

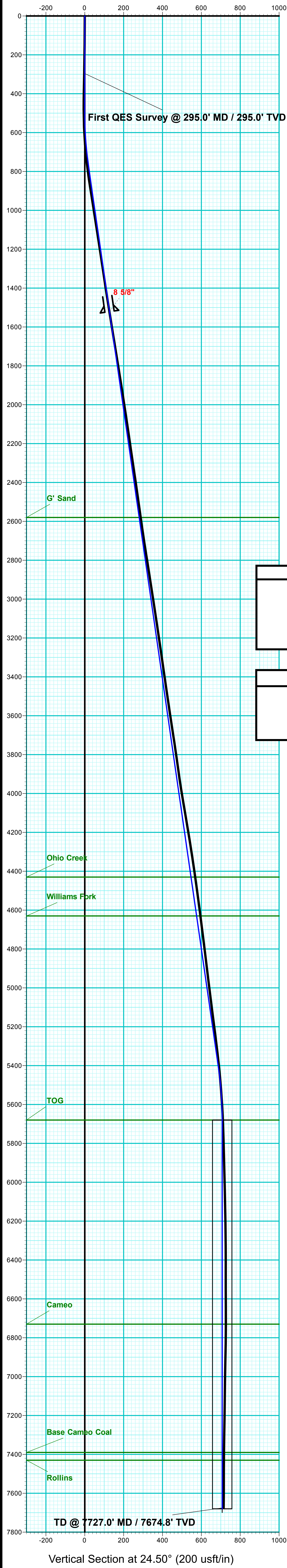
Company Name: Laramie Energy, LLC
BCU 0993-21-04W
Mesa County, CO
Rig: H&P #522
Created By: Will Jircik
Date: 10/13/2018

BCU 0993-21-04W
Mesa County, CO
Q181359 & RM-181142
Design #2



PROJECT DETAILS:		Mesa County, CO
Geodetic System:	US State Plane 1983	
Datum:	North American Datum 1983	
Ellipsoid:	GRS 1980	
Zone:	Colorado Central Zone	
System Datum:	Mean Sea Level	

WELL DETAILS: BCU 0993-21-04W					
			7257.0		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	1529672.96	2354497.85	39.265444	-107.780160



DESIGN TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude
PBHL - BCU 0993-21-04W	7680.0	643.6	293.3	1530309.00	2354807.22	39.267211
						Longitude
						-107.779124
						Shape
						Circle (Radius: 50.0)

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
2580.0	2599.6	G' Sand
4430.0	4468.7	Ohio Creek
4630.0	4670.8	Williams Fork
5680.0	5729.8	TOG
6730.0	6779.8	Cameo
7390.0	7439.8	Base Cameo Coal
7430.0	7479.8	Rollins

T

M

Azimuths to True North

Magnetic North: 9.37°

Strength: 51267.2snT

Dip Angle: 65.39°

Date: 10/3/2018

Model: USER DEFINED

DESIGN ANNOTATIONS							
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.0
773.4	8.20	24.50	772.5	17.6	8.1	19.5	19.5
5456.3	8.20	24.50	5407.5	625.8	285.2	687.7	687.7
5729.8	0.00	0.00	5680.0	643.6	293.3	707.3	707.3
7729.8	0.00	0.00	7680.0	643.6	293.3	707.3	707.3
							Annotation
							KOP/ (Build 3.00°/100')
							EOB @ 8.20° Inc / 24.50° Azm
							Drop @ 3.00°/100'
							EOD @ Vertical
							TD @ 7729.8' MD / 7680.0' TVD

ANNOTATIONS							
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure
295.0	1.30	237.60	295.0	-1.8	-2.8	-2.8	3.3
7727.0	1.00	260.80	7674.8	663.0	268.9	714.8	771.9
							Annotation
							First QES Survey @ 295.0' MD / 295.0' TVD
							TD @ 7727.0' MD / 7674.8' TVD

