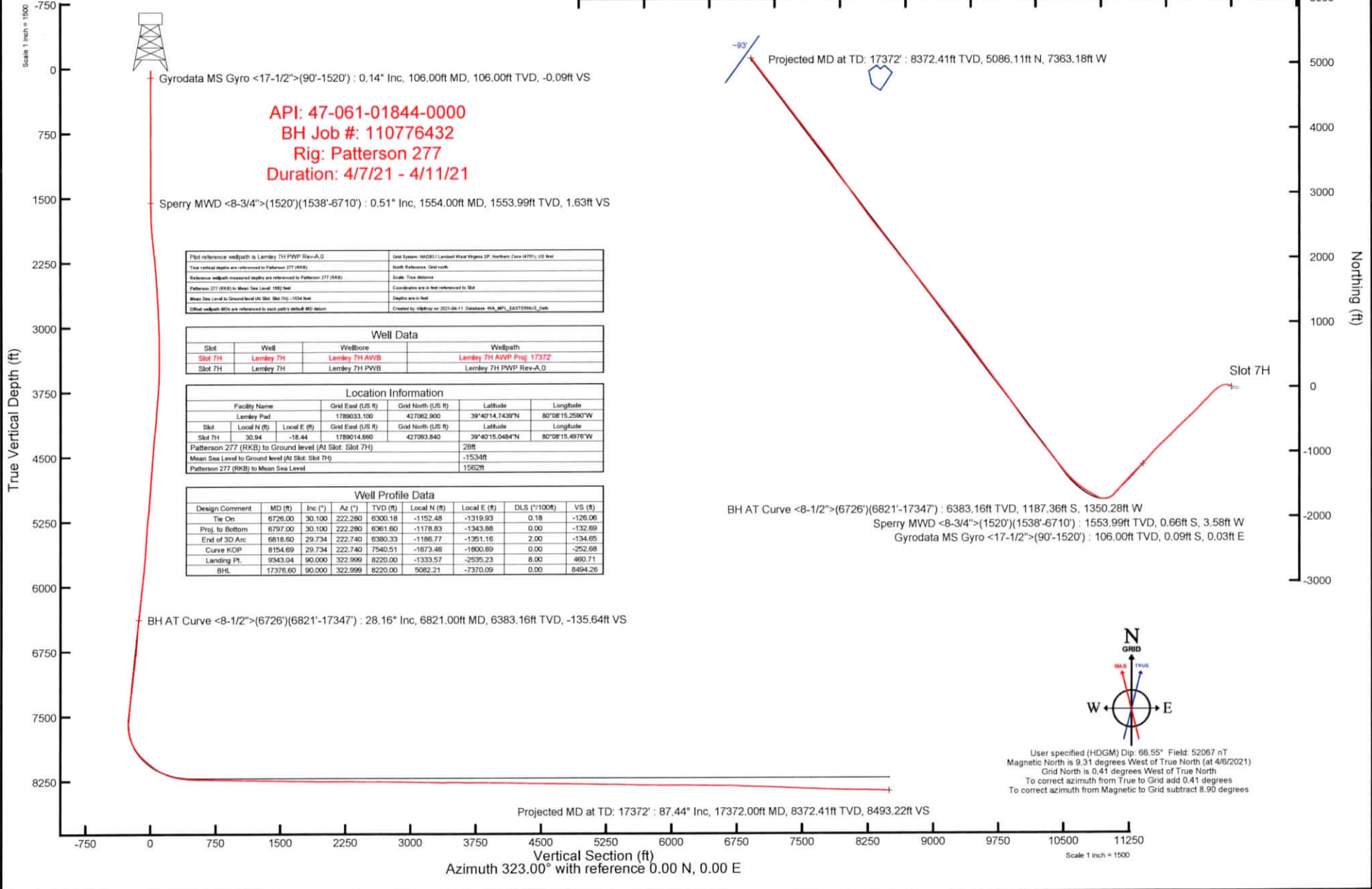


NORTHEAST NATURAL ENERGY, LLC

Location: Monongalia County, WV
 Field: Monongalia
 Facility: Lemley Pad

Slot: Slot 7H
 Well: Lemley 7H
 Wellbore: Lemley 7H PWB

Scale 1 inch = 2000
 Easting (ft)
 -10000 -9000 -8000 -7000 -6000 -5000 -4000 -3000 -2000 -1000 0 1000 6000

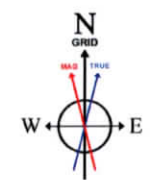


Plot reference wellpath is Lemley 7H PWB Rev-A.0	Grid System: NAD83 / Lambert West Virginia SP, Northern Zone (NAD83) US feet
True vertical depths are referenced to Patterson 277 (RRB)	North Reference: Grid north
Reference wellpath measured depths are referenced to Patterson 277 (RRB)	Scale: True distance
Patterson 277 (RRB) to Mean Sea Level: 1552 feet	Coordinates are in feet referenced to SGA
Mean Sea Level to Ground level (At Slot: Slot 7H): -1534 feet	Depth are in feet
Other wellpath MDs are referenced to each path's default MD station	Created by: jhiggins on 2021-04-11 Database: PIA_MPL_SAEY1996v1_02b

Well Data			
Slot	Well	Wellbore	Wellpath
Slot 7H	Lemley 7H	Lemley 7H AVVB	Lemley 7H AVVB Proj. 17372
Slot 7H	Lemley 7H	Lemley 7H PWB	Lemley 7H PWB Rev-A.0

Location Information						
Facility Name		Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Lemley Pad		1788033.100	427062.900	39°40'14.7439"N	80°08'15.2590"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Slot 7H	30.94	-18.44	1789014.890	427093.840	39°40'15.0484"N	80°08'15.4970"W
Patterson 277 (RRB) to Ground level (At Slot: Slot 7H)			28ft			
Mean Sea Level to Ground level (At Slot: Slot 7H)			-1534ft			
Patterson 277 (RRB) to Mean Sea Level			1552ft			

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (1100ft)	VS (ft)
Tie On	6726.00	30.100	222.280	6300.18	-1152.48	-1319.93	0.18	-126.06
Proj. to Bottom	6797.00	30.100	222.280	6361.60	-1178.83	-1343.88	0.00	-132.69
End of 3D Arc	6818.60	29.734	222.740	6380.33	-1186.77	-1351.16	2.00	-134.65
Curve KOP	8154.69	29.734	222.740	7540.51	-1673.46	-1800.89	0.00	-252.68
Landing Pt.	9343.04	90.000	322.999	8220.00	-1333.57	-2535.23	8.00	460.71
BHL	17376.60	90.000	322.999	8220.00	5082.21	-7370.09	0.00	8494.26



User specified (HDGM) Dip: 66.55° Field: 52067 nT
 Magnetic North is 9.31 degrees West of True North (at 4/6/2021)
 Grid North is 0.41 degrees West of True North
 To correct azimuth from True to Grid add 0.41 degrees
 To correct azimuth from Magnetic to Grid subtract 8.90 degrees