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

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API 47- 033 - 06115 County Harrison District Simpson
Quad Rosemont Pad Name J Osborn Field/Pool Name
Farm name Judy M Osborn (LE) Well Number 200
Operator (as registered with the OOG) Arsenal Resources
Address 6031 Wallace Road Ext., Ste. 200 City Wexford State PA Zip 15090

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4346642.058 Easting 567437.974
Landing Point of Curve Northing 4346010.344 Easting 566302.833
Bottom Hole Northing 4341323.563 Easting 568013.771

Elevation (ft) 1164.03 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 Oil Based Mud

Date permit issued 07/07/2025 Date drilling commenced 07/09/2025 Date drilling ceased 10/26/2025
Date completion activities began 11/07/2025 Date completion activities ceased 12/26/2025
Verbal plugging (Y/N) N Date permission granted NA Granted by NA

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

Freshwater depth(s) ft none reported Open mine(s) (Y/N) depths N
Salt water depth(s) ft none reported Void(s) encountered (Y/N) depths N
Coal depth(s) ft none reported Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:
8-13-2026

Reviewed
Approved
08/28/2026

API 47- 033 - 06115 Farm name Judy M Osborn (LE) Well number 200

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' GL	New	94	NA	Y
Surface	17.5"	13 3/8"	813' GL	New	54.50	94'	Y
Coal	NA	NA	NA	NA	NA	NA	NA
Intermediate 1	12 1/4"	9 5/8"	1,519' GL	New	40	NA	Y
Intermediate 2	NA	NA	NA	NA	NA	NA	NA
Intermediate 3	NA	NA	NA	NA	NA	NA	NA
Production	8 1/2"	5 1/2"	25,390' GL	New	20	NA	Y
Tubing	NA	NA	NA	NA	NA	NA	NA
Packer type and depth set	NA						

Comment Details Cement to surface on Conductor, Surface, Intermediate. Lap onto intermediate on production.

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	195	15.60	1.18	230	Surface	8+
Surface	A	780	15.60	1.2	940	Surface	8+
Coal	NA	NA	NA	NA	NA	NA	NA
Intermediate 1	A	560	15.6	1.19	669	Surface	8+
Intermediate 2	NA	NA	NA	NA	NA	NA	NA
Intermediate 3	NA	NA	NA	NA	NA	NA	NA
Production	A	1365/3575	14.5/15.0	1.291/1.18	1762/4219	108' GL	8+
Tubing	NA	NA	NA	NA	NA	NA	NA

Drillers TD (ft) 25,411' (GL) Loggers TD (ft) NA

Deepest formation penetrated Marcellus Plug back to (ft) NA

Plug back procedure NA

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Kick off depth (ft) 7,936' (GL)

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

24" - No centralizers

13 3/8" - One (1) bow spring centralizer on every joint to Surface

9 5/8" - One (1) bow spring centralizer every joint from TD to surface

5 1/2" - One (1) Non-Weld Bowspring centralizer on every joint from TD of casing to end of curve. Then every other joint to KOP. Every third joint from KOP to TOC; there were no centralizers from TOC 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- 033 - 06115 Farm name Judy M Osborn (LE) Well number 200

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
		See Attached			

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
			See Attached					

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WR-35
Rev. 8/23/13

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PRODUCING FORMATION(S)	DEPTHS			
Marcellus Shale	7,202 - 7,470'	TVD	8,672 - 25,370'	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 _____ psi Bottom Hole _____ psi DURATION OF TEST 24 hrs

OPEN FLOW Gas 20,085 mcfpd Oil 0 bpd NGL 0 bpd Water 716 bpd GAS MEASURED BY □ 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 QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H_2S, ETC)
Sand/Silt	0	220	0	220	No water reported.
Sand/Silt/Coal	220	1325	220	1325	Coal @ 225', 325', 400', 440', 530', 595', 615'; WVGES
Big Lime	1325	1506	1325	1506	Limestone
Sand/Silt/Shale	1506	2970	1506	2970	Sandstone, Siltstone, Shale
Balltown	2970	3020	2970	3020	Sandstone
Sand/Silt/Shale	3020	4300	3020	4300	Sandstone, Siltstone, Shale
Benson	4300	4370	4300	4370	Sandstone
Sand/Silt/Shale	4370	6887	4370	8260	Sandstone, Siltstone, Shale
Burkett	6887	6905	8260	8283	Shale
Tully	6905	6954	8283	8346	Limestone
Mahantango	6954	7114	8346	8632	Shale
Marcellus	7114	7170	8632	8808	Shale
Lower Marcellus	7170	7208*	8808	25438	Shale - Gas shows through lateral
Onondaga	7208*	NA	NA	NA	Limestone, *Onondaga not penetrated - top est. based on 033-05933 thickness

Please insert additional pages as applicable.

Drilling Contractor Precision Drilling
Address 10350 Richmond Ave. Suite 700 City Houston State TX Zip 77042

Logging Company NA
Address _____ City _____ State _____ Zip _____

Cementing Company Halliburton
Address 4999 E Pointe Drive City Zanesville State OH Zip 43701

Stimulating Company ProFrac
Address 333 Shops Boulevard City Willow Park State TX Zip 76087
Please insert additional pages as applicable.

Completed by Arsenal Resources Telephone 724-940-1100
Signature [signature] Title Geologist & Permitting Specialist Date 07/28/2026

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

08/28/2026

Well Header

Well Name: J Osborn 200	API/UWI: 47-033-06115	Lease:	Pad Name: J Osborn	Operator: Arsenal Resources	Well Type:	Well Subtype:
Orig KB Elev (ft): 1,190.00	Water Depth (ft):	Lic Date:	Spud Date: 10/12/2025	RR Date: 10/26/2025		
County: HARRISON	District:	Division:	Division Code:			
Datum:	Latitude (°): 39° 15' 59.393" N	Longitude (°): 80° 13' 5.736" W	UTM E (m):	UTM N (m)		
Jobs						
Job Cat: Completion/Workover	Job Type: Initial Completion	Start Date: 9/2/2025	End Date:			

Perforations

Date	Top (ftKB)	Btm (ftKB)	Entered Shot Total	Zone
12/26/2025	8,672.00	8,834.00	40	Marcellus, Original Hole
12/26/2025	8,872.00	9,034.00	40	Marcellus, Original Hole
12/25/2025	9,072.00	9,234.00	40	Marcellus, Original Hole
12/24/2025	9,272.00	9,434.00	40	Marcellus, Original Hole
12/24/2025	9,472.00	9,634.00	40	Marcellus, Original Hole
12/24/2025	9,672.00	9,834.00	40	Marcellus, Original Hole
12/23/2025	9,872.00	10,034.00	40	Marcellus, Original Hole
12/23/2025	10,072.00	10,234.00	40	Marcellus, Original Hole
12/22/2025	10,272.00	10,434.00	40	Marcellus, Original Hole
12/22/2025	10,472.00	10,634.00	40	Marcellus, Original Hole
12/21/2025	10,672.00	10,835.00	40	Marcellus, Original Hole
12/21/2025	10,872.00	11,034.00	40	Marcellus, Original Hole
12/21/2025	11,070.00	11,234.00	40	Marcellus, Original Hole
12/20/2025	11,272.00	11,434.00	40	Marcellus, Original Hole
12/20/2025	11,472.00	11,634.00	40	Marcellus, Original Hole
12/19/2025	11,672.00	11,834.00	40	Marcellus, Original Hole
12/19/2025	11,874.00	12,034.00	40	Marcellus, Original Hole
12/19/2025	12,072.00	12,234.00	40	Marcellus, Original Hole
12/18/2025	12,272.00	12,434.00	40	Marcellus, Original Hole
12/18/2025	12,472.00	12,634.00	40	Marcellus, Original Hole
12/17/2025	12,672.00	12,834.00	40	Marcellus, Original Hole
12/17/2025	12,872.00	13,034.00	40	Marcellus, Original Hole
12/16/2025	13,072.00	13,234.00	40	Marcellus, Original Hole
12/16/2025	13,272.00	13,434.00	40	Marcellus, Original Hole
12/15/2025	13,472.00	13,634.00	40	Marcellus, Original Hole
12/15/2025	13,672.00	13,834.00	40	Marcellus, Original Hole
12/14/2025	13,872.00	14,034.00	40	Marcellus, Original Hole
12/13/2025	14,072.00	14,234.00	40	Marcellus, Original Hole
12/13/2025	14,272.00	14,434.00	40	Marcellus, Original Hole
12/13/2025	14,472.00	14,634.00	40	Marcellus, Original Hole
12/12/2025	14,672.00	14,835.00	40	Marcellus, Original Hole
12/12/2025	14,870.00	15,034.00	40	Marcellus, Original Hole
12/11/2025	15,072.00	15,236.00	40	Marcellus, Original Hole
12/11/2025	15,271.00	15,434.00	40	Marcellus, Original Hole
12/10/2025	15,472.00	15,634.00	40	Marcellus, Original Hole
12/10/2025	15,670.00	15,834.00	40	Marcellus, Original Hole
12/9/2025	15,872.00	16,034.00	40	Marcellus, Original Hole
12/9/2025	16,072.00	16,234.00	40	Marcellus, Original Hole
12/9/2025	16,272.00	16,434.00	40	Marcellus, Original Hole
12/9/2025	16,472.00	16,636.00	40	Marcellus, Original Hole
12/8/2025	16,672.00	16,834.00	40	Marcellus, Original Hole
12/8/2025	16,872.00	17,034.00	40	Marcellus, Original Hole
12/8/2025	17,072.00	17,234.00	40	Marcellus, Original Hole
12/7/2025	17,272.00	17,434.00	40	Marcellus, Original Hole
12/7/2025	17,472.00	17,636.00	40	Marcellus, Original Hole
12/7/2025	17,672.00	17,834.00	40	Marcellus, Original Hole
12/7/2025	17,872.00	18,034.00	40	Marcellus, Original Hole
12/6/2025	18,072.00	18,234.00	40	Marcellus, Original Hole
12/6/2025	18,272.00	18,434.00	40	Marcellus, Original Hole
12/6/2025	18,472.00	18,634.00	40	Marcellus, Original Hole
12/6/2025	18,672.00	18,834.00	40	Marcellus, Original Hole
12/5/2025	18,872.00	19,034.00	40	Marcellus, Original Hole
12/5/2025	19,072.00	19,234.00	40	Marcellus, Original Hole
12/5/2025	19,272.00	19,432.00	40	Marcellus, Original Hole
12/5/2025	19,472.00	19,634.00	40	Marcellus, Original Hole
12/4/2025	19,672.00	19,834.00	40	Marcellus, Original Hole
12/4/2025	19,870.00	20,032.00	40	Marcellus, Original Hole
12/3/2025	20,072.00	20,234.00	40	Marcellus, Original Hole
12/3/2025	20,272.00	20,434.00	40	Marcellus, Original Hole
12/3/2025	20,472.00	20,634.00	40	Marcellus, Original Hole
12/2/2025	20,672.00	20,834.00	40	Marcellus, Original Hole
12/2/2025	20,872.00	21,034.00	40	Marcellus, Original Hole
12/2/2025	21,072.00	21,234.00	40	Marcellus, Original Hole
12/1/2025	21,272.00	21,434.00	40	Marcellus, Original Hole
12/1/2025	21,472.00	21,634.00	40	Marcellus, Original Hole
12/1/2025	21,672.00	21,834.00	40	Marcellus, Original Hole
12/1/2025	21,872.00	22,034.00	40	Marcellus, Original Hole
11/30/2025	22,072.00	22,234.00	40	Marcellus, Original Hole
11/30/2025	22,272.00	22,434.00	40	Marcellus, Original Hole
11/30/2025	22,472.00	22,632.00	40	Marcellus, Original Hole
11/29/2025	22,675.00	22,834.00	40	Marcellus, Original Hole
11/29/2025	22,872.00	23,037.00	40	Marcellus, Original Hole
11/29/2025	23,074.00	23,234.00	40	Marcellus, Original Hole
11/29/2025	23,272.00	23,434.00	40	Marcellus, Original Hole
11/28/2025	23,475.00	23,634.00	40	Marcellus, Original Hole
11/28/2025	23,672.00	23,834.00	40	Marcellus, Original Hole
11/28/2025	23,872.00	24,034.00	40	Marcellus, Original Hole
11/27/2025	24,072.00	24,234.00	40	Marcellus, Original Hole
11/27/2025	24,272.00	24,434.00	40	Marcellus, Original Hole
11/27/2025	24,472.00	24,634.00	40	Marcellus, Original Hole
11/26/2025	24,672.00	24,834.00	40	Marcellus, Original Hole
11/26/2025	24,872.00	25,034.00	40	Marcellus, Original Hole
11/25/2025	25,072.00	25,234.00	40	Marcellus, Original Hole
11/7/2025	25,272.00	25,370.00	30	Marcellus, Original Hole

Stimulations Summary

Start Date: 11/25/2025 | R Treat Avg (bbl/min): | P Treat Avg (psi): | Mass Prop Tot (lb): 42,149,030 | Vol Clean Total (bbl): 797,960.00 | Frac Grad Avg (psi/ft): 1.27

Stimulation Intervals

Interval Number	Start Date	Slurry Rate Avg (bbl/min)	P Treat Avg (psi)	P Breakdown (psi)	ISIP (psi)	Proppant Total OR (lb)	Vol Clean Total (bbl)
1	11/25/2025	85.10	10,664.00	10,095.00	5,082.00	262,940.00	8,574.00
2	11/25/2025	85.80	10,096.00	5,943.00	5,486.00	493,200.00	9,827.00

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3	11/26/2025	91.70	9,551.00	6,199.00	5,693.00	$04,660.00	9,935.00
4	11/26/2025	90.00	9,547.00	6,977.00	5,696.00	$14,360.00	10,008.00
5	11/27/2025	90.10	9,821.00	6,454.00	5,633.00	$04,120.00	9,878.00
6	11/27/2025	89.60	9,763.00	9,331.00	5,889.00	$15,140.00	9,702.00
7	11/27/2025	89.80	9,601.00	5,859.00	5,827.00	$11,900.00	9,651.00
8	11/28/2025	89.70	9,521.00	6,285.00	5,993.00	495,720.00	9,593.00
9	11/28/2025	89.90	9,560.00	6,297.00	5,969.00	$08,320.00	9,422.00
10	11/28/2025	90.00	9,581.00	6,874.00	5,780.00	$07,700.00	9,487.00
11	11/29/2025	90.00	9,589.00	6,250.00	5,042.00	$06,840.00	9,607.00
12	11/29/2025	89.40	9,374.00	6,387.00	5,313.00	496,060.00	9,331.00
13	11/29/2025	90.10	9,359.00	6,888.00	6,432.00	$05,620.00	9,665.00
14	11/29/2025	90.00	9,266.00	6,445.00	5,880.00	$13,600.00	9,733.00
15	11/30/2025	89.80	9,442.00	5,157.00	6,209.00	$11,700.00	9,621.00
16	11/30/2025	87.50	9,448.00	6,129.00	6,031.00	$00,540.00	9,448.00
17	11/30/2025	90.50	9,441.00	5,941.00	6,201.00	$09,300.00	9,558.00
18	12/1/2025	90.10	9,516.00	5,682.00	6,292.00	495,560.00	9,539.00
19	12/1/2025	89.70	9,490.00	7,096.00	6,162.00	$09,600.00	9,630.00
20	12/1/2025	90.20	9,502.00	7,055.00	6,108.00	$07,360.00	9,791.00
21	12/2/2025	89.60	9,264.00	5,313.00	5,414.00	496,780.00	9,389.00
22	12/2/2025	87.10	9,495.00	5,828.00	6,382.00	$07,700.00	9,766.00
23	12/2/2025	90.20	9,643.00	6,583.00	5,983.00	$10,420.00	9,687.00
24	12/3/2025	90.20	9,819.00	8,101.00	6,158.00	497,000.00	9,753.00
25	12/3/2025	89.60	9,985.00	5,910.00	6,554.00	498,440.00	9,704.00
26	12/3/2025	90.50	9,849.00	6,503.00	6,490.00	$08,020.00	9,719.00
27	12/4/2025	89.00	9,734.00	7,003.00	6,247.00	$08,080.00	9,672.00
28	12/4/2025	89.90	9,360.00	6,916.00	6,524.00	$06,060.00	9,741.00
29	12/4/2025	90.20	9,640.00	6,065.00	6,458.00	$08,600.00	9,820.00
30	12/5/2025	90.40	9,393.00	6,705.00	6,200.00	499,980.00	9,675.00
31	12/5/2025	89.90	9,522.00	6,693.00	6,516.00	$02,200.00	9,465.00
32	12/5/2025	90.10	9,468.00	7,109.00	6,477.00	$01,200.00	9,562.00
33	12/5/2025	90.30	9,452.00	7,124.00	6,467.00	$02,640.00	9,726.00
34	12/6/2025	90.30	9,428.00	6,280.00	6,543.00	495,400.00	10,515.00
35	12/6/2025	90.50	9,613.00	5,653.00	6,630.00	$08,270.00	9,742.00
36	12/6/2025	90.10	9,294.00	6,129.00	6,144.00	$00,380.00	9,614.00
37	12/7/2025	89.90	9,555.00	7,379.00	6,448.00	490,260.00	9,755.00
38	12/7/2025	90.20	9,331.00	7,249.00	6,231.00	$08,260.00	9,677.00
39	12/7/2025	90.20	9,297.00	7,613.00	6,510.00	496,980.00	9,261.00
40	12/7/2025	90.00	9,127.00	6,271.00	6,489.00	$09,200.00	9,460.00
41	12/8/2025	90.20	9,248.00	5,789.00	6,108.00	498,780.00	9,513.00
42	12/8/2025	90.30	9,218.00	7,055.00	6,271.00	495,460.00	9,261.00
43	12/8/2025	90.20	9,076.00	6,964.00	5,871.00	521,700.00	9,564.00
44	12/8/2025	90.00	9,110.00	7,013.00	6,144.00	$04,960.00	9,576.00
45	12/9/2025	90.20	9,001.00	7,178.00	6,136.00	$04,860.00	9,510.00
46	12/9/2025	90.20	8,947.00	5,605.00	6,513.00	495,920.00	9,366.00
47	12/9/2025	90.00	8,898.00	5,663.00	6,570.00	$06,300.00	9,633.00
48	12/10/2025	90.00	8,914.00	7,254.00	6,789.00	$02,340.00	9,461.00
49	12/10/2025	90.20	8,977.00	6,695.00	6,022.00	$02,740.00	9,299.00
50	12/11/2025	89.90	9,041.00	5,437.00	6,231.00	$04,820.00	9,561.00
51	12/11/2025	89.70	9,046.00	6,942.00	5,885.00	$14,560.00	9,595.00
52	12/12/2025	89.90	9,148.00	6,076.00	6,379.00	$01,460.00	9,299.00
53	12/12/2025	89.60	8,810.00	5,731.00	6,466.00	$09,860.00	9,369.00
54	12/12/2025	90.00	9,111.00	6,677.00	6,720.00	$04,380.00	9,292.00
55	12/13/2025	89.70	9,074.00	7,135.00	6,333.00	$06,800.00	9,422.00
56	12/13/2025	89.90	9,271.00	6,260.00	6,591.00	$10,600.00	9,874.00
57	12/14/2025	89.80	9,246.00	7,119.00	6,565.00	$03,240.00	9,487.00
58	12/15/2025	89.10	9,104.00	7,192.00	6,179.00	$01,800.00	9,314.00
59	12/15/2025	89.70	9,179.00	7,615.00	6,679.00	$07,100.00	9,495.00
60	12/16/2025	90.10	9,269.00	5,593.00	6,550.00	$06,040.00	9,659.00
61	12/16/2025	90.10	8,983.00	6,081.00	6,224.00	$03,680.00	9,829.00
62	12/17/2025	90.10	9,090.00	6,620.00	6,472.00	$00,100.00	9,475.00
63	12/17/2025	89.30	8,894.00	7,163.00	6,027.00	$16,780.00	9,594.00
64	12/18/2025	89.80	9,258.00	7,694.00	6,995.00	$01,380.00	9,255.00
65	12/18/2025	89.50	9,145.00	7,646.00	6,171.00	$11,040.00	9,561.00
66	12/18/2025	90.20	8,902.00	5,713.00	6,365.00	499,260.00	9,281.00
67	12/19/2025	90.20	8,736.00	7,610.00	6,455.00	495,900.00	9,355.00
68	12/19/2025	90.30	8,716.00	5,429.00	6,381.00	496,200.00	9,210.00
69	12/20/2025	90.20	8,696.00	7,609.00	6,565.00	$04,400.00	9,396.00
70	12/20/2025	90.30	8,663.00	6,979.00	6,397.00	499,000.00	9,341.00
71	12/20/2025	90.30	8,657.00	5,726.00	6,376.00	499,280.00	9,235.00
72	12/21/2025	89.90	8,300.00	7,589.00	6,451.00	$13,640.00	9,283.00
73	12/21/2025	90.10	8,140.00	7,303.00	6,042.00	$04,660.00	9,112.00
74	12/22/2025	89.90	8,111.00	6,993.00	6,176.00	499,820.00	9,021.00
75	12/22/2025	90.10	8,090.00	6,631.00	6,311.00	$07,580.00	9,249.00
76	12/23/2025	90.30	8,182.00	6,837.00	5,358.00	$09,700.00	9,054.00
77	12/23/2025	90.20	7,878.00	6,886.00	6,490.00	$19,240.00	9,271.00
78	12/24/2025	90.20	7,869.00	6,052.00	6,291.00	$10,760.00	9,204.00
79	12/24/2025	89.80	7,961.00	7,639.00	6,153.00	$09,780.00	9,211.00
80	12/24/2025	90.40	7,773.00	6,695.00	6,429.00	$04,060.00	9,558.00
81	12/25/2025	90.30	7,787.00	7,265.00	6,116.00	$01,040.00	8,980.00
82	12/26/2025	90.60	8,140.00	6,805.00	5,301.00	497,780.00	8,856.00
83	12/26/2025	89.60	7,936.00	6,768.00	5,364.00	$07,980.00	9,167.00
84	12/26/2025	90.20	7,548.00	7,362.00	5,517.00	$02,140.00	9,209.00

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	11/25/2025
Job End Date:	12/26/2025
State:	West Virginia
County:	Harrison
API Number:	47-033-06115-00-00
Operator Name:	Arsenal Resources
Well Name and Number:	J Osborn 200
Latitude:	39.266498
Longitude:	-80.21826
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7336
Total Base Water Volume (gal)*:	36970290
Total Base Non Water Volume:	0

FracFocus Chemical Disclosure Registry

Water Source	Percent
Other, > 1000TDS	100.00%

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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	87.59653	None
Sand (100 Mesh Proppant)	ProFrac	Proppant					
			Crystalline Silica (quartz)	14808-60-7	100.00000	5.98378	None
Sand (40/70 White Proppant)	ProFrac	Proppant					
			Crystalline Silica (quartz)	14808-60-7	100.00000	5.97485	None
Hydrochloric Acid (7.5%)	Cooper Natural	Acidizing					
			Water	7732-18-5	92.50000	0.37719	None
			Hydrochloric Acid	7647-01-0	7.50000	0.03058	None
Other Chemical(s)	Listed Above	See Trade Name(s) List					
			Water	7732-18-5	92.50000	0.37719	None

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			Water	7732-18-5	85.00000	0.00869	None
			Ammonium chloride	12125-02-9	5.00000	0.00324	None
			Tall Oil fatty amide	68155-20-4	5.00000	0.00324	None
			Alcohols, C11-14-iso, C-13-rich, ethoxylated	78330-21-9	5.00000	0.00324	None
			Ethylene glycol	107-21-1	42.00000	0.00082	None
			Quaternary ammonium compounds,benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	5.00000	0.00059	None
			Pyridinium, 1-(phenylmethyl)-, Et Me derivs, chloride	68909-18-2	25.00000	0.00049	None
			Ciric Acid	77-92-9	10.00000	0.00019	None
			Alcohols, C12 - 14 secondary, ethoxylated	84133-50-6	8.00000	0.00016	None
			Water	7732-18-5	5.00000	0.00010	None
			2-Propenal, 3-phenyl	104-55-2	4.00000	0.00008	None
			Methanol	67-56-1	2.00000	0.00004	None
			Methyl 9-decenoate	25601-41-6	1.00000	0.00002	None
			Methyl 9-dedecenoate	39202-17-0	1.00000	0.00002	None
			Sodium xylene sulfonate	1300-72-7	0.30000	0.00000	None
ProSlick 773	ProFrac	Friction Reducer					
			Petroleum distillates, hydrotreated light	64742-47-8	30.00000	0.01942	None
			Ammonium chloride	12125-02-9	5.00000	0.00324	None
			Tall Oil fatty amide	68155-20-4	5.00000	0.00324	None
			Alcohols, C11-14-iso, C-13-rich, ethoxylated	78330-21-9	5.00000	0.00324	None
Hydrochloric Acid (15%)	Cooper Natural	Acidizing					
			Water	7732-18-5	85.00000	0.00869	None
			Hydrochloric Acid	7647-01-0	15.00000	0.00153	None
BioSuiteGQ123X	ProFrac	Biocide					
			glutaral	111-30-8	15.00000	0.00177	None
			Quaternary ammonium compounds,benzyl-C12-16-alkyldimethyl, chlorides	68424-85-1	5.00000	0.00059	None
Acid Pack Pro LT	ProFrac	Acid Inhibitor					
			Ethylene glycol	107-21-1	42.00000	0.00082	None

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			Pyridinium, 1-(phenylmethyl)-, Et Me derivs, chloride	68909-18-2	25.00000	0.00049	None
			Ciric Acid	77-92-9	10.00000	0.00019	None
			Alcohols, C12 - 14 secondary, ethoxylated	84133-50-6	8.00000	0.00016	None
			Water	7732-18-5	5.00000	0.00010	None
			2-Propenal, 3-phenyl	104-55-2	4.00000	0.00008	None
			Methanol	67-56-1	2.00000	0.00004	None
			Isotridecanol, ethoxylated	69011-36-5	1.80000	0.00003	None
			Methyl 9-decenoate	25601-41-6	1.00000	0.00002	None
			Methyl 9-dedecenoate	39202-17-0	1.00000	0.00002	None
			Sodium xylene sulfonate	1300-72-7	0.30000	0.00000	None
ProChek 170	ProFrac	Scale Inhibitor					
			Methyl alcohol	67-56-1	5.00000	0.00058	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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08/28/2026

WR-36
Rev. 5/08

Date: 07/28/2026
Operators Well Number: J Osborn 200
API Well No: 47- 033 - 06115

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of
Initial Gas-Oil Ratio

Well Operator: Arsenal Resources LLC
Address: 6031 Wallace Road Ext. Suite 200
Wexford, PA 15090

Designated Agent: Eric Morris
Address: 633 West Main Street
Bridgeport, WV 26330

Geological Target Formation: Marcellus Depth 8,632 feet
Perforation Interval 8,672 - 25,370 feet

Guidelines for testing:
1. *A minimum of gas vented or flared.*
2. *A 24 hour pre-flow into pipelines or tanks.*
3. *Uniform producing rate during the 24 hour test per test period.*
4. *Measurement standards as for Form WR-39, "Report of Annual Production" (see 35CSR4-15)*
5. *Separate Form WR-36 for each producing formation in a multiple completion.*

TEST DATA

Start of Test Date	Time	End of Test Date	Time	Duration of Test
2/15/2026	5:00 AM	2/16/2026	6:00 AM	24 Hrs

Tubing Pressure	Casing Pressure	Separator Pressure	Separator Temperature
NA	1420	257	64

Oil Production During Test	Gas Production During Test	Water Production During Test
0 BBLS	20,085 MCF	716 BBls 36870 -Salinity

Oil Gravity	Producing Method (flowing, pumping, gas lift etc.)
NA API	Flowing

GAS PRODUCTION

Measurement Method		Positive Choke ☐ / Positive flow prover ☑
Flange Tap ☑ Pipe Tap ☐ L-10 ☐		
Orifice diameter	Pipe Diameter (inside)	Nominal Choke Size inches: 48/64"
Differential Pressure range	Max. Static pressure range	Prover and Orifice diameter - inches: 8.0" run with 3.0" orifice
Differential: 281 psi		Static
Gas Gravity (Air = 1.0) Measured .571 Estimated	Flowing Temperature: 64	Gas Temperature: 96
24 Hour Coefficient	24 Hour coefficient pressure PSIA	

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TEST RESULTS

Daily Oil	Daily Water	Daily Gas	Gas-Oil Ratio
0	716 BBLs	20,085 MCF	NA

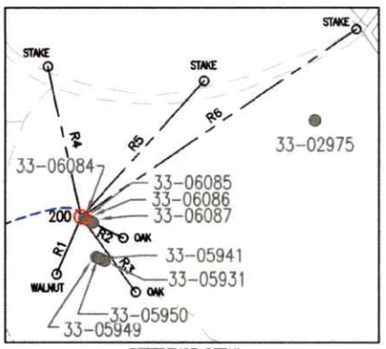
Arsenal Resources LLC
Well Operator
BY [signature]
ITS: Geologist & Permitting Specialist

08/28/2026

BHL is located on topo map 11,452 feet south of Latitude: 39°15'00"
SHL is located on topo map 9,144 feet south of Latitude: 39°17'30"

BHL is located on topo map 1,164 feet west of Longitude: 80°12'30"
SHL is located on topo map 2,883 feet west of Longitude: 80°12'30"

AS-DRILLED PLAT



REFERENCE DETAIL
SCALE 1" = 800'

LINE	BEARING	DISTANCE
R1	S 22°53'36" W	301.95'
R2	S 63°33'54" E	227.60'
R3	S 36°00'46" E	448.90'
R4	N 12°26'56" W	746.10'
R5	N 41°56'04" E	885.85'
R6	N 55°36'18" E	1605.75'

J OSBORN HSOP 16 200 PERMITTED		
SURFACE HOLE LOCATION (SHL)		
UTM 17-NAD83 (M)	NAD83, WV NORTH (FT)	NAD83, GEOGRAPHIC
NORTHING: 4346642.057	NORTHING: 279992.657	LAT-(N) 39.266498
EASTING: 567437.973	EASTING: 1765143.777	LONG-(W) 80.218260
LANDING POINT LOCATION (LPL)		
UTM 17-NAD83 (M):	NAD83, WV NORTH (FT)	NAD83, GEOGRAPHIC
NORTHING: 4346037.698	NORTHING: 278071.577	LAT-(N) 39.261141
EASTING: 566301.032	EASTING: 1761380.052	LONG-(W) 80.231498
BOTTOM HOLE LOCATION (BHL)		
UTM 17-NAD83 (M):	NAD83, WV NORTH (FT)	NAD83, GEOGRAPHIC
NORTHING: 4342820.267	NORTHING: 267450.228	LAT-(N) 39.232061
EASTING: 567468.512	EASTING: 1765035.440	LONG-(W) 80.218289

J OSBORN HSOP 16 200 AS DRILLED		
SURFACE HOLE LOCATION (SHL)		
UTM 17-NAD83 (M)	NAD83, WV NORTH (FT)	NAD83, GEOGRAPHIC
NORTHING: 4346642.058	NORTHING: 279992.660	LAT-(N) 39.266498
EASTING: 567437.974	EASTING: 1765143.780	LONG-(W) 80.218260
LANDING POINT LOCATION (LPL)		
UTM 17-NAD83 (M)	NAD83, WV NORTH (FT)	NAD83, GEOGRAPHIC
NORTHING: 4346010.344	NORTHING: 277981.720	LAT-(N) 39.260894
EASTING: 566302.833	EASTING: 1761384.470	LONG-(W) 80.231480
BOTTOM HOLE LOCATION (BHL)		
UTM 17-NAD83 (M):	NAD83, WV NORTH (FT)	NAD83, GEOGRAPHIC
NORTHING: 4341323.563	NORTHING: 262509.210	LAT-(N) 39.218533
EASTING: 568013.771	EASTING: 1766743.000	LONG-(W) 80.212122

NOTES:

1. There are no water wells or developed springs within 250' of proposed well.
2. There are no existing buildings within 625' of proposed well.
3. Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
4. There are no native trout streams within 300' of proposed well.
5. Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
6. It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.
7. Topo Mark Scale is 1"=2000'.

SHL

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BHL

THRASHER
THE THRASHER GROUP, INC.
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
PHONE 304-624-4108

SEE PAGES 2-3 FOR PLAT
SEE PAGE 4 FOR SURFACE OWNER TABLE

FILE #: J OSBORN HSOP 16 200
DRAWING #: J OSBORN HSOP 16 200
SCALE: AS SHOWN
MINIMUM DEGREE OF ACCURACY: 1/2500
PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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: Joseph H. Lowther
R.P.E.: L.L.S.: P.S. No. 2346

JOSEPH H. LOWTHER LICENSED No. 2346 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25304

DATE: JULY 27, 2026
OPERATOR'S WELL #: J OSBORN HSOP 16 200
API WELL #: 47 (STATE) 033 (COUNTY) 06115 (PERMIT)

Well Type: [X] Gas [ ] Oil [ ] Waste Disposal [ ] Liquid Injection [X] Production [ ] Storage [ ] Deep [X] Shallow

WATERSHED: SIMPSON CREEK
ELEVATION: 1164.03'±
COUNTY/DISTRICT: HARRISON / SIMPSON
QUADRANGLE: ROSEMONT, WV 7.5'
SURFACE OWNER: JUDY M OSBORN (LE) (JUDY M OSBORN IRREVOCABLE TRUST)
ACREAGE: 70.00±
OIL & GAS ROYALTY OWNER: GOBEL OSBORN, ET AL
ACREAGE: 1,399.52±

DRILL [X] CONVERT [ ] DRILL DEEPER [ ] REDRILL [ ] FRACTURE OR STIMULATE [X]
PLUG OFF OLD FORMATION [ ] PERFORATE NEW FORMATION [ ] PLUG & ABANDON [ ]
CLEAN OUT & REPLUG [ ] OTHER CHANGE [ ] (SPECIFY):

08/28/2026

TARGET FORMATION: MARCELLUS
ESTIMATED DEPTH: 7470.2'± TVD / 25,438'± TMD

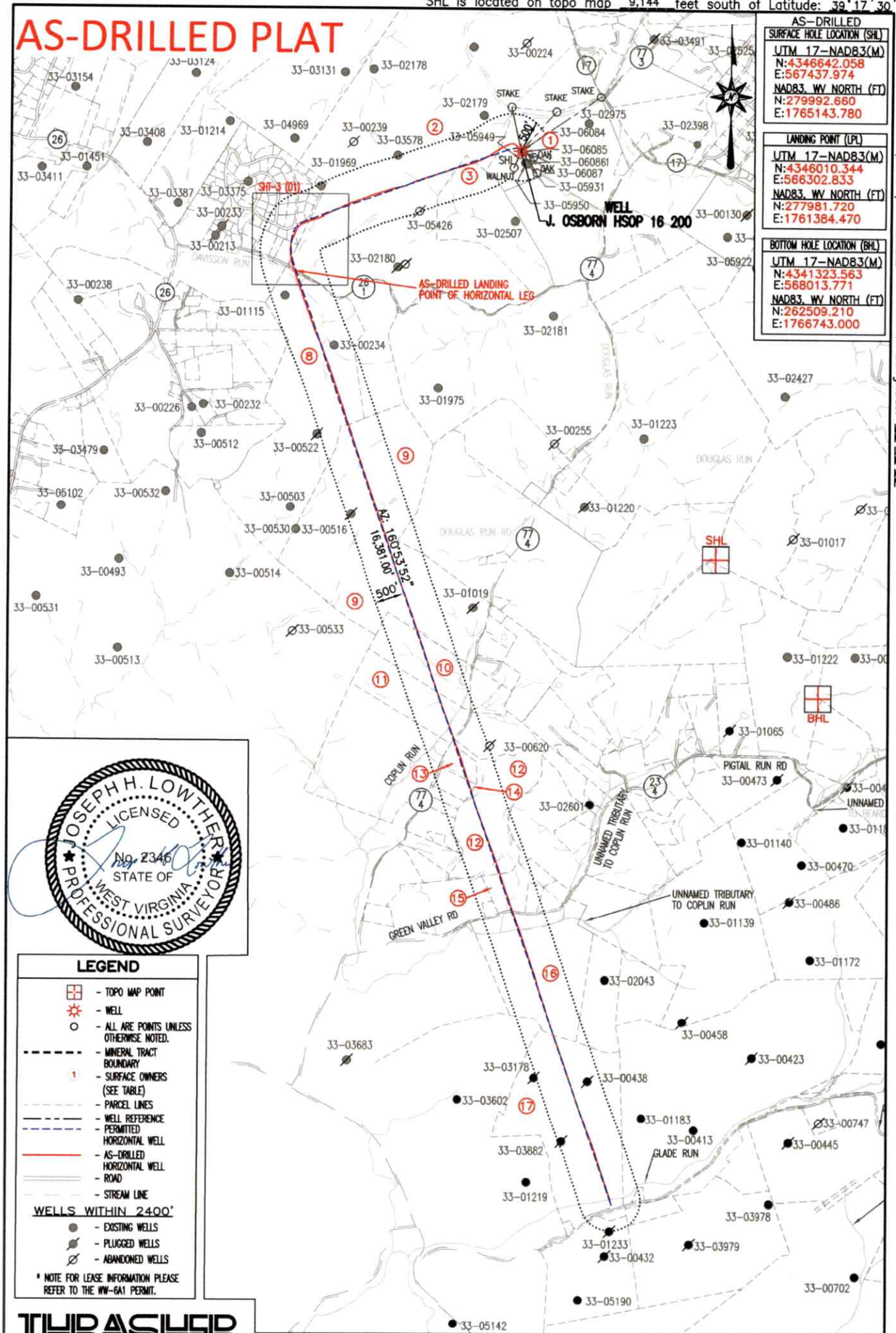
WELL OPERATOR: ARSENAL RESOURCES
Address: 6031 WALLACE ROAD EXTENSION, SUITE 200
City: WEXFORD State: PA Zip Code: 15090

DESIGNATED AGENT: ERIC MORRIS
Address: 633 WEST MAIN ST.
City: BRIDGEPORT State: WV Zip Code: 26330

BHL is located on topo map 11,452 feet south of Latitude: 39°15'00"
SHL is located on topo map 9,144 feet south of Latitude: 39°17'30"

BHL is located on topo map 1,164 feet west of Longitude: 80°12'30"
SHL is located on topo map 2,883 feet west of Longitude: 80°12'30"

AS-DRILLED PLAT



JOSEPH H. LOWTHER
LICENSED
No. 2346
STATE OF
WEST VIRGINIA
PROFESSIONAL SURVEYOR

LEGEND

- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- MINERAL TRACT BOUNDARY
- SURFACE OWNERS (SEE TABLE)
- PARCEL LINES
- WELL REFERENCE
- PERMITTED HORIZONTAL WELL
- AS-DRILLED HORIZONTAL WELL
- ROAD
- STREAM LINE

WELLS WITHIN 2400'

- EXISTING WELLS
- PLUGGED WELLS
- ABANDONED WELLS

* NOTE FOR LEASE INFORMATION PLEASE REFER TO THE WW-6A1 PERMIT.

THRASHER
THE THRASHER GROUP, INC.
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
PHONE 304-624-4108

SEE PAGE 3 FOR INSET DUE TO PARCEL SIZE
SEE PAGE 4 FOR SURFACE OWNERS TABLE

DATE: JULY 27, 2026

08/28/2026

OPERATOR'S WELL #: J OSBORN HSOP 16 200

API WELL #: 47 (STATE) 033 (COUNTY) 06115 (PERMIT)

STATE OF WEST VIRGINIA
DIVISION OF
ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

FILE #: J OSBORN HSOP 16 200
DRAWING #: J OSBORN HSOP 16 200
SCALE: 1" = 2000'

WELL OPERATOR ARSENAL RESOURCES
Address 6031 WALLACE ROAD EXTENSION, SUITE 200
City WEXFORD State PA Zip Code 15090

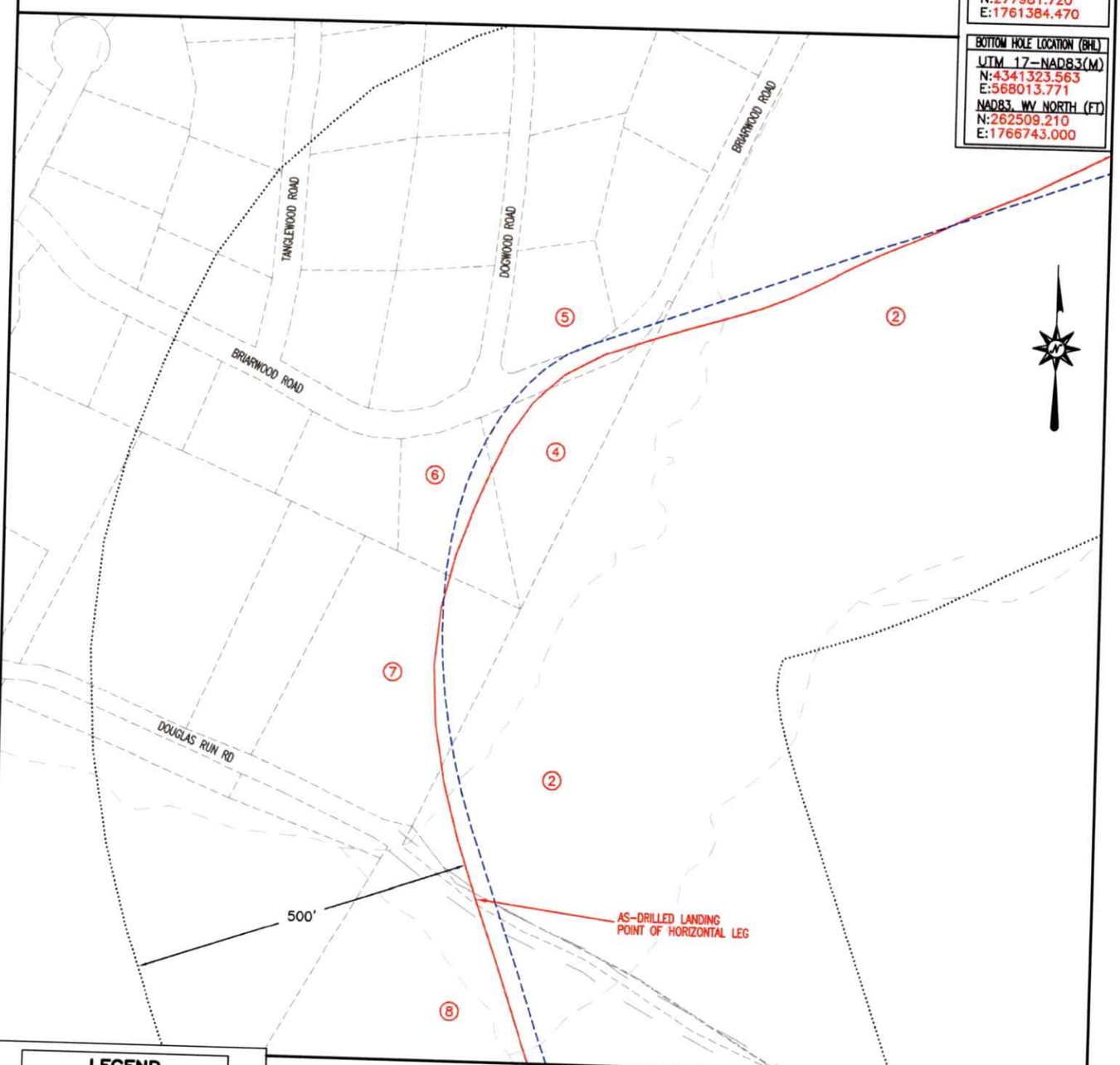
DESIGNATED AGENT ERIC MORRIS
Address 633 WEST MAIN ST.
City BRIDGEPORT State WV Zip Code 26330

J OSBORN HSOP 16 200 AS-DRILLED

J OSBORN HSOP 16 200 AS-DRILLED

AS-DRILLED PLAT

AS-DRILLED	
SURFACE HOLE LOCATION (SHL)	
UTM 17-NAD83(M)	
N:	4346642.058
E:	567437.974
NAD83, WV NORTH (FT)	
N:	279992.660
E:	1765143.780
LANDING POINT (LPL)	
UTM 17-NAD83(M)	
N:	4346010.344
E:	566302.833
NAD83, WV NORTH (FT)	
N:	277981.720
E:	1761384.470
BOTTOM HOLE LOCATION (BHL)	
UTM 17-NAD83(M)	
N:	4341323.563
E:	568013.771
NAD83, WV NORTH (FT)	
N:	262509.210
E:	1766743.000



LEGEND

- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- MINERAL TRACT BOUNDARY
- SURFACE OWNERS (SEE TABLE)
- PARCEL LINES
- WELL REFERENCE
- PERMITTED HORIZONTAL WELL
- AS-DRILLED HORIZONTAL WELL
- ROAD
- STREAM LINE

WELLS WITHIN 2400'

- EXISTING WELLS
- PLUGGED WELLS
- ABANDONED WELLS

* NOTE FOR LEASE INFORMATION PLEASE REFER TO THE WW-6A1 PERMIT.

SHT-3 (D1)
SCALE 1" = 200'

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THRASHER
THE THRASHER GROUP, INC.
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
PHONE 304-624-4108

JOSEPH C. WITHERS
LICENSED
No. 2345
STATE OF
WEST VIRGINIA
PROFESSIONAL SURVEYOR

08/28/2026

JULY 27, 2026

AS-DRILLED PLAT

J OSBORN WELL 200			
ID	SURFACE OWNER	DIST-TM-PAR	ACREAGE
1	OSBORN JUDY M (LE) (JUDY M OSBORN IRREVOCABLE TRUST)	15-0330-0005	56.67
2	HARRON CAROLYN S	15-0330-0003	355.02
3	DAVIS CHARLES THOMAS II	15-0330-0004	41.84
2	HARRON CAROLYN S	15-0330-0003	355.02
4	ADLINGTON RODNEY LYNN & ALLISON LYNN	16-2423-0052	0.91
ROAD	BRIARWOOD ROAD	N/A	N/A
5	BIFANO CHRISTOPHER P & CHERYL	16-2423-0048	0.52
ROAD	BRIARWOOD ROAD	N/A	N/A
4	ADLINGTON RODNEY LYNN & ALLISON LYNN	16-2423-0052	0.91
6	BUSH THOMAS E III & CYNTHIA J	16-2423-0051	0.71
7	MICHEL THOMAS H & JONALEE A	15-0330-0024-0002	2.20
2	HARRON CAROLYN S	15-0330-0003	355.02
ROAD	DOUGLAS RUN	N/A	N/A
8	PHILLIPS JAMES P & COURTNEY L	15-0330-0024-0000	162.91
9	PHILLIPS JAMES P & COURTNEY	15-0350-0002-0000	158.49
10	ROLLINS JOHN C	15-0350-0010-0000	28.74
11	ROLLINS JOHN C	15-0350-0011-0000	29.52
ROAD	COPLIN RUN ROAD	N/A	N/A
12	FLESHER NICHOLAS A & MEGHAN A	15-0350-0022-0000	44.00
13	MCKINNEY PAUL SCOTT	15-0350-0022-0003	4.61
14	BEDNAR DANIEL S & MITZI D	15-0350-0022-0004	4.08
12	FLESHER NICHOLAS A & MEGHAN A	15-0350-0022-0000	44.00
15	ROBINSON JOHN E & SHAREN K	15-0370-0006-0006	13.22
ROAD	COPLIN RUN ROAD	N/A	N/A
16	TUCKER MARY M ETAL	15-0370-0008-0000	67.45
17	KIRK JOEL C	15-0370-0020-0000	104.85

THRASHER

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BRIDGEPORT, WV 26330
PHONE 304-624-4108

DATE: JULY 27, 2026

OPERATOR'S WELL #: J OSBORN HSOP 16 200

API WELL #: 47 (STATE) 033 (COUNTY) 06115 (PERMIT)

WELL OPERATOR ARSENAL RESOURCES
Address 6031 WALLACE ROAD EXTENSION, SUITE 200
City WEXFORD State PA Zip Code 15090

STATE OF WEST VIRGINIA
DIVISION OF
ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

08/28/2026

FILE #: J OSBORN HSOP 16 200
DRAWING #: J OSBORN HSOP 16 200
SCALE: N/A

DESIGNATED AGENT ERIC MORRIS
Address 633 WEST MAIN ST.
City BRIDGEPORT State WV Zip Code 26330