

# **EXTRACTION OIL & GAS**

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

**SW SE SEC 36 T6N R66W 6th P.M.**

**CS-SHERWOOD 2-1-13**

**ORIGINAL WELLBORE**

**04 November, 2015**

**Plan: PROPOSAL #2**





Project: WELD COUNTY, COLORADO (NAD 83)  
Site: SW SE SEC 36 T6N R66W 6th P.M.  
Well: CS-SHERWOOD 2-1-13  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #2

ANNOTATIONS

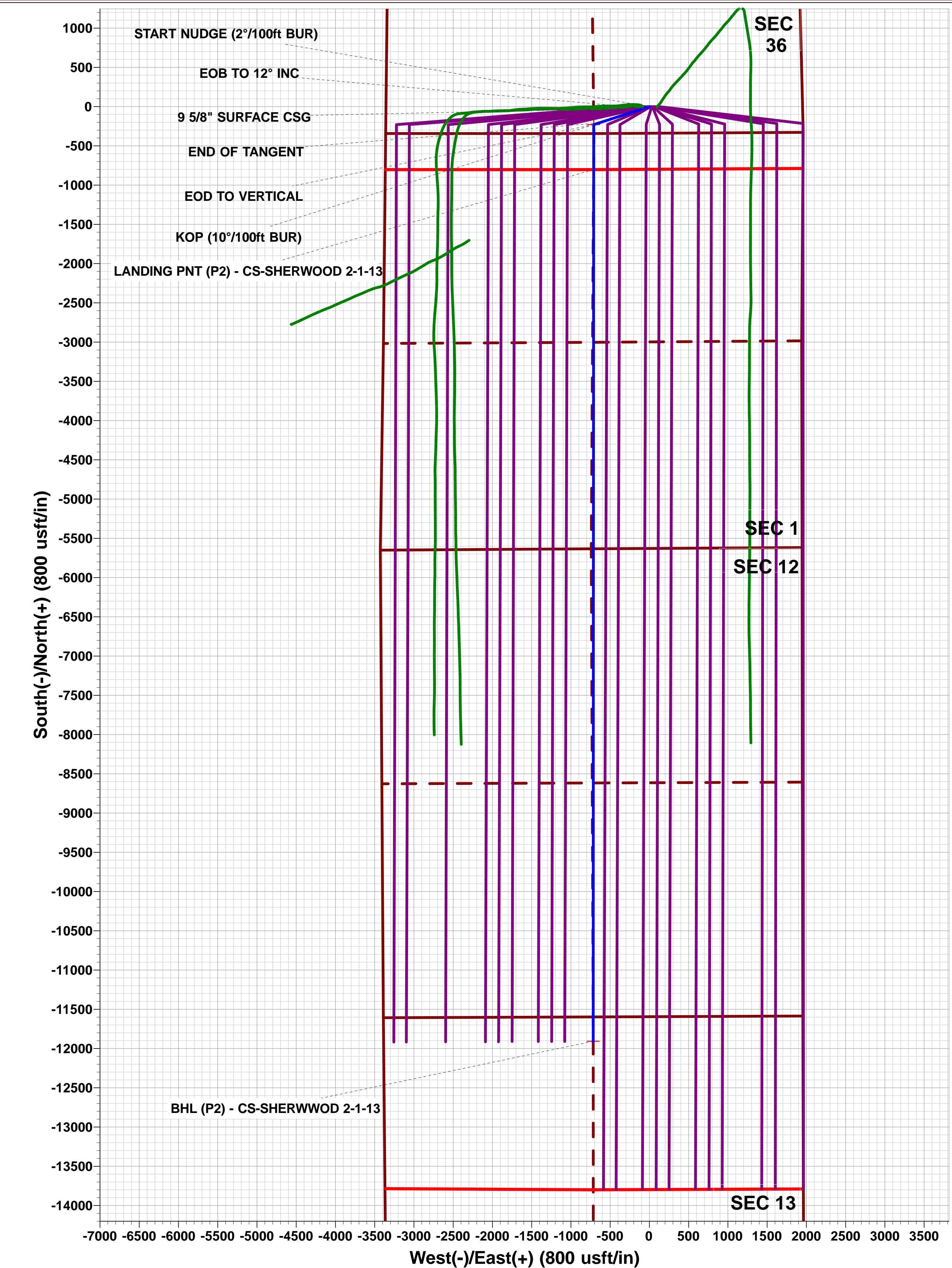
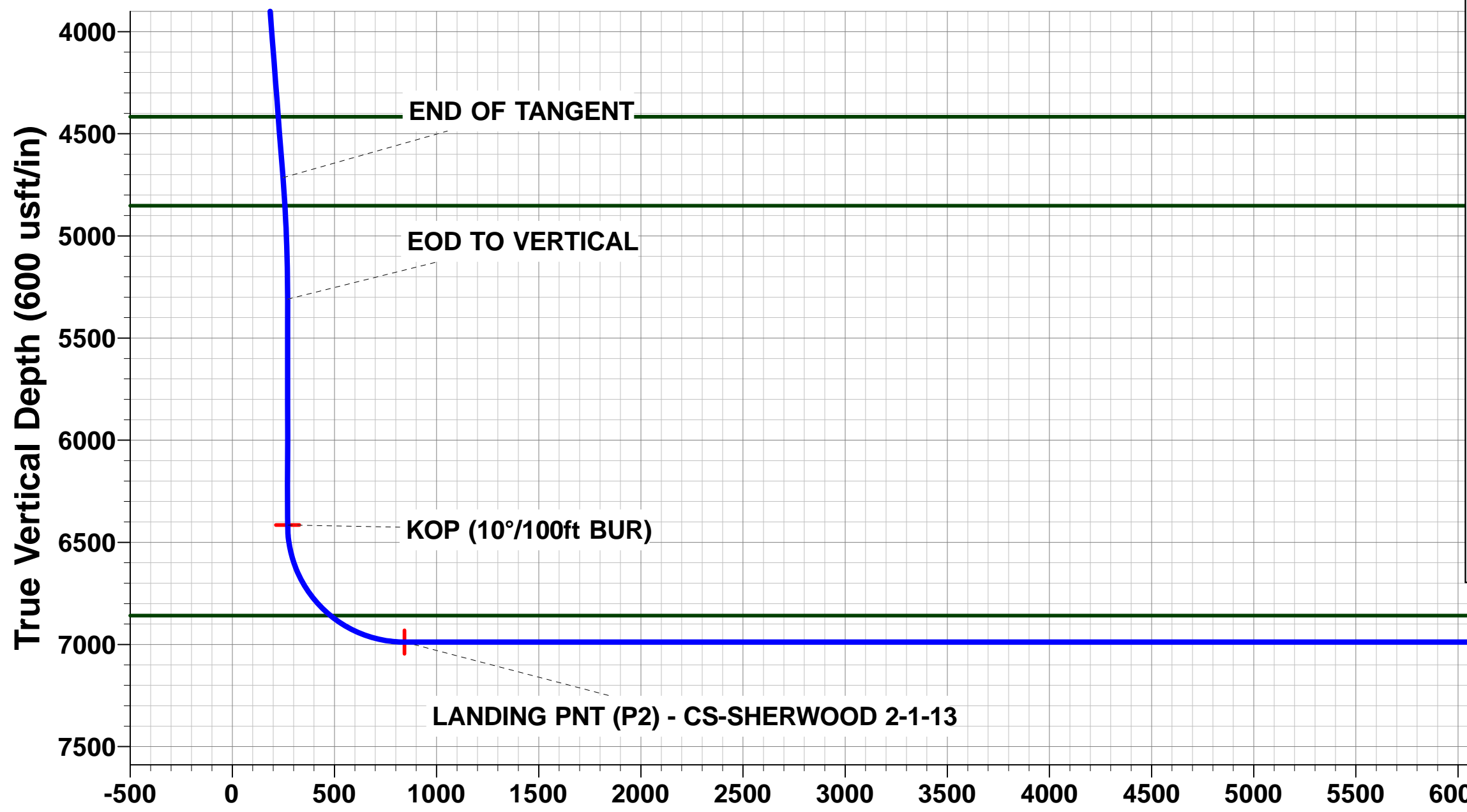
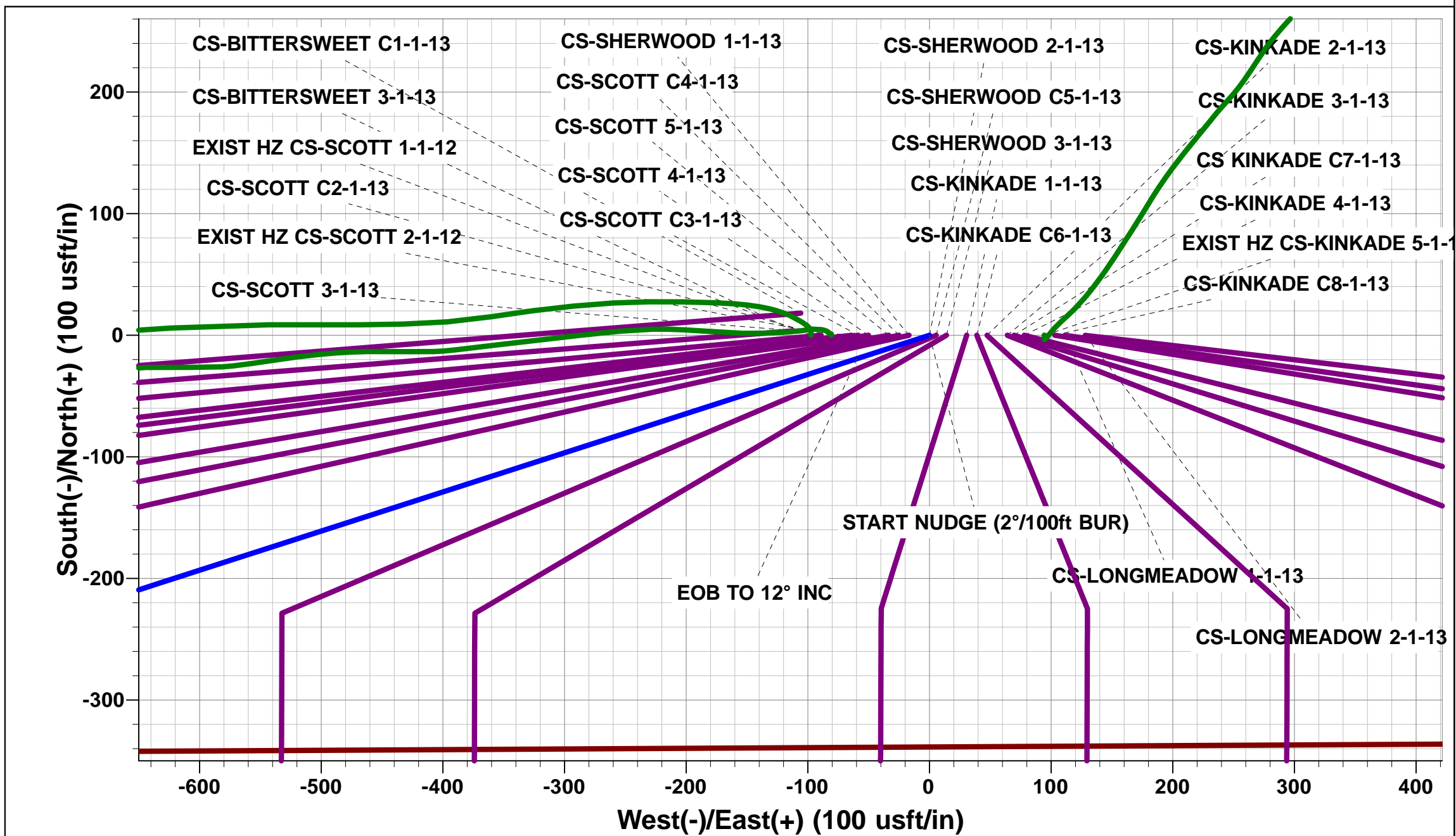
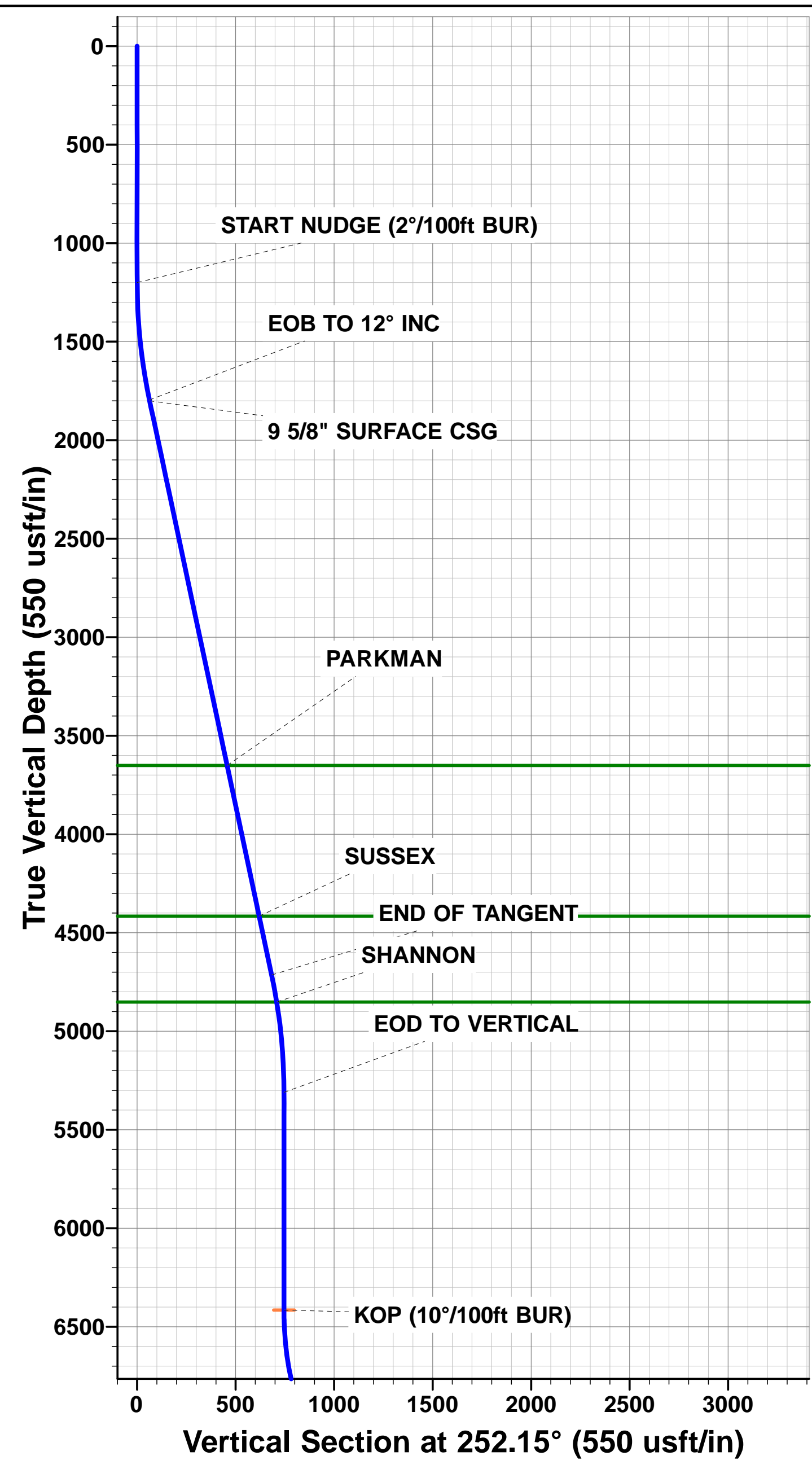
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Dep	Annotation
1200.0	1200.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1795.4	1799.8	12.00	252.15	-19.2	-59.5	22.7	62.6	EOB TO 12° INC
1800.0	1804.5	12.00	252.15	-19.5	-60.5	23.1	63.5	9 5/8" SURFACE CSG
4714.6	4784.1	12.00	252.15	-209.3	-649.9	247.9	682.8	END OF TANGENT
5310.0	5383.9	0.00	252.15	-228.5	-709.5	270.7	745.4	EOD TO VERTICAL
6415.0	6488.9	0.00	0.00	-228.5	-709.5	270.7	745.4	KOP (10°/100ft BUR)
6988.0	7389.0	90.00	180.03	-801.5	-709.8	842.7	1318.4	LANDING PNT (P2) - CS-SHERWOOD 2-1-13
6988.0	18493.2	90.00	180.03	-11905.7	-715.7	11927.2	12422.6	BHL (P2)- CS-SHERWOOD 2-1-13

PROPOSED LOCAL COORDINATES:

SHL: 340ft FSL & 1952ft FEL Sec 36  
LANDING PNT: 460ft FNL & 2655t FWL Sec 1  
BHL: 310ft FNL & 2671ft FWL Sec 13

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP (P2) - CS-SHERWOOD 2-1-13	6415.0	-228.5	-709.5	40.437743	-104.725429
BHL (P2) - CS-SHERWOOD 2-1-13	6988.0	-11905.7	-715.7	40.405690	-104.725450
LANDING PNT (P2) - CS-SHERWOOD 2-1-13	6988.0	-801.5	-709.8	40.436170	-104.725430



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well CS-SHERWOOD 2-1-13
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4681.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4681.0usft (Original Well Elev)
<b>Site:</b>	SW SE SEC 36 T6N R66W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	CS-SHERWOOD 2-1-13	<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

Site	SW SE SEC 36 T6N R66W 6th P.M.				
Site Position:		Northing:	1,403,485.52 usft	Latitude:	40.438370
From:	Lat/Long	Easting:	3,216,213.28 usft	Longitude:	-104.723230
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000 ft	Grid Convergence:	0.50 °

Well	CS-SHERWOOD 2-1-13					
Well Position	+N-S	0.0 usft	Northing:	1,403,486.36 usfi	Latitude:	40.438370
	+E-W	97.4 usft	Easting:	3,216,310.70 usfi	Longitude:	-104.722880
Position Uncertainty		0.0 usft	Wellhead Elevation:	usfi	Ground Level:	4,665.0 usfi

<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	23/06/2015	8.40	66.94	52,644

<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>
	0.0	0.0	0.0	183.44

<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	-4,681.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	-3,481.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,799.8	12.00	252.15	1,795.4	-2,885.6	-19.2	-59.5	2.00	2.00	0.00	252.15	
4,784.1	12.00	252.15	4,714.6	33.6	-209.3	-650.0	0.00	0.00	0.00	0.00	
5,383.9	0.00	0.00	5,310.0	629.0	-228.5	-709.5	2.00	-2.00	0.00	180.00	
6,488.9	0.00	0.00	6,415.0	1,734.0	-228.5	-709.5	0.00	0.00	0.00	0.00	KOP (P2) - CS-SH
7,389.0	90.00	180.03	6,988.0	2,307.0	-801.5	-709.8	10.00	10.00	-20.00	180.03	LANDING PNT (P2
18,493.2	90.00	180.03	6,988.0	2,307.0	-11,905.7	-715.7	0.00	0.00	0.00	-58.28	BHL (P2) - CS-SHE

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well CS-SHERWOOD 2-1-13
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4681.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4681.0usft (Original Well Elev)
<b>Site:</b>	SW SE SEC 36 T6N R66W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	CS-SHERWOOD 2-1-13	<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	4,681.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,581.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,481.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,381.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,281.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,181.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,081.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	3,981.00	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	3,881.00	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,781.00	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,681.00	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,581.00	0.0	0.0	0.0	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
1,200.0	0.00	0.00	1,200.0	3,481.00	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	2.00	252.15	1,300.0	3,381.02	-0.5	-1.7	0.6	2.00	2.00	0.00
1,400.0	4.00	252.15	1,399.8	3,281.16	-2.1	-6.6	2.5	2.00	2.00	0.00
1,500.0	6.00	252.15	1,499.5	3,181.55	-4.8	-14.9	5.7	2.00	2.00	0.00
1,600.0	8.00	252.15	1,598.7	3,082.30	-8.5	-26.5	10.1	2.00	2.00	0.00
1,700.0	10.00	252.15	1,697.5	2,983.53	-13.3	-41.4	15.8	2.00	2.00	0.00
<b>EOB TO 12" INC</b>										
1,799.8	12.00	252.15	1,795.4	2,885.57	-19.2	-59.5	22.7	2.00	2.00	0.00
1,800.0	12.00	252.15	1,795.6	2,885.38	-19.2	-59.6	22.7	0.00	0.00	0.00
<b>9 5/8" SURFACE CSG</b>										
1,804.5	12.00	252.15	1,800.0	2,881.00	-19.5	-60.5	23.1	0.00	0.00	0.00
1,900.0	12.00	252.15	1,893.4	2,787.56	-25.6	-79.4	30.3	0.00	0.00	0.00
2,000.0	12.00	252.15	1,991.3	2,689.74	-31.9	-99.2	37.8	0.00	0.00	0.00
2,100.0	12.00	252.15	2,089.1	2,591.93	-38.3	-118.9	45.4	0.00	0.00	0.00
2,200.0	12.00	252.15	2,186.9	2,494.11	-44.7	-138.7	52.9	0.00	0.00	0.00
2,300.0	12.00	252.15	2,284.7	2,396.30	-51.0	-158.5	60.5	0.00	0.00	0.00
2,400.0	12.00	252.15	2,382.5	2,298.48	-57.4	-178.3	68.0	0.00	0.00	0.00
2,500.0	12.00	252.15	2,480.3	2,200.66	-63.8	-198.1	75.6	0.00	0.00	0.00
2,600.0	12.00	252.15	2,578.2	2,102.85	-70.2	-217.9	83.1	0.00	0.00	0.00
2,700.0	12.00	252.15	2,676.0	2,005.03	-76.5	-237.6	90.7	0.00	0.00	0.00
2,800.0	12.00	252.15	2,773.8	1,907.21	-82.9	-257.4	98.2	0.00	0.00	0.00
2,900.0	12.00	252.15	2,871.6	1,809.40	-89.3	-277.2	105.8	0.00	0.00	0.00
3,000.0	12.00	252.15	2,969.4	1,711.58	-95.6	-297.0	113.3	0.00	0.00	0.00
3,100.0	12.00	252.15	3,067.2	1,613.77	-102.0	-316.8	120.8	0.00	0.00	0.00
3,200.0	12.00	252.15	3,165.1	1,515.95	-108.4	-336.6	128.4	0.00	0.00	0.00
3,300.0	12.00	252.15	3,262.9	1,418.13	-114.8	-356.3	135.9	0.00	0.00	0.00
3,400.0	12.00	252.15	3,360.7	1,320.32	-121.1	-376.1	143.5	0.00	0.00	0.00
3,500.0	12.00	252.15	3,458.5	1,222.50	-127.5	-395.9	151.0	0.00	0.00	0.00
3,600.0	12.00	252.15	3,556.3	1,124.68	-133.9	-415.7	158.6	0.00	0.00	0.00
<b>PARKMAN</b>										
3,696.8	12.00	252.15	3,651.0	1,030.00	-140.0	-434.8	165.9	0.00	0.00	0.00
3,700.0	12.00	252.15	3,654.1	1,026.87	-140.2	-435.5	166.1	0.00	0.00	0.00
3,800.0	12.00	252.15	3,751.9	929.05	-146.6	-455.3	173.7	0.00	0.00	0.00
3,900.0	12.00	252.15	3,849.8	831.24	-153.0	-475.0	181.2	0.00	0.00	0.00
4,000.0	12.00	252.15	3,947.6	733.42	-159.4	-494.8	188.8	0.00	0.00	0.00
4,100.0	12.00	252.15	4,045.4	635.60	-165.7	-514.6	196.3	0.00	0.00	0.00
4,200.0	12.00	252.15	4,143.2	537.79	-172.1	-534.4	203.9	0.00	0.00	0.00
4,300.0	12.00	252.15	4,241.0	439.97	-178.5	-554.2	211.4	0.00	0.00	0.00
4,400.0	12.00	252.15	4,338.8	342.15	-184.8	-574.0	219.0	0.00	0.00	0.00
<b>SUSSEX</b>										
4,478.9	12.00	252.15	4,416.0	265.00	-189.9	-589.6	224.9	0.00	0.00	0.00



# Planning Report



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<b>Site:</b>	SW SE SEC 36 T6N R66W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	CS-SHERWOOD 2-1-13	<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)
4,500.0	12.00	252.15	4,436.7	244.34	-191.2	-593.7	226.5	0.00	0.00	0.00
4,600.0	12.00	252.15	4,534.5	146.52	-197.6	-613.5	234.1	0.00	0.00	0.00
4,700.0	12.00	252.15	4,632.3	48.71	-204.0	-633.3	241.6	0.00	0.00	0.00
<b>END OF TANGENT</b>										
<b>4,784.1</b>	<b>12.00</b>	<b>252.15</b>	<b>4,714.6</b>	<b>-33.56</b>	<b>-209.3</b>	<b>-649.9</b>	<b>247.9</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
4,800.0	11.68	252.15	4,730.1	-49.12	-210.3	-653.1	249.1	2.00	-2.00	0.00
4,900.0	9.68	252.15	4,828.4	-147.38	-216.0	-670.7	255.9	2.00	-2.00	0.00
<b>SHANNON</b>										
<b>4,923.9</b>	<b>9.20</b>	<b>252.15</b>	<b>4,852.0</b>	<b>-171.00</b>	<b>-217.2</b>	<b>-674.4</b>	<b>257.3</b>	<b>2.00</b>	<b>-2.00</b>	<b>0.00</b>
5,000.0	7.68	252.15	4,927.2	-246.23	-220.6	-685.1	261.3	2.00	-2.00	0.00
5,100.0	5.68	252.15	5,026.5	-345.55	-224.2	-696.1	265.6	2.00	-2.00	0.00
5,200.0	3.68	252.15	5,126.2	-445.21	-226.7	-703.9	268.5	2.00	-2.00	0.00
5,300.0	1.68	252.15	5,226.1	-545.10	-228.1	-708.3	270.2	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
<b>5,383.9</b>	<b>0.00</b>	<b>252.15</b>	<b>5,310.0</b>	<b>-628.98</b>	<b>-228.5</b>	<b>-709.5</b>	<b>270.7</b>	<b>2.00</b>	<b>-2.00</b>	<b>0.00</b>
5,400.0	0.00	0.00	5,326.1	-645.08	-228.5	-709.5	270.7	0.00	0.00	0.00
5,500.0	0.00	0.00	5,426.1	-745.08	-228.5	-709.5	270.7	0.00	0.00	0.00
5,600.0	0.00	0.00	5,526.1	-845.08	-228.5	-709.5	270.7	0.00	0.00	0.00
5,700.0	0.00	0.00	5,626.1	-945.08	-228.5	-709.5	270.7	0.00	0.00	0.00
5,800.0	0.00	0.00	5,726.1	-1,045.08	-228.5	-709.5	270.7	0.00	0.00	0.00
5,900.0	0.00	0.00	5,826.1	-1,145.08	-228.5	-709.5	270.7	0.00	0.00	0.00
6,000.0	0.00	0.00	5,926.1	-1,245.08	-228.5	-709.5	270.7	0.00	0.00	0.00
6,100.0	0.00	0.00	6,026.1	-1,345.08	-228.5	-709.5	270.7	0.00	0.00	0.00
6,200.0	0.00	0.00	6,126.1	-1,445.08	-228.5	-709.5	270.7	0.00	0.00	0.00
6,300.0	0.00	0.00	6,226.1	-1,545.08	-228.5	-709.5	270.7	0.00	0.00	0.00
6,400.0	0.00	0.00	6,326.1	-1,645.08	-228.5	-709.5	270.7	0.00	0.00	0.00
<b>KOP (10°/100ft BUR)</b>										
<b>6,488.9</b>	<b>0.00</b>	<b>0.00</b>	<b>6,415.0</b>	<b>-1,733.98</b>	<b>-228.5</b>	<b>-709.5</b>	<b>270.7</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
6,500.0	1.11	180.03	6,426.1	-1,745.08	-228.6	-709.5	270.8	9.99	9.99	0.00
6,600.0	11.11	180.03	6,525.4	-1,844.39	-239.2	-709.5	281.4	10.00	10.00	0.00
6,700.0	21.11	180.03	6,621.3	-1,940.34	-266.9	-709.5	309.0	10.00	10.00	0.00
6,800.0	31.11	180.03	6,711.0	-2,030.03	-310.9	-709.6	352.9	10.00	10.00	0.00
6,900.0	41.11	180.03	6,791.7	-2,110.72	-369.7	-709.6	411.7	10.00	10.00	0.00
<b>NIORARA</b>										
<b>6,995.3</b>	<b>50.64</b>	<b>180.03</b>	<b>6,858.0</b>	<b>-2,177.00</b>	<b>-438.1</b>	<b>-709.6</b>	<b>479.9</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
7,000.0	51.10	180.03	6,861.0	-2,179.96	-441.7	-709.6	483.5	10.00	10.00	0.00
7,100.0	61.10	180.03	6,916.7	-2,235.66	-524.6	-709.7	566.3	10.00	10.00	0.00
7,200.0	71.10	180.03	6,957.1	-2,276.12	-615.9	-709.7	657.4	10.00	10.00	0.00
7,300.0	81.10	180.03	6,981.1	-2,300.10	-712.9	-709.8	754.2	10.00	10.00	0.00
<b>LANDING PNT (P2) - CS-SHERWOOD 2-1-13</b>										
<b>7,389.0</b>	<b>90.00</b>	<b>180.03</b>	<b>6,988.0</b>	<b>-2,307.00</b>	<b>-801.5</b>	<b>-709.8</b>	<b>842.7</b>	<b>9.99</b>	<b>9.99</b>	<b>0.00</b>
7,400.0	90.00	180.03	6,988.0	-2,307.00	-812.5	-709.9	853.7	0.00	0.00	0.00
7,500.0	90.00	180.03	6,988.0	-2,307.01	-912.5	-709.9	953.5	0.00	0.00	0.00
7,600.0	90.00	180.03	6,988.0	-2,307.01	-1,012.5	-710.0	1,053.3	0.00	0.00	0.00
7,700.0	90.00	180.03	6,988.0	-2,307.01	-1,112.5	-710.0	1,153.1	0.00	0.00	0.00
7,800.0	90.00	180.03	6,988.0	-2,307.02	-1,212.5	-710.1	1,252.9	0.00	0.00	0.00
7,900.0	90.00	180.03	6,988.0	-2,307.02	-1,312.5	-710.2	1,352.8	0.00	0.00	0.00
8,000.0	90.00	180.03	6,988.0	-2,307.03	-1,412.5	-710.2	1,452.6	0.00	0.00	0.00
8,100.0	90.00	180.03	6,988.0	-2,307.03	-1,512.5	-710.3	1,552.4	0.00	0.00	0.00
8,200.0	90.00	180.03	6,988.0	-2,307.04	-1,612.5	-710.3	1,652.2	0.00	0.00	0.00
8,300.0	90.00	180.03	6,988.0	-2,307.04	-1,712.5	-710.4	1,752.1	0.00	0.00	0.00
8,400.0	90.00	180.03	6,988.0	-2,307.05	-1,812.5	-710.5	1,851.9	0.00	0.00	0.00
8,500.0	90.00	180.03	6,988.0	-2,307.05	-1,912.5	-710.5	1,951.7	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well CS-SHERWOOD 2-1-13
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4681.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4681.0usft (Original Well Elev)
<b>Site:</b>	SW SE SEC 36 T6N R66W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	CS-SHERWOOD 2-1-13	<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)
8,600.0	90.00	180.03	6,988.1	-2,307.05	-2,012.5	-710.6	2,051.5	0.00	0.00	0.00
8,700.0	90.00	180.03	6,988.1	-2,307.06	-2,112.5	-710.6	2,151.4	0.00	0.00	0.00
8,800.0	90.00	180.03	6,988.1	-2,307.06	-2,212.5	-710.7	2,251.2	0.00	0.00	0.00
8,900.0	90.00	180.03	6,988.1	-2,307.06	-2,312.5	-710.8	2,351.0	0.00	0.00	0.00
9,000.0	90.00	180.03	6,988.1	-2,307.07	-2,412.5	-710.8	2,450.8	0.00	0.00	0.00
9,100.0	90.00	180.03	6,988.1	-2,307.07	-2,512.5	-710.9	2,550.6	0.00	0.00	0.00
9,200.0	90.00	180.03	6,988.1	-2,307.07	-2,612.5	-710.9	2,650.5	0.00	0.00	0.00
9,300.0	90.00	180.03	6,988.1	-2,307.08	-2,712.5	-711.0	2,750.3	0.00	0.00	0.00
9,400.0	90.00	180.03	6,988.1	-2,307.08	-2,812.5	-711.0	2,850.1	0.00	0.00	0.00
9,500.0	90.00	180.03	6,988.1	-2,307.08	-2,912.5	-711.1	2,949.9	0.00	0.00	0.00
9,600.0	90.00	180.03	6,988.1	-2,307.09	-3,012.5	-711.2	3,049.8	0.00	0.00	0.00
9,700.0	90.00	180.03	6,988.1	-2,307.09	-3,112.5	-711.2	3,149.6	0.00	0.00	0.00
9,800.0	90.00	180.03	6,988.1	-2,307.09	-3,212.5	-711.3	3,249.4	0.00	0.00	0.00
9,900.0	90.00	180.03	6,988.1	-2,307.10	-3,312.5	-711.3	3,349.2	0.00	0.00	0.00
10,000.0	90.00	180.03	6,988.1	-2,307.10	-3,412.5	-711.4	3,449.1	0.00	0.00	0.00
10,100.0	90.00	180.03	6,988.1	-2,307.10	-3,512.5	-711.4	3,548.9	0.00	0.00	0.00
10,200.0	90.00	180.03	6,988.1	-2,307.10	-3,612.5	-711.5	3,648.7	0.00	0.00	0.00
10,300.0	90.00	180.03	6,988.1	-2,307.11	-3,712.5	-711.6	3,748.5	0.00	0.00	0.00
10,400.0	90.00	180.03	6,988.1	-2,307.11	-3,812.5	-711.6	3,848.4	0.00	0.00	0.00
10,500.0	90.00	180.03	6,988.1	-2,307.11	-3,912.5	-711.7	3,948.2	0.00	0.00	0.00
10,600.0	90.00	180.03	6,988.1	-2,307.11	-4,012.5	-711.7	4,048.0	0.00	0.00	0.00
10,700.0	90.00	180.03	6,988.1	-2,307.11	-4,112.5	-711.8	4,147.8	0.00	0.00	0.00
10,800.0	90.00	180.03	6,988.1	-2,307.12	-4,212.5	-711.8	4,247.6	0.00	0.00	0.00
10,900.0	90.00	180.03	6,988.1	-2,307.12	-4,312.5	-711.9	4,347.5	0.00	0.00	0.00
11,000.0	90.00	180.03	6,988.1	-2,307.12	-4,412.5	-712.0	4,447.3	0.00	0.00	0.00
11,100.0	90.00	180.03	6,988.1	-2,307.12	-4,512.5	-712.0	4,547.1	0.00	0.00	0.00
11,200.0	90.00	180.03	6,988.1	-2,307.12	-4,612.5	-712.1	4,646.9	0.00	0.00	0.00
11,300.0	90.00	180.03	6,988.1	-2,307.12	-4,712.5	-712.1	4,746.8	0.00	0.00	0.00
11,400.0	90.00	180.03	6,988.1	-2,307.13	-4,812.5	-712.2	4,846.6	0.00	0.00	0.00
11,500.0	90.00	180.03	6,988.1	-2,307.13	-4,912.5	-712.2	4,946.4	0.00	0.00	0.00
11,600.0	90.00	180.03	6,988.1	-2,307.13	-5,012.5	-712.3	5,046.2	0.00	0.00	0.00
11,700.0	90.00	180.03	6,988.1	-2,307.13	-5,112.5	-712.3	5,146.1	0.00	0.00	0.00
11,800.0	90.00	180.03	6,988.1	-2,307.13	-5,212.5	-712.4	5,245.9	0.00	0.00	0.00
11,900.0	90.00	180.03	6,988.1	-2,307.13	-5,312.5	-712.5	5,345.7	0.00	0.00	0.00
12,000.0	90.00	180.03	6,988.1	-2,307.13	-5,412.5	-712.5	5,445.5	0.00	0.00	0.00
12,100.0	90.00	180.03	6,988.1	-2,307.13	-5,512.5	-712.6	5,545.3	0.00	0.00	0.00
12,200.0	90.00	180.03	6,988.1	-2,307.13	-5,612.5	-712.6	5,645.2	0.00	0.00	0.00
12,300.0	90.00	180.03	6,988.1	-2,307.13	-5,712.5	-712.7	5,745.0	0.00	0.00	0.00
12,400.0	90.00	180.03	6,988.1	-2,307.13	-5,812.5	-712.7	5,844.8	0.00	0.00	0.00
12,500.0	90.00	180.03	6,988.1	-2,307.14	-5,912.5	-712.8	5,944.6	0.00	0.00	0.00
12,600.0	90.00	180.03	6,988.1	-2,307.14	-6,012.5	-712.8	6,044.5	0.00	0.00	0.00
12,700.0	90.00	180.03	6,988.1	-2,307.14	-6,112.5	-712.9	6,144.3	0.00	0.00	0.00
12,800.0	90.00	180.03	6,988.1	-2,307.14	-6,212.5	-712.9	6,244.1	0.00	0.00	0.00
12,900.0	90.00	180.03	6,988.1	-2,307.14	-6,312.5	-713.0	6,343.9	0.00	0.00	0.00
13,000.0	90.00	180.03	6,988.1	-2,307.14	-6,412.5	-713.0	6,443.8	0.00	0.00	0.00
13,100.0	90.00	180.03	6,988.1	-2,307.14	-6,512.5	-713.1	6,543.6	0.00	0.00	0.00
13,200.0	90.00	180.03	6,988.1	-2,307.14	-6,612.5	-713.2	6,643.4	0.00	0.00	0.00
13,300.0	90.00	180.03	6,988.1	-2,307.14	-6,712.5	-713.2	6,743.2	0.00	0.00	0.00
13,400.0	90.00	180.03	6,988.1	-2,307.14	-6,812.5	-713.3	6,843.0	0.00	0.00	0.00
13,500.0	90.00	180.03	6,988.1	-2,307.13	-6,912.5	-713.3	6,942.9	0.00	0.00	0.00
13,600.0	90.00	180.03	6,988.1	-2,307.13	-7,012.5	-713.4	7,042.7	0.00	0.00	0.00
13,700.0	90.00	180.03	6,988.1	-2,307.13	-7,112.5	-713.4	7,142.5	0.00	0.00	0.00
13,800.0	90.00	180.03	6,988.1	-2,307.13	-7,212.5	-713.5	7,242.3	0.00	0.00	0.00
13,900.0	90.00	180.03	6,988.1	-2,307.13	-7,312.5	-713.5	7,342.2	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well CS-SHERWOOD 2-1-13
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4681.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4681.0usft (Original Well Elev)
<b>Site:</b>	SW SE SEC 36 T6N R66W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	CS-SHERWOOD 2-1-13	<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)
14,000.0	90.00	180.03	6,988.1	-2,307.13	-7,412.5	-713.6	7,442.0	0.00	0.00	0.00
14,100.0	90.00	180.03	6,988.1	-2,307.13	-7,512.5	-713.6	7,541.8	0.00	0.00	0.00
14,200.0	90.00	180.03	6,988.1	-2,307.13	-7,612.5	-713.7	7,641.6	0.00	0.00	0.00
14,300.0	90.00	180.03	6,988.1	-2,307.13	-7,712.5	-713.7	7,741.4	0.00	0.00	0.00
14,400.0	90.00	180.03	6,988.1	-2,307.13	-7,812.5	-713.8	7,841.3	0.00	0.00	0.00
14,500.0	90.00	180.03	6,988.1	-2,307.13	-7,912.5	-713.8	7,941.1	0.00	0.00	0.00
14,600.0	90.00	180.03	6,988.1	-2,307.12	-8,012.5	-713.9	8,040.9	0.00	0.00	0.00
14,700.0	90.00	180.03	6,988.1	-2,307.12	-8,112.5	-713.9	8,140.7	0.00	0.00	0.00
14,800.0	90.00	180.03	6,988.1	-2,307.12	-8,212.5	-714.0	8,240.6	0.00	0.00	0.00
14,900.0	90.00	180.03	6,988.1	-2,307.12	-8,312.5	-714.0	8,340.4	0.00	0.00	0.00
15,000.0	90.00	180.03	6,988.1	-2,307.12	-8,412.5	-714.1	8,440.2	0.00	0.00	0.00
15,100.0	90.00	180.03	6,988.1	-2,307.12	-8,512.5	-714.1	8,540.0	0.00	0.00	0.00
15,200.0	90.00	180.03	6,988.1	-2,307.11	-8,612.5	-714.2	8,639.9	0.00	0.00	0.00
15,300.0	90.00	180.03	6,988.1	-2,307.11	-8,712.5	-714.2	8,739.7	0.00	0.00	0.00
15,400.0	90.00	180.03	6,988.1	-2,307.11	-8,812.5	-714.3	8,839.5	0.00	0.00	0.00
15,500.0	90.00	180.03	6,988.1	-2,307.11	-8,912.5	-714.3	8,939.3	0.00	0.00	0.00
15,600.0	90.00	180.03	6,988.1	-2,307.10	-9,012.5	-714.4	9,039.1	0.00	0.00	0.00
15,700.0	90.00	180.03	6,988.1	-2,307.10	-9,112.5	-714.4	9,139.0	0.00	0.00	0.00
15,800.0	90.00	180.03	6,988.1	-2,307.10	-9,212.5	-714.5	9,238.8	0.00	0.00	0.00
15,900.0	90.00	180.03	6,988.1	-2,307.10	-9,312.5	-714.5	9,338.6	0.00	0.00	0.00
16,000.0	90.00	180.03	6,988.1	-2,307.09	-9,412.5	-714.6	9,438.4	0.00	0.00	0.00
16,100.0	90.00	180.03	6,988.1	-2,307.09	-9,512.5	-714.6	9,538.3	0.00	0.00	0.00
16,200.0	90.00	180.03	6,988.1	-2,307.09	-9,612.5	-714.7	9,638.1	0.00	0.00	0.00
16,300.0	90.00	180.03	6,988.1	-2,307.09	-9,712.5	-714.7	9,737.9	0.00	0.00	0.00
16,400.0	90.00	180.03	6,988.1	-2,307.08	-9,812.5	-714.8	9,837.7	0.00	0.00	0.00
16,500.0	90.00	180.03	6,988.1	-2,307.08	-9,912.5	-714.8	9,937.5	0.00	0.00	0.00
16,600.0	90.00	180.03	6,988.1	-2,307.08	-10,012.5	-714.9	10,037.4	0.00	0.00	0.00
16,700.0	90.00	180.03	6,988.1	-2,307.07	-10,112.5	-714.9	10,137.2	0.00	0.00	0.00
16,800.0	90.00	180.03	6,988.1	-2,307.07	-10,212.5	-715.0	10,237.0	0.00	0.00	0.00
16,900.0	90.00	180.03	6,988.1	-2,307.07	-10,312.5	-715.0	10,336.8	0.00	0.00	0.00
17,000.0	90.00	180.03	6,988.1	-2,307.06	-10,412.5	-715.0	10,436.7	0.00	0.00	0.00
17,100.0	90.00	180.03	6,988.1	-2,307.06	-10,512.5	-715.1	10,536.5	0.00	0.00	0.00
17,200.0	90.00	180.03	6,988.1	-2,307.06	-10,612.5	-715.1	10,636.3	0.00	0.00	0.00
17,300.0	90.00	180.03	6,988.1	-2,307.05	-10,712.5	-715.2	10,736.1	0.00	0.00	0.00
17,400.0	90.00	180.03	6,988.0	-2,307.05	-10,812.5	-715.2	10,836.0	0.00	0.00	0.00
17,500.0	90.00	180.03	6,988.0	-2,307.04	-10,912.5	-715.3	10,935.8	0.00	0.00	0.00
17,600.0	90.00	180.03	6,988.0	-2,307.04	-11,012.5	-715.3	11,035.6	0.00	0.00	0.00
17,700.0	90.00	180.03	6,988.0	-2,307.04	-11,112.5	-715.4	11,135.4	0.00	0.00	0.00
17,800.0	90.00	180.03	6,988.0	-2,307.03	-11,212.5	-715.4	11,235.2	0.00	0.00	0.00
17,900.0	90.00	180.03	6,988.0	-2,307.03	-11,312.5	-715.5	11,335.1	0.00	0.00	0.00
18,000.0	90.00	180.03	6,988.0	-2,307.02	-11,412.5	-715.5	11,434.9	0.00	0.00	0.00
18,100.0	90.00	180.03	6,988.0	-2,307.02	-11,512.5	-715.6	11,534.7	0.00	0.00	0.00
18,200.0	90.00	180.03	6,988.0	-2,307.01	-11,612.5	-715.6	11,634.5	0.00	0.00	0.00
18,300.0	90.00	180.03	6,988.0	-2,307.01	-11,712.5	-715.7	11,734.4	0.00	0.00	0.00
18,400.0	90.00	180.03	6,988.0	-2,307.00	-11,812.5	-715.7	11,834.2	0.00	0.00	0.00
<b>BHL (P2)- CS-SHERWOOD 2-1-13</b>										
<b>18,493.2</b>	<b>90.00</b>	<b>180.03</b>	<b>6,988.0</b>	<b>-2,307.00</b>	<b>-11,905.7</b>	<b>-715.7</b>	<b>11,927.2</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 CS-SHERWOOD 2-1-13
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4681.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4681.0usft (Original Well Elev)
<b>Site:</b>	SW SE SEC 36 T6N R66W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	CS-SHERWOOD 2-1-13	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

Formations					
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,696.8	3,651.0	PARKMAN			
4,478.9	4,416.0	SUSSEX			
4,923.9	4,852.0	SHANNON			
6,995.3	6,858.0	NIOBRARA			

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,200.0	1,200.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1,799.8	1,795.4	-19.2	-59.5	EOB TO 12° INC
1,804.5	1,800.0	-19.5	-60.5	9 5/8" SURFACE CSG
4,784.1	4,714.6	-209.3	-649.9	END OF TANGENT
5,383.9	5,310.0	-228.5	-709.5	EOD TO VERTICAL
6,488.9	6,415.0	-228.5	-709.5	KOP (10°/100ft BUR)
7,389.0	6,988.0	-801.5	-709.8	LANDING PNT (P2) - CS-SHERWOOD 2-1-13
18,493.2	6,988.0	-11,905.7	-715.7	BHL (P2)- CS-SHERWOOD 2-1-13