.84	6,977.0	-1,904.96	4,241.3	-351.9	4,246.5	0.00	0.00	0.00
11,400.0	90.00	1.84	6,977.0	-1,904.96	4,341.2	-348.7	4,346.3	0.00	0.00	0.00
11,500.0	90.00	1.84	6,977.0	-1,904.96	4,441.2	-345.5	4,446.2	0.00	0.00	0.00
11,600.0	90.00	1.84	6,977.0	-1,904.96	4,541.1	-342.3	4,546.1	0.00	0.00	0.00
11,700.0	90.00	1.84	6,977.0	-1,904.96	4,641.1	-339.1	4,646.0	0.00	0.00	0.00
11,800.0	90.00	1.84	6,977.0	-1,904.96	4,741.0	-335.9	4,745.9	0.00	0.00	0.00
11,900.0	90.00	1.84	6,977.0	-1,904.96	4,841.0	-332.7	4,845.8	0.00	0.00	0.00
12,000.0	90.00	1.84	6,977.0	-1,904.96	4,940.9	-329.4	4,945.6	0.00	0.00	0.00
12,100.0	90.00	1.84	6,977.0	-1,904.96	5,040.9	-326.2	5,045.5	0.00	0.00	0.00
12,200.0	90.00	1.84	6,977.0	-1,904.96	5,140.8	-323.0	5,145.4	0.00	0.00	0.00
12,300.0	90.00	1.84	6,977.0	-1,904.96	5,240.8	-319.8	5,245.3	0.00	0.00	0.00
12,400.0	90.00	1.84	6,977.0	-1,904.96	5,340.7	-316.6	5,345.2	0.00	0.00	0.00
12,500.0	90.00	1.84	6,977.0	-1,904.96	5,440.7	-313.4	5,445.0	0.00	0.00	0.00
12,600.0	90.00	1.84	6,977.0	-1,904.96	5,540.6	-310.2	5,544.9	0.00	0.00	0.00
12,700.0	90.00	1.84	6,977.0	-1,904.96	5,640.5	-307.0	5,644.8	0.00	0.00	0.00
12,800.0	90.00	1.84	6,977.0	-1,904.96	5,740.5	-303.8	5,744.7	0.00	0.00	0.00
12,900.0	90.00	1.84	6,977.0	-1,904.96	5,840.4	-300.6	5,844.6	0.00	0.00	0.00
13,000.0	90.00	1.84	6,977.0	-1,904.96	5,940.4	-297.4	5,944.5	0.00	0.00	0.00
13,100.0	90.00	1.84	6,977.0	-1,904.96	6,040.3	-294.2	6,044.3	0.00	0.00	0.00
13,200.0	90.00	1.84	6,977.0	-1,904.96	6,140.3	-291.0	6,144.2	0.00	0.00	0.00
13,300.0	90.00	1.84	6,977.0	-1,904.96	6,240.2	-287.8	6,244.1	0.00	0.00	0.00
13,400.0	90.00	1.84	6,977.0	-1,904.96	6,340.2	-284.6	6,344.0	0.00	0.00	0.00
13,500.0	90.00	1.84	6,977.0	-1,904.96	6,440.1	-281.4	6,443.9	0.00	0.00	0.00
13,600.0	90.00	1.84	6,977.0	-1,904.96	6,540.1	-278.2	6,543.8	0.00	0.00	0.00
13,700.0	90.00	1.84	6,977.0	-1,904.96	6,640.0	-275.0	6,643.6	0.00	0.00	0.00
13,800.0	90.00	1.84	6,977.0	-1,904.96	6,740.0	-271.8	6,743.5	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well CARSON 4
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 5072.0usft (SAV 802)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 5072.0usft (SAV 802)
<b>Site:</b>	SW SW SEC 7 T10N R61W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	CARSON 4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

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)
13,900.0	90.00	1.84	6,977.0	-1,904.96	6,839.9	-268.6	6,843.4	0.00	0.00	0.00
14,000.0	90.00	1.84	6,977.0	-1,904.96	6,939.9	-265.3	6,943.3	0.00	0.00	0.00
14,100.0	90.00	1.84	6,977.0	-1,904.96	7,039.8	-262.1	7,043.2	0.00	0.00	0.00
14,200.0	90.00	1.84	6,977.0	-1,904.96	7,139.8	-258.9	7,143.1	0.00	0.00	0.00
14,300.0	90.00	1.84	6,977.0	-1,904.96	7,239.7	-255.7	7,242.9	0.00	0.00	0.00
14,400.0	90.00	1.84	6,977.0	-1,904.97	7,339.7	-252.5	7,342.8	0.00	0.00	0.00
14,500.0	90.00	1.84	6,977.0	-1,904.97	7,439.6	-249.3	7,442.7	0.00	0.00	0.00
14,600.0	90.00	1.84	6,977.0	-1,904.97	7,539.6	-246.1	7,542.6	0.00	0.00	0.00
14,700.0	90.00	1.84	6,977.0	-1,904.97	7,639.5	-242.9	7,642.5	0.00	0.00	0.00
14,800.0	90.00	1.84	6,977.0	-1,904.97	7,739.5	-239.7	7,742.4	0.00	0.00	0.00
14,900.0	90.00	1.84	6,977.0	-1,904.97	7,839.4	-236.5	7,842.2	0.00	0.00	0.00
15,000.0	90.00	1.84	6,977.0	-1,904.97	7,939.4	-233.3	7,942.1	0.00	0.00	0.00
15,100.0	90.00	1.83	6,977.0	-1,904.97	8,039.3	-230.1	8,042.0	0.00	0.00	0.00
15,200.0	90.00	1.83	6,977.0	-1,904.97	8,139.3	-226.9	8,141.9	0.00	0.00	0.00
15,300.0	90.00	1.83	6,977.0	-1,904.97	8,239.2	-223.7	8,241.8	0.00	0.00	0.00
15,400.0	90.00	1.83	6,977.0	-1,904.97	8,339.2	-220.5	8,341.7	0.00	0.00	0.00
15,500.0	90.00	1.83	6,977.0	-1,904.98	8,439.1	-217.3	8,441.5	0.00	0.00	0.00
15,600.0	90.00	1.83	6,977.0	-1,904.98	8,539.1	-214.1	8,541.4	0.00	0.00	0.00
15,700.0	90.00	1.83	6,977.0	-1,904.98	8,639.0	-210.9	8,641.3	0.00	0.00	0.00
15,800.0	90.00	1.83	6,977.0	-1,904.98	8,739.0	-207.7	8,741.2	0.00	0.00	0.00
15,900.0	90.00	1.83	6,977.0	-1,904.98	8,838.9	-204.5	8,841.1	0.00	0.00	0.00
16,000.0	90.00	1.83	6,977.0	-1,904.98	8,938.9	-201.3	8,941.0	0.00	0.00	0.00
16,100.0	90.00	1.83	6,977.0	-1,904.98	9,038.8	-198.1	9,040.8	0.00	0.00	0.00
16,200.0	90.00	1.83	6,977.0	-1,904.99	9,138.8	-194.9	9,140.7	0.00	0.00	0.00
16,300.0	90.00	1.83	6,977.0	-1,904.99	9,238.7	-191.7	9,240.6	0.00	0.00	0.00
16,400.0	90.00	1.83	6,977.0	-1,904.99	9,338.7	-188.5	9,340.5	0.00	0.00	0.00
16,500.0	90.00	1.83	6,977.0	-1,904.99	9,438.6	-185.3	9,440.4	0.00	0.00	0.00
16,600.0	90.00	1.83	6,977.0	-1,904.99	9,538.5	-182.1	9,540.3	0.00	0.00	0.00
16,700.0	90.00	1.83	6,977.0	-1,904.99	9,638.5	-178.9	9,640.1	0.00	0.00	0.00
16,800.0	90.00	1.83	6,977.0	-1,904.99	9,738.4	-175.7	9,740.0	0.00	0.00	0.00
16,900.0	90.00	1.83	6,977.0	-1,905.00	9,838.4	-172.5	9,839.9	0.00	0.00	0.00
17,000.0	90.00	1.83	6,977.0	-1,905.00	9,938.3	-169.3	9,939.8	0.00	0.00	0.00
17,100.0	90.00	1.83	6,977.0	-1,905.00	10,038.3	-166.1	10,039.7	0.00	0.00	0.00
<b>BHL (P2) - CARSON 4</b>										
<b>17,139.4</b>	<b>90.00</b>	<b>1.83</b>	<b>6,977.0</b>	<b>-1,905.00</b>	<b>10,077.7</b>	<b>-164.8</b>	<b>10,079.0</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Formations						
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,255.9	3,235.0	PARKMAN		0.00		
3,999.1	3,962.0	SUSSEX		0.00		
4,400.9	4,355.0	SHANNON		0.00		
6,694.6	6,633.0	NIOBRARA		0.00		
7,113.1	6,925.0	FORT HAYS		0.00		
7,251.9	6,967.0	CODELL		0.00		

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well CARSON 4
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 5072.0usft (SAV 802)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 5072.0usft (SAV 802)
<b>Site:</b>	SW SW SEC 7 T10N R61W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	CARSON 4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

## Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,900.0	1,900.0	0.0	0.0	START NUDGE (2°/100ft BUR)
2,500.0	2,495.6	-29.9	-55.0	EOB TO 12° INC
4,618.0	4,567.3	-240.4	-441.8	END OF TANGENT
5,218.0	5,163.0	-270.3	-496.8	EOD TO VERTICAL
6,459.0	6,404.0	-270.3	-496.8	KOP (10°/100ft BUR)
7,359.1	6,977.0	302.4	-478.4	LANDING PNT (P2) - CARSON 4
17,139.4	6,977.0	10,077.7	-164.8	BHL (P2) - CARSON 4