

Carrizo Oil and Gas, Inc. (Niobrara)

Weld County

Shull 25 9-60 Pad

Shull 6-25-9-60

Wellbore #1

Plan: Design #1

Standard Planning Report

18 December, 2014

Carrizo Oil and Gas, Inc.

Planning Report

Database:	EDMServer	Local Co-ordinate Reference:	Well Shull 6-25-9-60
Company:	Carrizo Oil and Gas, Inc. (Niobrara)	TVD Reference:	WELL @ 4904.0usft (Original Well Elev)
Project:	Weld County	MD Reference:	WELL @ 4904.0usft (Original Well Elev)
Site:	Shull 25 9-60 Pad	North Reference:	Grid
Well:	Shull 6-25-9-60	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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

Site		Shull 25 9-60 Pad			
Site Position:		Northing:	1,506,559.70 usft	Latitude:	40° 42' 52.881 N
From:	Map	Easting:	3,406,089.43 usft	Longitude:	104° 2' 6.204 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.95 °

Well	Shull 6-25-9-60					
Well Position	+N/-S	-5.2 usft	Northing:	1,506,554.51 usft	Latitude:	40° 42' 52.873 N
	+E/-W	-260.4 usft	Easting:	3,405,829.01 usft	Longitude:	104° 2' 9.587 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	0.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/18/2014	8.01	67.30	52,998

Design	Design #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	5.75

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	
150.9	6.03	113.03	150.6	-3.1	7.3	4.00	4.00	0.00	113.03	
5,535.2	6.03	113.03	5,505.1	-224.6	528.2	0.00	0.00	0.00	0.00	
6,459.9	90.00	358.82	6,100.0	348.9	573.8	10.00	9.08	-12.35	-114.09	6-25 land
10,908.2	90.00	358.82	6,100.0	4,796.3	482.6	0.00	0.00	0.00	0.00	6-25 TD

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
150.9	6.03	113.03	150.6	-3.1	7.3	-2.4	4.00	4.00	0.00
5,535.2	6.03	113.03	5,505.1	-224.6	528.2	-170.5	0.00	0.00	0.00
6,459.9	90.00	358.82	6,100.0	348.9	573.8	404.6	10.00	9.08	-12.35
10,908.2	90.00	358.82	6,100.0	4,796.3	482.6	4,820.5	0.00	0.00	0.00

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Wellbore:	Wellbore #1		
Design:	Design #1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
6-25 TD	0.00	0.00	6,100.0	4,796.3	482.6	1,511,350.81	3,406,311.60	40° 43' 40.181 N	104° 2' 2.291 W
- plan hits target center									
- Point									
6-25 land	0.00	0.00	6,100.0	348.9	573.8	1,506,903.44	3,406,402.85	40° 42' 56.226 N	104° 2' 2.061 W
- plan hits target center									
- Point									