

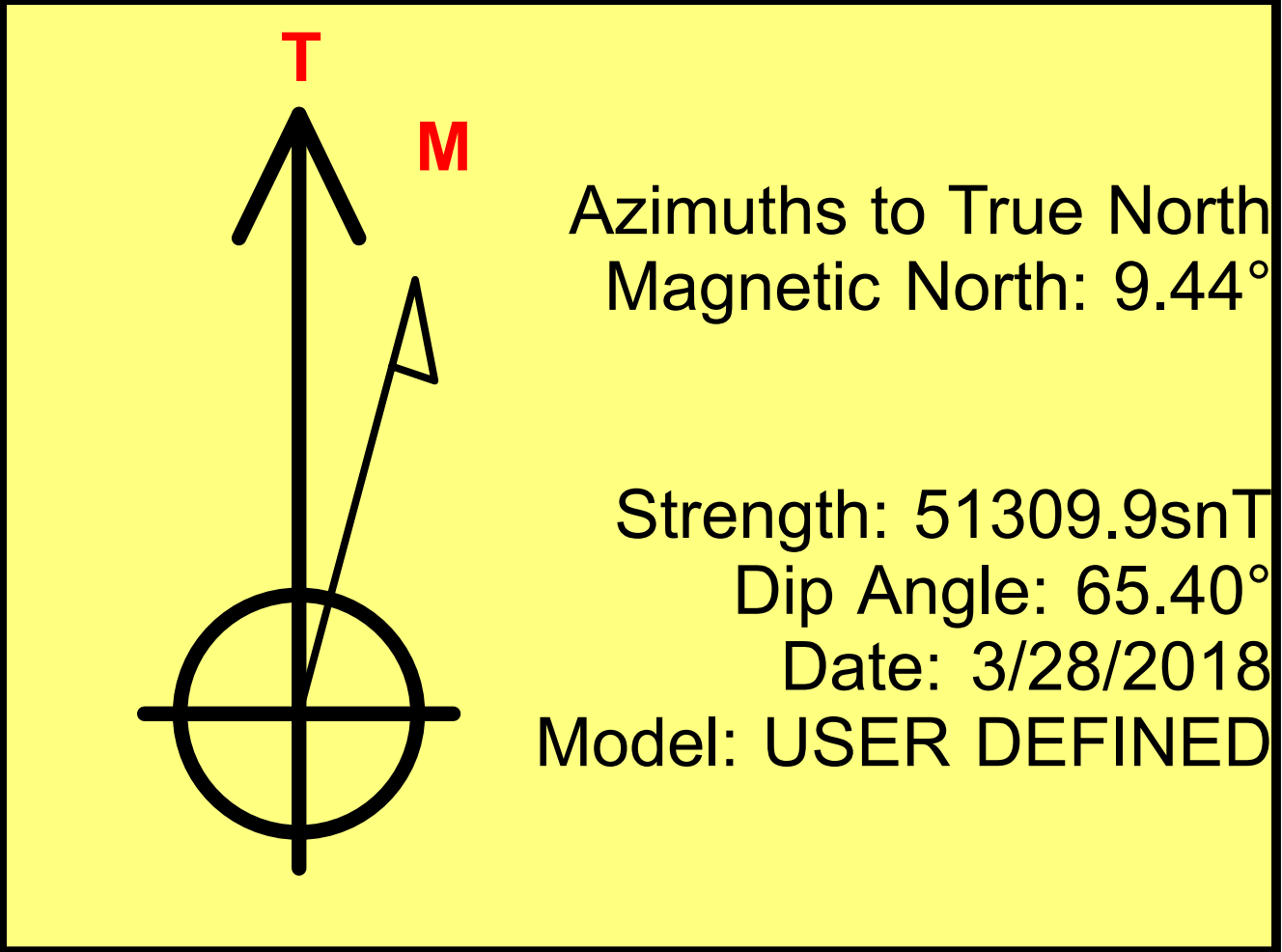
Nichols 0994-24-17W  
Mesa County, CO  
Q180403 & RM-180347  
Design #3

Company Name: Laramie Energy, LLC  
Nichols 0994-24-17W  
Mesa County, CO  
Rig: H&P #290  
Created By: Will Jircik  
Date: 4/25/2018



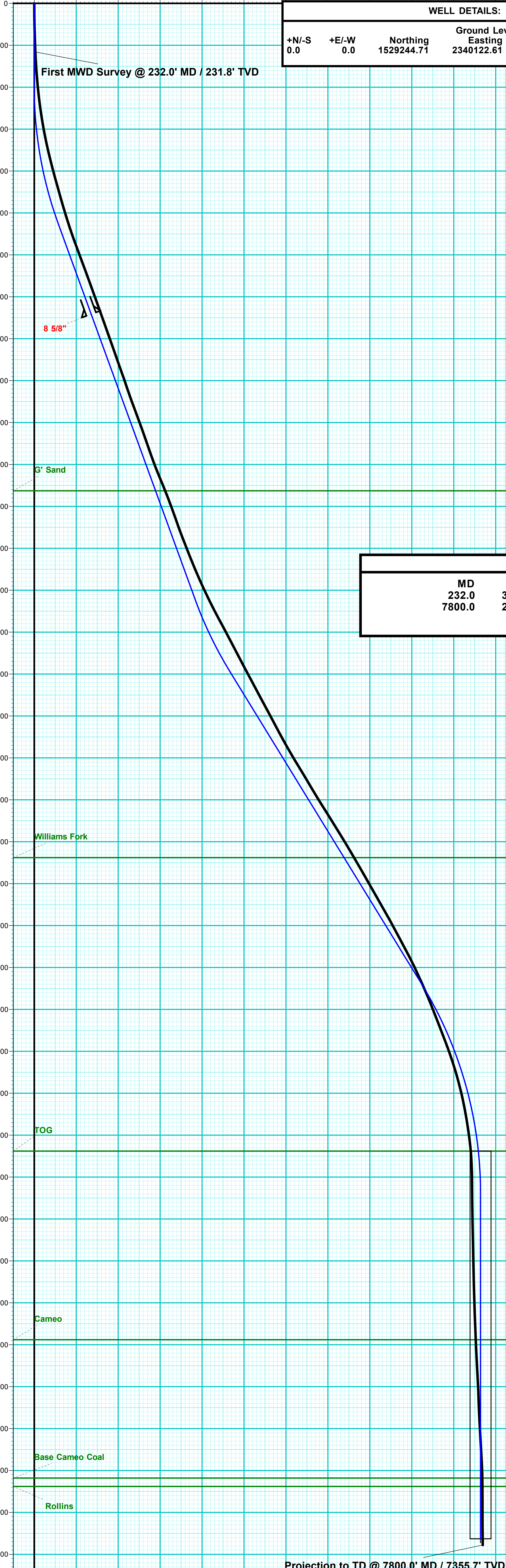
PROJECT DETAILS:	Mesa County, CO
Geodetic System:	US State Plane 1983
Datum:	North American Datum 1983
Ellipsoid:	GRS 1980
Zone:	Colorado Central Zone
System Datum:	Mean Sea Level

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
2326.0	2421.1	G' Sand
4076.0	4396.5	Williams Fork
5476.0	5952.4	TOG
6376.0	6852.3	Cameo
7036.0	7512.8	Base Cameo Coal
7076.0	7552.8	Rollins

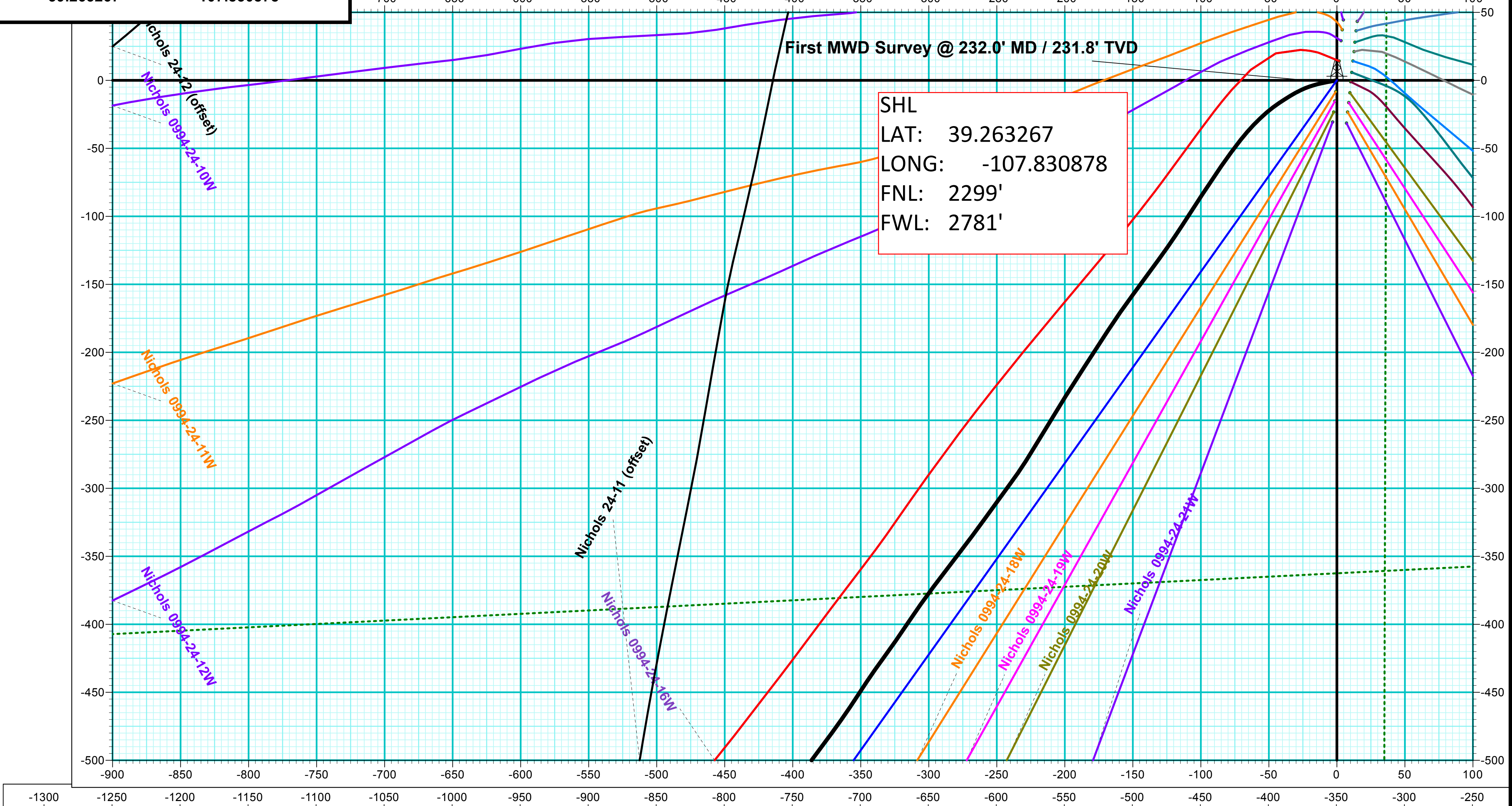


DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL - Nichols 0994-24-17W	7326.0	-1734.7	-1232.3	1527542.17	2338846.23	39.258504	-107.835230	Circle (Radius: 50.0)

DESIGN #3 ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSecDeparture	Annotation		
400.0	0.00	0.00	400.0	0.0	0.0	0.0	KOP (Build 3° / 100')		
1066.7	20.00	215.39	1053.2	-93.9	-66.7	115.2	EOB @ 20.00° Inc. / 215.39° Azm		
2972.7	20.00	215.39	2844.3	-625.3	-444.2	767.1	Build 3° / 100'		
3356.5	31.52	215.39	3189.4	-761.1	-540.7	933.6	EOB @ 31.52° Inc. / 215.39° Azm		
5102.3	31.52	215.39	4677.7	-1505.1	-1069.1	1846.2	Drop 3° / 100'		
6152.8	0.00	0.00	5676.0	-1734.7	-1232.3	2127.9	EOD @ Vertical		
7802.8	0.00	0.00	7326.0	-1734.7	-1232.3	2127.9	TD @ 7802.8' MD / 7326.0' TVD		



WELL DETAILS: Nichols 0994-24-17W					
+N/-S	+E/-W	Northing	Ground Level: Easting	7212.0	Longitude
0.0	0.0	1529244.71	2340122.61	39.263267	-107.830878



ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSecDeparture	Annotation		
232.0	3.70	259.90	231.8	-1.3	-7.4	5.3	7.5	First MWD Survey @ 232.0' MD / 231.8' TVD	
7800.0	2.07	142.86	7355.7	-1733.5	-1252.0	2138.2	2178.1	Projection to TD @ 7800.0' MD / 7355.7' TVD	

