

EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)

SE NE SEC. 22 T6N R67W 6th P.M.

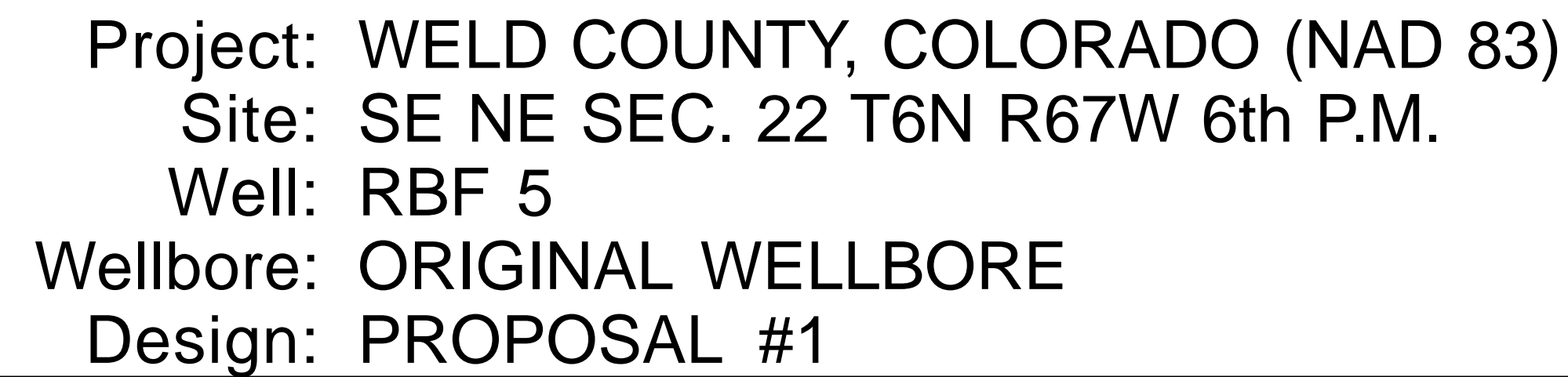
RBF 5

ORIGINAL WELLBORE

25 October, 2016

Plan: PROPOSAL #1





FORMATION TOP DETAILS

TVDPATH	MDPATH	FORMATION
3450.0	3516.2	PARKMAN
4215.0	4301.3	SUSSEX
4790.0	4891.5	SHANNON
6809.0	6932.8	SHARON SPRINGS
6846.0	6973.6	NIOBRARA
6965.0	7117.7	NIO B
7120.0	7389.6	FORT HAYS
7150.0	7497.9	CODELL

PROPOSED LOCAL COORDINATES

SHL: 2009ft FNL & 300ft FEL of Sec 22

LP: 991.3ft FNL & 460ft FEL of Sec 22

BHL: 990ft FNL & 460ft FWL of Sec 21

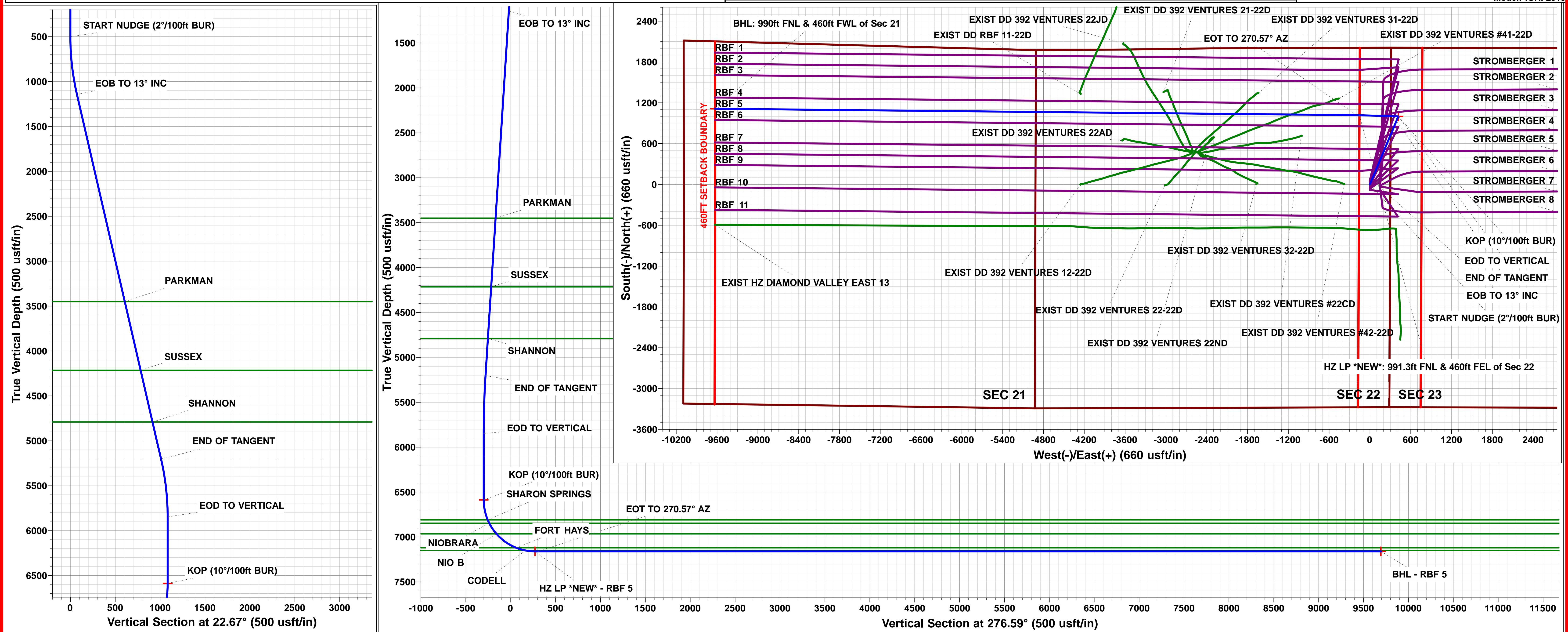
Magnetic Field

Strength: 52493.4nT

Dip Angle: 66.91°

Date: 25/10/2016

Model: IGRF2016



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RBF 5
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
Site:	SE NE SEC. 22 T6N R67W 6th P.M.	North Reference:	True
Well:	RBF 5	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

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

Site	SE NE SEC. 22 T6N R67W 6th P.M.				
Site Position:		Northing:	1,417,027.42usft	Latitude:	40.476424
From:	Lat/Long	Easting:	3,175,712.36usft	Longitude:	-104.868382
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft	Grid Convergence:	0.41 °

Well	RBF 5					
Well Position	+N/-S	-812.8 usft	Northing:	1,416,208.73 usft	Latitude:	40.474193
	+E/-W	-839.7 usft	Easting:	3,174,878.55 usft	Longitude:	-104.871400
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	4,778.0 usft

Wellbore	ORIGINAL WELLBORE				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	25/10/2016	8.34	66.91	52,493

Design	PROPOSAL #1				
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Audit Notes:					
Version:		Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	276.59	

Plan Sections											
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	-4,794.0	0.0	0.0	0.00	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	-4,294.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,150.0	13.00	22.67	1,144.4	-3,649.6	67.8	28.3	2.00	2.00	0.00	22.67	
5,314.9	13.00	22.67	5,202.6	408.6	932.2	389.4	0.00	0.00	0.00	0.00	
5,964.9	0.00	0.00	5,847.0	1,053.0	1,000.0	417.7	2.00	-2.00	0.00	180.00	
6,704.9	0.00	0.00	6,587.0	1,793.0	1,000.0	417.7	0.00	0.00	0.00	0.00	KOP - RBF 5
7,604.9	90.00	271.70	7,160.0	2,366.0	1,017.0	-155.0	10.00	10.00	0.00	271.70	
7,642.4	90.00	270.57	7,160.0	2,366.0	1,017.7	-192.5	3.00	0.00	-3.00	-90.01	
17,080.1	90.00	270.57	7,160.0	2,366.0	1,112.3	-9,629.7	0.00	0.00	0.00	0.00	BHL - RBF 5

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Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
Site:	SE NE SEC. 22 T6N R67W 6th P.M.	North Reference:	True
Well:	RBF 5	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

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)
SHL: 2009ft FNL & 300ft FEL of Sec 22										
0.0	0.00	0.00	0.0	4,794.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,694.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,594.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,494.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,394.00	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
500.0	0.00	0.00	500.0	4,294.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	2.00	22.67	600.0	4,194.02	1.6	0.7	-0.5	2.00	2.00	0.00
700.0	4.00	22.67	699.8	4,094.16	6.4	2.7	-1.9	2.00	2.00	0.00
800.0	6.00	22.67	799.5	3,994.55	14.5	6.0	-4.3	2.00	2.00	0.00
900.0	8.00	22.67	898.7	3,895.30	25.7	10.7	-7.7	2.00	2.00	0.00
1,000.0	10.00	22.67	997.5	3,796.53	40.2	16.8	-12.1	2.00	2.00	0.00
1,100.0	12.00	22.67	1,095.6	3,698.38	57.8	24.1	-17.3	2.00	2.00	0.00
1,150.0	13.00	22.67	1,144.4	3,649.57	67.8	28.3	-20.3	2.00	2.00	0.00
EOB TO 13° INC										
1,150.0	13.00	22.67	1,144.5	3,649.52	67.8	28.3	-20.3	0.00	0.00	0.00
1,200.0	13.00	22.67	1,193.2	3,600.84	78.1	32.6	-23.5	0.00	0.00	0.00
1,300.0	13.00	22.67	1,290.6	3,503.41	98.9	41.3	-29.7	0.00	0.00	0.00
1,400.0	13.00	22.67	1,388.0	3,405.97	119.6	50.0	-35.9	0.00	0.00	0.00
1,500.0	13.00	22.67	1,485.5	3,308.53	140.4	58.6	-42.1	0.00	0.00	0.00
1,600.0	13.00	22.67	1,582.9	3,211.10	161.2	67.3	-48.4	0.00	0.00	0.00
1,700.0	13.00	22.67	1,680.3	3,113.66	181.9	76.0	-54.6	0.00	0.00	0.00
1,800.0	13.00	22.67	1,777.8	3,016.22	202.7	84.7	-60.8	0.00	0.00	0.00
1,900.0	13.00	22.67	1,875.2	2,918.78	223.4	93.3	-67.1	0.00	0.00	0.00
2,000.0	13.00	22.67	1,972.7	2,821.35	244.2	102.0	-73.3	0.00	0.00	0.00
2,100.0	13.00	22.67	2,070.1	2,723.91	264.9	110.7	-79.5	0.00	0.00	0.00
2,200.0	13.00	22.67	2,167.5	2,626.47	285.7	119.3	-85.8	0.00	0.00	0.00
2,300.0	13.00	22.67	2,265.0	2,529.04	306.5	128.0	-92.0	0.00	0.00	0.00
2,400.0	13.00	22.67	2,362.4	2,431.60	327.2	136.7	-98.2	0.00	0.00	0.00
2,500.0	13.00	22.67	2,459.8	2,334.16	348.0	145.3	-104.5	0.00	0.00	0.00
2,600.0	13.00	22.67	2,557.3	2,236.73	368.7	154.0	-110.7	0.00	0.00	0.00
2,700.0	13.00	22.67	2,654.7	2,139.29	389.5	162.7	-116.9	0.00	0.00	0.00
2,800.0	13.00	22.67	2,752.1	2,041.85	410.2	171.4	-123.2	0.00	0.00	0.00
2,900.0	13.00	22.67	2,849.6	1,944.41	431.0	180.0	-129.4	0.00	0.00	0.00
3,000.0	13.00	22.67	2,947.0	1,846.98	451.8	188.7	-135.6	0.00	0.00	0.00
3,100.0	13.00	22.67	3,044.5	1,749.54	472.5	197.4	-141.8	0.00	0.00	0.00
3,200.0	13.00	22.67	3,141.9	1,652.10	493.3	206.0	-148.1	0.00	0.00	0.00
3,300.0	13.00	22.67	3,239.3	1,554.67	514.0	214.7	-154.3	0.00	0.00	0.00
3,400.0	13.00	22.67	3,336.8	1,457.23	534.8	223.4	-160.5	0.00	0.00	0.00
3,500.0	13.00	22.67	3,434.2	1,359.79	555.5	232.0	-166.8	0.00	0.00	0.00
PARKMAN										
3,516.2	13.00	22.67	3,450.0	1,344.00	558.9	233.5	-167.8	0.00	0.00	0.00
3,600.0	13.00	22.67	3,531.6	1,262.35	576.3	240.7	-173.0	0.00	0.00	0.00
3,700.0	13.00	22.67	3,629.1	1,164.92	597.1	249.4	-179.2	0.00	0.00	0.00
3,800.0	13.00	22.67	3,726.5	1,067.48	617.8	258.1	-185.5	0.00	0.00	0.00
3,900.0	13.00	22.67	3,824.0	970.04	638.6	266.7	-191.7	0.00	0.00	0.00
4,000.0	13.00	22.67	3,921.4	872.61	659.3	275.4	-197.9	0.00	0.00	0.00
4,100.0	13.00	22.67	4,018.8	775.17	680.1	284.1	-204.2	0.00	0.00	0.00
4,200.0	13.00	22.67	4,116.3	677.73	700.8	292.7	-210.4	0.00	0.00	0.00
4,300.0	13.00	22.67	4,213.7	580.30	721.6	301.4	-216.6	0.00	0.00	0.00
SUSSEX										
4,301.3	13.00	22.67	4,215.0	579.00	721.9	301.5	-216.7	0.00	0.00	0.00
4,400.0	13.00	22.67	4,311.1	482.86	742.4	310.1	-222.8	0.00	0.00	0.00
4,500.0	13.00	22.67	4,408.6	385.42	763.1	318.7	-229.1	0.00	0.00	0.00
4,600.0	13.00	22.67	4,506.0	287.98	783.9	327.4	-235.3	0.00	0.00	0.00
4,700.0	13.00	22.67	4,603.5	190.55	804.6	336.1	-241.5	0.00	0.00	0.00
4,800.0	13.00	22.67	4,700.9	93.11	825.4	344.8	-247.8	0.00	0.00	0.00

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Well:	RBF 5	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

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)
SHANNON										
4,891.5	13.00	22.67	4,790.0	4.00	844.4	352.7	-253.5	0.00	0.00	0.00
4,900.0	13.00	22.67	4,798.3	-4.33	846.1	353.4	-254.0	0.00	0.00	0.00
5,000.0	13.00	22.67	4,895.8	-101.76	866.9	362.1	-260.2	0.00	0.00	0.00
5,100.0	13.00	22.67	4,993.2	-199.20	887.6	370.8	-266.5	0.00	0.00	0.00
5,200.0	13.00	22.67	5,090.6	-296.64	908.4	379.4	-272.7	0.00	0.00	0.00
5,300.0	13.00	22.67	5,188.1	-394.08	929.2	388.1	-278.9	0.00	0.00	0.00
END OF TANGENT										
5,314.9	13.00	22.67	5,202.6	-408.59	932.3	389.4	-279.9	0.00	0.00	0.00
5,400.0	11.30	22.67	5,285.8	-491.78	948.8	396.3	-284.8	2.00	-2.00	0.00
5,500.0	9.30	22.67	5,384.2	-590.17	965.3	403.2	-289.8	2.00	-2.00	0.00
5,600.0	7.30	22.67	5,483.1	-689.12	978.6	408.8	-293.8	2.00	-2.00	0.00
5,700.0	5.30	22.67	5,582.5	-788.51	988.7	413.0	-296.8	2.00	-2.00	0.00
5,800.0	3.30	22.67	5,682.2	-888.22	995.6	415.9	-298.9	2.00	-2.00	0.00
5,900.0	1.30	22.67	5,782.1	-988.14	999.3	417.4	-300.0	2.00	-2.00	0.00
EOD TO VERTICAL										
5,964.9	0.00	0.00	5,847.0	-1,053.02	1,000.0	417.7	-300.2	2.00	-2.00	0.00
6,000.0	0.00	0.00	5,882.1	-1,088.13	1,000.0	417.7	-300.2	0.00	0.00	0.00
6,100.0	0.00	0.00	5,982.1	-1,188.13	1,000.0	417.7	-300.2	0.00	0.00	0.00
6,200.0	0.00	0.00	6,082.1	-1,288.13	1,000.0	417.7	-300.2	0.00	0.00	0.00
6,300.0	0.00	0.00	6,182.1	-1,388.13	1,000.0	417.7	-300.2	0.00	0.00	0.00
6,400.0	0.00	0.00	6,282.1	-1,488.13	1,000.0	417.7	-300.2	0.00	0.00	0.00
6,500.0	0.00	0.00	6,382.1	-1,588.13	1,000.0	417.7	-300.2	0.00	0.00	0.00
6,600.0	0.00	0.00	6,482.1	-1,688.13	1,000.0	417.7	-300.2	0.00	0.00	0.00
6,700.0	0.00	0.00	6,582.1	-1,788.13	1,000.0	417.7	-300.2	0.00	0.00	0.00
KOP (10°/100ft BUR)										
6,704.9	0.00	0.00	6,587.0	-1,793.02	1,000.0	417.7	-300.2	0.00	0.00	0.00
6,800.0	9.51	271.70	6,681.7	-1,887.69	1,000.2	409.8	-292.3	10.00	10.00	0.00
6,900.0	19.51	271.70	6,778.4	-1,984.38	1,001.0	384.8	-267.4	10.00	10.00	0.00
SHARON SPRINGS										
6,932.8	22.80	271.70	6,809.0	-2,015.00	1,001.3	373.0	-255.6	10.00	10.00	0.00
NIOBRARA										
6,973.6	26.87	271.70	6,846.0	-2,052.00	1,001.8	355.8	-238.5	10.00	10.00	0.00
7,000.0	29.51	271.70	6,869.3	-2,075.25	1,002.2	343.4	-226.1	10.00	10.00	0.00
7,100.0	39.51	271.70	6,951.5	-2,157.55	1,003.9	286.8	-169.7	10.00	10.00	0.00
NIO B										
7,117.7	41.28	271.70	6,965.0	-2,171.00	1,004.2	275.4	-158.3	10.00	10.00	0.00
7,200.0	49.51	271.70	7,022.8	-2,228.77	1,006.0	216.8	-100.0	10.00	10.00	0.00
7,300.0	59.51	271.70	7,080.7	-2,286.74	1,008.4	135.6	-18.9	10.00	10.00	0.00
FORT HAYS										
7,389.6	68.48	271.70	7,120.0	-2,326.00	1,010.8	55.1	61.2	10.00	10.00	0.00
7,400.0	69.51	271.70	7,123.7	-2,329.72	1,011.0	45.4	70.9	10.00	10.00	0.00
CODELL										
7,497.9	79.30	271.70	7,150.0	-2,356.00	1,013.8	-48.7	164.7	10.00	10.00	0.00
7,500.0	79.51	271.70	7,150.4	-2,356.39	1,013.9	-50.8	166.8	10.00	10.00	0.00
7,600.0	89.51	271.70	7,159.9	-2,365.94	1,016.9	-150.1	265.8	10.00	10.00	0.00
HZ LP *NEW*: 991.3ft FNL & 460ft FEL of Sec 22										
7,604.9	90.00	271.70	7,160.0	-2,365.96	1,017.0	-155.0	270.7	9.96	9.96	0.00
EOT TO 270.57° AZ										
7,642.4	90.00	270.57	7,160.0	-2,365.96	1,017.7	-192.5	308.1	3.00	0.00	-3.00
7,700.0	90.00	270.57	7,160.0	-2,365.96	1,018.3	-250.1	365.3	0.00	0.00	0.00
7,800.0	90.00	270.57	7,160.0	-2,365.96	1,019.3	-350.1	464.8	0.00	0.00	0.00
7,900.0	90.00	270.57	7,160.0	-2,365.96	1,020.3	-450.1	564.2	0.00	0.00	0.00
8,000.0	90.00	270.57	7,160.0	-2,365.96	1,021.3	-550.1	663.7	0.00	0.00	0.00
8,100.0	90.00	270.57	7,160.0	-2,365.96	1,022.3	-650.1	763.1	0.00	0.00	0.00
8,200.0	90.00	270.57	7,160.0	-2,365.96	1,023.3	-750.1	862.6	0.00	0.00	0.00
8,300.0	90.00	270.57	7,160.0	-2,365.96	1,024.3	-850.1	962.0	0.00	0.00	0.00
8,400.0	90.00	270.57	7,160.0	-2,365.96	1,025.3	-950.1	1,061.5	0.00	0.00	0.00

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Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
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Well:	RBF 5	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

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	270.57	7,160.0	-2,365.96	1,026.3	-1,050.1	1,160.9	0.00	0.00	0.00
8,600.0	90.00	270.57	7,160.0	-2,365.96	1,027.3	-1,150.1	1,260.4	0.00	0.00	0.00
8,700.0	90.00	270.57	7,160.0	-2,365.96	1,028.3	-1,250.1	1,359.8	0.00	0.00	0.00
8,800.0	90.00	270.57	7,160.0	-2,365.96	1,029.3	-1,350.1	1,459.3	0.00	0.00	0.00
8,900.0	90.00	270.57	7,160.0	-2,365.96	1,030.3	-1,450.1	1,558.7	0.00	0.00	0.00
9,000.0	90.00	270.57	7,160.0	-2,365.96	1,031.3	-1,550.1	1,658.2	0.00	0.00	0.00
9,100.0	90.00	270.57	7,160.0	-2,365.96	1,032.3	-1,650.1	1,757.6	0.00	0.00	0.00
9,200.0	90.00	270.57	7,160.0	-2,365.96	1,033.4	-1,750.1	1,857.1	0.00	0.00	0.00
9,300.0	90.00	270.57	7,160.0	-2,365.97	1,034.4	-1,850.0	1,956.5	0.00	0.00	0.00
9,400.0	90.00	270.57	7,160.0	-2,365.97	1,035.4	-1,950.0	2,056.0	0.00	0.00	0.00
9,500.0	90.00	270.57	7,160.0	-2,365.97	1,036.4	-2,050.0	2,155.4	0.00	0.00	0.00
9,600.0	90.00	270.57	7,160.0	-2,365.97	1,037.4	-2,150.0	2,254.9	0.00	0.00	0.00
9,700.0	90.00	270.57	7,160.0	-2,365.97	1,038.4	-2,250.0	2,354.3	0.00	0.00	0.00
9,800.0	90.00	270.57	7,160.0	-2,365.97	1,039.4	-2,350.0	2,453.8	0.00	0.00	0.00
9,900.0	90.00	270.57	7,160.0	-2,365.97	1,040.4	-2,450.0	2,553.2	0.00	0.00	0.00
10,000.0	90.00	270.57	7,160.0	-2,365.97	1,041.4	-2,550.0	2,652.7	0.00	0.00	0.00
10,100.0	90.00	270.57	7,160.0	-2,365.97	1,042.4	-2,650.0	2,752.1	0.00	0.00	0.00
10,200.0	90.00	270.57	7,160.0	-2,365.97	1,043.4	-2,750.0	2,851.6	0.00	0.00	0.00
10,300.0	90.00	270.57	7,160.0	-2,365.97	1,044.4	-2,850.0	2,951.0	0.00	0.00	0.00
10,400.0	90.00	270.57	7,160.0	-2,365.97	1,045.4	-2,950.0	3,050.5	0.00	0.00	0.00
10,500.0	90.00	270.57	7,160.0	-2,365.97	1,046.4	-3,050.0	3,149.9	0.00	0.00	0.00
10,600.0	90.00	270.57	7,160.0	-2,365.97	1,047.4	-3,150.0	3,249.4	0.00	0.00	0.00
10,700.0	90.00	270.57	7,160.0	-2,365.97	1,048.4	-3,250.0	3,348.8	0.00	0.00	0.00
10,800.0	90.00	270.57	7,160.0	-2,365.97	1,049.4	-3,350.0	3,448.3	0.00	0.00	0.00
10,900.0	90.00	270.57	7,160.0	-2,365.97	1,050.4	-3,450.0	3,547.7	0.00	0.00	0.00
11,000.0	90.00	270.57	7,160.0	-2,365.97	1,051.4	-3,550.0	3,647.2	0.00	0.00	0.00
11,100.0	90.00	270.57	7,160.0	-2,365.97	1,052.4	-3,650.0	3,746.6	0.00	0.00	0.00
11,200.0	90.00	270.57	7,160.0	-2,365.97	1,053.4	-3,750.0	3,846.1	0.00	0.00	0.00
11,300.0	90.00	270.57	7,160.0	-2,365.97	1,054.4	-3,849.9	3,945.5	0.00	0.00	0.00
11,400.0	90.00	270.57	7,160.0	-2,365.97	1,055.4	-3,949.9	4,045.0	0.00	0.00	0.00
11,500.0	90.00	270.57	7,160.0	-2,365.98	1,056.4	-4,049.9	4,144.4	0.00	0.00	0.00
11,600.0	90.00	270.57	7,160.0	-2,365.98	1,057.4	-4,149.9	4,243.9	0.00	0.00	0.00
11,700.0	90.00	270.57	7,160.0	-2,365.98	1,058.4	-4,249.9	4,343.3	0.00	0.00	0.00
11,800.0	90.00	270.57	7,160.0	-2,365.98	1,059.4	-4,349.9	4,442.8	0.00	0.00	0.00
11,900.0	90.00	270.57	7,160.0	-2,365.98	1,060.4	-4,449.9	4,542.2	0.00	0.00	0.00
12,000.0	90.00	270.57	7,160.0	-2,365.98	1,061.4	-4,549.9	4,641.7	0.00	0.00	0.00
12,100.0	90.00	270.57	7,160.0	-2,365.98	1,062.4	-4,649.9	4,741.1	0.00	0.00	0.00
12,200.0	90.00	270.57	7,160.0	-2,365.98	1,063.4	-4,749.9	4,840.5	0.00	0.00	0.00
12,300.0	90.00	270.57	7,160.0	-2,365.98	1,064.4	-4,849.9	4,940.0	0.00	0.00	0.00
12,400.0	90.00	270.57	7,160.0	-2,365.98	1,065.4	-4,949.9	5,039.4	0.00	0.00	0.00
12,500.0	90.00	270.57	7,160.0	-2,365.98	1,066.4	-5,049.9	5,138.9	0.00	0.00	0.00
12,600.0	90.00	270.57	7,160.0	-2,365.98	1,067.4	-5,149.9	5,238.3	0.00	0.00	0.00
12,700.0	90.00	270.57	7,160.0	-2,365.98	1,068.4	-5,249.9	5,337.8	0.00	0.00	0.00
12,800.0	90.00	270.57	7,160.0	-2,365.98	1,069.4	-5,349.9	5,437.2	0.00	0.00	0.00
12,900.0	90.00	270.57	7,160.0	-2,365.98	1,070.4	-5,449.9	5,536.7	0.00	0.00	0.00
13,000.0	90.00	270.57	7,160.0	-2,365.98	1,071.4	-5,549.9	5,636.1	0.00	0.00	0.00
13,100.0	90.00	270.57	7,160.0	-2,365.98	1,072.4	-5,649.9	5,735.6	0.00	0.00	0.00
13,200.0	90.00	270.57	7,160.0	-2,365.98	1,073.4	-5,749.8	5,835.0	0.00	0.00	0.00
13,300.0	90.00	270.57	7,160.0	-2,365.98	1,074.4	-5,849.8	5,934.5	0.00	0.00	0.00
13,400.0	90.00	270.57	7,160.0	-2,365.98	1,075.4	-5,949.8	6,033.9	0.00	0.00	0.00
13,500.0	90.00	270.57	7,160.0	-2,365.98	1,076.4	-6,049.8	6,133.4	0.00	0.00	0.00
13,600.0	90.00	270.57	7,160.0	-2,365.98	1,077.4	-6,149.8	6,232.8	0.00	0.00	0.00
13,700.0	90.00	270.57	7,160.0	-2,365.98	1,078.4	-6,249.8	6,332.3	0.00	0.00	0.00
13,800.0	90.00	270.57	7,160.0	-2,365.99	1,079.5	-6,349.8	6,431.7	0.00	0.00	0.00
13,900.0	90.00	270.57	7,160.0	-2,365.99	1,080.5	-6,449.8	6,531.2	0.00	0.00	0.00
14,000.0	90.00	270.57	7,160.0	-2,365.99	1,081.5	-6,549.8	6,630.6	0.00	0.00	0.00
14,100.0	90.00	270.57	7,160.0	-2,365.99	1,082.5	-6,649.8	6,730.1	0.00	0.00	0.00
14,200.0	90.00	270.57	7,160.0	-2,365.99	1,083.5	-6,749.8	6,829.5	0.00	0.00	0.00
14,300.0	90.00	270.57	7,160.0	-2,365.99	1,084.5	-6,849.8	6,929.0	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RBF 5
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
Site:	SE NE SEC. 22 T6N R67W 6th P.M.	North Reference:	True
Well:	RBF 5	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

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)
14,400.0	90.00	270.57	7,160.0	-2,365.99	1,085.5	-6,949.8	7,028.4	0.00	0.00	0.00
14,500.0	90.00	270.57	7,160.0	-2,365.99	1,086.5	-7,049.8	7,127.9	0.00	0.00	0.00
14,600.0	90.00	270.57	7,160.0	-2,365.99	1,087.5	-7,149.8	7,227.3	0.00	0.00	0.00
14,700.0	90.00	270.57	7,160.0	-2,365.99	1,088.5	-7,249.8	7,326.8	0.00	0.00	0.00
14,800.0	90.00	270.57	7,160.0	-2,365.99	1,089.5	-7,349.8	7,426.2	0.00	0.00	0.00
14,900.0	90.00	270.57	7,160.0	-2,365.99	1,090.5	-7,449.8	7,525.7	0.00	0.00	0.00
15,000.0	90.00	270.57	7,160.0	-2,365.99	1,091.5	-7,549.8	7,625.1	0.00	0.00	0.00
15,100.0	90.00	270.57	7,160.0	-2,365.99	1,092.5	-7,649.8	7,724.6	0.00	0.00	0.00
15,200.0	90.00	270.57	7,160.0	-2,365.99	1,093.5	-7,749.7	7,824.0	0.00	0.00	0.00
15,300.0	90.00	270.57	7,160.0	-2,365.99	1,094.5	-7,849.7	7,923.5	0.00	0.00	0.00
15,400.0	90.00	270.57	7,160.0	-2,365.99	1,095.5	-7,949.7	8,022.9	0.00	0.00	0.00
15,500.0	90.00	270.57	7,160.0	-2,365.99	1,096.5	-8,049.7	8,122.4	0.00	0.00	0.00
15,600.0	90.00	270.57	7,160.0	-2,365.99	1,097.5	-8,149.7	8,221.8	0.00	0.00	0.00
15,700.0	90.00	270.57	7,160.0	-2,365.99	1,098.5	-8,249.7	8,321.3	0.00	0.00	0.00
15,800.0	90.00	270.57	7,160.0	-2,365.99	1,099.5	-8,349.7	8,420.7	0.00	0.00	0.00
15,900.0	90.00	270.57	7,160.0	-2,365.99	1,100.5	-8,449.7	8,520.2	0.00	0.00	0.00
16,000.0	90.00	270.57	7,160.0	-2,366.00	1,101.5	-8,549.7	8,619.6	0.00	0.00	0.00
16,100.0	90.00	270.57	7,160.0	-2,366.00	1,102.5	-8,649.7	8,719.1	0.00	0.00	0.00
16,200.0	90.00	270.57	7,160.0	-2,366.00	1,103.5	-8,749.7	8,818.5	0.00	0.00	0.00
16,300.0	90.00	270.57	7,160.0	-2,366.00	1,104.5	-8,849.7	8,918.0	0.00	0.00	0.00
16,400.0	90.00	270.57	7,160.0	-2,366.00	1,105.5	-8,949.7	9,017.4	0.00	0.00	0.00
16,500.0	90.00	270.57	7,160.0	-2,366.00	1,106.5	-9,049.7	9,116.9	0.00	0.00	0.00
16,600.0	90.00	270.57	7,160.0	-2,366.00	1,107.5	-9,149.7	9,216.3	0.00	0.00	0.00
16,700.0	90.00	270.57	7,160.0	-2,366.00	1,108.5	-9,249.7	9,315.8	0.00	0.00	0.00
16,800.0	90.00	270.57	7,160.0	-2,366.00	1,109.5	-9,349.7	9,415.2	0.00	0.00	0.00
16,900.0	90.00	270.57	7,160.0	-2,366.00	1,110.5	-9,449.7	9,514.7	0.00	0.00	0.00
17,000.0	90.00	270.57	7,160.0	-2,366.00	1,111.5	-9,549.7	9,614.1	0.00	0.00	0.00
BHL: 990ft FNL & 460ft FWL of Sec 21										
17,080.1	90.00	270.57	7,160.0	-2,366.00	1,112.3	-9,629.7	9,693.7	0.00	0.00	0.00

Formations

MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,516.2	3,450.0	PARKMAN			
4,301.3	4,215.0	SUSSEX			
4,891.5	4,790.0	SHANNON			
6,932.8	6,809.0	SHARON SPRINGS			
6,973.6	6,846.0	NIOBRARA			
7,117.7	6,965.0	NIO B			
7,389.6	7,120.0	FORT HAYS			
7,497.9	7,150.0	CODELL			

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RBF 5
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4794.0usft (Original Well Elev)
Site:	SE NE SEC. 22 T6N R67W 6th P.M.	North Reference:	True
Well:	RBF 5	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Plan Annotations				
Local Coordinates				
MD (usft)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Comment
0.0	0.0	0.0	0.0	SHL: 2009ft FNL & 300ft FEL of Sec 22
500.0	500.0	0.0	0.0	START NUDGE (2"/100ft BUR)
1,150.0	1,144.5	67.8	28.3	EOB TO 13° INC
5,314.9	5,202.6	932.3	389.4	END OF TANGENT
5,964.9	5,847.0	1,000.0	417.7	EOD TO VERTICAL
6,704.9	6,587.0	1,000.0	417.7	KOP (10"/100ft BUR)
7,604.9	7,160.0	1,017.0	-155.0	HZ LP *NEW*: 991.3ft FNL & 460ft FEL of Sec 22
7,642.4	7,160.0	1,017.7	-192.5	EOT TO 270.57° AZ
17,080.1	7,160.0	1,112.3	-9,629.7	BHL: 990ft FNL & 460ft FWL of Sec 21