



Project: WELD COUNTY, CO  
Site: WINDER SOUTH PAD  
Well: WINDER SOUTH 7  
Wellbore: WINDER SOUTH 7  
Design: WINDER SOUTH 7  
Latitude: 40° 30' 9.623 N  
Longitude: 104° 53' 25.220 W  
GL: 4855.00  
KB: WELL @ 4880.00ft (Patterson 346)



#### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LP WINDER SOUTH 7 P3	7220.00	-1818.60	-203.58	1424727.13	3169347.34	40° 29' 51.652 N	104° 53' 27.856 W
PBHL WINDER SOUTH 7 P3	7220.00	-1793.78	-9610.90	1424687.27	3159940.09	40° 29' 51.878 N	104° 55' 29.629 W

#### WELL DETAILS: WINDER SOUTH 7

+N/-S	+E/-W	Northing	Ground Level:	Latitude	Longitude	Slot
0.00	0.00	1426547.08	4855.00 Easting 3169538.41	40° 30' 9.623 N	104° 53' 25.220 W	

#### SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSEct	Annotation
4029.00	20.42	172.28	3910.46	-828.82	185.32	0.00	0.00	-30.11	Start DLS 2.00 TFO 172.05
4219.61	16.65	174.12	4091.15	-888.95	192.59	2.00	172.05	-26.22	Start 2773.76 hold at 4219.60 MD
6993.36	16.65	174.12	6748.57	-1679.63	274.04	0.00	0.00	38.78	Start DLS 12.00 TFO 95.78
7757.74	90.00	270.15	7220.00	-1818.60	-203.58	12.00	95.78	533.78	Start 9407.36 hold at 7757.74 MD
17165.10	90.00	270.15	7220.00	-1793.78	-9610.90	0.00	0.00	9776.86	TD at 17165.10

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3580.00	3638.11	PARKMAN
4140.00	4270.60	SUSSEX
4700.00	4855.11	SHANNON
6905.00	7159.09	SHARON SPRINGS
6951.00	7210.61	NIORARA
7058.00	7343.09	NIO B TARGET

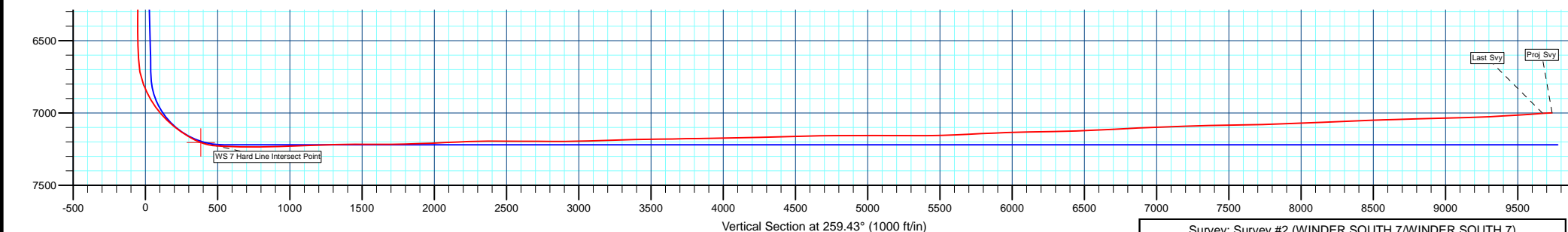
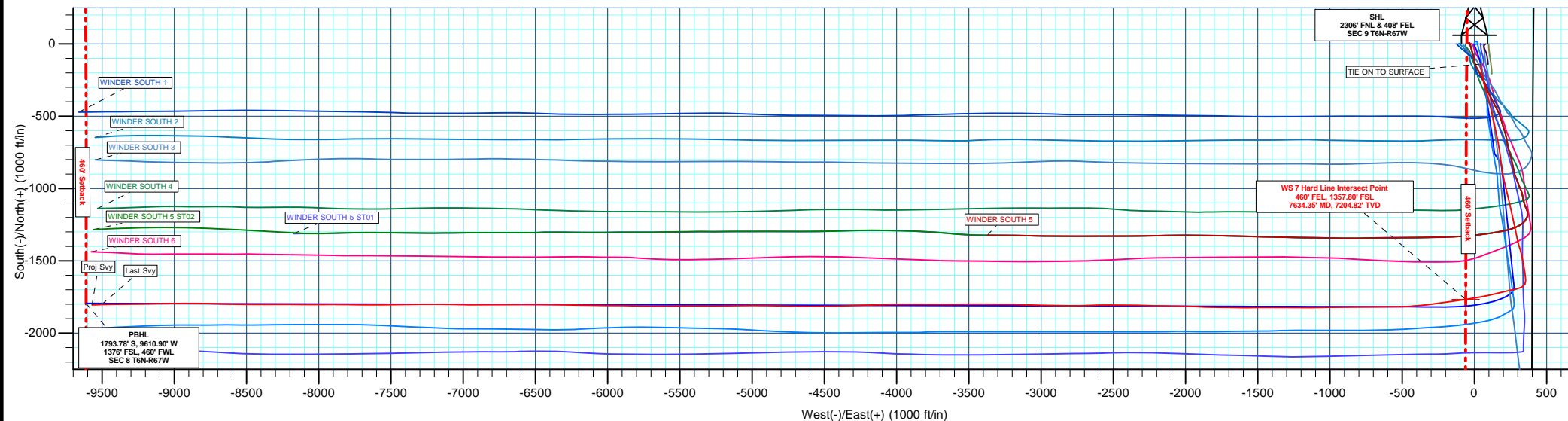


Azimuths to True North  
Magnetic North: 8.36°

Magnetic Field  
Strength: 52514.5nT  
Dip Angle: 66.93°  
Date: 09/26/2016  
Model: IGRF2015

#### PROJECT DETAILS: WELD COUNTY, CO

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



Survey: Survey #2 (WINDER SOUTH 7/WINDER SOUTH 7)

Created By: TRACY WILLIAMS Date: 13:31, December 12 2016