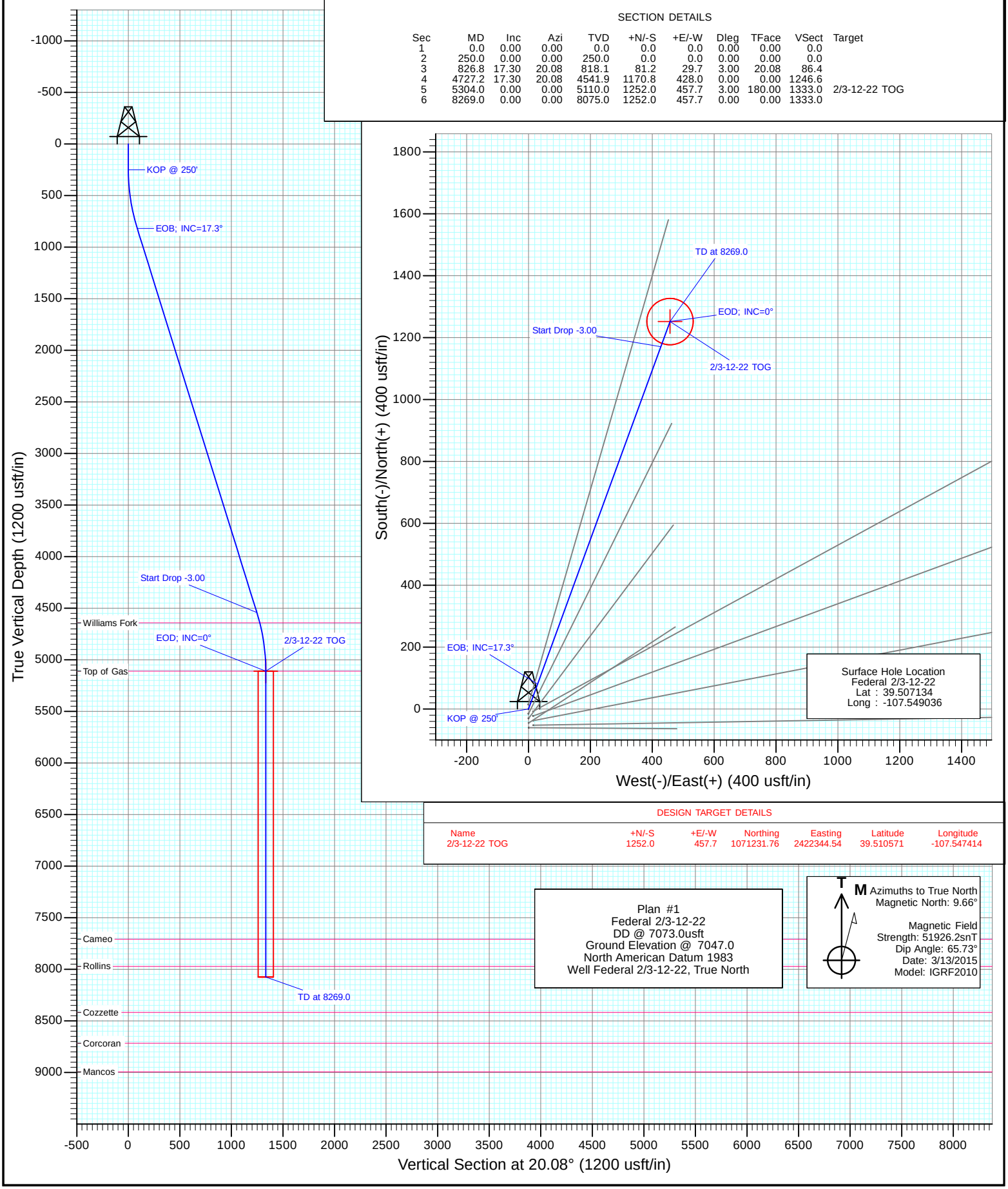
COACHMAN energy

Project: Garfield County, CO
Site: S22-T6S-R91W
Well: Federal 2/3-12-22
Wellbore: DD
Design: Plan #1

CATHEDRAL

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.0	
3	826.8	17.30	20.08	818.1	81.2	29.7	3.00	20.08	86.4	
4	4727.2	17.30	20.08	4541.9	1170.8	428.0	0.00	0.00	1246.6	
5	5304.0	0.00	0.00	5110.0	1252.0	457.7	3.00	180.00	1333.0	2/3-12-22 TOG
6	8269.0	0.00	0.00	8075.0	1252.0	457.7	0.00	0.00	1333.0	



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
2/3-12-22 TOG	1252.0	457.7	1071231.76	2422344.54	39.510571	-107.547414

Plan #1
Federal 2/3-12-22
DD @ 7073.0usft
Ground Elevation @ 7047.0
North American Datum 1983
Well Federal 2/3-12-22, True North

T M Azimuths to True North
Magnetic North: 9.66°

Magnetic Field
Strength: 51926.2snT
Dip Angle: 65.73°
Date: 3/13/2015
Model: IGRF2010

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well Federal 2/3-12-22
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 2/3-12-22	**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 2/3-12-22					
Well Position	**+N/-S**	0.0 usft	**Northing:**	1,069,990.66 usft	**Latitude:**	39.507134
	+E/-W	0.0 usft	**Easting:**	2,421,858.07 usft	**Longitude:**	-107.549036
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)**
	IGRF2010	3/13/2015	9.67	65.73	51,926

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	20.08	

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	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.00	0.00	
826.8	17.30	20.08	818.1	81.2	29.7	3.00	3.00	0.00	20.08	
4,727.2	17.30	20.08	4,541.9	1,170.8	428.0	0.00	0.00	0.00	0.00	
5,304.0	0.00	0.00	5,110.0	1,252.0	457.7	3.00	-3.00	0.00	180.00	2/3-12-22 TOG
8,269.0	0.00	0.00	8,075.0	1,252.0	457.7	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 2/3-12-22	**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	
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	KOP @ 250'
300.0	1.50	20.08	300.0	0.6	0.2	0.7	3.00	3.00	
400.0	4.50	20.08	399.8	5.5	2.0	5.9	3.00	3.00	
500.0	7.50	20.08	499.3	15.3	5.6	16.3	3.00	3.00	
600.0	10.50	20.08	598.0	30.0	11.0	32.0	3.00	3.00	
700.0	13.50	20.08	695.8	49.6	18.1	52.8	3.00	3.00	
800.0	16.50	20.08	792.4	73.9	27.0	78.6	3.00	3.00	
826.8	17.30	20.08	818.1	81.2	29.7	86.4	3.00	3.00	EOB; INC=17.3°
900.0	17.30	20.08	888.0	101.6	37.2	108.2	0.00	0.00	
1,000.0	17.30	20.08	983.4	129.6	47.4	138.0	0.00	0.00	
1,100.0	17.30	20.08	1,078.9	157.5	57.6	167.7	0.00	0.00	
1,200.0	17.30	20.08	1,174.4	185.4	67.8	197.4	0.00	0.00	
1,300.0	17.30	20.08	1,269.9	213.4	78.0	227.2	0.00	0.00	
1,400.0	17.30	20.08	1,365.3	241.3	88.2	256.9	0.00	0.00	
1,500.0	17.30	20.08	1,460.8	269.3	98.4	286.7	0.00	0.00	
1,600.0	17.30	20.08	1,556.3	297.2	108.6	316.4	0.00	0.00	
1,700.0	17.30	20.08	1,651.7	325.1	118.9	346.2	0.00	0.00	
1,800.0	17.30	20.08	1,747.2	353.1	129.1	375.9	0.00	0.00	
1,900.0	17.30	20.08	1,842.7	381.0	139.3	405.7	0.00	0.00	
2,000.0	17.30	20.08	1,938.2	408.9	149.5	435.4	0.00	0.00	
2,100.0	17.30	20.08	2,033.6	436.9	159.7	465.1	0.00	0.00	
2,200.0	17.30	20.08	2,129.1	464.8	169.9	494.9	0.00	0.00	
2,300.0	17.30	20.08	2,224.6	492.7	180.1	524.6	0.00	0.00	
2,400.0	17.30	20.08	2,320.1	520.7	190.3	554.4	0.00	0.00	
2,500.0	17.30	20.08	2,415.5	548.6	200.5	584.1	0.00	0.00	
2,600.0	17.30	20.08	2,511.0	576.6	210.8	613.9	0.00	0.00	
2,700.0	17.30	20.08	2,606.5	604.5	221.0	643.6	0.00	0.00	
2,800.0	17.30	20.08	2,702.0	632.4	231.2	673.4	0.00	0.00	
2,900.0	17.30	20.08	2,797.4	660.4	241.4	703.1	0.00	0.00	
3,000.0	17.30	20.08	2,892.9	688.3	251.6	732.8	0.00	0.00	
3,100.0	17.30	20.08	2,988.4	716.2	261.8	762.6	0.00	0.00	
3,200.0	17.30	20.08	3,083.9	744.2	272.0	792.3	0.00	0.00	
3,300.0	17.30	20.08	3,179.3	772.1	282.2	822.1	0.00	0.00	
3,400.0	17.30	20.08	3,274.8	800.0	292.5	851.8	0.00	0.00	
3,500.0	17.30	20.08	3,370.3	828.0	302.7	881.6	0.00	0.00	
3,600.0	17.30	20.08	3,465.8	855.9	312.9	911.3	0.00	0.00	
3,700.0	17.30	20.08	3,561.2	883.9	323.1	941.1	0.00	0.00	
3,800.0	17.30	20.08	3,656.7	911.8	333.3	970.8	0.00	0.00	
3,900.0	17.30	20.08	3,752.2	939.7	343.5	1,000.6	0.00	0.00	
4,000.0	17.30	20.08	3,847.6	967.7	353.7	1,030.3	0.00	0.00	
4,100.0	17.30	20.08	3,943.1	995.6	363.9	1,060.0	0.00	0.00	
4,200.0	17.30	20.08	4,038.6	1,023.5	374.2	1,089.8	0.00	0.00	
4,300.0	17.30	20.08	4,134.1	1,051.5	384.4	1,119.5	0.00	0.00	
4,400.0	17.30	20.08	4,229.5	1,079.4	394.6	1,149.3	0.00	0.00	
4,500.0	17.30	20.08	4,325.0	1,107.4	404.8	1,179.0	0.00	0.00	
4,600.0	17.30	20.08	4,420.5	1,135.3	415.0	1,208.8	0.00	0.00	
4,700.0	17.30	20.08	4,516.0	1,163.2	425.2	1,238.5	0.00	0.00	
4,727.2	17.30	20.08	4,541.9	1,170.8	428.0	1,246.6	0.00	0.00	Start Drop -3.00
4,800.0	15.12	20.08	4,611.8	1,189.9	435.0	1,266.9	3.00	-3.00	

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Site:	S22-T6S-R91W	**North Reference:**	True
Well:	Federal 2/3-12-22	**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
4,831.2	14.18	20.08	4,642.0	1,197.3	437.7	1,274.8	3.00	-3.00	Williams Fork
4,900.0	12.12	20.08	4,709.0	1,212.0	443.1	1,290.5	3.00	-3.00	
5,000.0	9.12	20.08	4,807.3	1,229.3	449.4	1,308.9	3.00	-3.00	
5,100.0	6.12	20.08	4,906.4	1,241.8	453.9	1,322.2	3.00	-3.00	
5,200.0	3.12	20.08	5,006.1	1,249.3	456.7	1,330.2	3.00	-3.00	
5,300.0	0.12	20.08	5,106.0	1,252.0	457.7	1,333.0	3.00	-3.00	
5,304.0	0.00	0.00	5,110.0	1,252.0	457.7	1,333.0	3.00	-3.00	EOD; INC=0° - Top of Gas - 2/3-12-22 TOG
5,400.0	0.00	0.00	5,206.0	1,252.0	457.7	1,333.0	0.00	0.00	
5,500.0	0.00	0.00	5,306.0	1,252.0	457.7	1,333.0	0.00	0.00	
5,600.0	0.00	0.00	5,406.0	1,252.0	457.7	1,333.0	0.00	0.00	
5,700.0	0.00	0.00	5,506.0	1,252.0	457.7	1,333.0	0.00	0.00	
5,800.0	0.00	0.00	5,606.0	1,252.0	457.7	1,333.0	0.00	0.00	
5,900.0	0.00	0.00	5,706.0	1,252.0	457.7	1,333.0	0.00	0.00	
6,000.0	0.00	0.00	5,806.0	1,252.0	457.7	1,333.0	0.00	0.00	
6,100.0	0.00	0.00	5,906.0	1,252.0	457.7	1,333.0	0.00	0.00	
6,200.0	0.00	0.00	6,006.0	1,252.0	457.7	1,333.0	0.00	0.00	
6,300.0	0.00	0.00	6,106.0	1,252.0	457.7	1,333.0	0.00	0.00	
6,400.0	0.00	0.00	6,206.0	1,252.0	457.7	1,333.0	0.00	0.00	
6,500.0	0.00	0.00	6,306.0	1,252.0	457.7	1,333.0	0.00	0.00	
6,600.0	0.00	0.00	6,406.0	1,252.0	457.7	1,333.0	0.00	0.00	
6,700.0	0.00	0.00	6,506.0	1,252.0	457.7	1,333.0	0.00	0.00	
6,800.0	0.00	0.00	6,606.0	1,252.0	457.7	1,333.0	0.00	0.00	
6,900.0	0.00	0.00	6,706.0	1,252.0	457.7	1,333.0	0.00	0.00	
7,000.0	0.00	0.00	6,806.0	1,252.0	457.7	1,333.0	0.00	0.00	
7,100.0	0.00	0.00	6,906.0	1,252.0	457.7	1,333.0	0.00	0.00	
7,200.0	0.00	0.00	7,006.0	1,252.0	457.7	1,333.0	0.00	0.00	
7,300.0	0.00	0.00	7,106.0	1,252.0	457.7	1,333.0	0.00	0.00	
7,400.0	0.00	0.00	7,206.0	1,252.0	457.7	1,333.0	0.00	0.00	
7,500.0	0.00	0.00	7,306.0	1,252.0	457.7	1,333.0	0.00	0.00	
7,600.0	0.00	0.00	7,406.0	1,252.0	457.7	1,333.0	0.00	0.00	
7,700.0	0.00	0.00	7,506.0	1,252.0	457.7	1,333.0	0.00	0.00	
7,800.0	0.00	0.00	7,606.0	1,252.0	457.7	1,333.0	0.00	0.00	
7,900.0	0.00	0.00	7,706.0	1,252.0	457.7	1,333.0	0.00	0.00	
7,902.0	0.00	0.00	7,708.0	1,252.0	457.7	1,333.0	0.00	0.00	Cameo
8,000.0	0.00	0.00	7,806.0	1,252.0	457.7	1,333.0	0.00	0.00	
8,100.0	0.00	0.00	7,906.0	1,252.0	457.7	1,333.0	0.00	0.00	
8,166.0	0.00	0.00	7,972.0	1,252.0	457.7	1,333.0	0.00	0.00	Rollins
8,200.0	0.00	0.00	8,006.0	1,252.0	457.7	1,333.0	0.00	0.00	
8,269.0	0.00	0.00	8,075.0	1,252.0	457.7	1,333.0	0.00	0.00	TD at 8269.0

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
2/3-12-22 TOG - plan hits target center - Circle (radius 75.0)	0.00	0.00	5,110.0	1,252.0	457.7	1,071,231.76	2,422,344.54	39.510571	-107.547414

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Site:	S22-T6S-R91W	**North Reference:**	True
Well:	Federal 2/3-12-22	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,831.2	4,642.0	Williams Fork			
5,304.0	5,110.0	Top of Gas			
7,902.0	7,708.0	Cameo			
8,166.0	7,972.0	Rollins			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
250.0	250.0	0.0	0.0	KOP @ 250'
826.8	818.1	81.2	29.7	EOB; INC=17.3°
4,727.2	4,541.9	1,170.8	428.0	Start Drop -3.00
5,304.0	5,110.0	1,252.0	457.7	EOD; INC=0°
8,269.0	8,075.0	1,252.0	457.7	TD at 8269.0

Coachman Energy Operating Company, LLC

Garfield County, CO
S22-T6S-R91W
Federal 2/3-12-22
DD
Plan #1

Anticollision Report

16 March, 2015

Company:	Coachman Energy Operating Company, LLC	**Local Co-ordinate Reference:**	Well Federal 2/3-12-22
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 2/3-12-22	**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	8,269.0	Plan #1 (DD)	ISCWSA MWD	MWD - ISCWSA

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
S22-T6S-R91W						
Federal 2/3-11-22 - DD - Plan #1	200.0	200.0	14.9	14.3	24.262	CC, ES
Federal 2/3-11-22 - DD - Plan #1	900.0	891.5	34.4	29.7	7.394	SF
Federal 2/3-13-22 - DD - Plan #1	250.0	250.0	14.9	14.1	17.770	CC, ES
Federal 2/3-13-22 - DD - Plan #1	800.0	804.3	30.8	26.9	7.782	SF
Federal 2/3-14-22 - DD - Plan #1	250.0	250.0	29.9	29.0	35.540	CC, ES
Federal 2/3-14-22 - DD - Plan #1	8,269.0	8,141.5	657.6	615.9	15.755	SF
Federal 2/3-15-22 - DD - Plan #1	250.0	250.0	44.8	44.0	53.309	CC, ES
Federal 2/3-15-22 - DD - Plan #1	700.0	701.6	76.3	72.9	22.712	SF
Federal 2/3-16-22 - DD - Plan #1	250.0	250.0	60.1	59.3	71.519	CC, ES
Federal 2/3-16-22 - DD - Plan #1	700.0	695.9	110.2	106.9	33.027	SF
Federal 6/7-13-22 - DD - Plan #1	250.0	250.0	16.9	16.0	20.092	CC, ES
Federal 6/7-13-22 - DD - Plan #1	400.0	399.1	20.9	19.4	13.762	SF
Federal 6/7-14-22 - DD - Plan #1	200.0	200.0	27.1	26.5	44.010	CC
Federal 6/7-14-22 - DD - Plan #1	250.0	249.8	27.3	26.4	32.516	ES
Federal 6/7-14-22 - DD - Plan #1	500.0	497.4	43.4	41.3	20.671	SF
Federal 6/7-15-22 - DD - Plan #1	250.0	250.0	40.4	39.5	48.031	CC, ES
Federal 6/7-15-22 - DD - Plan #1	600.0	595.7	71.0	68.2	26.000	SF
Federal 6/7-16-22 - DD - Plan #1	200.0	200.0	54.5	53.9	88.522	CC
Federal 6/7-16-22 - DD - Plan #1	250.0	249.6	54.7	53.9	65.386	ES
Federal 6/7-16-22 - DD - Plan #1	600.0	591.7	93.6	90.8	33.528	SF

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	**Local Co-ordinate Reference:**	Well Federal 2/3-12-22
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 2/3-12-22	**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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
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	89.836	
200.0	200.0	200.0	200.0	0.3	0.3	-1.08	14.9	-0.3	14.9	14.3	0.62	24.262	CC, ES
250.0	250.0	249.6	249.6	0.4	0.4	-0.38	15.6	-0.1	15.6	14.7	0.84	18.461	
300.0	300.0	299.2	299.2	0.5	0.5	-19.35	17.4	0.4	16.8	15.7	1.08	15.554	
400.0	399.8	398.3	397.9	0.8	0.8	-18.35	24.8	2.6	19.4	17.8	1.61	12.050	
500.0	499.3	497.2	496.0	1.0	1.1	-18.50	37.1	6.1	22.0	19.9	2.16	10.187	
600.0	598.0	596.0	593.1	1.3	1.4	-19.44	54.2	11.1	24.7	22.0	2.73	9.028	
700.0	695.8	694.6	689.1	1.7	1.8	-20.92	76.1	17.4	27.4	24.1	3.34	8.208	
800.0	792.4	793.2	783.7	2.2	2.3	-22.78	102.7	25.1	30.2	26.2	4.00	7.561	
826.8	818.1	819.6	808.8	2.3	2.5	-23.32	110.6	27.4	31.0	26.8	4.18	7.402	
900.0	888.0	891.5	876.5	2.7	2.9	-23.96	133.9	34.1	34.4	29.7	4.65	7.394	SF
1,000.0	983.4	991.0	969.3	3.3	3.6	-23.34	168.5	44.1	41.5	36.2	5.30	7.830	
1,100.0	1,078.9	1,090.7	1,062.2	3.8	4.2	-22.87	203.2	54.2	48.7	42.8	5.98	8.155	
1,200.0	1,174.4	1,190.5	1,155.2	4.4	4.9	-22.53	237.9	64.2	56.0	49.3	6.66	8.403	
1,300.0	1,269.9	1,290.2	1,248.1	5.0	5.6	-22.26	272.6	74.2	63.2	55.8	7.36	8.588	
1,400.0	1,365.3	1,390.0	1,341.1	5.6	6.3	-22.05	307.3	84.3	70.4	62.3	8.06	8.734	
1,500.0	1,460.8	1,489.7	1,434.1	6.1	7.0	-21.88	342.0	94.3	77.6	68.9	8.77	8.850	
1,600.0	1,556.3	1,589.4	1,527.0	6.7	7.7	-21.73	376.7	104.3	84.9	75.4	9.49	8.946	
1,700.0	1,651.7	1,689.2	1,620.0	7.3	8.4	-21.61	411.5	114.4	92.1	81.9	10.20	9.024	
1,800.0	1,747.2	1,788.9	1,713.0	7.9	9.1	-21.51	446.2	124.4	99.3	88.4	10.93	9.090	
1,900.0	1,842.7	1,888.7	1,805.9	8.5	9.8	-21.42	480.9	134.5	106.5	94.9	11.65	9.147	
2,000.0	1,938.2	1,988.4	1,898.9	9.1	10.5	-21.34	515.6	144.5	113.8	101.4	12.37	9.195	
2,100.0	2,033.6	2,088.1	1,991.8	9.7	11.2	-21.28	550.3	154.5	121.0	107.9	13.10	9.237	
2,200.0	2,129.1	2,187.9	2,084.8	10.2	11.9	-21.22	585.0	164.6	128.2	114.4	13.83	9.274	
2,300.0	2,224.6	2,287.6	2,177.8	10.8	12.6	-21.16	619.7	174.6	135.5	120.9	14.56	9.306	
2,400.0	2,320.1	2,387.3	2,270.7	11.4	13.3	-21.11	654.4	184.7	142.7	127.4	15.28	9.335	
2,500.0	2,415.5	2,487.1	2,363.7	12.0	14.0	-21.07	689.2	194.7	149.9	133.9	16.01	9.361	
2,600.0	2,511.0	2,586.8	2,456.7	12.6	14.7	-21.03	723.9	204.7	157.1	140.4	16.75	9.384	
2,700.0	2,606.5	2,686.6	2,549.6	13.2	15.4	-20.99	758.6	214.8	164.4	146.9	17.48	9.405	
2,800.0	2,702.0	2,786.3	2,642.6	13.8	16.1	-20.96	793.3	224.8	171.6	153.4	18.21	9.424	
2,900.0	2,797.4	2,886.0	2,735.5	14.4	16.8	-20.93	828.0	234.8	178.8	159.9	18.94	9.442	
3,000.0	2,892.9	2,985.8	2,828.5	15.0	17.5	-20.90	862.7	244.9	186.1	166.4	19.67	9.458	
3,100.0	2,988.4	3,085.5	2,921.5	15.6	18.2	-20.87	897.4	254.9	193.3	172.9	20.40	9.473	
3,200.0	3,083.9	3,185.3	3,014.4	16.1	18.9	-20.85	932.2	265.0	200.5	179.4	21.14	9.486	
3,300.0	3,179.3	3,285.0	3,107.4	16.7	19.6	-20.83	966.9	275.0	207.7	185.9	21.87	9.499	
3,400.0	3,274.8	3,384.7	3,200.4	17.3	20.3	-20.80	1,001.6	285.0	215.0	192.4	22.60	9.511	
3,500.0	3,370.3	3,484.5	3,293.3	17.9	21.0	-20.79	1,036.3	295.1	222.2	198.9	23.34	9.522	
3,600.0	3,465.8	3,584.2	3,386.3	18.5	21.7	-20.77	1,071.0	305.1	229.4	205.4	24.07	9.532	
3,700.0	3,561.2	3,683.9	3,479.2	19.1	22.4	-20.75	1,105.7	315.2	236.7	211.9	24.80	9.542	
3,800.0	3,656.7	3,783.7	3,572.2	19.7	23.1	-20.73	1,140.4	325.2	243.9	218.4	25.54	9.551	
3,900.0	3,752.2	3,883.4	3,665.2	20.3	23.8	-20.72	1,175.1	335.2	251.1	224.9	26.27	9.560	
4,000.0	3,847.6	3,983.2	3,758.1	20.9	24.5	-20.70	1,209.9	345.3	258.3	231.3	27.00	9.568	
4,100.0	3,943.1	4,082.9	3,851.1	21.5	25.2	-20.69	1,244.6	355.3	265.6	237.8	27.73	9.576	
4,200.0	4,038.6	4,182.6	3,944.0	22.1	25.9	-20.68	1,279.3	365.4	272.8	244.3	28.47	9.583	
4,300.0	4,134.1	4,282.4	4,037.0	22.6	26.6	-20.66	1,314.0	375.4	280.0	250.8	29.20	9.590	
4,400.0	4,229.5	4,382.1	4,130.0	23.2	27.3	-20.65	1,348.7	385.4	287.3	257.3	29.93	9.597	
4,500.0	4,325.0	4,481.8	4,222.9	23.8	28.0	-20.64	1,383.4	395.5	294.5	263.8	30.67	9.603	
4,600.0	4,420.5	4,581.6	4,315.9	24.4	28.7	-20.63	1,418.1	405.5	301.7	270.3	31.40	9.609	
4,700.0	4,516.0	4,681.3	4,408.9	25.0	29.4	-20.62	1,452.9	415.5	309.0	276.8	32.13	9.615	
4,727.2	4,541.9	4,711.6	4,437.1	25.2	29.6	-20.62	1,463.3	418.6	310.8	278.5	32.33	9.613	
4,800.0	4,611.8	4,797.8	4,518.5	25.5	30.0	-20.71	1,490.7	426.5	315.1	282.3	32.82	9.601	

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

Company:	Coachman Energy Operating Company, LLC	**Local Co-ordinate Reference:**	Well Federal 2/3-12-22
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 2/3-12-22	**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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
4,900.0	4,709.0	4,916.6	4,632.5	25.9	30.5	-20.80	1,522.7	435.7	320.0	286.7	33.33	9.602	
5,000.0	4,807.3	5,035.7	4,748.7	26.2	31.0	-20.87	1,547.8	443.0	323.9	290.2	33.70	9.612	
5,100.0	4,906.4	5,155.2	4,866.6	26.5	31.3	-20.92	1,566.0	448.3	326.7	292.8	33.92	9.630	
5,200.0	5,006.1	5,274.8	4,985.6	26.7	31.6	-20.95	1,577.0	451.5	328.4	294.4	34.01	9.656	
5,304.0	5,110.0	5,399.2	5,110.0	26.8	31.7	-0.89	1,580.9	452.6	329.0	295.0	33.94	9.693	
5,400.0	5,206.0	5,495.3	5,206.0	26.9	31.8	-0.89	1,580.9	452.6	329.0	294.8	34.18	9.624	
5,500.0	5,306.0	5,595.3	5,306.0	27.0	31.8	-0.89	1,580.9	452.6	329.0	294.5	34.47	9.545	
5,600.0	5,406.0	5,695.3	5,406.0	27.1	31.9	-0.89	1,580.9	452.6	329.0	294.2	34.75	9.466	
5,700.0	5,506.0	5,795.3	5,506.0	27.1	32.0	-0.89	1,580.9	452.6	329.0	293.9	35.04	9.388	
5,800.0	5,606.0	5,895.3	5,606.0	27.2	32.1	-0.89	1,580.9	452.6	329.0	293.6	35.34	9.310	
5,900.0	5,706.0	5,995.3	5,706.0	27.3	32.2	-0.89	1,580.9	452.6	329.0	293.3	35.63	9.232	
6,000.0	5,806.0	6,095.3	5,806.0	27.4	32.2	-0.89	1,580.9	452.6	329.0	293.0	35.93	9.155	
6,100.0	5,906.0	6,195.3	5,906.0	27.5	32.3	-0.89	1,580.9	452.6	329.0	292.7	36.24	9.079	
6,200.0	6,006.0	6,295.3	6,006.0	27.6	32.4	-0.89	1,580.9	452.6	329.0	292.4	36.54	9.003	
6,300.0	6,106.0	6,395.3	6,106.0	27.7	32.5	-0.89	1,580.9	452.6	329.0	292.1	36.85	8.927	
6,400.0	6,206.0	6,495.3	6,206.0	27.8	32.6	-0.89	1,580.9	452.6	329.0	291.8	37.16	8.852	
6,500.0	6,306.0	6,595.3	6,306.0	27.9	32.7	-0.89	1,580.9	452.6	329.0	291.5	37.48	8.778	
6,600.0	6,406.0	6,695.3	6,406.0	28.0	32.7	-0.89	1,580.9	452.6	329.0	291.2	37.80	8.704	
6,700.0	6,506.0	6,795.3	6,506.0	28.1	32.8	-0.89	1,580.9	452.6	329.0	290.9	38.12	8.631	
6,800.0	6,606.0	6,895.3	6,606.0	28.3	32.9	-0.89	1,580.9	452.6	329.0	290.5	38.44	8.559	
6,900.0	6,706.0	6,995.3	6,706.0	28.4	33.0	-0.89	1,580.9	452.6	329.0	290.2	38.76	8.487	
7,000.0	6,806.0	7,095.3	6,806.0	28.5	33.1	-0.89	1,580.9	452.6	329.0	289.9	39.09	8.416	
7,100.0	6,906.0	7,195.3	6,906.0	28.6	33.2	-0.89	1,580.9	452.6	329.0	289.5	39.42	8.345	
7,200.0	7,006.0	7,295.3	7,006.0	28.7	33.3	-0.89	1,580.9	452.6	329.0	289.2	39.75	8.275	
7,300.0	7,106.0	7,395.3	7,106.0	28.8	33.4	-0.89	1,580.9	452.6	329.0	288.9	40.09	8.206	
7,400.0	7,206.0	7,495.3	7,206.0	28.9	33.5	-0.89	1,580.9	452.6	329.0	288.5	40.42	8.138	
7,500.0	7,306.0	7,595.3	7,306.0	29.0	33.6	-0.89	1,580.9	452.6	329.0	288.2	40.76	8.070	
7,600.0	7,406.0	7,695.3	7,406.0	29.2	33.7	-0.89	1,580.9	452.6	329.0	287.9	41.10	8.003	
7,700.0	7,506.0	7,795.3	7,506.0	29.3	33.8	-0.89	1,580.9	452.6	329.0	287.5	41.45	7.937	
7,800.0	7,606.0	7,895.3	7,606.0	29.4	33.9	-0.89	1,580.9	452.6	329.0	287.2	41.79	7.871	
7,900.0	7,706.0	7,995.3	7,706.0	29.5	34.0	-0.89	1,580.9	452.6	329.0	286.8	42.14	7.806	
8,000.0	7,806.0	8,095.3	7,806.0	29.6	34.1	-0.89	1,580.9	452.6	329.0	286.5	42.49	7.742	
8,100.0	7,906.0	8,195.3	7,906.0	29.8	34.2	-0.89	1,580.9	452.6	329.0	286.1	42.84	7.679	
8,200.0	8,006.0	8,295.3	8,006.0	29.9	34.3	-0.89	1,580.9	452.6	329.0	285.8	43.19	7.616	
8,269.0	8,075.0	8,364.2	8,075.0	30.0	34.4	-0.89	1,580.9	452.6	329.0	285.5	43.44	7.573	

Company:	Coachman Energy Operating Company, LLC	**Local Co-ordinate Reference:**	Well Federal 2/3-12-22
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 2/3-12-22	**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 2/3-13-22 - DD - Plan #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-ISCWSA MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
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	
250.0	250.0	250.0	250.0	0.4	0.4	178.92	-14.9	0.3	14.9	14.1	0.84	17.770	CC, ES
300.0	300.0	300.0	300.0	0.5	0.5	159.70	-14.9	0.3	15.5	14.5	1.08	14.376	
400.0	399.8	400.8	400.7	0.8	0.8	161.72	-12.6	1.5	18.1	16.5	1.61	11.265	
500.0	499.3	501.7	501.3	1.0	1.0	161.72	-5.4	5.0	20.8	18.7	2.15	9.684	
600.0	598.0	602.7	601.4	1.3	1.3	160.38	6.5	10.9	23.7	21.0	2.72	8.742	
700.0	695.8	703.8	700.8	1.7	1.6	158.18	23.2	19.1	26.8	23.5	3.31	8.098	
800.0	792.4	804.3	798.7	2.2	2.0	156.16	43.8	29.2	30.8	26.9	3.96	7.782	SF
826.8	818.1	831.1	824.7	2.3	2.1	156.22	49.4	32.0	32.6	28.4	4.14	7.866	
900.0	888.0	904.1	895.7	2.7	2.5	156.70	64.6	39.5	37.9	33.3	4.57	8.283	
1,000.0	983.4	1,003.8	992.7	3.3	2.9	157.17	85.5	49.8	45.1	39.9	5.18	8.703	
1,100.0	1,078.9	1,103.6	1,089.6	3.8	3.4	157.51	106.4	60.1	52.3	46.5	5.81	9.007	
1,200.0	1,174.4	1,203.3	1,186.6	4.4	3.8	157.77	127.3	70.4	59.5	53.1	6.44	9.235	
1,300.0	1,269.9	1,303.0	1,283.6	5.0	4.3	157.97	148.1	80.7	66.7	59.6	7.09	9.409	
1,400.0	1,365.3	1,402.8	1,380.6	5.6	4.8	158.14	169.0	91.0	74.0	66.2	7.75	9.546	
1,500.0	1,460.8	1,502.5	1,477.6	6.1	5.3	158.27	189.9	101.3	81.2	72.8	8.41	9.655	
1,600.0	1,556.3	1,602.2	1,574.6	6.7	5.7	158.38	210.8	111.6	88.4	79.3	9.07	9.745	
1,700.0	1,651.7	1,702.0	1,671.5	7.3	6.2	158.48	231.6	121.9	95.6	85.9	9.74	9.818	
1,800.0	1,747.2	1,801.7	1,768.5	7.9	6.7	158.56	252.5	132.2	102.8	92.4	10.41	9.880	
1,900.0	1,842.7	1,901.5	1,865.5	8.5	7.2	158.63	273.4	142.5	110.1	99.0	11.08	9.933	
2,000.0	1,938.2	2,001.2	1,962.5	9.1	7.6	158.69	294.3	152.8	117.3	105.5	11.75	9.978	
2,100.0	2,033.6	2,100.9	2,059.5	9.7	8.1	158.75	315.1	163.1	124.5	112.1	12.43	10.018	
2,200.0	2,129.1	2,200.7	2,156.5	10.2	8.6	158.80	336.0	173.4	131.7	118.6	13.10	10.052	
2,300.0	2,224.6	2,300.4	2,253.5	10.8	9.1	158.84	356.9	183.7	138.9	125.2	13.78	10.082	
2,400.0	2,320.1	2,400.2	2,350.4	11.4	9.6	158.88	377.8	194.0	146.2	131.7	14.46	10.109	
2,500.0	2,415.5	2,499.9	2,447.4	12.0	10.0	158.92	398.6	204.3	153.4	138.3	15.14	10.133	
2,600.0	2,511.0	2,599.6	2,544.4	12.6	10.5	158.95	419.5	214.6	160.6	144.8	15.82	10.155	
2,700.0	2,606.5	2,699.4	2,641.4	13.2	11.0	158.98	440.4	224.9	167.8	151.3	16.50	10.175	
2,800.0	2,702.0	2,799.1	2,738.4	13.8	11.5	159.01	461.3	235.2	175.1	157.9	17.17	10.193	
2,900.0	2,797.4	2,898.9	2,835.4	14.4	12.0	159.03	482.1	245.5	182.3	164.4	17.85	10.209	
3,000.0	2,892.9	2,998.6	2,932.3	15.0	12.5	159.06	503.0	255.8	189.5	171.0	18.54	10.224	
3,100.0	2,988.4	3,098.3	3,029.3	15.6	12.9	159.08	523.9	266.1	196.7	177.5	19.22	10.238	
3,200.0	3,083.9	3,198.1	3,126.3	16.1	13.4	159.10	544.8	276.4	203.9	184.0	19.90	10.250	
3,300.0	3,179.3	3,297.8	3,223.3	16.7	13.9	159.12	565.6	286.7	211.2	190.6	20.58	10.262	
3,400.0	3,274.8	3,397.5	3,320.3	17.3	14.4	159.14	586.5	297.0	218.4	197.1	21.26	10.273	
3,500.0	3,370.3	3,497.3	3,417.3	17.9	14.9	159.15	607.4	307.3	225.6	203.7	21.94	10.284	
3,600.0	3,465.8	3,597.0	3,514.3	18.5	15.3	159.17	628.2	317.6	232.8	210.2	22.62	10.293	
3,700.0	3,561.2	3,696.8	3,611.2	19.1	15.8	159.18	649.1	327.9	240.1	216.8	23.30	10.302	
3,800.0	3,656.7	3,796.5	3,708.2	19.7	16.3	159.19	670.0	338.2	247.3	223.3	23.98	10.311	
3,900.0	3,752.2	3,896.2	3,805.2	20.3	16.8	159.21	690.9	348.5	254.5	229.8	24.66	10.319	
4,000.0	3,847.6	3,996.0	3,902.2	20.9	17.3	159.22	711.7	358.8	261.7	236.4	25.34	10.327	
4,100.0	3,943.1	4,095.7	3,999.2	21.5	17.7	159.23	732.6	369.1	268.9	242.9	26.02	10.334	
4,200.0	4,038.6	4,195.5	4,096.2	22.1	18.2	159.24	753.5	379.4	276.2	249.5	26.71	10.341	
4,300.0	4,134.1	4,295.2	4,193.1	22.6	18.7	159.25	774.4	389.7	283.4	256.0	27.39	10.348	
4,400.0	4,229.5	4,394.9	4,290.1	23.2	19.2	159.26	795.2	400.0	290.6	262.5	28.07	10.354	
4,500.0	4,325.0	4,494.7	4,387.1	23.8	19.7	159.27	816.1	410.3	297.8	269.1	28.75	10.360	
4,600.0	4,420.5	4,594.4	4,484.1	24.4	20.2	159.28	837.0	420.6	305.1	275.6	29.43	10.366	
4,700.0	4,516.0	4,694.2	4,581.1	25.0	20.6	159.29	857.9	430.9	312.3	282.2	30.11	10.371	
4,727.2	4,541.9	4,721.3	4,607.5	25.2	20.8	159.29	863.5	433.7	314.2	283.9	30.29	10.373	
4,800.0	4,611.8	4,792.1	4,676.4	25.5	21.1	159.26	878.3	441.0	318.2	287.4	30.79	10.335	

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

Company:	Coachman Energy Operating Company, LLC	**Local Co-ordinate Reference:**	Well Federal 2/3-12-22
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 2/3-12-22	**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 2/3-13-22 - DD - Plan #1

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
4,900.0	4,709.0	4,879.0	4,761.4	25.9	21.4	159.16	894.3	448.8	322.1	290.8	31.29	10.293	
5,000.0	4,807.3	4,965.9	4,847.1	26.2	21.7	159.08	906.8	455.0	325.1	293.4	31.67	10.264	
5,100.0	4,906.4	5,052.7	4,933.3	26.5	21.9	159.03	915.7	459.4	327.2	295.3	31.93	10.247	
5,200.0	5,006.1	5,139.4	5,019.9	26.7	22.0	159.00	921.2	462.1	328.5	296.4	32.07	10.243	
5,304.0	5,110.0	5,229.6	5,110.0	26.8	22.1	179.07	923.1	463.0	329.0	296.9	32.09	10.252	
5,400.0	5,206.0	5,325.6	5,206.0	26.9	22.2	179.07	923.1	463.0	329.0	296.6	32.35	10.168	
5,500.0	5,306.0	5,425.6	5,306.0	27.0	22.3	179.07	923.1	463.0	329.0	296.3	32.66	10.073	
5,600.0	5,406.0	5,525.6	5,406.0	27.1	22.5	179.07	923.1	463.0	329.0	296.0	32.97	9.978	
5,700.0	5,506.0	5,625.6	5,506.0	27.1	22.6	179.07	923.1	463.0	329.0	295.7	33.28	9.885	
5,800.0	5,606.0	5,725.6	5,606.0	27.2	22.7	179.07	923.1	463.0	329.0	295.4	33.60	9.792	
5,900.0	5,706.0	5,825.6	5,706.0	27.3	22.8	179.07	923.1	463.0	329.0	295.1	33.92	9.700	
6,000.0	5,806.0	5,925.6	5,806.0	27.4	22.9	179.07	923.1	463.0	329.0	294.7	34.24	9.609	
6,100.0	5,906.0	6,025.6	5,906.0	27.5	23.0	179.07	923.1	463.0	329.0	294.4	34.56	9.519	
6,200.0	6,006.0	6,125.6	6,006.0	27.6	23.2	179.07	923.1	463.0	329.0	294.1	34.89	9.430	
6,300.0	6,106.0	6,225.6	6,106.0	27.7	23.3	179.07	923.1	463.0	329.0	293.8	35.22	9.341	
6,400.0	6,206.0	6,325.6	6,206.0	27.8	23.4	179.07	923.1	463.0	329.0	293.4	35.55	9.254	
6,500.0	6,306.0	6,425.6	6,306.0	27.9	23.5	179.07	923.1	463.0	329.0	293.1	35.88	9.168	
6,600.0	6,406.0	6,525.6	6,406.0	28.0	23.7	179.07	923.1	463.0	329.0	292.8	36.22	9.082	
6,700.0	6,506.0	6,625.6	6,506.0	28.1	23.8	179.07	923.1	463.0	329.0	292.4	36.56	8.998	
6,800.0	6,606.0	6,725.6	6,606.0	28.3	23.9	179.07	923.1	463.0	329.0	292.1	36.90	8.914	
6,900.0	6,706.0	6,825.6	6,706.0	28.4	24.0	179.07	923.1	463.0	329.0	291.7	37.25	8.832	
7,000.0	6,806.0	6,925.6	6,806.0	28.5	24.2	179.07	923.1	463.0	329.0	291.4	37.59	8.751	
7,100.0	6,906.0	7,025.6	6,906.0	28.6	24.3	179.07	923.1	463.0	329.0	291.0	37.94	8.670	
7,200.0	7,006.0	7,125.6	7,006.0	28.7	24.4	179.07	923.1	463.0	329.0	290.7	38.29	8.591	
7,300.0	7,106.0	7,225.6	7,106.0	28.8	24.6	179.07	923.1	463.0	329.0	290.3	38.65	8.512	
7,400.0	7,206.0	7,325.6	7,206.0	28.9	24.7	179.07	923.1	463.0	329.0	290.0	39.00	8.435	
7,500.0	7,306.0	7,425.6	7,306.0	29.0	24.9	179.07	923.1	463.0	329.0	289.6	39.36	8.358	
7,600.0	7,406.0	7,525.6	7,406.0	29.2	25.0	179.07	923.1	463.0	329.0	289.3	39.72	8.283	
7,700.0	7,506.0	7,625.6	7,506.0	29.3	25.1	179.07	923.1	463.0	329.0	288.9	40.08	8.208	
7,800.0	7,606.0	7,725.6	7,606.0	29.4	25.3	179.07	923.1	463.0	329.0	288.5	40.44	8.135	
7,900.0	7,706.0	7,825.6	7,706.0	29.5	25.4	179.07	923.1	463.0	329.0	288.2	40.80	8.062	
8,000.0	7,806.0	7,925.6	7,806.0	29.6	25.6	179.07	923.1	463.0	329.0	287.8	41.17	7.991	
8,100.0	7,906.0	8,025.6	7,906.0	29.8	25.7	179.07	923.1	463.0	329.0	287.4	41.54	7.920	
8,200.0	8,006.0	8,125.6	8,006.0	29.9	25.9	179.07	923.1	463.0	329.0	287.1	41.91	7.850	
8,246.0	8,052.0	8,171.6	8,052.0	30.0	25.9	179.07	923.1	463.0	329.0	286.9	42.08	7.819	
8,269.0	8,075.0	8,194.6	8,075.0	30.0	26.0	179.07	923.1	463.0	329.0	286.8	42.16	7.803	

Company:	Coachman Energy Operating Company, LLC	**Local Co-ordinate Reference:**	Well Federal 2/3-12-22
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 2/3-12-22	**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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
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	
250.0	250.0	250.0	250.0	0.4	0.4	178.92	-29.9	0.6	29.9	29.0	0.84	35.540	CC, ES
300.0	300.0	300.0	300.0	0.5	0.5	159.28	-29.9	0.6	30.5	29.4	1.08	28.189	
400.0	399.8	400.6	400.6	0.8	0.8	161.63	-29.3	1.0	34.9	33.3	1.61	21.650	
500.0	499.3	502.1	501.9	1.0	1.0	161.94	-25.0	4.2	40.5	38.3	2.16	18.766	
600.0	598.0	603.8	603.0	1.3	1.2	160.39	-16.4	10.7	46.7	44.0	2.72	17.180	
700.0	695.8	705.1	703.1	1.7	1.5	157.78	-3.6	20.2	53.7	50.4	3.31	16.232	
800.0	792.4	804.6	801.0	2.2	1.9	156.71	10.2	30.6	64.4	60.4	3.95	16.288	
826.8	818.1	831.1	827.2	2.3	2.0	156.77	13.9	33.3	68.0	63.9	4.13	16.475	
900.0	888.0	903.6	898.5	2.7	2.2	157.14	23.9	40.9	78.5	74.0	4.54	17.277	
1,000.0	983.4	1,002.5	996.0	3.3	2.6	157.51	37.7	51.2	92.8	87.7	5.13	18.084	
1,100.0	1,078.9	1,101.5	1,093.5	3.8	3.0	157.78	51.4	61.5	107.1	101.4	5.74	18.668	
1,200.0	1,174.4	1,200.5	1,190.9	4.4	3.3	157.99	65.2	71.8	121.4	115.1	6.36	19.105	
1,300.0	1,269.9	1,299.4	1,288.4	5.0	3.7	158.15	78.9	82.1	135.8	128.8	6.98	19.438	
1,400.0	1,365.3	1,398.4	1,385.9	5.6	4.1	158.29	92.7	92.4	150.1	142.5	7.62	19.699	
1,500.0	1,460.8	1,497.4	1,483.3	6.1	4.5	158.39	106.4	102.7	164.4	156.2	8.26	19.907	
1,600.0	1,556.3	1,596.3	1,580.8	6.7	4.8	158.49	120.2	113.0	178.7	169.8	8.90	20.077	
1,700.0	1,651.7	1,695.3	1,678.2	7.3	5.2	158.56	133.9	123.3	193.1	183.5	9.55	20.217	
1,800.0	1,747.2	1,794.3	1,775.7	7.9	5.6	158.63	147.7	133.6	207.4	197.2	10.20	20.335	
1,900.0	1,842.7	1,893.2	1,873.2	8.5	6.0	158.69	161.4	143.9	221.7	210.9	10.85	20.435	
2,000.0	1,938.2	1,992.2	1,970.6	9.1	6.4	158.74	175.2	154.2	236.0	224.5	11.50	20.520	
2,100.0	2,033.6	2,091.2	2,068.1	9.7	6.7	158.79	188.9	164.5	250.4	238.2	12.16	20.595	
2,200.0	2,129.1	2,190.1	2,165.6	10.2	7.1	158.83	202.7	174.8	264.7	251.9	12.81	20.660	
2,300.0	2,224.6	2,289.1	2,263.0	10.8	7.5	158.87	216.4	185.1	279.0	265.5	13.47	20.718	
2,400.0	2,320.1	2,388.1	2,360.5	11.4	7.9	158.90	230.2	195.4	293.3	279.2	14.12	20.770	
2,500.0	2,415.5	2,487.1	2,458.0	12.0	8.3	158.93	243.9	205.7	307.7	292.9	14.78	20.816	
2,600.0	2,511.0	2,586.0	2,555.4	12.6	8.7	158.96	257.7	216.0	322.0	306.6	15.44	20.858	
2,700.0	2,606.5	2,685.0	2,652.9	13.2	9.0	158.98	271.4	226.3	336.3	320.2	16.09	20.896	
2,800.0	2,702.0	2,784.0	2,750.4	13.8	9.4	159.00	285.2	236.6	350.6	333.9	16.75	20.931	
2,900.0	2,797.4	2,882.9	2,847.8	14.4	9.8	159.03	298.9	246.9	365.0	347.6	17.41	20.962	
3,000.0	2,892.9	2,981.9	2,945.3	15.0	10.2	159.04	312.7	257.2	379.3	361.2	18.07	20.992	
3,100.0	2,988.4	3,080.9	3,042.8	15.6	10.6	159.06	326.4	267.5	393.6	374.9	18.73	21.019	
3,200.0	3,083.9	3,179.8	3,140.2	16.1	11.0	159.08	340.2	277.8	407.9	388.6	19.38	21.045	
3,300.0	3,179.3	3,278.8	3,237.7	16.7	11.3	159.10	353.9	288.2	422.3	402.2	20.04	21.069	
3,400.0	3,274.8	3,377.8	3,335.2	17.3	11.7	159.11	367.7	298.5	436.6	415.9	20.70	21.091	
3,500.0	3,370.3	3,476.7	3,432.6	17.9	12.1	159.12	381.4	308.8	450.9	429.6	21.36	21.113	
3,600.0	3,465.8	3,575.7	3,530.1	18.5	12.5	159.14	395.2	319.1	465.2	443.2	22.02	21.133	
3,700.0	3,561.2	3,674.7	3,627.6	19.1	12.9	159.15	408.9	329.4	479.6	456.9	22.67	21.152	
3,800.0	3,656.7	3,773.6	3,725.0	19.7	13.3	159.16	422.7	339.7	493.9	470.6	23.33	21.170	
3,900.0	3,752.2	3,872.6	3,822.5	20.3	13.7	159.17	436.4	350.0	508.2	484.2	23.99	21.187	
4,000.0	3,847.6	3,971.6	3,920.0	20.9	14.0	159.18	450.2	360.3	522.6	497.9	24.64	21.203	
4,100.0	3,943.1	4,070.5	4,017.4	21.5	14.4	159.19	463.9	370.6	536.9	511.6	25.30	21.219	
4,200.0	4,038.6	4,169.5	4,114.9	22.1	14.8	159.20	477.7	380.9	551.2	525.2	25.96	21.234	
4,300.0	4,134.1	4,268.5	4,212.4	22.6	15.2	159.21	491.4	391.2	565.5	538.9	26.61	21.249	
4,400.0	4,229.5	4,367.5	4,309.8	23.2	15.6	159.22	505.2	401.5	579.9	552.6	27.27	21.263	
4,500.0	4,325.0	4,466.4	4,407.3	23.8	16.0	159.22	518.9	411.8	594.2	566.3	27.93	21.277	
4,600.0	4,420.5	4,565.4	4,504.8	24.4	16.4	159.23	532.7	422.1	608.5	579.9	28.58	21.290	
4,700.0	4,516.0	4,664.4	4,602.2	25.0	16.7	159.24	546.4	432.4	622.8	593.6	29.24	21.303	
4,727.2	4,541.9	4,691.3	4,628.7	25.2	16.8	159.24	550.2	435.2	626.7	597.3	29.42	21.306	
4,800.0	4,611.8	4,763.5	4,699.9	25.5	17.1	159.30	560.2	442.7	635.9	606.0	29.91	21.260	

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

Company:	Coachman Energy Operating Company, LLC	**Local Co-ordinate Reference:**	Well Federal 2/3-12-22
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 2/3-12-22	**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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
4,900.0	4,709.0	4,858.9	4,793.8	25.9	17.5	159.21	573.4	452.6	644.3	613.8	30.51	21.115	
5,000.0	4,807.3	4,937.6	4,871.6	26.2	17.7	159.11	582.6	459.5	650.1	619.1	30.93	21.015	
5,100.0	4,906.4	5,016.2	4,949.8	26.5	17.9	159.04	589.1	464.4	654.2	623.0	31.22	20.952	
5,200.0	5,006.1	5,100.0	5,033.5	26.7	18.1	159.00	593.3	467.5	656.7	625.3	31.41	20.911	
5,304.0	5,110.0	5,176.5	5,110.0	26.8	18.2	179.06	594.5	468.4	657.6	626.1	31.45	20.911	
5,400.0	5,206.0	5,272.6	5,206.0	26.9	18.3	179.06	594.5	468.4	657.6	625.9	31.73	20.726	
5,500.0	5,306.0	5,372.6	5,306.0	27.0	18.4	179.06	594.5	468.4	657.6	625.6	32.04	20.522	
5,600.0	5,406.0	5,472.6	5,406.0	27.1	18.6	179.06	594.5	468.4	657.6	625.2	32.36	20.321	
5,700.0	5,506.0	5,572.6	5,506.0	27.1	18.7	179.06	594.5	468.4	657.6	624.9	32.68	20.122	
5,800.0	5,606.0	5,672.6	5,606.0	27.2	18.8	179.06	594.5	468.4	657.6	624.6	33.00	19.924	
5,900.0	5,706.0	5,772.6	5,706.0	27.3	19.0	179.06	594.5	468.4	657.6	624.3	33.33	19.729	
6,000.0	5,806.0	5,872.6	5,806.0	27.4	19.1	179.06	594.5	468.4	657.6	623.9	33.66	19.536	
6,100.0	5,906.0	5,972.6	5,906.0	27.5	19.3	179.06	594.5	468.4	657.6	623.6	33.99	19.345	
6,200.0	6,006.0	6,072.6	6,006.0	27.6	19.4	179.06	594.5	468.4	657.6	623.3	34.33	19.156	
6,300.0	6,106.0	6,172.6	6,106.0	27.7	19.6	179.06	594.5	468.4	657.6	622.9	34.67	18.970	
6,400.0	6,206.0	6,272.6	6,206.0	27.8	19.7	179.06	594.5	468.4	657.6	622.6	35.01	18.785	
6,500.0	6,306.0	6,372.6	6,306.0	27.9	19.9	179.06	594.5	468.4	657.6	622.2	35.35	18.604	
6,600.0	6,406.0	6,472.6	6,406.0	28.0	20.0	179.06	594.5	468.4	657.6	621.9	35.69	18.424	
6,700.0	6,506.0	6,572.6	6,506.0	28.1	20.2	179.06	594.5	468.4	657.6	621.6	36.04	18.246	
6,800.0	6,606.0	6,672.6	6,606.0	28.3	20.3	179.06	594.5	468.4	657.6	621.2	36.39	18.071	
6,900.0	6,706.0	6,772.6	6,706.0	28.4	20.5	179.06	594.5	468.4	657.6	620.9	36.74	17.898	
7,000.0	6,806.0	6,872.6	6,806.0	28.5	20.6	179.06	594.5	468.4	657.6	620.5	37.09	17.728	
7,100.0	6,906.0	6,972.6	6,906.0	28.6	20.8	179.06	594.5	468.4	657.6	620.1	37.45	17.560	
7,200.0	7,006.0	7,072.6	7,006.0	28.7	21.0	179.06	594.5	468.4	657.6	619.8	37.81	17.393	
7,300.0	7,106.0	7,172.6	7,106.0	28.8	21.1	179.06	594.5	468.4	657.6	619.4	38.17	17.230	
7,400.0	7,206.0	7,272.6	7,206.0	28.9	21.3	179.06	594.5	468.4	657.6	619.1	38.53	17.068	
7,500.0	7,306.0	7,372.6	7,306.0	29.0	21.4	179.06	594.5	468.4	657.6	618.7	38.89	16.909	
7,600.0	7,406.0	7,472.6	7,406.0	29.2	21.6	179.06	594.5	468.4	657.6	618.3	39.26	16.751	
7,700.0	7,506.0	7,572.6	7,506.0	29.3	21.8	179.06	594.5	468.4	657.6	618.0	39.62	16.596	
7,800.0	7,606.0	7,672.6	7,606.0	29.4	21.9	179.06	594.5	468.4	657.6	617.6	39.99	16.443	
7,900.0	7,706.0	7,772.6	7,706.0	29.5	22.1	179.06	594.5	468.4	657.6	617.2	40.36	16.293	
8,000.0	7,806.0	7,872.6	7,806.0	29.6	22.3	179.06	594.5	468.4	657.6	616.9	40.73	16.144	
8,100.0	7,906.0	7,972.6	7,906.0	29.8	22.4	179.06	594.5	468.4	657.6	616.5	41.11	15.997	
8,200.0	8,006.0	8,072.6	8,006.0	29.9	22.6	179.06	594.5	468.4	657.6	616.1	41.48	15.853	
8,269.0	8,075.0	8,141.5	8,075.0	30.0	22.7	179.06	594.5	468.4	657.6	615.9	41.74	15.755	SF

Company:	Coachman Energy Operating Company, LLC	**Local Co-ordinate Reference:**	Well Federal 2/3-12-22
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 2/3-12-22	**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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	178.92	-44.8	0.8	44.8				
100.0	100.0	100.0	100.0	0.1	0.1	178.92	-44.8	0.8	44.8	44.6	0.17	269.428	
200.0	200.0	200.0	200.0	0.3	0.3	178.92	-44.8	0.8	44.8	44.2	0.62	72.765	
250.0	250.0	250.0	250.0	0.4	0.4	178.92	-44.8	0.8	44.8	44.0	0.84	53.309	CC, ES
300.0	300.0	300.0	300.0	0.5	0.5	159.13	-44.8	0.8	45.4	44.3	1.08	42.001	
400.0	399.8	401.3	401.2	0.8	0.8	158.65	-43.3	3.1	48.9	47.3	1.61	30.459	
500.0	499.3	502.5	502.1	1.0	1.0	155.46	-38.9	9.8	54.5	52.4	2.15	25.351	
600.0	598.0	602.5	601.4	1.3	1.3	151.68	-32.3	19.9	63.1	60.4	2.73	23.105	
700.0	695.8	701.6	699.7	1.7	1.6	150.57	-25.7	30.0	76.3	72.9	3.36	22.712	SF
800.0	792.4	800.0	797.4	2.2	1.8	151.27	-19.1	40.2	94.0	90.0	4.02	23.397	
826.8	818.1	826.2	823.4	2.3	1.9	151.64	-17.3	42.9	99.5	95.3	4.20	23.708	
900.0	888.0	897.7	894.3	2.7	2.1	152.77	-12.5	50.2	115.0	110.4	4.62	24.900	
1,000.0	983.4	995.4	991.3	3.3	2.4	153.89	-5.9	60.2	136.3	131.1	5.21	26.158	
1,100.0	1,078.9	1,093.1	1,088.2	3.8	2.7	154.71	0.7	70.3	157.6	151.8	5.81	27.112	
1,200.0	1,174.4	1,190.7	1,185.2	4.4	3.1	155.34	7.3	80.3	178.9	172.5	6.42	27.860	
1,300.0	1,269.9	1,288.4	1,282.1	5.0	3.4	155.83	13.8	90.4	200.3	193.3	7.04	28.448	
1,400.0	1,365.3	1,386.1	1,379.1	5.6	3.7	156.23	20.4	100.4	221.7	214.0	7.66	28.928	
1,500.0	1,460.8	1,483.8	1,476.0	6.1	4.0	156.55	27.0	110.4	243.0	234.7	8.29	29.323	
1,600.0	1,556.3	1,581.5	1,572.9	6.7	4.3	156.83	33.6	120.5	264.4	255.5	8.92	29.655	
1,700.0	1,651.7	1,679.1	1,669.9	7.3	4.6	157.06	40.1	130.5	285.8	276.2	9.55	29.937	
1,800.0	1,747.2	1,776.8	1,766.8	7.9	4.9	157.26	46.7	140.6	307.2	297.0	10.18	30.179	
1,900.0	1,842.7	1,874.5	1,863.8	8.5	5.2	157.44	53.3	150.6	328.6	317.8	10.81	30.390	
2,000.0	1,938.2	1,972.2	1,960.7	9.1	5.5	157.59	59.9	160.6	350.0	338.5	11.45	30.574	
2,100.0	2,033.6	2,069.9	2,057.6	9.7	5.8	157.73	66.5	170.7	371.4	359.3	12.08	30.738	
2,200.0	2,129.1	2,167.5	2,154.6	10.2	6.1	157.85	73.0	180.7	392.8	380.0	12.72	30.884	
2,300.0	2,224.6	2,265.2	2,251.5	10.8	6.4	157.96	79.6	190.8	414.1	400.8	13.35	31.015	
2,400.0	2,320.1	2,362.9	2,348.5	11.4	6.8	158.05	86.2	200.8	435.5	421.6	13.99	31.134	
2,500.0	2,415.5	2,460.6	2,445.4	12.0	7.1	158.14	92.8	210.8	456.9	442.3	14.63	31.242	
2,600.0	2,511.0	2,558.3	2,542.3	12.6	7.4	158.22	99.3	220.9	478.3	463.1	15.26	31.341	
2,700.0	2,606.5	2,655.9	2,639.3	13.2	7.7	158.30	105.9	230.9	499.7	483.8	15.90	31.432	
2,800.0	2,702.0	2,753.6	2,736.2	13.8	8.0	158.36	112.5	241.0	521.2	504.6	16.54	31.516	
2,900.0	2,797.4	2,851.3	2,833.2	14.4	8.3	158.43	119.1	251.0	542.6	525.4	17.17	31.594	
3,000.0	2,892.9	2,949.0	2,930.1	15.0	8.6	158.48	125.7	261.0	564.0	546.1	17.81	31.666	
3,100.0	2,988.4	3,046.7	3,027.0	15.6	8.9	158.54	132.2	271.1	585.4	566.9	18.45	31.735	
3,200.0	3,083.9	3,144.4	3,124.0	16.1	9.2	158.59	138.8	281.1	606.8	587.7	19.08	31.798	
3,300.0	3,179.3	3,242.0	3,220.9	16.7	9.5	158.63	145.4	291.2	628.2	608.5	19.72	31.859	
3,400.0	3,274.8	3,339.7	3,317.9	17.3	9.9	158.68	152.0	301.2	649.6	629.2	20.35	31.916	
3,500.0	3,370.3	3,437.4	3,414.8	17.9	10.2	158.72	158.5	311.2	671.0	650.0	20.99	31.970	
3,600.0	3,465.8	3,535.1	3,511.8	18.5	10.5	158.76	165.1	321.3	692.4	670.8	21.62	32.021	
3,700.0	3,561.2	3,632.8	3,608.7	19.1	10.8	158.79	171.7	331.3	713.8	691.5	22.26	32.070	
3,800.0	3,656.7	3,730.4	3,705.6	19.7	11.1	158.82	178.3	341.4	735.2	712.3	22.89	32.116	
3,900.0	3,752.2	3,828.1	3,802.6	20.3	11.4	158.86	184.8	351.4	756.6	733.1	23.53	32.161	
4,000.0	3,847.6	3,925.8	3,899.5	20.9	11.7	158.89	191.4	361.4	778.0	753.9	24.16	32.204	
4,100.0	3,943.1	4,023.5	3,996.5	21.5	12.0	158.91	198.0	371.5	799.4	774.6	24.79	32.245	
4,200.0	4,038.6	4,121.2	4,093.4	22.1	12.3	158.94	204.6	381.5	820.8	795.4	25.42	32.285	
4,300.0	4,134.1	4,218.8	4,190.3	22.6	12.7	158.97	211.2	391.6	842.2	816.2	26.06	32.323	
4,400.0	4,229.5	4,316.5	4,287.3	23.2	13.0	158.99	217.7	401.6	863.6	837.0	26.69	32.360	
4,500.0	4,325.0	4,414.2	4,384.2	23.8	13.3	159.01	224.3	411.6	885.0	857.7	27.32	32.396	
4,600.0	4,420.5	4,511.9	4,481.2	24.4	13.6	159.04	230.9	421.7	906.5	878.5	27.95	32.431	
4,700.0	4,516.0	4,609.6	4,578.1	25.0	13.9	159.06	237.5	431.7	927.9	899.3	28.58	32.464	
4,727.2	4,541.9	4,636.1	4,604.5	25.2	14.0	159.06	239.3	434.5	933.7	904.9	28.75	32.473	
4,800.0	4,611.8	4,707.5	4,675.3	25.5	14.2	159.20	244.1	441.8	948.0	918.8	29.24	32.421	

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

Company:	Coachman Energy Operating Company, LLC	**Local Co-ordinate Reference:**	Well Federal 2/3-12-22
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 2/3-12-22	**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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
4,900.0	4,709.0	4,806.3	4,773.3	25.9	14.5	159.25	250.7	451.9	963.5	933.7	29.84	32.285	
5,000.0	4,807.3	4,905.6	4,871.9	26.2	14.8	159.14	257.4	462.2	974.2	943.8	30.40	32.045	
5,100.0	4,906.4	4,984.5	4,950.4	26.5	15.0	159.03	261.9	469.0	981.0	950.2	30.77	31.882	
5,200.0	5,006.1	5,062.8	5,028.5	26.7	15.2	158.96	264.6	473.2	985.1	954.1	30.99	31.790	
5,304.0	5,110.0	5,144.3	5,110.0	26.8	15.3	179.02	265.6	474.6	986.6	955.5	31.09	31.738	
5,400.0	5,206.0	5,240.3	5,206.0	26.9	15.5	179.02	265.6	474.6	986.6	955.2	31.36	31.456	
5,500.0	5,306.0	5,340.3	5,306.0	27.0	15.6	179.02	265.6	474.6	986.6	954.9	31.68	31.141	
5,600.0	5,406.0	5,440.3	5,406.0	27.1	15.8	179.02	265.6	474.6	986.6	954.6	32.00	30.829	
5,700.0	5,506.0	5,540.3	5,506.0	27.1	16.0	179.02	265.6	474.6	986.6	954.3	32.32	30.521	
5,800.0	5,606.0	5,640.3	5,606.0	27.2	16.1	179.02	265.6	474.6	986.6	953.9	32.65	30.216	
5,900.0	5,706.0	5,740.3	5,706.0	27.3	16.3	179.02	265.6	474.6	986.6	953.6	32.98	29.914	
6,000.0	5,806.0	5,840.3	5,806.0	27.4	16.4	179.02	265.6	474.6	986.6	953.3	33.31	29.616	
6,100.0	5,906.0	5,940.3	5,906.0	27.5	16.6	179.02	265.6	474.6	986.6	952.9	33.65	29.322	
6,200.0	6,006.0	6,040.3	6,006.0	27.6	16.8	179.02	265.6	474.6	986.6	952.6	33.98	29.031	
6,300.0	6,106.0	6,140.3	6,106.0	27.7	17.0	179.02	265.6	474.6	986.6	952.3	34.32	28.743	
6,400.0	6,206.0	6,240.3	6,206.0	27.8	17.1	179.02	265.6	474.6	986.6	951.9	34.67	28.460	
6,500.0	6,306.0	6,340.3	6,306.0	27.9	17.3	179.02	265.6	474.6	986.6	951.6	35.01	28.179	
6,600.0	6,406.0	6,440.3	6,406.0	28.0	17.5	179.02	265.6	474.6	986.6	951.2	35.36	27.903	
6,700.0	6,506.0	6,540.3	6,506.0	28.1	17.7	179.02	265.6	474.6	986.6	950.9	35.71	27.630	
6,800.0	6,606.0	6,640.3	6,606.0	28.3	17.8	179.02	265.6	474.6	986.6	950.5	36.06	27.361	
6,900.0	6,706.0	6,740.3	6,706.0	28.4	18.0	179.02	265.6	474.6	986.6	950.2	36.41	27.095	
7,000.0	6,806.0	6,840.3	6,806.0	28.5	18.2	179.02	265.6	474.6	986.6	949.8	36.77	26.833	
7,100.0	6,906.0	6,940.3	6,906.0	28.6	18.4	179.02	265.6	474.6	986.6	949.5	37.13	26.574	
7,200.0	7,006.0	7,040.3	7,006.0	28.7	18.6	179.02	265.6	474.6	986.6	949.1	37.49	26.319	
7,300.0	7,106.0	7,140.3	7,106.0	28.8	18.7	179.02	265.6	474.6	986.6	948.7	37.85	26.068	
7,400.0	7,206.0	7,240.3	7,206.0	28.9	18.9	179.02	265.6	474.6	986.6	948.4	38.21	25.820	
7,500.0	7,306.0	7,340.3	7,306.0	29.0	19.1	179.02	265.6	474.6	986.6	948.0	38.58	25.575	
7,600.0	7,406.0	7,440.3	7,406.0	29.2	19.3	179.02	265.6	474.6	986.6	947.6	38.94	25.334	
7,700.0	7,506.0	7,540.3	7,506.0	29.3	19.5	179.02	265.6	474.6	986.6	947.3	39.31	25.097	
7,800.0	7,606.0	7,640.3	7,606.0	29.4	19.7	179.02	265.6	474.6	986.6	946.9	39.68	24.862	
7,900.0	7,706.0	7,740.3	7,706.0	29.5	19.8	179.02	265.6	474.6	986.6	946.5	40.05	24.631	
8,000.0	7,806.0	7,840.3	7,806.0	29.6	20.0	179.02	265.6	474.6	986.6	946.2	40.43	24.404	
8,100.0	7,906.0	7,940.3	7,906.0	29.8	20.2	179.02	265.6	474.6	986.6	945.8	40.80	24.180	
8,200.0	8,006.0	8,040.3	8,006.0	29.9	20.4	179.02	265.6	474.6	986.6	945.4	41.18	23.958	
8,269.0	8,075.0	8,109.3	8,075.0	30.0	20.5	179.02	265.6	474.6	986.6	945.1	41.44	23.808	

Company:	Coachman Energy Operating Company, LLC	**Local Co-ordinate Reference:**	Well Federal 2/3-12-22
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 2/3-12-22	**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 Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	178.66	-60.1	1.4	60.1				
100.0	100.0	100.0	100.0	0.1	0.1	178.66	-60.1	1.4	60.1	60.0	0.17	361.463	
200.0	200.0	200.0	200.0	0.3	0.3	178.66	-60.1	1.4	60.1	59.5	0.62	97.621	
250.0	250.0	250.0	250.0	0.4	0.4	178.66	-60.1	1.4	60.1	59.3	0.84	71.519	CC, ES
300.0	300.0	300.0	300.0	0.5	0.5	158.79	-60.1	1.4	60.7	59.6	1.08	56.158	
400.0	399.8	399.8	399.8	0.8	0.7	158.87	-60.1	3.1	65.7	64.1	1.60	40.980	
500.0	499.3	499.2	499.1	1.0	1.0	157.67	-60.2	8.3	75.5	73.4	2.15	35.148	
600.0	598.0	597.9	597.4	1.3	1.2	155.78	-60.2	16.9	90.4	87.7	2.73	33.159	
700.0	695.8	695.9	694.8	1.7	1.5	154.51	-60.3	27.2	110.2	106.9	3.34	33.027	SF
800.0	792.4	792.8	791.2	2.2	1.7	154.47	-60.4	37.5	134.6	130.7	3.97	33.884	
826.8	818.1	818.6	816.9	2.3	1.8	154.60	-60.4	40.2	142.0	137.8	4.15	34.228	
900.0	888.0	888.9	886.7	2.7	2.0	155.18	-60.4	47.6	162.4	157.8	4.55	35.700	
1,000.0	983.4	984.9	982.2	3.3	2.3	155.77	-60.5	57.7	190.3	185.2	5.12	37.200	
1,100.0	1,078.9	1,080.9	1,077.7	3.8	2.6	156.21	-60.6	67.9	218.3	212.6	5.70	38.295	
1,200.0	1,174.4	1,176.9	1,173.1	4.4	2.8	156.55	-60.6	78.0	246.3	240.0	6.30	39.117	
1,300.0	1,269.9	1,272.9	1,268.6	5.0	3.1	156.82	-60.7	88.2	274.3	267.4	6.90	39.747	
1,400.0	1,365.3	1,368.9	1,364.0	5.6	3.4	157.04	-60.8	98.3	302.3	294.7	7.51	40.244	
1,500.0	1,460.8	1,464.9	1,459.5	6.1	3.7	157.23	-60.8	108.4	330.2	322.1	8.13	40.642	
1,600.0	1,556.3	1,560.9	1,555.0	6.7	4.0	157.38	-60.9	118.6	358.2	349.5	8.74	40.967	
1,700.0	1,651.7	1,656.9	1,650.4	7.3	4.2	157.51	-61.0	128.7	386.2	376.9	9.37	41.238	
1,800.0	1,747.2	1,752.9	1,745.9	7.9	4.5	157.63	-61.0	138.8	414.2	404.2	9.99	41.465	
1,900.0	1,842.7	1,848.9	1,841.3	8.5	4.8	157.73	-61.1	149.0	442.2	431.6	10.62	41.660	
2,000.0	1,938.2	1,944.9	1,936.8	9.1	5.1	157.81	-61.2	159.1	470.2	459.0	11.24	41.828	
2,100.0	2,033.6	2,040.9	2,032.3	9.7	5.4	157.89	-61.2	169.3	498.2	486.3	11.87	41.975	
2,200.0	2,129.1	2,136.9	2,127.7	10.2	5.7	157.96	-61.3	179.4	526.2	513.7	12.50	42.104	
2,300.0	2,224.6	2,232.9	2,223.2	10.8	6.0	158.03	-61.4	189.5	554.2	541.1	13.13	42.220	
2,400.0	2,320.1	2,328.9	2,318.7	11.4	6.2	158.08	-61.5	199.7	582.2	568.5	13.76	42.324	
2,500.0	2,415.5	2,424.9	2,414.1	12.0	6.5	158.13	-61.5	209.8	610.2	595.8	14.39	42.418	
2,600.0	2,511.0	2,520.9	2,509.6	12.6	6.8	158.18	-61.6	219.9	638.2	623.2	15.02	42.504	
2,700.0	2,606.5	2,616.9	2,605.0	13.2	7.1	158.22	-61.7	230.1	666.2	650.6	15.65	42.583	
2,800.0	2,702.0	2,712.9	2,700.5	13.8	7.4	158.26	-61.7	240.2	694.2	677.9	16.27	42.657	
2,900.0	2,797.4	2,808.9	2,796.0	14.4	7.7	158.30	-61.8	250.4	722.2	705.3	16.90	42.725	
3,000.0	2,892.9	2,904.9	2,891.4	15.0	8.0	158.33	-61.9	260.5	750.2	732.7	17.53	42.788	
3,100.0	2,988.4	3,000.9	2,986.9	15.6	8.2	158.36	-61.9	270.6	778.2	760.1	18.16	42.848	
3,200.0	3,083.9	3,096.9	3,082.3	16.1	8.5	158.39	-62.0	280.8	806.2	787.4	18.79	42.905	
3,300.0	3,179.3	3,192.9	3,177.8	16.7	8.8	158.42	-62.1	290.9	834.2	814.8	19.42	42.958	
3,400.0	3,274.8	3,288.9	3,273.3	17.3	9.1	158.45	-62.1	301.0	862.2	842.2	20.05	43.009	
3,500.0	3,370.3	3,384.8	3,368.7	17.9	9.4	158.47	-62.2	311.2	890.2	869.6	20.68	43.058	
3,600.0	3,465.8	3,480.8	3,464.2	18.5	9.7	158.49	-62.3	321.3	918.3	896.9	21.30	43.105	
3,700.0	3,561.2	3,576.8	3,559.7	19.1	10.0	158.51	-62.4	331.5	946.3	924.3	21.93	43.150	
3,800.0	3,656.7	3,672.8	3,655.1	19.7	10.2	158.53	-62.4	341.6	974.3	951.7	22.56	43.193	

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

Company:	Coachman Energy Operating Company, LLC	**Local Co-ordinate Reference:**	Well Federal 2/3-12-22
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 2/3-12-22	**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-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
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	
250.0	250.0	250.0	250.0	0.4	0.4	115.55	-7.3	15.2	16.9	16.0	0.84	20.092	CC, ES
300.0	300.0	299.7	299.7	0.5	0.5	95.87	-7.0	15.8	17.3	16.3	1.06	16.322	
400.0	399.8	399.1	399.0	0.8	0.8	98.40	-4.5	20.3	20.9	19.4	1.52	13.762	SF
500.0	499.3	498.2	497.5	1.0	1.0	101.47	0.4	29.4	28.1	26.1	2.04	13.802	
600.0	598.0	596.8	594.9	1.3	1.3	103.87	7.7	42.8	39.0	36.3	2.65	14.714	
700.0	695.8	694.7	690.7	1.7	1.7	105.43	17.4	60.5	53.5	50.1	3.38	15.795	
800.0	792.4	791.8	784.5	2.2	2.2	106.37	29.3	82.2	71.5	67.2	4.26	16.778	
826.8	818.1	817.6	809.3	2.3	2.3	106.54	32.8	88.7	76.9	72.3	4.52	16.999	
900.0	888.0	887.9	876.1	2.7	2.7	106.52	43.2	107.9	92.5	87.2	5.26	17.571	
1,000.0	983.4	983.0	965.2	3.3	3.3	104.55	59.2	137.2	115.6	109.2	6.35	18.200	
1,100.0	1,078.9	1,076.7	1,051.1	3.8	4.0	101.50	77.0	169.9	140.9	133.4	7.49	18.803	
1,200.0	1,174.4	1,168.9	1,133.9	4.4	4.8	98.02	96.5	205.6	168.9	160.3	8.67	19.495	
1,300.0	1,269.9	1,264.0	1,218.3	5.0	5.7	94.95	117.4	243.9	198.5	188.6	9.86	20.121	
1,400.0	1,365.3	1,359.0	1,302.8	5.6	6.5	92.68	138.3	282.2	228.4	217.4	11.05	20.663	
1,500.0	1,460.8	1,454.1	1,387.2	6.1	7.4	90.93	159.2	320.6	258.6	246.4	12.24	21.127	
1,600.0	1,556.3	1,549.2	1,471.7	6.7	8.3	89.55	180.1	358.9	288.9	275.5	13.42	21.524	
1,700.0	1,651.7	1,644.3	1,556.2	7.3	9.1	88.42	201.0	397.2	319.4	304.8	14.61	21.868	
1,800.0	1,747.2	1,739.3	1,640.6	7.9	10.0	87.50	221.9	435.5	350.0	334.2	15.79	22.168	
1,900.0	1,842.7	1,834.4	1,725.1	8.5	10.9	86.72	242.8	473.9	380.6	363.7	16.97	22.430	
2,000.0	1,938.2	1,929.5	1,809.5	9.1	11.8	86.06	263.7	512.2	411.3	393.2	18.15	22.662	
2,100.0	2,033.6	2,024.5	1,894.0	9.7	12.7	85.49	284.6	550.5	442.1	422.7	19.33	22.868	
2,200.0	2,129.1	2,119.6	1,978.5	10.2	13.6	84.99	305.5	588.8	472.8	452.3	20.51	23.052	
2,300.0	2,224.6	2,214.7	2,062.9	10.8	14.4	84.56	326.4	627.2	503.6	482.0	21.69	23.218	
2,400.0	2,320.1	2,309.8	2,147.4	11.4	15.3	84.17	347.3	665.5	534.5	511.6	22.87	23.368	
2,500.0	2,415.5	2,404.8	2,231.8	12.0	16.2	83.83	368.2	703.8	565.3	541.3	24.05	23.503	
2,600.0	2,511.0	2,499.9	2,316.3	12.6	17.1	83.52	389.1	742.1	596.2	570.9	25.23	23.627	
2,700.0	2,606.5	2,595.0	2,400.7	13.2	18.0	83.25	410.0	780.5	627.1	600.6	26.41	23.740	
2,800.0	2,702.0	2,690.1	2,485.2	13.8	18.9	82.99	430.9	818.8	657.9	630.3	27.59	23.844	
2,900.0	2,797.4	2,785.1	2,569.7	14.4	19.8	82.76	451.8	857.1	688.8	660.1	28.77	23.940	
3,000.0	2,892.9	2,880.2	2,654.1	15.0	20.7	82.56	472.6	895.4	719.7	689.8	29.95	24.028	
3,100.0	2,988.4	2,975.3	2,738.6	15.6	21.6	82.36	493.5	933.8	750.7	719.5	31.13	24.110	
3,200.0	3,083.9	3,070.3	2,823.0	16.1	22.4	82.19	514.4	972.1	781.6	749.3	32.31	24.186	
3,300.0	3,179.3	3,165.4	2,907.5	16.7	23.3	82.02	535.3	1,010.4	812.5	779.0	33.50	24.257	
3,400.0	3,274.8	3,260.5	2,992.0	17.3	24.2	81.87	556.2	1,048.7	843.4	808.8	34.68	24.324	
3,500.0	3,370.3	3,355.6	3,076.4	17.9	25.1	81.73	577.1	1,087.0	874.4	838.5	35.86	24.386	
3,600.0	3,465.8	3,450.6	3,160.9	18.5	26.0	81.60	598.0	1,125.4	905.3	868.3	37.04	24.444	
3,700.0	3,561.2	3,545.7	3,245.3	19.1	26.9	81.48	618.9	1,163.7	936.3	898.0	38.22	24.499	
3,800.0	3,656.7	3,640.8	3,329.8	19.7	27.8	81.36	639.8	1,202.0	967.2	927.8	39.40	24.550	
3,900.0	3,752.2	3,735.9	3,414.3	20.3	28.7	81.26	660.7	1,240.3	998.2	957.6	40.58	24.599	

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

Anticollision Report

Company:	Coachman Energy Operating Company, LLC	**Local Co-ordinate Reference:**	Well Federal 2/3-12-22
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 2/3-12-22	**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-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
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	CC
250.0	250.0	249.8	249.8	0.4	0.4	143.75	-22.0	16.1	27.3	26.4	0.84	32.516	ES
300.0	300.0	299.6	299.5	0.5	0.5	120.95	-21.3	18.0	28.2	27.1	1.07	26.478	
400.0	399.8	398.8	398.4	0.8	0.8	115.86	-18.6	25.2	33.5	32.0	1.55	21.586	
500.0	499.3	497.4	496.2	1.0	1.1	112.36	-14.2	37.2	43.4	41.3	2.10	20.671	SF
600.0	598.0	595.2	592.4	1.3	1.4	110.37	-8.1	53.8	57.6	54.9	2.73	21.082	
700.0	695.8	691.9	686.4	1.7	1.8	109.31	-0.5	74.6	76.1	72.6	3.48	21.846	
800.0	792.4	787.2	778.0	2.2	2.3	108.72	8.7	99.6	98.6	94.2	4.37	22.572	
826.8	818.1	812.5	802.0	2.3	2.5	108.61	11.4	106.9	105.3	100.7	4.63	22.752	
900.0	888.0	881.0	866.7	2.7	2.9	108.30	19.3	128.3	124.6	119.3	5.37	23.204	
1,000.0	983.4	973.5	952.5	3.3	3.6	106.68	31.2	160.5	153.1	146.7	6.44	23.758	
1,100.0	1,078.9	1,065.4	1,036.2	3.8	4.3	104.38	44.3	196.2	184.0	176.5	7.57	24.318	
1,200.0	1,174.4	1,160.0	1,121.8	4.4	5.1	102.41	58.2	234.0	215.8	207.1	8.73	24.727	
1,300.0	1,269.9	1,254.6	1,207.4	5.0	5.9	100.95	72.1	271.7	247.8	237.9	9.89	25.052	
1,400.0	1,365.3	1,349.2	1,293.0	5.6	6.7	99.83	86.0	309.5	279.8	268.8	11.06	25.304	
1,500.0	1,460.8	1,443.7	1,378.6	6.1	7.5	98.93	99.9	347.2	312.0	299.7	12.23	25.506	
1,600.0	1,556.3	1,538.3	1,464.2	6.7	8.3	98.20	113.8	385.0	344.2	330.8	13.41	25.673	
1,700.0	1,651.7	1,632.9	1,549.8	7.3	9.2	97.60	127.7	422.7	376.4	361.8	14.58	25.813	
1,800.0	1,747.2	1,727.5	1,635.4	7.9	10.0	97.09	141.6	460.5	408.7	392.9	15.76	25.931	
1,900.0	1,842.7	1,822.1	1,721.0	8.5	10.8	96.66	155.5	498.2	441.0	424.1	16.94	26.033	
2,000.0	1,938.2	1,916.7	1,806.7	9.1	11.6	96.28	169.4	536.0	473.3	455.2	18.12	26.122	
2,100.0	2,033.6	2,011.3	1,892.3	9.7	12.4	95.95	183.3	573.7	505.7	486.4	19.30	26.199	
2,200.0	2,129.1	2,105.9	1,977.9	10.2	13.3	95.67	197.2	611.4	538.0	517.5	20.48	26.268	
2,300.0	2,224.6	2,200.5	2,063.5	10.8	14.1	95.41	211.1	649.2	570.4	548.7	21.66	26.329	
2,400.0	2,320.1	2,295.1	2,149.1	11.4	14.9	95.18	225.0	686.9	602.7	579.9	22.84	26.384	
2,500.0	2,415.5	2,389.7	2,234.7	12.0	15.7	94.98	238.9	724.7	635.1	611.1	24.03	26.433	
2,600.0	2,511.0	2,484.2	2,320.3	12.6	16.6	94.79	252.8	762.4	667.5	642.3	25.21	26.478	
2,700.0	2,606.5	2,578.8	2,405.9	13.2	17.4	94.63	266.7	800.2	699.9	673.5	26.39	26.518	
2,800.0	2,702.0	2,673.4	2,491.6	13.8	18.2	94.47	280.6	837.9	732.3	704.7	27.57	26.556	
2,900.0	2,797.4	2,768.0	2,577.2	14.4	19.1	94.33	294.5	875.7	764.7	735.9	28.76	26.590	
3,000.0	2,892.9	2,862.6	2,662.8	15.0	19.9	94.20	308.4	913.4	797.1	767.1	29.94	26.621	
3,100.0	2,988.4	2,957.2	2,748.4	15.6	20.7	94.09	322.3	951.2	829.5	798.3	31.12	26.650	
3,200.0	3,083.9	3,051.8	2,834.0	16.1	21.5	93.98	336.2	988.9	861.9	829.6	32.31	26.677	
3,300.0	3,179.3	3,146.4	2,919.6	16.7	22.4	93.88	350.1	1,026.7	894.3	860.8	33.49	26.702	
3,400.0	3,274.8	3,241.0	3,005.2	17.3	23.2	93.78	364.0	1,064.4	926.7	892.0	34.68	26.725	
3,500.0	3,370.3	3,335.6	3,090.8	17.9	24.0	93.69	377.9	1,102.2	959.1	923.3	35.86	26.747	
3,600.0	3,465.8	3,430.2	3,176.4	18.5	24.8	93.61	391.8	1,139.9	991.5	954.5	37.04	26.767	

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

Company:	Coachman Energy Operating Company, LLC	**Local Co-ordinate Reference:**	Well Federal 2/3-12-22
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 2/3-12-22	**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-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
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	
250.0	250.0	250.0	250.0	0.4	0.4	156.96	-37.2	15.8	40.4	39.5	0.84	48.031	CC, ES
300.0	300.0	299.8	299.8	0.5	0.5	136.60	-37.0	16.4	41.0	39.9	1.07	38.302	
400.0	399.8	399.1	399.0	0.8	0.8	134.66	-36.1	21.5	45.9	44.4	1.57	29.325	
500.0	499.3	497.9	497.2	1.0	1.0	131.77	-34.1	31.6	55.9	53.8	2.11	26.445	
600.0	598.0	595.7	593.8	1.3	1.3	128.91	-31.3	46.4	71.0	68.2	2.73	26.000	SF
700.0	695.8	692.2	688.2	1.7	1.7	126.47	-27.5	65.8	91.0	87.6	3.44	26.490	
800.0	792.4	787.0	780.0	2.2	2.1	124.48	-23.0	89.5	115.9	111.7	4.25	27.275	
826.8	818.1	812.2	804.1	2.3	2.3	124.02	-21.7	96.5	123.4	118.9	4.49	27.490	
900.0	888.0	880.2	868.8	2.7	2.7	122.95	-17.7	117.0	144.9	139.7	5.16	28.069	
1,000.0	983.4	971.8	954.7	3.3	3.3	120.73	-11.7	148.2	175.9	169.8	6.15	28.582	
1,100.0	1,078.9	1,061.8	1,037.6	3.8	3.9	118.08	-5.1	182.7	209.3	202.1	7.22	29.002	
1,200.0	1,174.4	1,154.7	1,122.2	4.4	4.7	115.61	2.1	220.3	244.1	235.8	8.34	29.270	
1,300.0	1,269.9	1,248.0	1,207.2	5.0	5.5	113.75	9.4	258.1	279.2	269.8	9.47	29.477	
1,400.0	1,365.3	1,341.3	1,292.2	5.6	6.2	112.30	16.7	295.9	314.6	304.0	10.61	29.644	
1,500.0	1,460.8	1,434.6	1,377.2	6.1	7.0	111.14	23.9	333.7	350.0	338.3	11.75	29.780	
1,600.0	1,556.3	1,527.9	1,462.2	6.7	7.8	110.20	31.2	371.4	385.6	372.7	12.90	29.894	
1,700.0	1,651.7	1,621.2	1,547.1	7.3	8.6	109.41	38.4	409.2	421.3	407.2	14.05	29.991	
1,800.0	1,747.2	1,714.4	1,632.1	7.9	9.4	108.75	45.7	447.0	457.0	441.8	15.19	30.074	
1,900.0	1,842.7	1,807.7	1,717.1	8.5	10.2	108.18	52.9	484.8	492.7	476.4	16.34	30.147	
2,000.0	1,938.2	1,901.0	1,802.1	9.1	11.0	107.69	60.2	522.6	528.5	511.0	17.49	30.211	
2,100.0	2,033.6	1,994.3	1,887.1	9.7	11.8	107.26	67.5	560.3	564.3	545.7	18.64	30.268	
2,200.0	2,129.1	2,087.6	1,972.1	10.2	12.5	106.88	74.7	598.1	600.2	580.4	19.80	30.319	
2,300.0	2,224.6	2,180.9	2,057.1	10.8	13.3	106.55	82.0	635.9	636.0	615.1	20.95	30.365	
2,400.0	2,320.1	2,274.2	2,142.0	11.4	14.1	106.25	89.2	673.7	671.9	649.8	22.10	30.406	
2,500.0	2,415.5	2,367.4	2,227.0	12.0	14.9	105.98	96.5	711.5	707.8	684.6	23.25	30.443	
2,600.0	2,511.0	2,460.7	2,312.0	12.6	15.7	105.74	103.8	749.2	743.7	719.3	24.40	30.478	
2,700.0	2,606.5	2,554.0	2,397.0	13.2	16.5	105.52	111.0	787.0	779.6	754.1	25.55	30.509	
2,800.0	2,702.0	2,647.3	2,482.0	13.8	17.3	105.32	118.3	824.8	815.6	788.9	26.71	30.538	
2,900.0	2,797.4	2,740.6	2,567.0	14.4	18.1	105.13	125.5	862.6	851.5	823.6	27.86	30.565	
3,000.0	2,892.9	2,833.9	2,652.0	15.0	18.9	104.96	132.8	900.4	887.4	858.4	29.01	30.589	
3,100.0	2,988.4	2,927.2	2,736.9	15.6	19.7	104.81	140.0	938.1	923.4	893.2	30.16	30.612	
3,200.0	3,083.9	3,020.5	2,821.9	16.1	20.5	104.66	147.3	975.9	959.3	928.0	31.32	30.634	
3,300.0	3,179.3	3,113.7	2,906.9	16.7	21.3	104.53	154.6	1,013.7	995.3	962.8	32.47	30.653	

Company:	Coachman Energy Operating Company, LLC	**Local Co-ordinate Reference:**	Well Federal 2/3-12-22
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 2/3-12-22	**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-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	162.84	-52.1	16.1	54.5				
100.0	100.0	100.0	100.0	0.1	0.1	162.84	-52.1	16.1	54.5	54.4	0.17	327.771	
200.0	200.0	200.0	200.0	0.3	0.3	162.84	-52.1	16.1	54.5	53.9	0.62	88.522	CC
250.0	250.0	249.6	249.6	0.4	0.4	162.19	-52.1	16.7	54.7	53.9	0.84	65.386	ES
300.0	300.0	299.1	299.1	0.5	0.5	140.61	-52.0	18.7	55.8	54.7	1.07	52.241	
400.0	399.8	397.8	397.4	0.8	0.8	136.79	-51.9	26.3	62.4	60.8	1.59	39.371	
500.0	499.3	495.5	494.3	1.0	1.0	132.91	-51.7	38.9	75.0	72.9	2.16	34.793	
600.0	598.0	591.7	588.9	1.3	1.4	129.66	-51.4	56.1	93.6	90.8	2.79	33.528	SF
700.0	695.8	686.1	680.8	1.7	1.8	127.16	-51.0	77.6	117.8	114.3	3.51	33.605	
800.0	792.4	778.2	769.4	2.2	2.3	125.24	-50.6	102.9	147.6	143.3	4.32	34.193	
826.8	818.1	802.4	792.5	2.3	2.4	124.80	-50.5	110.3	156.5	152.0	4.55	34.408	
900.0	888.0	868.0	854.4	2.7	2.8	124.02	-50.1	131.7	181.9	176.7	5.21	34.935	
1,000.0	983.4	955.7	936.1	3.3	3.5	122.43	-49.6	163.6	218.7	212.6	6.16	35.516	
1,100.0	1,078.9	1,045.4	1,018.4	3.8	4.2	120.60	-49.0	199.3	257.7	250.5	7.18	35.905	
1,200.0	1,174.4	1,137.1	1,102.5	4.4	4.9	119.17	-48.3	236.1	296.9	288.7	8.23	36.079	
1,300.0	1,269.9	1,228.9	1,186.5	5.0	5.6	118.07	-47.7	272.9	336.3	327.0	9.29	36.211	
1,400.0	1,365.3	1,320.6	1,270.6	5.6	6.4	117.21	-47.1	309.7	375.8	365.4	10.36	36.279	
1,500.0	1,460.8	1,412.4	1,354.6	6.1	7.2	116.50	-46.5	346.5	415.3	403.9	11.43	36.319	
1,600.0	1,556.3	1,504.1	1,438.7	6.7	7.9	115.92	-45.8	383.2	454.9	442.4	12.52	36.343	
1,700.0	1,651.7	1,595.9	1,522.7	7.3	8.7	115.43	-45.2	420.0	494.5	480.9	13.60	36.356	
1,800.0	1,747.2	1,687.6	1,606.8	7.9	9.4	115.02	-44.6	456.8	534.1	519.4	14.69	36.362	
1,900.0	1,842.7	1,779.4	1,690.8	8.5	10.2	114.66	-43.9	493.6	573.8	558.0	15.78	36.364	
2,000.0	1,938.2	1,871.1	1,774.9	9.1	11.0	114.35	-43.3	530.4	613.4	596.5	16.87	36.363	
2,100.0	2,033.6	1,962.9	1,858.9	9.7	11.7	114.07	-42.7	567.2	653.1	635.1	17.96	36.361	
2,200.0	2,129.1	2,054.6	1,943.0	10.2	12.5	113.83	-42.1	603.9	692.8	673.7	19.05	36.358	
2,300.0	2,224.6	2,146.4	2,027.0	10.8	13.3	113.61	-41.4	640.7	732.5	712.3	20.15	36.354	
2,400.0	2,320.1	2,238.1	2,111.1	11.4	14.0	113.42	-40.8	677.5	772.2	751.0	21.24	36.349	
2,500.0	2,415.5	2,329.9	2,195.1	12.0	14.8	113.24	-40.2	714.3	811.9	789.6	22.34	36.345	
2,600.0	2,511.0	2,421.6	2,279.2	12.6	15.6	113.08	-39.6	751.1	851.6	828.2	23.44	36.340	
2,700.0	2,606.5	2,513.4	2,363.2	13.2	16.3	112.94	-38.9	787.8	891.4	866.8	24.53	36.335	
2,800.0	2,702.0	2,605.1	2,447.3	13.8	17.1	112.80	-38.3	824.6	931.1	905.5	25.63	36.331	
2,900.0	2,797.4	2,696.9	2,531.3	14.4	17.9	112.68	-37.7	861.4	970.8	944.1	26.73	36.326	

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

Company:	Coachman Energy Operating Company, LLC	**Local Co-ordinate Reference:**	Well Federal 2/3-12-22
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 2/3-12-22	**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 2/3-12-22
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: -1.32°