



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Company:	Coachman Energy Operating Company, LLC	TVD Reference:	DD @ 7073.0usft
Project:	Garfield County, CO	MD Reference:	DD @ 7073.0usft
Site:	S22-T6S-R91W	North Reference:	True
Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Project	Garfield County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		S22-T6S-R91W			
Site Position:		Northing:	1,070,005.61 usft	Latitude:	39.507175
From:	Lat/Long	Easting:	2,421,858.13 usft	Longitude:	-107.549037
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-1.32 °

Well	Federal 2/3-13-22					
Well Position	+N/-S	0.0 usft	Northing:	1,069,975.72 usft	Latitude:	39.507093
	+E/-W	0.0 usft	Easting:	2,421,858.00 usft	Longitude:	-107.549035
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	7,047.0 usft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	3/13/2015	9.60	65.67	51,942

Design	Plan #1				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	26.26	

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
749.9	13.50	26.26	745.7	47.3	23.3	3.00	3.00	0.00	26.26	
4,779.7	13.50	26.26	4,664.3	890.7	439.4	0.00	0.00	0.00	0.00	
5,229.6	0.00	0.00	5,110.0	938.0	462.8	3.00	-3.00	0.00	180.00	2/3-13-22 TOG
8,194.6	0.00	0.00	8,075.0	938.0	462.8	0.00	0.00	0.00	0.00	

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Project:	Garfield County, CO	MD Reference:	DD @ 7073.0usft
Site:	S22-T6S-R91W	North Reference:	True
Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #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 (°/100u)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	KOP @ 300'
400.0	3.00	26.26	400.0	2.3	1.2	2.6	3.00	3.00	
500.0	6.00	26.26	499.6	9.4	4.6	10.5	3.00	3.00	
600.0	9.00	26.26	598.8	21.1	10.4	23.5	3.00	3.00	
700.0	12.00	26.26	697.1	37.4	18.5	41.7	3.00	3.00	
749.9	13.50	26.26	745.7	47.3	23.3	52.7	3.00	3.00	EOB; INC=13.5°
800.0	13.50	26.26	794.5	57.8	28.5	64.4	0.00	0.00	
900.0	13.50	26.26	891.7	78.7	38.8	87.8	0.00	0.00	
1,000.0	13.50	26.26	988.9	99.6	49.2	111.1	0.00	0.00	
1,100.0	13.50	26.26	1,086.2	120.6	59.5	134.5	0.00	0.00	
1,200.0	13.50	26.26	1,183.4	141.5	69.8	157.8	0.00	0.00	
1,300.0	13.50	26.26	1,280.7	162.4	80.1	181.1	0.00	0.00	
1,400.0	13.50	26.26	1,377.9	183.4	90.5	204.5	0.00	0.00	
1,500.0	13.50	26.26	1,475.1	204.3	100.8	227.8	0.00	0.00	
1,600.0	13.50	26.26	1,572.4	225.2	111.1	251.1	0.00	0.00	
1,700.0	13.50	26.26	1,669.6	246.2	121.4	274.5	0.00	0.00	
1,800.0	13.50	26.26	1,766.9	267.1	131.8	297.8	0.00	0.00	
1,900.0	13.50	26.26	1,864.1	288.0	142.1	321.2	0.00	0.00	
2,000.0	13.50	26.26	1,961.3	308.9	152.4	344.5	0.00	0.00	
2,100.0	13.50	26.26	2,058.6	329.9	162.7	367.8	0.00	0.00	
2,200.0	13.50	26.26	2,155.8	350.8	173.1	391.2	0.00	0.00	
2,300.0	13.50	26.26	2,253.0	371.7	183.4	414.5	0.00	0.00	
2,400.0	13.50	26.26	2,350.3	392.7	193.7	437.8	0.00	0.00	
2,500.0	13.50	26.26	2,447.5	413.6	204.0	461.2	0.00	0.00	
2,600.0	13.50	26.26	2,544.8	434.5	214.4	484.5	0.00	0.00	
2,700.0	13.50	26.26	2,642.0	455.4	224.7	507.9	0.00	0.00	
2,800.0	13.50	26.26	2,739.2	476.4	235.0	531.2	0.00	0.00	
2,900.0	13.50	26.26	2,836.5	497.3	245.3	554.5	0.00	0.00	
3,000.0	13.50	26.26	2,933.7	518.2	255.7	577.9	0.00	0.00	
3,100.0	13.50	26.26	3,031.0	539.2	266.0	601.2	0.00	0.00	
3,200.0	13.50	26.26	3,128.2	560.1	276.3	624.5	0.00	0.00	
3,300.0	13.50	26.26	3,225.4	581.0	286.6	647.9	0.00	0.00	
3,400.0	13.50	26.26	3,322.7	601.9	297.0	671.2	0.00	0.00	
3,500.0	13.50	26.26	3,419.9	622.9	307.3	694.6	0.00	0.00	
3,600.0	13.50	26.26	3,517.1	643.8	317.6	717.9	0.00	0.00	
3,700.0	13.50	26.26	3,614.4	664.7	327.9	741.2	0.00	0.00	
3,800.0	13.50	26.26	3,711.6	685.7	338.3	764.6	0.00	0.00	
3,900.0	13.50	26.26	3,808.9	706.6	348.6	787.9	0.00	0.00	
4,000.0	13.50	26.26	3,906.1	727.5	358.9	811.2	0.00	0.00	
4,100.0	13.50	26.26	4,003.3	748.5	369.2	834.6	0.00	0.00	
4,200.0	13.50	26.26	4,100.6	769.4	379.6	857.9	0.00	0.00	
4,300.0	13.50	26.26	4,197.8	790.3	389.9	881.3	0.00	0.00	
4,400.0	13.50	26.26	4,295.1	811.2	400.2	904.6	0.00	0.00	
4,500.0	13.50	26.26	4,392.3	832.2	410.5	927.9	0.00	0.00	
4,600.0	13.50	26.26	4,489.5	853.1	420.9	951.3	0.00	0.00	
4,700.0	13.50	26.26	4,586.8	874.0	431.2	974.6	0.00	0.00	
4,756.8	13.50	26.26	4,642.0	885.9	437.1	987.9	0.00	0.00	Williams Fork
4,779.7	13.50	26.26	4,664.3	890.7	439.4	993.2	0.00	0.00	Start Drop -3.00
4,800.0	12.89	26.26	4,684.0	894.9	441.5	997.8	3.00	-3.00	

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Project:	Garfield County, CO	MD Reference:	DD @ 7073.0usft
Site:	S22-T6S-R91W	North Reference:	True
Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #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 (°/100u)	Comments / Formations
4,900.0	9.89	26.26	4,782.1	912.6	450.2	1,017.6	3.00	-3.00	
5,000.0	6.89	26.26	4,881.0	925.6	456.7	1,032.2	3.00	-3.00	
5,100.0	3.89	26.26	4,980.5	934.1	460.8	1,041.6	3.00	-3.00	
5,200.0	0.89	26.26	5,080.4	937.8	462.7	1,045.7	3.00	-3.00	
5,229.6	0.00	0.00	5,110.0	938.0	462.8	1,045.9	3.00	-3.00	EOD; INC=0° - Top of Gas - 2/3-13-22 TOG
5,300.0	0.00	0.00	5,180.4	938.0	462.8	1,045.9	0.00	0.00	
5,400.0	0.00	0.00	5,280.4	938.0	462.8	1,045.9	0.00	0.00	
5,500.0	0.00	0.00	5,380.4	938.0	462.8	1,045.9	0.00	0.00	
5,600.0	0.00	0.00	5,480.4	938.0	462.8	1,045.9	0.00	0.00	
5,700.0	0.00	0.00	5,580.4	938.0	462.8	1,045.9	0.00	0.00	
5,800.0	0.00	0.00	5,680.4	938.0	462.8	1,045.9	0.00	0.00	
5,900.0	0.00	0.00	5,780.4	938.0	462.8	1,045.9	0.00	0.00	
6,000.0	0.00	0.00	5,880.4	938.0	462.8	1,045.9	0.00	0.00	
6,100.0	0.00	0.00	5,980.4	938.0	462.8	1,045.9	0.00	0.00	
6,200.0	0.00	0.00	6,080.4	938.0	462.8	1,045.9	0.00	0.00	
6,300.0	0.00	0.00	6,180.4	938.0	462.8	1,045.9	0.00	0.00	
6,400.0	0.00	0.00	6,280.4	938.0	462.8	1,045.9	0.00	0.00	
6,500.0	0.00	0.00	6,380.4	938.0	462.8	1,045.9	0.00	0.00	
6,600.0	0.00	0.00	6,480.4	938.0	462.8	1,045.9	0.00	0.00	
6,700.0	0.00	0.00	6,580.4	938.0	462.8	1,045.9	0.00	0.00	
6,800.0	0.00	0.00	6,680.4	938.0	462.8	1,045.9	0.00	0.00	
6,900.0	0.00	0.00	6,780.4	938.0	462.8	1,045.9	0.00	0.00	
7,000.0	0.00	0.00	6,880.4	938.0	462.8	1,045.9	0.00	0.00	
7,100.0	0.00	0.00	6,980.4	938.0	462.8	1,045.9	0.00	0.00	
7,200.0	0.00	0.00	7,080.4	938.0	462.8	1,045.9	0.00	0.00	
7,300.0	0.00	0.00	7,180.4	938.0	462.8	1,045.9	0.00	0.00	
7,400.0	0.00	0.00	7,280.4	938.0	462.8	1,045.9	0.00	0.00	
7,500.0	0.00	0.00	7,380.4	938.0	462.8	1,045.9	0.00	0.00	
7,600.0	0.00	0.00	7,480.4	938.0	462.8	1,045.9	0.00	0.00	
7,700.0	0.00	0.00	7,580.4	938.0	462.8	1,045.9	0.00	0.00	
7,800.0	0.00	0.00	7,680.4	938.0	462.8	1,045.9	0.00	0.00	
7,827.6	0.00	0.00	7,708.0	938.0	462.8	1,045.9	0.00	0.00	Cameo
7,900.0	0.00	0.00	7,780.4	938.0	462.8	1,045.9	0.00	0.00	
8,000.0	0.00	0.00	7,880.4	938.0	462.8	1,045.9	0.00	0.00	
8,091.6	0.00	0.00	7,972.0	938.0	462.8	1,045.9	0.00	0.00	Rollins
8,100.0	0.00	0.00	7,980.4	938.0	462.8	1,045.9	0.00	0.00	
8,194.6	0.00	0.00	8,075.0	938.0	462.8	1,045.9	0.00	0.00	TD at 8194.6

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
2/3-13-22 TOG	0.00	0.00	5,110.0	938.0	462.8	1,070,902.79	2,422,342.31	39.509668	-107.547395
- hit/miss target									
- Shape									
- plan hits target center									
- Circle (radius 75.0)									

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Company:	Coachman Energy Operating Company, LLC	TVD Reference:	DD @ 7073.0usft
Project:	Garfield County, CO	MD Reference:	DD @ 7073.0usft
Site:	S22-T6S-R91W	North Reference:	True
Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,756.8	4,642.0	Williams Fork				
5,229.6	5,110.0	Top of Gas				
7,827.6	7,708.0	Cameo				
8,091.6	7,972.0	Rollins				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
300.0	300.0	0.0	0.0	KOP @ 300'	
749.9	745.7	47.3	23.3	EOB; INC=13.5°	
4,779.7	4,664.3	890.7	439.4	Start Drop -3.00	
5,229.6	5,110.0	938.0	462.8	EOD; INC=0°	
8,194.6	8,075.0	938.0	462.8	TD at 8194.6	

Coachman Energy Operating Company, LLC

Garfield County, CO

S22-T6S-R91W

Federal 2/3-13-22

DD

Plan #1

Anticollision Report

16 March, 2015

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Project:	Garfield County, CO	TVD Reference:	DD @ 7073.0usft
Reference Site:	S22-T6S-R91W	MD Reference:	DD @ 7073.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #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 center-center distance of 1,000.0usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	3/16/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	8,194.6	Plan #1 (DD)	ISCWSA MWD	MWD - ISCWSA	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
S22-T6S-R91W						
Federal 2/3-11-22 - DD - Plan #1	200.0	200.0	29.9	29.3	48.517	CC, ES
Federal 2/3-11-22 - DD - Plan #1	8,194.6	8,364.2	657.9	615.1	15.355	SF
Federal 2/3-12-22 - DD - Plan #1	233.5	233.5	14.9	14.2	19.488	CC, ES
Federal 2/3-12-22 - DD - Plan #1	8,194.6	8,269.0	329.0	286.8	7.803	SF
Federal 2/3-14-22 - DD - Plan #1	300.0	300.0	14.9	13.9	14.021	CC, ES
Federal 2/3-14-22 - DD - Plan #1	8,194.6	8,141.5	328.6	287.5	7.994	SF
Federal 2/3-15-22 - DD - Plan #1	300.0	300.0	29.9	28.8	28.042	CC, ES
Federal 2/3-15-22 - DD - Plan #1	600.0	601.5	39.7	37.0	15.117	SF
Federal 2/3-16-22 - DD - Plan #1	300.0	300.0	45.2	44.1	42.410	CC, ES
Federal 2/3-16-22 - DD - Plan #1	8,194.6	8,099.8	986.6	946.2	24.454	SF
Federal 6/7-13-22 - DD - Plan #1	233.3	233.3	16.8	16.0	21.939	CC, ES
Federal 6/7-13-22 - DD - Plan #1	500.0	497.2	25.3	23.2	12.492	SF
Federal 6/7-14-22 - DD - Plan #1	200.0	200.0	16.9	16.3	27.425	CC, ES
Federal 6/7-14-22 - DD - Plan #1	400.0	398.2	24.6	23.1	16.114	SF
Federal 6/7-15-22 - DD - Plan #1	234.8	234.8	27.1	26.3	35.091	CC
Federal 6/7-15-22 - DD - Plan #1	300.0	299.7	27.4	26.3	25.806	ES
Federal 6/7-15-22 - DD - Plan #1	500.0	497.6	39.2	37.1	19.408	SF
Federal 6/7-16-22 - DD - Plan #1	200.0	200.0	40.4	39.8	65.561	CC, ES
Federal 6/7-16-22 - DD - Plan #1	600.0	592.2	74.0	71.3	27.840	SF

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Project:	Garfield County, CO	TVD Reference:	DD @ 7073.0usft
Reference Site:	S22-T6S-R91W	MD Reference:	DD @ 7073.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S22-T6S-R91W - Federal 2/3-11-22 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-1.08	29.9	-0.6	29.9					
100.0	100.0	100.0	100.0	0.1	0.1	-1.08	29.9	-0.6	29.9	29.7	0.17	179.645		
200.0	200.0	200.0	200.0	0.3	0.3	-1.08	29.9	-0.6	29.9	29.3	0.62	48.517 CC, ES		
300.0	300.0	298.4	298.4	0.5	0.5	0.25	32.3	0.1	32.4	31.3	1.07	30.309		
400.0	400.0	396.6	396.2	0.8	0.8	-24.49	39.6	2.2	37.4	35.9	1.56	23.939		
500.0	499.6	494.4	493.3	1.0	1.0	-24.51	51.6	5.7	42.7	40.6	2.10	20.400		
600.0	598.8	592.0	589.3	1.3	1.4	-25.55	68.4	10.6	48.2	45.6	2.65	18.188		
700.0	697.1	689.4	684.0	1.6	1.8	-27.27	89.8	16.8	54.0	50.7	3.25	16.632		
749.9	745.7	737.8	730.7	1.8	2.0	-28.31	102.1	20.3	56.9	53.4	3.56	15.983		
800.0	794.5	786.4	777.2	2.0	2.3	-29.20	115.7	24.2	60.6	56.7	3.85	15.724		
900.0	891.7	882.7	868.2	2.4	2.9	-29.62	145.8	33.0	71.3	66.9	4.47	15.953		
1,000.0	988.9	980.7	959.7	2.9	3.5	-29.09	179.8	42.8	85.6	80.5	5.12	16.711		
1,100.0	1,086.2	1,079.7	1,051.9	3.4	4.2	-28.68	214.3	52.8	100.0	94.2	5.79	17.282		
1,200.0	1,183.4	1,178.7	1,144.2	3.8	4.8	-28.37	248.7	62.7	114.4	107.9	6.45	17.734		
1,300.0	1,280.7	1,277.6	1,236.4	4.3	5.5	-28.13	283.1	72.7	128.8	121.7	7.13	18.061		
1,400.0	1,377.9	1,376.6	1,328.6	4.8	6.2	-27.94	317.6	82.6	143.2	135.4	7.82	18.321		
1,500.0	1,475.1	1,475.5	1,420.9	5.2	6.9	-27.79	352.0	92.6	157.6	149.1	8.51	18.530		
1,600.0	1,572.4	1,574.5	1,513.1	5.7	7.6	-27.66	386.5	102.6	172.0	162.8	9.20	18.701		
1,700.0	1,669.6	1,673.4	1,605.3	6.2	8.3	-27.55	420.9	112.5	186.4	176.5	9.89	18.844		
1,800.0	1,766.9	1,772.4	1,697.6	6.7	9.0	-27.45	455.3	122.5	200.8	190.2	10.59	18.964		
1,900.0	1,864.1	1,871.3	1,789.8	7.2	9.7	-27.37	489.8	132.4	215.2	204.0	11.29	19.067		
2,000.0	1,961.3	1,970.3	1,882.0	7.6	10.3	-27.30	524.2	142.4	229.7	217.7	11.99	19.156		
2,100.0	2,058.6	2,069.3	1,974.3	8.1	11.0	-27.24	558.7	152.4	244.1	231.4	12.69	19.234		
2,200.0	2,155.8	2,168.2	2,066.5	8.6	11.7	-27.18	593.1	162.3	258.5	245.1	13.39	19.302		
2,300.0	2,253.0	2,267.2	2,158.7	9.1	12.4	-27.13	627.6	172.3	272.9	258.8	14.09	19.363		
2,400.0	2,350.3	2,366.1	2,250.9	9.6	13.1	-27.09	662.0	182.2	287.3	272.5	14.80	19.418		
2,500.0	2,447.5	2,465.1	2,343.2	10.0	13.8	-27.05	696.4	192.2	301.7	286.2	15.50	19.467		
2,600.0	2,544.8	2,564.0	2,435.4	10.5	14.5	-27.01	730.9	202.2	316.1	299.9	16.20	19.512		
2,700.0	2,642.0	2,663.0	2,527.6	11.0	15.2	-26.98	765.3	212.1	330.5	313.6	16.91	19.552		
2,800.0	2,739.2	2,761.9	2,619.9	11.5	15.9	-26.94	799.8	222.1	345.0	327.3	17.61	19.590		
2,900.0	2,836.5	2,860.9	2,712.1	12.0	16.6	-26.92	834.2	232.0	359.4	341.1	18.31	19.624		
3,000.0	2,933.7	2,959.9	2,804.3	12.4	17.3	-26.89	868.6	242.0	373.8	354.8	19.02	19.656		
3,100.0	3,031.0	3,058.8	2,896.6	12.9	18.0	-26.87	903.1	252.0	388.2	368.5	19.72	19.686		
3,200.0	3,128.2	3,157.8	2,988.8	13.4	18.7	-26.84	937.5	261.9	402.6	382.2	20.42	19.713		
3,300.0	3,225.4	3,256.7	3,081.0	13.9	19.4	-26.82	972.0	271.9	417.0	395.9	21.13	19.739		
3,400.0	3,322.7	3,355.7	3,173.3	14.4	20.1	-26.80	1,006.4	281.8	431.4	409.6	21.83	19.763		
3,500.0	3,419.9	3,454.6	3,265.5	14.9	20.8	-26.78	1,040.8	291.8	445.8	423.3	22.53	19.786		
3,600.0	3,517.1	3,553.6	3,357.7	15.3	21.5	-26.77	1,075.3	301.8	460.3	437.0	23.24	19.808		
3,700.0	3,614.4	3,652.5	3,450.0	15.8	22.2	-26.75	1,109.7	311.7	474.7	450.7	23.94	19.828		
3,800.0	3,711.6	3,751.5	3,542.2	16.3	22.9	-26.74	1,144.2	321.7	489.1	464.4	24.64	19.848		
3,900.0	3,808.9	3,850.5	3,634.4	16.8	23.6	-26.72	1,178.6	331.6	503.5	478.2	25.34	19.867		
4,000.0	3,906.1	3,949.4	3,726.7	17.3	24.3	-26.71	1,213.1	341.6	517.9	491.9	26.05	19.884		
4,100.0	4,003.3	4,048.4	3,818.9	17.8	24.9	-26.70	1,247.5	351.6	532.3	505.6	26.75	19.901		
4,200.0	4,100.6	4,147.3	3,911.1	18.2	25.6	-26.68	1,281.9	361.5	546.7	519.3	27.45	19.918		
4,300.0	4,197.8	4,246.3	4,003.4	18.7	26.3	-26.67	1,316.4	371.5	561.2	533.0	28.15	19.933		
4,400.0	4,295.1	4,345.2	4,095.6	19.2	27.0	-26.66	1,350.8	381.4	575.6	546.7	28.85	19.948		
4,500.0	4,392.3	4,444.2	4,187.8	19.7	27.7	-26.65	1,385.3	391.4	590.0	560.4	29.55	19.963		
4,600.0	4,489.5	4,543.1	4,280.1	20.2	28.4	-26.64	1,419.7	401.4	604.4	574.1	30.25	19.977		
4,700.0	4,586.8	4,642.1	4,372.3	20.7	29.1	-26.63	1,454.1	411.3	618.8	587.9	30.96	19.990		
4,779.7	4,664.3	4,734.7	4,458.8	21.0	29.7	-26.64	1,485.9	420.5	630.0	598.4	31.54	19.972		
4,800.0	4,684.0	4,764.2	4,486.6	21.1	29.9	-26.68	1,495.4	423.2	632.4	600.7	31.69	19.958		
4,900.0	4,782.1	4,910.3	4,626.4	21.5	30.5	-26.89	1,536.1	435.0	642.8	610.6	32.28	19.915		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Project:	Garfield County, CO	TVD Reference:	DD @ 7073.0usft
Reference Site:	S22-T6S-R91W	MD Reference:	DD @ 7073.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S22-T6S-R91W - Federal 2/3-11-22 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
5,000.0	4,881.0	5,057.8	4,770.3	21.7	31.0	-27.03	1,566.6	443.8	650.6	617.9	32.71	19.890		
5,100.0	4,980.5	5,206.2	4,917.3	22.0	31.4	-27.13	1,586.5	449.6	655.6	622.6	32.98	19.880		
5,200.0	5,080.4	5,355.1	5,065.9	22.1	31.7	-27.17	1,595.4	452.2	657.8	624.8	33.07	19.890		
5,229.6	5,110.0	5,399.2	5,110.0	22.1	31.7	-0.91	1,595.9	452.3	657.9	624.9	33.07	19.894		
5,300.0	5,180.4	5,469.7	5,180.4	22.2	31.8	-0.91	1,595.9	452.3	657.9	624.7	33.26	19.784		
5,400.0	5,280.4	5,569.7	5,280.4	22.3	31.8	-0.91	1,595.9	452.3	657.9	624.4	33.55	19.613		
5,500.0	5,380.4	5,669.7	5,380.4	22.4	31.9	-0.91	1,595.9	452.3	657.9	624.1	33.84	19.441		
5,600.0	5,480.4	5,769.7	5,480.4	22.5	32.0	-0.91	1,595.9	452.3	657.9	623.8	34.14	19.270		
5,700.0	5,580.4	5,869.7	5,580.4	22.6	32.1	-0.91	1,595.9	452.3	657.9	623.5	34.45	19.100		
5,800.0	5,680.4	5,969.7	5,680.4	22.8	32.1	-0.91	1,595.9	452.3	657.9	623.2	34.75	18.932		
5,900.0	5,780.4	6,069.7	5,780.4	22.9	32.2	-0.91	1,595.9	452.3	657.9	622.9	35.06	18.765		
6,000.0	5,880.4	6,169.7	5,880.4	23.0	32.3	-0.91	1,595.9	452.3	657.9	622.6	35.38	18.599		
6,100.0	5,980.4	6,269.7	5,980.4	23.1	32.4	-0.91	1,595.9	452.3	657.9	622.3	35.69	18.435		
6,200.0	6,080.4	6,369.7	6,080.4	23.2	32.5	-0.91	1,595.9	452.3	657.9	621.9	36.01	18.272		
6,300.0	6,180.4	6,469.7	6,180.4	23.4	32.5	-0.91	1,595.9	452.3	657.9	621.6	36.33	18.110		
6,400.0	6,280.4	6,569.7	6,280.4	23.5	32.6	-0.91	1,595.9	452.3	657.9	621.3	36.65	17.950		
6,500.0	6,380.4	6,669.7	6,380.4	23.6	32.7	-0.91	1,595.9	452.3	657.9	621.0	36.98	17.792		
6,600.0	6,480.4	6,769.7	6,480.4	23.7	32.8	-0.91	1,595.9	452.3	657.9	620.6	37.31	17.635		
6,700.0	6,580.4	6,869.7	6,580.4	23.9	32.9	-0.91	1,595.9	452.3	657.9	620.3	37.64	17.480		
6,800.0	6,680.4	6,969.7	6,680.4	24.0	33.0	-0.91	1,595.9	452.3	657.9	620.0	37.97	17.326		
6,900.0	6,780.4	7,069.7	6,780.4	24.1	33.1	-0.91	1,595.9	452.3	657.9	619.6	38.31	17.174		
7,000.0	6,880.4	7,169.7	6,880.4	24.3	33.2	-0.91	1,595.9	452.3	657.9	619.3	38.65	17.024		
7,100.0	6,980.4	7,269.7	6,980.4	24.4	33.3	-0.91	1,595.9	452.3	657.9	619.0	38.99	16.875		
7,200.0	7,080.4	7,369.7	7,080.4	24.5	33.4	-0.91	1,595.9	452.3	657.9	618.6	39.33	16.728		
7,300.0	7,180.4	7,469.7	7,180.4	24.7	33.5	-0.91	1,595.9	452.3	657.9	618.3	39.68	16.583		
7,400.0	7,280.4	7,569.7	7,280.4	24.8	33.6	-0.91	1,595.9	452.3	657.9	617.9	40.02	16.439		
7,500.0	7,380.4	7,669.7	7,380.4	25.0	33.7	-0.91	1,595.9	452.3	657.9	617.6	40.37	16.297		
7,600.0	7,480.4	7,769.7	7,480.4	25.1	33.8	-0.91	1,595.9	452.3	657.9	617.2	40.72	16.156		
7,700.0	7,580.4	7,869.7	7,580.4	25.2	33.9	-0.91	1,595.9	452.3	657.9	616.9	41.08	16.017		
7,800.0	7,680.4	7,969.7	7,680.4	25.4	34.0	-0.91	1,595.9	452.3	657.9	616.5	41.43	15.880		
7,900.0	7,780.4	8,069.7	7,780.4	25.5	34.1	-0.91	1,595.9	452.3	657.9	616.2	41.79	15.745		
8,000.0	7,880.4	8,169.7	7,880.4	25.7	34.2	-0.91	1,595.9	452.3	657.9	615.8	42.15	15.611		
8,100.0	7,980.4	8,269.7	7,980.4	25.8	34.3	-0.91	1,595.9	452.3	657.9	615.4	42.51	15.479		
8,194.6	8,075.0	8,364.2	8,075.0	26.0	34.4	-0.91	1,595.9	452.3	657.9	615.1	42.85	15.355 SF		

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Project:	Garfield County, CO	TVD Reference:	DD @ 7073.0usft
Reference Site:	S22-T6S-R91W	MD Reference:	DD @ 7073.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S22-T6S-R91W - Federal 2/3-12-22 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.0	0.0	0.0	0.0	0.0	0.0	-1.08	14.9	-0.3	14.9					
100.0	100.0	100.0	100.0	0.1	0.1	-1.08	14.9	-0.3	14.9	14.8	0.17	89.809	CC, ES	
200.0	200.0	200.0	200.0	0.3	0.3	-1.08	14.9	-0.3	14.9	14.3	0.62	24.255		
233.5	233.5	233.5	233.5	0.4	0.4	-1.08	14.9	-0.3	14.9	14.2	0.77	19.488		
300.0	300.0	299.6	299.6	0.5	0.5	-0.22	15.5	-0.1	15.5	14.5	1.07	14.592		
400.0	400.0	398.8	398.6	0.8	0.8	-24.45	20.4	1.7	18.1	16.5	1.55	11.642		
500.0	499.6	497.8	497.1	1.0	1.0	-24.41	30.0	5.2	20.8	18.7	2.08	9.991		
600.0	598.8	596.6	594.7	1.3	1.3	-25.65	44.4	10.5	23.7	21.0	2.63	8.985		
700.0	697.1	695.4	691.3	1.6	1.7	-27.75	63.5	17.5	26.7	23.5	3.22	8.291		
749.9	745.7	744.6	739.0	1.8	1.9	-29.01	74.7	21.6	28.3	24.8	3.54	8.000		
800.0	794.5	793.9	786.6	2.0	2.1	-29.79	87.2	26.1	30.5	26.7	3.82	7.984		
900.0	891.7	893.2	881.5	2.4	2.7	-29.30	114.7	36.2	37.5	33.0	4.43	8.455		
1,000.0	988.9	992.9	976.7	2.9	3.2	-28.81	142.5	46.4	44.7	39.6	5.06	8.837		
1,100.0	1,086.2	1,092.7	1,071.9	3.4	3.8	-28.47	170.4	56.5	51.9	46.2	5.70	9.111		
1,200.0	1,183.4	1,192.4	1,167.1	3.8	4.4	-28.20	198.3	66.7	59.1	52.8	6.34	9.320		
1,300.0	1,280.7	1,292.2	1,262.4	4.3	4.9	-28.00	226.1	76.9	66.3	59.3	7.00	9.474		
1,400.0	1,377.9	1,391.9	1,357.6	4.8	5.5	-27.83	254.0	87.1	73.6	65.9	7.66	9.598		
1,500.0	1,475.1	1,491.6	1,452.8	5.2	6.1	-27.70	281.9	97.3	80.8	72.5	8.33	9.697		
1,600.0	1,572.4	1,591.4	1,548.0	5.7	6.7	-27.58	309.7	107.5	88.0	79.0	9.00	9.778		
1,700.0	1,669.6	1,691.1	1,643.3	6.2	7.3	-27.49	337.6	117.7	95.2	85.6	9.67	9.845		
1,800.0	1,766.9	1,790.9	1,738.5	6.7	7.8	-27.40	365.4	127.8	102.4	92.1	10.35	9.902		
1,900.0	1,864.1	1,890.6	1,833.7	7.2	8.4	-27.33	393.3	138.0	109.7	98.6	11.02	9.951		
2,000.0	1,961.3	1,990.3	1,928.9	7.6	9.0	-27.27	421.2	148.2	116.9	105.2	11.70	9.992		
2,100.0	2,058.6	2,090.1	2,024.2	8.1	9.6	-27.21	449.0	158.4	124.1	111.7	12.38	10.029		
2,200.0	2,155.8	2,189.8	2,119.4	8.6	10.2	-27.16	476.9	168.6	131.3	118.3	13.05	10.061		
2,300.0	2,253.0	2,289.5	2,214.6	9.1	10.8	-27.12	504.8	178.8	138.6	124.8	13.73	10.089		
2,400.0	2,350.3	2,389.3	2,309.8	9.6	11.4	-27.08	532.6	189.0	145.8	131.4	14.41	10.115		
2,500.0	2,447.5	2,489.0	2,405.1	10.0	12.0	-27.04	560.5	199.1	153.0	137.9	15.09	10.137		
2,600.0	2,544.8	2,588.8	2,500.3	10.5	12.5	-27.01	588.4	209.3	160.2	144.4	15.77	10.158		
2,700.0	2,642.0	2,688.5	2,595.5	11.0	13.1	-26.98	616.2	219.5	167.4	151.0	16.45	10.177		
2,800.0	2,739.2	2,788.2	2,690.7	11.5	13.7	-26.95	644.1	229.7	174.7	157.5	17.13	10.194		
2,900.0	2,836.5	2,888.0	2,786.0	12.0	14.3	-26.93	671.9	239.9	181.9	164.1	17.82	10.209		
3,000.0	2,933.7	2,987.7	2,881.2	12.4	14.9	-26.90	699.8	250.1	189.1	170.6	18.50	10.224		
3,100.0	3,031.0	3,087.5	2,976.4	12.9	15.5	-26.88	727.7	260.3	196.3	177.1	19.18	10.237		
3,200.0	3,128.2	3,187.2	3,071.6	13.4	16.1	-26.86	755.5	270.4	203.5	183.7	19.86	10.249		
3,300.0	3,225.4	3,286.9	3,166.9	13.9	16.7	-26.84	783.4	280.6	210.8	190.2	20.54	10.261		
3,400.0	3,322.7	3,386.7	3,262.1	14.4	17.2	-26.83	811.3	290.8	218.0	196.8	21.22	10.272		
3,500.0	3,419.9	3,486.4	3,357.3	14.9	17.8	-26.81	839.1	301.0	225.2	203.3	21.90	10.282		
3,600.0	3,517.1	3,586.2	3,452.5	15.3	18.4	-26.79	867.0	311.2	232.4	209.9	22.59	10.291		
3,700.0	3,614.4	3,685.9	3,547.8	15.8	19.0	-26.78	894.9	321.4	239.7	216.4	23.27	10.300		
3,800.0	3,711.6	3,785.6	3,643.0	16.3	19.6	-26.77	922.7	331.6	246.9	222.9	23.95	10.308		
3,900.0	3,808.9	3,885.4	3,738.2	16.8	20.2	-26.75	950.6	341.7	254.1	229.5	24.63	10.316		
4,000.0	3,906.1	3,985.1	3,833.4	17.3	20.8	-26.74	978.4	351.9	261.3	236.0	25.31	10.324		
4,100.0	4,003.3	4,084.8	3,928.7	17.8	21.4	-26.73	1,006.3	362.1	268.5	242.6	25.99	10.331		
4,200.0	4,100.6	4,184.6	4,023.9	18.2	22.0	-26.72	1,034.2	372.3	275.8	249.1	26.68	10.338		
4,300.0	4,197.8	4,284.3	4,119.1	18.7	22.6	-26.71	1,062.0	382.5	283.0	255.6	27.36	10.345		
4,400.0	4,295.1	4,384.1	4,214.3	19.2	23.1	-26.70	1,089.9	392.7	290.2	262.2	28.04	10.351		
4,500.0	4,392.3	4,483.8	4,309.6	19.7	23.7	-26.69	1,117.8	402.9	297.4	268.7	28.72	10.357		
4,600.0	4,489.5	4,583.5	4,404.8	20.2	24.3	-26.68	1,145.6	413.0	304.7	275.3	29.40	10.363		
4,700.0	4,586.8	4,683.3	4,500.0	20.7	24.9	-26.67	1,173.5	423.2	311.9	281.8	30.08	10.368		
4,779.7	4,664.3	4,769.3	4,582.3	21.0	25.4	-26.70	1,197.1	431.9	317.3	286.6	30.64	10.356		
4,800.0	4,684.0	4,793.3	4,605.4	21.1	25.5	-26.74	1,203.2	434.1	318.3	287.5	30.78	10.342		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Project:	Garfield County, CO	TVD Reference:	DD @ 7073.0usft
Reference Site:	S22-T6S-R91W	MD Reference:	DD @ 7073.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S22-T6S-R91W - Federal 2/3-12-22 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance				Total		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis	Separation Factor		
4,900.0	4,782.1	4,911.8	4,720.6	21.5	26.0	-26.93	1,229.3	443.6	322.7	291.4	31.31	10.306		
5,000.0	4,881.0	5,030.6	4,837.6	21.7	26.3	-27.07	1,248.6	450.7	325.9	294.2	31.70	10.280		
5,100.0	4,980.5	5,149.6	4,955.8	22.0	26.6	-27.15	1,261.1	455.2	328.0	296.0	31.96	10.263		
5,200.0	5,080.4	5,268.8	5,074.8	22.1	26.8	-27.19	1,266.6	457.3	328.9	296.9	32.08	10.255		
5,229.6	5,110.0	5,304.0	5,110.0	22.1	26.8	-0.93	1,266.9	457.4	329.0	296.9	32.09	10.253		
5,300.0	5,180.4	5,374.4	5,180.4	22.2	26.9	-0.93	1,266.9	457.4	329.0	296.7	32.28	10.192		
5,400.0	5,280.4	5,474.4	5,280.4	22.3	26.9	-0.93	1,266.9	457.4	329.0	296.4	32.58	10.098		
5,500.0	5,380.4	5,574.4	5,380.4	22.4	27.0	-0.93	1,266.9	457.4	329.0	296.1	32.89	10.004		
5,600.0	5,480.4	5,674.4	5,480.4	22.5	27.1	-0.93	1,266.9	457.4	329.0	295.8	33.20	9.910		
5,700.0	5,580.4	5,774.4	5,580.4	22.6	27.2	-0.93	1,266.9	457.4	329.0	295.5	33.51	9.817		
5,800.0	5,680.4	5,874.4	5,680.4	22.8	27.3	-0.93	1,266.9	457.4	329.0	295.1	33.83	9.724		
5,900.0	5,780.4	5,974.4	5,780.4	22.9	27.4	-0.93	1,266.9	457.4	329.0	294.8	34.15	9.633		
6,000.0	5,880.4	6,074.4	5,880.4	23.0	27.5	-0.93	1,266.9	457.4	329.0	294.5	34.47	9.543		
6,100.0	5,980.4	6,174.4	5,980.4	23.1	27.6	-0.93	1,266.9	457.4	329.0	294.2	34.80	9.453		
6,200.0	6,080.4	6,274.4	6,080.4	23.2	27.7	-0.93	1,266.9	457.4	329.0	293.8	35.13	9.365		
6,300.0	6,180.4	6,374.4	6,180.4	23.4	27.8	-0.93	1,266.9	457.4	329.0	293.5	35.46	9.277		
6,400.0	6,280.4	6,474.4	6,280.4	23.5	27.9	-0.93	1,266.9	457.4	329.0	293.2	35.80	9.191		
6,500.0	6,380.4	6,574.4	6,380.4	23.6	28.0	-0.93	1,266.9	457.4	329.0	292.8	36.13	9.105		
6,600.0	6,480.4	6,674.4	6,480.4	23.7	28.1	-0.93	1,266.9	457.4	329.0	292.5	36.47	9.020		
6,700.0	6,580.4	6,774.4	6,580.4	23.9	28.2	-0.93	1,266.9	457.4	329.0	292.2	36.81	8.937		
6,800.0	6,680.4	6,874.4	6,680.4	24.0	28.3	-0.93	1,266.9	457.4	329.0	291.8	37.16	8.854		
6,900.0	6,780.4	6,974.4	6,780.4	24.1	28.4	-0.93	1,266.9	457.4	329.0	291.5	37.50	8.772		
7,000.0	6,880.4	7,074.4	6,880.4	24.3	28.6	-0.93	1,266.9	457.4	329.0	291.1	37.85	8.692		
7,100.0	6,980.4	7,174.4	6,980.4	24.4	28.7	-0.93	1,266.9	457.4	329.0	290.8	38.20	8.612		
7,200.0	7,080.4	7,274.4	7,080.4	24.5	28.8	-0.93	1,266.9	457.4	329.0	290.4	38.55	8.533		
7,300.0	7,180.4	7,374.4	7,180.4	24.7	28.9	-0.93	1,266.9	457.4	329.0	290.1	38.91	8.455		
7,400.0	7,280.4	7,474.4	7,280.4	24.8	29.0	-0.93	1,266.9	457.4	329.0	289.7	39.26	8.379		
7,500.0	7,380.4	7,574.4	7,380.4	25.0	29.1	-0.93	1,266.9	457.4	329.0	289.4	39.62	8.303		
7,600.0	7,480.4	7,674.4	7,480.4	25.1	29.3	-0.93	1,266.9	457.4	329.0	289.0	39.98	8.228		
7,700.0	7,580.4	7,774.4	7,580.4	25.2	29.4	-0.93	1,266.9	457.4	329.0	288.6	40.34	8.154		
7,800.0	7,680.4	7,874.4	7,680.4	25.4	29.5	-0.93	1,266.9	457.4	329.0	288.3	40.71	8.081		
7,900.0	7,780.4	7,974.4	7,780.4	25.5	29.6	-0.93	1,266.9	457.4	329.0	287.9	41.07	8.010		
8,000.0	7,880.4	8,074.4	7,880.4	25.7	29.7	-0.93	1,266.9	457.4	329.0	287.5	41.44	7.939		
8,100.0	7,980.4	8,174.4	7,980.4	25.8	29.9	-0.93	1,266.9	457.4	329.0	287.2	41.81	7.869		
8,194.6	8,075.0	8,269.0	8,075.0	26.0	30.0	-0.93	1,266.9	457.4	329.0	286.8	42.16	7.803 SF		

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Project:	Garfield County, CO	TVD Reference:	DD @ 7073.0usft
Reference Site:	S22-T6S-R91W	MD Reference:	DD @ 7073.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S22-T6S-R91W - Federal 2/3-14-22 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	178.92	-14.9	0.3	14.9					
100.0	100.0	100.0	100.0	0.1	0.1	178.92	-14.9	0.3	14.9	14.8	0.17	89.809		
200.0	200.0	200.0	200.0	0.3	0.3	178.92	-14.9	0.3	14.9	14.3	0.62	24.255		
300.0	300.0	300.0	300.0	0.5	0.5	178.92	-14.9	0.3	14.9	13.9	1.07	14.021 CC, ES		
400.0	400.0	400.3	400.3	0.8	0.8	155.37	-14.4	0.7	16.8	15.2	1.55	10.792		
500.0	499.6	501.1	500.9	1.0	1.0	156.03	-10.2	3.9	19.6	17.5	2.08	9.441		
600.0	598.8	601.9	601.2	1.3	1.2	154.31	-1.7	10.2	22.9	20.3	2.62	8.733		
700.0	697.1	702.7	700.7	1.6	1.5	151.33	11.0	19.7	26.7	23.5	3.20	8.358		
749.9	745.7	752.4	749.7	1.8	1.7	150.95	17.9	24.9	29.7	26.2	3.51	8.468		
800.0	794.5	802.4	799.0	2.0	1.9	151.22	24.8	30.1	33.3	29.5	3.78	8.802		
900.0	891.7	902.2	897.2	2.4	2.2	151.62	38.7	40.5	40.4	36.1	4.35	9.293		
1,000.0	988.9	1,001.9	995.4	2.9	2.6	151.90	52.5	50.8	47.6	42.6	4.94	9.633		
1,100.0	1,086.2	1,101.7	1,093.6	3.4	3.0	152.10	66.4	61.2	54.7	49.2	5.54	9.877		
1,200.0	1,183.4	1,201.4	1,191.9	3.8	3.3	152.26	80.3	71.6	61.8	55.7	6.15	10.059		
1,300.0	1,280.7	1,301.2	1,290.1	4.3	3.7	152.39	94.1	82.0	69.0	62.2	6.77	10.197		
1,400.0	1,377.9	1,400.9	1,388.3	4.8	4.1	152.49	108.0	92.4	76.1	68.7	7.39	10.306		
1,500.0	1,475.1	1,500.7	1,486.6	5.2	4.5	152.57	121.8	102.8	83.3	75.3	8.01	10.393		
1,600.0	1,572.4	1,600.4	1,584.8	5.7	4.9	152.64	135.7	113.1	90.4	81.8	8.64	10.463		
1,700.0	1,669.6	1,700.2	1,683.0	6.2	5.2	152.71	149.6	123.5	97.5	88.3	9.27	10.522		
1,800.0	1,766.9	1,799.9	1,781.3	6.7	5.6	152.76	163.4	133.9	104.7	94.8	9.90	10.571		
1,900.0	1,864.1	1,899.6	1,879.5	7.2	6.0	152.80	177.3	144.3	111.8	101.3	10.54	10.613		
2,000.0	1,961.3	1,999.4	1,977.7	7.6	6.4	152.84	191.1	154.7	119.0	107.8	11.17	10.649		
2,100.0	2,058.6	2,099.1	2,075.9	8.1	6.8	152.88	205.0	165.1	126.1	114.3	11.81	10.680		
2,200.0	2,155.8	2,198.9	2,174.2	8.6	7.2	152.91	218.8	175.4	133.3	120.8	12.44	10.707		
2,300.0	2,253.0	2,298.6	2,272.4	9.1	7.5	152.94	232.7	185.8	140.4	127.3	13.08	10.731		
2,400.0	2,350.3	2,398.4	2,370.6	9.6	7.9	152.97	246.6	196.2	147.5	133.8	13.72	10.753		
2,500.0	2,447.5	2,498.1	2,468.9	10.0	8.3	152.99	260.4	206.6	154.7	140.3	14.36	10.772		
2,600.0	2,544.8	2,597.9	2,567.1	10.5	8.7	153.01	274.3	217.0	161.8	146.8	15.00	10.790		
2,700.0	2,642.0	2,697.6	2,665.3	11.0	9.1	153.03	288.1	227.4	169.0	153.3	15.64	10.805		
2,800.0	2,739.2	2,797.3	2,763.6	11.5	9.5	153.05	302.0	237.7	176.1	159.8	16.28	10.820		
2,900.0	2,836.5	2,897.1	2,861.8	12.0	9.9	153.07	315.8	248.1	183.2	166.3	16.91	10.833		
3,000.0	2,933.7	2,996.8	2,960.0	12.4	10.3	153.08	329.7	258.5	190.4	172.8	17.55	10.845		
3,100.0	3,031.0	3,096.6	3,058.2	12.9	10.6	153.10	343.6	268.9	197.5	179.3	18.19	10.856		
3,200.0	3,128.2	3,196.3	3,156.5	13.4	11.0	153.11	357.4	279.3	204.7	185.8	18.83	10.867		
3,300.0	3,225.4	3,296.1	3,254.7	13.9	11.4	153.12	371.3	289.7	211.8	192.3	19.47	10.876		
3,400.0	3,322.7	3,395.8	3,352.9	14.4	11.8	153.13	385.1	300.0	218.9	198.8	20.11	10.885		
3,500.0	3,419.9	3,495.6	3,451.2	14.9	12.2	153.14	399.0	310.4	226.1	205.3	20.75	10.894		
3,600.0	3,517.1	3,595.3	3,549.4	15.3	12.6	153.15	412.8	320.8	233.2	211.8	21.39	10.902		
3,700.0	3,614.4	3,695.0	3,647.6	15.8	13.0	153.16	426.7	331.2	240.4	218.3	22.03	10.909		
3,800.0	3,711.6	3,794.8	3,745.9	16.3	13.4	153.17	440.6	341.6	247.5	224.8	22.67	10.917		
3,900.0	3,808.9	3,894.5	3,844.1	16.8	13.7	153.18	454.4	352.0	254.6	231.3	23.31	10.923		
4,000.0	3,906.1	3,994.3	3,942.3	17.3	14.1	153.19	468.3	362.4	261.8	237.8	23.95	10.930		
4,100.0	4,003.3	4,094.0	4,040.5	17.8	14.5	153.20	482.1	372.7	268.9	244.3	24.59	10.936		
4,200.0	4,100.6	4,193.8	4,138.8	18.2	14.9	153.20	496.0	383.1	276.1	250.8	25.23	10.942		
4,300.0	4,197.8	4,293.5	4,237.0	18.7	15.3	153.21	509.8	393.5	283.2	257.3	25.87	10.947		
4,400.0	4,295.1	4,393.3	4,335.2	19.2	15.7	153.22	523.7	403.9	290.4	263.8	26.51	10.953		
4,500.0	4,392.3	4,493.0	4,433.5	19.7	16.1	153.22	537.6	414.3	297.5	270.3	27.15	10.958		
4,600.0	4,489.5	4,592.7	4,531.7	20.2	16.5	153.23	551.4	424.7	304.6	276.8	27.79	10.963		
4,700.0	4,586.8	4,692.5	4,629.9	20.7	16.8	153.23	565.3	435.0	311.8	283.3	28.43	10.968		
4,779.7	4,664.3	4,772.0	4,708.2	21.0	17.2	153.24	576.3	443.3	317.5	288.5	28.94	10.971		
4,800.0	4,684.0	4,792.2	4,728.2	21.1	17.2	153.25	579.1	445.4	318.8	289.8	29.07	10.969		
4,900.0	4,782.1	4,886.4	4,820.9	21.5	17.6	153.09	591.8	454.9	323.1	293.5	29.64	10.902		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Project:	Garfield County, CO	TVD Reference:	DD @ 7073.0usft
Reference Site:	S22-T6S-R91W	MD Reference:	DD @ 7073.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S22-T6S-R91W - Federal 2/3-14-22 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
5,000.0	4,881.0	4,974.4	4,908.3	21.7	17.8	152.94	600.9	461.7	325.9	295.9	30.05	10.847		
5,100.0	4,980.5	5,062.5	4,996.0	22.0	18.0	152.85	606.7	466.1	327.8	297.4	30.34	10.804		
5,200.0	5,080.4	5,150.5	5,084.0	22.1	18.1	152.81	609.3	468.0	328.6	298.1	30.51	10.771		
5,229.6	5,110.0	5,176.5	5,110.0	22.1	18.2	179.06	609.4	468.1	328.6	298.1	30.53	10.762		
5,300.0	5,180.4	5,247.0	5,180.4	22.2	18.2	179.06	609.4	468.1	328.6	297.9	30.74	10.689		
5,400.0	5,280.4	5,347.0	5,280.4	22.3	18.4	179.06	609.4	468.1	328.6	297.5	31.07	10.577		
5,500.0	5,380.4	5,447.0	5,380.4	22.4	18.5	179.06	609.4	468.1	328.6	297.2	31.40	10.466		
5,600.0	5,480.4	5,547.0	5,480.4	22.5	18.7	179.06	609.4	468.1	328.6	296.9	31.73	10.357		
5,700.0	5,580.4	5,647.0	5,580.4	22.6	18.8	179.06	609.4	468.1	328.6	296.6	32.06	10.249		
5,800.0	5,680.4	5,747.0	5,680.4	22.8	18.9	179.06	609.4	468.1	328.6	296.2	32.40	10.143		
5,900.0	5,780.4	5,847.0	5,780.4	22.9	19.1	179.06	609.4	468.1	328.6	295.9	32.74	10.038		
6,000.0	5,880.4	5,947.0	5,880.4	23.0	19.2	179.06	609.4	468.1	328.6	295.5	33.08	9.934		
6,100.0	5,980.4	6,047.0	5,980.4	23.1	19.4	179.06	609.4	468.1	328.6	295.2	33.42	9.832		
6,200.0	6,080.4	6,147.0	6,080.4	23.2	19.5	179.06	609.4	468.1	328.6	294.8	33.77	9.731		
6,300.0	6,180.4	6,247.0	6,180.4	23.4	19.7	179.06	609.4	468.1	328.6	294.5	34.12	9.631		
6,400.0	6,280.4	6,347.0	6,280.4	23.5	19.8	179.06	609.4	468.1	328.6	294.1	34.47	9.533		
6,500.0	6,380.4	6,447.0	6,380.4	23.6	20.0	179.06	609.4	468.1	328.6	293.8	34.83	9.436		
6,600.0	6,480.4	6,547.0	6,480.4	23.7	20.1	179.06	609.4	468.1	328.6	293.4	35.18	9.341		
6,700.0	6,580.4	6,647.0	6,580.4	23.9	20.3	179.06	609.4	468.1	328.6	293.1	35.54	9.247		
6,800.0	6,680.4	6,747.0	6,680.4	24.0	20.4	179.06	609.4	468.1	328.6	292.7	35.90	9.154		
6,900.0	6,780.4	6,847.0	6,780.4	24.1	20.6	179.06	609.4	468.1	328.6	292.4	36.26	9.062		
7,000.0	6,880.4	6,947.0	6,880.4	24.3	20.8	179.06	609.4	468.1	328.6	292.0	36.63	8.972		
7,100.0	6,980.4	7,047.0	6,980.4	24.4	20.9	179.06	609.4	468.1	328.6	291.6	36.99	8.883		
7,200.0	7,080.4	7,147.0	7,080.4	24.5	21.1	179.06	609.4	468.1	328.6	291.3	37.36	8.796		
7,300.0	7,180.4	7,247.0	7,180.4	24.7	21.2	179.06	609.4	468.1	328.6	290.9	37.73	8.710		
7,400.0	7,280.4	7,347.0	7,280.4	24.8	21.4	179.06	609.4	468.1	328.6	290.5	38.10	8.625		
7,500.0	7,380.4	7,447.0	7,380.4	25.0	21.6	179.06	609.4	468.1	328.6	290.1	38.47	8.541		
7,600.0	7,480.4	7,547.0	7,480.4	25.1	21.7	179.06	609.4	468.1	328.6	289.8	38.85	8.459		
7,700.0	7,580.4	7,647.0	7,580.4	25.2	21.9	179.06	609.4	468.1	328.6	289.4	39.22	8.378		
7,800.0	7,680.4	7,747.0	7,680.4	25.4	22.1	179.06	609.4	468.1	328.6	289.0	39.60	8.298		
7,900.0	7,780.4	7,847.0	7,780.4	25.5	22.2	179.06	609.4	468.1	328.6	288.6	39.98	8.219		
8,000.0	7,880.4	7,947.0	7,880.4	25.7	22.4	179.06	609.4	468.1	328.6	288.3	40.36	8.142		
8,100.0	7,980.4	8,047.0	7,980.4	25.8	22.6	179.06	609.4	468.1	328.6	287.9	40.74	8.065		
8,194.6	8,075.0	8,141.5	8,075.0	26.0	22.7	179.06	609.4	468.1	328.6	287.5	41.11	7.994 SF		

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Project:	Garfield County, CO	TVD Reference:	DD @ 7073.0usft
Reference Site:	S22-T6S-R91W	MD Reference:	DD @ 7073.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S22-T6S-R91W - Federal 2/3-15-22 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	178.92	-29.9	0.6	29.9					
100.0	100.0	100.0	100.0	0.1	0.1	178.92	-29.9	0.6	29.9	29.7	0.17	179.619		
200.0	200.0	200.0	200.0	0.3	0.3	178.92	-29.9	0.6	29.9	29.3	0.62	48.510		
300.0	300.0	300.0	300.0	0.5	0.5	178.92	-29.9	0.6	29.9	28.8	1.07	28.042 CC, ES		
400.0	400.0	400.8	400.8	0.8	0.8	150.71	-28.4	2.8	30.8	29.3	1.55	19.912		
500.0	499.6	501.5	501.1	1.0	1.0	145.54	-24.0	9.4	33.8	31.7	2.06	16.380		
600.0	598.8	601.5	600.4	1.3	1.3	140.39	-17.5	19.5	39.7	37.0	2.62	15.117 SF		
700.0	697.1	701.0	699.2	1.6	1.6	140.32	-10.8	29.7	49.5	46.3	3.24	15.292		
749.9	745.7	750.5	748.2	1.8	1.7	141.52	-7.4	34.8	56.0	52.4	3.56	15.708		
800.0	794.5	800.1	797.5	2.0	1.8	142.94	-4.1	39.9	63.0	59.2	3.85	16.344		
900.0	891.7	899.1	895.7	2.4	2.1	145.01	2.6	50.1	77.1	72.6	4.44	17.349		
1,000.0	988.9	998.0	993.9	2.9	2.5	146.43	9.2	60.2	91.2	86.2	5.04	18.104		
1,100.0	1,086.2	1,097.0	1,092.2	3.4	2.8	147.47	15.9	70.4	105.4	99.8	5.64	18.686		
1,200.0	1,183.4	1,196.0	1,190.4	3.8	3.1	148.27	22.5	80.6	119.6	113.4	6.25	19.148		
1,300.0	1,280.7	1,295.0	1,288.6	4.3	3.4	148.89	29.2	90.8	133.9	127.0	6.86	19.520		
1,400.0	1,377.9	1,393.9	1,386.8	4.8	3.7	149.40	35.9	100.9	148.1	140.7	7.47	19.826		
1,500.0	1,475.1	1,492.9	1,485.0	5.2	4.0	149.81	42.5	111.1	162.4	154.3	8.09	20.082		
1,600.0	1,572.4	1,591.9	1,583.3	5.7	4.3	150.16	49.2	121.3	176.6	167.9	8.70	20.299		
1,700.0	1,669.6	1,690.8	1,681.5	6.2	4.6	150.46	55.9	131.4	190.9	181.6	9.32	20.485		
1,800.0	1,766.9	1,789.8	1,779.7	6.7	4.9	150.72	62.5	141.6	205.2	195.2	9.94	20.647		
1,900.0	1,864.1	1,888.8	1,877.9	7.2	5.3	150.94	69.2	151.8	219.5	208.9	10.56	20.789		
2,000.0	1,961.3	1,987.8	1,976.2	7.6	5.6	151.13	75.9	162.0	233.7	222.6	11.18	20.915		
2,100.0	2,058.6	2,086.7	2,074.4	8.1	5.9	151.31	82.5	172.1	248.0	236.2	11.80	21.026		
2,200.0	2,155.8	2,185.7	2,172.6	8.6	6.2	151.46	89.2	182.3	262.3	249.9	12.42	21.127		
2,300.0	2,253.0	2,284.7	2,270.8	9.1	6.5	151.60	95.9	192.5	276.6	263.6	13.04	21.217		
2,400.0	2,350.3	2,383.6	2,369.0	9.6	6.8	151.72	102.5	202.7	290.9	277.2	13.66	21.300		
2,500.0	2,447.5	2,482.6	2,467.3	10.0	7.1	151.84	109.2	212.8	305.2	290.9	14.28	21.375		
2,600.0	2,544.8	2,581.6	2,565.5	10.5	7.4	151.94	115.8	223.0	319.5	304.6	14.90	21.444		
2,700.0	2,642.0	2,680.6	2,663.7	11.0	7.8	152.03	122.5	233.2	333.7	318.2	15.52	21.507		
2,800.0	2,739.2	2,779.5	2,761.9	11.5	8.1	152.12	129.2	243.3	348.0	331.9	16.14	21.566		
2,900.0	2,836.5	2,878.5	2,860.2	12.0	8.4	152.20	135.8	253.5	362.3	345.6	16.76	21.621		
3,000.0	2,933.7	2,977.5	2,958.4	12.4	8.7	152.27	142.5	263.7	376.6	359.2	17.38	21.672		
3,100.0	3,031.0	3,076.5	3,056.6	12.9	9.0	152.34	149.2	273.9	390.9	372.9	18.00	21.719		
3,200.0	3,128.2	3,175.4	3,154.8	13.4	9.3	152.40	155.8	284.0	405.2	386.6	18.62	21.764		
3,300.0	3,225.4	3,274.4	3,253.0	13.9	9.6	152.46	162.5	294.2	419.5	400.3	19.24	21.806		
3,400.0	3,322.7	3,373.4	3,351.3	14.4	10.0	152.52	169.2	304.4	433.8	413.9	19.86	21.846		
3,500.0	3,419.9	3,472.3	3,449.5	14.9	10.3	152.57	175.8	314.6	448.1	427.6	20.48	21.883		
3,600.0	3,517.1	3,571.3	3,547.7	15.3	10.6	152.62	182.5	324.7	462.4	441.3	21.09	21.919		
3,700.0	3,614.4	3,670.3	3,645.9	15.8	10.9	152.66	189.2	334.9	476.7	455.0	21.71	21.953		
3,800.0	3,711.6	3,769.3	3,744.2	16.3	11.2	152.71	195.8	345.1	491.0	468.6	22.33	21.985		
3,900.0	3,808.9	3,868.2	3,842.4	16.8	11.5	152.75	202.5	355.2	505.3	482.3	22.95	22.016		
4,000.0	3,906.1	3,967.2	3,940.6	17.3	11.9	152.78	209.1	365.4	519.6	496.0	23.57	22.045		
4,100.0	4,003.3	4,066.2	4,038.8	17.8	12.2	152.82	215.8	375.6	533.9	509.7	24.19	22.074		
4,200.0	4,100.6	4,165.1	4,137.0	18.2	12.5	152.85	222.5	385.8	548.2	523.4	24.80	22.101		
4,300.0	4,197.8	4,264.1	4,235.3	18.7	12.8	152.89	229.1	395.9	562.5	537.0	25.42	22.127		
4,400.0	4,295.1	4,363.1	4,333.5	19.2	13.1	152.92	235.8	406.1	576.7	550.7	26.04	22.152		
4,500.0	4,392.3	4,462.1	4,431.7	19.7	13.4	152.95	242.5	416.3	591.0	564.4	26.65	22.176		
4,600.0	4,489.5	4,561.0	4,529.9	20.2	13.7	152.98	249.1	426.5	605.3	578.1	27.27	22.199		
4,700.0	4,586.8	4,660.0	4,628.2	20.7	14.1	153.00	255.8	436.6	619.6	591.8	27.88	22.222		
4,779.7	4,664.3	4,738.9	4,706.5	21.0	14.3	153.02	261.1	444.7	631.0	602.7	28.37	22.240		
4,800.0	4,684.0	4,759.0	4,726.4	21.1	14.4	153.06	262.5	446.8	633.8	605.3	28.50	22.238		
4,900.0	4,782.1	4,858.4	4,825.0	21.5	14.7	153.09	269.2	457.0	644.9	615.8	29.09	22.169		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Project:	Garfield County, CO	TVD Reference:	DD @ 7073.0usft
Reference Site:	S22-T6S-R91W	MD Reference:	DD @ 7073.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S22-T6S-R91W - Federal 2/3-15-22 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
5,000.0	4,881.0	4,950.5	4,916.5	21.7	15.0	152.91	275.1	466.1	651.6	622.0	29.59	22.018		
5,100.0	4,980.5	5,034.9	5,000.6	22.0	15.1	152.79	278.8	471.7	655.7	625.7	29.93	21.904		
5,200.0	5,080.4	5,119.3	5,085.0	22.1	15.3	152.73	280.4	474.2	657.5	627.4	30.14	21.817		
5,229.6	5,110.0	5,144.3	5,110.0	22.1	15.3	178.99	280.5	474.3	657.6	627.4	30.17	21.794		
5,300.0	5,180.4	5,214.8	5,180.4	22.2	15.4	178.99	280.5	474.3	657.6	627.2	30.38	21.644		
5,400.0	5,280.4	5,314.8	5,280.4	22.3	15.6	178.99	280.5	474.3	657.6	626.9	30.71	21.413		
5,500.0	5,380.4	5,414.8	5,380.4	22.4	15.7	178.99	280.5	474.3	657.6	626.6	31.04	21.186		
5,600.0	5,480.4	5,514.8	5,480.4	22.5	15.9	178.99	280.5	474.3	657.6	626.2	31.37	20.961		
5,700.0	5,580.4	5,614.8	5,580.4	22.6	16.1	178.99	280.5	474.3	657.6	625.9	31.71	20.738		
5,800.0	5,680.4	5,714.8	5,680.4	22.8	16.2	178.99	280.5	474.3	657.6	625.6	32.05	20.519		
5,900.0	5,780.4	5,814.8	5,780.4	22.9	16.4	178.99	280.5	474.3	657.6	625.2	32.39	20.303		
6,000.0	5,880.4	5,914.8	5,880.4	23.0	16.6	178.99	280.5	474.3	657.6	624.9	32.73	20.089		
6,100.0	5,980.4	6,014.8	5,980.4	23.1	16.7	178.99	280.5	474.3	657.6	624.5	33.08	19.878		
6,200.0	6,080.4	6,114.8	6,080.4	23.2	16.9	178.99	280.5	474.3	657.6	624.2	33.43	19.671		
6,300.0	6,180.4	6,214.8	6,180.4	23.4	17.1	178.99	280.5	474.3	657.6	623.8	33.78	19.466		
6,400.0	6,280.4	6,314.8	6,280.4	23.5	17.3	178.99	280.5	474.3	657.6	623.5	34.14	19.264		
6,500.0	6,380.4	6,414.8	6,380.4	23.6	17.4	178.99	280.5	474.3	657.6	623.1	34.49	19.065		
6,600.0	6,480.4	6,514.8	6,480.4	23.7	17.6	178.99	280.5	474.3	657.6	622.8	34.85	18.869		
6,700.0	6,580.4	6,614.8	6,580.4	23.9	17.8	178.99	280.5	474.3	657.6	622.4	35.21	18.676		
6,800.0	6,680.4	6,714.8	6,680.4	24.0	18.0	178.99	280.5	474.3	657.6	622.0	35.57	18.486		
6,900.0	6,780.4	6,814.8	6,780.4	24.1	18.1	178.99	280.5	474.3	657.6	621.7	35.94	18.299		
7,000.0	6,880.4	6,914.8	6,880.4	24.3	18.3	178.99	280.5	474.3	657.6	621.3	36.30	18.114		
7,100.0	6,980.4	7,014.8	6,980.4	24.4	18.5	178.99	280.5	474.3	657.6	620.9	36.67	17.932		
7,200.0	7,080.4	7,114.8	7,080.4	24.5	18.7	178.99	280.5	474.3	657.6	620.6	37.04	17.753		
7,300.0	7,180.4	7,214.8	7,180.4	24.7	18.9	178.99	280.5	474.3	657.6	620.2	37.41	17.577		
7,400.0	7,280.4	7,314.8	7,280.4	24.8	19.1	178.99	280.5	474.3	657.6	619.8	37.79	17.403		
7,500.0	7,380.4	7,414.8	7,380.4	25.0	19.2	178.99	280.5	474.3	657.6	619.4	38.16	17.232		
7,600.0	7,480.4	7,514.8	7,480.4	25.1	19.4	178.99	280.5	474.3	657.6	619.1	38.54	17.064		
7,700.0	7,580.4	7,614.8	7,580.4	25.2	19.6	178.99	280.5	474.3	657.6	618.7	38.92	16.898		
7,800.0	7,680.4	7,714.8	7,680.4	25.4	19.8	178.99	280.5	474.3	657.6	618.3	39.30	16.735		
7,900.0	7,780.4	7,814.8	7,780.4	25.5	20.0	178.99	280.5	474.3	657.6	617.9	39.68	16.574		
8,000.0	7,880.4	7,914.8	7,880.4	25.7	20.2	178.99	280.5	474.3	657.6	617.5	40.06	16.416		
8,100.0	7,980.4	8,014.8	7,980.4	25.8	20.4	178.99	280.5	474.3	657.6	617.2	40.44	16.260		
8,194.6	8,075.0	8,109.3	8,075.0	26.0	20.5	178.99	280.5	474.3	657.6	616.8	40.81	16.115		

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Project:	Garfield County, CO	TVD Reference:	DD @ 7073.0usft
Reference Site:	S22-T6S-R91W	MD Reference:	DD @ 7073.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S22-T6S-R91W - Federal 2/3-16-22 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	178.57	-45.2	1.1	45.2					
100.0	100.0	100.0	100.0	0.1	0.1	178.57	-45.2	1.1	45.2	45.0	0.17	271.655		
200.0	200.0	200.0	200.0	0.3	0.3	178.57	-45.2	1.1	45.2	44.6	0.62	73.367		
300.0	300.0	300.0	300.0	0.5	0.5	178.57	-45.2	1.1	45.2	44.1	1.07	42.410 CC, ES		
400.0	400.0	399.9	399.9	0.8	0.7	151.64	-45.2	2.9	47.6	46.0	1.54	30.819		
500.0	499.6	499.5	499.4	1.0	1.0	149.98	-45.2	8.1	54.7	52.6	2.06	26.524		
600.0	598.8	598.6	598.1	1.3	1.2	147.97	-45.3	16.7	66.7	64.0	2.62	25.435		
700.0	697.1	697.2	696.1	1.6	1.5	147.15	-45.3	27.1	83.2	80.0	3.22	25.853		
749.9	745.7	746.1	744.7	1.8	1.6	147.45	-45.4	32.2	93.1	89.6	3.53	26.366		
800.0	794.5	795.1	793.4	2.0	1.7	148.02	-45.4	37.4	103.6	99.8	3.80	27.245		
900.0	891.7	892.9	890.7	2.4	2.0	148.87	-45.5	47.7	124.5	120.2	4.36	28.556		
1,000.0	988.9	990.6	987.9	2.9	2.3	149.48	-45.6	58.1	145.5	140.5	4.94	29.475		
1,100.0	1,086.2	1,088.4	1,085.1	3.4	2.6	149.94	-45.6	68.4	166.4	160.9	5.52	30.142		
1,200.0	1,183.4	1,186.2	1,182.3	3.8	2.9	150.29	-45.7	78.7	187.4	181.3	6.12	30.643		
1,300.0	1,280.7	1,283.9	1,279.6	4.3	3.1	150.57	-45.8	89.0	208.4	201.7	6.72	31.028		
1,400.0	1,377.9	1,381.7	1,376.8	4.8	3.4	150.81	-45.8	99.4	229.4	222.1	7.32	31.333		
1,500.0	1,475.1	1,479.5	1,474.0	5.2	3.7	151.00	-45.9	109.7	250.4	242.4	7.93	31.579		
1,600.0	1,572.4	1,577.2	1,571.2	5.7	4.0	151.16	-46.0	120.0	271.4	262.8	8.54	31.781		
1,700.0	1,669.6	1,675.0	1,668.5	6.2	4.3	151.30	-46.1	130.3	292.3	283.2	9.15	31.950		
1,800.0	1,766.9	1,772.8	1,765.7	6.7	4.6	151.42	-46.1	140.7	313.3	303.6	9.76	32.094		
1,900.0	1,864.1	1,870.6	1,862.9	7.2	4.9	151.52	-46.2	151.0	334.3	323.9	10.38	32.217		
2,000.0	1,961.3	1,968.3	1,960.1	7.6	5.2	151.62	-46.3	161.3	355.3	344.3	10.99	32.324		
2,100.0	2,058.6	2,066.1	2,057.4	8.1	5.5	151.70	-46.3	171.6	376.3	364.7	11.61	32.419		
2,200.0	2,155.8	2,163.9	2,154.6	8.6	5.7	151.77	-46.4	182.0	397.3	385.1	12.22	32.503		
2,300.0	2,253.0	2,261.6	2,251.8	9.1	6.0	151.84	-46.5	192.3	418.3	405.5	12.84	32.578		
2,400.0	2,350.3	2,359.4	2,349.0	9.6	6.3	151.90	-46.5	202.6	439.3	425.8	13.46	32.646		
2,500.0	2,447.5	2,457.2	2,446.2	10.0	6.6	151.96	-46.6	212.9	460.3	446.2	14.07	32.707		
2,600.0	2,544.8	2,554.9	2,543.5	10.5	6.9	152.00	-46.7	223.3	481.3	466.6	14.69	32.764		
2,700.0	2,642.0	2,652.7	2,640.7	11.0	7.2	152.05	-46.8	233.6	502.3	487.0	15.31	32.816		
2,800.0	2,739.2	2,750.5	2,737.9	11.5	7.5	152.09	-46.8	243.9	523.3	507.4	15.92	32.865		
2,900.0	2,836.5	2,848.3	2,835.1	12.0	7.8	152.13	-46.9	254.2	544.3	527.7	16.54	32.910		
3,000.0	2,933.7	2,946.0	2,932.4	12.4	8.1	152.17	-47.0	264.6	565.3	548.1	17.15	32.952		
3,100.0	3,031.0	3,043.8	3,029.6	12.9	8.4	152.20	-47.0	274.9	586.3	568.5	17.77	32.992		
3,200.0	3,128.2	3,141.6	3,126.8	13.4	8.7	152.23	-47.1	285.2	607.3	588.9	18.39	33.030		
3,300.0	3,225.4	3,239.3	3,224.0	13.9	9.0	152.26	-47.2	295.5	628.3	609.3	19.00	33.066		
3,400.0	3,322.7	3,337.1	3,321.3	14.4	9.2	152.29	-47.2	305.9	649.3	629.6	19.62	33.100		
3,500.0	3,419.9	3,434.9	3,418.5	14.9	9.5	152.31	-47.3	316.2	670.3	650.0	20.23	33.132		
3,600.0	3,517.1	3,532.7	3,515.7	15.3	9.8	152.34	-47.4	326.5	691.3	670.4	20.84	33.164		
3,700.0	3,614.4	3,630.4	3,612.9	15.8	10.1	152.36	-47.5	336.8	712.3	690.8	21.46	33.194		
3,800.0	3,711.6	3,728.2	3,710.2	16.3	10.4	152.38	-47.5	347.2	733.3	711.2	22.07	33.223		
3,900.0	3,808.9	3,826.0	3,807.4	16.8	10.7	152.40	-47.6	357.5	754.2	731.6	22.68	33.250		
4,000.0	3,906.1	3,923.7	3,904.6	17.3	11.0	152.42	-47.7	367.8	775.2	752.0	23.30	33.278		
4,100.0	4,003.3	4,021.5	4,001.8	17.8	11.3	152.44	-47.7	378.1	796.2	772.3	23.91	33.304		
4,200.0	4,100.6	4,119.3	4,099.0	18.2	11.6	152.45	-47.8	388.5	817.2	792.7	24.52	33.329		
4,300.0	4,197.8	4,217.0	4,196.3	18.7	11.9	152.47	-47.9	398.8	838.2	813.1	25.13	33.354		
4,400.0	4,295.1	4,314.8	4,293.5	19.2	12.2	152.49	-48.0	409.1	859.2	833.5	25.74	33.379		
4,500.0	4,392.3	4,412.6	4,390.7	19.7	12.4	152.50	-48.0	419.4	880.2	853.9	26.35	33.402		
4,600.0	4,489.5	4,510.4	4,487.9	20.2	12.7	152.51	-48.1	429.8	901.2	874.3	26.96	33.425		
4,700.0	4,586.8	4,608.1	4,585.2	20.7	13.0	152.53	-48.2	440.1	922.2	894.7	27.57	33.448		
4,779.7	4,664.3	4,686.1	4,662.7	21.0	13.3	152.54	-48.2	448.3	939.0	910.9	28.06	33.466		
4,800.0	4,684.0	4,705.9	4,682.4	21.1	13.3	152.60	-48.2	450.4	943.1	915.0	28.19	33.456		
4,900.0	4,782.1	4,804.3	4,780.2	21.5	13.6	152.75	-48.3	460.8	960.9	932.1	28.79	33.382		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Project:	Garfield County, CO	TVD Reference:	DD @ 7073.0usft
Reference Site:	S22-T6S-R91W	MD Reference:	DD @ 7073.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S22-T6S-R91W - Federal 2/3-16-22 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
5,000.0	4,881.0	4,903.9	4,879.3	21.7	13.9	152.76	-48.4	470.4	974.1	944.8	29.29	33.257		
5,100.0	4,980.5	5,004.2	4,979.5	22.0	14.1	152.76	-48.4	476.7	982.6	953.0	29.65	33.144		
5,200.0	5,080.4	5,105.0	5,080.2	22.1	14.2	152.76	-48.4	479.5	986.4	956.5	29.89	32.999		
5,229.6	5,110.0	5,134.8	5,110.0	22.1	14.3	179.02	-48.4	479.7	986.6	956.6	29.94	32.948		
5,300.0	5,180.4	5,205.2	5,180.4	22.2	14.4	179.02	-48.4	479.7	986.6	956.4	30.15	32.720		
5,400.0	5,280.4	5,305.2	5,280.4	22.3	14.5	179.02	-48.4	479.7	986.6	956.1	30.47	32.376		
5,500.0	5,380.4	5,405.2	5,380.4	22.4	14.7	179.02	-48.4	479.7	986.6	955.8	30.80	32.035		
5,600.0	5,480.4	5,505.2	5,480.4	22.5	14.9	179.02	-48.4	479.7	986.6	955.5	31.12	31.699		
5,700.0	5,580.4	5,605.2	5,580.4	22.6	15.0	179.02	-48.4	479.7	986.6	955.1	31.45	31.366		
5,800.0	5,680.4	5,705.2	5,680.4	22.8	15.2	179.02	-48.4	479.7	986.6	954.8	31.79	31.038		
5,900.0	5,780.4	5,805.2	5,780.4	22.9	15.4	179.02	-48.4	479.7	986.6	954.5	32.12	30.713		
6,000.0	5,880.4	5,905.2	5,880.4	23.0	15.6	179.02	-48.4	479.7	986.6	954.1	32.46	30.393		
6,100.0	5,980.4	6,005.2	5,980.4	23.1	15.7	179.02	-48.4	479.7	986.6	953.8	32.80	30.076		
6,200.0	6,080.4	6,105.2	6,080.4	23.2	15.9	179.02	-48.4	479.7	986.6	953.4	33.15	29.764		
6,300.0	6,180.4	6,205.2	6,180.4	23.4	16.1	179.02	-48.4	479.7	986.6	953.1	33.49	29.457		
6,400.0	6,280.4	6,305.2	6,280.4	23.5	16.3	179.02	-48.4	479.7	986.6	952.7	33.84	29.153		
6,500.0	6,380.4	6,405.2	6,380.4	23.6	16.4	179.02	-48.4	479.7	986.6	952.4	34.19	28.854		
6,600.0	6,480.4	6,505.2	6,480.4	23.7	16.6	179.02	-48.4	479.7	986.6	952.0	34.55	28.558		
6,700.0	6,580.4	6,605.2	6,580.4	23.9	16.8	179.02	-48.4	479.7	986.6	951.7	34.90	28.267		
6,800.0	6,680.4	6,705.2	6,680.4	24.0	17.0	179.02	-48.4	479.7	986.6	951.3	35.26	27.981		
6,900.0	6,780.4	6,805.2	6,780.4	24.1	17.2	179.02	-48.4	479.7	986.6	951.0	35.62	27.698		
7,000.0	6,880.4	6,905.2	6,880.4	24.3	17.3	179.02	-48.4	479.7	986.6	950.6	35.98	27.419		
7,100.0	6,980.4	7,005.2	6,980.4	24.4	17.5	179.02	-48.4	479.7	986.6	950.2	36.35	27.145		
7,200.0	7,080.4	7,105.2	7,080.4	24.5	17.7	179.02	-48.4	479.7	986.6	949.9	36.71	26.874		
7,300.0	7,180.4	7,205.2	7,180.4	24.7	17.9	179.02	-48.4	479.7	986.6	949.5	37.08	26.608		
7,400.0	7,280.4	7,305.2	7,280.4	24.8	18.1	179.02	-48.4	479.7	986.6	949.1	37.45	26.345		
7,500.0	7,380.4	7,405.2	7,380.4	25.0	18.3	179.02	-48.4	479.7	986.6	948.8	37.82	26.087		
7,600.0	7,480.4	7,505.2	7,480.4	25.1	18.5	179.02	-48.4	479.7	986.6	948.4	38.19	25.832		
7,700.0	7,580.4	7,605.2	7,580.4	25.2	18.6	179.02	-48.4	479.7	986.6	948.0	38.57	25.581		
7,800.0	7,680.4	7,705.2	7,680.4	25.4	18.8	179.02	-48.4	479.7	986.6	947.6	38.94	25.334		
7,900.0	7,780.4	7,805.2	7,780.4	25.5	19.0	179.02	-48.4	479.7	986.6	947.3	39.32	25.091		
8,000.0	7,880.4	7,905.2	7,880.4	25.7	19.2	179.02	-48.4	479.7	986.6	946.9	39.70	24.851		
8,100.0	7,980.4	8,005.2	7,980.4	25.8	19.4	179.02	-48.4	479.7	986.6	946.5	40.08	24.618		
8,194.6	8,075.0	8,099.8	8,075.0	26.0	19.5	179.02	-48.4	479.7	986.6	946.2	40.35	24.454 SF		

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Project:	Garfield County, CO	TVD Reference:	DD @ 7073.0usft
Reference Site:	S22-T6S-R91W	MD Reference:	DD @ 7073.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S22-T6S-R91W - Federal 6/7-13-22 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	62.91	7.6	15.0	16.8					
100.0	100.0	100.0	100.0	0.1	0.1	62.91	7.6	15.0	16.8	16.6	0.17	100.996		
200.0	200.0	200.0	200.0	0.3	0.3	62.91	7.6	15.0	16.8	16.2	0.62	27.276		
233.3	233.3	233.3	233.3	0.4	0.4	62.91	7.6	15.0	16.8	16.0	0.77	21.939 CC, ES		
300.0	300.0	299.6	299.5	0.5	0.5	62.85	8.0	15.5	17.4	16.4	1.06	16.412		
400.0	400.0	398.5	398.4	0.8	0.8	40.48	10.4	20.0	20.6	19.0	1.53	13.432		
500.0	499.6	497.2	496.5	1.0	1.0	49.67	15.3	29.0	25.3	23.2	2.02	12.492 SF		
600.0	598.8	595.4	593.5	1.3	1.3	60.11	22.6	42.3	32.4	29.8	2.54	12.734		
700.0	697.1	693.1	689.1	1.6	1.7	69.27	32.1	59.9	42.5	39.3	3.16	13.448		
749.9	745.7	741.5	736.1	1.8	1.9	73.06	37.8	70.2	48.8	45.2	3.53	13.817		
800.0	794.5	790.0	782.9	2.0	2.1	75.92	44.0	81.5	56.0	52.1	3.92	14.273		
900.0	891.7	886.1	874.4	2.4	2.7	77.79	57.9	107.1	73.4	68.7	4.77	15.398		
1,000.0	988.9	980.9	963.2	2.9	3.3	76.84	73.8	136.2	94.4	88.8	5.65	16.702		
1,100.0	1,086.2	1,073.8	1,048.5	3.4	4.0	74.71	91.4	168.6	119.0	112.5	6.55	18.184		
1,200.0	1,183.4	1,164.9	1,130.3	3.8	4.8	72.17	110.6	203.7	147.3	139.9	7.43	19.839		
1,300.0	1,280.7	1,260.1	1,214.8	4.3	5.6	69.94	131.5	242.1	177.5	169.2	8.32	21.338		
1,400.0	1,377.9	1,355.2	1,299.4	4.8	6.5	68.36	152.4	280.4	207.9	198.7	9.21	22.564		
1,500.0	1,475.1	1,450.4	1,383.9	5.2	7.4	67.17	173.3	318.8	238.3	228.2	10.11	23.575		
1,600.0	1,572.4	1,545.5	1,468.4	5.7	8.2	66.26	194.2	357.1	268.9	257.9	11.01	24.419		
1,700.0	1,669.6	1,640.6	1,552.9	6.2	9.1	65.53	215.1	395.5	299.4	287.5	11.91	25.133		
1,800.0	1,766.9	1,735.8	1,637.5	6.7	10.0	64.94	236.0	433.8	330.1	317.2	12.82	25.743		
1,900.0	1,864.1	1,830.9	1,722.0	7.2	10.9	64.45	257.0	472.2	360.7	347.0	13.73	26.271		
2,000.0	1,961.3	1,926.1	1,806.5	7.6	11.8	64.03	277.9	510.5	391.4	376.7	14.64	26.731		
2,100.0	2,058.6	2,021.2	1,891.0	8.1	12.6	63.68	298.8	548.9	422.1	406.5	15.55	27.136		
2,200.0	2,155.8	2,116.4	1,975.6	8.6	13.5	63.37	319.7	587.2	452.8	436.3	16.47	27.494		
2,300.0	2,253.0	2,211.5	2,060.1	9.1	14.4	63.10	340.6	625.6	483.5	466.1	17.38	27.814		
2,400.0	2,350.3	2,306.7	2,144.6	9.6	15.3	62.87	361.5	663.9	514.2	495.9	18.30	28.100		
2,500.0	2,447.5	2,401.8	2,229.1	10.0	16.2	62.66	382.4	702.3	544.9	525.7	19.21	28.359		
2,600.0	2,544.8	2,497.0	2,313.7	10.5	17.1	62.47	403.3	740.7	575.6	555.5	20.13	28.593		
2,700.0	2,642.0	2,592.1	2,398.2	11.0	18.0	62.30	424.3	779.0	606.4	585.3	21.05	28.806		
2,800.0	2,739.2	2,687.2	2,482.7	11.5	18.9	62.15	445.2	817.4	637.1	615.1	21.97	29.001		
2,900.0	2,836.5	2,782.4	2,567.2	12.0	19.8	62.02	466.1	855.7	667.9	645.0	22.89	29.180		
3,000.0	2,933.7	2,877.5	2,651.8	12.4	20.6	61.89	487.0	894.1	698.6	674.8	23.81	29.345		
3,100.0	3,031.0	2,972.7	2,736.3	12.9	21.5	61.77	507.9	932.4	729.3	704.6	24.73	29.497		
3,200.0	3,128.2	3,067.8	2,820.8	13.4	22.4	61.67	528.8	970.8	760.1	734.5	25.65	29.638		
3,300.0	3,225.4	3,163.0	2,905.3	13.9	23.3	61.57	549.7	1,009.1	790.8	764.3	26.57	29.769		
3,400.0	3,322.7	3,258.1	2,989.9	14.4	24.2	61.48	570.7	1,047.5	821.6	794.1	27.49	29.891		
3,500.0	3,419.9	3,353.3	3,074.4	14.9	25.1	61.40	591.6	1,085.8	852.4	823.9	28.41	30.004		
3,600.0	3,517.1	3,448.4	3,158.9	15.3	26.0	61.32	612.5	1,124.2	883.1	853.8	29.33	30.111		
3,700.0	3,614.4	3,543.6	3,243.4	15.8	26.9	61.25	633.4	1,162.5	913.9	883.6	30.25	30.211		
3,800.0	3,711.6	3,638.7	3,328.0	16.3	27.8	61.18	654.3	1,200.9	944.6	913.5	31.17	30.304		
3,900.0	3,808.9	3,733.9	3,412.5	16.8	28.7	61.12	675.2	1,239.3	975.4	943.3	32.09	30.393		

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Project:	Garfield County, CO	TVD Reference:	DD @ 7073.0usft
Reference Site:	S22-T6S-R91W	MD Reference:	DD @ 7073.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S22-T6S-R91W - Federal 6/7-14-22 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	115.55	-7.3	15.2	16.9					
100.0	100.0	100.0	100.0	0.1	0.1	115.55	-7.3	15.2	16.9	16.7	0.17	101.545		
200.0	200.0	200.0	200.0	0.3	0.3	115.55	-7.3	15.2	16.9	16.3	0.62	27.425 CC, ES		
300.0	300.0	299.3	299.3	0.5	0.5	109.90	-6.4	17.7	18.8	17.7	1.06	17.656		
400.0	400.0	398.2	397.9	0.8	0.8	77.89	-3.7	24.9	24.6	23.1	1.53	16.114 SF		
500.0	499.6	496.6	495.4	1.0	1.0	78.23	0.7	36.8	33.6	31.6	2.02	16.632		
600.0	598.8	594.2	591.4	1.3	1.4	80.92	6.7	53.3	45.8	43.2	2.58	17.732		
700.0	697.1	690.8	685.5	1.6	1.8	84.03	14.4	74.1	61.3	58.1	3.26	18.838		
749.9	745.7	738.6	731.5	1.8	2.1	85.49	18.8	86.0	70.3	66.7	3.64	19.301		
800.0	794.5	786.4	777.2	2.0	2.3	86.69	23.6	99.1	80.3	76.2	4.06	19.785		
900.0	891.7	880.7	866.3	2.4	2.9	86.91	34.2	127.9	102.7	97.8	4.93	20.830		
1,000.0	988.9	973.2	952.3	2.9	3.6	85.56	46.1	160.1	128.6	122.7	5.84	22.014		
1,100.0	1,086.2	1,065.2	1,036.0	3.4	4.3	83.55	59.2	195.9	157.7	151.0	6.77	23.318		
1,200.0	1,183.4	1,160.4	1,122.2	3.8	5.1	81.88	73.2	233.9	188.0	180.3	7.70	24.399		
1,300.0	1,280.7	1,255.6	1,208.3	4.3	5.9	80.66	87.2	271.9	218.3	209.6	8.65	25.239		
1,400.0	1,377.9	1,350.8	1,294.5	4.8	6.7	79.74	101.2	309.9	248.7	239.1	9.60	25.909		
1,500.0	1,475.1	1,446.0	1,380.7	5.2	7.5	79.02	115.2	347.8	279.1	268.6	10.55	26.453		
1,600.0	1,572.4	1,541.2	1,466.8	5.7	8.4	78.45	129.2	385.8	309.6	298.1	11.51	26.903		
1,700.0	1,669.6	1,636.4	1,553.0	6.2	9.2	77.97	143.2	423.8	340.1	327.6	12.47	27.281		
1,800.0	1,766.9	1,731.6	1,639.2	6.7	10.0	77.58	157.1	461.8	370.6	357.2	13.43	27.602		
1,900.0	1,864.1	1,826.9	1,725.3	7.2	10.8	77.24	171.1	499.8	401.1	386.7	14.39	27.878		
2,000.0	1,961.3	1,922.1	1,811.5	7.6	11.7	76.95	185.1	537.8	431.6	416.3	15.35	28.119		
2,100.0	2,058.6	2,017.3	1,897.7	8.1	12.5	76.70	199.1	575.8	462.2	445.9	16.31	28.329		
2,200.0	2,155.8	2,112.5	1,983.8	8.6	13.3	76.48	213.1	613.8	492.7	475.4	17.28	28.516		
2,300.0	2,253.0	2,207.7	2,070.0	9.1	14.2	76.29	227.1	651.8	523.3	505.0	18.24	28.681		
2,400.0	2,350.3	2,302.9	2,156.2	9.6	15.0	76.12	241.1	689.8	553.8	534.6	19.21	28.830		
2,500.0	2,447.5	2,398.1	2,242.3	10.0	15.8	75.96	255.1	727.8	584.4	564.2	20.18	28.963		
2,600.0	2,544.8	2,493.3	2,328.5	10.5	16.7	75.82	269.0	765.8	615.0	593.8	21.14	29.084		
2,700.0	2,642.0	2,588.5	2,414.7	11.0	17.5	75.70	283.0	803.8	645.5	623.4	22.11	29.194		
2,800.0	2,739.2	2,683.7	2,500.8	11.5	18.3	75.58	297.0	841.7	676.1	653.0	23.08	29.294		
2,900.0	2,836.5	2,778.9	2,587.0	12.0	19.1	75.48	311.0	879.7	706.7	682.6	24.05	29.386		
3,000.0	2,933.7	2,874.1	2,673.2	12.4	20.0	75.38	325.0	917.7	737.3	712.2	25.02	29.471		
3,100.0	3,031.0	2,969.3	2,759.3	12.9	20.8	75.30	339.0	955.7	767.8	741.9	25.99	29.549		
3,200.0	3,128.2	3,064.5	2,845.5	13.4	21.6	75.21	353.0	993.7	798.4	771.5	26.95	29.621		
3,300.0	3,225.4	3,159.7	2,931.7	13.9	22.5	75.14	367.0	1,031.7	829.0	801.1	27.92	29.688		
3,400.0	3,322.7	3,254.9	3,017.8	14.4	23.3	75.07	381.0	1,069.7	859.6	830.7	28.89	29.751		
3,500.0	3,419.9	3,350.1	3,104.0	14.9	24.1	75.00	394.9	1,107.7	890.2	860.3	29.86	29.809		
3,600.0	3,517.1	3,445.3	3,190.2	15.3	25.0	74.94	408.9	1,145.7	920.8	889.9	30.83	29.864		
3,700.0	3,614.4	3,540.5	3,276.3	15.8	25.8	74.89	422.9	1,183.7	951.3	919.5	31.80	29.915		
3,800.0	3,711.6	3,635.7	3,362.5	16.3	26.6	74.83	436.9	1,221.7	981.9	949.2	32.77	29.963		

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Project:	Garfield County, CO	TVD Reference:	DD @ 7073.0usft
Reference Site:	S22-T6S-R91W	MD Reference:	DD @ 7073.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S22-T6S-R91W - Federal 6/7-15-22 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	145.07	-22.2	15.5	27.1					
100.0	100.0	100.0	100.0	0.1	0.1	145.07	-22.2	15.5	27.1	26.9	0.17	162.955		
200.0	200.0	200.0	200.0	0.3	0.3	145.07	-22.2	15.5	27.1	26.5	0.62	44.010		
234.8	234.8	234.8	234.8	0.4	0.4	145.07	-22.2	15.5	27.1	26.3	0.77	35.091 CC		
300.0	300.0	299.7	299.7	0.5	0.5	143.83	-22.1	16.2	27.4	26.3	1.06	25.806 ES		
400.0	400.0	398.9	398.8	0.8	0.8	113.09	-21.1	21.2	30.9	29.4	1.52	20.387		
500.0	499.6	497.6	496.9	1.0	1.0	110.27	-19.2	31.3	39.2	37.1	2.02	19.408 SF		
600.0	598.8	595.5	593.6	1.3	1.3	109.00	-16.3	46.1	52.0	49.4	2.59	20.077		
700.0	697.1	692.3	688.4	1.6	1.7	108.60	-12.6	65.6	69.3	66.0	3.26	21.240		
749.9	745.7	740.1	734.8	1.8	1.9	108.56	-10.4	76.9	79.5	75.9	3.64	21.821		
800.0	794.5	787.8	780.8	2.0	2.1	108.49	-8.0	89.4	90.7	86.7	4.04	22.453		
900.0	891.7	882.0	870.5	2.4	2.7	106.89	-2.7	117.3	115.0	110.1	4.89	23.509		
1,000.0	988.9	974.4	957.2	2.9	3.3	104.30	3.4	148.8	142.2	136.4	5.80	24.509		
1,100.0	1,086.2	1,064.9	1,040.4	3.4	4.0	101.37	10.1	183.7	172.4	165.7	6.74	25.588		
1,200.0	1,183.4	1,159.3	1,126.4	3.8	4.7	98.75	17.4	221.9	204.4	196.7	7.71	26.508		
1,300.0	1,280.7	1,253.7	1,212.4	4.3	5.5	96.84	24.8	260.1	236.7	228.0	8.68	27.261		
1,400.0	1,377.9	1,348.1	1,298.4	4.8	6.3	95.39	32.1	298.4	269.1	259.5	9.65	27.874		
1,500.0	1,475.1	1,442.5	1,384.4	5.2	7.1	94.25	39.5	336.6	301.7	291.0	10.63	28.381		
1,600.0	1,572.4	1,536.9	1,470.4	5.7	7.9	93.33	46.8	374.8	334.3	322.7	11.61	28.807		
1,700.0	1,669.6	1,631.3	1,556.4	6.2	8.7	92.57	54.2	413.0	367.0	354.5	12.58	29.169		
1,800.0	1,766.9	1,725.7	1,642.4	6.7	9.5	91.94	61.5	451.3	399.8	386.3	13.56	29.480		
1,900.0	1,864.1	1,820.1	1,728.4	7.2	10.3	91.40	68.8	489.5	432.6	418.1	14.54	29.750		
2,000.0	1,961.3	1,914.5	1,814.4	7.6	11.1	90.94	76.2	527.7	465.4	449.9	15.52	29.987		
2,100.0	2,058.6	2,008.9	1,900.4	8.1	11.9	90.54	83.5	566.0	498.3	481.8	16.50	30.196		
2,200.0	2,155.8	2,103.3	1,986.3	8.6	12.7	90.19	90.9	604.2	531.2	513.7	17.48	30.382		
2,300.0	2,253.0	2,197.7	2,072.3	9.1	13.5	89.88	98.2	642.4	564.1	545.6	18.46	30.548		
2,400.0	2,350.3	2,292.0	2,158.3	9.6	14.3	89.60	105.6	680.6	597.0	577.5	19.45	30.698		
2,500.0	2,447.5	2,386.4	2,244.3	10.0	15.1	89.35	112.9	718.9	629.9	609.5	20.43	30.833		
2,600.0	2,544.8	2,480.8	2,330.3	10.5	15.9	89.13	120.3	757.1	662.8	641.4	21.41	30.956		
2,700.0	2,642.0	2,575.2	2,416.3	11.0	16.7	88.93	127.6	795.3	695.7	673.3	22.39	31.068		
2,800.0	2,739.2	2,669.6	2,502.3	11.5	17.5	88.75	134.9	833.6	728.7	705.3	23.38	31.171		
2,900.0	2,836.5	2,764.0	2,588.3	12.0	18.3	88.58	142.3	871.8	761.6	737.3	24.36	31.265		
3,000.0	2,933.7	2,858.4	2,674.3	12.4	19.1	88.43	149.6	910.0	794.6	769.2	25.34	31.353		
3,100.0	3,031.0	2,952.8	2,760.3	12.9	19.9	88.28	157.0	948.3	827.5	801.2	26.33	31.433		
3,200.0	3,128.2	3,047.2	2,846.3	13.4	20.7	88.15	164.3	986.5	860.5	833.2	27.31	31.508		
3,300.0	3,225.4	3,141.6	2,932.3	13.9	21.5	88.03	171.7	1,024.7	893.4	865.2	28.29	31.578		
3,400.0	3,322.7	3,236.0	3,018.3	14.4	22.4	87.92	179.0	1,062.9	926.4	897.1	29.28	31.643		
3,500.0	3,419.9	3,330.4	3,104.3	14.9	23.2	87.82	186.4	1,101.2	959.4	929.1	30.26	31.704		
3,600.0	3,517.1	3,424.8	3,190.3	15.3	24.0	87.72	193.7	1,139.4	992.4	961.1	31.24	31.761		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Project:	Garfield County, CO	TVD Reference:	DD @ 7073.0usft
Reference Site:	S22-T6S-R91W	MD Reference:	DD @ 7073.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S22-T6S-R91W - Federal 6/7-16-22 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	156.96	-37.2	15.8	40.4					
100.0	100.0	100.0	100.0	0.1	0.1	156.96	-37.2	15.8	40.4	40.2	0.17	242.752		
200.0	200.0	200.0	200.0	0.3	0.3	156.96	-37.2	15.8	40.4	39.8	0.62	65.561 CC, ES		
300.0	300.0	299.1	299.1	0.5	0.5	153.66	-37.1	18.4	41.4	40.4	1.06	39.132		
400.0	400.0	397.8	397.4	0.8	0.8	121.25	-37.0	26.0	46.6	45.1	1.54	30.352		
500.0	499.6	495.6	494.5	1.0	1.0	116.74	-36.8	38.6	57.6	55.5	2.06	27.880		
600.0	598.8	592.2	589.5	1.3	1.4	114.09	-36.5	55.9	74.0	71.3	2.66	27.840 SF		
700.0	697.1	687.3	682.0	1.6	1.8	112.68	-36.1	77.6	95.6	92.2	3.34	28.626		
749.9	745.7	733.9	727.0	1.8	2.0	112.26	-35.9	89.9	108.2	104.5	3.72	29.090		
800.0	794.5	780.4	771.5	2.0	2.3	112.07	-35.7	103.3	121.9	117.8	4.11	29.644		
900.0	891.7	871.7	858.0	2.4	2.9	110.78	-35.2	132.7	151.4	146.4	4.95	30.598		
1,000.0	988.9	961.0	941.0	2.9	3.5	108.86	-34.6	165.4	183.9	178.1	5.83	31.547		
1,100.0	1,086.2	1,052.6	1,025.0	3.4	4.2	106.80	-34.0	201.9	218.9	212.2	6.76	32.406		
1,200.0	1,183.4	1,145.9	1,110.5	3.8	5.0	105.24	-33.3	239.4	254.2	246.5	7.70	33.030		
1,300.0	1,280.7	1,239.3	1,196.1	4.3	5.7	104.07	-32.7	276.8	289.7	281.0	8.64	33.522		
1,400.0	1,377.9	1,332.7	1,281.6	4.8	6.5	103.14	-32.1	314.2	325.2	315.6	9.59	33.900		
1,500.0	1,475.1	1,426.0	1,367.1	5.2	7.3	102.40	-31.4	351.7	360.8	350.2	10.55	34.202		
1,600.0	1,572.4	1,519.4	1,452.6	5.7	8.0	101.80	-30.8	389.1	396.4	384.9	11.51	34.449		
1,700.0	1,669.6	1,612.8	1,538.2	6.2	8.8	101.29	-30.2	426.5	432.1	419.6	12.47	34.655		
1,800.0	1,766.9	1,706.1	1,623.7	6.7	9.6	100.86	-29.5	463.9	467.8	454.3	13.43	34.829		
1,900.0	1,864.1	1,799.5	1,709.2	7.2	10.4	100.49	-28.9	501.4	503.5	489.1	14.39	34.977		
2,000.0	1,961.3	1,892.8	1,794.8	7.6	11.1	100.17	-28.2	538.8	539.2	523.8	15.36	35.105		
2,100.0	2,058.6	1,986.2	1,880.3	8.1	11.9	99.89	-27.6	576.2	574.9	558.6	16.33	35.217		
2,200.0	2,155.8	2,079.6	1,965.8	8.6	12.7	99.64	-27.0	613.7	610.7	593.4	17.29	35.316		
2,300.0	2,253.0	2,172.9	2,051.3	9.1	13.5	99.42	-26.3	651.1	646.4	628.2	18.26	35.404		
2,400.0	2,350.3	2,266.3	2,136.9	9.6	14.3	99.23	-25.7	688.5	682.2	663.0	19.23	35.482		
2,500.0	2,447.5	2,359.7	2,222.4	10.0	15.0	99.05	-25.0	725.9	718.0	697.8	20.19	35.552		
2,600.0	2,544.8	2,453.0	2,307.9	10.5	15.8	98.89	-24.4	763.4	753.7	732.6	21.16	35.616		
2,700.0	2,642.0	2,546.4	2,393.5	11.0	16.6	98.74	-23.8	800.8	789.5	767.4	22.13	35.673		
2,800.0	2,739.2	2,639.7	2,479.0	11.5	17.4	98.61	-23.1	838.2	825.3	802.2	23.10	35.726		
2,900.0	2,836.5	2,733.1	2,564.5	12.0	18.2	98.49	-22.5	875.7	861.1	837.0	24.07	35.774		
3,000.0	2,933.7	2,826.5	2,650.1	12.4	18.9	98.37	-21.9	913.1	896.9	871.8	25.04	35.818		
3,100.0	3,031.0	2,919.8	2,735.6	12.9	19.7	98.27	-21.2	950.5	932.7	906.6	26.01	35.859		
3,200.0	3,128.2	3,013.2	2,821.1	13.4	20.5	98.17	-20.6	987.9	968.4	941.5	26.98	35.896		

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	Local Co-ordinate Reference:	Well Federal 2/3-13-22
Project:	Garfield County, CO	TVD Reference:	DD @ 7073.0usft
Reference Site:	S22-T6S-R91W	MD Reference:	DD @ 7073.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	Federal 2/3-13-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to DD @ 7073.0usft

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Federal 2/3-13-22

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: -1.32°

