

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

API 47-091-01369 County Taylor District Flemington
Quad Rosemont Pad Name Johnson TFP 40 Field/Pool Name _____
Farm name Renee Johnson Well Number Johnson TFP 40 204
Operator (as registered with the OOG) Arsenal Resources
Address 6031 Wallace Rd Ext, Ste 101 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 4345805.85 Easting 571690.32
Landing Point of Curve Northing 4345825.02 Easting 572034.92
Bottom Hole Northing 4339717.94 Easting 574264.2

Elevation (ft) 1332.5 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

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AUG 04 2023

Date permit issued 04/22/2022 Date drilling commenced 7/13/2022 Date drilling ceased 12/02/2022
Date completion activities began 1/27/2023 Date completion activities ceased 7/5/2023
Verbal plugging (Y/N) N Date permission granted NA Granted by NA

WV Department of
Environmental

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:

JDK
10/18/2023

API 47-091 - 01369 Farm name Renee Johnson Well number Johnson TFP 40 204

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"	120'	New	102.7	NA	Y
Surface	17 1/2"	13 3/8"	727' GL	New	54.5	NA	Y
Coal	NA	NA	NA	NA	NA	NA	N
Intermediate 1	12 1/4"	9 5/8"	2,111' GL	New	40.0	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"	29,416' GL	New	20.0	NA	Y
Tubing	NA	NA	NA	NA	NA	NA	NA
Packer type and depth set		NA					

Comment Details Cement to surface on Conductor, Surface, and Intermediate. Top of production cement at surface 0'(GL)ft.

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	260	15.60	1.30	338	Surface	8+
Surface	A	703	15.60	1.19	836.6	Surface	8+
Coal	NA	NA	NA	NA	NA	NA	NA
Intermediate 1	A	715	15.60	1.19	850.9	Surface	8+
Intermediate 2	NA	NA	NA	NA	NA	NA	NA
Intermediate 3	NA	NA	NA	NA	NA	NA	NA
Production	A	1040/4645	14.0/14.5	1.37/1.21	1,424.8/5620.5	Surface	8+
Tubing	NA	NA	NA	NA	NA	NA	NA

Drillers TD (ft) 29,450'(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) 7,145'(GL)

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

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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" & 9 5/8"- one bow spring centralizer on every other joint, 5 1/2" - one semi rigid centralizer on every joint from TD of well to end of curve. Then every other joint to KOP. Every third joint from KOP to 2,000'; there will be no centralizers from 2,000' to surface

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS Stages and perforations

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS NA

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

API 47- 091 - 01369 Farm name Renee Johnson Well number Johnson TFP 40 204

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					

Please insert additional pages as applicable.

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PRODUCING FORMATION(S)	DEPTHS	
Marcellus Shale	7687 - 7906	TVD 8097 - 29,394 MD

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 13014 mcfpd Oil 0 bpd NGL 0 bpd Water 645 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 ₂ S, ETC)
Sand/Silt/Coal	0	4876	0	4924	Sandstone, Siltstone, Coal, Shale
Elk Siltstone	4876	4897	4924	4946	Siltstone
Sand/Silt/Shale	4897	7482	4946	7606	Sandstone, Siltstone, Shale
Burket	7482	7510	7606	7642	Shale
Tully	7510	7562	7642	7710	Limestone
Mahantango	7562	7726	7710	8004	Shale
Marcellus	7726	7788	8004	8231	Shale
Lower Marcellus	7788	-	8231	29,450	Shale

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Please insert additional pages as applicable.

Drilling Contractor Patterson
Address 10713 West Sam Houston Parkway N., Suite 800 City Houston State TX Zip 77064

TX Department of Environmental Protection

Logging Company NA
Address _____ City _____ State _____ Zip _____

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

Stimulating Company Stingray - Mammoth Energy Services INC
Address 14201 Caliber Drive Suite 300 City Oklahoma City State OK Zip 73134

Please insert additional pages as applicable.

Completed by Arsenal Resources Telephone 724-940-1100
Signature [Signature] Title Director of Geology & Dev Planning Date 7/27/2023

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



WR 35 FORM COMPLETIONS INFORMATION

Well Header

Well Name Johnson TFP 40 204	API/UWI 4709101369	Lease	Pad Name Johnson TFP 40	Operator Arsenal Resources	Well Type Development	Well Subtype
Orig KB Elev (ft) 1,359.00	Water Depth (ft)	Well License Date	Spud Date 11/10/2022	Rig Release Date 12/2/2022		
County TAYLOR	District	Division	Division Code			
Lat/Long Datum	Latitude (°) 39° 15' 31.04" N	Longitude (°) 80° 10' 8.616" W	UTM Easting (m)	UTM Northing (m)		

Jobs

Job Category Completion/Workover	Primary Job Type Initial Completion	Start Date 1/19/2023	End Date
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Perforations

Date	Top (ftKB)	Btm (ftKB)	Entered Shot Total	Zone
3/30/2023	8,097.0	8,259.0	40	
3/29/2023	8,301.0	8,459.0	40	
3/29/2023	8,497.0	8,659.0	40	
3/29/2023	8,697.0	8,858.0	40	
3/29/2023	8,897.0	9,059.0	40	
3/28/2023	9,097.0	9,259.0	40	
3/28/2023	9,297.0	9,459.0	40	
3/27/2023	9,500.0	9,659.0	40	
3/27/2023	9,697.0	9,859.0	40	
3/27/2023	9,899.0	10,059.0	40	
3/26/2023	10,097.0	10,259.0	40	
3/26/2023	10,297.0	10,459.0	40	
3/26/2023	10,497.0	10,659.0	40	
3/25/2023	10,699.0	10,859.0	40	
3/25/2023	10,897.0	11,059.0	40	
3/25/2023	11,097.0	11,253.0	40	
3/24/2023	11,297.0	11,456.0	40	
3/23/2023	11,497.0	11,659.0	40	
3/22/2023	11,697.0	11,857.0	40	
3/22/2023	11,897.0	12,055.0	40	
3/21/2023	12,097.0	12,256.0	40	
3/21/2023	12,297.0	12,459.0	40	
3/20/2023	12,497.0	12,659.0	40	
3/20/2023	12,700.0	12,859.0	40	
3/19/2023	12,897.0	13,059.0	40	
3/19/2023	13,100.0	13,259.0	40	
3/19/2023	13,297.0	13,459.0	40	
3/18/2023	13,502.0	13,659.0	40	
3/18/2023	13,697.0	13,859.0	40	
3/18/2023	13,897.0	14,059.0	40	
3/17/2023	14,097.0	14,259.0	40	
3/17/2023	14,297.0	14,459.0	40	
3/16/2023	14,497.0	14,659.0	40	
3/16/2023	14,697.0	14,859.0	40	
3/15/2023	14,900.0	15,059.0	40	
3/15/2023	15,097.0	15,259.0	40	
3/14/2023	15,297.0	15,459.0	40	
3/14/2023	15,497.0	15,659.0	40	

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WYR 35 FORM COMPLETIONS INFORMATION

Perforations

Date	Top (ftKB)	Btm (ftKB)	Entered Shot Total	Zone
3/11/2023	17,097.0	17,257.0	40	
3/11/2023	17,297.0	17,459.0	40	
3/10/2023	17,497.0	17,659.0	40	
3/10/2023	17,697.0	17,857.0	40	
3/10/2023	17,897.0	18,059.0	40	
3/10/2023	18,097.0	18,259.0	40	
3/9/2023	18,297.0	18,459.0	40	
3/9/2023	18,497.0	18,659.0	40	
3/8/2023	18,697.0	18,859.0	40	
3/8/2023	18,897.0	19,056.0	40	
3/7/2023	19,097.0	19,259.0	40	
3/7/2023	19,297.0	19,459.0	40	
3/7/2023	19,497.0	19,659.0	40	
3/6/2023	19,697.0	19,859.0	40	
3/6/2023	19,897.0	20,056.0	40	
3/5/2023	20,097.0	20,259.0	40	
3/4/2023	20,297.0	20,459.0	40	
3/3/2023	20,497.0	20,659.0	40	
3/3/2023	20,697.0	20,857.0	40	
3/3/2023	20,897.0	21,059.0	40	
3/2/2023	21,097.0	21,259.0	40	
3/2/2023	21,297.0	21,459.0	40	
3/1/2023	21,497.0	21,659.0	40	
3/1/2023	21,697.0	21,859.0	40	
2/28/2023	21,897.0	22,059.0	40	
2/28/2023	22,097.0	22,261.0	40	
2/27/2023	22,297.0	22,459.0	40	
2/27/2023	22,497.0	22,659.0	40	
2/26/2023	22,697.0	22,859.0	40	
2/26/2023	22,897.0	23,059.0	40	RECEIVED
2/25/2023	23,097.0	23,259.0	40	Office of Oil and Gas
2/25/2023	23,297.0	23,459.0	40	AUG 04 2023
2/24/2023	23,497.0	23,659.0	40	
2/24/2023	23,697.0	23,859.0	40	
2/23/2023	23,897.0	24,059.0	40	NY Department of
2/23/2023	24,097.0	24,259.0	40	Environmental Protection
2/23/2023	24,297.0	24,459.0	40	
2/23/2023	24,497.0	24,659.0	40	
2/22/2023	24,697.0	24,859.0	40	
2/22/2023	24,897.0	25,059.0	40	
2/21/2023	25,097.0	25,259.0	40	
2/21/2023	25,300.0	25,459.0	40	
2/21/2023	25,497.0	25,661.0	40	
2/21/2023	25,697.0	25,859.0	40	
2/20/2023	25,897.0	26,057.0	40	
2/20/2023	26,097.0	26,259.0	40	
2/20/2023	26,297.0	26,459.0	40	
2/19/2023	26,497.0	26,659.0	40	
2/19/2023	26,697.0	26,859.0	40	
2/19/2023	26,897.0	27,059.0	40	
2/19/2023	27,097.0	27,259.0	40	
2/18/2023	27,297.0	27,459.0	40	
2/18/2023	27,497.0	27,659.0	40	
2/18/2023	27,697.0	27,859.0	40	



WYR 35 FORM COMPLETIONS INFORMATION

Perforations

Date	Top (ftKB)	Btm (ftKB)	Entered Shot Total	Zone
2/17/2023	28,097.0	28,259.0	40	
2/17/2023	28,297.0	28,459.0	40	
2/16/2023	28,499.0	28,659.0	40	
2/16/2023	28,697.0	28,859.0	40	
2/15/2023	28,897.0	29,059.0	40	
2/14/2023	29,097.0	29,259.0	40	
1/27/2023	29,297.0	29,394.0	30	

Stimulations Summary

Start Date 2/14/2023	R Treat Avg (bbl/min)	P Treat Avg (psi)	Proppant Total (lb) 53,230,019.0	Volume Clean Total (bbl) 1,014,235.00	Frac Gradient Average (psi/ft) 1.10
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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	2/14/2023	80.5	9,922.0	10,622.0	4,547.0		7,475.00
2	2/14/2023	86.6	10,448.0	7,046.0	5,498.0		10,007.00
3	2/15/2023	85.5	10,221.0	8,259.0	5,414.0		10,044.00
4	2/16/2023	84.8	10,048.0	6,566.0	5,295.0		10,115.00
5	2/16/2023	84	9,843.0	7,344.0	5,034.0		10,049.00
6	2/17/2023	86.5	10,085.0	7,021.0	5,520.0		10,045.00
7	2/17/2023	85.9	10,125.0	7,273.0	5,910.0		9,998.00
8	2/17/2023	87.4	10,027.0	7,022.0	5,566.0		9,926.00
9	2/18/2023	83.8	9,763.0	6,732.0	5,270.0		9,999.00
10	2/18/2023	85.3	9,854.0	7,085.0	5,380.0		10,268.00
11	2/18/2023	84.7	9,770.0	6,685.0	5,060.0		9,966.00
12	2/19/2023	83.8	9,692.0	5,652.0	6,125.0		13,236.00
13	2/19/2023	85.3	9,744.0	6,385.0	5,530.0		9,822.00
14	2/19/2023	86.2	9,694.0	6,647.0	5,451.0	RECEIVED Office of Oil and Gas	9,882.00
15	2/19/2023	86.7	9,627.0	6,082.0	4,923.0		9,846.00
16	2/20/2023	85.3	9,442.0	6,030.0	4,810.0	AUG 04 2023	9,818.00
17	2/20/2023	85.5	9,216.0	6,261.0	5,710.0		9,828.00
18	2/20/2023	87.8	9,454.0	5,980.0	5,810.0		9,824.00
19	2/21/2023	86	9,606.0	6,219.0	5,390.0	Environmental Protection	9,769.00
20	2/21/2023	86.2	9,213.0	6,453.0	5,705.0		9,800.00
21	2/21/2023	83.9	9,162.0	6,448.0	5,626.0		9,720.00
22	2/22/2023	85.2	9,092.0	6,620.0	4,894.0		9,698.00
23	2/22/2023	85.9	9,258.0	7,673.0	4,950.0		9,344.00
24	2/22/2023	84.8	9,405.0	10,804.0	4,980.0		9,306.00
25	2/22/2023	82.3	9,343.0	6,847.0	5,089.0		9,665.00
26	2/23/2023	88.1	9,373.0	7,362.0	5,307.0		9,646.00
27	2/23/2023	85.8	9,250.0	6,986.0	5,460.0		10,513.00
28	2/23/2023	78.8	9,288.0	7,612.0	5,480.0		9,510.00
29	2/24/2023	86.1	9,308.0	7,045.0	5,510.0		9,490.00
30	2/25/2023	84.2	9,181.0	7,492.0	5,650.0		9,229.00
31	2/25/2023	80.9	9,162.0	7,494.0	4,025.0		9,357.00
32	2/26/2023	84.8	8,942.0	6,303.0	5,410.0		9,465.00
33	2/26/2023	85.3	8,890.0	6,950.0	5,110.0		9,338.00
34	2/27/2023	83.4	8,674.0	5,996.0	5,210.0		9,743.00
35	2/27/2023	84.5	9,011.0	7,066.0	5,275.0		9,353.00
36	2/28/2023	85.3	9,137.0	6,037.0	5,110.0		9,477.00
37	2/28/2023	84.1	8,995.0	5,159.0	5,090.0		9,363.00



WR 35 FORM COMPLETIONS INFORMATION

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)
43	3/3/2023	84.7	9,042.0	6,205.0	6,205.0		9,450.00
44	3/3/2023	82.4	9,124.0	6,233.0	6,829.0		9,276.00
45	3/4/2023	84.2	9,176.0	7,165.0	5,348.0		9,640.00
46	3/4/2023	84.1	9,146.0	6,768.0	4,938.0		9,717.00
47	3/6/2023	88	9,314.0	6,918.0	5,630.0		9,612.00
48	3/6/2023	84.5	9,173.0	6,436.0	5,805.0		9,588.00
49	3/6/2023	85.6	9,349.0	7,464.0	5,521.0		9,609.00
50	3/7/2023	85.6	9,458.0	7,616.0	5,918.0		9,283.00
51	3/7/2023	84.5	9,303.0	7,980.0	5,519.0		9,486.00
52	3/8/2023	87.7	9,503.0	6,579.0	5,416.0		9,600.00
53	3/8/2023	83.5	9,263.0	7,397.0	6,513.0		10,466.00
54	3/9/2023	87.5	9,315.0	6,592.0	6,690.0		9,545.00
55	3/9/2023	85.4	9,284.0	7,804.0	6,027.0		9,211.00
56	3/10/2023	84	8,772.0	6,639.0	5,548.0		9,399.00
57	3/10/2023	85.5	9,024.0	6,486.0	5,319.0		9,231.00
58	3/10/2023	87	9,016.0	5,954.0	5,171.0		9,170.00
59	3/10/2023	87.7	8,958.0	7,552.0	5,475.0		9,407.00
60	3/11/2023	87.4	9,174.0	6,668.0	6,019.0		9,410.00
61	3/11/2023	85.8	9,237.0	6,201.0	5,067.0		9,229.00
62	3/11/2023	87.9	9,407.0	7,546.0	5,175.0		9,398.00
63	3/12/2023	84.4	9,730.0	7,143.0	4,870.0		9,548.00
64	3/12/2023	86.5	9,338.0	7,203.0	5,106.0		9,141.00
65	3/12/2023	81.8	9,217.0	7,228.0	4,910.0		10,201.00
66	3/13/2023	86.7	9,308.0	5,947.0	6,116.0		9,174.00
67	3/13/2023	85	9,037.0	7,276.0	6,314.0		9,161.00
68	3/13/2023	87.4	9,182.0	6,946.0	6,310.0		9,150.00
69	3/14/2023	84.1	8,945.0	7,167.0	6,109.0		9,156.00
70	3/14/2023	86.6	8,943.0	7,077.0	5,425.0	RECEIVED	9,165.00
71	3/14/2023	87.7	8,653.0	6,523.0	5,150.0	Office of Oil and Gas	9,181.00
72	3/15/2023	88.8	9,169.0	6,481.0	6,140.0		9,946.00
73	3/16/2023	83.8	8,967.0	6,450.0	6,405.0	AUG 04 2023	9,218.00
74	3/16/2023	85.4	8,440.0	6,432.0	4,657.0		9,191.00
75	3/17/2023	87.7	8,577.0	5,988.0	5,254.0		9,166.00
76	3/17/2023	89.4	8,876.0	5,922.0	5,531.0	Environmental Protection	9,190.00
77	3/17/2023	84.4	8,932.0	7,097.0	4,465.0		8,927.00
78	3/18/2023	85.7	8,496.0	6,200.0	5,140.0		9,320.00
79	3/18/2023	87.8	8,609.0	6,113.0	4,662.0		9,324.00
80	3/18/2023	88.4	8,635.0	6,801.0	4,890.0		8,990.00
81	3/19/2023	84.9	8,387.0	5,585.0	4,625.0		9,155.00
82	3/19/2023	84.4	8,742.0	5,737.0	4,530.0		9,404.00
83	3/20/2023	88.6	8,913.0	6,212.0	4,785.0		9,118.00
84	3/20/2023	82.5	8,297.0	5,700.0	4,825.0		9,013.00
85	3/21/2023	83.4	8,557.0	6,447.0	4,860.0		9,468.00
86	3/21/2023	85.5	8,404.0	6,975.0	6,131.0		9,084.00
87	3/22/2023	87.7	8,235.0	6,815.0	5,230.0		9,110.00
88	3/22/2023	88.7	8,562.0	7,261.0	4,912.0		9,062.00
89	3/23/2023	83.8	8,365.0	6,695.0	5,845.0		9,339.00
90	3/24/2023	83.4	7,971.0	5,359.0	5,286.0		9,067.00
91	3/24/2023	70.1	8,574.0	6,131.0	5,414.0		10,237.00
92	3/25/2023	87.9	8,245.0	6,978.0	4,445.0		9,093.00
93	3/25/2023	88.4	7,985.0	7,255.0	4,415.0		9,079.00
94	3/25/2023	85.3	7,841.0	6,044.0	5,317.0		9,099.00
95	3/26/2023	85.9	8,179.0	6,746.0	4,878.0		9,044.00
96	3/26/2023	82.8	8,468.0	5,603.0	4,370.0		9,076.00



WV 35 FORM COMPLETIONS INFORMATION

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)
98	3/27/2023	87.7	8,058.0	6,999.0	5,942.0		9,033.00
99	3/27/2023	84.1	8,027.0	6,731.0	4,426.0		9,068.00
100	3/28/2023	84.1	7,759.0	5,706.0	4,827.0		8,943.00
101	3/28/2023	89.7	7,896.0	6,925.0	5,132.0		9,029.00
102	3/28/2023	84.9	7,468.0	6,568.0	5,913.0		8,958.00
103	3/29/2023	85.6	7,804.0	6,704.0	4,590.0		8,955.00
104	3/29/2023	85.7	7,305.0	6,299.0	4,880.0		8,959.00
105	3/29/2023	87.8	7,206.0	5,920.0	4,412.0		9,086.00
106	3/29/2023	83.4	7,224.0	7,044.0	4,485.0		9,106.00
107	3/30/2023	86.6	7,177.0	6,549.0	4,610.0		9,035.00

RECEIVED
Office of Oil and Gas

AUG 04 2023

WV Department of
Environmental Protection

**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 101
Wexford, PA 15090

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

Geological Target Formation: Marcellus Depth 7726 feet
Perforation Interval 8301-29394 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 7/4/23	Time 6:00 AM	End of Test Date 7/5/23	Time 6:00 AM	Duration of Test 24 Hrs
Tubing Pressure NA	Casing Pressure 2250	Separator Pressure 305	Separator Temperature 62	
Oil Production During Test BBLs	Gas Production During Test MCF	Water Production During Test BBLs -Salinity		
Oil Gravity API	Producing Method (flowing, pumping, gas lift etc.) Flowing			

GAS PRODUCTION

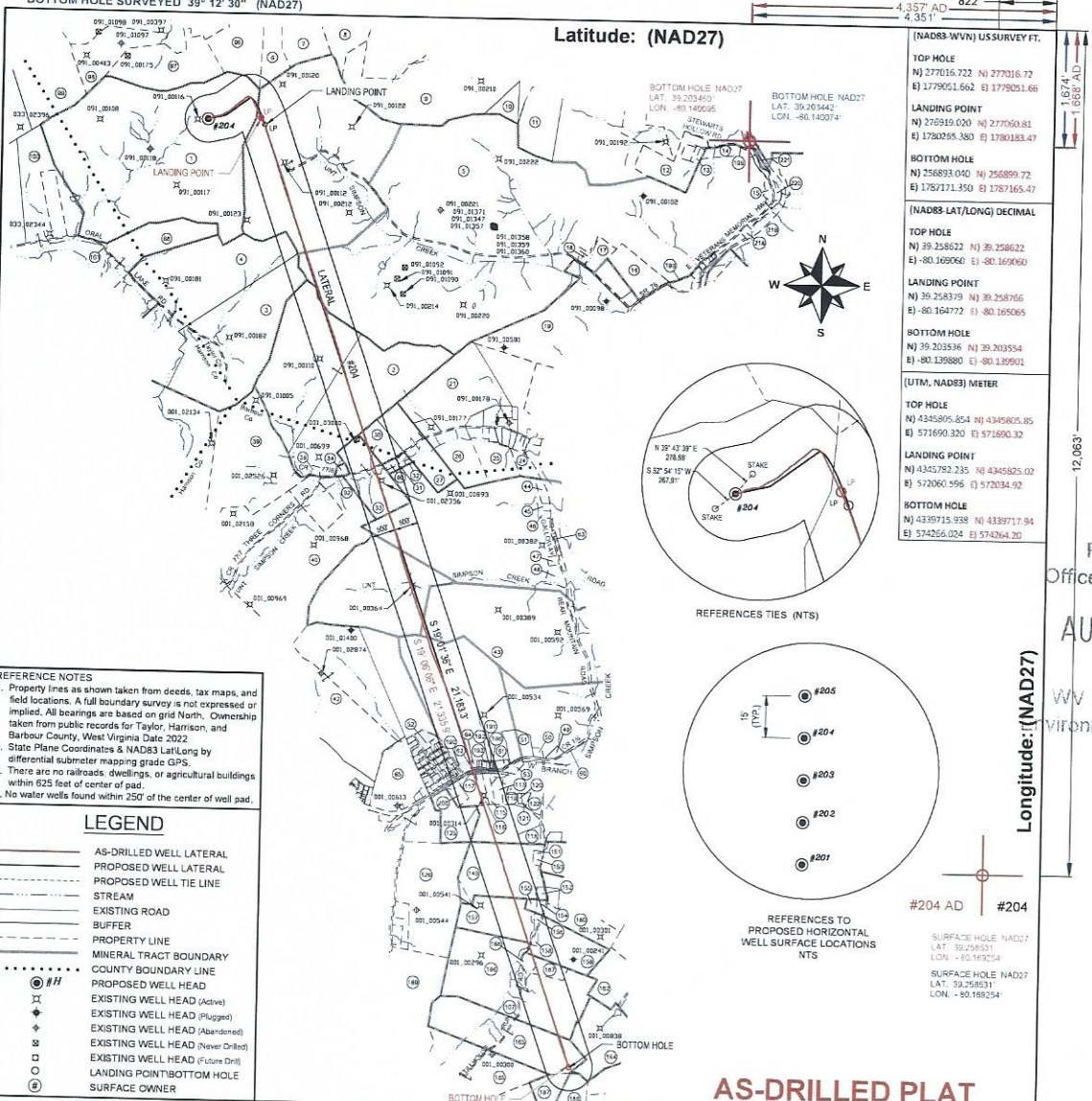
Measurement Method Flange Tap <input checked="" type="checkbox"/> Pipe Tap <input type="checkbox"/> L-10 <input type="checkbox"/>		Positive Choke <input type="checkbox"/>	RECEIVED Office of Oil and Gas AUG 04 2023 WV Department of Environmental Protection
		Positive flow prover <input checked="" type="checkbox"/>	
Orifice diameter	Pipe Diameter (inside)	Nominal Choke Size inches 36/64"	
Differential Pressure range	Max. Static pressure range	Prover and Orifice diameter - inches 5.761" run with 3.0" orifice	
Differential 159" H2O		Static 305 psi	
Gas Gravity (Air = 1.0) Measured	Flowing Temperature 62	Gas Temperature 115	
Estimated	24 Hour coefficient pressure PSIA		

TEST RESULTS

Daily Oil 0	Daily Water 645 BBLs	Daily Gas 13014 MCF	Gas-Oil Ratio NA
-----------------------	--------------------------------	-------------------------------	----------------------------

Arsenal Resources LLC
BY  Well Operator
ITS: Director of Geology & Dev Planning

SURFACE HOLE SURVEYED 39° 17' 30" (NAD27)
 BOTTOM HOLE SURVEYED 39° 12' 30" (NAD27)



(NAD83 WVN) US SURVEY FT.	
TOP HOLE	N) 277016.72 E) 1779051.66
LANDING POINT	N) 276919.020 E) 1780285.380
BOTTOM HOLE	N) 256893.040 E) 1782171.350
(NAD83 LAT/LONG) DECIMAL	
TOP HOLE	N) 39.258622 E) -80.169060
LANDING POINT	N) 39.258319 E) -80.164772
BOTTOM HOLE	N) 39.203536 E) -80.139880
(UTM, NAD83) METER	
TOP HOLE	N) 4345805.854 E) 571690.320
LANDING POINT	N) 4345782.235 E) 572034.92
BOTTOM HOLE	N) 4339715.938 E) 574264.20

REFERENCE NOTES

- Property lines as shown taken from deeds, tax maps, and field locations. A full boundary survey is not expressed or implied. All bearings are based on grid North. Ownership taken from public records for Taylor, Harrison, and Barbour County, West Virginia Date 2022
- State Plane Coordinates & NAD83 Lat/Long by differential submeter mapping grade GPS.
- There are no railroads, dwellings, or agricultural buildings within 625 feet of center of pad.
- No water wells found within 250' of the center of well pad.

LEGEND

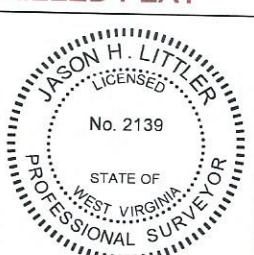
	AS-DRILLED WELL LATERAL
	PROPOSED WELL LATERAL
	PROPOSED WELL TIE LINE
	STREAM
	EXISTING ROAD
	BUFFER
	PROPERTY LINE
	MINERAL TRACT BOUNDARY
	COUNTY BOUNDARY LINE
	PROPOSED WELL HEAD
	EXISTING WELL HEAD (Active)
	EXISTING WELL HEAD (Plugged)
	EXISTING WELL HEAD (Abandoned)
	EXISTING WELL HEAD (Never Drilled)
	EXISTING WELL HEAD (Future Drill)
	LANDING POINT/BOTTOM HOLE
	SURFACE OWNER

RECEIVED
 Office of Oil and Gas
 AUG 04 2023
 WV Department of Environmental Protection

FILE#: 22078-001
 SHEET#: 1 of 2
 SCALE: 1" = 3000'
 TICK SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/200
 PROVEN SOURCE OF ELEVATION: WV-RTN CORS STATION

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: *Jason H. Littler* 3/14/23
 P.S. #2139: Jason H. Littler P.S.



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



DATE: MARCH 14, 2023
 OPERATOR'S WELL #: JOHNSON TFP-40 # 204
 API WELL #: 47 091 1369
 STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow
 WATERSHED: SIMPSON CREEK
 COUNTY / DISTRICT: TAYLOR CO. FLEMINGTON DISTRICT
 SURFACE OWNER: RENEE JOHNSON
 OIL & GAS ROYALTY OWNER: SEE WW-6A1

ELEVATION: 1,332.5
 QUADRANGLE: ROSEMONT, WV
 ACREAGE: 284 ±
 ACREAGE: 284 ±

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 ESTIMATED DEPTH: TVD: 7,906' TMD: 29,450'
 WELL OPERATOR: ARSENAL RESOURCES DESIGNATED AGENT: NATHAN SKEEN
 ADDRESS: 6031 WALLACE ROAD EXTENSION # 300 ADDRESS: 633 MAIN STREET
 CITY: WEXFORD STATE: PA ZIP: 15090 CITY: BRIDGEPORT STATE: WV ZIP: 26330

BOTTOM HOLE SURVEYED 80° 07' 30" (NAD27)
 SURFACE HOLE SURVEYED 80° 10' 00" (NAD27)

SURFACE HOLE SURVEYED 39° 17' 30" (NAD27)
 BOTTOM HOLE SURVEYED 39° 12' 30" (NAD27)

4,357' AD 822'
 4,351'

Latitude: (NAD27)

(NAD83-WVN) USSURVEY FT.

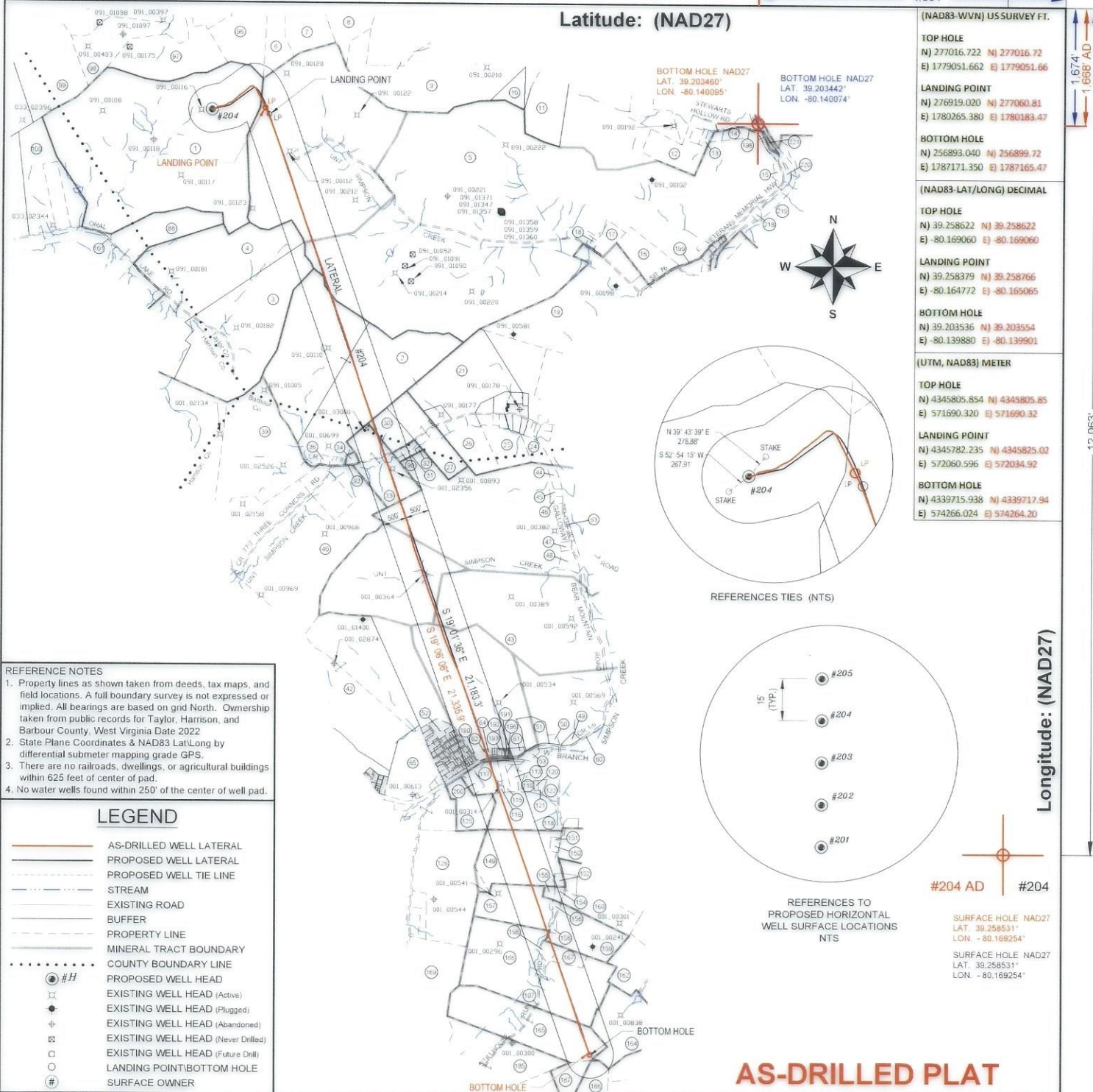
TOP HOLE
 N) 277016.722 N) 277016.72
 E) 1779051.662 E) 1779051.66
 LANDING POINT
 N) 276919.020 N) 277080.81
 E) 1780265.380 E) 1780183.47
 BOTTOM HOLE
 N) 256893.040 N) 256899.72
 E) 1787171.350 E) 1787165.47

(NAD83-LAT/LONG) DECIMAL

TOP HOLE
 N) 39.258622 N) 39.258622
 E) -80.169060 E) -80.169060
 LANDING POINT
 N) 39.258379 N) 39.258766
 E) -80.164772 E) -80.165065
 BOTTOM HOLE
 N) 39.203536 N) 39.203554
 E) -80.139880 E) -80.139901

(UTM, NAD83) METER

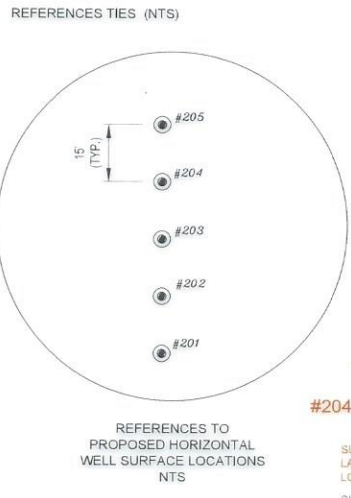
TOP HOLE
 N) 4345805.854 N) 4345805.85
 E) 571690.320 E) 571690.32
 LANDING POINT
 N) 4345782.235 N) 4345825.02
 E) 572060.596 E) 572034.92
 BOTTOM HOLE
 N) 4339715.938 N) 4339717.94
 E) 574266.024 E) 574264.20



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LEGEND

- AS-DRILLED WELL LATERAL
- PROPOSED WELL LATERAL
- PROPOSED WELL TIE LINE
- STREAM
- EXISTING ROAD
- BUFFER
- PROPERTY LINE
- MINERAL TRACT BOUNDARY
- COUNTY BOUNDARY LINE
- PROPOSED WELL HEAD
- EXISTING WELL HEAD (Active)
- EXISTING WELL HEAD (Plugged)
- EXISTING WELL HEAD (Abandoned)
- EXISTING WELL HEAD (Never Drilled)
- EXISTING WELL HEAD (Future Drill)
- LANDING POINT/BOTTOM HOLE
- SURFACE OWNER



Longitude: (NAD27)

12,063'

BOTTOM HOLE SURVEYED 80° 07' 30" (NAD27)
 SURFACE HOLE SURVEYED 80° 10' 00" (NAD27)

FILE#: 22078-001
 SHEET#: 1 of 2
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 Signed: *J. H. Littler* 3/14/23
 P.S. #2139: Jason H. Littler P.S.



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304
 Well Type: Oil Waste Disposal Production Deep Gas Liquid Injection Storage Shallow
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 COUNTY / DISTRICT: TAYLOR CO. FLEMINGTON DISTRICT
 SURFACE OWNER: RENEE JOHNSON
 OIL & GAS ROYALTY OWNER: SEE VW-6A1



DATE: MARCH 14, 2023
 JOHNSON TFP-40
 OPERATOR'S WELL #: # 204
 API WELL #: 47 091 1369
 STATE COUNTY PERMIT
 ELEVATION: 1,332.5
 QUADRANGLE: ROSEMONT, WV
 ACREAGE: 284 ±
 ACREAGE: 284 ±

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 ESTIMATED DEPTH: TVD: 7,906' TMD: 29,450'
 WELL OPERATOR: ARSENAL RESOURCES DESIGNATED AGENT: NATHAN SKEEN
 ADDRESS: 6031 WALLACE ROAD EXTENSION # 300 ADDRESS: 633 MAIN STREET
 CITY: WEXFORD STATE: PA ZIP: 15090 CITY: BRIDGEPORT STATE: WV ZIP: 26330

SURFACE PARCEL OWNER INFORMATION			ADJOINER PARCEL OWNER INFORMATION				
ID#	DEP#	PARCEL NUMBER	OWNER NAME	ID#	DEP#	PARCEL NUMBER	OWNER NAME
1	033	17-15-0331-0027-0000	JOHNSON RENEE	100	033	17-15-0351-0009-0000	JOHNSON RENEE
5	091	46-04-0011-0001-0000	CFS FARMS LIMITED LIABILITY CO	88	033	17-15-0351-0010-0000	JOHNSON RENEE
2	001	01-09-0009-0002-0000	STEWART FARM LLC	101		RIGHT-OF-WAY	COUNTY ROUTE 17 ORAL LAKE ROAD
30	091	46-04-0011-0002-0000	PROPOST PAUL	3	033	17-15-0351-0013-0000	GCSTREAM LLC
33	001	01-09-0009-0007-0000	CROUSE STEPHEN DALE & MICHAEL LYNN	4	033	17-15-0351-0012-0000	GCSTREAM LLC
43	001	01-09-0009-0022-0000	WOLFE LARRY, ROBERT WOLFE & STANLEY WOLFE ET UXES, HWS	96	091	46-04-0007-0008-0000	FRUM CLINTON A (HEIRS)
62	001	01-09-012A-0107-0001	DARR WILLIAM	96	091	46-04-0007-0009-0000	CEQUEL III COMMUNICATIONS
196	001	01-09-0012-0022-0000	DOBBINS PATRICK JOHN & JOSEPH ALBERT II	97	091	46-04-0007-0027-0000	CEQUEL III COMMUNICATIONS
117	001	01-09-0012-0023-0000	REPPERT FUELS INC	96	091	46-04-0008-0021-0000	MILLARD CARLYLE G
116	001	01-09-0012-0021-0000	ZOCKEFOOSE BARBARA A	6	091	46-04-0008-0022-0000	GRIPPIN JAMES S & ELAINE M
118	001	01-09-0012-0017-0000	MONTGOMERY MICHAEL J & BERTHA, HWS	7	091	46-04-0008-0023-0000	GRAY RANDALL & RITA
149	001	01-09-0012-0051-0000	WBL SPE III LLC	9	091	46-04-0008-0029-0000	COALQUEST DEVELOPMENT LLC
157	001	01-09-0012-0050-0002	KNAPP FRANCES C & JERREL F WS	8	091	46-04-0008-0035-0000	MARKS BETTY P
159	001	01-09-0012-0050-0001	STREETS BRENDA K ET ALS	10	091	46-04-0008-0105-0000	BLOSSER PATRICK B ETAL ROBERT C & CLINTON D & SURV
168	001	01-09-0012-0050-0004	MCCUNE CLAYTON & CHARLOTTE WS	11	091	46-04-0008-0081-0000	SIMMONS HUNTER
167	001	01-09-0022-0009-0000	STREETS FRANKLIN D & BRENDA (WROS)	12	091	46-04-0008-0083-0000	PRATT JANICE&CHARLENE MOORE & CURTIS & DAVID STEWART
166	001	01-09-0012-0050-0000	MARTIN ROBERT E	13	091	46-04-0008-0084-0000	PRATT JANICE & CHARLENE MOORE & CURTIS & DAVID STEWART
165	001	01-09-0022-0006-0000	MARTIN ROBERT	198		RIGHT-OF-WAY	COUNTY ROUTE 3/10 STEWARTS HOLLOW ROAD

AS-DRILLED PLAT

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- SURFACE OWNER

FILE#: 22078-001
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ELEVATION: 1,332.5
QUADRANGLE: ROSEMONT, WV
ACREAGE: 284 ±
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 PLUG OFF FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE SPECIFY: _____

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WELL OPERATOR: ARSENAL RESOURCES
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ADDRESS: 633 MAIN STREET
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