

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

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Office Of Oil and Gas

MAY 26 2025

WV Department of
Environmental Protection

API 47 - 061 - 01925 County Monongalia District Battelle
Quad Wadestown Pad Name Miracle Run Field/Pool Name _____
Farm name Byron Lane Rapp Well Number 10H
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>4386831.2</u>	Easting	<u>558470.9</u>
Landing Point of Curve	Northing	<u>4387033.5</u>	Easting	<u>559088.5</u>
Bottom Hole	Northing	<u>4381625.1</u>	Easting	<u>562818.8</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-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 4/5/2023 Date drilling commenced 3/3/2024 Date drilling ceased 4/5/2024
Date completion activities began 5/18/2024 Date completion activities ceased 6/13/2024
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>	

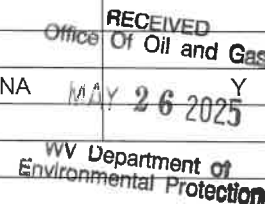
APPROVED

6/25/2025 Reviewed by: EPK

09/19/2025

API 47-061 - 01925 Farm name Byron Lane Rapp Well number 10H

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	133'	New	NA/78.9	NA	N
Surface	17 1/2"	13 3/8"	1455'	New	J-55/54.5	NA	Y
Coal							
Intermediate 1	12 3/8"	9 5/8"	2730'	New	J-55/36	NA	Y
Intermediate 2							
Intermediate 3							
Production	8 3/4"	5 1/2"	30,718'	New	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						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	5780	14.5	1.16	6694.74	2039	48
Tubing							

Drillers TD (ft) 30,768' Loggers TD (ft) 30,723'
Deepest formation penetrated Marcellus Plug back to (ft) _____
Plug back procedure _____

Kick off depth (ft) 8,110' MD/ 7,688' TVD

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 at shoe track & every other joint in the lateral to KOP. Bow springs from KOP to surface every third 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 _____

09/19/2025

PERFORATION RECORD

Please insert additional pages as applicable.

Please insert additional pages as applicable.

09/19/2025

Well number 10H

DEPTHS

Please insert additional pages as applicable.

OPEN FLOW	Gas		Oil		NGL		Water		GAS MEASURED BY
	3336	mcfpd		bpd		bpd		bpd	☐ Estimated ☐ Orifice ☐ Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITYAND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)

[illegible]

Please insert additional pages as applicable.

Nabors Drilling Technologies USA, Inc. 2500 Oregon St.,
Odessa, TX 79764

Address 130 Meadow Ridge Rd, Ste 44 City Mt. Morris State PA Zip 15349

Address 1681 E. Main Street City Bridgeport State WV Zip 26330

Address	3990 Rogerdale Rd	City	Houston	State	TX	Zip	77042
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Address	800 Mountain View Dr.	City	Smithfield	State	PA	Zip	15478
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Please insert additional pages as applicable.

Telephone 304-212-0422

Signature Hollmes Title Regulatory Manager Date 5-03-25

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

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Miracle Run 10H Stimulation Report

Stage Number	Report Date	Department of Environmental Protection 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	5,746	8,182	10,062	81	641	8,409	300,560	682
2	5/19/2024	4,483	6,998	9,601	84	160	10,048	455,400	678
3	5/19/2024	6,045	6,461	9,998	86	648	10,379	455,200	682
4	5/20/2024	5,905	6,479	9,942	86	22	9,962	455,020	671
5	5/20/2024	5,550	6,765	9,654	83	10	10,072	455,630	747
6	5/20/2024	5,965	6,739	9,783	87	4	9,844	455,140	657
7	5/20/2024	5,995	7,135	9,908	89	49	10,088	455,160	661
8	5/21/2024	5,904	7,141	9,602	86	41	10,058	455,360	653
9	5/21/2024	5,866	8,457	9,973	92	27	9,844	455,360	642
10	5/21/2024	6,003	7,480	10,005	89	129	9,938	455,100	651
11	5/22/2024	6,349	6,529	9,699	85	7	9,587	451,310	644
12	5/22/2024	5,928	6,828	9,760	86	11	10,129	455,140	638
13	5/22/2024	6,217	6,743	9,907	91	53	9,862	457,340	640
14	5/19/2024	6,234	6,041	9,613	91	22	10,474	455,230	631
15	5/23/2024	6,104	6,909	9,761	91	16	9,862	455,000	615
16	5/23/2024	5,892	7,565	9,872	92	28	9,896	453,460	616
17	5/19/2024	5,667	6,393	9,865	92	59	9,829	454,780	615
18	5/24/2024	6,003	7,505	9,714	91	5	10,155	455,940	615
19	5/24/2024	6,434	7,452	9,788	90	15	10,852	455,160	605
20	5/25/2024	6,304	7,655	9,778	89	15	10,028	455,700	634
21	5/25/2024	6,435	7,895	9,695	88	35	9,672	455,200	605
22	5/25/2024	6,393	7,259	9,853	92	30	9,806	455,500	592
23	5/26/2024	6,461	6,711	9,750	89	5	9,955	454,900	589
24	5/26/2024	6,578	7,035	9,783	91	9	10,242	454,600	582
25	5/26/2024	6,373	7,356	9,827	91	6	9,797	455,500	581
26	5/26/2024	6,432	7,259	9,980	92	62	10,054	455,240	578
27	5/27/2024	6,146	6,282	9,778	92	8	9,873	454,200	572
28	5/27/2024	6,155	7,188	9,751	91	24	10,426	455,480	562
29	5/27/2024	6,627	6,739	9,682	92	9	10,079	455,180	561
30	5/28/2024	6,682	6,831	9,500	92	98	9,951	455,200	558
31	5/28/2024	6,129	7,051	9,785	92	64	9,881	454,100	552
32	5/28/2024	5,850	6,969	9,495	92	9	9,948	457,470	542
33	5/28/2024	6,152	7,568	9,723	94	10	10,023	454,320	555
34	5/29/2024	6,216	6,224	9,627	94	5	9,125	454,840	531
35	5/29/2024	5,746	7,257	9,801	94	4	8,627	455,600	556
36	5/29/2024	5,832	7,908	9,799	94	8	8,998	455,300	535
37	5/29/2024	5,581	7,548	9,809	93	6	8,852	454,480	532
38	5/29/2024	5,121	7,435	9,824	93	10	8,428	454,300	519
39	5/30/2024	5,917	8,112	9,743	94	3	8,545	456,240	511
40	5/30/2024	6,140	7,852	9,648	94	11	8,872	456,400	521
41	5/30/2024	5,608	7,130	9,403	94	10	8,665	454,680	508

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42	5/19/2024	5,404	7,769	9,557	95	6	8,644	456,120	490
43	5/30/2024	6,335	7,766	9,405	94	6	8,413	454,630	503
44	5/31/2024	6,189	8,209	9,409	94	15	8,525	455,300	514
45	5/31/2024	6,000	6,619	9,404	94	11	8,640	456,800	497
46	5/31/2024	6,299	7,229	9,500	94	7	8,733	455,400	486
47	5/31/2024	5,319	7,619	9,807	94	4	8,554	456,900	487
48	5/31/2024	5,176	8,116	9,481	95	4	8,599	455,050	444
49	6/1/2024	5,422	8,687	9,343	94	5	8,589	456,000	477
50	6/1/2024	6,005	6,260	9,336	94	4	8,677	455,900	469
51	6/1/2024	6,854	8,087	9,525	94	12	8,404	454,700	458
52	6/1/2024	6,115	7,358	9,634	94	12	8,570	455,600	479
53	6/2/2024	5,973	7,496	9,477	94	6	8,639	454,420	467
54	6/2/2024	5,500	7,976	9,830	91	25	8,509	454,900	456
55	6/2/2024	5,762	8,116	9,878	94	3	8,500	456,300	451
56	6/2/2024	6,069	7,744	9,851	93	10	9,183	455,380	435
57	6/2/2024	6,420	7,650	9,771	92	17	8,718	455,160	447
58	6/3/2024	6,263	7,981	9,804	93	16	8,755	454,940	435
59	6/3/2024	5,738	8,431	9,834	93	6	8,550	454,600	440
60	6/3/2024	6,143	6,747	9,787	87	11	8,506	450,980	424
61	6/3/2024	5,800	7,271	9,286	94	7	8,643	455,480	502
62	6/3/2024	6,171	6,938	9,323	94	15	8,318	454,770	415
63	6/4/2024	6,349	7,505	9,271	94	15	8,784	456,840	412
64	6/4/2024	6,701	6,989	9,199	94	63	9,025	456,420	410
65	6/4/2024	6,109	7,182	9,421	94	7	8,663	454,500	401
66	6/4/2024	5,808	7,213	9,143	94	13	8,631	454,750	415
67	6/5/2024	5,541	7,008	9,272	94	7	8,314	456,600	415
68	6/5/2024	6,030	6,990	9,342	94	18	8,361	455,400	389
69	6/5/2024	5,757	7,617	9,328	94	21	8,333	455,700	387
70	6/5/2024	5,731	7,052	9,315	94	30	9,495	455,500	382
71	6/5/2024	5,655	7,514	9,168	94	6	8,327	456,100	386
72	6/5/2024	5,486	7,186	9,130	94	6	8,399	455,850	382
73	6/6/2024	6,067	7,696	9,275	94	1	8,454	455,500	387
74	6/6/2024	5,852	8,898	9,340	93	26	8,532	455,500	358
75	6/6/2024	5,749	8,114	9,412	94	19	8,457	457,200	344
76	6/7/2024	6,155	8,447	9,207	94	23	8,266	455,100	352
77	6/7/2024	5,594	6,960	9,203	96	11	8,510	456,300	342
78	6/7/2024	5,285	8,490	9,182	95	26	8,580	455,800	334
79	6/7/2024	5,348	7,426	9,184	94	5	8,415	457,300	364
80	6/8/2024	5,349	7,405	9,276	94	11	8,222	455,600	354
81	6/8/2024	5,503	8,634	9,203	94	18	8,094	456,000	327
82	6/8/2024	5,558	8,048	9,151	94	18	8,522	455,240	328
83	6/8/2024	5,385	7,989	9,181	94	19	8,435	457,750	325
84	6/8/2024	5,275	9,492	9,024	94	19	8,083	455,900	325
85	6/9/2024	5,196	7,702	9,071	94	27	8,409	457,300	311
86	6/9/2024	5,592	7,992	8,916	94	18	8,319	456,000	322
87	6/9/2024	5,882	7,895	9,020	95	25	8,366	456,000	292
88	6/9/2024	5,222	8,219	8,903	94	14	8,167	456,000	283

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89	6/9/2024	5,459	7,960	8,960	94	9	8,300	456,500	303
90	6/9/2024	5,438	8,899	8,969	94	25	8,434	456,600	295
91	6/10/2024	5,259	7,919	8,792	94	12	8,759	455,800	299
92	6/10/2024	5,385	7,684	8,766	94	9	8,454	455,660	281
93	6/10/2024	5,416	8,536	8,973	94	13	8,690	457,000	273
94	6/10/2024	5,306	7,432	8,744	94	11	8,449	455,000	304
95	6/11/2024	5,365	7,414	8,788	94	13	8,107	455,950	303
96	6/11/2024	5,603	7,647	8,737	94	3	8,097	455,620	252
97	6/11/2024	5,647	7,655	8,626	95	20	8,370	455,500	262
98	5/19/2024	5,422	7,877	8,776	94	20	8,060	457,140	270
99	6/11/2024	5,319	8,062	8,691	94	9	8,359	454,900	254
100	6/12/2024	5,397	7,690	8,672	95	8	8,475	455,100	248
101	6/12/2024	5,557	7,918	8,545	94	2	8,195	456,000	237
102	6/12/2024	5,695	6,859	8,622	95	13	8,297	456,500	237
103	6/12/2024	5,512	7,794	8,607	94	18	8,183	457,200	221
104	6/12/2024	548	8,176	8,413	95	25	8,359	457,800	234
105	6/12/2024	5,514	7,717	8,328	94	16	8,214	455,400	229
106	6/13/2024	5,300	7,299	8,210	94	13	8,117	456,800	224
107	6/13/2024	5,602	7,209	8,222	94	42	8,254	456,500	223
108	6/13/2024	5,740	7,989	8,012	93	53	8,382	456,380	68
109	6/13/2024	5,579	7,416	8,155	93	5	8,744	456,780	374
110	6/13/2024	5,530	7,158	8,143	95	32	8,909	456,760	454

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Miracle Run 10H**Perforation Report**

Stage Number	Report Date	Total Shots	Cluster 1 Top TD	Cluster 5 Bottom TD
1	5/19/2024	40		30,606
2	5/19/2024	40	30,535	30,404
3	5/19/2024	40	30,362	30,204
4	5/20/2024	40	30,162	30,004
5	5/20/2024	40	29,962	29,804
6	5/20/2024	40	29,762	29,605
7	5/20/2024	40	29,563	29,405
8	5/21/2024	40	29,363	29,205
9	5/21/2024	40	29,163	29,005
10	5/21/2024	40	28,963	28,805
11	5/22/2024	40	28,763	28,605
12	5/22/2024	40	28,563	28,405
13	5/22/2024	40	28,363	28,205
14	5/19/2024	40	28,163	28,005
15	5/23/2024	40	27,963	27,805
16	5/23/2024	40	27,763	27,605
17	5/19/2024	40	27,563	27,406
18	5/24/2024	40	27,364	27,206
19	5/24/2024	40	27,164	27,006
20	5/25/2024	40	26,051	25,893
21	5/25/2024	40	26,764	26,606
22	5/25/2024	40	26,564	26,406
23	5/26/2024	40	26,364	26,206
24	5/26/2024	40	26,164	26,006
25	5/26/2024	40	25,964	25,806
26	5/26/2024	40	25,764	25,606
27	5/27/2024	40	25,564	25,406
28	5/27/2024	40	25,364	25,207
29	5/27/2024	40	25,165	25,007
30	5/28/2024	40	24,965	24,807
31	5/28/2024	40	24,765	24,607
32	5/28/2024	40	24,565	24,407
33	5/28/2024	40	24,365	24,207
34	5/29/2024	40	24,165	24,007
35	5/29/2024	40	23,965	23,807
36	5/29/2024	40	23,765	23,607
37	5/29/2024	40	23,565	23,407
38	5/29/2024	40	23,365	23,207
39	5/30/2024	40	23,165	23,008
40	5/30/2024	40	22,966	22,808
41	5/30/2024	40	22,766	22,608
42	5/19/2024	40	22,566	22,408

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43	5/30/2024	40	22,366	22,208
44	5/31/2024	40	22,166	22,008
45	5/31/2024	40	21,966	21,808
46	5/31/2024	40	21,766	21,608
47	5/31/2024	40	21,566	21,408
48	5/31/2024	40	21,366	21,208
49	6/1/2024	40	21,166	21,008
50	6/1/2024	40	20,966	20,809
51	6/1/2024	40	20,767	20,609
52	6/1/2024	40	20,567	20,409
53	6/2/2024	40	20,367	20,209
54	6/2/2024	40	20,167	20,009
55	6/2/2024	40	19,967	19,809
56	6/2/2024	40	19,767	19,609
57	6/2/2024	40	19,567	19,409
58	6/3/2024	40	19,367	19,209
59	6/3/2024	40	19,167	19,009
60	6/3/2024	40	18,967	18,809
61	6/3/2024	40	18,767	18,610
62	6/3/2024	40	18,568	18,410
63	6/4/2024	40	18,368	18,210
64	6/4/2024	40	18,168	18,010
65	6/4/2024	40	17,968	17,810
66	6/4/2024	40	17,768	17,610
67	6/5/2024	40	17,568	17,410
68	6/5/2024	40	17,368	17,210
69	6/5/2024	40	17,168	17,010
70	6/5/2024	40	16,968	16,810
71	6/5/2024	40	16,768	16,610
72	6/5/2024	40	16,568	16,410
73	6/6/2024	40	16,369	16,211
74	6/6/2024	40	16,169	16,011
75	6/6/2024	40	15,969	15,811
76	6/7/2024	40	15,769	15,611
77	6/7/2024	40	15,569	15,411
78	6/7/2024	40	15,369	15,211
79	6/7/2024	40	15,169	15,011
80	6/8/2024	40	14,969	14,811
81	6/8/2024	40	14,769	14,611
82	6/8/2024	40	14,569	14,411
83	6/8/2024	40	14,369	14,211
84	6/8/2024	40	14,169	14,012
85	6/9/2024	40	13,970	13,812
86	6/9/2024	40	13,770	13,612
87	6/9/2024	40	13,570	13,412
88	6/9/2024	40	13,370	13,212
89	6/9/2024	40	13,170	13,012

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90	6/9/2024	40	12,970	12,812
91	6/10/2024	40	12,770	12,612
92	6/10/2024	40	12,570	12,412
93	6/10/2024	40	12,370	12,212
94	6/10/2024	40	12,170	12,012
95	6/11/2024	40	11,970	11,813
96	6/11/2024	40	11,771	11,613
97	6/11/2024	40	11,571	11,413
98	5/19/2024	40	11,371	11,213
99	6/11/2024	40	11,171	11,013
100	6/12/2024	40	10,971	10,813
101	6/12/2024	40	10,771	10,613
102	6/12/2024	40	10,571	10,413
103	6/12/2024	40	10,371	10,213
104	6/12/2024	40	10,171	10,013
105	6/12/2024	40	9,971	9,813
106	6/13/2024	40	9,771	9,614
107	6/13/2024	40	9,572	9,414
108	6/13/2024	40	9,372	9,214
109	6/13/2024	40	9,172	9,014
110	6/13/2024	40	8,972	8,814

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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

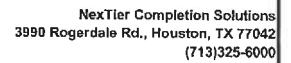
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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	05/19/2024
Job End Date:	06/13/2024
State:	West Virginia
County:	Monongalia
API Number:	47-061-01925-00-00
Operator Name:	Northeast Natural Energy LLC
Well Name and Number:	Miracle Run 10H
Latitude:	39.629253
Longitude:	-80.31868
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	8154
Total Base Water Volume (gal)*:	43465842
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	87.73062	None
Sand (100 Mesh Proppant)	ProFrac	Proppant					
			Crystalline Silica (quartz)	14808-60-7	100.00000	10.88690	None
Sand (40/70 White Proppant)	ProFrac	Proppant					
			Crystalline Silica (quartz)	14808-60-7	100.00000	1.18768	None
Other Chemical(s)	Listed Above	See Trade Name(s) List					
			Water	7732-18-5	92.50000	0.12255	None
			ALKANES, C12-26-BRANCHED AND LINEAR	90622-53-0	40.00000	0.02910	None
			Water	7732-18-5	80.00000	0.01683	None
			WATER	7732-18-5	15.00000	0.01091	None

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			ETHOXYLATED ALCOHOLS (C12-16)	68551-12-2	5.00000	0.00364	None
			AA/Maleic Anhydride Co-polymer	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	0.12255	None
			Hydrochloric Acid	7647-01-0	7.50000	0.00994	None
StimSTREAM FR 9800	Chemstream	Friction Reducer					
			ACRYLAMIDE-CHLORIDE SALT OF TRIMETHYLAMMONIO-ETHYL ACRYLATE COPOLYMER	69418-26-4	40.00000	0.02910	None
			ALKANES, C12-26-BRANCHED AND LINEAR	90622-53-0	40.00000	0.02910	None
			WATER	7732-18-5	15.00000	0.01091	None
			ETHOXYLATED ALCOHOLS (C12-16)	68551-12-2	5.00000	0.00364	None
Clearal 268A	Chemstream	Biocide					
			Water	7732-18-5	80.00000	0.01683	None
			Glutaraldehyde	111-30-8	20.00000	0.00421	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%

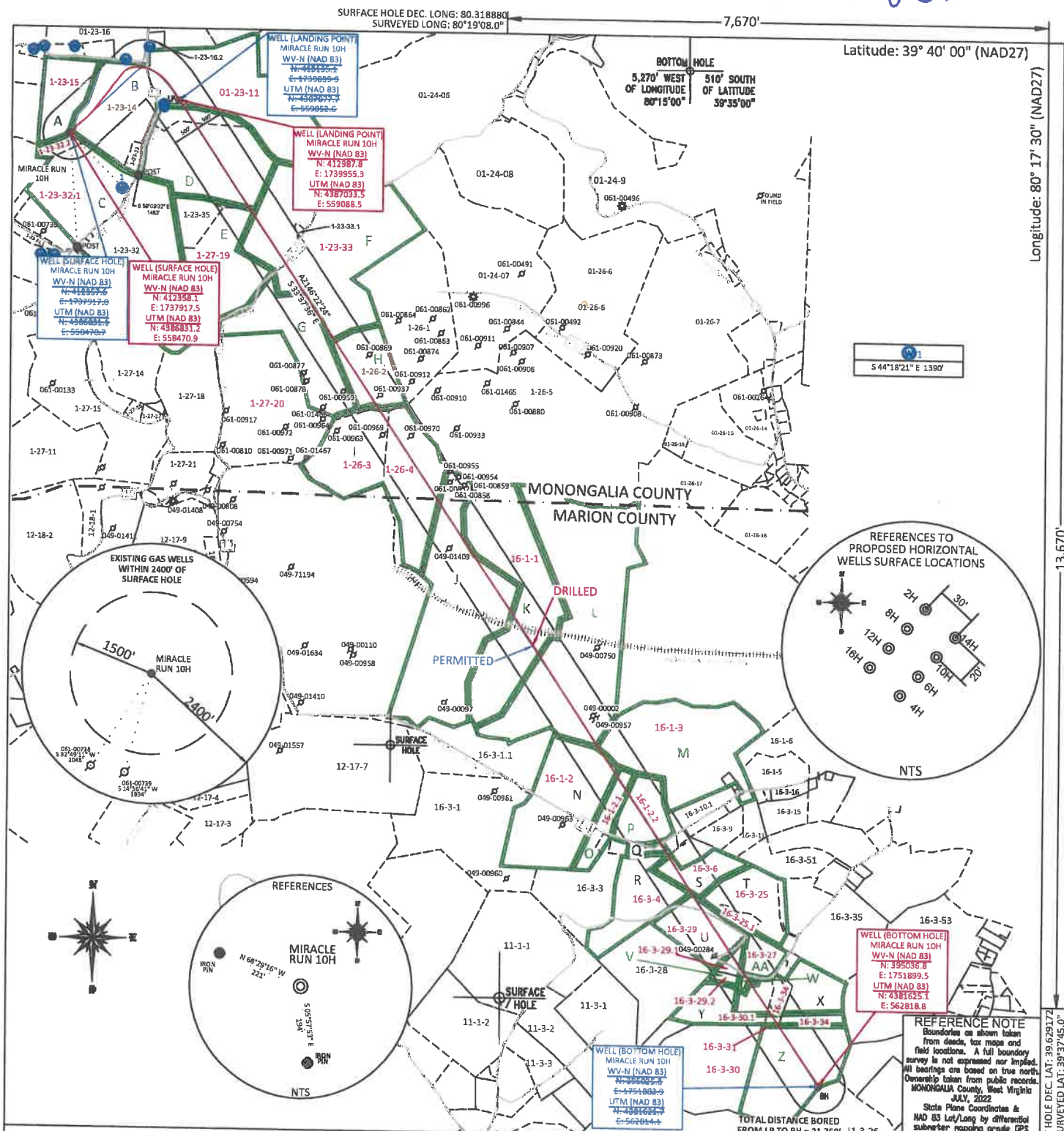
Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

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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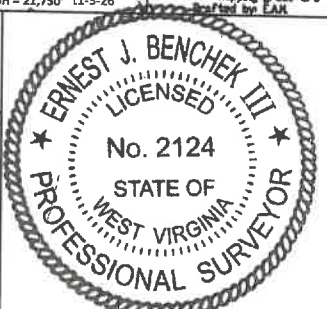
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FILE #: NNE20
DRAWING #: 3095
SCALE: PLAT: 1" = 2600'
TICK: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SOURCE OF ELEVATION: SUBMETER MAPPING GRADE GPS

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:
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 10H (AS-DRILLED)
API WELL #: 47 61 01925
STATE COUNTY PERMIT

AS-BUILT ELEVATION: 1,521.56'
QUADRANGLE: WADESTOWN
ACREAGE: 1741.26
ACREAGE: 56.46 +/ -

DRILL ☒ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☐ FRACTURE OR STIMULATE ☒
PLUG OFF FORMATION ☐ PERFORATE NEW FORMATION ☐ PLUG & ABANDON ☐
CLEAN OUT & REPLUG ☐ OTHER CHANGE ☐ (SPECIFY):

TARGET FORMATION: MARCELLUS
WELL OPERATOR: NORTHEAST NATURAL ENERGY LLC
ADDRESS: 707 VIRGINIA STREET EAST, SUITE 1200
CITY: CHARLESTON STATE: WV ZIP CODE: 25301

DRILLED DEPTH: TVD: 8,174' TMD: 30,768'
DESIGNATED AGENT: JOHN ADAMS
ADDRESS: 707 VIRGINIA STREET EAST, SUITE 1200
CITY: CHARLESTON STATE: WV ZIP CODE: 25301

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PROPERTY INDEX	
1-23-11	CLAUDE S & JONI L ANDERSON
1-23-12	CNX LAND LLC
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
1-27-19	CNX LAND LLC
1-26-2	CONSOL MINING COMPANY LLC
1-27-20	CONSOL MINING COMPANY LLC
1-26-3	CONSOL MINING COMPANY LLC
1-26-4	CONSOL MINING COMPANY LLC
16-1-1	MARION COUNTY COAL RESOURCES INC
16-1-3	MICHAEL A & DOROTHY K DEMARY
16-1-2	JAMES A TENNANT & KIM M DENSON
16-1-2.2	JAMES A TENNANT & KIM M DENSON
16-1-2.1	GREGORY N & JULIE A TENNANT
16-3-6	JUDITH A PRICE
16-3-25	CHARLES L & SUSAN L UNDERWOOD
16-3-4	WACO OIL & GAS
16-3-25.1	TONY & TRACY UNDERWOOD
16-3-29	CHARLES L & SUSAN L UNDERWOOD
16-3-27	MATTHEW PAUL SICKLES
16-3-29.2	MATTHEW PAUL SICKLES
16-3-34	CHESTER L & SUSAN L MICHAEL
16-3-30.1	CHESTER L & SUSAN L MICHAEL
16-3-31	CHARLES L & SUSAN L UNDERWOOD
16-3-30	CHARLES L & SUSAN L UNDERWOOD
1-23-16	SHEILA J TENNANT
16-3-29.1	MATTHEW PAUL SICKLES

LEASE INDEX			
A	WV-061-003830-005	O	WV-049-086168-003
B	WV-061-003828-007	P	WV-049-086191-002
C	WV-061-005463-023	Q	WV-049-086145-001
D	WV-061-003829-005	R	WV-049-086145-001
E	WV-061-000198-001-LOI	S	WV-049-106467-001
F	WV-061-005633-015	T	WV-049-106467-001
G	WV-061-006138-005	U	WV-049-106399-002
H	WV-061-006138-005	V	WV-049-085259-003
I	WV-061-003844-025	W	WV-049-085259-003
J	WV-061-006503-001	X	WV-049-106436-001
K	WV-049-106389-002	Y	WV-049-106436-001
L	WV-049-004839-001	Z	WV-049-106399-001
M	WV-049-005194-004	AA	WV-049-085259-003
N	WV-049-086168-003		

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FILE #: NEE20	DATE: MAY 5, 2025
DRAWING #: 3095	OPERATOR'S WELL #: MIRACLE RUN 10H
SCALE: N/A	API WELL #: 47 61 STATE COUNTY PERMIT