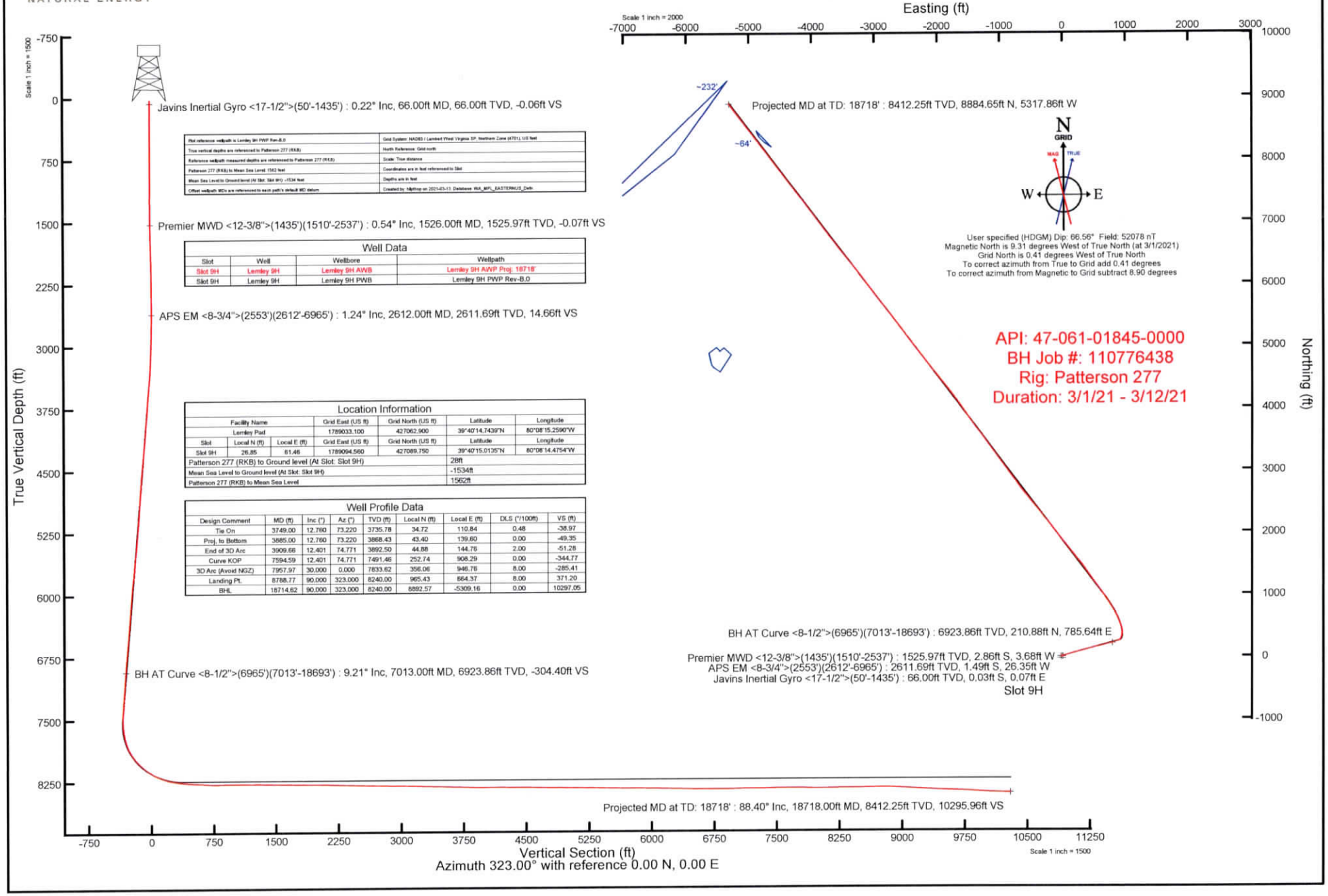
NORTHEAST NATURAL ENERGY, LLC

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

Slot: Slot 9H
Well: Lemley 9H
Wellbore: Lemley 9H PWB



Plot reference wellpath is Lemley 9H PWP Rev-B.0	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 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 Slot
Mean Sea Level to Ground level (At Slot: Slot 9H) : -1534 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: hbjohnson on 2021-03-13, Database: WA_MPI_EASTERNUS_Defn

Well Data

Slot	Well	Wellbore	Wellpath
Slot 9H	Lemley 9H	Lemley 9H AWB	Lemley 9H AWP Proj. 18718'
Slot 9H	Lemley 9H	Lemley 9H PWB	Lemley 9H PWP Rev-B.0

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)	Latitude	Longitude
Slot 9H	26.85	61.46	1789094.560	427089.750	39°40'15.0135"N	80°08'14.4754"W
Patterson 277 (RKB) to Ground level (At Slot: Slot 9H)					28ft	
Mean Sea Level to Ground level (At Slot: Slot 9H)					-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 (°/100ft)	VS (ft)
Tie On	3749.00	12.760	73.220	3735.78	34.72	110.84	0.48	-38.97
Proj. to Bottom	3885.00	12.760	73.220	3868.43	43.40	139.60	0.00	-49.35
End of 3D Arc	3909.66	12.401	74.771	3892.50	44.88	144.76	2.00	-51.28
Curve KOP	7594.59	12.401	74.771	7491.46	252.74	908.29	0.00	-344.77
3D Arc (Avoid NGZ)	7957.97	30.000	0.000	7833.62	356.06	946.76	8.00	-285.41
Landing Pt.	8788.77	90.000	323.000	8240.00	965.43	664.37	8.00	371.20
BHL	18714.62	90.000	323.000	8240.00	8892.57	-5309.16	0.00	10297.05