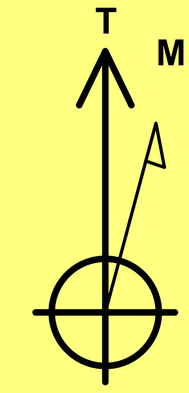
Nichols 0994-24-13E
Mesa County, CO
Q180329 & RM-180288
Design #2

Company Name: Laramie Energy, LLC
Nichols 0994-24-13E
Mesa County, CO
Rig: H&P #290
Created By: Will Jircik
Date: 3/25/2018

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

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2456.0	2544.9	G' Sand
4206.0	4396.0	Williams Fork
5606.0	5852.4	TOG
6506.0	6752.4	Cameo
7166.0	7412.4	Base Cameo Coal
7206.0	7452.4	Rollins
7236.0	7482.4	Corcoran
7236.0	7482.4	Cozzette



Azimuths to True North
Magnetic North: 9.45°

Strength: 51314.5snT
Dip Angle: 65.40°
Date: 3/14/2018
Model: USER DEFINED

DESIGN TARGET DETAILS

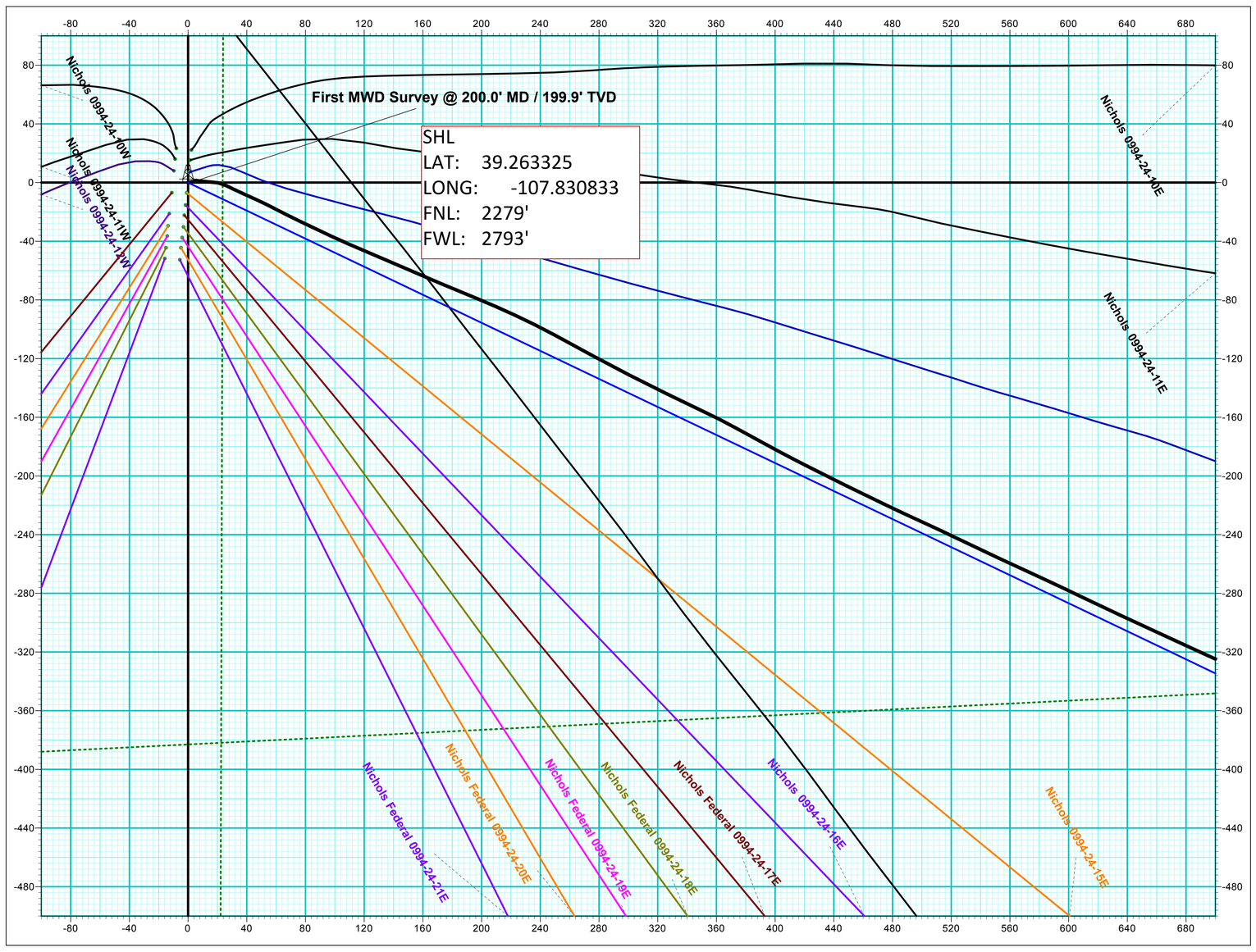
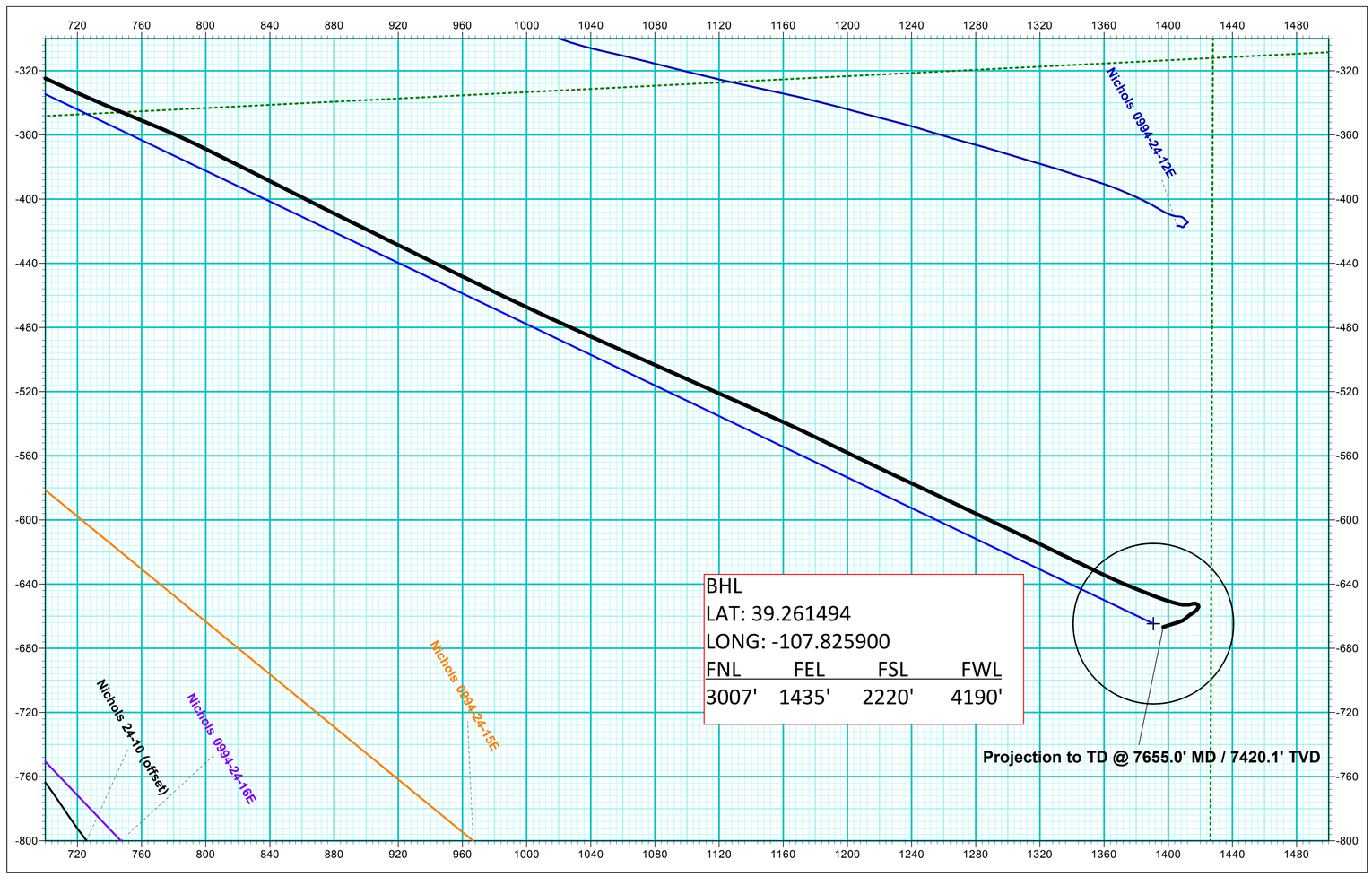
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - Nichols 0994-24-13E	7456.0	-664.6	1390.8	1528565.40	2341509.17	39.261500	-107.825921	Circle (Radius: 50.0)

DESIGN ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
494.0	0.00	0.00	494.0	0.0	0.0	0.0	0.0	KOP (Build 3° / 100')
1127.9	19.02	115.54	1116.3	-44.9	94.1	104.2	104.2	EOB @ 19.02° Inc. / 115.54° Azm
5218.5	19.02	115.54	4983.7	-619.7	1296.7	1437.2	1437.2	Drop 3° / 100'
5852.4	0.00	0.00	5606.0	-664.6	1390.8	1541.4	1541.4	EOB @ Vertical
7702.4	0.00	0.00	7456.0	-664.6	1390.8	1541.4	1541.4	TD @ 7702.4' MD / 7456.0' TVD

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
200.0	3.40	77.50	199.9	1.3	5.8	4.7	5.9	First MWD Survey @ 200.0' MD / 199.9' TVD
7655.0	2.11	252.12	7420.1	-666.7	1396.9	1547.8	1593.6	Projection to TD @ 7655.0' MD / 7420.1' TVD

WELL DETAILS: Nichols 0994-24-13E

+N/-S	+E/-W	Northing	Ground Level: Easting	7212.0 Latittude	Longitude
0.0	0.0	1529265.50	2340135.89	39.263325	-107.830833