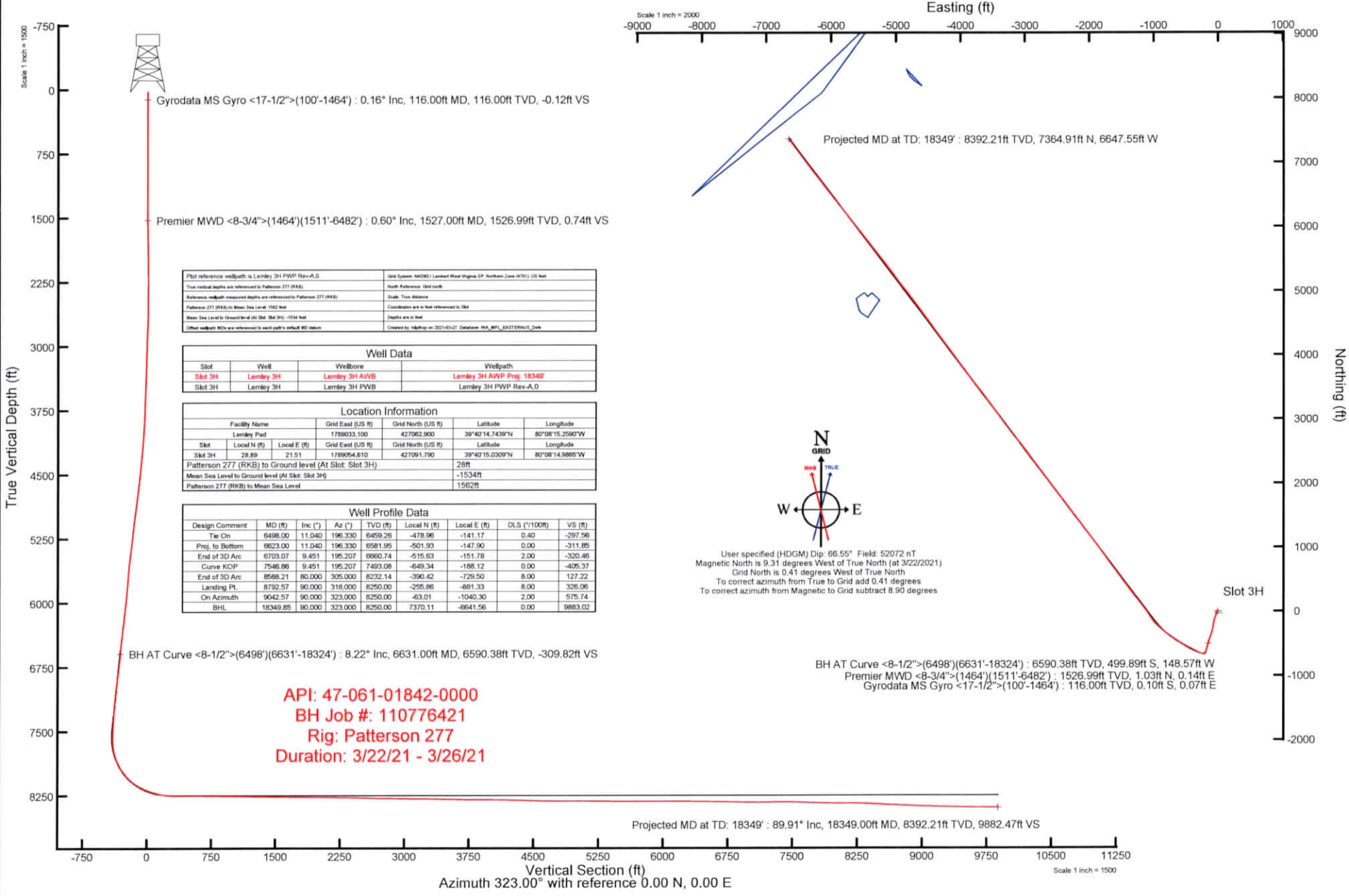


NORTHEAST NATURAL ENERGY, LLC

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

Slot: Slot 3H
 Well: Lemley 3H
 Wellbore: Lemley 3H PWB

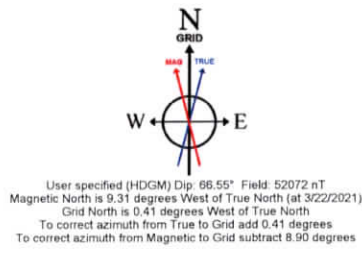


Plot reference: wellpath is Lemley 3H PWB Rev-A.0	Grid System: NAD83 / Lambert West Virginia S.P. Northern Zone 14701 US Feet
True vertical depths are referenced to Patterson 277 (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to Patterson 277 (RKB)	Scale: True distance
Patterson 277 (RKB) to Mean Sea Level: 1562 feet	Coordinates are in feet referenced to GSI
Mean Sea Level to Ground level (At Slot: Slot 3H): -1534 feet	Depth are in feet
Other wellpath MDs are referenced to each path's output MD station	Created by: Japheth on 2021-03-27 Database: WVA_WPI_EASTERRUG_Data

Slot	Well	Wellbore	Wellpath
Slot 3H	Lemley 3H	Lemley 3H AVB	Lemley 3H AWP Proj: 18349
Slot 3H	Lemley 3H	Lemley 3H PWB	Lemley 3H PWB Rev-A.0

Location Information					
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
Lemley Pad	178903.100	427062.900	39°40'14.7439"N	80°08'15.2596"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Longitude
Slot 3H	28.89	21.51	1789054.810	427091.790	39°40'15.0309"N 80°08'14.9869"W
Patterson 277 (RKB) to Ground level (At Slot: Slot 3H)	28ft				
Mean Sea Level to Ground level (At Slot: Slot 3H)	-1534ft				
Patterson 277 (RKB) to Mean Sea Level	1562ft				

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (1/100ft)	VS (ft)
Tie On	6498.00	11.040	196.330	6459.26	-478.96	-141.17	0.40	-297.56
Proj. to Bottom	6623.00	11.040	196.330	6581.95	-501.93	-147.90	0.00	-311.85
End of 3D Arc	6703.07	9.451	195.207	6660.74	-515.63	-151.78	2.00	-320.46
Curve KOP	7546.86	9.451	195.207	7493.08	-649.34	-188.12	0.00	-405.37
End of 3D Arc	8588.21	80.000	305.000	8232.14	-390.42	-729.50	8.00	127.22
Landing Pt.	8792.57	90.000	318.000	8250.00	-295.86	-861.33	8.00	326.06
On Azimuth	9042.57	90.000	323.000	8250.00	-63.01	-1040.30	2.00	575.74
BHL	18349.85	90.000	323.000	8250.00	7370.11	-6641.56	0.00	9883.02



API: 47-061-01842-0000
BH Job #: 110776421
Rig: Patterson 277
Duration: 3/22/21 - 3/26/21

BH AT Curve <8-1/2">(6498')(6631'-18324') : 8.22° Inc, 6631.00ft MD, 6590.38ft TVD, -309.82ft VS
 Premier MWD <8-3/4">(1464')(1511'-6482') : 0.60° Inc, 1527.00ft MD, 1526.99ft TVD, 0.74ft VS
 Gyrodatta MS Gyro <17-1/2">(100'-1464') : 0.16° Inc, 116.00ft MD, 116.00ft TVD, -0.12ft VS

Projected MD at TD: 18349' : 89.91° Inc, 18349.00ft MD, 8392.21ft TVD, 9882.47ft VS

Vertical Section (ft)
 Azimuth 323.00° with reference 0.00 N, 0.00 E

Scale 1 inch = 1500