

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

API 47 - 061 - 01939 County Monongalia District Battelle
Quad Wadestown Pad Name Phoenix Field/Pool Name _____
Farm name Charles Wendell Moore & Frank M Chisler Well Number 3H
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 4388196.3 Easting 562452.2
Landing Point of Curve Northing 4388454.0 Easting 562574.6
Bottom Hole Northing 4391814.2 Easting 560255.8

Elevation (ft) 1,503' 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 7/5/23 Date drilling commenced 8/14/23 Date drilling ceased 11/4/23
Date completion activities began 2/7/24 Date completion activities ceased 3/20/24
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 1,360 Open mine(s) (Y/N) depths Y, Federal #2 @1,230
Salt water depth(s) ft 2,760 Void(s) encountered (Y/N) depths _____
Coal depth(s) ft 1,230 Cavern(s) encountered (Y/N) depths _____
Is coal being mined in area (Y/N) N

Reviewed by:

APPROVED

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Farm name Charles Wendell Moore & Frank M Chisler Well number 3H

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	32"	24"	100'	N		NA	N
Surface	17-1/2"	13-3/8"	1,525'	N	54.5	1164	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2,815'	N	J-55/36	2482	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"	5-1/2"	22,110'	N	P-110/20	NA	N
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	A Common	292	15.6			CTS	48
Surface	L, NCM-956	1345	15.6	1.14	1,528	CTS	8
Coal							
Intermediate 1	L, NCM-956	1070	15.6	1.13	1,206	CTS	8
Intermediate 2							
Intermediate 3							
Production	L, NCM-956	4195	14.5	1.12	4,719	2,189	48
Tubing							

Drillers TD (ft) 22,136'

Loggers TD (ft) 22,111'

Deepest formation penetrated Marcellus

Plug back to (ft) NA

Plug back procedure _____

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Kick off depth (ft) 7,356'

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Check all wireline logs run

☐ caliper ☐ density ☐ deviated/directional ☐ induction
☐ neutron ☐ resistivity ☒ gamma ray ☐ temperature

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☐ 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: Single piece bowspring centralizers placed every joint (~40') 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 _____

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API 47-061 - 01939 Farm name Charles Wendell Moore & Frank M Chisler Well number 3H

PERFORATION RECORD

[illegible]

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

[illegible]

Please insert additional pages as applicable.

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DEPTHS

Marcellus	8,176	TVD	22,136'	MD
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Please insert additional pages as applicable.

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

SHUT-IN PRESSURE Surface 3249 psi Bottom Hole 5869 psi DURATION OF TEST 24 hrs

OPEN FLOW Gas Oil NGL Water GAS MEASURED BY
 3612 mcfpd bpd bpd bpd ☐ Estimated ☒ Orifice ☐ Pilot

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

[illegible]

Please insert additional pages as applicable.

Drilling Contractor Patterson UTI
Address 67090 Executive Dr. City St. Clairsville State OH Zip 43950

Logging Company	Baker Hughes				
Address	837 Phillippi Pike	City	Clarksburg	State	PA
				Zip	26301

Cementing Company		NexTier							
Address	730 Braddock View Drive	City	Lemont Furnace	State	PA	Zip	15456		

Stimulating Company Evolution Well Services
Address 1780 Hughes Landing Blvd, Suite 123 City The Woodlands State TX Zip 77381

Please insert additional pages as applicable.

Completed by Hollie Medley Telephone 304-212-0422
Signature Hollie Medley Title Regulatory Manager Date 4-7-25

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

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Phoenix 3H 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	2/7/2024	4,871		9,317	94	522	7,443	301,456	489
2	2/8/2024	5,523	6,013	9,535	94	78	9,766	455,110	482
3	2/8/2024	5,198	6,793	9,274	89	151	9,706	454,871	477
4	2/9/2024	5,477	7,277	9,506	91	101	9,721	455,176	473
5	2/9/2024	5,315	7,223	9,761	93	92	9,705	455,201	470
6	2/10/2024	5,443	7,640	9,549	90	35	9,685	455,127	470
7	2/11/2024	5,572	7,311	9,266	88	41	10,313	455,122	463
8	2/11/2024	5,340	7,243	9,750	89	85	9,643	455,035	454
9	2/12/2024	5,441	7,060	9,734	88	25	9,624	455,144	451
10	2/13/2024	5,902	6,982	9,587	90	82	9,667	455,163	446
11	2/13/2024	9,520	6,969	9,720	90	57	9,636	455,139	442
12	2/14/2024	5,359	7,297	9,642	93	34	9,602	455,094	438
13	2/15/2024	6,176	7,401	9,678	93	70	9,680	455,102	433
14	2/15/2024	5,572	6,870	9,617	91	57	9,669	455,031	435
15	2/16/2024	6,944	7,323	9,699	94	20	9,771	455,356	430
16	2/17/2024	6,444	7,241	9,774	93	42	9,645	455,243	423
17	2/18/2024	7,023	6,670	9,713	93	57	9,664	455,392	417
18	2/19/2024	5,775	7,260	9,595	90	65	9,649	455,409	417
19	2/19/2024	5,486	7,375	9,429	90	15	9,581	455,085	411
20	2/20/2024	7,172	7,551	9,158	91	22	9,664	455,335	417
21	2/20/2024	5,963	8,110	9,483	91	62	9,595	455,724	399
22	2/21/2024	6,751	7,507	9,644	93	21	9,641	455,044	397
23	2/22/2024	6,146	6,943	9,527	91	62	9,576	455,017	396
24	2/22/2024	5,826	7,344	9,436	93	18	9,590	454,996	385
25	2/23/2024	7,120	7,064	9,752	92	18	9,637	455,362	386
26	2/24/2024	7,311	8,390	9,466	94	29	9,603	455,350	393
27	2/24/2024	6,482	6,353	9,472	94	14	9,575	455,007	372
28	2/25/2024	6,283	6,909	9,387	85	21	9,601	455,350	372
29	2/26/2024	5,715	7,199	9,336	94	27	9,079	410,773	362
30	2/27/2024	6,148	7,735	9,461	93	10	9,518	455,050	362
31	2/27/2024	6,669	7,601	9,226	93	11	9,597	455,288	362
32	2/28/2024	6,502	6,729	9,543	94	8	9,563	455,321	345
33	2/29/2024	5,440	6,402	9,438	93	7	10,112	455,077	345
34	3/2/2024	5,676	6,995	9,247	94	6	9,511	455,144	340
35	3/2/2024	5,865	4,325	9,055	91	55	9,519	455,108	336
36	3/3/2024	5,447	8,357	9,120	94	42	9,561	455,300	332
37	3/3/2024	8,552	5,963	9,044	92	44	9,517	455,077	328
38	3/4/2024	5,509	7,614	9,150	94	6	9,496	455,193	323
39	3/4/2024	5,406	7,032	9,166	94	11	9,588	455,241	321
40	3/5/2024	5,749	5,092	8,973	93	55	9,497	455,209	317
41	3/5/2024	5,474	8,416	9,350	93	7	9,566	454,335	311
42	3/6/2024	5,660	7,684	9,080	93	56	9,471	455,128	307
43	3/7/2024	5,521	8,088	9,038	94	6	9,476	454,750	301
44	3/7/2024	5,515	7,579	8,842	92	28	9,471	455,136	298
45	3/8/2024	5,617	7,600	9,244	93	50	9,454	455,053	295

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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)
46	3/8/2024	5,607	8,111	9,076	94	91	9,572	455,203	290
47	3/9/2024	5,320	7,182	8,983	94	8	9,467	455,159	288
48	3/10/2024	5,488	5,163	8,791	94	44	9,523	455,089	280
49	3/11/2024	5,711	6,840	8,750	94	20	9,481	455,131	276
50	3/11/2024	5,236	7,025	8,902	94	57	9,522	455,010	271
51	3/12/2024	5,472	7,592	8,643	94	17	9,514	455,078	270
52	3/12/2024	5,372	7,980	8,608	94	60	9,526	455,189	265
53	3/13/2024	5,240	7,588	8,633	94	10	9,452	455,045	258
54	3/13/2024	5,243	7,959	8,526	94	69	9,533	455,168	255
55	3/14/2024	6,298	7,453	8,791	94	12	9,471	455,332	270
56	3/14/2024	5,377	7,242	8,620	93	45	9,530	455,047	254
57	3/15/2024	6,905	6,911	8,456	94	9	9,770	455,264	249
58	3/15/2024	5,709	7,007	8,295	94	90	9,521	455,125	237
59	3/16/2024	6,721	7,067	8,436	94	11	9,455	455,418	240
60	3/16/2024	4,963	7,555	8,443	94	52	9,478	455,254	229
61	3/17/2024	5,981	7,198	8,557	94	9	9,461	455,634	237
62	3/17/2024	7,159	8,020	8,459	94	53	9,478	455,037	223
63	3/18/2024	6,305	7,505	8,486	94	8	9,408	455,357	220
64	3/18/2024	5,872	7,304	8,509	94	5	9,415	455,188	211
65	3/18/2024	5,719	6,840	8,379	94	68	9,499	455,359	207
66	3/19/2024	6,004	7,409	8,524	94	4	9,393	455,618	208
67	3/19/2024	5,756	7,434	8,250	93	51	9,465	455,074	195
68	3/20/2024	5,667	7,764	8,355	94	68	9,456	455,157	191
69	3/20/2024	6,809	7,709	8,730	94	9	9,408	455,423	194

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Phoenix 3H Perforation Report				
Stage Number	Report Date	Total Shots	Cluster 1 Top TD	Cluster 5 Bottom TD
1	2/7/2024	40		22,000
2	2/8/2024	40	21,956	21,799
3	2/8/2024	40	21,757	21,600
4	2/9/2024	40	21,558	21,400
5	2/9/2024	40	21,359	21,201
6	2/10/2024	40	21,159	21,002
7	2/11/2024	40	20,960	20,803
8	2/11/2024	40	20,761	20,603
9	2/12/2024	40	20,562	20,404
10	2/13/2024	40	20,362	20,205
11	2/13/2024	40	20,163	20,006
12	2/14/2024	40	19,964	19,806
13	2/15/2024	40	19,765	19,607
14	2/15/2024	40	19,565	19,408
15	2/16/2024	40	19,366	19,209
16	2/17/2024	40	19,167	19,009
17	2/18/2024	40	18,968	18,810
18	2/19/2024	40	18,768	18,611
19	2/19/2024	40	18,569	18,412
20	2/20/2024	40	18,370	18,212
21	2/20/2024	40	18,171	18,013
22	2/21/2024	40	17,971	17,814
23	2/22/2024	40	17,772	17,615
24	2/22/2024	40	17,573	17,415
25	2/23/2024	40	17,374	17,216
26	2/24/2024	40	17,174	17,017
27	2/24/2024	40	16,975	16,818
28	2/25/2024	40	16,776	16,618
29	2/26/2024	40	16,577	16,419
30	2/27/2024	40	16,377	16,220
31	2/27/2024	40	16,178	16,021
32	2/28/2024	40	15,979	15,821
33	2/29/2024	40	15,780	15,622
34	3/2/2024	40	15,580	15,423
35	3/2/2024	40	15,381	15,224
36	3/3/2024	40	15,182	15,024
37	3/3/2024	40	14,983	14,825
38	3/4/2024	40	14,783	14,626
39	3/4/2024	40	14,584	14,427
40	3/5/2024	40	14,385	14,227
41	3/5/2024	40	14,186	14,028
42	3/6/2024	40	13,986	13,829
43	3/7/2024	40	13,787	13,630
44	3/7/2024	40	13,588	13,430
45	3/8/2024	40	13,389	13,231
46	3/8/2024	40	13,189	13,032
47	3/9/2024	40	12,990	12,833

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Stage Number	Report Date	Total Shots	Cluster 1 Top TD	Cluster 5 Bottom TD
48	3/10/2024	40	12,791	12,633
49	3/11/2024	40	12,592	12,434
50	3/11/2024	40	12,392	12,235
51	3/12/2024	40	12,193	12,036
52	3/12/2024	40	11,994	11,836
53	3/13/2024	40	11,795	11,637
54	3/13/2024	40	11,595	11,438
55	3/14/2024	40	11,396	11,239
56	3/14/2024	40	11,197	11,039
57	3/15/2024	40	10,998	10,840
58	3/15/2024	40	10,798	10,641
59	3/16/2024	40	10,599	10,442
60	3/16/2024	40	10,400	10,242
61	3/17/2024	40	10,201	10,043
62	3/17/2024	40	10,001	9,844
63	3/18/2024	40	9,802	9,645
64	3/18/2024	40	9,603	9,445
65	3/18/2024	40	9,404	9,246
66	3/19/2024	40	9,204	9,047
67	3/19/2024	40	9,005	8,848
68	3/20/2024	40	8,806	8,648
69	3/20/2024	40	8,607	8,449

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1-14-07	DAVID W WOLFE JR & BRANDI SHAY WOLFE
1-14-08	KING FAMILY TRUST
1-14-09	KING FAMILY TRUST
1-17-14.1	FRANK M. CHISLER
1-17-14	PHOENIX ENERGY RESOURCES, LLC
1-17-06.1	SUSAN ANNE BURNESON
1-17-05	KENT A. & SHIRLEY A. LEONHARDT
1-17-12	PHOENIX ENERGY RESOURCES, LLC
1-24-19.1	CHARLES WENDELL MOORE

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B	WV-061-003767-004	H WV-061-005790-003
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E	WV-061-005787-001	K WV-061-004874-001
F	WV-061-004290-001	

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FILE #: <u>NEE14</u> DRAWING #: <u>3030</u> SCALE: <u>N/A</u>	DATE: <u>APRIL 2, 2025</u> OPERATOR'S WELL #: <u>PHOENIX 3H AS-DRILLED</u> API WELL #: <u>47</u> <u>61</u> <u>01939</u> STATE COUNTY PERMIT
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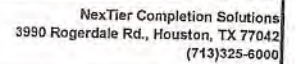
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NextTier Completion Solutions
3990 Rogerdale Rd., Houston, TX 77042
(713)325-6000

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	02/06/2024
Job End Date:	03/23/2024
State:	West Virginia
County:	Monongalia
API Number:	47-061-01939-00-00
Operator Name:	Northeast Natural Energy LLC
Well Name and Number:	PHOENIX 3H
Latitude:	39.641167
Longitude:	-80.272417
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7296
Total Base Water Volume (gal)*:	27618066
Total Base Non Water Volume:	0



Water Source	Percent
Surface Water, < 1000TDS	85.00%
Other, > 1000TDS	15.00%

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 HIF Fluid (% by mass)**	Comments
Clearal 268	Chemstream	Biocide					
EZ-A 431	TARQUIN	HCL Additive					
HCL Acid (28%)	TARQUIN	Acid					
Sand	US Silica	Proppant					
StimSTREAM FR 9800	Chemstream	Friction Reducer				RECEIVED Office of Oil and Gas APR 09 2025 WV Department of Environmental Protection	
StimSTREAM SC 405	Chemstream	Scale Control					
Water	NNE	Carrier/Base Fluid					
Items above are Trade Names. Items below are the individual ingredients.							
			Water	7732-18-5	100.00000	88.00104	None
			Crystalline Silica in the form of Quartz	14808-60-7	99.90000	11.89670	None
			Acrylamide-Chloride Salt of Trimethylammonio-	69418-26-4	40.00000	0.02183	None

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			Ethyl Acrylate Copolymer				
			Alkanes, C12-26-Branched and Linear	90622-53-0	40.00000	0.02183	None
			Hydrogen chloride	7647-01-0	28.00000	0.00948	None
			Glutaraldehyde	111-30-8	20.00000	0.00445	None
			Ethoxylated Alcohols (C12-16)	68551-12-2	5.00000	0.00273	None
			AA/Maleic Anhydride Co-polymer	9003-04-7	5.00000	0.00192	None
			AA/ATBS Co-polymer	9003-05-8	5.00000	0.00192	None
			Quaternary Ammonium Compounds	68424-85-1	3.00000	0.00067	None
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00067	None
			Ethanol	64-17-5	1.50000	0.00033	None
			Methanol	67-56-1	25.00000	0.00004	None
			Pyridinium, 1-(phenylmethyl)-, ethyl methyl derivs., chlorides	68909-18-2	25.00000	0.00004	None
			Proprietary	Proprietary	10.00000	0.00003	None
			Ethanoic Acid	64-19-7	15.00000	0.00002	None
			Ethoxylated Alcohols	68439-50-9	15.00000	0.00002	None
			2-ethylhexanol	104-76-7	5.00000	0.00001	None
			Ethoxylated Nonylphenols	127087-87-0	5.00000	0.00001	None

* 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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05/30/2025