

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API 47 - 061 - 01886 County Monongalia District Battelle
Quad Mannington Pad Name McClellan Field/Pool Name _____
Farm name McClellan Well Number 7H
Operator (as registered with the OOG) Northeast Natural Energy LLC
Address 707 Virginia St. E., Suite 1200 City Charleston State WV Zip 25301

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4386010.8 Easting 561897.8
Landing Point of Curve Northing 4385706.7 Easting 561199.3
Bottom Hole Northing 4389102.6 Easting 558860.9

Elevation (ft) 1,412' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine

Mud Type(s) and Additive(s)
Synthetic Based Mud - Horizontal Section: BIO-BASE 365, CALCIUM CHLORIDE POWDER, G-SEAL PLUS, HRP, LIME, M-I WATE (BARITE),
M-I-X II MEDIUM, MEGADRIL P SYSTEM, MEGADRIL P SYSTEM RENTAL, MEGAMUL, SAFE-CARB 250, VERSATHIN HF, VERSAWET, VG-PLUS, VINSEAL MEDIUM, WALNUT NUT PLUG MEDIUM

Date permit issued 9/17/2021 Date drilling commenced 2/22/2022 Date drilling ceased 9/21/2022
Date completion activities began 12/15/22 Date completion activities ceased 1/6/23
Verbal plugging (Y/N) NA Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 726', 1105', 1135' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 2150', 2470' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 1095' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:

02/23/2024

API 47-061 - 01886 Farm name McClellan Well number 7H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	30"	24"	100'	N		NA	
Surface	17-1/2"	13-3/8"	1,456'	N	54.5	NA	Y, 48 bbl
Coal							
Intermediate 1	12-1/4"	9-5/8"	2,716	N	40	NA	Y, 18 bbl
Intermediate 2							
Intermediate 3							
Production	8-3/4"	5-1/2"	22,408	N	20	NA	Y
Tubing							
Packer type and depth set							

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	4,500 PSI Grout						48
Surface	Class A + 2%	1,240	15.6	1.19	1,472	CTS	8
Coal							
Intermediate 1	Class A + 1%	915	15.6	1.18	1,083	CTS	8
Intermediate 2							
Intermediate 3							
Production	50:50 Class A + Additives	4,530	14.5	1.16	5,245	1,252	48
Tubing							

Drillers TD (ft) 22,379' Loggers TD (ft) 22,349'
 Deepest formation penetrated Marcellus Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) 7,597'

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____
Surface: Bow spring centralizers every 3rd joint or approximately 120'
Intermediate: Bow spring centralizers every 3rd joint or approximately 120'
Production: Rigid body centralizers placed at a minimum of every other joint (~80') from TD to surface

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

McClellan 7H Stimulation Report

Stage Number	Report Date	ISIP (psi)	Breakdown Pressure (psi)	Avg Treating Pressure (psi)	Avg Treating Rate (BPM)	Pad Volume (bbls)	Total Clean Fluid (Bbls)	Total Proppant Amount (lbs)	Flush Volume (bbls)
1	12/15/2022	5,814		8,882	87	480	8,782	300,490	687
2	12/15/2022	5,131	6,035	9,362	93	100	8,839	390,000	573
3	12/16/2022	5,783	5,775	8,868	79	30	8,511	390,000	589
4	12/16/2022	6,228	6,286	8,573	85	288	8,917	355,290	550
5	12/16/2022	5,654	7,298	9,230	81	21	8,482	390,880	539
6	12/16/2022	5,842	5,668	9,590	91	167	8,861	390,000	407
7	12/17/2022	5,536	6,720	9,372	87	51	8,860	390,000	519
8	12/17/2022	5,783	6,914	9,016	80	59	8,351	389,740	514
9	12/17/2022	5,736	6,783	9,198	84	32	8,437	390,160	515
10	12/17/2022	5,816	6,883	9,150	89	49	8,616	390,000	517
11	12/18/2022	5,351	7,893	9,339	89	56	8,599	390,000	490
12	12/18/2022	6,296	7,495	9,263	84	54	8,405	389,108	501
13	12/18/2022	5,551	6,828	9,295	85	26	8,392	390,020	488
14	12/18/2022	5,867	6,438	9,542	91	76	9,058	390,000	514
15	12/19/2022	6,000	6,961	9,435	89	76	8,853	390,000	612
16	12/19/2022	6,019	6,922	9,225	84	53	8,668	395,280	492
17	12/19/2022	6,272	6,701	9,074	85	53	8,377	388,560	489
18	12/19/2022	5,762	7,247	9,207	87	117	8,718	388,720	479
19	12/19/2022	5,867	7,451	9,102	87	89	8,946	390,000	482
20	12/20/2022	6,437	7,596	9,268	86	86	8,573	387,580	477
21	12/20/2022	6,629	7,196	9,270	84	44	8,340	389,082	469
22	12/20/2022	6,548	7,681	9,189	84	41	8,347	389,640	467
23	12/20/2022	6,029	7,860	9,320	88	115	8,459	388,236	454
24	12/21/2022	5,943	7,671	8,940	87	92	8,595	388,878	456
25	12/21/2022	5,753	7,969	9,225	82	49	8,826	383,720	457
26	12/21/2022	5,860	7,930	9,265	82	29	8,441	384,690	452
27	12/21/2022	5,750	8,022	9,274	89	44	8,460	390,341	446
28	12/22/2022	6,098	8,177	9,305	88	43	8,724	388,226	479
29	12/22/2022	5,707	7,997	9,491	84	83	8,603	389,240	444
30	12/22/2022	5,745	8,455	9,308	79	89	8,209	388,340	434
31	12/22/2022	5,960	8,713	9,299	80	48	8,373	388,180	432
32	12/22/2022	6,223	8,189	9,156	85	46	8,079	392,312	431
33	12/23/2022	5,790	8,073	9,209	80	49	8,327	391,480	433
34	12/25/2022	5,669	8,322	9,049	77	111	8,899	389,170	418
35	12/26/2022	5,968	7,143	9,240	89	52	8,564	390,658	418
36	12/27/2022	6,155	7,990	9,226	86	33	8,458	391,168	418
37	12/27/2022	6,277	8,115	9,269	79	32	8,491	387,600	415
38	12/27/2022	6,447	4,270	9,297	85	67	8,902	389,800	375
39	12/27/2022	5,694	7,759	9,182	89	74	8,678	390,574	395
40	12/28/2022	5,940	6,924	9,342	86	32	8,427	392,338	402
41	12/28/2022	5,588	7,842	9,213	82	49	8,416	389,893	355

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Stage Number	Report Date	ISIP (psi)	Breakdown Pressure (psi)	Avg Treating Pressure (psi)	Avg Treating Rate (BPM)	Pad Volume (bbls)	Total Clean Fluid (Bbls)	Total Proppant Amount (lbs)	Flush Volume (bbls)
42	12/28/2022	5,993	9,180	9,259	86	106	8,486	389,960	350
43	12/28/2022	5,978	7,509	9,197	90	24	8,248	391,075	385
44	12/29/2022	5,929	7,929	9,169	92	43	8,906	390,181	391
45	12/29/2022	5,582	7,500	9,225	85	38	8,612	391,200	350
46	12/29/2022	5,872	9,024	9,113	87	55	8,621	392,480	340
47	12/29/2022	5,526	7,942	8,958	83	51	8,395	392,680	335
48	12/29/2022	5,708	7,581	9,142	84	30	8,282	391,817	376
49	12/30/2022	5,618	7,547	9,277	88	26	8,619	390,000	325
50	12/30/2022	5,798	7,097	9,017	87	90	8,270	388,680	320
51	12/30/2022	5,747	7,513	8,956	87	71	8,611	387,640	320
52	12/30/2022	5,866	7,997	9,075	88	41	8,691	390,379	347
53	12/31/2022	5,871	7,730	8,965	86	32	8,293	390,931	350
54	12/31/2022	6,223	7,684	8,857	86	70	8,502	388,660	300
55	12/31/2022	5,760	7,447	8,719	86	308	8,174	390,300	295
56	12/31/2022	6,027	7,316	8,666	86	21	8,535	391,051	348
57	1/1/2023	5,777	6,916	8,700	91	47	9,016	389,244	324
58	1/1/2023	5,826	7,483	8,770	90	36	8,584	390,434	333
59	1/1/2023	5,938	7,329	8,692	88	120	8,433	393,300	315
60	1/1/2023	6,435	8,576	8,699	89	54	8,419	393,347	328
61	1/1/2023	6,360	7,246	8,602	89	62	8,444	389,947	324
62	1/2/2023	5,866	8,164	8,642	89	73	8,402	391,696	312
63	1/2/2023	6,070	7,283	8,321	88	103	8,378	389,102	305
64	1/2/2023	5,833	7,192	8,331	89	161	8,198	390,220	275
65	1/22/2023	6,212	8,230	8,261	90	217	8,423	391,653	315
66	1/2/2023	5,819	6,782	8,121	89	61	8,282	390,701	293
67	1/3/2023	6,007	6,438	7,923	89	16	8,150	389,960	290
68	1/3/2023	6,121	7,313	8,108	89	79	8,270	390,920	291
69	1/4/2023	5,762	7,543	8,267	88	28	8,209	391,060	287
70	1/4/2023	5,806	7,220	8,347	89	36	8,226	390,100	275
71	1/4/2023	5,961	7,996	8,249	90	91	8,470	389,920	250
72	1/4/2023	6,590	7,998	8,346	90	133	8,273	390,580	276
73	1/5/2023	6,148	7,043	8,269	89	68	8,069	389,800	272
74	1/5/2023	5,784	7,389	8,020	89	47	8,487	385,200	270
75	1/5/2023	5,821	7,515	8,204	90	81	8,635	388,860	265
76	1/5/2023	6,336	7,653	8,219	90	52	7,902	390,760	235
77	1/5/2023	5,937	7,373	8,291	90	52	8,245	390,160	257
78	1/6/2023	5,897	7,473	8,396	89	71	8,301	391,080	252
79	1/6/2023	5,843	7,784	8,026	90	47	8,153	386,009	215

02/23/2024

McClellan 7H

Perforation Report

Stage Number	Report Date	Total Shots	Cluster 1 Top TD	Cluster 5 Bottom TD
1	12/15/2022	40		22,299
2	12/15/2022	40	22,261	22,123
3	12/16/2022	40	22,086	21,947
4	12/16/2022	40	21,910	21,772
5	12/16/2022	40	21,735	21,597
6	12/16/2022	40	21,560	21,422
7	12/17/2022	40	21,385	21,247
8	12/17/2022	40	21,210	21,072
9	12/17/2022	40	21,035	20,897
10	12/17/2022	40	20,860	20,722
11	12/18/2022	40	20,685	20,547
12	12/18/2022	40	20,510	20,372
13	12/18/2022	40	20,335	20,197
14	12/18/2022	40	20,160	20,022
15	12/19/2022	40	19,985	19,847
16	12/19/2022	40	19,810	19,672
17	12/19/2022	40	19,635	19,496
18	12/19/2022	40	19,459	19,321
19	12/19/2022	40	19,284	19,146
20	12/20/2022	40	19,109	18,971
21	12/20/2022	40	18,934	18,796
22	12/20/2022	40	18,759	18,621
23	12/20/2022	40	18,584	18,446
24	12/21/2022	40	18,409	18,271
25	12/21/2022	40	18,234	18,096
26	12/21/2022	40	18,059	17,921
27	12/21/2022	40	17,884	17,746
28	12/22/2022	40	17,709	17,571
29	12/22/2022	40	17,534	17,396
30	12/22/2022	40	17,359	17,221
31	12/22/2022	40	17,184	17,046
32	12/22/2022	40	17,008	16,870
33	12/23/2022	40	16,833	16,695
34	12/25/2022	40	16,658	16,520
35	12/26/2022	40	16,483	16,345
36	12/27/2022	40	16,308	16,170
37	12/27/2022	40	16,133	15,995
38	12/27/2022	40	15,958	15,820
39	12/27/2022	40	15,783	15,645
40	12/28/2022	40	15,608	15,470
41	12/28/2022	40	15,433	15,295
42	12/28/2022	40	15,258	15,120
43	12/28/2022	40	15,083	14,945
44	12/29/2022	40	14,908	14,770
45	12/29/2022	40	14,733	14,595
46	12/29/2022	40	14,558	14,419
47	12/29/2022	40	14,382	14,244

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Stage Number	Report Date	Total Shots	Cluster 1 Top TD	Cluster 5 Bottom TD
48	12/29/2022	40	14,207	14,069
49	12/30/2022	40	14,032	13,894
50	12/30/2022	40	13,857	13,719
51	12/30/2022	40	13,682	13,544
52	12/30/2022	40	13,507	13,369
53	12/31/2022	40	13,332	13,194
54	12/31/2022	40	13,157	13,019
55	12/31/2022	40	12,982	12,844
56	12/31/2022	40	12,807	12,669
57	1/1/2023	40	12,632	12,494
58	1/1/2023	40	12,457	12,319
59	1/1/2023	40	12,282	12,144
60	1/1/2023	40	12,107	11,968
61	1/1/2023	40	11,931	11,793
62	1/2/2023	40	11,756	11,618
63	1/2/2023	40	11,581	11,443
64	1/2/2023	40	11,406	11,268
65	1/22/2023	40	11,231	11,093
66	1/2/2023	40	11,056	10,918
67	1/3/2023	40	10,881	10,743
68	1/3/2023	40	10,706	10,568
69	1/4/2023	40	10,531	10,393
70	1/4/2023	40	10,356	10,218
71	1/4/2023	40	10,181	10,043
72	1/4/2023	40	10,006	9,868
73	1/5/2023	40	9,831	9,693
74	1/5/2023	40	9,656	9,517
75	1/5/2023	40	9,480	9,342
76	1/5/2023	40	9,305	9,167
77	1/5/2023	40	9,130	8,992
78	1/6/2023	40	8,955	8,817
79	1/6/2023	40	8,780	8,642

02/23/2024

McClellan Completion lithology Lithology/Formation	Top Depth in FT TVD	Bottom Depth in FT TVD	Describe rock type and record quantity and type of fluid (freshwater, brine, oil, gas, H2S, etc)
Sand/silt	0	160	Sand/silt
silt/red shale	160	490	silt/red shale
siltstone/sandstone/limestone	490	520	siltstone/sandstone/limestone
limestone/siltstone/sandstone	520	576	siltstone
coal	576	580	coal
siltstone/limestone/shale	580	760	siltstone/shale
coal	760	992	siltstone/shale/limestone
siltstone/sandstone	992	998	coal
coal	998	1084	siltstone/shale/limestone
sandstone/siltstone/limestone	1084	1092	siltstone/shale/limestone
coal-Pittsburgh	1092	1120	coal - Pittsburgh
sandstone/limestone	1120	1150	siltstone/shale/limestone
red shale/siltstone	1150	1480	sandstone
Limestone/siltstone	1480	2050	siltstone/limestone/sand/red shale
sandstone	2050	2110	siltstone/sandstone
sandstone/siltstone/red shale	2110	2260	sandstone
siltstone/sandstone	2260	2470	siltstone/sandstone
sandstone	2470	2500	Big Injun Sandstone
Upper Devonian Sands/silts	2500	3010	sandstone/siltstone
shale/siltstone	3010	3020	Gantz sandstone
Upper Devonian Sands/silts	3020	3560	Upper Devonian sandstones/siltstones
Devonian siltstones/shales	3560	7620	Devonian siltstones/shales
Middlesex shale/silt	7620	7790	Middlesex shale/silt
Burkett shale	7790	7816	Burkett Shale
Geneseo shale	7816	7845	Geneseo shale
Tully Limestone	7845	7898	Tully Limestone
Hamilton shale	7898	7996	Hamilton shale
Marcellus shale	7996	TD	Marcellus shale

02/23/2024

REFERENCE WELLPATH IDENTIFICATION

Operator	NORTHEAST NATURAL ENERGY, LLC	Well	McClellan 7H
Field	Monongalia	API/Legal	
Facility	McClellan Pad	Wellbore	McClellan 7H AWB
Slot	Slot #07		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert West Virginia SP, Northern Zone (4701), US feet	Software System	WellArchitect® 6.0
North Reference	Grid	User	Manajohj
Scale	0.999941	Report Generated	9/19/2022 at 11:57:45 PM
Convergence at slot	0.50° West	Database	WA_MPL_EASTERNUS_Defn

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-18.41	-67.97	1749117.03	409477.49	39°37'17.8333"N	80°16'43.7852"W
Facility Reference Pt			1749185.00	409495.90	39°37'18.0211"N	80°16'42.9186"W
Field Reference Pt			1777685.71	440640.65	39°42'28.1140"N	80°10'41.6900"W

WELLPATH DATUM

Calculation method	Minimum curvature	Patterson 277 (RKB) to Facility Vertical Datum	1440.00ft
Horizontal Reference Pt	Slot	Patterson 277 (RKB) to Mean Sea Level	1440.00ft
Vertical Reference Pt	Patterson 277 (RKB)	Patterson 277 (RKB) to Ground Level at Slot (Slot #07)	28.00ft
MD Reference Pt	Patterson 277 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	326.37°



Actual Wellpath Report

McClellan 7H AWP Proj: 22426
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REFERENCE WELLPATH IDENTIFICATION

Operator	NORTHEAST NATURAL ENERGY, LLC	Well	McClellan 7H
Field	Monongalia	API/Legal	
Facility	McClellan Pad	Wellbore	McClellan 7H AWB
Slot	Slot #07		

WELLPATH DATA (249 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
0.00†	0.000	110.500	0.00	0.00	0.00	0.00	1749117.03	409477.49	39°37'17.8333"N	80°16'43.7852"W	0.00	0.000	0.00	0.00	0.00
28.00	0.000	110.500	28.00	0.00	0.00	0.00	1749117.03	409477.49	39°37'17.8333"N	80°16'43.7852"W	0.00	0.000	0.00	0.00	0.00
78.00	0.110	110.500	78.00	-0.04	-0.02	0.04	1749117.07	409477.47	39°37'17.8333"N	80°16'43.7846"W	0.05	110.500	0.22	0.22	0.00
128.00	0.360	165.100	128.00	-0.23	-0.19	0.13	1749117.16	409477.30	39°37'17.8315"N	80°16'43.7835"W	0.23	144.902	0.62	0.50	109.20
178.00	0.360	254.500	178.00	-0.33	-0.38	0.02	1749117.05	409477.11	39°37'17.8295"N	80°16'43.7849"W	0.38	177.082	1.01	0.00	178.80
228.00	0.300	255.500	228.00	-0.23	-0.45	-0.26	1749116.77	409477.04	39°37'17.8288"N	80°16'43.7885"W	0.52	209.685	0.12	-0.12	2.00
278.00	0.530	183.100	278.00	-0.38	-0.72	-0.40	1749116.63	409476.77	39°37'17.8262"N	80°16'43.7902"W	0.82	209.013	1.05	0.46	-144.80
328.00	0.440	222.800	328.00	-0.61	-1.09	-0.54	1749116.49	409476.40	39°37'17.8225"N	80°16'43.7920"W	1.22	206.407	0.68	-0.18	79.40
378.00	0.460	225.100	377.99	-0.69	-1.37	-0.81	1749116.22	409476.12	39°37'17.8197"N	80°16'43.7955"W	1.60	210.668	0.05	0.04	4.60
428.00	0.590	210.400	427.99	-0.84	-1.74	-1.09	1749115.94	409475.75	39°37'17.8160"N	80°16'43.7989"W	2.05	212.034	0.37	0.26	-29.40
478.00	0.330	241.500	477.99	-0.94	-2.03	-1.34	1749115.69	409475.46	39°37'17.8132"N	80°16'43.8022"W	2.43	213.531	0.70	-0.52	62.20
528.00	0.280	155.600	527.99	-1.05	-2.21	-1.42	1749115.61	409475.28	39°37'17.8114"N	80°16'43.8031"W	2.62	212.744	0.89	-0.10	-171.80
578.00	0.480	221.500	577.99	-1.23	-2.47	-1.51	1749115.52	409475.02	39°37'17.8087"N	80°16'43.8042"W	2.90	211.345	0.83	0.40	131.80
628.00	0.100	217.300	627.99	-1.29	-2.67	-1.67	1749115.36	409474.82	39°37'17.8068"N	80°16'43.8063"W	3.15	212.100	0.76	-0.76	-8.40
678.00	0.430	237.500	677.99	-1.30	-2.80	-1.86	1749115.17	409474.69	39°37'17.8054"N	80°16'43.8086"W	3.36	213.539	0.68	0.66	40.40
728.00	0.140	156.300	727.99	-1.36	-2.96	-1.99	1749115.04	409474.53	39°37'17.8039"N	80°16'43.8103"W	3.57	213.938	0.86	-0.58	-162.40
778.00	0.480	219.800	777.99	-1.48	-3.18	-2.10	1749114.93	409474.32	39°37'17.8017"N	80°16'43.8117"W	3.81	213.483	0.87	0.68	127.00
828.00	0.230	265.700	827.99	-1.49	-3.34	-2.33	1749114.70	409474.15	39°37'17.8001"N	80°16'43.8147"W	4.08	214.922	0.72	-0.50	91.80
878.00	0.470	198.000	877.98	-1.57	-3.55	-2.50	1749114.53	409473.94	39°37'17.7980"N	80°16'43.8167"W	4.34	215.160	0.88	0.48	-135.40
928.00	0.420	219.200	927.98	-1.75	-3.88	-2.68	1749114.35	409473.61	39°37'17.7947"N	80°16'43.8190"W	4.72	214.582	0.34	-0.10	42.40
978.00	0.450	230.000	977.98	-1.83	-4.15	-2.94	1749114.09	409473.34	39°37'17.7920"N	80°16'43.8224"W	5.09	215.336	0.17	0.06	21.60
1028.00	0.470	229.800	1027.98	-1.87	-4.41	-3.25	1749113.78	409473.08	39°37'17.7894"N	80°16'43.8263"W	5.48	216.392	0.04	0.04	-0.40
1078.00	0.190	123.800	1077.98	-1.97	-4.59	-3.34	1749113.69	409472.90	39°37'17.7877"N	80°16'43.8274"W	5.67	216.035	1.11	-0.56	-212.00
1128.00	0.240	251.100	1127.98	-2.02	-4.67	-3.37	1749113.66	409472.82	39°37'17.7869"N	80°16'43.8277"W	5.76	215.810	0.77	0.10	254.60
1228.00	0.930	172.700	1227.97	-2.70	-5.54	-3.46	1749113.57	409471.95	39°37'17.7782"N	80°16'43.8289"W	6.53	212.005	0.91	0.69	-78.40
1278.00	0.280	114.100	1277.97	-3.16	-5.99	-3.30	1749113.73	409471.50	39°37'17.7738"N	80°16'43.8267"W	6.84	208.838	1.64	-1.30	-117.20
1328.00	0.170	102.200	1327.97	-3.32	-6.06	-3.12	1749113.91	409471.43	39°37'17.7731"N	80°16'43.8244"W	6.81	207.216	0.24	-0.22	-23.80
1428.00	0.950	201.460	1498.96	-4.31	-7.43	-3.39	1749113.64	409470.06	39°37'17.7596"N	80°16'43.8277"W	8.17	204.499	0.58	0.46	58.05
1528.00	2.970	210.120	1592.90	-5.84	-10.26	-4.89	1749112.14	409467.23	39°37'17.7314"N	80°16'43.8466"W	11.37	205.493	2.17	2.15	9.21
1628.00	8.060	218.980	1687.43	-8.92	-17.58	-10.32	1749106.71	409459.92	39°37'17.6587"N	80°16'43.9152"W	20.38	210.427	5.42	5.36	9.33



Actual Wellpath Report

McClellan 7H AWP Proj: 22426'
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REFERENCE WELLPATH IDENTIFICATION

Operator	NORTHEAST NATURAL ENERGY, LLC	Well	McClellan 7H
Field	Monongalia	API/ Legal	
Facility	McClellan Pad	Wellbore	McClellan 7H AWB
Slot	Slot #07		

WELLPATH DATA (249 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS ["/100ft]	Build Rate ["/100ft]	Turn Rate ["/100ft]
1782.00	14.010	224.820	1779.66	-13.17	-30.78	-22.50	1749094.53	409446.71	39°37'17.5272"N	80°16'44.0693"W	38.13	216.165	6.43	6.33	6.21
1877.00	18.100	230.820	1870.94	-16.90	-48.27	-42.05	1749074.98	409429.22	39°37'17.3527"N	80°16'44.3173"W	64.02	221.063	4.64	4.31	6.32
1972.00	18.860	230.000	1961.04	-20.03	-67.46	-65.26	1749051.78	409410.03	39°37'17.1610"N	80°16'44.6116"W	93.86	224.047	0.85	0.80	-0.86
2067.00	19.310	229.940	2050.82	-23.49	-87.44	-89.04	1749028.00	409390.05	39°37'16.9615"N	80°16'44.9134"W	124.80	225.519	0.47	0.47	-0.06
2162.00	19.400	226.740	2140.45	-27.89	-108.36	-112.56	1749004.48	409369.13	39°37'16.7527"N	80°16'45.2115"W	156.24	226.086	1.12	0.09	-3.37
2257.00	18.920	225.050	2230.19	-33.55	-130.06	-134.94	1748982.09	409347.44	39°37'16.5364"N	80°16'45.4952"W	187.42	226.056	0.77	-0.51	-1.78
2352.00	18.790	222.270	2320.09	-40.31	-152.26	-156.14	1748960.90	409325.24	39°37'16.3152"N	80°16'45.7636"W	218.09	225.720	0.96	-0.14	-2.93
2447.00	18.510	221.420	2410.10	-47.92	-174.89	-176.40	1748940.64	409302.61	39°37'16.0898"N	80°16'46.0201"W	248.40	225.247	0.41	-0.29	-0.89
2541.00	18.030	220.990	2499.37	-55.63	-197.06	-195.82	1748921.23	409280.44	39°37'15.8690"N	80°16'46.2657"W	277.81	224.819	0.53	-0.51	-0.46
2636.00	17.360	219.520	2589.87	-63.64	-219.09	-214.48	1748902.56	409258.41	39°37'15.6497"N	80°16'46.5017"W	306.60	224.390	0.85	-0.71	-1.56
2741.00	17.330	215.060	2690.10	-73.86	-243.98	-233.43	1748883.61	409233.53	39°37'15.4022"N	80°16'46.7412"W	337.66	223.735	1.27	-0.03	-4.25
2836.00	18.340	216.690	2780.54	-84.04	-267.54	-250.49	1748866.56	409209.96	39°37'15.1678"N	80°16'46.9565"W	366.50	223.114	1.19	1.06	1.72
2931.00	20.880	217.400	2870.02	-94.58	-292.98	-289.71	1748847.34	409184.53	39°37'14.9147"N	80°16'47.1993"W	398.22	222.631	2.69	2.67	0.75
3025.00	22.200	218.400	2957.45	-105.50	-320.21	-290.91	1748826.14	409157.30	39°37'14.6439"N	80°16'47.4672"W	432.62	222.255	1.46	1.40	1.06
3120.00	23.400	216.050	3045.03	-117.59	-349.53	-313.16	1748803.89	409127.98	39°37'14.3522"N	80°16'47.7483"W	469.30	221.859	1.59	1.26	-2.47
3214.00	23.490	215.560	3131.27	-130.73	-379.86	-335.04	1748782.01	409097.65	39°37'14.0506"N	80°16'48.0245"W	506.50	221.413	0.23	0.10	-0.52
3308.00	23.390	217.140	3217.51	-143.53	-409.97	-357.20	1748759.85	409067.54	39°37'13.7511"N	80°16'48.3044"W	543.76	221.065	0.68	-0.11	1.68
3406.00	22.850	219.800	3307.64	-155.36	-440.10	-381.13	1748735.93	409037.42	39°37'13.4513"N	80°16'48.6068"W	582.19	220.893	1.20	-0.55	2.71
3500.00	23.660	218.710	3394.01	-166.29	-468.84	-404.61	1748712.45	409008.68	39°37'13.1652"N	80°16'48.9036"W	619.29	220.794	0.98	0.86	-1.16
3594.00	21.830	214.730	3480.70	-178.46	-497.93	-426.36	1748690.69	408979.59	39°37'12.8759"N	80°16'49.1784"W	655.53	220.573	2.54	-1.95	-4.23
3689.00	20.860	215.850	3569.18	-190.90	-526.15	-446.33	1748670.73	408951.37	39°37'12.5953"N	80°16'49.4304"W	689.96	220.308	1.11	-1.02	1.16
3783.00	20.750	218.730	3657.05	-201.81	-552.71	-466.55	1748650.51	408924.81	39°37'12.3311"N	80°16'49.6889"W	723.30	220.168	1.09	-0.12	3.06
3878.00	21.150	221.470	3745.78	-211.32	-578.68	-488.43	1748628.63	408898.85	39°37'12.0725"N	80°16'49.9626"W	757.25	220.166	1.11	0.42	2.88
3973.00	22.340	223.310	3834.01	-219.81	-604.66	-512.17	1748604.90	408872.87	39°37'11.8137"N	80°16'50.2630"W	792.42	220.266	1.44	1.25	1.94
4067.00	22.210	222.940	3921.00	-227.97	-630.67	-536.52	1748580.54	408846.86	39°37'11.5546"N	80°16'50.5714"W	828.01	220.389	0.20	-0.14	-0.39
4162.00	22.380	227.700	4008.91	-234.87	-655.98	-562.13	1748554.93	408821.55	39°37'11.3022"N	80°16'50.8968"W	863.89	220.594	1.91	0.18	5.01
4256.00	22.570	227.630	4095.77	-240.31	-680.18	-588.70	1748528.37	408797.35	39°37'11.0608"N	80°16'51.2326"W	899.56	220.876	0.20	0.20	-0.07
4351.00	21.810	230.810	4186.51	-244.93	-704.36	-616.70	1748500.37	408773.17	39°37'10.8194"N	80°16'51.5877"W	936.19	221.204	1.45	-0.78	3.24
4446.00	20.620	234.360	4303.97	-247.98	-732.08	-652.88	1748464.19	408745.45	39°37'10.5424"N	80°16'52.0469"W	980.92	221.727	1.39	-0.94	2.82
4541.00	20.820	234.000	4362.90	-248.83	-745.13	-670.95	1748446.12	408732.41	39°37'10.4119"N	80°16'52.2764"W	1002.69	222.001	0.38	0.32	-0.57

2024

REFERENCE WELLPATH IDENTIFICATION

Operator	NORTHEAST NATURAL ENERGY, LLC	Well	McClellan 7H
Field	Monongalia	API/ Legal	
Facility	McClellan Pad	Wellbore	McClellan 7H AWB
Slot	Slot #07		

WELLPATH DATA (249 stations)

ID [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
4638.00	20.390	233.410	4451.82	-250.38	-764.92	-697.90	1748419.18	408712.62	39°37'10.2140"N	80°16'52.6186"W	1035.45	222.377	0.50	-0.45	-0.62
4733.00	20.260	229.860	4540.91	-253.10	-785.39	-723.76	1748393.31	408692.15	39°37'10.0095"N	80°16'52.9468"W	1068.02	222.662	1.30	-0.14	-3.74
4828.00	20.290	232.350	4630.03	-256.12	-806.05	-749.38	1748367.70	408671.49	39°37'9.8031"N	80°16'53.2718"W	1100.58	222.913	0.91	0.03	2.62
4924.00	19.420	230.200	4720.32	-259.00	-826.44	-774.82	1748342.26	408651.10	39°37'9.5995"N	80°16'53.5947"W	1132.85	223.154	1.18	-0.91	-2.24
5018.00	19.010	231.020	4809.08	-262.11	-846.07	-798.73	1748318.35	408631.47	39°37'9.4034"N	80°16'53.8980"W	1163.53	223.351	0.52	-0.44	0.87
5113.00	19.350	232.190	4898.81	-264.70	-865.45	-823.19	1748293.89	408612.09	39°37'9.2097"N	80°16'54.2084"W	1194.42	223.566	0.54	0.36	1.23
5207.00	21.230	237.040	4986.98	-265.63	-884.26	-849.77	1748267.31	408593.28	39°37'9.0216"N	80°16'54.5461"W	1226.39	223.861	2.68	2.00	5.16
5304.00	20.750	236.510	5077.54	-265.39	-903.30	-878.84	1748238.24	408574.25	39°37'8.8309"N	80°16'54.9154"W	1260.28	224.214	0.53	-0.49	-0.55
5398.00	20.030	232.870	5165.66	-266.33	-922.20	-905.56	1748211.52	408555.34	39°37'8.6418"N	80°16'55.2547"W	1292.48	224.478	1.55	-0.77	-3.87
5493.00	21.500	237.410	5254.49	-267.01	-941.40	-933.21	1748183.88	408536.14	39°37'8.4497"N	80°16'55.6058"W	1325.56	224.749	2.29	1.55	4.78
5588.00	22.820	245.740	5342.49	-263.69	-958.35	-964.68	1748152.41	408519.19	39°37'8.2794"N	80°16'56.0061"W	1359.80	225.188	3.58	1.39	8.77
5683.00	21.400	242.130	5430.51	-258.95	-974.03	-996.80	1748120.29	408503.52	39°37'8.1218"N	80°16'56.4148"W	1393.68	225.662	2.07	-1.49	-3.80
5778.00	22.400	245.240	5518.65	-254.42	-989.71	-1028.56	1748088.53	408487.84	39°37'7.9640"N	80°16'56.8189"W	1427.40	226.103	1.61	1.05	3.27
5872.00	24.000	243.100	5605.05	-249.42	-1005.86	-1061.87	1748055.22	408471.69	39°37'7.8016"N	80°16'57.2428"W	1462.65	226.552	1.92	1.70	-2.28
5966.00	24.160	239.230	5690.88	-246.22	-1024.35	-1095.45	1748021.64	408453.20	39°37'7.6159"N	80°16'57.6698"W	1499.77	226.921	1.69	0.17	-4.12
6060.00	23.470	239.140	5776.87	-244.35	-1043.80	-1128.05	1747989.05	408433.76	39°37'7.4210"N	80°16'58.0842"W	1536.88	227.222	0.74	-0.73	-0.10
6155.00	23.940	241.240	5863.86	-241.80	-1062.78	-1161.19	1747955.91	408414.78	39°37'7.2306"N	80°16'58.5055"W	1574.12	227.534	1.02	0.49	2.21
6253.00	23.410	239.800	5953.61	-238.95	-1082.13	-1195.44	1747921.66	408395.42	39°37'7.0363"N	80°16'58.9411"W	1612.48	227.848	0.80	-0.54	-1.47
6348.00	22.820	236.340	6040.99	-237.83	-1101.84	-1227.09	1747890.02	408375.72	39°37'6.8388"N	80°16'59.3433"W	1649.18	228.078	1.56	-0.62	-3.64
6443.00	21.760	230.350	6128.90	-239.69	-1123.29	-1255.99	1747861.12	408354.27	39°37'6.6243"N	80°16'59.7102"W	1685.02	228.192	2.64	-1.12	-6.31
6537.00	20.330	230.020	6216.63	-243.32	-1144.90	-1281.92	1747835.19	408332.66	39°37'6.4085"N	80°17'0.0391"W	1718.75	228.231	1.53	-1.52	-0.35
6632.00	20.100	233.990	6305.78	-245.82	-1165.10	-1307.77	1747809.34	408312.46	39°37'6.2067"N	80°17'0.3672"W	1751.49	228.302	1.46	-0.24	4.18
6727.00	20.350	235.620	6394.92	-246.72	-1184.03	-1334.60	1747782.51	408293.53	39°37'6.0173"N	80°17'0.7080"W	1784.12	228.421	0.65	0.26	1.72
6820.00	20.700	237.780	6482.02	-246.53	-1201.92	-1361.86	1747755.26	408275.64	39°37'5.8381"N	80°17'1.0543"W	1816.39	228.570	0.90	0.38	2.32
6914.00	21.300	239.280	6569.78	-245.25	-1219.50	-1390.59	1747726.53	408258.06	39°37'5.6619"N	80°17'1.4195"W	1849.57	228.750	0.86	0.64	1.60
7009.00	23.760	241.050	6657.52	-242.81	-1237.58	-1422.17	1747694.94	408239.98	39°37'5.4805"N	80°17'1.8210"W	1885.26	228.970	2.69	2.59	1.86
7105.00	23.040	238.590	6743.79	-240.55	-1256.34	-1454.44	1747662.67	408221.23	39°37'5.2924"N	80°17'2.2313"W	1921.92	229.180	1.29	-0.77	-2.62
7200.00	21.790	241.060	6835.31	-238.30	-1275.33	-1487.06	1747630.06	408202.24	39°37'5.1019"N	80°17'2.6460"W	1959.03	229.383	1.58	-1.26	2.49
7295.00	22.220	242.660	6922.46	-234.93	-1291.93	-1518.12	1747599.01	408185.64	39°37'4.9351"N	80°17'3.0410"W	1993.43	229.602	0.78	0.46	1.70
7390.00	21.070	242.860	7009.83	-231.07	-1307.80	-1548.94	1747568.18	408169.77	39°37'4.7756"N	80°17'3.4331"W	2027.21	229.825	1.23	-1.22	0.21

REFERENCE WELLPATH IDENTIFICATION

Operator	NORTHEAST NATURAL ENERGY, LLC	Well	McClellan 7H
Field	Monongalia	API/ Legal	
Facility	McClellan Pad	Wellbore	McClellan 7H AWB
Slot	Slot #07		

WELLPATH DATA (249 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
7485.00	21.590	244.740	7098.33	-226.60	-1323.06	-1579.95	1747537.18	408154.52	39°37'4.6223"N	80°17'3.8276"W	2060.75	230.057	0.90	0.55	1.98
7597.00	21.810	243.070	7202.39	-221.17	-1341.27	-1617.13	1747500.00	408136.30	39°37'4.4390"N	80°17'4.3007"W	2100.98	230.327	0.59	0.20	-1.49
7692.00	22.310	247.430	7290.44	-215.65	-1356.48	-1649.52	1747467.61	408121.39	39°37'4.2888"N	80°17'4.7129"W	2135.45	230.574	1.80	0.53	4.59
7787.00	24.730	254.300	7377.56	-206.07	-1368.48	-1685.31	1747431.82	408109.09	39°37'4.1642"N	80°17'5.1689"W	2170.95	230.923	3.85	2.55	7.23
7882.00	26.730	257.070	7463.14	-192.40	-1378.64	-1725.27	1747391.86	408098.93	39°37'4.0603"N	80°17'5.6784"W	2208.44	231.372	2.46	2.11	2.92
7977.00	28.840	270.200	7547.26	-172.07	-1383.35	-1769.05	1747348.09	408094.23	39°37'4.0100"N	80°17'6.2373"W	2245.71	231.976	6.80	2.22	13.82
8071.00	32.990	279.580	7627.94	-141.90	-1379.01	-1817.01	1747300.13	408098.57	39°37'4.0488"N	80°17'6.8505"W	2281.05	232.804	6.75	4.41	9.98
8165.00	38.860	292.220	7704.13	-99.87	-1363.56	-1869.66	1747247.48	408114.01	39°37'4.1969"N	80°17'7.5251"W	2314.07	233.896	10.04	6.24	13.45
8259.00	41.000	299.870	7776.25	-47.84	-1337.03	-1923.74	1747193.41	408140.54	39°37'4.4544"N	80°17'8.2190"W	2342.74	235.200	5.69	2.28	8.14
8353.00	47.580	304.930	7843.52	12.14	-1301.76	-1979.00	1747138.15	408175.81	39°37'4.7982"N	80°17'8.9291"W	2368.76	236.664	7.94	7.00	5.38
8447.00	54.500	311.310	7902.63	81.51	-1256.55	-2036.29	1747080.86	408221.01	39°37'5.2400"N	80°17'9.6663"W	2392.78	238.322	9.05	7.36	6.79
8541.00	60.290	313.190	7953.26	158.28	-1203.31	-2094.85	1747022.31	408274.26	39°37'5.7612"N	80°17'10.4205"W	2415.85	240.126	6.39	6.16	2.00
8636.00	66.250	316.270	7995.98	241.34	-1143.59	-2155.05	1746962.11	408333.97	39°37'6.3461"N	80°17'11.1964"W	2439.68	242.047	6.91	6.27	3.24
8731.00	72.020	318.650	8029.80	329.00	-1078.19	-2215.01	1746902.16	408399.37	39°37'6.9872"N	80°17'11.9699"W	2463.49	244.045	6.51	6.07	2.51
8825.00	77.880	321.920	8054.21	419.21	-1008.38	-2272.95	1746844.22	408469.17	39°37'7.6721"N	80°17'12.7181"W	2486.59	246.076	7.08	6.23	3.48
8919.00	82.000	324.900	8070.63	511.61	-934.08	-2328.09	1746789.08	408543.47	39°37'8.4016"N	80°17'13.4311"W	2508.49	248.138	5.38	4.38	3.17
9014.00	82.630	327.250	8083.33	605.75	-855.97	-2380.63	1746736.55	408621.58	39°37'9.1690"N	80°17'14.1112"W	2529.84	250.224	2.54	0.66	2.47
9109.00	82.850	325.700	8095.34	699.99	-777.41	-2432.68	1746684.50	408700.13	39°37'9.9409"N	80°17'14.7850"W	2553.87	252.278	1.63	0.23	-1.63
9204.00	86.890	327.840	8103.83	794.58	-698.28	-2484.51	1746632.67	408779.25	39°37'10.7184"N	80°17'15.4563"W	2580.77	254.302	4.81	4.25	2.25
9299.00	87.660	326.220	8108.35	889.46	-618.67	-2536.15	1746581.04	408858.86	39°37'11.5007"N	80°17'16.1250"W	2610.52	256.291	1.89	0.81	-1.71
9394.00	88.060	325.810	8111.90	984.39	-539.96	-2589.21	1746527.98	408937.57	39°37'12.2740"N	80°17'16.8120"W	2644.92	258.220	0.60	0.42	-0.43
9488.00	87.110	325.420	8115.86	1078.30	-462.45	-2642.25	1746474.94	409015.07	39°37'13.0353"N	80°17'17.4984"W	2682.42	260.073	1.09	-1.01	-0.41
9583.00	85.750	326.180	8121.77	1173.11	-384.03	-2695.54	1746421.65	409093.48	39°37'13.8057"N	80°17'18.1882"W	2722.76	261.892	1.64	-1.43	0.80
9677.00	85.690	325.330	8128.79	1266.84	-306.55	-2748.29	1746368.90	409170.96	39°37'14.5669"N	80°17'18.8710"W	2765.34	263.635	0.90	-0.06	-0.90
9771.00	85.840	324.710	8136.73	1360.56	-229.74	-2802.04	1746315.17	409247.77	39°37'15.3213"N	80°17'19.5663"W	2811.44	265.313	0.68	0.16	-0.66
9865.00	85.070	326.290	8143.18	1454.25	-152.52	-2855.11	1746262.10	409324.98	39°37'16.0798"N	80°17'20.2532"W	2859.18	266.942	1.87	-0.82	1.68
9960.00	86.950	324.860	8149.86	1550.00	-73.53	-2909.25	1746207.96	409403.97	39°37'16.8557"N	80°17'20.9539"W	2910.18	268.552	2.46	1.96	-1.49
10055.00	88.060	325.100	8153.95	1643.88	3.38	-2963.14	1746154.07	409480.87	39°37'17.6111"N	80°17'21.6512"W	2963.14	270.065	1.21	1.18	0.26
10150.00	89.230	325.860	8156.20	1738.84	81.63	-3016.96	1746100.26	409559.11	39°37'18.3797"N	80°17'22.3477"W	3018.06	271.550	1.47	1.23	0.80
10245.00	88.490	325.810	8158.09	1833.82	160.22	-3070.30	1746046.92	409637.70	39°37'19.1518"N	80°17'23.0382"W	3074.47	272.987	0.78	-0.78	-0.05



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REFERENCE WELLPATH IDENTIFICATION

Operator	NORTHEAST NATURAL ENERGY, LLC	Well	McClellan 7H
Field	Monongalia	API/ Legal	
Facility	McClellan Pad	Wellbore	McClellan 7H AWB
Slot	Slot #07		

WELLPATH DATA (249 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
10340.00	88.520	326.380	8160.57	1928.78	239.04	-3123.27	1745993.95	409716.51	39°37'19.9261"N	80°17'23.7240"W	3132.40	274.377	0.60	0.03	0.60
10435.00	88.650	327.340	8162.91	2023.75	318.56	-3175.19	1745942.04	409796.03	39°37'20.7075"N	80°17'24.3964"W	3191.13	275.729	1.02	0.14	1.01
10530.00	88.800	327.480	8165.03	2118.71	398.58	-3226.35	1745890.88	409876.05	39°37'21.4938"N	80°17'25.0591"W	3250.87	277.043	0.22	0.16	0.15
10624.00	89.110	328.510	8166.74	2212.65	478.28	-3276.16	1745841.08	409955.74	39°37'22.2271"N	80°17'25.7046"W	3310.88	278.306	1.14	0.33	1.10
10719.00	89.260	327.290	8168.09	2307.61	558.75	-3326.63	1745790.60	410036.20	39°37'23.0680"N	80°17'26.3587"W	3373.23	279.534	1.29	0.16	-1.28
10813.00	90.370	327.810	8168.40	2401.59	638.07	-3377.07	1745740.17	410115.52	39°37'23.8475"N	80°17'27.0122"W	3436.82	280.699	1.30	1.18	0.55
10908.00	90.580	326.890	8167.61	2496.57	718.05	-3428.32	1745688.92	410195.50	39°37'24.6335"N	80°17'27.6761"W	3502.71	281.829	0.99	0.22	-0.97
11003.00	91.350	327.480	8166.01	2591.55	797.88	-3479.79	1745637.45	410275.32	39°37'25.4179"N	80°17'28.3429"W	3570.09	282.914	1.02	0.81	0.62
11097.00	90.860	328.430	8164.20	2685.49	877.54	-3529.66	1745587.59	410354.98	39°37'26.2008"N	80°17'28.9891"W	3637.11	283.962	1.14	-0.52	1.01
11193.00	90.250	325.550	8163.27	2781.47	958.03	-3581.95	1745535.30	410435.46	39°37'26.9917"N	80°17'29.6664"W	3707.86	284.974	3.07	-0.64	-3.00
11287.00	90.060	328.110	8163.01	2875.46	1036.71	-3633.38	1745483.88	410514.13	39°37'27.7648"N	80°17'30.3325"W	3778.38	285.925	2.73	-0.20	2.72
11382.00	89.780	328.810	8163.14	2970.39	1117.67	-3683.07	1745434.19	410595.09	39°37'28.5606"N	80°17'30.9766"W	3848.92	286.881	0.79	-0.29	0.74
11476.00	90.830	328.680	8162.64	3064.31	1198.03	-3731.84	1745385.42	410675.44	39°37'29.3504"N	80°17'31.6090"W	3919.43	287.798	1.13	1.12	-0.14
11571.00	90.770	327.590	8161.32	3159.26	1278.70	-3781.99	1745335.28	410756.11	39°37'30.1433"N	80°17'32.2589"W	3992.30	288.681	1.15	-0.06	-1.15
11665.00	91.050	326.910	8159.82	3253.23	1357.75	-3832.83	1745284.43	410835.16	39°37'30.9201"N	80°17'32.9176"W	4066.21	289.506	0.78	0.30	-0.72
11760.00	91.600	329.290	8157.63	3348.16	1438.37	-3883.02	1745234.25	410915.78	39°37'31.7125"N	80°17'33.5680"W	4140.86	290.326	2.57	0.58	2.51
11855.00	91.570	326.590	8155.00	3443.07	1518.85	-3933.42	1745183.85	410996.24	39°37'32.5034"N	80°17'34.2212"W	4216.48	291.114	2.84	-0.03	-2.84
11949.00	91.750	327.910	8152.28	3537.02	1597.87	-3984.25	1745133.03	411075.26	39°37'33.2799"N	80°17'34.8797"W	4292.72	291.853	1.42	0.19	1.40
12044.00	91.570	326.860	8149.52	3631.97	1677.85	-4035.43	1745081.85	411155.24	39°37'34.0659"N	80°17'35.5428"W	4370.34	292.577	1.12	-0.19	-1.11
12139.00	91.820	326.470	8146.71	3726.92	1757.19	-4087.61	1745029.67	411234.57	39°37'34.8454"N	80°17'36.2186"W	4449.30	293.262	0.49	0.26	-0.41
12235.00	91.480	325.720	8143.95	3822.88	1836.83	-4141.14	1744976.14	411314.21	39°37'35.6278"N	80°17'36.9117"W	4530.23	293.920	0.86	-0.35	-0.78
12330.00	91.570	326.340	8141.42	3917.85	1915.59	-4194.20	1744923.08	411392.96	39°37'36.4015"N	80°17'37.5987"W	4610.95	294.547	0.66	0.09	0.65
12425.00	91.420	324.290	8138.94	4012.73	1993.68	-4248.24	1744869.05	411471.04	39°37'37.1685"N	80°17'38.2982"W	4692.79	295.140	2.16	-0.16	-2.16
12520.00	91.600	325.590	8136.44	4107.73	2071.41	-4302.79	1744814.50	411548.77	39°37'37.9319"N	80°17'39.0041"W	4775.43	295.707	1.38	0.19	1.37
12614.00	91.570	325.000	8133.84	4201.67	2148.66	-4356.29	1744761.00	411626.02	39°37'38.6906"N	80°17'39.6965"W	4857.37	296.254	0.63	-0.03	-0.63
12709.00	91.690	327.810	8131.14	4296.63	2227.75	-4408.83	1744708.47	411705.10	39°37'39.4677"N	80°17'40.3769"W	4939.70	296.807	2.96	0.13	2.96
12804.00	91.600	324.170	8128.41	4391.57	2306.45	-4461.94	1744655.37	411783.80	39°37'40.2408"N	80°17'41.0645"W	5022.81	297.335	3.83	-0.09	-3.83
12899.00	91.720	324.640	8125.66	4486.47	2383.67	-4517.21	1744600.10	411861.01	39°37'40.9991"N	80°17'41.7796"W	5107.55	297.820	0.51	0.13	0.49
12994.00	91.480	324.580	8123.03	4580.39	2460.27	-4571.63	1744545.68	411937.61	39°37'41.7513"N	80°17'42.4838"W	5191.60	298.287	0.26	-0.26	-0.06
13089.00	91.600	323.940	8120.51	4674.29	2536.54	-4626.51	1744490.80	412013.88	39°37'42.5003"N	80°17'43.1938"W	5276.24	298.734	0.69	0.13	-0.68



Actual Wellpath Report

McClellan 7H AWP Proj: 22426'
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REFERENCE WELLPATH IDENTIFICATION

Operator	NORTHEAST NATURAL ENERGY, LLC	Well	McClellan 7H
Field	Monongalia	API/Legal	
Facility	McClellan Pad	Wellbore	McClellan 7H AWB
Slot	Slot #07		

WELLPATH DATA (249 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
13182.00	91.350	326.060	8118.06	4769.23	2614.33	-4680.98	1744436.34	412091.66	39°37'43.2643"N	80°17'43.8988"W	5361.56	299.183	2.25	-0.26	2.23
13277.00	91.320	325.870	8115.85	4864.20	2693.03	-4734.14	1744383.18	412170.36	39°37'44.0374"N	80°17'44.5870"W	5446.51	299.634	0.20	-0.03	-0.20
13372.00	91.600	325.740	8113.43	4959.17	2771.59	-4787.51	1744329.81	412248.91	39°37'44.8090"N	80°17'45.2780"W	5531.90	300.067	0.32	0.29	-0.14
13466.00	91.480	326.150	8110.90	5053.13	2849.44	-4840.13	1744277.20	412326.75	39°37'45.5738"N	80°17'45.9594"W	5616.60	300.486	0.45	-0.13	0.44
13561.00	91.540	326.190	8108.40	5148.10	2928.33	-4893.00	1744224.33	412405.64	39°37'46.3488"N	80°17'46.6440"W	5702.33	300.899	0.08	0.06	0.04
13656.00	91.660	326.250	8105.74	5243.06	3007.26	-4945.80	1744171.53	412484.56	39°37'47.1242"N	80°17'47.3277"W	5788.31	301.301	0.14	0.13	0.06
13751.00	91.660	326.100	8102.99	5338.02	3086.14	-4998.66	1744118.67	412563.45	39°37'47.8992"N	80°17'48.0123"W	5874.60	301.691	0.16	0.00	-0.16
13846.00	91.540	325.790	8100.34	5432.98	3164.82	-5051.84	1744065.50	412642.12	39°37'48.6721"N	80°17'48.7008"W	5961.31	302.066	0.35	-0.13	-0.33
13941.00	91.450	325.830	8097.86	5527.94	3243.38	-5105.21	1744012.14	412720.67	39°37'49.4437"N	80°17'49.3918"W	6048.36	302.428	0.10	-0.09	0.04
14035.00	91.540	326.170	8095.41	5621.91	3321.28	-5157.75	1743959.59	412798.57	39°37'50.2090"N	80°17'50.0722"W	6134.60	302.779	0.37	0.10	0.36
14130.00	91.260	326.280	8093.07	5716.88	3400.22	-5210.55	1743906.80	412877.50	39°37'50.9845"N	80°17'50.7559"W	6221.84	303.127	0.32	-0.29	0.12
14225.00	91.420	325.840	8090.87	5811.85	3479.01	-5263.58	1743853.78	412956.29	39°37'51.7585"N	80°17'51.4426"W	6309.42	303.463	0.49	0.17	-0.46
14319.00	91.140	325.640	8088.77	5905.82	3556.69	-5316.48	1743800.87	413033.96	39°37'52.5215"N	80°17'52.1275"W	6396.48	303.782	0.37	-0.30	-0.21
14414.00	91.020	324.170	8086.97	6000.77	3634.40	-5371.09	1743746.27	413111.67	39°37'53.2847"N	80°17'52.8343"W	6485.17	304.085	1.55	-0.13	-1.55
14509.00	91.510	325.830	8084.88	6095.72	3712.20	-5425.56	1743691.80	413189.46	39°37'54.0487"N	80°17'53.5393"W	6573.97	304.380	1.82	0.52	1.75
14604.00	90.490	326.430	8083.22	6190.70	3791.06	-5478.50	1743638.87	413268.32	39°37'54.8235"N	80°17'54.2248"W	6662.29	304.683	1.25	-1.07	0.63
14699.00	90.800	327.180	8082.15	6285.69	3870.55	-5530.51	1743586.86	413347.81	39°37'55.6045"N	80°17'54.8986"W	6750.38	304.986	0.85	0.33	0.79
14794.00	90.650	327.040	8080.95	6380.67	3950.32	-5582.09	1743535.28	413427.57	39°37'56.3882"N	80°17'55.5669"W	6838.48	305.286	0.22	-0.16	-0.15
14889.00	91.140	327.120	8079.46	6475.66	4030.05	-5633.71	1743483.66	413507.30	39°37'57.1717"N	80°17'56.2357"W	6926.76	305.578	0.52	0.52	0.08
14983.00	91.140	327.110	8077.99	6569.63	4108.98	-5684.74	1743432.64	413586.22	39°37'57.9472"N	80°17'56.8969"W	7014.27	305.860	0.01	0.00	-0.01
15078.00	91.050	326.930	8075.78	6664.61	4188.65	-5736.44	1743380.94	413665.89	39°37'58.7300"N	80°17'57.5668"W	7102.93	306.136	0.21	-0.09	-0.19
15173.00	90.980	327.000	8074.10	6759.59	4268.28	-5788.22	1743329.16	413745.51	39°37'59.5124"N	80°17'58.2376"W	7191.79	306.405	0.10	-0.07	0.07
15268.00	90.950	326.950	8072.50	6854.57	4347.92	-5839.99	1743277.39	413825.15	39°38'00.2949"N	80°17'58.9084"W	7280.79	306.668	0.06	-0.03	-0.05
15362.00	90.950	326.610	8070.94	6948.55	4426.55	-5891.48	1743225.91	413903.77	39°38'01.0674"N	80°17'59.5754"W	7369.12	306.919	0.36	0.00	-0.36
15456.00	90.310	326.630	8069.90	7042.54	4505.04	-5943.20	1743174.20	413982.25	39°38'01.8385"N	80°18'00.2453"W	7457.68	307.163	0.68	-0.68	0.02
15550.00	90.580	326.900	8069.17	7136.54	4583.66	-5994.72	1743122.68	414060.87	39°38'02.6110"N	80°18'00.9127"W	7546.29	307.402	0.41	0.29	0.29
15645.00	90.400	326.880	8068.36	7231.53	4663.23	-6046.61	1743070.79	414140.44	39°38'03.3928"N	80°18'01.5850"W	7635.92	307.640	0.19	-0.19	-0.02
15740.00	90.490	326.750	8067.62	7327.53	4743.57	-6099.15	1743018.25	414220.77	39°38'04.1821"N	80°18'02.2657"W	7726.65	307.874	0.16	0.09	-0.14
15835.00	90.310	326.540	8066.95	7422.52	4822.92	-6151.38	1742966.02	414300.12	39°38'04.9617"N	80°18'02.9424"W	7816.66	308.098	0.29	-0.19	-0.22
15930.00	89.940	326.950	8066.75	7516.52	4901.53	-6202.93	1742914.48	414378.72	39°38'05.7340"N	80°18'03.6102"W	7905.78	308.316	0.59	-0.39	0.44

REFERENCE WELLPATH IDENTIFICATION

Operator	NORTHEAST NATURAL ENERGY, LLC	Well	McClellan 7H
Field	Monongalia	API/ Legal	
Facility	McClellan Pad	Wellbore	McClellan 7H AWB
Slot	Slot #07		

WELLPATH DATA (249 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
16026.00	90.090	327.200	8066.72	7612.51	4982.11	-6255.11	1742862.30	414459.29	39°38'6.5257"N	80°18'4.2863"W	7996.74	308.537	0.30	0.16	0.26
16120.00	90.000	327.120	8066.65	7706.50	5061.09	-6306.08	1742862.30	414538.27	39°38'7.3018"N	80°18'4.9468"W	8085.87	308.750	0.13	-0.10	-0.09
16215.00	90.250	327.140	8066.44	7801.49	5140.88	-6357.64	1742759.77	414618.05	39°38'8.0857"N	80°18'5.6149"W	8176.08	308.959	0.26	0.26	0.02
16309.00	90.060	327.200	8066.19	7895.49	5219.86	-6408.08	1742708.82	414697.03	39°38'8.8618"N	80°18'6.2753"W	8265.42	309.163	0.21	-0.20	0.06
16405.00	90.740	327.300	8065.52	7991.47	5300.60	-6460.54	1742666.89	414777.77	39°38'9.6551"N	80°18'6.9483"W	8356.73	309.367	0.72	0.71	0.10
16499.00	90.800	327.350	8064.25	8085.45	5379.72	-6511.28	1742606.15	414856.88	39°38'10.4325"N	80°18'7.6059"W	8446.19	309.564	0.08	0.06	0.05
16594.00	90.030	326.770	8063.56	8180.44	5459.44	-6562.94	1742554.50	414936.60	39°38'11.2159"N	80°18'8.2752"W	8536.84	309.756	1.01	-0.81	-0.61
16688.00	90.220	326.870	8063.36	8274.44	5538.12	-6614.38	1742503.05	415015.27	39°38'11.9888"N	80°18'8.9417"W	8626.75	309.939	0.23	0.20	0.11
16783.00	89.910	327.060	8063.25	8369.43	5617.76	-6666.17	1742451.27	415094.90	39°38'12.7713"N	80°18'9.6128"W	8717.63	310.122	0.38	-0.33	0.20
16877.00	90.000	326.870	8063.33	8463.43	5696.56	-6717.41	1742400.03	415173.70	39°38'13.5456"N	80°18'10.2768"W	8807.64	310.299	0.22	0.10	-0.20
16972.00	89.660	327.150	8063.61	8558.42	5776.24	-6769.14	1742348.30	415253.38	39°38'14.3285"N	80°18'10.9470"W	8898.67	310.475	0.46	-0.36	0.29
17067.00	89.350	326.930	8064.43	8653.41	5855.95	-6820.82	1742296.62	415333.08	39°38'15.1116"N	80°18'11.6167"W	8989.76	310.647	0.40	-0.33	-0.23
17162.00	89.600	327.390	8065.30	8748.39	5935.76	-6872.34	1742245.11	415412.89	39°38'15.8958"N	80°18'12.2843"W	9080.88	310.818	0.55	0.26	0.48
17256.00	89.780	326.840	8065.81	8842.39	6014.70	-6923.38	1742194.08	415491.82	39°38'16.6714"N	80°18'12.9457"W	9171.14	310.983	0.62	0.19	-0.59
17350.00	89.850	327.100	8066.11	8936.38	6093.51	-6974.61	1742142.84	415570.63	39°38'17.4457"N	80°18'13.6096"W	9261.54	311.143	0.29	0.07	0.28
17444.00	90.030	327.420	8066.21	9030.37	6172.58	-7025.45	1742092.01	415649.69	39°38'18.2226"N	80°18'14.2684"W	9351.88	311.303	0.39	0.19	0.34
17539.00	89.940	327.130	8066.23	9125.36	6252.50	-7076.81	1742040.66	415729.60	39°38'19.0078"N	80°18'14.9340"W	9443.25	311.461	0.32	-0.09	-0.31
17634.00	90.000	327.340	8066.28	9220.35	6332.38	-7128.22	1741989.25	415809.48	39°38'19.7928"N	80°18'15.6003"W	9534.70	311.616	0.23	0.06	0.22
17729.00	89.660	325.980	8066.57	9315.34	6411.74	-7180.43	1741937.04	415888.84	39°38'20.5725"N	80°18'16.2768"W	9626.48	311.763	1.48	-0.36	-1.43
17823.00	89.690	326.020	8067.10	9409.34	6489.67	-7233.00	1741884.48	415968.77	39°38'21.3379"N	80°18'16.9576"W	9717.62	311.899	0.05	0.03	0.04
17918.00	89.880	326.540	8067.46	9504.34	6568.69	-7285.73	1741831.74	416045.78	39°38'22.1141"N	80°18'17.6407"W	9809.67	312.037	0.58	0.20	0.55
18012.00	89.750	325.940	8067.76	9598.34	6646.84	-7337.97	1741779.51	416123.92	39°38'22.8818"N	80°18'18.3174"W	9900.82	312.171	0.65	-0.14	-0.64
18107.00	89.750	326.380	8068.17	9693.33	6725.74	-7390.87	1741726.61	416202.82	39°38'23.6569"N	80°18'19.0026"W	9993.03	312.302	0.46	0.00	0.46
18203.00	89.660	326.060	8068.67	9789.33	6805.53	-7444.25	1741673.24	416282.61	39°38'24.4407"N	80°18'19.6940"W	10086.23	312.434	0.35	-0.09	-0.33
18297.00	89.720	325.820	8069.18	9883.33	6883.41	-7496.89	1741620.60	416360.48	39°38'25.2057"N	80°18'20.3759"W	10177.66	312.567	0.26	0.06	-0.26
18393.00	89.750	326.490	8069.62	9979.33	6963.14	-7550.36	1741567.13	416440.20	39°38'25.9889"N	80°18'21.0684"W	10270.99	312.683	0.70	0.03	0.70
18489.00	89.820	326.090	8069.98	10074.32	7042.17	-7603.08	1741514.41	416519.22	39°38'26.7652"N	80°18'21.7514"W	10363.35	312.807	0.43	0.07	-0.42
18585.00	89.720	326.150	8070.36	10169.32	7121.03	-7656.04	1741461.46	416598.09	39°38'27.5399"N	80°18'22.4374"W	10455.82	312.927	0.12	-0.11	0.06
18681.00	89.480	325.960	8071.02	10264.32	7199.84	-7709.09	1741408.42	416676.89	39°38'28.3140"N	80°18'23.1245"W	10548.35	313.044	0.32	-0.25	-0.20
18777.00	89.720	325.980	8071.68	10359.31	7278.57	-7762.25	1741355.26	416755.61	39°38'29.0873"N	80°18'23.8131"W	10640.96	313.158	0.25	0.25	0.02

REFERENCE WELLPATH IDENTIFICATION

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Field	Monongalia	API/ Legal	
Facility	McClellan Pad	Wellbore	McClellan 7H AWB
Slot	Slot #07		

WELLPATH DATA (249 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]
18866.00	89.720	326.170	8072.14	10452.31	7355.74	-7814.15	1741303.36	416832.78	39°38'29.8453"N	80°18'24.4854"W	10731.63	313.269	0.20	0.00	0.20
18961.00	90.120	325.860	8072.27	10547.31	7434.51	-7867.26	1741250.26	416911.54	39°38'30.6191"N	80°18'25.1733"W	10824.31	313.380	0.53	0.42	-0.33
19056.00	91.140	326.250	8071.23	10642.30	7513.31	-7920.30	1741197.22	416990.34	39°38'31.3932"N	80°18'25.8603"W	10917.01	313.489	1.15	1.07	0.41
19150.00	92.030	326.270	8068.63	10736.26	7591.45	-7972.49	1741145.03	417068.48	39°38'32.1607"N	80°18'26.5364"W	11008.66	313.598	0.95	0.95	0.02
19245.00	90.520	326.070	8066.61	10831.24	7670.34	-8025.36	1741092.16	417147.36	39°38'32.9357"N	80°18'27.2214"W	11101.38	313.704	1.60	-1.59	-0.21
19341.00	90.220	327.010	8065.89	10927.23	7750.43	-8078.29	1741039.23	417227.45	39°38'33.7225"N	80°18'27.9072"W	11195.00	313.813	1.03	-0.31	0.98
19435.00	89.750	326.300	8065.92	11021.23	7828.96	-8129.96	1740987.57	417305.97	39°38'34.4939"N	80°18'28.5767"W	11286.67	313.919	0.91	-0.50	-0.76
19530.00	89.450	326.330	8066.58	11116.23	7908.00	-8182.65	1740934.88	417385.01	39°38'35.2704"N	80°18'29.2592"W	11379.47	314.022	0.32	-0.32	0.03
19624.00	89.910	327.290	8067.11	11210.22	7986.67	-8234.11	1740883.43	417463.67	39°38'36.0432"N	80°18'29.9260"W	11471.15	314.126	1.13	0.49	1.02
19718.00	90.000	326.570	8067.18	11304.22	8065.44	-8285.40	1740832.14	417542.43	39°38'36.8171"N	80°18'30.5908"W	11562.83	314.229	0.77	0.10	-0.77
19814.00	89.230	326.430	8067.83	11400.21	8145.49	-8338.38	1740779.16	417622.48	39°38'37.6035"N	80°18'31.2773"W	11656.65	314.330	0.82	-0.80	-0.15
19908.00	89.540	326.650	8068.83	11494.21	8223.91	-8390.21	1740727.34	417700.89	39°38'38.3738"N	80°18'31.9488"W	11748.54	314.427	0.40	0.33	0.23
20004.00	90.090	326.170	8069.14	11590.21	8303.87	-8443.32	1740674.23	417780.86	39°38'39.1594"N	80°18'32.6369"W	11842.46	314.523	0.76	0.57	-0.50
20099.00	89.720	326.330	8069.30	11685.21	8382.86	-8496.10	1740621.45	417859.84	39°38'39.9353"N	80°18'33.3207"W	11935.50	314.616	0.42	-0.39	0.17
20193.00	88.550	325.810	8070.72	11779.19	8460.85	-8548.56	1740569.00	417937.82	39°38'40.7013"N	80°18'34.0003"W	12027.62	314.705	1.36	-1.24	-0.56
20288.00	88.770	325.940	8072.94	11874.16	8539.47	-8601.84	1740515.72	418016.43	39°38'41.4736"N	80°18'34.6904"W	12120.81	314.792	0.27	0.23	0.14
20381.00	88.890	325.950	8074.84	11967.14	8616.50	-8653.91	1740463.65	418093.46	39°38'42.2302"N	80°18'35.3649"W	12212.05	314.876	0.13	0.13	0.01
20476.00	89.230	326.040	8076.40	12062.13	8695.25	-8707.03	1740410.53	418172.20	39°38'43.0037"N	80°18'36.0530"W	12305.27	314.961	0.37	0.36	0.09
20571.00	88.710	326.020	8078.11	12157.11	8774.02	-8760.10	1740357.46	418250.97	39°38'43.7774"N	80°18'36.7406"W	12398.50	315.045	0.56	-0.55	-0.02
20666.00	88.460	325.800	8080.45	12252.08	8852.67	-8813.33	1740304.24	418329.62	39°38'44.5499"N	80°18'37.4301"W	12491.78	315.128	0.35	-0.26	-0.23
20761.00	88.030	325.860	8083.36	12347.03	8931.23	-8866.66	1740250.91	418408.18	39°38'45.3216"N	80°18'38.1209"W	12585.10	315.208	0.46	-0.45	0.06
20856.00	89.720	326.110	8085.23	12442.00	9009.96	-8919.80	1740197.78	418486.90	39°38'46.0949"N	80°18'38.8092"W	12678.41	315.288	1.80	1.78	0.26
20951.00	89.690	326.240	8086.72	12537.00	9088.88	-8972.68	1740144.90	418565.81	39°38'46.8701"N	80°18'39.4943"W	12771.71	315.369	0.14	-0.03	0.14
21046.00	89.690	326.140	8086.23	12632.00	9167.81	-9025.54	1740092.04	418644.74	39°38'47.6454"N	80°18'40.1792"W	12865.04	315.448	0.11	0.00	-0.11
21141.00	89.880	326.000	8086.59	12727.00	9246.63	-9078.57	1740039.02	418723.56	39°38'48.4196"N	80°18'40.8661"W	12958.42	315.525	0.25	0.20	-0.15
21237.00	89.720	326.070	8086.92	12823.00	9326.25	-9132.20	1739985.39	418803.17	39°38'49.2017"N	80°18'41.5609"W	13052.82	315.602	0.18	-0.17	0.07
21332.00	89.570	326.040	8087.51	12917.99	9405.06	-9185.25	1739932.35	418881.98	39°38'49.9758"N	80°18'42.2482"W	13146.25	315.677	0.16	-0.16	-0.03
21428.00	89.350	325.990	8088.42	13013.99	9484.66	-9238.91	1739878.69	418961.57	39°38'50.7576"N	80°18'42.9433"W	13240.70	315.752	0.24	-0.23	-0.05
21523.00	89.420	326.050	8089.44	13108.98	9563.43	-9292.00	1739825.60	419040.34	39°38'51.5314"N	80°18'43.6311"W	13334.18	315.825	0.10	0.07	0.06
21619.00	90.090	325.930	8089.84	13203.98	9642.18	-9345.13	1739772.47	419119.08	39°38'52.3048"N	80°18'44.3195"W	13427.70	315.896	0.72	0.71	-0.13

REFERENCE WELLPATH IDENTIFICATION

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Field	Monongalia	API/ Legal	
Facility	McClellan Pad	Wellbore	McClellan 7H AWB
Slot	Slot #07		

WELLPATH DATA (249 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS ["/100ft]	Build Rate ["/100ft]	Turn Rate ["/100ft]
21713.00	90.180	326.780	8089.62	13298.97	9720.81	-9398.46	1739719.15	419197.70	39°38'53.0771"N	80°18'45.0103"W	13521.28	315.966	0.18	0.09	-0.16
21809.00	90.520	326.150	8089.03	13394.97	9800.36	-9452.19	1739665.42	419277.25	39°38'53.8585"N	80°18'45.7063"W	13615.83	316.036	0.52	0.38	0.39
21904.00	90.150	326.200	8088.48	13489.97	9879.28	-9505.07	1739612.54	419356.16	39°38'54.6336"N	80°18'46.3915"W	13709.36	316.106	0.39	-0.39	0.05
21999.00	90.150	326.080	8088.23	13584.96	9958.17	-9558.00	1739559.62	419435.05	39°38'55.4085"N	80°18'47.0773"W	13802.91	316.175	0.13	0.00	-0.13
22094.00	90.150	326.040	8087.98	13679.96	10036.98	-9611.04	1739506.58	419513.85	39°38'56.1827"N	80°18'47.7645"W	13896.51	316.242	0.04	0.00	-0.04
22190.00	90.370	326.070	8087.54	13775.96	10116.62	-9664.64	1739452.98	419593.49	39°38'56.9649"N	80°18'48.4590"W	13991.12	316.309	0.23	0.23	0.03
22285.00	92.030	326.140	8085.55	13870.93	10195.45	-9717.61	1739400.01	419672.32	39°38'57.7392"N	80°18'49.1452"W	14084.72	316.375	1.75	1.75	0.07
22379.00	91.570	326.050	8082.60	13964.89	10273.43	-9770.02	1739347.61	419750.29	39°38'58.5052"N	80°18'49.8242"W	14177.33	316.439	0.50	-0.49	-0.10
22426.00†	91.570	326.050	8081.31	14011.87	10312.40	-9796.26	1739321.37	419789.26	39°38'58.8880"N	80°18'50.1642"W	14223.65	316.470	0.00	0.00	0.00

HOLE & CASING SECTIONS - Ref Wellbore: McClellan 7H AWB Ref Wellpath: McClellan 7H AWP Proj: 22426'

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
17.5in Open Hole	28.00	1498.00	1470.00	28.00	1497.96	0.00	0.00	-7.42	-3.38
13.375in Casing Surface	28.00	1468.00	1440.00	28.00	1467.97	0.00	0.00	-7.00	-3.22
12.25in Open Hole	1498.00	2697.00	1199.00	1497.96	2648.10	-7.42	-3.38	-233.37	-225.73
9.625in Casing Intermediate	28.00	2667.00	2639.00	28.00	2619.46	0.00	0.00	-226.29	-220.28
8.75in Open Hole	2697.00	7485.00	4788.00	2648.10	7098.33	-233.37	-225.73	-1323.05	-1579.95
8.5in Open Hole	7485.00	22426.00	14941.00	7098.33	8081.31	-1323.05	-1579.95	10312.40	-9796.26
5.5in Casing Production	28.00	22396.00	22368.00	28.00	8082.14	0.00	0.00	10287.53	-9779.51

REFERENCE WELLPATH IDENTIFICATION

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Field	Monongalia			API/ Legal	
Facility	McClellan Pad			Wellbore	McClellan 7H AWB
Slot	Slot #07				

TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
McClellan 7H LP Rev-5	8040.00	-956.89	-2305.17	1746812.00	408520.65	39°37'8.1782"N	80°17'13.1356"W	point
McClellan Hardline #1 (03.15.2022)	8529.00	11954.58	-11011.73	1738105.98	421431.34	39°39'15.0077"N	80°19'5.8940"W	polygon
2D Polygon: dimensions not calculated								
McClellan 7H BHL Rev-8	9127.06	11987.38	-10914.01	1738203.69	421464.14	39°39'15.3406"N	80°19'4.6485"W	point

WELLPATH COMPOSITION - Ref Wellbore: McClellan 7H AWB Ref Wellpath: McClellan 7H AWP Proj: 22426'

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
28.00	1328.00	BH Generic gyro - northseeking (Standard)	01 <17.5"> Javins Inertial Gyro [Northseeking] (78'-1328')	McClellan 7H AWB	9/13/2022
1328.00	2636.00	OWSG MWD rev2 - Standard	02 <12.25">SDI MWD [OWSG MWD REV.2-Standard] (1328')(1499'-2636')	McClellan 7H AWB	9/13/2022
2636.00	7485.00	OWSG MWD rev2 - Standard	03 <8.75">SDI MWD [OWSG MWD REV.2-Standard] (2636')(2741'-7485')	McClellan 7H AWB	9/13/2022
7485.00	22426.00	BH AutoTrak Curve/eXpress (2019) (HRGM, Short spacing)	04 <8.5"> BH ATK Curve [HRGM+Short Spacing] (7485')(7597'-22379')	McClellan 7H AWB	9/13/2022



Actual Wellpath Report

McClellan 7H AWP Proj: 22426'
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REFERENCE WELLPATH IDENTIFICATION

Operator	NORTHEAST NATURAL ENERGY, LLC	Well	McClellan 7H
Field	Monongalia	API/Legal	
Facility	McClellan Pad	Wellbore	McClellan 7H AWB
Slot	Slot #07		

COMMENTS

Wellpath general comments

API: 47061018860000
 BH Job #: 111431589
 Rig: Patterson 277
 Duration: 9/13/2022 - 9/15/2022

- 01_ <17.5"> Javins Inertial Gyro [Northseeking] (78'-1328')
- 02_ <12.25">SDI MWD [OWSG MWD REV.2-Standard] (1328')(1499'-2636')
- 03_ <8.75">SDI MWD [OWSG MWD REV.2-Standard] (2636')(2741'-7485')
- 04_ <8.5"> BH ATK Curve [HRGM+Short Spacing] (7485')(7597'-22379')

Final Survey MD @ 22379'
 Projected MD at TD: 22426'

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	12/15/2022
Job End Date:	1/6/2023
State:	West Virginia
County:	Monongalia
API Number:	47-061-01886-00-00
Operator Name:	Northeast Natural Energy LLC
Well Name and Number:	McClellan 7H
Latitude:	39.62162100
Longitude:	-80.27882900
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	8,096
Total Base Water Volume (gal):	28,189,392
Total Base Non Water Volume:	0



Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Northeast Natural Energy	Carrier/Base Fluid					
			Water	7732-18-5	100.00000	88.12945	None
Sand (100 Mesh Proppant)	ProFrac	Proppant					
			Silica Substrate	14808-60-7	100.00000	10.33162	None
Sand (40/70 White Proppant)	ProFrac	Proppant					
			Silica Substrate	14808-60-7	100.00000	1.17736	None
Hydrochloric Acid (7.5%)	CNR	Acidizing					
			Water	7732-18-5	85.00000	0.22363	None
			Hydrochloric Acid (Hydrogen Chloride)	7647-01-0	37.00000	0.09734	None
SPRINGS-STREAM FR 9800	Chemstream	Friction Reducer					
			Butene, homopolymer	9003-29-6	25.00000	0.01483	None
			alkanes, C16-20-iso-	90622-59-6	25.00000	0.01483	None
			Ethoxylated alcohols (C12-18)	68213-23-0	3.00000	0.00178	None
General 268	Chemstream	Biocide					
			Non-hazardous substances	Proprietary	80.00000	0.01775	None

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			Glutaraldehyde	111-30-8	20.00000	0.00444	None
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00067	None
			Quaternary Ammonium Compounds	68424-85-1	3.00000	0.00067	None
			Ethanol	64-17-5	1.50000	0.00033	None
StimSTREAM SC 405	Chemstream	Scale Control					
			Non-Hazardous Substances	Proprietary	70.00000	0.01087	None
			Diethylenetriamine penta (methylene phosphonic acid) (DTPMP)	15827-60-8	10.00000	0.00155	None
			Citric Acid	77-92-9	10.00000	0.00155	None
			2-Phosphono-1,2,4-butanetricarboxylic acid (PBTC)	37971-36-1	10.00000	0.00155	None
ProHib 100	CNR	Acid Inhibitor					
			2-Butoxyethanol	111-76-2	60.00000	0.00046	None
			Proprietary material	Proprietary	30.00000	0.00023	None
			Proprietary non-ionic surfactant	Proprietary	20.00000	0.00015	None
			Proprietary ethoxylated alcohol	Proprietary	10.00000	0.00008	None
			Proprietary corrosion inhibitor	Proprietary	10.00000	0.00008	None
ProFE 105	CNR	Iron Control					
			Citric Acid	77-92-9	20.00000	0.00013	None
			Acetic Acid	64-19-7	5.00000	0.00003	None
Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.							
Other Chemical(s)	Listed Above	See Trade Name(s) List					
			Water	7732-18-5	85.00000	0.22363	
			Non-hazardous substances	Proprietary	80.00000	0.01775	
			Butene, homopolymer	9003-29-6	25.00000	0.01483	
			Non-Hazardous Substances	Proprietary	70.00000	0.01087	
			Ethoxylated alcohols (C12-18)	68213-23-0	3.00000	0.00178	
			Citric Acid	77-92-9	10.00000	0.00155	
			Diethylenetriamine penta (methylene phosphonic acid) (DTPMP)	15827-60-8	10.00000	0.00155	
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00067	
			Quaternary Ammonium Compounds	68424-85-1	3.00000	0.00067	
			Ethanol	64-17-5	1.50000	0.00033	
			Proprietary material	Proprietary	30.00000	0.00023	
			Proprietary non-ionic surfactant	Proprietary	20.00000	0.00015	
			Proprietary corrosion inhibitor	Proprietary	10.00000	0.00008	
			Proprietary ethoxylated alcohol	Proprietary	10.00000	0.00008	
			Acetic Acid	64-19-7	5.00000	0.00003	

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