

Project: WELD COUNTY, CO (NAD 83)
Site: 7N-65W-03 RUSCH PAD
Well: RUSCH 15W4CM
Wellbore: Plan A
Design: Permit Rev-1

PRAIRIE OPERATING CO

CASING DETAILS

TVD	MD	Name	Size
1825.00	1863.35	9 5/8"	9-5/8
7106.00	17974.59	5 1/2" CSG	5-1/2

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	700.00	10.00	200.00	697.47	-40.90	-14.89	2.00	200.00	13.62	
4	1459.74	17.04	137.46	1439.11	-185.75	38.13	2.00	-97.22	-43.85	
5	6603.29	17.04	137.46	6356.86	-1296.31	1057.19	0.00	0.00	-1096.73	
6	7734.54	90.00	271.77	7106.00	-1441.22	429.27	9.00	133.03	-473.58	
7	17974.59	90.00	271.77	7106.00	-1124.13	-9805.87	0.00	0.00	9766.47	RUSCH 15W4CM_BHL/BPZ

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	Northing	Easting	Latitude	Longitude
RUSCH 15W4CM_SHL	0.00	1462680.23	3238409.05	40.600287	-104.641435
RUSCH 15W4CM_LP/TPZ	7106.00	1461243.24	3238852.59	40.596331	-104.639888
RUSCH 15W4CM_BHL/BPZ	7106.00	1461461.20	3228614.52	40.597196	-104.676746

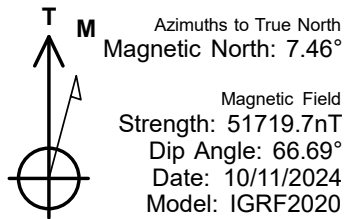
WELL DETAILS: RUSCH 15W4CM

GL = 4886'

RKB = 20' @ 4906.00usft (RIG)

Plan: Permit Rev-1 (RUSCH 15W4CM/Plan A)

Date: 10/13/2024

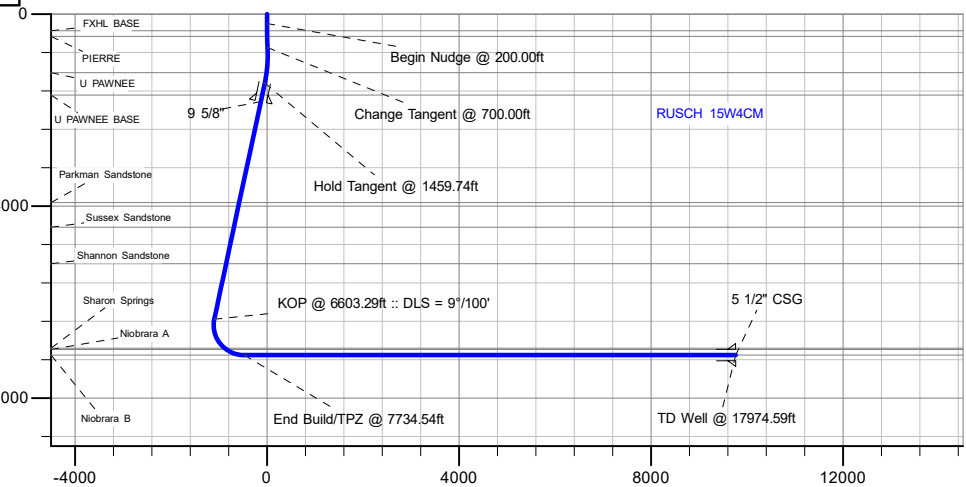


SHL
1730' FSL
587' FEL

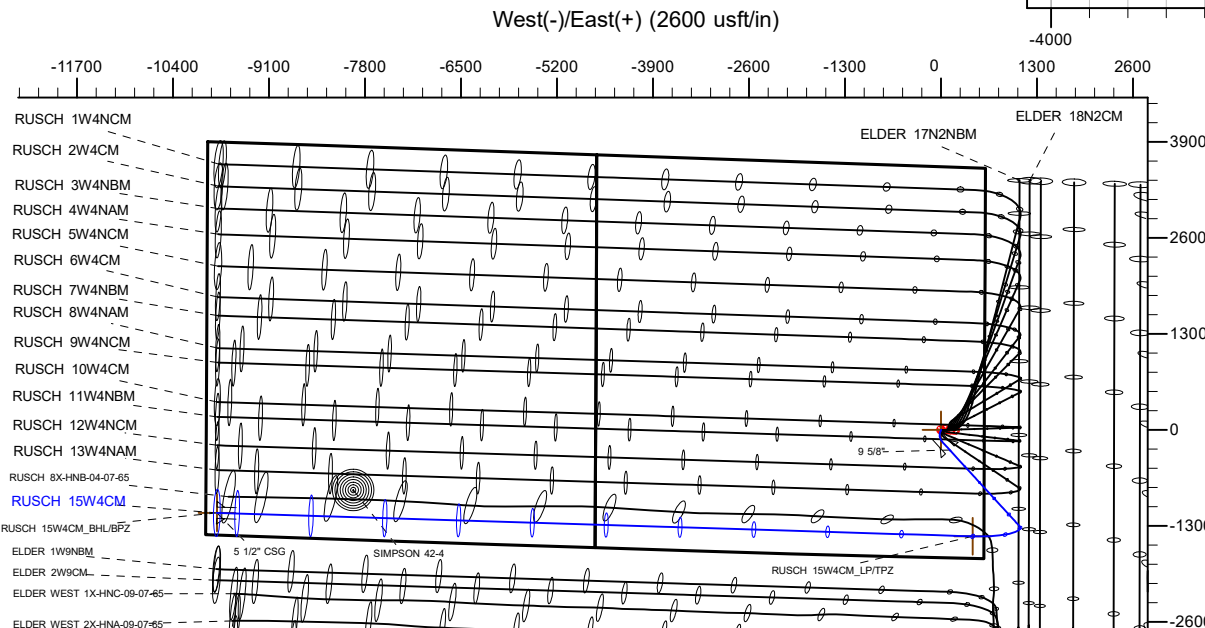
LP/TPZ
300' FSL
150' FEL

BHL/BPZ
300' FSL
150' FWL

True Vertical Depth (4000 usft/in)



Vertical Section at 271.77° (4000 usft/in)



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
351.00	351.07	FXHL BASE
466.00	466.38	PIERRE
1221.00	1233.59	U PAWNEE
1691.00	1723.20	U PAWNEE BASE
3929.00	4063.95	Parkman Sandstone
4441.00	4599.46	Sussex Sandstone
5202.00	5395.40	Shannon Sandstone
6960.00	7289.27	Sharon Springs
6991.00	7341.14	Niobrara A
7106.00	7734.54	Niobrara B

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well RUSCH 15W4CM
Company:	PRAIRIE OPERATING CO	TVD Reference:	RKB = 20' @ 4906.00usft (RIG)
Project:	WELD COUNTY, CO (NAD 83)	MD Reference:	RKB = 20' @ 4906.00usft (RIG)
Site:	7N-65W-03 RUSCH PAD	North Reference:	True
Well:	RUSCH 15W4CM	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-1		

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

Site	7N-65W-03 RUSCH PAD				
Site Position:		Northing:	1,462,715.14 usft	Latitude:	40.600383
From:	Lat/Long	Easting:	3,238,401.50 usft	Longitude:	-104.641461
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "		

Well	RUSCH 15W4CM					
Well Position	+N/-S	0.00 usft	Northing:	1,462,680.23 usft	Latitude:	40.600287
	+E/-W	0.00 usft	Easting:	3,238,409.06 usft	Longitude:	-104.641435
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft	Ground Level:	4,886.00 usft
Grid Convergence:		0.55 °				

Wellbore	Plan A				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF202013	10/11/2024	7.46	66.69	51,719.69978099

Design	Permit Rev-1				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	271.77	

Plan Survey Tool Program	Date	10/13/2024			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	1,825.00	Permit Rev-1 (Plan A)	ISCWSA MWD+IFR1	
				MWD+IFR	
2	1,825.00	17,974.59	Permit Rev-1 (Plan A)	ISCWSA MWD+IFR1	
				MWD+IFR	

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well RUSCH 15W4CM
Company:	PRAIRIE OPERATING CO	TVD Reference:	RKB = 20' @ 4906.00usft (RIG)
Project:	WELD COUNTY, CO (NAD 83)	MD Reference:	RKB = 20' @ 4906.00usft (RIG)
Site:	7N-65W-03 RUSCH PAD	North Reference:	True
Well:	RUSCH 15W4CM	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	10.00	200.00	697.47	-40.90	-14.89	2.00	2.00	0.00	200.00	
1,459.74	17.04	137.46	1,439.11	-185.75	38.13	2.00	0.93	-8.23	-97.22	
6,603.29	17.04	137.46	6,356.86	-1,296.31	1,057.19	0.00	0.00	0.00	0.00	
7,734.54	90.00	271.77	7,106.00	-1,441.22	429.27	9.00	6.45	11.87	133.03	
17,974.59	90.00	271.77	7,106.00	-1,124.13	-9,805.87	0.00	0.00	0.00	0.00	RUSCH 15W4CM_BH

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well RUSCH 15W4CM
Company:	PRAIRIE OPERATING CO	TVD Reference:	RKB = 20' @ 4906.00usft (RIG)
Project:	WELD COUNTY, CO (NAD 83)	MD Reference:	RKB = 20' @ 4906.00usft (RIG)
Site:	7N-65W-03 RUSCH PAD	North Reference:	True
Well:	RUSCH 15W4CM	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 200.00ft									
300.00	2.00	200.00	299.98	-1.64	-0.60	0.55	2.00	2.00	0.00
351.07	3.02	200.00	351.00	-3.74	-1.36	1.25	2.00	2.00	0.00
FXHL BASE									
400.00	4.00	200.00	399.84	-6.56	-2.39	2.18	2.00	2.00	0.00
466.38	5.33	200.00	466.00	-11.63	-4.23	3.87	2.00	2.00	0.00
PIERRE									
500.00	6.00	200.00	499.45	-14.75	-5.37	4.91	2.00	2.00	0.00
600.00	8.00	200.00	598.70	-26.20	-9.54	8.72	2.00	2.00	0.00
700.00	10.00	200.00	697.47	-40.90	-14.89	13.62	2.00	2.00	0.00
Change Tangent @ 700.00ft									
800.00	9.95	188.44	795.96	-57.60	-19.12	17.33	2.00	-0.05	-11.56
900.00	10.29	177.20	894.42	-75.06	-19.95	17.63	2.00	0.34	-11.24
1,000.00	10.98	167.01	992.71	-93.26	-17.38	14.49	2.00	0.69	-10.18
1,100.00	11.97	158.26	1,090.72	-112.17	-11.39	7.92	2.00	0.99	-8.76
1,200.00	13.19	150.95	1,188.32	-131.78	-2.01	-2.06	2.00	1.22	-7.30
1,233.59	13.64	148.80	1,221.00	-138.51	1.90	-6.17	2.00	1.34	-6.41
U PAWNEE									
1,300.00	14.57	144.94	1,285.41	-152.05	10.75	-15.44	2.00	1.41	-5.81
1,400.00	16.09	140.00	1,381.85	-172.96	26.89	-32.22	2.00	1.51	-4.95
1,459.74	17.04	137.46	1,439.11	-185.75	38.13	-43.85	2.00	1.59	-4.24
Hold Tangent @ 1459.74ft									
1,500.00	17.04	137.46	1,477.60	-194.44	46.10	-52.09	0.00	0.00	0.00
1,600.00	17.04	137.46	1,573.21	-216.04	65.92	-72.56	0.00	0.00	0.00
1,700.00	17.04	137.46	1,668.82	-237.63	85.73	-93.03	0.00	0.00	0.00
1,723.20	17.04	137.46	1,691.00	-242.64	90.32	-97.77	0.00	0.00	0.00
U PAWNEE BASE									
1,800.00	17.04	137.46	1,764.43	-259.22	105.54	-113.50	0.00	0.00	0.00
1,863.35	17.04	137.46	1,825.00	-272.90	118.09	-126.46	0.00	0.00	0.00
9 5/8"									
1,900.00	17.04	137.46	1,860.04	-280.81	125.35	-133.97	0.00	0.00	0.00
2,000.00	17.04	137.46	1,955.65	-302.40	145.17	-154.44	0.00	0.00	0.00
2,100.00	17.04	137.46	2,051.26	-323.99	164.98	-174.91	0.00	0.00	0.00
2,200.00	17.04	137.46	2,146.87	-345.58	184.79	-195.38	0.00	0.00	0.00
2,300.00	17.04	137.46	2,242.48	-367.18	204.60	-215.85	0.00	0.00	0.00
2,400.00	17.04	137.46	2,338.09	-388.77	224.42	-236.32	0.00	0.00	0.00
2,500.00	17.04	137.46	2,433.70	-410.36	244.23	-256.79	0.00	0.00	0.00
2,600.00	17.04	137.46	2,529.31	-431.95	264.04	-277.26	0.00	0.00	0.00
2,700.00	17.04	137.46	2,624.92	-453.54	283.85	-297.73	0.00	0.00	0.00
2,800.00	17.04	137.46	2,720.53	-475.13	303.67	-318.20	0.00	0.00	0.00
2,900.00	17.04	137.46	2,816.14	-496.72	323.48	-338.67	0.00	0.00	0.00
3,000.00	17.04	137.46	2,911.75	-518.31	343.29	-359.14	0.00	0.00	0.00
3,100.00	17.04	137.46	3,007.36	-539.91	363.10	-379.61	0.00	0.00	0.00
3,200.00	17.04	137.46	3,102.97	-561.50	382.92	-400.08	0.00	0.00	0.00
3,300.00	17.04	137.46	3,198.58	-583.09	402.73	-420.55	0.00	0.00	0.00
3,400.00	17.04	137.46	3,294.19	-604.68	422.54	-441.02	0.00	0.00	0.00
3,500.00	17.04	137.46	3,389.80	-626.27	442.35	-461.49	0.00	0.00	0.00
3,600.00	17.04	137.46	3,485.41	-647.86	462.17	-481.96	0.00	0.00	0.00
3,700.00	17.04	137.46	3,581.02	-669.45	481.98	-502.43	0.00	0.00	0.00
3,800.00	17.04	137.46	3,676.63	-691.04	501.79	-522.90	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well RUSCH 15W4CM
Company:	PRAIRIE OPERATING CO	TVD Reference:	RKB = 20' @ 4906.00usft (RIG)
Project:	WELD COUNTY, CO (NAD 83)	MD Reference:	RKB = 20' @ 4906.00usft (RIG)
Site:	7N-65W-03 RUSCH PAD	North Reference:	True
Well:	RUSCH 15W4CM	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-1		

Planned Survey

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
3,900.00	17.04	137.46	3,772.24	-712.64	521.60	-543.37	0.00	0.00	0.00
4,000.00	17.04	137.46	3,867.85	-734.23	541.42	-563.84	0.00	0.00	0.00
4,063.95	17.04	137.46	3,929.00	-748.04	554.09	-576.93	0.00	0.00	0.00
Parkman Sandstone									
4,100.00	17.04	137.46	3,963.46	-755.82	561.23	-584.31	0.00	0.00	0.00
4,200.00	17.04	137.46	4,059.07	-777.41	581.04	-604.78	0.00	0.00	0.00
4,300.00	17.04	137.46	4,154.68	-799.00	600.85	-625.25	0.00	0.00	0.00
4,400.00	17.04	137.46	4,250.29	-820.59	620.67	-645.72	0.00	0.00	0.00
4,500.00	17.04	137.46	4,345.90	-842.18	640.48	-666.19	0.00	0.00	0.00
4,599.46	17.04	137.46	4,441.00	-863.66	660.18	-686.55	0.00	0.00	0.00
Sussex Sandstone									
4,600.00	17.04	137.46	4,441.51	-863.78	660.29	-686.66	0.00	0.00	0.00
4,700.00	17.04	137.46	4,537.12	-885.37	680.10	-707.13	0.00	0.00	0.00
4,800.00	17.04	137.46	4,632.73	-906.96	699.92	-727.60	0.00	0.00	0.00
4,900.00	17.04	137.46	4,728.34	-928.55	719.73	-748.07	0.00	0.00	0.00
5,000.00	17.04	137.46	4,823.95	-950.14	739.54	-768.54	0.00	0.00	0.00
5,100.00	17.04	137.46	4,919.56	-971.73	759.35	-789.01	0.00	0.00	0.00
5,200.00	17.04	137.46	5,015.17	-993.32	779.17	-809.48	0.00	0.00	0.00
5,300.00	17.04	137.46	5,110.78	-1,014.91	798.98	-829.95	0.00	0.00	0.00
5,395.40	17.04	137.46	5,202.00	-1,035.51	817.88	-849.47	0.00	0.00	0.00
Shannon Sandstone									
5,400.00	17.04	137.46	5,206.39	-1,036.51	818.79	-850.42	0.00	0.00	0.00
5,500.00	17.04	137.46	5,302.00	-1,058.10	838.60	-870.89	0.00	0.00	0.00
5,600.00	17.04	137.46	5,397.61	-1,079.69	858.42	-891.36	0.00	0.00	0.00
5,700.00	17.04	137.46	5,493.22	-1,101.28	878.23	-911.83	0.00	0.00	0.00
5,800.00	17.04	137.46	5,588.83	-1,122.87	898.04	-932.30	0.00	0.00	0.00
5,900.00	17.04	137.46	5,684.44	-1,144.46	917.85	-952.77	0.00	0.00	0.00
6,000.00	17.04	137.46	5,780.05	-1,166.05	937.67	-973.24	0.00	0.00	0.00
6,100.00	17.04	137.46	5,875.66	-1,187.64	957.48	-993.71	0.00	0.00	0.00
6,200.00	17.04	137.46	5,971.27	-1,209.24	977.29	-1,014.17	0.00	0.00	0.00
6,300.00	17.04	137.46	6,066.88	-1,230.83	997.10	-1,034.64	0.00	0.00	0.00
6,400.00	17.04	137.46	6,162.49	-1,252.42	1,016.92	-1,055.11	0.00	0.00	0.00
6,500.00	17.04	137.46	6,258.10	-1,274.01	1,036.73	-1,075.58	0.00	0.00	0.00
6,603.29	17.04	137.46	6,356.86	-1,296.31	1,057.19	-1,096.73	0.00	0.00	0.00
KOP @ 6603.29ft :: DLS = 9°/100'									
6,650.00	14.49	149.83	6,401.82	-1,306.41	1,064.76	-1,104.60	9.00	-5.46	26.47
6,700.00	12.75	167.55	6,450.44	-1,317.21	1,069.10	-1,109.27	9.00	-3.49	35.44
6,750.00	12.45	188.24	6,499.26	-1,327.94	1,069.51	-1,110.02	9.00	-0.60	41.39
6,800.00	13.68	207.49	6,547.99	-1,338.52	1,066.01	-1,106.85	9.00	2.47	38.50
6,850.00	16.10	222.34	6,596.32	-1,348.89	1,058.61	-1,099.77	9.00	4.84	29.69
6,900.00	19.27	232.92	6,643.96	-1,359.00	1,047.35	-1,088.83	9.00	6.33	21.16
6,950.00	22.87	240.45	6,690.62	-1,368.77	1,032.31	-1,074.09	9.00	7.21	15.06
7,000.00	26.74	245.97	6,736.01	-1,378.15	1,013.57	-1,055.66	9.00	7.73	11.03
7,050.00	30.76	250.15	6,779.84	-1,387.07	991.26	-1,033.63	9.00	8.05	8.38
7,100.00	34.89	253.45	6,821.85	-1,395.49	965.51	-1,008.16	9.00	8.26	6.59
7,150.00	39.10	256.12	6,861.78	-1,403.35	936.48	-979.38	9.00	8.41	5.34
7,200.00	43.35	258.34	6,899.38	-1,410.61	904.35	-947.49	9.00	8.51	4.45
7,250.00	47.64	260.24	6,934.41	-1,417.21	869.32	-912.68	9.00	8.58	3.80
7,289.27	51.04	261.56	6,960.00	-1,421.91	839.91	-883.43	9.00	8.63	3.35
Sharon Springs									
7,300.00	51.96	261.90	6,966.68	-1,423.12	831.60	-875.16	9.00	8.66	3.15
7,341.14	55.53	263.12	6,991.00	-1,427.44	798.71	-842.42	9.00	8.68	2.97
Niobrara A									

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well RUSCH 15W4CM
Company:	PRAIRIE OPERATING CO	TVD Reference:	RKB = 20' @ 4906.00usft (RIG)
Project:	WELD COUNTY, CO (NAD 83)	MD Reference:	RKB = 20' @ 4906.00usft (RIG)
Site:	7N-65W-03 RUSCH PAD	North Reference:	True
Well:	RUSCH 15W4CM	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,350.00	56.30	263.37	6,995.97	-1,428.30	791.42	-835.16	9.00	8.69	2.81
7,400.00	60.66	264.69	7,022.10	-1,432.72	749.04	-792.94	9.00	8.71	2.66
7,450.00	65.03	265.91	7,044.92	-1,436.36	704.71	-748.74	9.00	8.74	2.44
7,500.00	69.40	267.05	7,064.28	-1,439.18	658.72	-702.85	9.00	8.75	2.27
7,550.00	73.79	268.12	7,080.06	-1,441.17	611.33	-655.55	9.00	8.77	2.14
7,600.00	78.18	269.14	7,092.17	-1,442.33	562.84	-607.12	9.00	8.78	2.05
7,650.00	82.57	270.14	7,100.53	-1,442.63	513.56	-557.87	9.00	8.78	1.98
7,700.00	86.96	271.11	7,105.09	-1,442.09	463.78	-508.11	9.00	8.79	1.95
7,734.54	90.00	271.77	7,106.00	-1,441.22	429.27	-473.58	9.00	8.79	1.93
End Build/TPZ @ 7734.54ft - Niobrara B									
7,800.00	90.00	271.77	7,106.00	-1,439.20	363.84	-408.12	0.00	0.00	0.00
7,900.00	90.00	271.77	7,106.00	-1,436.10	263.89	-308.12	0.00	0.00	0.00
8,000.00	90.00	271.77	7,106.00	-1,433.00	163.94	-208.12	0.00	0.00	0.00
8,100.00	90.00	271.77	7,106.00	-1,429.91	63.99	-108.12	0.00	0.00	0.00
8,200.00	90.00	271.77	7,106.00	-1,426.81	-35.97	-8.12	0.00	0.00	0.00
8,300.00	90.00	271.77	7,106.00	-1,423.72	-135.92	91.88	0.00	0.00	0.00
8,400.00	90.00	271.77	7,106.00	-1,420.62	-235.87	191.88	0.00	0.00	0.00
8,500.00	90.00	271.77	7,106.00	-1,417.52	-335.82	291.88	0.00	0.00	0.00
8,600.00	90.00	271.77	7,106.00	-1,414.43	-435.77	391.88	0.00	0.00	0.00
8,700.00	90.00	271.77	7,106.00	-1,411.33	-535.73	491.88	0.00	0.00	0.00
8,800.00	90.00	271.77	7,106.00	-1,408.23	-635.68	591.88	0.00	0.00	0.00
8,900.00	90.00	271.77	7,106.00	-1,405.14	-735.63	691.88	0.00	0.00	0.00
9,000.00	90.00	271.77	7,106.00	-1,402.04	-835.58	791.88	0.00	0.00	0.00
9,100.00	90.00	271.77	7,106.00	-1,398.94	-935.53	891.88	0.00	0.00	0.00
9,200.00	90.00	271.77	7,106.00	-1,395.85	-1,035.49	991.88	0.00	0.00	0.00
9,300.00	90.00	271.77	7,106.00	-1,392.75	-1,135.44	1,091.88	0.00	0.00	0.00
9,400.00	90.00	271.77	7,106.00	-1,389.65	-1,235.39	1,191.88	0.00	0.00	0.00
9,500.00	90.00	271.77	7,106.00	-1,386.56	-1,335.34	1,291.88	0.00	0.00	0.00
9,600.00	90.00	271.77	7,106.00	-1,383.46	-1,435.29	1,391.88	0.00	0.00	0.00
9,700.00	90.00	271.77	7,106.00	-1,380.36	-1,535.25	1,491.88	0.00	0.00	0.00
9,800.00	90.00	271.77	7,106.00	-1,377.27	-1,635.20	1,591.88	0.00	0.00	0.00
9,900.00	90.00	271.77	7,106.00	-1,374.17	-1,735.15	1,691.88	0.00	0.00	0.00
10,000.00	90.00	271.77	7,106.00	-1,371.07	-1,835.10	1,791.88	0.00	0.00	0.00
10,100.00	90.00	271.77	7,106.00	-1,367.98	-1,935.05	1,891.88	0.00	0.00	0.00
10,200.00	90.00	271.77	7,106.00	-1,364.88	-2,035.01	1,991.88	0.00	0.00	0.00
10,300.00	90.00	271.77	7,106.00	-1,361.78	-2,134.96	2,091.88	0.00	0.00	0.00
10,400.00	90.00	271.77	7,106.00	-1,358.69	-2,234.91	2,191.88	0.00	0.00	0.00
10,500.00	90.00	271.77	7,106.00	-1,355.59	-2,334.86	2,291.88	0.00	0.00	0.00
10,600.00	90.00	271.77	7,106.00	-1,352.49	-2,434.81	2,391.88	0.00	0.00	0.00
10,700.00	90.00	271.77	7,106.00	-1,349.40	-2,534.77	2,491.88	0.00	0.00	0.00
10,800.00	90.00	271.77	7,106.00	-1,346.30	-2,634.72	2,591.88	0.00	0.00	0.00
10,900.00	90.00	271.77	7,106.00	-1,343.20	-2,734.67	2,691.88	0.00	0.00	0.00
11,000.00	90.00	271.77	7,106.00	-1,340.11	-2,834.62	2,791.88	0.00	0.00	0.00
11,100.00	90.00	271.77	7,106.00	-1,337.01	-2,934.57	2,891.88	0.00	0.00	0.00
11,200.00	90.00	271.77	7,106.00	-1,333.91	-3,034.53	2,991.88	0.00	0.00	0.00
11,300.00	90.00	271.77	7,106.00	-1,330.82	-3,134.48	3,091.88	0.00	0.00	0.00
11,400.00	90.00	271.77	7,106.00	-1,327.72	-3,234.43	3,191.88	0.00	0.00	0.00
11,500.00	90.00	271.77	7,106.00	-1,324.62	-3,334.38	3,291.88	0.00	0.00	0.00
11,600.00	90.00	271.77	7,106.00	-1,321.53	-3,434.33	3,391.88	0.00	0.00	0.00
11,700.00	90.00	271.77	7,106.00	-1,318.43	-3,534.29	3,491.88	0.00	0.00	0.00
11,800.00	90.00	271.77	7,106.00	-1,315.33	-3,634.24	3,591.88	0.00	0.00	0.00
11,900.00	90.00	271.77	7,106.00	-1,312.24	-3,734.19	3,691.88	0.00	0.00	0.00
12,000.00	90.00	271.77	7,106.00	-1,309.14	-3,834.14	3,791.88	0.00	0.00	0.00
12,100.00	90.00	271.77	7,106.00	-1,306.04	-3,934.09	3,891.88	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well RUSCH 15W4CM
Company:	PRAIRIE OPERATING CO	TVD Reference:	RKB = 20' @ 4906.00usft (RIG)
Project:	WELD COUNTY, CO (NAD 83)	MD Reference:	RKB = 20' @ 4906.00usft (RIG)
Site:	7N-65W-03 RUSCH PAD	North Reference:	True
Well:	RUSCH 15W4CM	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,200.00	90.00	271.77	7,106.00	-1,302.95	-4,034.05	3,991.88	0.00	0.00	0.00
12,300.00	90.00	271.77	7,106.00	-1,299.85	-4,134.00	4,091.88	0.00	0.00	0.00
12,400.00	90.00	271.77	7,106.00	-1,296.76	-4,233.95	4,191.88	0.00	0.00	0.00
12,500.00	90.00	271.77	7,106.00	-1,293.66	-4,333.90	4,291.88	0.00	0.00	0.00
12,600.00	90.00	271.77	7,106.00	-1,290.56	-4,433.86	4,391.88	0.00	0.00	0.00
12,700.00	90.00	271.77	7,106.00	-1,287.47	-4,533.81	4,491.88	0.00	0.00	0.00
12,800.00	90.00	271.77	7,106.00	-1,284.37	-4,633.76	4,591.88	0.00	0.00	0.00
12,900.00	90.00	271.77	7,106.00	-1,281.27	-4,733.71	4,691.88	0.00	0.00	0.00
13,000.00	90.00	271.77	7,106.00	-1,278.18	-4,833.66	4,791.88	0.00	0.00	0.00
13,100.00	90.00	271.77	7,106.00	-1,275.08	-4,933.62	4,891.88	0.00	0.00	0.00
13,200.00	90.00	271.77	7,106.00	-1,271.98	-5,033.57	4,991.88	0.00	0.00	0.00
13,300.00	90.00	271.77	7,106.00	-1,268.89	-5,133.52	5,091.88	0.00	0.00	0.00
13,400.00	90.00	271.77	7,106.00	-1,265.79	-5,233.47	5,191.88	0.00	0.00	0.00
13,500.00	90.00	271.77	7,106.00	-1,262.69	-5,333.42	5,291.88	0.00	0.00	0.00
13,600.00	90.00	271.77	7,106.00	-1,259.60	-5,433.38	5,391.88	0.00	0.00	0.00
13,700.00	90.00	271.77	7,106.00	-1,256.50	-5,533.33	5,491.88	0.00	0.00	0.00
13,800.00	90.00	271.77	7,106.00	-1,253.40	-5,633.28	5,591.88	0.00	0.00	0.00
13,900.00	90.00	271.77	7,106.00	-1,250.31	-5,733.23	5,691.88	0.00	0.00	0.00
14,000.00	90.00	271.77	7,106.00	-1,247.21	-5,833.18	5,791.88	0.00	0.00	0.00
14,100.00	90.00	271.77	7,106.00	-1,244.11	-5,933.14	5,891.88	0.00	0.00	0.00
14,200.00	90.00	271.77	7,106.00	-1,241.02	-6,033.09	5,991.88	0.00	0.00	0.00
14,300.00	90.00	271.77	7,106.00	-1,237.92	-6,133.04	6,091.88	0.00	0.00	0.00
14,400.00	90.00	271.77	7,106.00	-1,234.82	-6,232.99	6,191.88	0.00	0.00	0.00
14,500.00	90.00	271.77	7,106.00	-1,231.73	-6,332.94	6,291.88	0.00	0.00	0.00
14,600.00	90.00	271.77	7,106.00	-1,228.63	-6,432.90	6,391.88	0.00	0.00	0.00
14,700.00	90.00	271.77	7,106.00	-1,225.53	-6,532.85	6,491.88	0.00	0.00	0.00
14,800.00	90.00	271.77	7,106.00	-1,222.44	-6,632.80	6,591.88	0.00	0.00	0.00
14,900.00	90.00	271.77	7,106.00	-1,219.34	-6,732.75	6,691.88	0.00	0.00	0.00
15,000.00	90.00	271.77	7,106.00	-1,216.24	-6,832.70	6,791.88	0.00	0.00	0.00
15,100.00	90.00	271.77	7,106.00	-1,213.15	-6,932.66	6,891.88	0.00	0.00	0.00
15,200.00	90.00	271.77	7,106.00	-1,210.05	-7,032.61	6,991.88	0.00	0.00	0.00
15,300.00	90.00	271.77	7,106.00	-1,206.95	-7,132.56	7,091.88	0.00	0.00	0.00
15,400.00	90.00	271.77	7,106.00	-1,203.86	-7,232.51	7,191.88	0.00	0.00	0.00
15,500.00	90.00	271.77	7,106.00	-1,200.76	-7,332.46	7,291.88	0.00	0.00	0.00
15,600.00	90.00	271.77	7,106.00	-1,197.66	-7,432.42	7,391.88	0.00	0.00	0.00
15,700.00	90.00	271.77	7,106.00	-1,194.57	-7,532.37	7,491.88	0.00	0.00	0.00
15,800.00	90.00	271.77	7,106.00	-1,191.47	-7,632.32	7,591.88	0.00	0.00	0.00
15,900.00	90.00	271.77	7,106.00	-1,188.37	-7,732.27	7,691.88	0.00	0.00	0.00
16,000.00	90.00	271.77	7,106.00	-1,185.28	-7,832.22	7,791.88	0.00	0.00	0.00
16,100.00	90.00	271.77	7,106.00	-1,182.18	-7,932.18	7,891.88	0.00	0.00	0.00
16,200.00	90.00	271.77	7,106.00	-1,179.08	-8,032.13	7,991.88	0.00	0.00	0.00
16,300.00	90.00	271.77	7,106.00	-1,175.99	-8,132.08	8,091.88	0.00	0.00	0.00
16,400.00	90.00	271.77	7,106.00	-1,172.89	-8,232.03	8,191.88	0.00	0.00	0.00
16,500.00	90.00	271.77	7,106.00	-1,169.80	-8,331.98	8,291.88	0.00	0.00	0.00
16,600.00	90.00	271.77	7,106.00	-1,166.70	-8,431.94	8,391.88	0.00	0.00	0.00
16,700.00	90.00	271.77	7,106.00	-1,163.60	-8,531.89	8,491.88	0.00	0.00	0.00
16,800.00	90.00	271.77	7,106.00	-1,160.51	-8,631.84	8,591.88	0.00	0.00	0.00
16,900.00	90.00	271.77	7,106.00	-1,157.41	-8,731.79	8,691.88	0.00	0.00	0.00
17,000.00	90.00	271.77	7,106.00	-1,154.31	-8,831.75	8,791.88	0.00	0.00	0.00
17,100.00	90.00	271.77	7,106.00	-1,151.22	-8,931.70	8,891.88	0.00	0.00	0.00
17,200.00	90.00	271.77	7,106.00	-1,148.12	-9,031.65	8,991.88	0.00	0.00	0.00
17,300.00	90.00	271.77	7,106.00	-1,145.02	-9,131.60	9,091.88	0.00	0.00	0.00
17,400.00	90.00	271.77	7,106.00	-1,141.93	-9,231.55	9,191.88	0.00	0.00	0.00
17,500.00	90.00	271.77	7,106.00	-1,138.83	-9,331.51	9,291.88	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well RUSCH 15W4CM
Company:	PRAIRIE OPERATING CO	TVD Reference:	RKB = 20' @ 4906.00usft (RIG)
Project:	WELD COUNTY, CO (NAD 83)	MD Reference:	RKB = 20' @ 4906.00usft (RIG)
Site:	7N-65W-03 RUSCH PAD	North Reference:	True
Well:	RUSCH 15W4CM	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
17,600.00	90.00	271.77	7,106.00	-1,135.73	-9,431.46	9,391.88	0.00	0.00	0.00	
17,700.00	90.00	271.77	7,106.00	-1,132.64	-9,531.41	9,491.88	0.00	0.00	0.00	
17,800.00	90.00	271.77	7,106.00	-1,129.54	-9,631.36	9,591.88	0.00	0.00	0.00	
17,900.00	90.00	271.77	7,106.00	-1,126.44	-9,731.31	9,691.88	0.00	0.00	0.00	
17,974.59	90.00	271.77	7,106.00	-1,124.13	-9,805.87	9,766.47	0.00	0.00	0.00	
TD Well @ 17974.59ft - 5 1/2" CSG										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,863.35	1,825.00	9 5/8"	9-5/8	13-1/2	
17,974.59	7,106.00	5 1/2" CSG	5-1/2	8-1/2	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
351.07	351.00	FXHL BASE				
466.38	466.00	PIERRE				
1,233.59	1,221.00	U PAWNEE				
1,723.20	1,691.00	U PAWNEE BASE				
4,063.95	3,929.00	Parkman Sandstone				
4,599.46	4,441.00	Sussex Sandstone				
5,395.40	5,202.00	Shannon Sandstone				
7,289.27	6,960.00	Sharon Springs				
7,341.14	6,991.00	Niobrara A				
7,734.54	7,106.00	Niobrara B		0.00		

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
200.00	200.00	0.00	0.00	Begin Nudge @ 200.00ft	
700.00	697.47	-40.90	-14.89	Change Tangent @ 700.00ft	
1,459.74	1,439.11	-185.75	38.13	Hold Tangent @ 1459.74ft	
6,603.29	6,356.86	-1,296.31	1,057.19	KOP @ 6603.29ft :: DLS = 9°/100'	
7,734.54	7,106.00	-1,441.22	429.27	End Build/TPZ @ 7734.54ft	
17,974.59	7,106.00	-1,124.13	-9,805.87	TD Well @ 17974.59ft	

PRAIRIE OPERATING CO

WELD COUNTY, CO (NAD 83)

7N-65W-03 RUSCH PAD

RUSCH 15W4CM

Plan A

Permit Rev-1

Anticollision Summary Report

13 October, 2024

Anticollision Summary Report

Company:	PRAIRIE OPERATING CO	Local Co-ordinate Reference:	Well RUSCH 15W4CM
Project:	WELD COUNTY, CO (NAD 83)	TVD Reference:	RKB = 20' @ 4906.00usft (RIG)
Reference Site:	7N-65W-03 RUSCH PAD	MD Reference:	RKB = 20' @ 4906.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	RUSCH 15W4CM	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 usft	Output errors are at	2.45 sigma
Reference Wellbore	Plan A	Database:	EDM 5000.16 Single User Db
Reference Design:	Permit Rev-1	Offset TVD Reference:	Reference Datum

Reference	Permit Rev-1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 2,500.00usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.45 Sigma	Casing Method:	Added to Error Values

Survey Tool Program	Date	10/13/2024		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	1,825.00	Permit Rev-1 (Plan A)	ISCWSA MWD+IFR1	MWD+IFR
1,825.00	17,974.59	Permit Rev-1 (Plan A)	ISCWSA MWD+IFR1	MWD+IFR

Summary						
Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
7N-65W-03 RUSCH PAD						
RUSCH 10W4CM - Plan A - Permit Rev-1	200.00	200.00	59.98	52.41	7.925	CC, ES
RUSCH 10W4CM - Plan A - Permit Rev-1	17,975.24	17,828.61	1,501.76	862.06	2.348	SF
RUSCH 11W4NCM - Plan A - Permit Rev-1	200.00	200.00	44.99	37.42	5.944	CC, ES
RUSCH 11W4NCM - Plan A - Permit Rev-1	17,975.24	17,951.42	1,313.27	678.40	2.069	SF
RUSCH 12W4NCM - Plan A - Permit Rev-1	200.00	200.00	29.99	22.42	3.962	CC, ES
RUSCH 12W4NCM - Plan A - Permit Rev-1	17,975.24	17,690.78	922.42	286.15	1.450	Collision Avoidance Req., SF
RUSCH 13W4NAM - Plan B - Permit Rev-1	200.00	200.00	15.00	7.43	1.981	CC
RUSCH 13W4NAM - Plan B - Permit Rev-1	17,975.24	17,921.72	584.37	-53.35	0.916	EOU Contact, ES, SF
RUSCH 1W4NCM - Plan A - Permit Rev-1	200.00	200.00	194.95	187.38	25.758	CC, ES
RUSCH 1W4NCM - Plan A - Permit Rev-1	300.00	295.00	196.80	189.16	25.741	SF
RUSCH 2W4CM - Plan B - Permit Rev-1	200.00	200.00	179.95	172.38	23.775	CC, ES
RUSCH 2W4CM - Plan B - Permit Rev-1	300.00	296.61	181.27	173.62	23.705	SF
RUSCH 3W4NCM - Plan A - Permit Rev-1	200.00	200.00	164.95	157.38	21.794	CC, ES
RUSCH 3W4NCM - Plan A - Permit Rev-1	300.00	299.32	165.58	157.93	21.647	SF
RUSCH 4W4NAM - Plan A - Permit Rev-1	200.00	200.00	149.96	142.39	19.813	CC, ES
RUSCH 4W4NAM - Plan A - Permit Rev-1	300.00	299.88	150.55	142.90	19.681	SF
RUSCH 5W4NCM - Plan A - Permit Rev-1	200.00	200.00	134.96	127.39	17.832	CC, ES
RUSCH 5W4NCM - Plan A - Permit Rev-1	300.00	299.98	135.55	127.90	17.720	SF
RUSCH 6W4CM - Plan C - Permit Rev-1	200.00	200.00	119.69	112.12	15.813	CC, ES
RUSCH 6W4CM - Plan C - Permit Rev-1	300.00	299.98	120.28	112.63	15.724	SF
RUSCH 7W4NCM - Plan A - Permit Rev-1	200.00	200.00	104.97	97.40	13.869	CC, ES
RUSCH 7W4NCM - Plan A - Permit Rev-1	300.00	299.98	105.57	97.92	13.800	SF
RUSCH 8W4NAM - Plan B - Permit Rev-1	200.00	200.00	89.97	82.40	11.887	CC, ES
RUSCH 8W4NAM - Plan B - Permit Rev-1	17,975.24	17,670.91	2,233.30	1,594.20	3.494	SF
RUSCH 9W4NCM - Plan A - Permit Rev-1	200.00	200.00	74.98	67.41	9.906	CC, ES
RUSCH 9W4NCM - Plan A - Permit Rev-1	17,975.24	17,767.57	2,035.13	1,395.33	3.181	SF
7N-65W-04 OFFSETS						
SIMPSON 42-4 - PER P&A Well - No Surveys	16,139.12	7,102.00	367.47	-151.26	0.708	EOU Contact, CC, ES, SF

Anticollision Summary Report

Company:	PRAIRIE OPERATING CO	Local Co-ordinate Reference:	Well RUSCH 15W4CM
Project:	WELD COUNTY, CO (NAD 83)	TVD Reference:	RKB = 20' @ 4906.00usft (RIG)
Reference Site:	7N-65W-03 RUSCH PAD	MD Reference:	RKB = 20' @ 4906.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	RUSCH 15W4CM	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 usft	Output errors are at	2.45 sigma
Reference Wellbore	Plan A	Database:	EDM 5000.16 Single User Db
Reference Design:	Permit Rev-1	Offset TVD Reference:	Reference Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
7N-65W-11 ELDER PAD						
ELDER 11W9NCM - Plan A - Permit Rev-1						Out of range
ELDER 12W9NAM - Plan A - Permit Rev-1						Out of range
ELDER 13W9NBM - Plan A - Permit Rev-1						Out of range
ELDER 14W9CM - Plan A - Permit Rev-1						Out of range
ELDER 15W9NCM - Plan A - Permit Rev-1						Out of range
ELDER 16W9NBM - Plan A - Permit Rev-1						Out of range
ELDER 17N2NBM - Plan A - Permit Rev-1	7,241.12	13,051.90	253.20	160.09	2.719	CC
ELDER 17N2NBM - Plan A - Permit Rev-1	7,250.00	13,050.78	253.41	158.95	2.683	ES
ELDER 17N2NBM - Plan A - Permit Rev-1	7,300.00	13,044.91	262.45	161.01	2.587	SF
ELDER 18N2CM - Plan A - Permit Rev-1	7,249.54	13,225.72	471.47	379.03	5.100	CC
ELDER 18N2CM - Plan A - Permit Rev-1	7,250.00	13,225.66	471.47	378.99	5.098	ES
ELDER 18N2CM - Plan A - Permit Rev-1	7,350.00	13,214.63	489.47	389.34	4.889	SF
ELDER 19N2NCM - Plan A - Permit Rev-1	7,153.00	13,177.02	518.48	420.08	5.269	CC, ES
ELDER 19N2NCM - Plan A - Permit Rev-1	7,250.00	13,163.74	534.41	429.83	5.110	SF
ELDER 1W9NBM - Plan A - Permit Rev-1	8,020.46	7,874.06	761.88	697.03	11.747	CC
ELDER 1W9NBM - Plan A - Permit Rev-1	17,974.59	17,809.81	763.40	129.56	1.204	Collision Avoidance Req., ES
ELDER 20N2NBM - Plan A - Permit Rev-1	7,003.59	13,203.84	858.86	751.92	8.031	CC, ES
ELDER 20N2NBM - Plan A - Permit Rev-1	7,100.00	13,187.37	871.25	761.36	7.928	SF
ELDER 21N2NCM - Plan A - Permit Rev-1	6,952.23	13,416.65	1,395.48	1,285.63	12.703	CC, ES
ELDER 21N2NCM - Plan A - Permit Rev-1	7,050.00	13,399.02	1,406.20	1,294.63	12.603	SF
ELDER 23N2CM - Plan A - Permit Rev-1	6,943.16	13,612.70	1,756.27	1,645.46	15.849	CC
ELDER 23N2CM - Plan A - Permit Rev-1	6,950.00	13,611.41	1,756.32	1,645.40	15.834	ES
ELDER 23N2CM - Plan A - Permit Rev-1	7,050.00	13,593.36	1,768.27	1,655.95	15.743	SF
ELDER 25N2NAM - Plan A - Permit Rev-1	6,839.84	13,706.18	2,461.59	2,344.18	20.966	CC, ES
ELDER 25N2NAM - Plan A - Permit Rev-1	6,900.00	13,694.30	2,465.13	2,347.23	20.908	SF
ELDER 2W9CM - Plan A - Permit Rev-1	8,010.94	7,985.01	929.65	865.55	14.503	CC
ELDER 2W9CM - Plan A - Permit Rev-1	17,974.59	17,926.17	938.40	318.51	1.514	ES, SF
ELDER 31N2CM - Plan A - Permit Rev-1						Out of range
ELDER 8W9NAM - Plan A - Permit Rev-1						Out of range
ELDER 9W9CM - Plan A - Permit Rev-1						Out of range

Anticollision Summary Report

Company:	PRAIRIE OPERATING CO	Local Co-ordinate Reference:	Well RUSCH 15W4CM
Project:	WELD COUNTY, CO (NAD 83)	TVD Reference:	RKB = 20' @ 4906.00usft (RIG)
Reference Site:	7N-65W-03 RUSCH PAD	MD Reference:	RKB = 20' @ 4906.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	RUSCH 15W4CM	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 usft	Output errors are at	2.45 sigma
Reference Wellbore	Plan A	Database:	EDM 5000.16 Single User Db
Reference Design:	Permit Rev-1	Offset TVD Reference:	Reference Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
7N-65W-11 OFFSETS Incomplete						
ELDER 4Y-HNB-2-07-65 - PRAIRIE PR Well - Actual Atl	6,897.22	13,135.52	1,833.55	1,720.11	16.163	CC
ELDER 4Y-HNB-2-07-65 - PRAIRIE PR Well - Actual Atl	6,900.00	13,135.09	1,833.56	1,720.08	16.158	ES
ELDER 4Y-HNB-2-07-65 - PRAIRIE PR Well - Actual Atl	7,000.00	13,120.05	1,844.57	1,729.95	16.093	SF
ELDER 5X-HNB-09-07-65 - PRAIRIE PR Well - Actual A						Out of range
ELDER 6Y-HNC-02-07-65 - PRAIRIE PR Well - Interpolata						Out of range
ELDER 7Y-HC-02-07-65 - PRAIRIE PR Well - Interpolate						Out of range
ELDER 7Y-HNB-02-07-65 - PRAIRIE PR Well - Interpolata						Out of range
ELDER 8Y-HNA-02-07-65 - PRAIRIE PR Well - Interpolata						Out of range
ELDER 8Y-HNC-02-07-65 - PRAIRIE PR Well - Actual N						Out of range
ELDER WEST 1X-HNC-09-07-65 - PRAIRIE PR Well - In	17,713.56	17,565.00	1,094.60	428.37	1.643	CC, ES, SF
ELDER WEST 2X-HC-09-07-65 - PRAIRIE PR Well - Int	17,692.59	17,505.00	1,759.83	1,091.53	2.633	CC
ELDER WEST 2X-HC-09-07-65 - PRAIRIE PR Well - Int	17,700.00	17,505.00	1,759.84	1,091.40	2.633	ES, SF
ELDER WEST 2X-HNA-09-07-65 - PRAIRIE PR Well - In	10,924.61	10,647.36	1,409.57	1,171.36	5.917	CC
ELDER WEST 2X-HNA-09-07-65 - PRAIRIE PR Well - In	17,800.00	17,445.00	1,457.25	784.99	2.168	ES, SF
ELDER WEST 3X-HNB-09-07-65 - PRAIRIE PR Well - In	15,538.94	15,183.42	2,065.28	1,532.93	3.880	CC
ELDER WEST 3X-HNB-09-07-65 - PRAIRIE PR Well - In	17,800.00	17,323.65	2,115.55	1,440.55	3.134	ES, SF
ELDER WEST 4X-HNC-09-07-65 - PRAIRIE PR Well - In	7,919.23	7,563.62	2,402.78	2,344.54	41.255	CC
ELDER WEST 4X-HNC-09-07-65 - PRAIRIE PR Well - In	17,800.00	17,309.51	2,427.05	1,757.59	3.625	ES
ELDER WEST 4X-HNC-09-07-65 - PRAIRIE PR Well - In	17,900.00	17,333.00	2,433.99	1,761.63	3.620	SF
RUSCH 8X-HNB-04-07-65 - PRAIRIE PR Well - Actual A	7,753.81	8,125.88	193.87	128.27	2.955	CC
RUSCH 8X-HNB-04-07-65 - PRAIRIE PR Well - Actual A	17,823.69	18,235.00	241.71	-388.98	0.383	EOU Contact, ES, SF

Anticollision Summary Report

Company:	PRAIRIE OPERATING CO	Local Co-ordinate Reference:	Well RUSCH 15W4CM
Project:	WELD COUNTY, CO (NAD 83)	TVD Reference:	RKB = 20' @ 4906.00usft (RIG)
Reference Site:	7N-65W-03 RUSCH PAD	MD Reference:	RKB = 20' @ 4906.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	RUSCH 15W4CM	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 usft	Output errors are at	2.45 sigma
Reference Wellbore	Plan A	Database:	EDM 5000.16 Single User Db
Reference Design:	Permit Rev-1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to RKB = 20' @ 4906.00usft (RIG)

Offset Depths are relative to Offset Datum

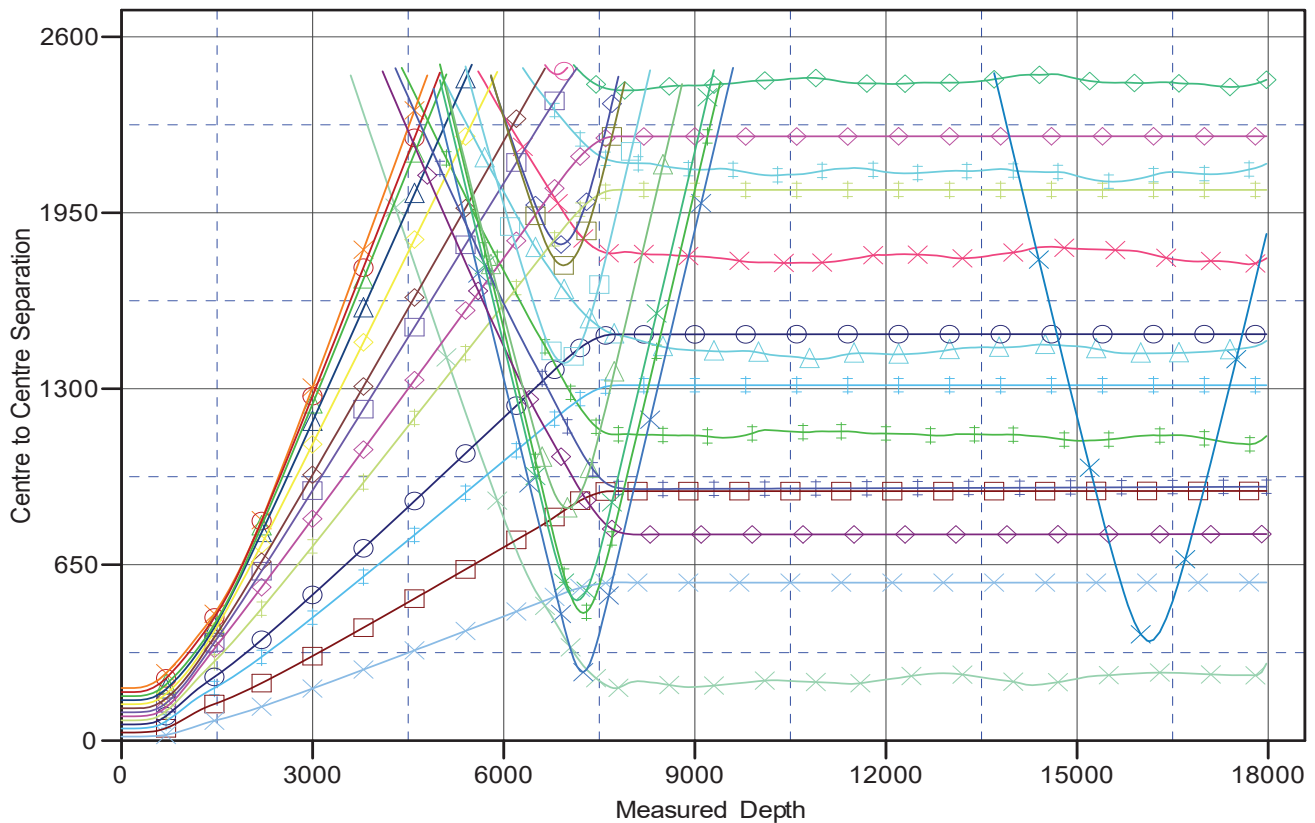
Central Meridian is -105.500000

Coordinates are relative to: RUSCH 15W4CM

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.55°

Ladder Plot



LEGEND

ELDER WEST 4X-HNC-09-07-05, PRAIRIE PR Well, Interpolated NRO Surveys V0	RUSCH 4W4NAM, Plan A, Permit Rev-1 V0	SIMPSON 4-4, PER P&A Well, No Surveys V0
ELDER WEST 2X-HNA-09-07-05, PRAIRIE PR Well, Interpolated NRO Surveys V0	RUSCH 3W4NAM, Plan A, Permit Rev-1 V0	ELDER 17W4NAM, Plan A, Permit Rev-1 V0
ELDER WEST 3X-HNB-09-07-05, PRAIRIE PR Well, Interpolated NRO Surveys V0	RUSCH 12W4NAM, Plan A, Permit Rev-1 V0	ELDER 18W4NAM, Plan A, Permit Rev-1 V0
RUSCH 8X-HNB-06-07-05, PRAIRIE PR Well, Actual Atlas Surveys V0	RUSCH 5W4NAM, Plan A, Permit Rev-1 V0	ELDER 23W4NAM, Plan A, Permit Rev-1 V0
ELDER WEST 2X-HC-09-07-05, PRAIRIE PR Well, Interpolated NRO Surveys V0	RUSCH 5W4NAM, Plan A, Permit Rev-1 V0	ELDER 25W4NAM, Plan A, Permit Rev-1 V0
ELDER WEST 1X-HNC-09-07-05, PRAIRIE PR Well, Interpolated NRO Surveys V0	RUSCH 2W4NAM, Plan B, Permit Rev-1 V0	ELDER 2W4NAM, Plan A, Permit Rev-1 V0
ELDER 4W4NB-2-07-05, PRAIRIE PR Well, Actual Atlas Surveys V0	RUSCH 7W4NAM, Plan A, Permit Rev-1 V0	ELDER 1W4NAM, Plan A, Permit Rev-1 V0
RUSCH 8W4NAM, Plan B, Permit Rev-1 V0	RUSCH 6W4NAM, Plan C, Permit Rev-1 V0	ELDER 21W4NAM, Plan A, Permit Rev-1 V0
RUSCH 1W4NAM, Plan A, Permit Rev-1 V0	RUSCH 13W4NAM, Plan B, Permit Rev-1 V0	ELDER 19W4NAM, Plan A, Permit Rev-1 V0
RUSCH 11W4NAM, Plan A, Permit Rev-1 V0	RUSCH 10W4NAM, Plan A, Permit Rev-1 V0	ELDER 20W4NAM, Plan A, Permit Rev-1 V0

Anticollision Summary Report

Company:	PRAIRIE OPERATING CO	Local Co-ordinate Reference:	Well RUSCH 15W4CM
Project:	WELD COUNTY, CO (NAD 83)	TVD Reference:	RKB = 20' @ 4906.00usft (RIG)
Reference Site:	7N-65W-03 RUSCH PAD	MD Reference:	RKB = 20' @ 4906.00usft (RIG)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	RUSCH 15W4CM	Survey Calculation Method:	Minimum Curvature
Well Error:	3.28 usft	Output errors are at	2.45 sigma
Reference Wellbore	Plan A	Database:	EDM 5000.16 Single User Db
Reference Design:	Permit Rev-1	Offset TVD Reference:	Reference Datum

Reference Depths are relative to RKB = 20' @ 4906.00usft (RIG)

Offset Depths are relative to Offset Datum

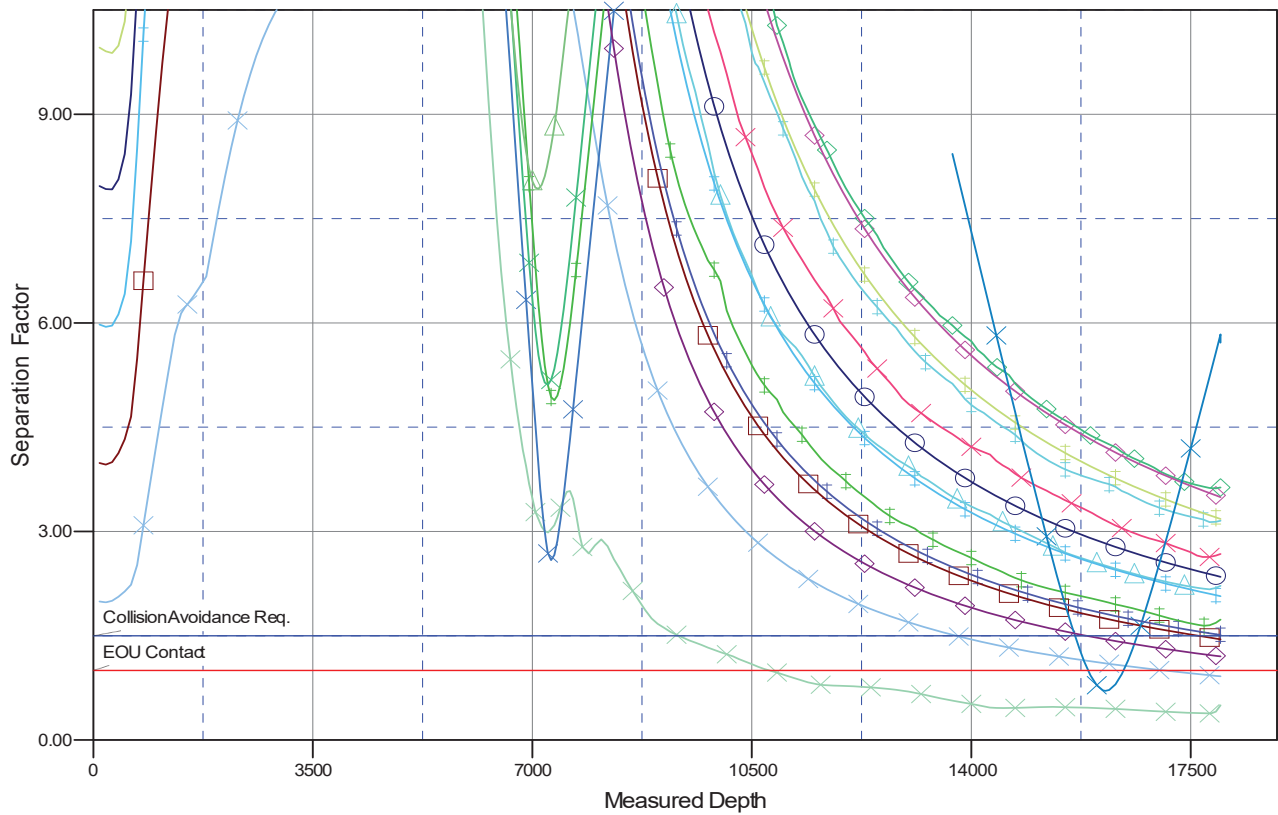
Central Meridian is -105.500000

Coordinates are relative to: RUSCH 15W4CM

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.55°

Separation Factor Plot



LEGEND

ELDER WEST 4X-HNC-09-07-65, PRAIRIE PR Well, Interpolated NRO Surveys V0	RUSCH 4WNNAM, Plan A, Permit Rev-1 V0	SIMPSON 4-4, PER PSA Well, No Surveys V0
ELDER WEST 2X-HNA-09-07-65, PRAIRIE PR Well, Interpolated NRO Surveys V0	RUSCH 3WNNAM, Plan A, Permit Rev-1 V0	ELDER 17WNNAM, Plan A, Permit Rev-1 V0
ELDER WEST 3X-HNB-09-07-65, PRAIRIE PR Well, Interpolated NRO Surveys V0	RUSCH 12WNNAM, Plan A, Permit Rev-1 V0	ELDER 18WNNAM, Plan A, Permit Rev-1 V0
RUSCH 8X-HNB-04-07-65, PRAIRIE PR Well, Actual Atlas Surveys V0	RUSCH 5WNNAM, Plan A, Permit Rev-1 V0	ELDER 22WNNAM, Plan A, Permit Rev-1 V0
ELDER WEST 2X-HC-09-07-65, PRAIRIE PR Well, Interpolated NRO Surveys V0	RUSCH 9WNNAM, Plan A, Permit Rev-1 V0	ELDER 25WNNAM, Plan A, Permit Rev-1 V0
ELDER WEST 1X-HNC-09-07-65, PRAIRIE PR Well, Interpolated NRO Surveys V0	RUSCH 2WNNAM, Plan B, Permit Rev-1 V0	ELDER 26WNNAM, Plan A, Permit Rev-1 V0
ELDER 4V-HNB-2-07-65, PRAIRIE PR Well, Actual Atlas Surveys V0	RUSCH 7WNNAM, Plan A, Permit Rev-1 V0	ELDER 1WNNAM, Plan A, Permit Rev-1 V0
RUSCH 8WNNAM, Plan B, Permit Rev-1 V0	RUSCH 6WNNAM, Plan C, Permit Rev-1 V0	ELDER 21WNNAM, Plan A, Permit Rev-1 V0
RUSCH 1WNNAM, Plan A, Permit Rev-1 V0	RUSCH 13WNNAM, Plan B, Permit Rev-1 V0	ELDER 19WNNAM, Plan A, Permit Rev-1 V0
RUSCH 11WNNAM, Plan A, Permit Rev-1 V0	RUSCH 10WNNAM, Plan A, Permit Rev-1 V0	ELDER 20WNNAM, Plan A, Permit Rev-1 V0