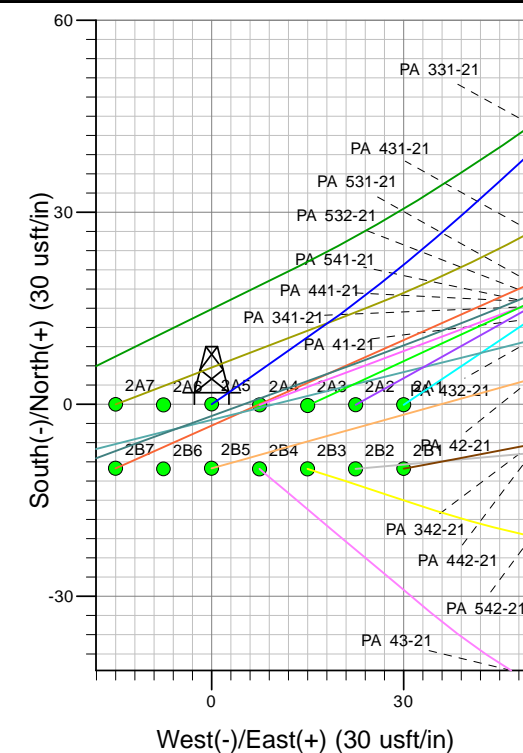
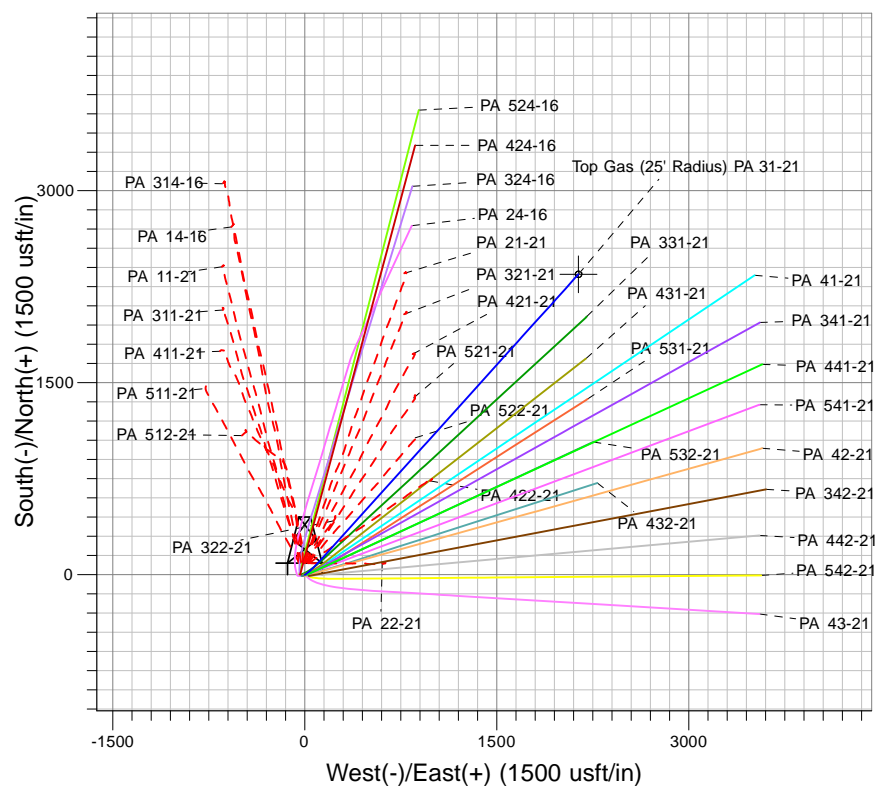
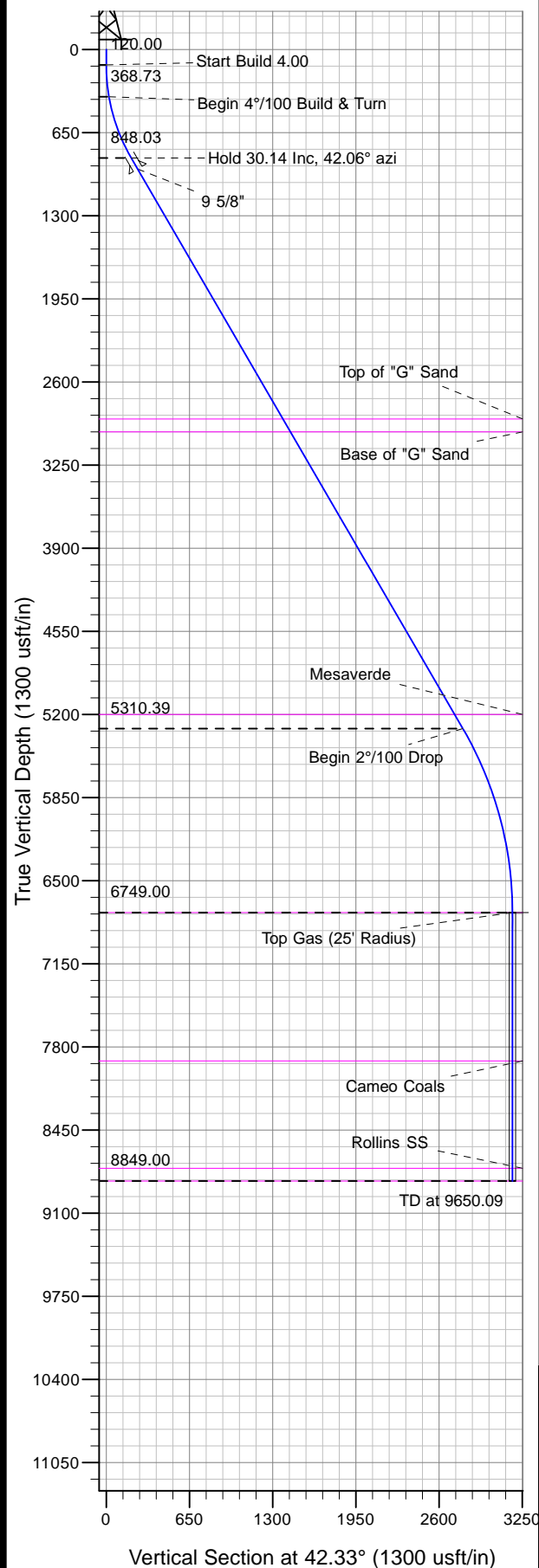




Well Name: PA 31-21
Surface Location: PA 22-21 Pad
North American Datum 1983 , US State Plane 1983, Colorado Central Zone
Ground Elevation: 6030.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1620600.10	2292479.50	39.51051	-108.00799	2A5

KELLY BUSHING @ 6056.00usft (Nabors 26')



Project: PA 21-06S-095W
Site: PA 22-21 Pad
Well: PA 31-21
Design #2 07Nov12 kjs



Azimuths to True North
Magnetic North: 10.23°
Magnetic Field
Strength: 52157.3snT
Dip Angle: 65.72°
Date: 6/6/2012
Model: IGRF2010

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	V/Sect	Departure	Annotation
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	Start Build 4.00
370.00	10.00	55.00	368.73	12.48	17.83	21.23	21.76	Begin 4°/100 Build & Turn
882.73	30.14	42.06	848.03	134.91	141.86	195.26	196.31	Hold 30.14 Inc, 42.06° azi
6042.91	30.14	42.06	5310.39	2058.88	1877.70	2786.53	2787.60	Begin 2°/100 Drop
7550.09	0.00	0.00	6749.00	2346.52	2137.22	3173.93	3175.01	Top Gas
9650.09	0.00	0.00	8849.00	2346.52	2137.22	3173.93	3175.01	TD at 9650.09