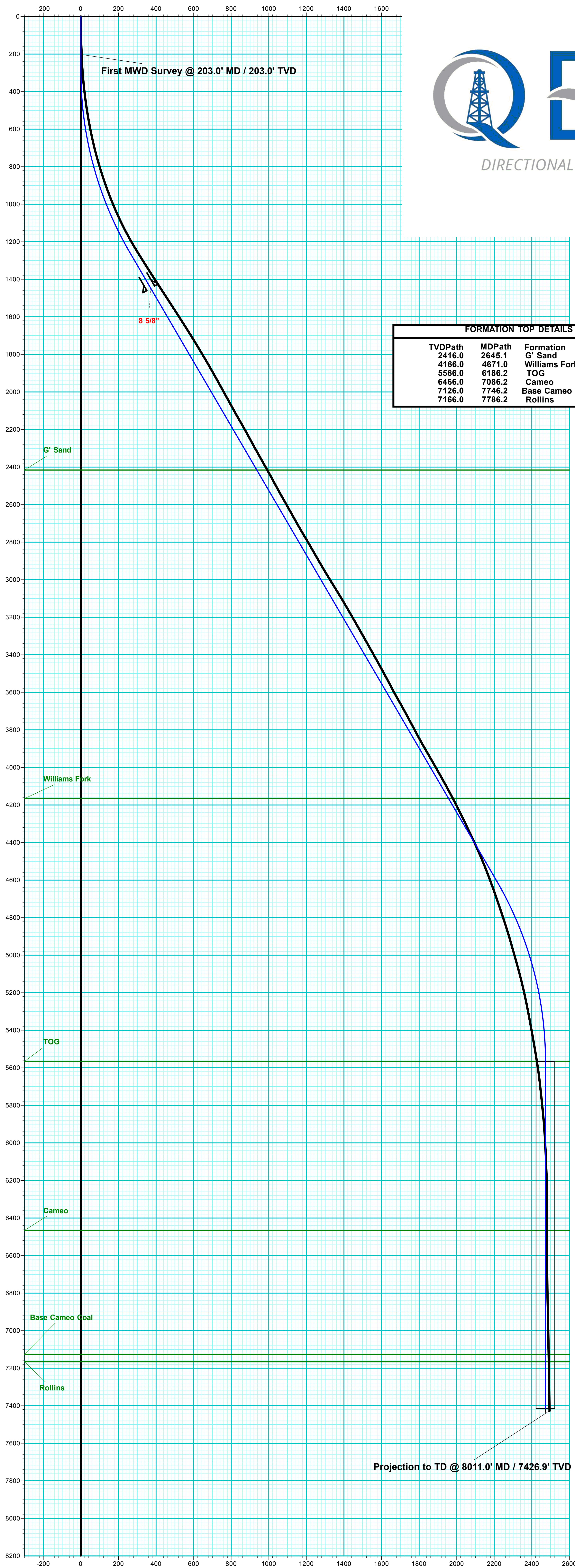


Nichols 0994-13-20W  
 Mesa County, CO  
 Q180128 & RM-180113  
 Design #2

Company Name: Laramie Energy, LLC  
 Nichols 0994-13-20W  
 Mesa County, CO  
 Rig: H&P #290  
 Created By: Will Jircik  
 Date: 2/2/2018

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

Azimuths to True North  
 Magnetic North: 9.53°  
 Strength: 51348.8snT  
 Dip Angle: 65.42°  
 Date: 1/24/2018  
 Model: IGRF2015



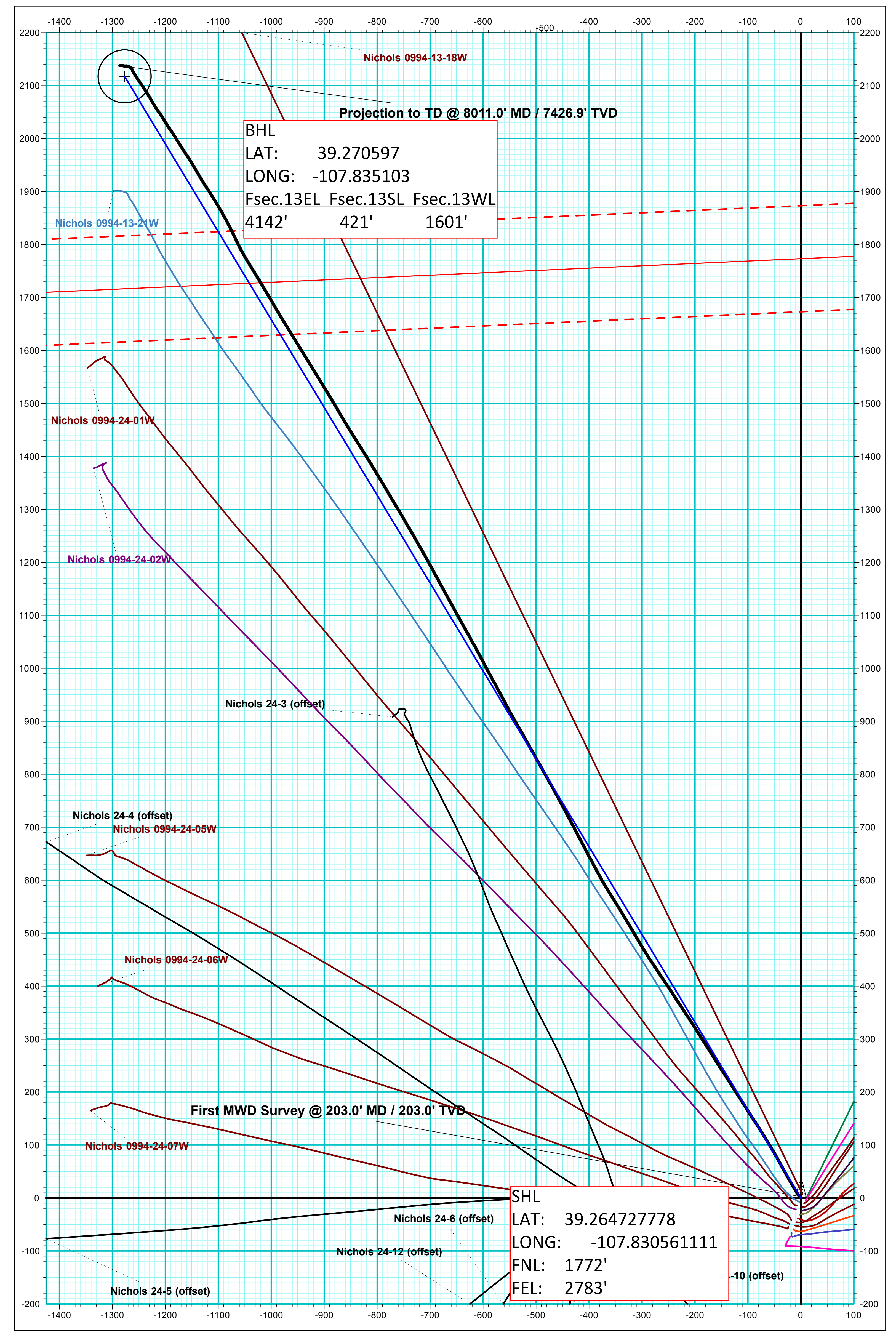
FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
2416.0	2645.1	G' Sand
4166.0	4671.0	Williams Fork
5566.0	6186.2	TOG
6466.0	7086.2	Cameo
7126.0	7746.2	Base Cameo Coal
7166.0	7786.2	Rollins

WELL DETAILS: Nichols 0994-13-20W					
+N/-S	+E/-W	Northing	Ground Level: Easting	7137.0 Latitude	Longitude
0.0	0.0	1529774.35	2340225.98	39.264728	-107.830561

DESIGN #2 ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation	
294.0	0.00	0.00	294.0	0.0	0.0	0.0	0.0	KOP (Build 3° / 100')	
1302.5	30.25	328.91	1256.2	222.8	-134.3	260.1	260.1	EOB @ 30.25° Inc. / 328.91° Azm	
5177.8	30.25	328.91	4603.7	1894.9	-1142.5	2212.6	2212.6	Drop 3° / 100'	
6186.2	0.00	328.91	5566.0	2117.6	-1276.8	2472.8	2472.8	EOD @ Vertical	
8036.2	0.00	0.00	7416.0	2117.6	-1276.8	2472.8	2472.8	TD @ 8036.2' MD / 7416.0' TVD	

ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation	
203.0	2.20	322.10	203.0	3.1	-2.4	3.9	3.9	First MWD Survey @ 203.0' MD / 203.0' TVD	
8011.0	1.97	269.88	7426.9	2137.7	-1285.8	2494.6	2505.8	Projection to TD @ 8011.0' MD / 7426.9' TVD	

DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - Nichols 0994-13-20W	16.0	2117.6	-1276.8	1531924.02	2339003.92	39.270542	-107.835071	Circle (Radius: 50.0)



Vertical Section at 328.91° (200 usft/in)