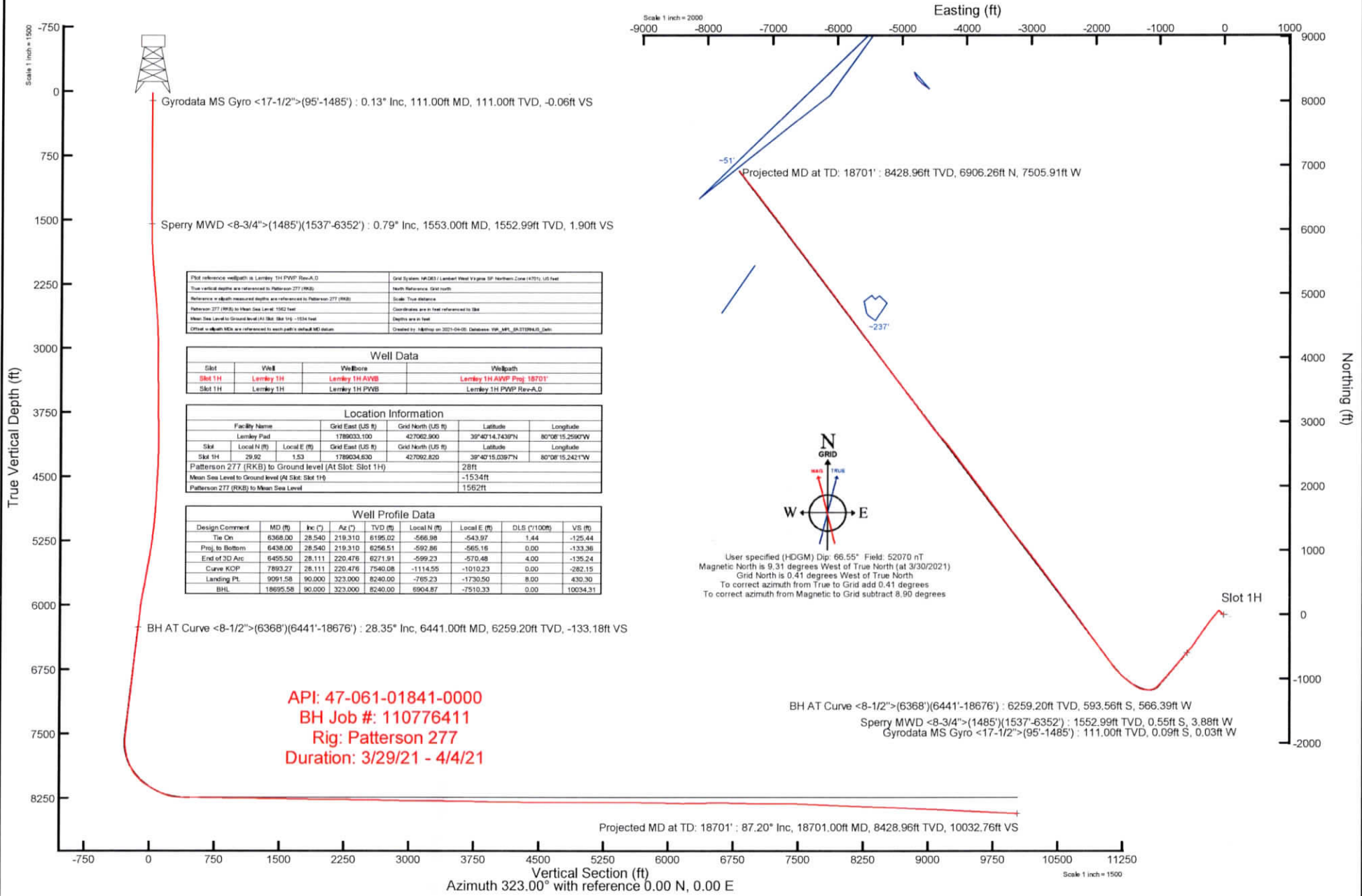


NORTHEAST NATURAL ENERGY, LLC

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

Slot: Slot 1H
 Well: Lemley 1H
 Wellbore: Lemley 1H PWB

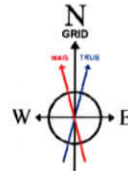


Slot reference wellpath is Lemley 1H PWB Rev-A-D	Grid System NAD83 / Lambert West Virginia SP Northern Zone (4701) US Feet
True vertical depths are referenced to Patterson 277 (RKB)	North Reference Grid north
Reference is 48ft measured depth are referenced to Patterson 277 (RKB)	Scale True distance
Reference 277 (RKB) to Mean Sea Level = 1552 feet	Coordinates are in feet referenced to Slot
When Slot Level to Ground level (At Slot Slot 1H) = 1534 feet	Depth are in feet
Offset wellpath MDs are referenced to each path's initial MD station	Created by: H&M on 2021-04-05 Database: WBP_APL_00120943_001

Well Data			
Slot	Well	Wellbore	Wellpath
Slot 1H	Lemley 1H	Lemley 1H AVWB	Lemley 1H AVWP Proj. 18701'
Slot 1H	Lemley 1H	Lemley 1H PWB	Lemley 1H PWB Rev-A-D

Location Information					
Facility Name	Grid East (US Ft)	Grid North (US Ft)	Latitude	Longitude	
Lemley Pad	1789033.100	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)	Longitude
Slot 1H	29.92	1.53	1789034.630	427062.820	39°40'15.0397"N 80°08'15.2421"W
Patterson 277 (RKB) to Ground level (At Slot Slot 1H)	28ft				
Mean Sea Level to Ground level (At Slot Slot 1H)	-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)	VS (ft)
Tie On	6368.00	28.540	219.310	6195.02	-566.88	-543.97	1.44
Proj. to Bottom	6438.00	28.540	219.310	6256.51	-592.86	-565.16	0.00
End of 3D Arc	6455.50	28.111	220.476	6271.91	-599.23	-570.48	4.00
Curve KOP	7893.27	28.111	220.476	7540.08	-1114.55	-1010.23	0.00
Landing Pt.	9091.58	90.000	323.000	8240.00	-785.23	-1730.50	8.00
BHL	18695.58	90.000	323.000	8240.00	6904.87	-7510.33	0.00



User specified (HDGM) Dip: 66.55° Field: 52070 nT
 Magnetic North is 9.31 degrees West of True North (at 3/30/2021)
 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

API: 47-061-01841-0000
BH Job #: 110776411
Rig: Patterson 277
Duration: 3/29/21 - 4/4/21

BH AT Curve $\langle 8-1/2^\circ \rangle (6368^\circ)(6441^\circ-18676^\circ)$: 6259.20ft TVD, 593.56ft S, 566.39ft W
 Sperry MWD $\langle 8-3/4^\circ \rangle (1485^\circ)(1537^\circ-6352^\circ)$: 1552.99ft TVD, 0.55ft S, 3.88ft W
 Gyrodatta MS Gyro $\langle 17-1/2^\circ \rangle (95^\circ-1485^\circ)$: 111.00ft TVD, 0.09ft S, 0.03ft W

Projected MD at TD: 18701' : 87.20° Inc, 18701.00ft MD, 8428.96ft TVD, 10032.76ft VS

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

Scale 1 inch = 1500