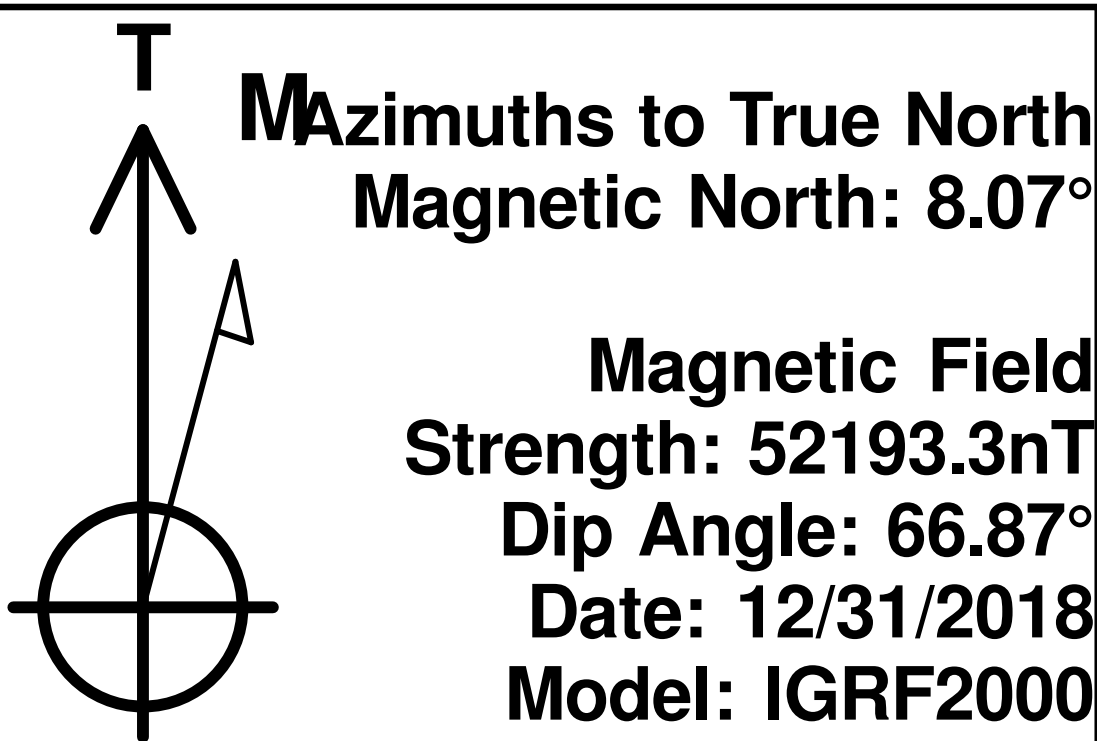




Extraction Oil & Gas
Project: Weld County, CO (NAD83)
Site: Sec 09-T05N-R65W Ash Pad
Well: MT Fed Heath 8W-20-13
Wellbore: Wellbore #1
Design: Wellbore #1 (MT Fed Heath 8W-20-13/Wellbore #1)
Patterson 340

PROJECT DETAILS: Weld County, CO (NAD83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Ground Level
Local North: True



SHL/ 1020' FNL & 1753' FWL
KOP/ 83' FWL & 2802' FSL
LP/ 2590' FNL & 460' FEL
BHL/460' FWL & 2906' FNL

Ground Elevation= 4635'

WELL DETAILS: MT Fed Heath 8W-20-13

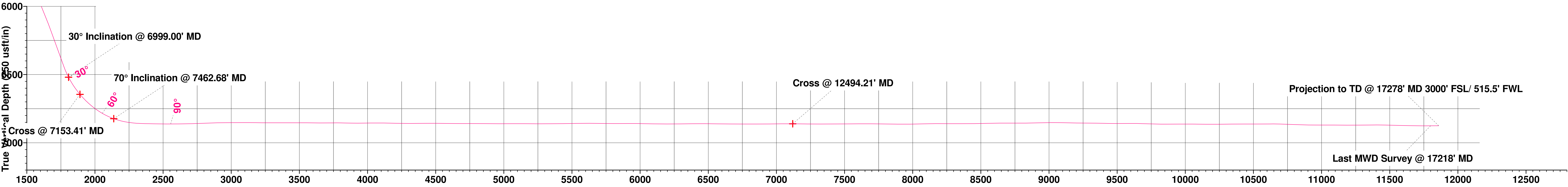
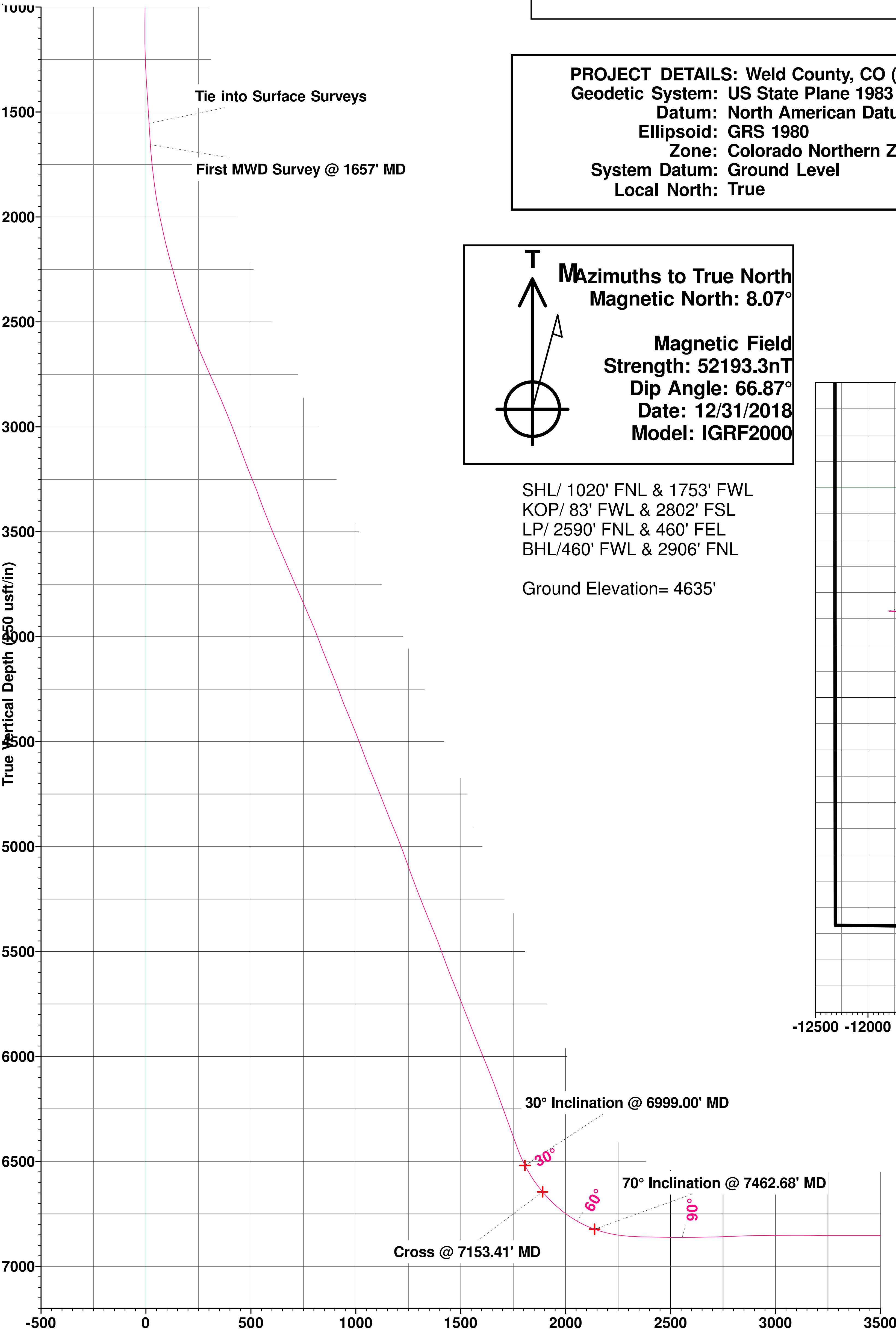
Ground Elevation:: 4635.00
RKB Elevation: kb @ 4660.00usft (Patterson 340)
Rig Name: Patterson 340

Northing	Easting	Latitude	Longitude
1396205.90	3230636.56	40.418030	-104.671660



ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
1555.00	4.13	233.60	1554.24	-15.45	-13.07	14.54	34.43	Tie into Surface Surveys
1657.00	4.60	229.29	1655.94	-20.30	-19.13	21.05	42.20	First MWD Survey @ 1657' MD
6999.00	30.00	236.29	6519.50	-1413.24	-1674.57	1806.46	2206.67	30° Inclination @ 6999.00' MD
7153.41	40.82	251.36	6645.13	-1451.66	-1755.01	1890.30	2297.17	Cross @ 7153.41' MD
7462.68	70.00	264.72	6823.41	-1489.76	-1999.96	2137.83	2545.05	70° Inclination @ 7462.68' MD
12494.21	89.32	271.66	6860.82	-1337.96	-7021.50	7119.57	7571.94	Cross @ 12494.21' MD
17218.00	90.41	272.25	6875.68	-1178.30	-11740.98	11799.95	12295.17	Last MWD Survey @ 17218' MD
17278.00	90.41	272.25	6875.25	-1175.94	-11800.93	11859.38	12355.17	Projection to TD @ 17278' MD 3000' FSL/ 515.5' FWL



Vertical Section at 264.31° (250 usft/in)