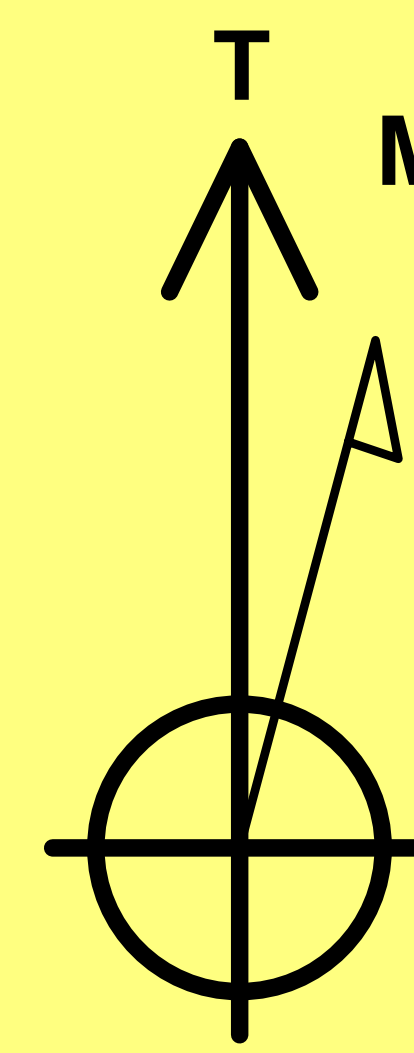


Nichols 0994-24-10W  
Mesa County, CO  
Q180235 & RM-180050  
Design #2

Company Name: Laramie Energy, LLC  
Nichols 0994-24-10W  
Mesa County, CO  
Rig: H&P #290  
Created By: Will Jircik  
Date: 2/25/2018

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: 9.45°

Strength: 51323.7snT  
Dip Angle: 65.40°  
Date: 2/13/2018  
Model: USER DEFINED



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2396.0	2453.5	G' Sand
4146.0	4267.9	Williams Fork
5546.0	5706.9	TOG
6446.0	6506.9	Camero
7106.0	7266.9	Base Cameo Coal
7146.0	7306.9	Rollins

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - Nichols 0994-24-10W	7396.0	-126.7	-1236.2	1529194.06	2338889.55	39.263041	-107.835227	Circle (Radius: 50.0)

DESIGN ANNOTATIONS

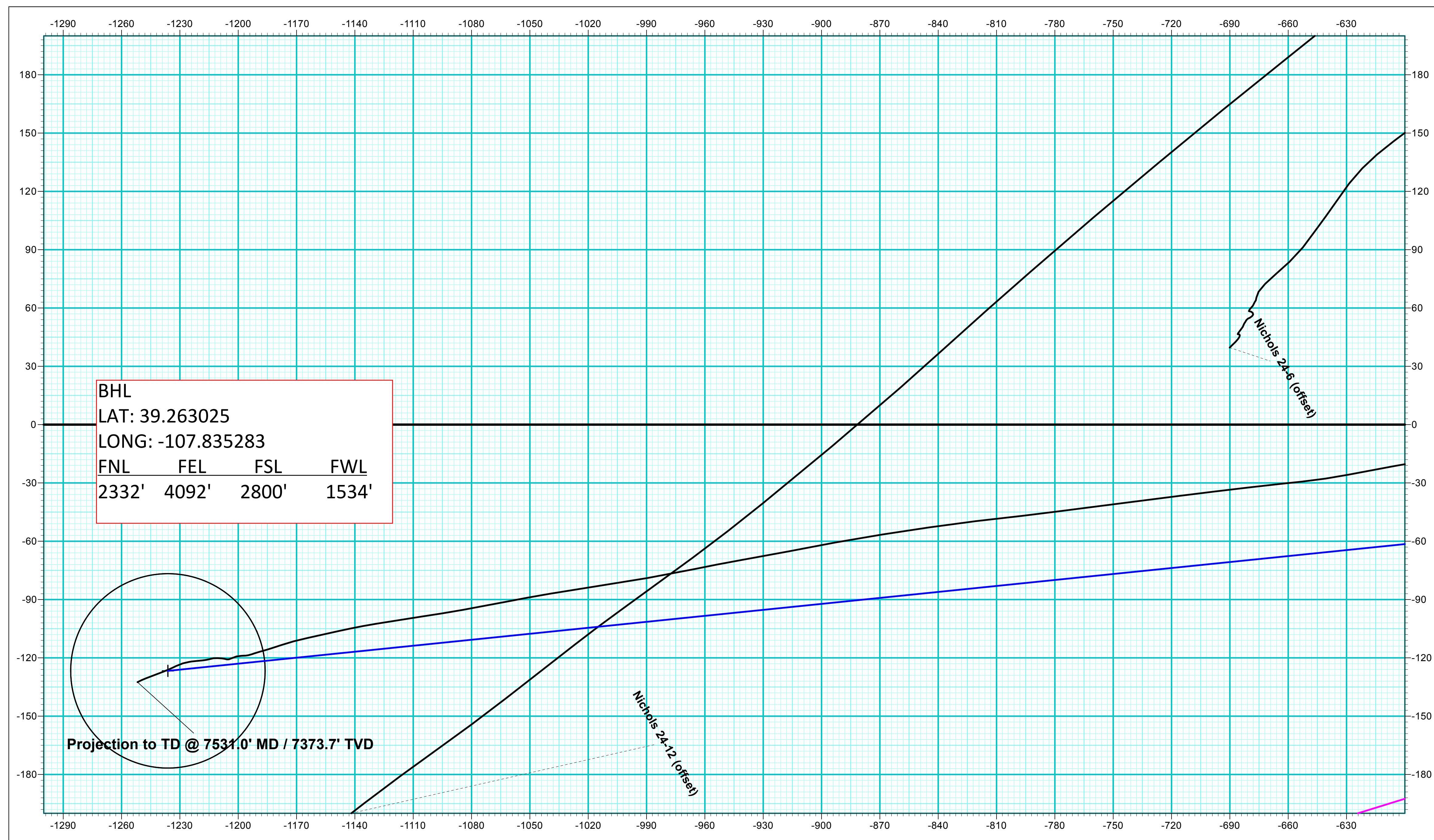
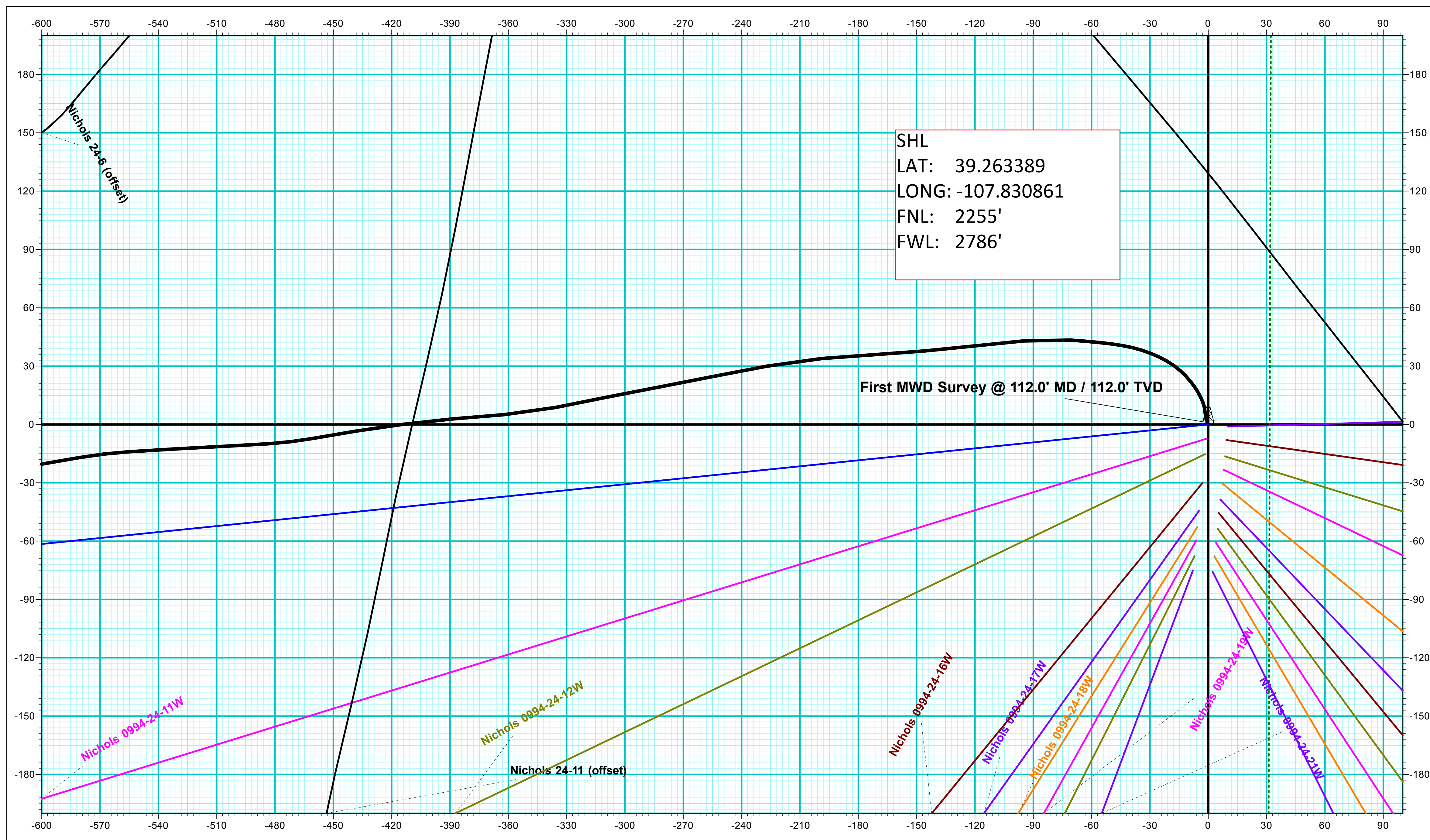
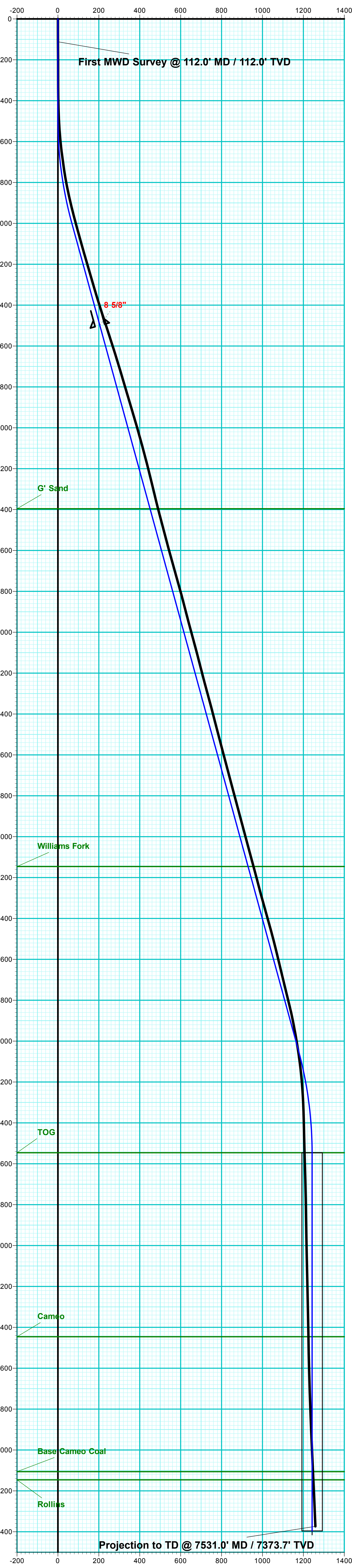
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
494.0	0.00	0.00	494.0	0.0	0.0	0.0	0.0	KOP (Build 3° / 100')
1004.4	15.31	264.15	998.4	-6.9	-67.4	67.8	67.8	EOB @ 15.31° Inc. / 264.15° Azm
5196.5	15.31	264.15	5041.5	-119.8	-1168.7	1174.8	1174.8	Drop 3° / 100'
5706.9	0.00	0.00	5546.0	-126.7	-1236.2	1242.6	1242.6	EOD @ Vertical
7556.9	0.00	0.00	7396.0	-126.7	-1236.2	1242.6	1242.6	TD @ 7556.9' MD / 7396.0' TVD

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
112.0	1.10	337.30	112.0	1.0	-0.4	0.3	1.1	First MWD Survey @ 112.0' MD / 112.0' TVD
7531.0	2.59	244.04	7373.7	-132.5	-1251.8	1258.8	1289.1	Projection to TD @ 7531.0' MD / 7373.7' TVD

WELL DETAILS: Nichols 0994-24-10W

+N/-S	+E/-W	Northing	Ground Level: Easting	7212.0 Latitude	Longitude
0.0	0.0	1529289.00	2340128.56	39.263389	-107.830861



Vertical Section at 264.15° (200 usft/in)