

Project: Wells Ranch
 Site: A Section 21
 Well: Harper A21-669
 Wellbore: Original Drilling
 Design: APD - Rev 1

Northern Region - DJ Basin

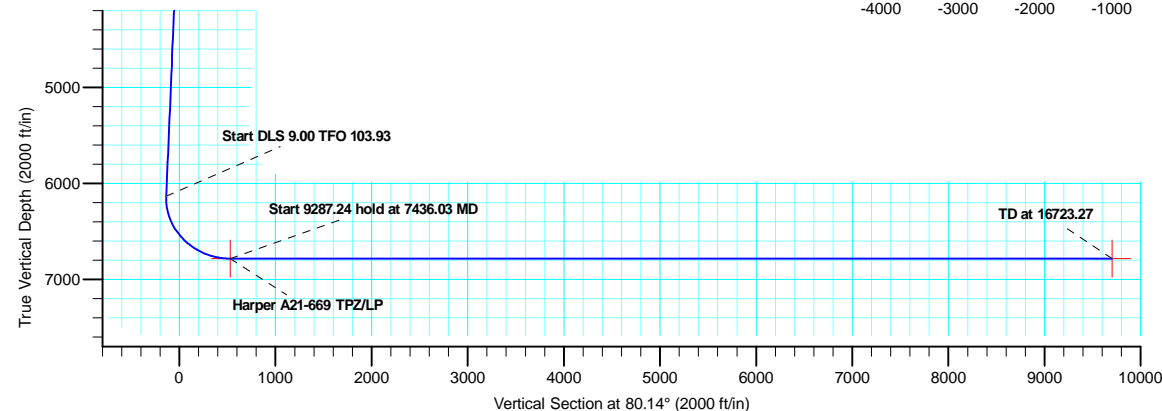
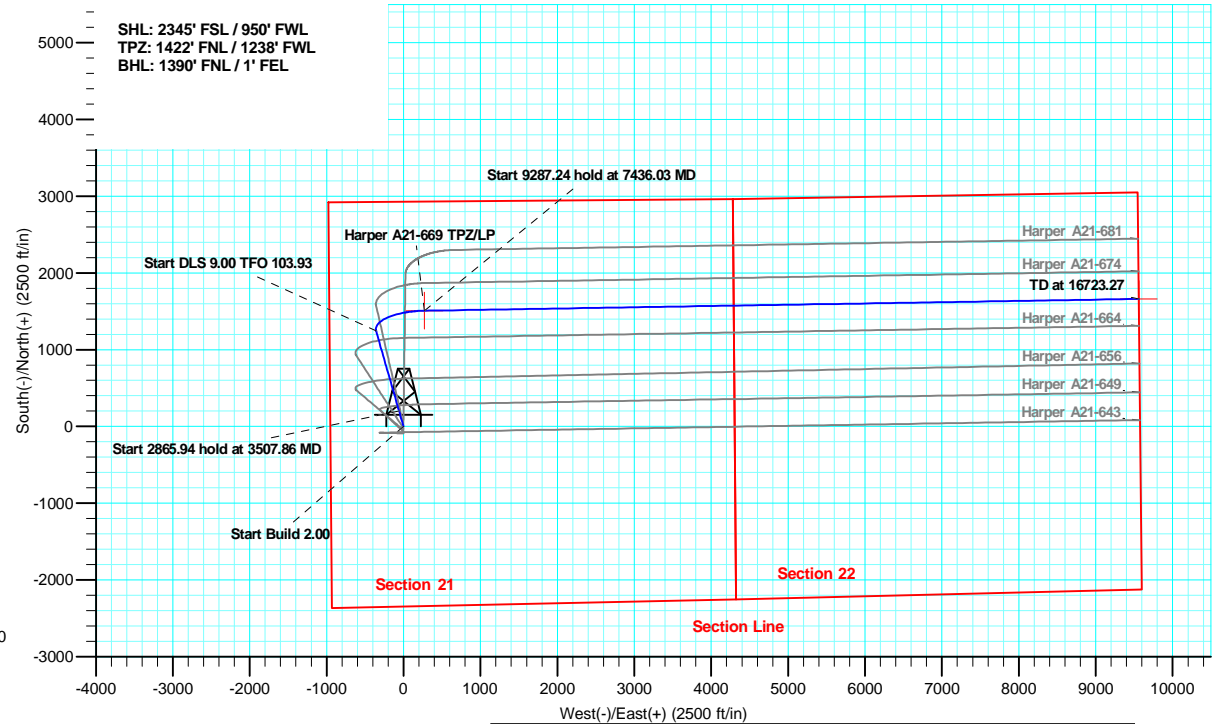
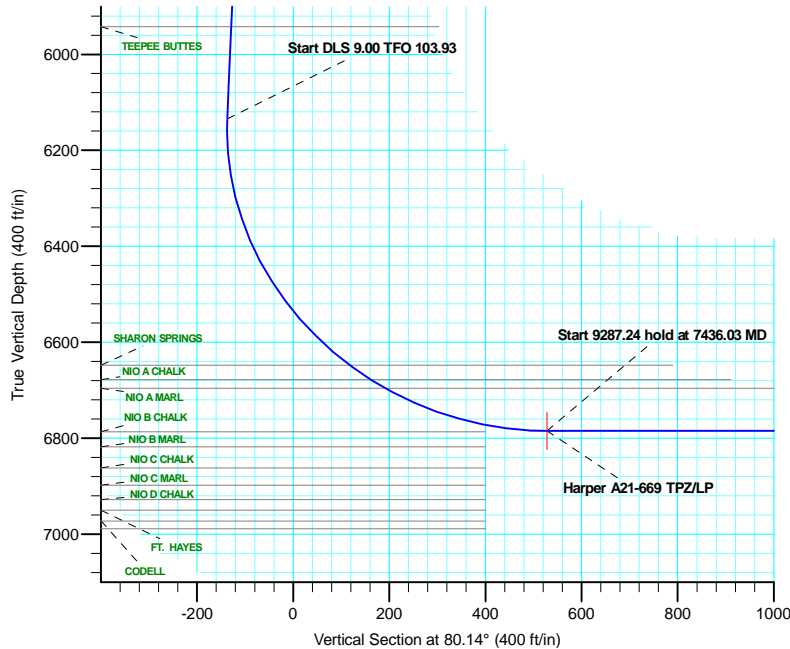
Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: Colorado Northern Zone
 System Datum: Mean Sea Level

SECTION DETAILS

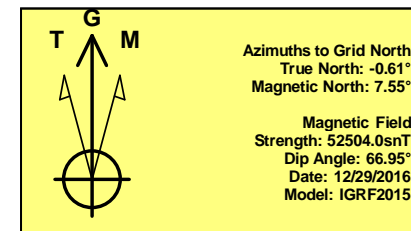
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2400.00	0.00	0.00	2400.00	0.00	0.00	0.00	0.00	0.00	
3	3507.86	22.16	344.06	3480.45	203.42	-58.11	2.00	344.06	-22.40	
4	6373.80	22.16	344.06	6134.75	1242.74	-354.98	0.00	0.00	-136.85	
5	7436.03	90.00	89.05	6785.00		274.30	9.00	103.93	528.72	Harper A21-669 TPZ/LP
6	16723.27	90.00	89.05	6785.00		9560.27	0.00	0.00	9703.70	Harper A21-669 BHL 1390'FNL, 1'FEL

WELL DETAILS: Harper A21-669

Northing		Ground Level:		4743.00	
Easting		3261183.68		Latitude	
0.00		0.00		40.4706872	
1415694.29		3261183.68		Longitude	
				-104.5612156	



OK to submit with 2A as per Noble Drilling



Plan: APD - Rev 1 (Harper A21-669/Original Drilling)

Created By: Shelly C. Peterkin Date: 10:00, January 17 2018