

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

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MAY 26 2025
WV Department of
Environmental Protection

API 47 - 061 - 01926 County Monongalia District Battelle
Quad Wadestown Pad Name Miracle Run Field/Pool Name _____
Farm name Byron Lane Rapp Well Number 14H
Operator (as registered with the OOG) Northeast Natural Energy
Address 707 Virginia St. E, Ste 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	<u>4386835.8</u>	Easting	<u>558475.0</u>
Landing Point of Curve	Northing	<u>4387153.4</u>	Easting	<u>559370.8</u>
Bottom Hole	Northing	<u>4382020.8</u>	Easting	<u>562913.1</u>

Elevation (ft) 1,521' 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 FOR HORIZONTAL SECTION; BIO-BASE 365, CALCIUM CHLORIDE POWDER, G-Seal Plus, HRP, Lime, M-I WATE (BARITE)

M-KK 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 4/5/2023 Date drilling commenced 3/7/2024 Date drilling ceased 3/22/2024
Date completion activities began 5/18/2024 Date completion activities ceased 6/12/2024
Verbal plugging (Y/N) N 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 <u>1,238'</u>	Open mine(s) (Y/N) depths _____
Salt water depth(s) ft <u>2,628'</u>	Void(s) encountered (Y/N) depths <u>N</u>
Coal depth(s) ft <u>718', 1,228'</u>	Cavern(s) encountered (Y/N) depths <u>N</u>
Is coal being mined in area (Y/N) <u>Y</u>	

APPROVED

Reviewed by:
4/25/2025 MPK
09/19/2025

API 47-061 - 01926

Farm name Byron Lane Rapp

Well number 14H

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	28"	24"	133'	N	100.5	NA	N
Surface	17 1/2"	13 3/8"	1,465'	N	J-55/ 54.5	NA	Y
Coal							
Intermediate 1	12 3/8"	9 5/8"	2,767'	N	J-55/36	NA	Y
Intermediate 2							
Intermediate 3							
Production	8 3/4"	5 1/2"	29,784.8'	N	P-110/20	NA	Y
Tubing							
Packer type and depth set							

Comment Details Casing depths based on KB elevation

Permit approved to set FW casing to cover Red Rock Formation.

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	Class A Common					CTS	48
Surface	L/100% NCM-956	1370	15.6	1.14	1556.40	CTS	8
Coal							
Intermediate 1	L/100% NCM-956	1100	15.6	1.12	1236.13	CTS	8
Intermediate 2							
Intermediate 3							
Production	Class L 50:50 POZ	5595	14.5	1.16	6480.46	2065'	48
Tubing							

Drillers TD (ft) 29863'

Loggers TD (ft) 29838'

Deepest formation penetrated Marcellus

Plug back to (ft) _____

Plug back procedure _____

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Kick off depth (ft) 8,165' MD/ 7543' TVD

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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: shoe track & every 3rd joint to surface.

Intermediate: shoe track & every 3rd joint to surface

Production: Rigid bow centralizers @ shoe track & every other joint in the lateral to KOP. Bow springs from KOP to surface every 3rd joint.

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 _____

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API 47-061 - 01926 Farm name Byron Lane Rapp Well number 14H

PERFORATION RECORD

[illegible]

Please insert additional pages as applicable.

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STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

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[illegible]

Please insert additional pages as applicable.

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PRODUCING FORMATION(S)	DEPTHS	
Marcellus	8,196'	29,863'

GAS TEST ☐ Build up ☐ Drawdown ☒ Open Flow OIL TEST ☐ Flow ☐ Pump

SHUT-IN PRESSURE Surface 3004 psi Bottom Hole 5310 psi DURATION OF TEST 24 hrs

OPEN FLOW Gas Oil NGL Water GAS MEASURED BY
 4469 mcfpd _____ bpd _____ bpd _____ bpd ☐ Estimated ☒ Orifice ☐ Pilot

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Please insert additional pages as applicable.

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

09/19/2025

Miracle Run 14H Perforation Report				
Stage Number	Report Date	Total Shots	Cluster 1 Top TD	Cluster 5 Bottom TD
1	5/19/2024	40		29,709
2	5/19/2024	40	29,666	29,507
3	5/19/2024	40	29,465	29,306
4	5/20/2024	40	29,264	29,105
5	5/20/2024	40	29,063	28,905
6	5/20/2024	40	28,862	28,704
7	5/20/2024	40	28,683	28,503
8	5/21/2024	40	28,461	28,302
9	5/21/2024	40	28,260	28,101
10	5/21/2024	40	28,059	27,901
11	5/22/2024	40	27,859	27,700
12	5/22/2024	40	27,658	27,499
13	5/22/2024	40	27,457	27,298
14	5/23/2024	40	27,256	27,098
15	5/23/2024	40	27,055	26,897
16	5/23/2024	40	26,855	26,696
17	5/24/2024	40	26,654	26,495
18	5/24/2024	40	26,453	26,294
19	5/24/2024	40	26,252	26,094
20	5/24/2024	40	26,051	25,893
21	5/25/2024	40	25,851	25,692
22	5/25/2024	40	25,650	25,491
23	5/26/2024	40	25,449	25,290
24	5/26/2024	40	25,248	25,090
25	5/26/2024	40	25,047	24,889
26	5/26/2024	40	24,847	24,688
27	5/27/2024	40	24,646	24,487
28	5/27/2024	40	24,445	24,286
29	5/27/2024	40	24,244	24,086
30	5/27/2024	40	24,044	23,885
31	5/28/2024	40	23,843	23,684
32	5/28/2024	40	23,642	23,483
33	5/28/2024	40	23,441	23,283
34	5/28/2024	40	23,240	23,082
35	5/29/2024	40	23,040	22,881
36	5/29/2024	40	22,839	22,680
37	5/29/2024	40	22,638	22,479
38	5/23/2024	40	22,437	22,279
39	5/30/2024	40	22,236	22,078
40	5/30/2024	40	22,036	21,877
41	5/30/2024	40	21,835	21,676
42	5/30/2024	40	21,634	21,475

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43	5/30/2024	40	21,433	21,275
44	5/31/2024	40	21,232	21,074
45	5/31/2024	40	21,032	20,873
46	5/31/2024	40	20,831	20,672
47	5/31/2024	40	20,630	20,471
48	5/31/2024	40	20,429	20,271
49	6/1/2024	40	20,229	20,070
50	6/1/2024	40	20,028	19,869
51	6/1/2024	40	19,827	19,668
52	6/1/2024	40	19,626	19,468
53	6/1/2024	40	19,425	19,267
54	6/2/2024	40	19,225	19,066
55	6/2/2024	40	19,024	18,865
56	6/2/2024	40	18,823	18,664
57	6/2/2024	40	18,622	18,464
58	6/2/2024	40	18,421	18,263
59	6/3/2024	40	18,221	18,062
60	6/3/2024	40	18,020	17,861
61	6/3/2024	40	17,819	17,660
62	6/3/2024	40	17,618	17,460
63	6/3/2024	40	17,417	17,259
64	6/4/2024	40	17,217	17,058
65	6/4/2024	40	17,016	16,857
66	6/4/2024	40	16,815	16,656
67	6/4/2024	40	16,614	16,456
68	6/5/2024	40	16,414	16,255
69	6/5/2024	40	16,213	16,054
70	6/5/2024	40	16,012	15,853
71	6/5/2024	40	15,811	15,653
72	6/5/2024	40	15,610	15,452
73	6/6/2024	40	15,410	15,251
74	6/6/2024	40	15,209	15,050
75	6/6/2024	40	15,008	14,849
76	6/6/2024	40	14,807	14,649
77	6/7/2024	40	14,606	14,448
78	6/7/2024	40	14,406	14,247
79	6/7/2024	40	14,205	14,046
80	6/7/2024	40	14,004	13,845
81	6/8/2024	40	13,803	13,645
82	6/8/2024	40	13,602	13,444
83	6/8/2024	40	13,402	13,243
84	6/8/2024	40	13,201	13,042
85	6/8/2024	40	13,000	12,841
86	6/9/2024	40	12,799	12,641
87	6/9/2024	40	12,598	12,440
88	6/9/2024	40	12,398	12,239
89	6/9/2024	40	12,197	12,038

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90	6/9/2024	40	11,996	11,837
91	6/10/2024	40	11,795	11,637
92	6/10/2024	40	11,595	11,436
93	6/10/2024	40	11,394	11,235
94	6/10/2024	40	11,193	11,034
95	6/10/2024	40	10,992	10,834
96	6/11/2024	40	10,791	10,633
97	6/11/2024	40	10,591	10,432
98	6/11/2024	40	10,390	10,231
99	6/11/2024	40	10,189	10,030
100	6/11/2024	40	9,988	9,830
101	6/12/2024	40	9,787	9,629
102	6/12/2024	40	9,587	9,428
103	6/12/2024	40	9,386	9,227
104	6/12/2024	40	9,185	9,026

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Miracle Run 14H
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	5/19/2024	5,257		9,865	81	730	8,686	300,380	652
2	5/19/2024	5,770	6,739	9,032	81	19	11,021	455,400	693
3	5/19/2024	6,142	7,955	9,792	86	15	9,830	455,280	660
4	5/20/2024	6,369	6,440	9,936	89	638	10,728	455,120	667
5	5/20/2024	5,930	7,171	9,870	90	39	10,512	455,030	670
6	5/20/2024	5,687	7,183	9,693	89	20	9,879	455,550	647
7	5/20/2024	5,750	6,581	9,800	91	47	10,355	456,700	647
8	5/21/2024	6,032	6,962	9,777	88	38	9,989	455,000	643
9	5/21/2024	5,856	7,528	9,589	87	13	9,773	453,260	628
10	5/21/2024	5,996	7,090	9,898	91	60	9,577	455,100	624
11	5/22/2024	6,015	6,068	9,770	92	81	9,906	454,800	627
12	5/22/2024	6,203	7,581	9,638	87	12	9,985	458,670	613
13	5/22/2024	5,919	7,089	10,103	92	41	9,995	457,700	629
14	5/23/2024	6,209	7,213	9,822	92	37	9,612	457,760	616
15	5/23/2024	5,791	6,667	9,620	92	12	9,945	455,400	600
16	5/23/2024	6,121	7,079	9,965	92	123	9,834	455,040	598
17	5/24/2024	6,225	7,257	9,930	92	53	9,531	456,160	592
18	5/24/2024	5,570	6,975	9,735	89	5	9,772	455,520	579
19	5/24/2024	5,977	7,741	9,727	91	8	10,049	455,000	585
20	5/24/2024	6,017	7,846	9,914	92	54	9,999	454,580	572
21	5/25/2024	5,928	7,547	9,618	88	8	9,946	455,200	560
22	5/25/2024	5,933	7,104	9,915	92	15	10,114	455,800	510
23	5/26/2024	6,266	5,695	9,899	91	84	10,279	455,500	568
24	5/26/2024	6,120	7,882	9,711	88	12	9,855	454,100	559
25	5/26/2024	6,129	7,655	9,761	91	15	9,828	455,600	559
26	5/26/2024	6,360	6,817	9,684	92	50	9,914	456,300	555
27	5/27/2024	6,127	6,758	9,707	92	55	10,087	455,180	553
28	5/27/2024	6,196	7,640	9,817	92	11	10,005	455,570	549
29	5/27/2024	5,896	7,516	9,837	92	24	9,974	454,200	527
30	5/27/2024	6,087	7,594	9,819	92	51	10,034	455,300	542
31	5/28/2024	6,356	6,879	9,590	92	56	9,924	455,460	524
32	5/28/2024	6,374	7,078	9,623	92	10	9,837	453,840	529
33	5/28/2024	6,210	6,973	9,555	93	5	9,771	454,940	522
34	5/28/2024	5,132	4,617	9,635	93	26	9,633	450,430	552
35	5/29/2024	6,371	7,096	9,649	94	48	9,363	454,830	550
36	5/29/2024	6,135	7,556	9,679	94	9	8,899	456,000	515
37	5/29/2024	5,711	7,543	9,515	94	6	9,120	455,180	507
38	5/23/2024	5,952	7,983	9,589	94	28	9,034	453,720	510
39	5/30/2024	6,010	6,724	9,479	94	19	8,699	455,170	495
40	5/30/2024	6,008	7,047	9,520	94	15	8,452	455,700	492
41	5/30/2024	6,078	7,415	9,387	94	13	8,911	456,580	487

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42	5/30/2024	6,064	7,867	9,446	95	23	8,622	455,580	490
43	5/30/2024	5,468	7,594	9,528	94	19	8,457	451,640	494
44	5/31/2024	5,962	9,289	9,466	93	3	8,740	454,560	526
45	5/31/2024	5,970	5,893	9,180	94	4	8,687	455,740	470
46	5/31/2024	6,143	8,028	9,462	94	4	8,602	456,100	469
47	5/31/2024	6,076	7,602	9,564	94	3	8,667	455,900	479
48	5/31/2024	5,583	7,513	9,710	95	7	8,293	457,150	481
49	6/1/2024	5,667	6,781	9,426	95	25	8,277	455,800	470
50	6/1/2024	5,400	6,748	9,304	94	20	8,570	455,600	448
51	6/1/2024	6,119	7,412	9,419	94	7	8,559	455,700	449
52	6/1/2024	6,192	8,175	9,759	93	6	8,499	455,460	448
53	6/1/2024	5,522	7,458	9,547	93	21	8,702	454,040	449
54	6/2/2024	6,812	8,507	9,678	92	20	8,545	455,580	431
55	6/2/2024	5,697	8,093	9,873	91	5	8,606	455,700	436
56	6/2/2024	5,932	7,020	9,904	92	63	9,177	443,500	449
57	6/2/2024	6,788	8,036	9,738	94	4	8,600	455,120	427
58	6/2/2024	5,816	7,672	9,687	93	8	8,707	454,680	422
59	6/3/2024	5,716	7,467	9,594	94	61	8,572	456,840	413
60	6/3/2024	6,442	5,932	9,389	94	8	8,592	455,110	407
61	6/3/2024	5,941	7,260	9,103	94	6	8,758	454,180	399
62	6/3/2024	5,833	8,647	9,231	94	12	8,630	454,960	418
63	6/3/2024	5,923	6,740	9,150	94	10	8,391	453,960	388
64	6/4/2024	5,750	6,607	9,093	94	2	8,526	455,600	396
65	6/4/2024	5,744	7,108	9,142	94	32	8,390	445,560	387
66	6/4/2024	5,324	7,137	9,238	95	37	8,441	455,070	384
67	6/4/2024	5,522	7,046	9,019	94	11	8,405	455,030	397
68	6/5/2024	5,529	6,101	9,070	94	12	8,258	456,120	362
69	6/5/2024	5,954	7,570	9,028	94	8	8,223	454,960	371
70	6/5/2024	5,642	7,933	9,287	94	23	8,378	455,040	359
71	6/5/2024	5,399	8,203	9,124	94	141	8,703	458,200	372
72	6/5/2024	5,486	7,186	9,130	94	6	8,399	455,850	382
73	6/6/2024	5,409	7,309	9,094	95	12	8,293	455,800	358
74	6/6/2024	5,439	7,542	8,804	94	11	8,563	456,600	343
75	6/6/2024	5,421	7,525	9,080	94	11	8,149	455,100	309
76	6/6/2024	5,277	7,369	9,019	94	8	8,375	456,200	365
77	6/7/2024	5,361	8,988	8,956	94	17	8,495	455,500	346
78	6/7/2024	5,425	10,225	9,032	93		8,610	455,600	345
79	6/7/2024	5,612	7,601	9,013	96	8	8,763	457,700	359
80	6/7/2024	5,653	8,495	8,935	95	9	8,359	456,900	316
81	6/8/2024	5,606	7,097	8,649	95	13	8,056	456,700	326
82	6/8/2024	5,676	5,735	8,759	95	32	8,329	454,680	311
83	6/8/2024	5,280	7,778	8,780	94	2	8,424	455,190	90
84	6/8/2024	5,383	9,433	9,014	94	31	8,239	456,250	309
85	6/8/2024	5,287	7,013	8,744	95	9	8,876	456,000	293
86	6/9/2024	5,197	8,690	8,861	94	30	8,479	455,800	295
87	6/9/2024	5,391	7,660	8,652	95	24	8,412	455,100	375
88	6/9/2024	5,636	7,491	8,755	96	25	8,222	455,520	317

89	6/9/2024	5,305	8,200	8,641	95	32	8,245	455,420	285
90	6/9/2024	5,290	7,964	8,686	95	10	8,380	457,300	281
91	6/10/2024	5,865	7,709	8,611	94	21	8,225	455,800	270
92	6/10/2024	5,905	7,661	8,529	94	11	8,205	455,840	260
93	6/10/2024	5,933	7,874	8,592	94	6	8,176	455,000	261
94	6/10/2024	5,518	6,882	8,670	95	26	8,184	454,800	269
95	6/10/2024	5,495	8,802	8,576	95	9	8,256	455,200	255
96	6/11/2024	5,621	8,267	8,438	95	13	8,089	455,350	224
97	6/11/2024	5,868	6,855	8,373	95	13	8,238	455,520	253
98	6/11/2024	5,581	6,938	8,210	94	16	8,245	455,860	261
99	6/11/2024	5,346	7,285	8,365	95	11	8,106	455,700	232
100	6/11/2024	5,252	7,060	8,460	94	11	8,242	454,500	230
101	6/12/2024	5,604	7,869	8,413	95	7	8,161	456,100	210
102	6/12/2024	5,874	7,344	8,231	94	9	8,337	456,240	221
103	6/12/2024	5,593	7,366	8,425	94	11	8,247	456,200	210
104	6/12/2024	5,415	7,218	8,322	94	18	8,381	457,400	211

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Miracle Run Completion Lithology			Bottom Depth in FT TVD	Describe rock type and record quantity and type of fluid (freshwater, brine, oil, gas, H2S, etc)
Lithology/Formation	Top Depth in FT TVD			
Sand/silt	0	170		Sand/silt
Sand/red shale	170	370		sand with reddish shale
sandstone/shale	370	715		sandstone/shale
Washington coal	715	718		coal
siltstone/sandstone/limestone	718	890		carbonaceous silt/sandstone
sandstone/siltstone	890	950		sandstone/siltstone
Limestone/siltstone	950	1040		Limestone/siltstone
Limestone/siltstone/red rock	1040	1100		Limestone/siltstone/red rock
Limestone/sandstone	1100	1227		Limestone/sandstone
Pittsburgh coal	1227	1237		Pittsburgh coal
Limestone/siltstone	1237	1280		Limestone/siltstone
Red Rock/siltstone/limestone	1280	1430		Red Rock/siltstone/limestone
Gray shale/siltstone	1430	1520		Gray shale/siltstone
sandstone/siltstone/red rock	1520	1780		sandstone/siltstone/red rock
Sandstone/Siltstone	1780	2300		Sandstone/Siltstone
Red Rock/siltstone	2300	2446		Red Rock/siltstone
Little Lime	2446	2488		Little Lime
Big Lime	2488	2627		Big Lime
Big Injun	2627	2700		Big Injun
Sand/silt	2700	3124		Sand/silt
Gantz	3124	3129		Gantz
Sand/silt	3129	3404		Sand/silt
Gordon	3404	3507		Gordon
Fourth Sand	3507	3527		Fourth Sand
siltstone/sandstone	3527	6900		siltstone/sandstone
Gray shale/siltstone	6900	7501		Gray shale/siltstone
Middlesex	7501	7718		Middlesex
Burkett	7718	7877		Burkett
Geneseo	7877	7926		Geneseo
Tully	7926	7974		Tully
Hamilton	7974	8075		Hamilton
Marcellus	8075	TD		Marcellus

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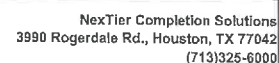
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NexTier Completion Solutions
3990 Rogerdale Rd., Houston, TX 77042
(713)325-6000

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	05/18/2024
Job End Date:	06/12/2024
State:	West Virginia
County:	Monongalia
API Number:	47-061-01926-00-00
Operator Name:	Northeast Natural Energy LLC
Well Name and Number:	Miracle Run 14H
Latitude:	39.629295
Longitude:	-80.318634
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	8162
Total Base Water Volume (gal)*:	41037570
Total Base Non Water Volume:	0



Water Source	Percent
Other, > 1000TDS	85.00%

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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	Operator	Carrier/Base Fluid					
			Water	7732-18-5	100.00000	87.72287	None
Sand (100 Mesh Proppant)	ProFrac	Proppant					
			Crystalline Silica (quartz)	14808-60-7	100.00000	10.87083	None
Sand (40/70 White Proppant)	ProFrac	Proppant					
			Crystalline Silica (quartz)	14808-60-7	100.00000	1.20929	None
Other Chemical(s)	Listed Above	See Trade Name(s) List					
			Water	7732-18-5	92.50000	0.12360	None
			ALKANES, C12-26-BRANCHED AND LINEAR	90622-53-0	40.00000	0.02948	None
			Water	7732-18-5	80.00000	0.01689	None
			WATER	7732-18-5	15.00000	0.01106	None

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			ETHOXYLATED ALCOHOLS (C12-16)	68551-12-2	5.00000	0.00369	None
			AA/Maleic Anhydride Copolymer	9003-04-7	5.00000	0.00157	None
			Quaternary Ammonium Compounds	68424-85-1	3.00000	0.00063	None
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00063	None
			Ethanol	64-17-5	1.50000	0.00032	None
			Pyridinium, 1-(phenylmethyl)-, ethyl methyl derivs., chlorides	68909-18-2	25.00000	0.00012	None
			Ethanoic Acid	64-19-7	15.00000	0.00007	None
			Ethoxylated Alcohols	68131-39-5	15.00000	0.00007	None
			Proprietary	Proprietary	10.00000	0.00005	None
			Proprietary	Proprietary	10.00000	0.00005	None
			2-ethylhexanol	104-76-7	5.00000	0.00002	None
			Ethoxylated Nonylphenos	127087-87-0	5.00000	0.00002	None
Hydrochloric Acid (7.5%)	Tarquin	Acidizing					
			Water	7732-18-5	92.50000	0.12360	None
			Hydrochloric Acid	7647-01-0	7.50000	0.01002	None
StimSTREAM FR 9800	Chemstream	Friction Reducer					
			ACRYLAMIDE-CHLORIDE SALT OF TRIMETHYLAMMONIO-ETHYL ACRYLATE COPOLYMER	69418-26-4	40.00000	0.02948	None
			ALKANES, C12-26-BRANCHED AND LINEAR	90622-53-0	40.00000	0.02948	None
			WATER	7732-18-5	15.00000	0.01106	None
			ETHOXYLATED ALCOHOLS (C12-16)	68551-12-2	5.00000	0.00369	None
Clearal 268A	Chemstream	Biocide					
			Water	7732-18-5	80.00000	0.01689	None
			Glutaraldehyde	111-30-8	20.00000	0.00422	None
			Quaternary Ammonium Compounds	68424-85-1	3.00000	0.00063	None
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00063	None
			Ethanol	64-17-5	1.50000	0.00032	None
StimSTREAM SC 405	Chemstream	Scale Inhibitor					

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			AA/Maleic Anhydride Co-polymer	9003-04-7	5.00000	0.00157	None
			AA/ATBS Co-polymer	9003-05-8	5.00000	0.00157	None
Acid Pack Pro	Tarquin	Acid Inhibitor					
			Methanol	67-56-1	25.00000	0.00012	None
			Pyridinium, 1-(phenylmethyl)-, ethyl methyl derivs., chlorides	68909-18-2	25.00000	0.00012	None
			Ethanoic Acid	64-19-7	15.00000	0.00007	None
			Ethoxylated Alcohols	68131-39-5	15.00000	0.00007	None
			Proprietary	Proprietary	10.00000	0.00005	None
			Proprietary	Proprietary	10.00000	0.00005	None
			2-ethylhexanol	104-76-7	5.00000	0.00002	None
			Ethoxylated Nonylphenos	127087-87-0	5.00000	0.00002	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

* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

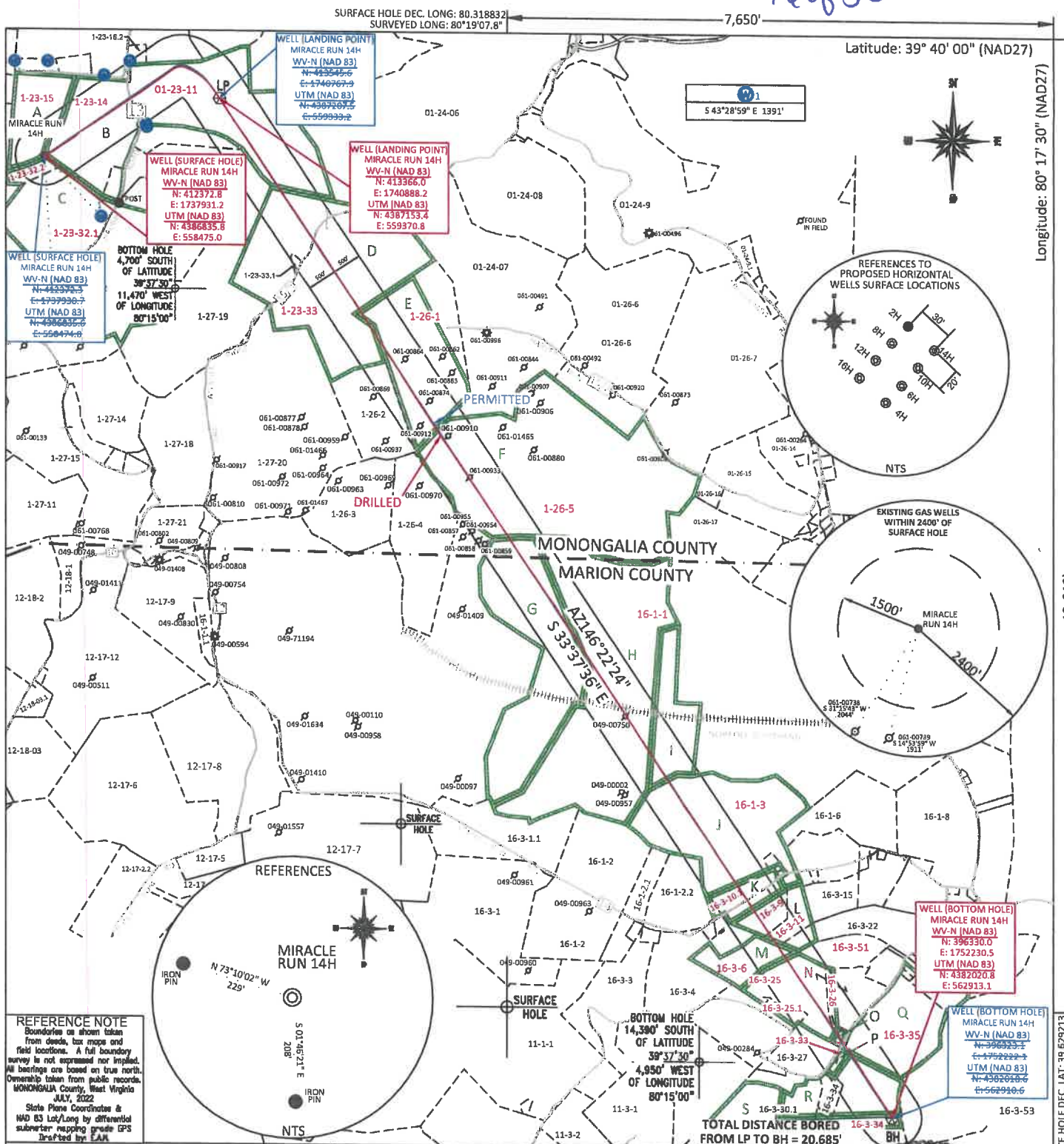
Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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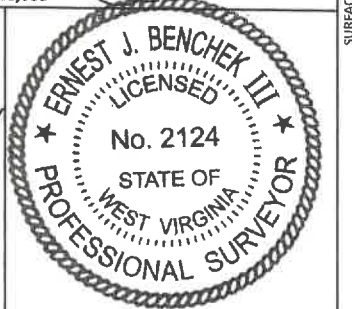
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FILE #: NNE20
DRAWING #: 3097
SCALE: PLAT: 1" = 2400'
TICK: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SOURCE OF ELEVATION: SUBMETER MAPPING GRADE GPS

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
Signed: *[Signature]*
L.L.S. #2124: Ernest J. Benchek III



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25304
Well Type: ☐ Oil ☐ Waste Diposal ☐ Production ☐ Deep ☒ Gas ☐ Liquid Injection ☐ Storage ☒ Shallow
WATERSHED: DUNKARD CREEK
COUNTY/DISTRICT: MONONGALIA / BATTELLE
SURFACE OWNER: BYRON LANE RAPP
OIL & GAS ROYALTY OWNER:
LEASE NUMBERS:
DATE: MAY 5, 2025
OPERATOR'S WELL #: MIRACLE RUN 14H (AS-DRILLED)
API WELL #: 47 61 01926
STATE COUNTY PERMIT
AS-BUILT ELEVATION: 1,521.56'
QUADRANGLE: WADESTOWN
ACREAGE: 1414.02 +/-
ACREAGE: 56.46 +/-
09/19/2025
TARGET FORMATION: MARCELLUS
WELL OPERATOR: NORTHEAST NATURAL ENERGY LLC
ADDRESS: 707 VIRGINIA STREET EAST, SUITE 1200
CITY: CHARLESTON STATE: WV ZIP CODE: 25301
DRILL ☒ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☐ FRACTURE OR STIMULATE ☒
PLUG OFF FORMATION ☐ PERFORATE NEW FORMATION ☐ PLUG & ABANDON ☐
CLEAN OUT & REPLUG ☐ OTHER CHANGE ☐ (SPECIFY):
DRILLED DEPTH: TVD: 8,196' TMD: 29,863'
DESIGNATED AGENT: JOHN ADAMS
ADDRESS: 707 VIRGINIA STREET EAST, SUITE 1200
CITY: CHARLESTON STATE: WV ZIP CODE: 25301

	PROPERTY INDEX
1-23-11	CLAUDE S & JONI L ANDERSON
1-23-14	CLAUDE S & JONI L ANDERSON
1-23-15	CLAUDE S & JONI L ANDERSON
1-23-32.2	NORTHEAST NATURAL ENERGY LLC
1-23-33	CONSOL MINING COMPANY LLC
1-26-1	CONSOL MINING COMPANY LLC
1-26-5	CONSOL MINING COMPANY LLC
16-1-1	MARION COUNTY COAL RESOURCES INC
16-1-3	MICHAEL A & DOROTHY K DEMARY
16-3-10.1	MARLA KETTINGER ETAL
16-3-9	MARLA KETTINGER ETAL
16-3-11	MARJORIE ROSE & FRANCIS D GUMP; DARWIN R GUMP
16-3-51	DONALD & PATRICIA PYLES
16-3-6	JUDITH A PRICE
16-3-25	CHARLES L & SUSAN L UNDERWOOD
16-3-25.1	CHARLES L & SUSAN L UNDERWOOD
16-3-33	CHARLES UNDERWOOD II
16-3-35	CHARLES L & SUSAN L UNDERWOOD
16-3-34	CHARLES L & SUSAN L UNDERWOOD
16-3-26	CHARLES L & SUSAN L UNDERWOOD

	LEASE INDEX		
A	WV-061-003830-005	K	WV-049-006439-008
B	WV-061-003828-007	L	WV-049-094055-001
C	WV-061-005463-023	M	WV-049-106467-001
D	WV-061-005633-015	N	WV-049-106467-001
E	WV-061-005781-001	O	WV-049-106467-001
F	WV-061-005781-001	P	WV-049-086171-001
G	WV-049-106389-002	Q	049-006401-001
H	WV-049-004839-001	R	WV-049-106436-001
I	WV-049-006487-001	S	WV-049-106436-001
J	WV-049-005194-004		

09/19/2025

FILE #: NEE20	DATE: MAY 5, 2025
DRAWING #: 3097	OPERATOR'S WELL #: MIRACLE RUN 14H
SCALE: N/A	API WELL #: 47 61
	STATE COUNTY PERMIT