

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

API 47069003640000 County OHIO District LIBERTY  
Quad BETHANY, WV- Pad Name ROY RIGGLE-OHI-PAD1 Field/Pool Name PANHANDLE FIELD WET  
Farm Name ROY & DEBRA R. RIGGLE Well Number ROY RIGGLE OHI 201H  
Operator (as registered with the OOG) SWN Production Company LLC  
Address PO Box 12359 City Spring State TX  
Zip 77391-2359

As Drilled Location NAD83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Landing Point of Curve  
Top Hole Northing 4,444,688.69 Easting 540,542.57  
Northing 4,444,437.16 Easting 540,075.74  
Bottom Hole Northing 4,448,697.80 Easting 538,437.55

Elevation (ft) 1,251.9' GL Type of Well  New  Existing Type of Report  Interim  Final  
Permit Type  Deviate  Horizontal  Horizontal 6A  Vertical Depth Type  Deep  Shallow  
Type of Operation  Convert  Deepen  Drill  Plug Back  Redrill  Re-Wor  Stimulate  
Well Type  Brine Disposal  CBM  Gas  Oil  Secondary Recovery  Solution Mining  Storage  Other  
Type of Completion  Single  Multiple Fluids Produce  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) SOBM  
See attached Mud Summary Report

Date permit issued 2023-10-23 Date drilling commenced 2023-11-29 Date drilling ceased 2023-12-12  
Date Completion activities began 2024-02-17 Date Completion activities ceased 2024-03-22  
Verbal Plugging (Y/N) N Date permission granted N/A Granted by N/A

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

Freshwater depth(s) ft 508'  
Salt water depth(s) ft 761'  
Coal depth(s) ft 638'  
Is coal being mined in area (Y/N) N

Oprn mine(s) (Y/N) depths N  
Void(s) encountered (Y/N) depths N  
Cavern(s) encountered (Y/N) depth N

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Reviewed by: [Signature]  
5/28/2024

06/14/2024

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WR-35  
Rev. 8/23/13

API 47069003640000

Farm name ROY & DEBRA R. RIGGLE Department of WV Well number ROY RIGGLE OHI 201H  
Environmental Protection

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Wt lb/ft	Grade	Basket Depth	Did cement circulate (Y/N) *Provide details below*
Conductor	24.000	20.000	136	NEW	94.00	J-55		Y
Surface	17.500	13.375	659	NEW	54.50	J-55		Y/ 40 BBLs
Coal	SEE SURFACE							
Intermediate 1	12.250	9.625	2055	NEW	36.00	J-55		Y/ 38 BBLs
Intermediate 2								
Intermediate 3								
Production	8.500	5.500	22250	NEW	20.00	P-110 HP		Y/ 70 BBLs
Tubing		2.875	7176	NEW	6.50	P-110		
Packer type and depth set								

Comment Details \_\_\_\_\_

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>2</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	CLASS A	GROUT TO SURFACE				SURFACE	24
Surface	CLASS A	696	15.6	1.19	101	SURFACE	8
Coal	SEE SURFACE						
Intermediate 1	CLASS A	771	15.6	1.18	124	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	4206	14.5	1.29	896	SURFACE	24
Tubing							

Drillers TD (ft) 22,250'

Loggers TD (ft) 22,250'

Deepest formation penetrated MARCELLUS

Plug back to (ft) 22,143'

Plug back procedure N/A

Kick off depth (f 6,084' MD)

Check all wireline logs run  caliper  density  deviated/directional  induction  sonic  
 neutron  resistivity  gamma ray  temperature  
 Well cored  Yes  No  Conventional  Sidewall Were cuttings collected  Yes  No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING:

SURFACE: 9 CENTRALIZERS - EVERY THIRD JOINT OF CASING

INTERMEDIATE: 25 CENTRALIZERS - EVERY THIRD JOINT OF CASING

PRODUCTION: 452 CENTRALIZERS - EVERY THIRD JOINT FROM SURFACE TO TOP OF CURVE, THEN EVERY JOINT UNTIL TD

WAS WELL COMPLETED AS SHOT HOLE  Yes  No Details \_\_\_\_\_

WAS WELL COMPLETED AS OPEN HOLE  Yes  No Details \_\_\_\_\_

WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED \_\_\_\_\_

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# Hydraulic Fracturing Fluid Product Component Information Disclosure



Job Start Date:	02/17/2024
Job End Date:	03/07/2024
State:	West Virginia
County:	Ohio
API Number:	47-069-00364-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	ROY RIGGLE OHI 201H
Latitude:	40.151567
Longitude:	-80.523983
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6463
Total Base Water Volume (gal)*:	23975370
Total Base Non Water Volume:	93552

Water Source	Percent
Surface Water, < 1000TDS	87.30%
Produced Water	12.70%

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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
Base Water	Operator	Base fluid					
Excelerate LX-15	SWN Well Services	Friction Reducer					
FE-1A	SWN Well Services	Iron Control					
HAI-501	SWN Well Services	Corrosion Inhibitor					
HCL	SWN Well Services	Solvent					
MC MX 2-2822	SWN Well Services	Scale Inhibitor					
Sand	SWN Well Services	Proppant					
Tolicide 4Frac	SWN Well	Biocide					

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Services		Items above are Trade Names. Items below are the individual ingredients.				
		Water	7732-18-5	100.00000	88.40176	
		Crystalline silica, quartz	14808-60-7	100.00000	11.48546	
		Hydrochloric acid	7647-01-0	15.00000	0.04122	
		Complex Amine Compound	proprietary	50.00000	0.03822	
		Hydrotreated light petroleum distillate	64742-47-8	25.00000	0.01911	
		Tetrakis (hydroxymethyl) phosphonium sulfate	55566-30-8	45.00000	0.00477	
		Surfactant	proprietary	5.00000	0.00382	
		Acetic anhydride	108-24-7	65.00000	0.00090	
		Methanol	67-56-1	60.00000	0.00081	
		Quaternary Ammonium Compounds	68424-85-1	8.00000	0.00079	
		Ethoxylated alcohols	proprietary	5.00000	0.00079	
		Alkoxylated polyhydric alcohol	proprietary	1.00000	0.00076	
		Polyethylenepoly-ethoxylated phosphonomethylated sodiumsalts	70900-16-2	20.00000	0.00054	
		Acetic acid	64-19-7	35.00000	0.00049	
		Ethanol	64-17-5	3.00000	0.00026	
		Sodium chloride	7647-14-5	5.00000	0.00013	
		Modified thiourea polymer	proprietary	30.00000	0.00013	
		Propargyl alcohol	107-19-7	5.00000	0.00002	

\* 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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Well Name: Roy Riggle OHI 201H 47069003640000

LITHOLOGY/FORMATION	TOP DEPTH, MD (FT)	TOP DEPTH, TVD (FT)	BOTTOM DEPTH, MD (FT)	BOTTOM DEPTH, TVD (FT)	QUANTITY AND TYPE OF FLUID
Base of Fresh Water	0.00	0.00	508.00	508.00	
Top of Salt Water	761.00	761.00	NA	NA	
Pittsburgh Coal	638.00	638.00	643.00	643.00	
Pottsville (ss)	758.00	758.00	872.00	872.00	
Ravenciff (ss)	1262.00	1261.00	1389.00	1386.00	
Maxton (ss)	1486.00	1482.00	1674.00	1666.00	
Big Injun (ss)	1824.00	1811.00	2054.00	2029.00	
Berea (siltstone)	2292.00	2250.00	2798.00	2713.00	
Rhinstreet (shale)	6198.00	5847.00	6491.00	6118.00	
Cashaqua (shale)	6491.00	6118.00	6562.00	6178.00	
Middlesex (shale)	6562.00	6178.00	6688.00	6274.00	
Tully (ls)	6688.00	6274.00	6747.00	6314.00	
Mahantango (shale)	6747.00	6314.00	6979.00	6426.00	
Marcellus (shale)	6979.00	6426.00	NA	NA	GAS

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**ROY RIGGLE OHI 201H  
ATTACHMENT 1  
PERF REPORT**

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STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
1	2/2/2024	22,143	22,131	72
2	2/18/2024	22,098	21,921	36
3	2/18/2024	21,888	21,711	36
4	2/18/2024	21,678	21,501	36
5	2/18/2024	21,468	21,291	36
6	2/19/2024	21,258	21,081	36
7	2/19/2024	21,048	20,871	36
8	2/19/2024	20,838	20,661	36
9	2/19/2024	20,628	20,451	36
10	2/20/2024	20,418	20,241	36
11	2/20/2024	20,208	20,031	36
12	2/20/2024	19,998	19,821	36
13	2/20/2024	19,788	19,611	36
14	2/20/2024	19,578	19,401	36
15	2/20/2024	19,368	19,191	36
16	2/21/2024	19,158	18,981	36
17	2/21/2024	18,948	18,771	36
18	2/21/2024	18,738	18,561	36
19	2/21/2024	18,528	18,351	36
20	2/22/2024	18,318	18,141	36
21	2/22/2024	18,108	17,931	36
22	2/22/2024	17,898	17,721	36
23	2/22/2024	17,688	17,511	36
24	2/23/2024	17,478	17,301	36
25	2/23/2024	17,268	17,091	36
26	2/23/2024	17,058	16,881	36
27	2/24/2024	16,848	16,671	36
28	2/24/2024	16,638	16,461	36
29	2/26/2024	16,428	16,251	36
30	2/26/2024	16,218	16,041	36
31	2/26/2024	16,008	15,831	36
32	2/27/2024	15,798	15,621	36
33	2/27/2024	15,588	15,411	36
34	2/27/2024	15,378	15,201	36
35	2/27/2024	15,168	14,991	36
36	2/28/2024	14,958	14,781	36
37	2/28/2024	14,748	14,571	36
38	2/28/2024	14,538	14,361	36
39	2/29/2024	14,328	14,151	36
40	2/29/2024	14,118	13,941	36
41	2/29/2024	13,908	13,731	36
42	2/29/2024	13,698	13,521	36



**ROY RIGGLE OHI 201H  
ATTACHMENT 1  
PERF REPORT**

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
43	3/1/2024	13,488	13,311	36
44	3/1/2024	13,278	13,101	36
45	3/1/2024	13,068	12,891	36
46	3/1/2024	12,858	12,681	36
47	3/1/2024	12,648	12,471	36
48	3/2/2024	12,438	12,261	36
49	3/2/2024	12,228	12,051	36
50	3/2/2024	12,018	11,841	36
51	3/2/2024	11,808	11,631	36
52	3/3/2024	11,598	11,421	36
53	3/3/2024	11,388	11,211	36
54	3/3/2024	11,178	11,001	36
55	3/3/2024	10,968	10,791	36
56	3/3/2024	10,758	10,581	36
57	3/3/2024	10,548	10,371	36
58	3/4/2024	10,338	10,161	36
59	3/4/2024	10,128	9,951	36
60	3/4/2024	9,918	9,741	36
61	3/4/2024	9,708	9,531	36
62	3/5/2024	9,498	9,321	36
63	3/5/2024	9,288	9,111	36
64	3/5/2024	9,078	8,901	36
65	3/5/2024	8,868	8,691	36
66	3/6/2024	8,658	8,481	36
67	3/6/2024	8,448	8,271	36
68	3/6/2024	8,238	8,061	36
69	3/6/2024	8,028	7,851	36
70	3/6/2024	7,818	7,641	36
71	3/7/2024	7,608	7,431	36
72	3/7/2024	7,398	7,221	36

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ROY RIGGLE OHI 201H  
ATTACHMENT 2  
STIM REPORT

STAGE NUM	Stim Date	Ave Pump Rate (BPM)	Ave Treatment	Max Breakdown	ISIP (PSI)	Amount of Proppant (lbs)	WV Department of Environmental Protection Amount of water bbls	Amount of nitrogen/othe
1	2/17/2024	26	8,844	9,459	4,625	0	2,245	0
2	2/18/2024	92.5	8,944	5,012	4,681	368,920	10,034	0
3	2/18/2024	87	7,851	3,852	4,862	370,280	9,657	0
4	2/18/2024	90.8	8,512	4,529	5,123	372,100	9,623	0
5	2/18/2024	84.6	8,185	5,862	5,263	370,420	12,866	0
6	2/19/2024	91.5	8,520	2,895	4,831	367,180	9,222	0
7	2/19/2024	88	8,087	3,195	5,412	368,500	9,546	0
8	2/19/2024	94.9	8,454	3,842	4,827	368,220	9,189	0
9	2/19/2024	93.1	8,819	6,125	6,020	369,560	9,218	0
10	2/20/2024	95.7	8,718	4,498	5,413	367,340	9,024	0
11	2/20/2024	92.8	8,187	4,458	4,961	367,300	8,855	0
12	2/20/2024	89.6	8,399	3,468	4,792	366,500	8,900	0
13	2/20/2024	98.3	9,062	4,311	4,706	375,360	8,340	0
14	2/20/2024	95.2	8,723	5,370	4,865	367,080	8,703	0
15	2/20/2024	98.2	8,817	4,583	4,975	362,980	8,321	0
16	2/21/2024	86.8	8,752	6,108	5,463	369,480	8,751	0
17	2/21/2024	83	7,808	4,377	5,128	367,040	8,092	0
18	2/21/2024	90.9	8,312	3,842	5,024	367,660	8,152	0
19	2/21/2024	82.1	8,066	4,861	4,678	368,620	8,334	0
20	2/22/2024	76.5	7,554	6,724	4,864	366,480	8,041	0
21	2/22/2024	87	8,591	6,354	5,137	367,640	7,996	0
22	2/22/2024	81.5	8,029	5,642	4,783	370,040	8,263	0
23	2/23/2024	92.1	8,858	4,933	5,321	367,880	8,323	0
24	2/23/2024	86	8,176	5,226	4,627	367,500	8,024	0
25	2/23/2024	96	9,187	4,581	5,233	366,800	8,104	0
26	2/23/2024	62.2	6,444	6,446	5,127	368,720	10,648	0
27	2/24/2024	77	7,805	4,621	4,763	367,920	8,083	0
28	2/24/2024	95	8,592	5,130	5,515	369,260	8,053	0
29	2/26/2024	88.8	7,679	3,475	5,127	366,330	7,780	0
30	2/26/2024	88.6	8,649	6,020	5,213	368,800	7,932	0
31	2/26/2024	93.4	8,615	5,268	5,126	365,820	7,847	0
32	2/27/2024	78.6	7,271	5,366	5,167	367,320	8,812	0
33	2/27/2024	89.7	7,964	4,335	4,661	368,260	7,708	0
34	2/27/2024	63.6	5,893	3,567	5,321	367,720	9,422	0
35	2/28/2024	81.2	7,383	5,365	4,568	371,760	7,819	0
36	2/28/2024	97.1	8,252	4,836	4,689	367,200	7,514	0
37	2/28/2024	93.6	8,309	5,895	4,615	367,380	7,549	0
38	2/29/2024	93.7	8,027	5,587	4,566	367,620	8,303	0
39	2/29/2024	97.1	7,953	5,779	4,685	367,200	7,590	0
40	2/29/2024	95	7,645	4,434	4,789	368,020	7,527	0
41	2/29/2024	65	5,844	5,816	4,312	368,180	8,423	0
42	3/1/2024	87.7	7,782	4,496	4,247	365,340	7,443	0
43	3/1/2024	83.8	7,328	5,506	4,687	367,200	7,524	0
44	3/1/2024	83.9	7,023	4,648	4,678	366,920	7,612	0
45	3/1/2024	84.1	7,393	6,106	4,159	369,000	7,351	0
46	3/1/2024	85.3	7,121	4,312	4,058	368,580	7,475	0
47	3/2/2024	86.9	7,551	6,073	4,242	368,660	7,311	0
48	3/2/2024	99	7,778	5,055	4,950	367,080	7,666	0
49	3/2/2024	95.8	7,597	5,820	4,850	364,840	7,525	0
50	3/2/2024	85	7,423	5,919	4,566	365,620	7,256	0
51	3/2/2024	85	7,095	4,434	4,472	367,120	7,257	0
52	3/3/2024	85.1	7,068	5,582	4,076	370,520	7,353	0
53	3/3/2024	64.8	5,280	4,310	5,050	371,280	7,440	0

**ROY RIGGLE OHI 201H  
ATTACHMENT 2  
STIM REPORT**

STAGE NUM	Stim Date	Ave Pump Rate (BPM)	Ave Treatment	Max Breakdown	ISIP (PSI)	Amount of Proppant (lbs)	Amount of water bbls	Amount of nitrogen/othe
54	3/3/2024	87	6,923	5,910	5,050	370,920	7,479	0
55	3/3/2024	90.1	7,308	4,360	4,900	372,740	7,470	0
56	3/3/2024	84.1	7,081	4,882	4,452	366,780	7,204	0
57	3/4/2024	85.3	7,149	4,401	4,414	367,820	7,152	0
58	3/4/2024	97.1	7,350	4,665	4,799	368,920	7,286	0
59	3/4/2024	97.1	7,091	4,603	4,798	369,140	7,320	0
60	3/4/2024	87.7	6,937	4,818	4,415	370,880	7,421	0
61	3/5/2024	85.8	7,634	4,064	4,817	371,420	7,268	0
62	3/5/2024	96.5	7,499	6,277	4,898	368,060	7,317	0
63	3/5/2024	91	7,143	5,273	4,850	365,520	7,172	0
64	3/5/2024	86.1	7,357	6,660	4,645	369,000	6,946	0
65	3/5/2024	86.9	6,988	5,021	4,577	366,980	6,931	0
66	3/6/2024	81.4	6,617	4,778	4,689	368,120	6,919	0
67	3/6/2024	97.1	7,081	4,608	4,598	370,260	7,298	0
68	3/6/2024	93.8	6,711	4,631	4,900	368,360	7,088	0
69	3/6/2024	87.9	6,748	4,521	4,293	368,060	7,008	0
70	3/7/2024	88.8	6,630	4,217	4,212	368,380	6,986	0
71	3/7/2024	90	6,374	4,737	4,798	368,020	7,067	0
72	3/7/2024	97.1	6,704	4,939	4,789	365,380	7,132	0

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WR-36  
Rev. 5/08

Date: 4.29.2024  
Operators Well Number: ROY RIGGLE OHI 201H  
API Well No: 47-069 - 00364

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

Well Operator's Report of  
Initial Gas-Oil Ratio

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Well Operator SWN PRODUCTION COMPANY LLC  
Address PO BOX 12359  
SPRING, TX 77391-2359

Designated Agent \_\_\_\_\_  
Address \_\_\_\_\_

Geological Target Formation: MARCELLUS Depth 6,225 TVD feet  
Perforation Interval 7,221-22,143 MD 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 <b>4/13/2024</b>	Time <b>9:00 AM</b>	End of Test Date <b>4/14/2024</b>	Time <b>9:00 AM</b>	Duration of Test <b>24 Hours</b>
Tubing Pressure <b>1158</b>	Casing Pressure <b>2185</b>	Separator Pressure <b>359</b>	Separator Temperature <b>115</b>	
Oil Production During Test <b>1664</b>	Gas Production During Test <b>13528</b>	Water Production During Test <b>1454</b>	105,000 PPM Chlorides -Salinity	
Oil Gravity <b>60</b>	Producing Method (flowing, pumping, gas lift etc.) <b>Free Flow Up Tubing</b>			

**GAS PRODUCTION**

Measurement Method Flange Tap <input checked="" type="checkbox"/> Pipe Tap <input type="checkbox"/> L-10 <input type="checkbox"/>		Positive Choke <input checked="" type="checkbox"/>
		Positive flow prover <input type="checkbox"/>
Orifice diameter <b>3"</b>	Pipe Diameter (inside) <b>3"</b>	Nominal Choke Size inches <b>128/64</b>
Differential Pressure range <b>205-250</b>	Max. Static pressure range <b>425</b>	Prover and Orifice diameter - inches <b>3"</b>
Differential <b>238</b>		Static <b>359</b>
Gas Gravity (Air = 1.0) Measured <b>0.75</b>	Flowing Temperature <b>115</b>	Gas Temperature <b>115</b>
Estimated <b>0.75</b>		
24 Hour Coefficient <b>1</b>	24 Hour coefficient pressure PSIA <b>14.65</b>	

**TEST RESULTS**

Daily Oil <b>1664</b>	Daily Water <b>1454</b>	Daily Gas <b>13528</b>	Gas-Oil Ratio <b>8.1</b>
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*Denise Grantham*  
Well Operator

BY DENISE GRANTHAM

ITS: DESIGNATED REPRESENTATIVE

**06/14/2024**

Latitude: 40°10'00"

SURFACE HOLE 6,703'

Latitude: 40°12'30"

BOTTOM HOLE 1,898'

# JACKSON SURVEYING INC.

2413 EAST PIKE ST. # 112  
Clarksburg, WV 26301  
304-623-5851

### SURFACE HOLE LOCATION (SHL):

UTM (NAD83, ZONE 17, METERS):  
NORTHING: 4,444,688.702  
EASTING: 540,542.563

### LANDING POINT LOCATION (LPL):

UTM (NAD83, ZONE 17, METERS):  
NORTHING: 4,444,426.900  
EASTING: 540,077.416

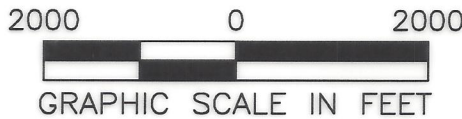
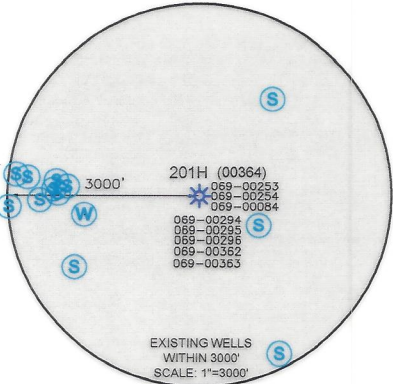
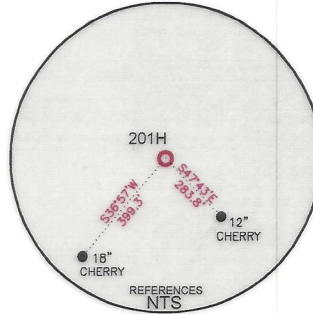
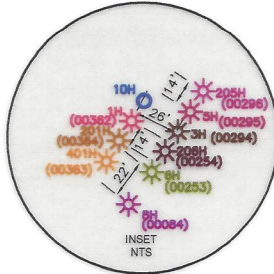
### BOTTOM HOLE LOCATION (BHL):

UTM (NAD83, ZONE 17, METERS):  
NORTHING: 4,448,697.327  
EASTING: 538,439.701

GRID NORTH  
UTM, NAD83 DATUM, ZONE 17, US FT

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 44°33'00" E	1936.79'	SHL TO LANDMARK	FENCE CORNER
L2	S 37°26'25" E	2245.98'	SHL TO LANDMARK	FENCE CORNER
LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L3	S 61°41'02" W	1739.76'	2582.00'	SHL TO LP
L4	N 19°27'48" W	191.90'	191.91'	AZL1 TO AZL2

SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,444,688.693 EASTING: 540,542.565
LANDING POINT LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,444,437.162 EASTING: 540,075.736
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,448,697.802 EASTING: 538,437.545



### WELL RESTRICTIONS

- NO OCCUPIED DWELLINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
- NO AGRICULTURE BUILDINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
- NO GROUND INTAKE OR PUBLIC WATER SUPPLY WITHIN 1000 FEET OF WELL PAD, LIMITS OF DISTURBANCE, E & S CONTROLS OR PUBLIC WATER SUPPLY.

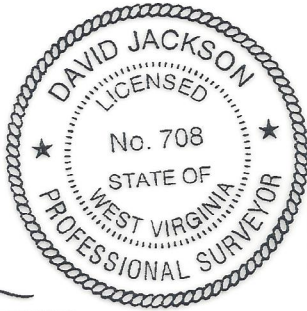
### NOTES ON SURVEY

- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

P.S. 708

*David L Jackson*



COMPANY:

**SWN**

**SWN** *R<sup>2</sup> V<sup>+</sup> A*

Production Company, LLC

Production Company™



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
WVDEP  
OFFICE OF OIL & GAS  
601 57TH STREET  
CHARLESTON, WV 25034

MINIMUM DEGREE OF ACCURACY: 1/200  
PROVEN SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT)

ROY RIGGLE OHI  
OPERATOR'S WELL #: 201H  
API WELL #: 47 069 00364  
STATE COUNTY PERMIT

WELL TYPE: OIL  WASTE DISPOSAL  PRODUCTION  DEEP  GAS  LIQUID INJECTION  STORAGE  SHALLOW

WATERSHED: CASTLEMAN RUN OF BUFFALO CREEK (HUC-10) ELEVATION: 1,251.9'

DISTRICT: LIBERTY COUNTY: OHIO QUADRANGLE: BETHANY, WV-PA

SURFACE OWNER: ROY & DEBRA R. RIGGLE ACREAGE: ±171.18

OIL & GAS ROYALTY OWNER: ROY & DEBRA R. RIGGLE ACREAGE: ±171.18

DRILL  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION

CONVERT  PLUG & ABANDON  CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY) **ASDRILLED**

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,468' TVD 22,250' TMD

06/14/2024

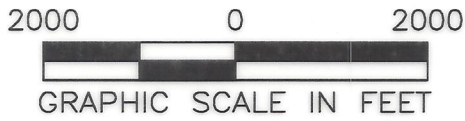
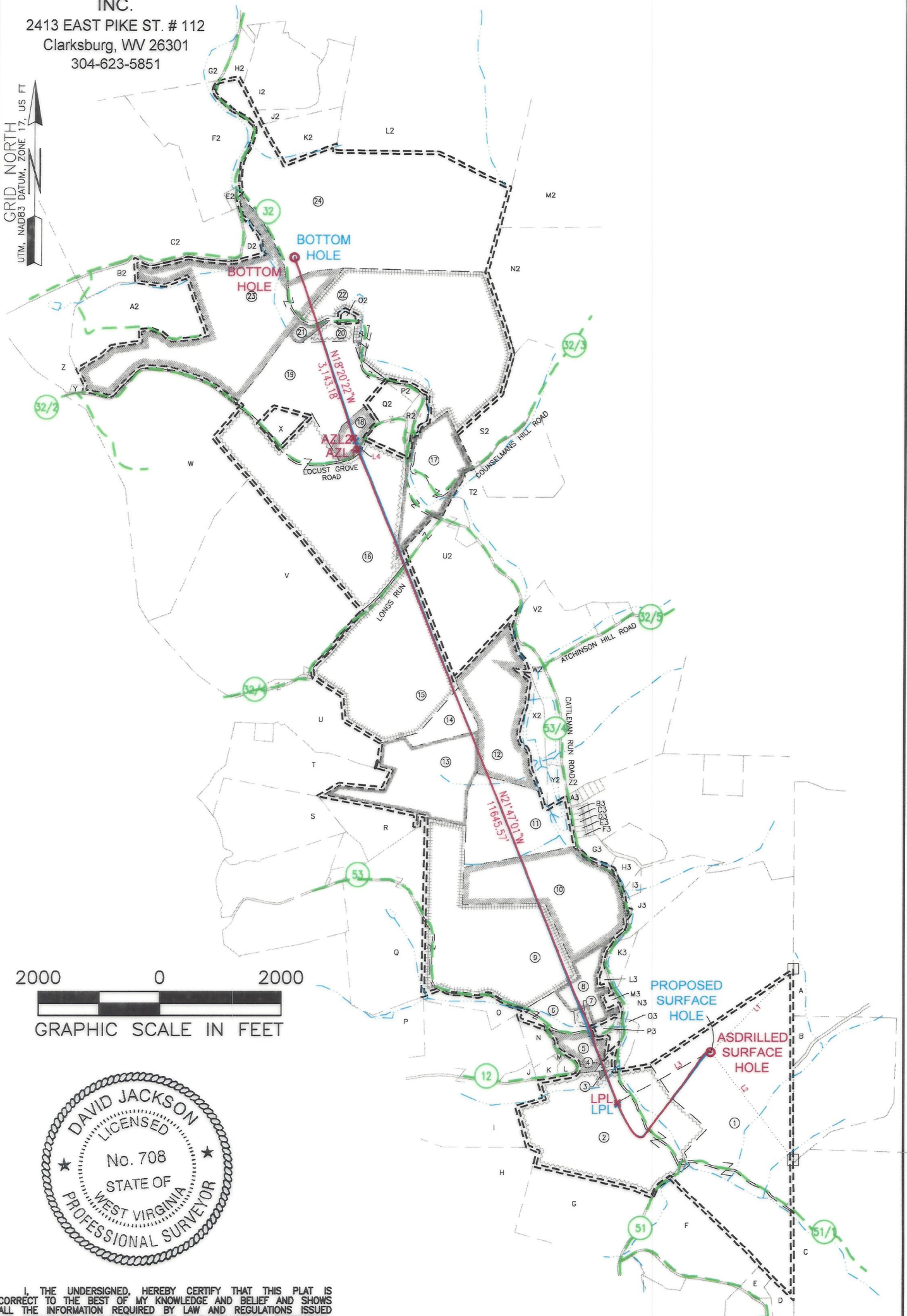
WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: BRITTANY WOODY  
 ADDRESS: 1300 FORT PIERPONT RD. SUITE 200 ADDRESS: 1300 FORT PIERPONT RD. SUITE 200  
 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

LEGEND:	REVISIONS:	DATE:
PROPOSED SURFACE HOLE / BOTTOM HOLE	SURVEYED BOUNDARY	01-10-2024
EXISTING / PRODUCING WELLHEAD	DRILLING UNIT	
LPL	LEASE BOUNDARY	DRAWN BY: N. MANO
EXISTING WATER WELL	ASDRILLED PATH	SCALE: 1" = 2000'
EXISTING SPRING	PROPOSED PATH	DRAWING NO:
		WELL LOCATION PLAT

**JACKSON SURVEYING  
INC.**

2413 EAST PIKE ST. # 112  
Clarksburg, WV 26301  
304-623-5851

GRID NORTH  
UTM, NAD83 DATUM, ZONE 17, US FT



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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

P.S. 708

*David L Jackson*

06/14/2024

REVISIONS:	COMPANY:				
	OPERATOR'S			DATE: 01-10-2024	
	WELL #:			DRAWN BY: N. MANO	
	DISTRICT:			SCALE: N/A	
	LIBERTY			DRAWING NO:	
	COUNTY:			WELL LOCATION PLAT 2	
	OHIO			STATE:	
	API # 47-069-00364			WV	



JACKSON SURVEYING  
 INC.  
 2413 EAST PIKE ST. # 112  
 Clarksburg, WV 26301  
 304-623-5851

WELL BORE TRACTS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	RIGGLE DEBRA R & ROY (S)	3-L6-14
TRACT	SURFACE OWNER (S)	TAX PARCEL
2	MORMANIS GREGORY N AND SHARON LEE (S)	3-L6-13
3	ELLIS JOYCE A (S)	3-L6-13.1
4	STRAUSS JOYCE ANN (S)	3-L6-8
5	GEAR ROBERT L & TAMMY Y (S)	3-L6-9
6	ATKINSON GREGORY D; ET AL C/O JENNIFER TUCKER (S)	3-L6-10.2
7	ATKINSON GREGORY D; ET AL C/O JENNIFER TUCKER (S)	3-L6-10.3
8	PARRISH EDGAR (S)	3-L6-2.2
9	ATKINSON GREGORY D; ET AL C/O JENNIFER TUCKER (S)	3-L6-10
10	STATE OF WV CONSERVATION COMM (S)	3-L3-1.1
	STATE OF WV CONSERVATION COMM DIV OF NAT RES PUB LAND CORP (S)	3-L3-1
12	WEST VIRGINIA STATE OF - DIVISION OF NATURAL RESOURCES (S)	3-B49-15
13	GRIMES MICHAEL J (S)	3-L2-10.1
14	GRIMES DONALD; ANTHONY HOUSTON (SURV) (S)	3-B48-39
15	WALDEN WILLIAM K & ANDREA (S)	3-B48-38
16	WALDEN WILLIAM K & FLORENCE ANDREA (SURV) (S)	3-B48-27
17	MCNICHOLAS JOHN WALTER III (S)	3-B48-36
18	WOOD RICHARD A JR & MELANIE (VOYTEK) (SURV) (S)	3-B48-28
19	CAMMARATA NICHOLAS J & JENNIFER C (SURV) (S)	3-B48-25
20	JONES CHARLES H (S)	3-B48-31
21	SMITH KAREN K (S)	3-B48-32
22	HOGAN ANDREW P (S)	3-B48-34
23	CHAMBERS CHARLOTTE A (S)	3-B48-24
24	WV ST OF DEPT OF COMM DIV OF NAT RE WILDLIFE RES SEC (S)	3-B43-62

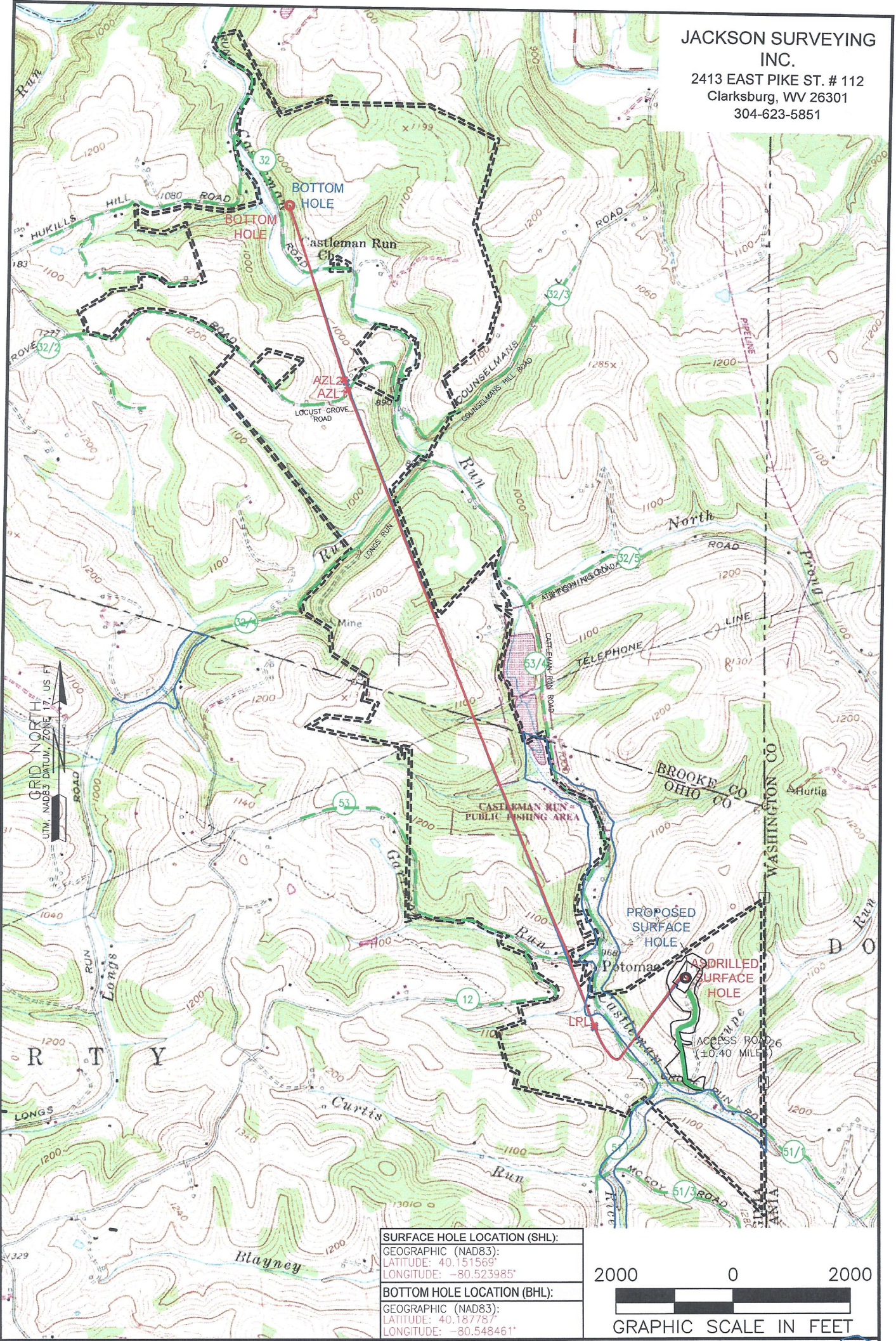
ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	ROBERT E JONES TR	230-16-1
B	RIGGLE DEBRA R & ROY	230-16-3
C	KEENER PRIMARY RES PROTECTOR TRUST JANET F KEENER TRUSTEE	230-15-5
D	WILHELM MICHAEL & JULIA E	3-L6-20
E	WILHELM JASON MICHAEL & CRYSTAL LOUISE	3-L6-20.6
F	RODGERS LEWIS IRWIN	3-L6-16
G	RODGERS LEWIS I	3-L6-15
H	TOMINACK JOHN I JR	3-L5-10
I	KESTNER GARY & TERRY	3-L5-9
J	COWAN CHERYL ANN	3-L6-21
K	MONTGOMERY PATRICK J & MONTGOMERY BRENDA LEE	3-L6-11.1
L	KELLY LYNN A	3-L6-12
M	CONNER RONALD LEROY	3-L6-11
N	GEAR LURA MARIE	3-L6-9.1
O	ATKINSON GREGORY D; ET AL C/O JENNIFER TUCKER	3-L6-10.1
P	ENNIS MARJORIE G	3-L5-8
Q	FISH HARRY ALAN FISH R H & P C (RES'V LF EST)	3-L2-13
R	FISH HARRY ALAN FISH R H & P C RES'V L/E	3-L2-13.1
S	BREITINGER MICHAEL	3-L2-11
T	OHARA MATTHEW JAMES; OHARA DEIRDRA (LIFE ESTATE)	3-L2-10.2
U	GRIMES DONALD; ANTHONY HOUSTON (SURV)	3-B48-40
V	STONE MARION PYLE	3-B48-41
W	SONDA SCOTT & MARK	3-B48-20
X	LYCANS AUDIE	3-B48-26
Y	WINDSOR POWER HOUSE COAL CO	3-B48-21
Z	NORDEN ANNA MAE (TOD) NORDEN - SMITH KATHERINE ETAL	3-B48-22
A2	CHAMBERS HARRY L & BEVERLY R (SURV)	3-B48-24.1
B2	CHAMBERS CHARLOTTE A	3-B48-23
C2	JONES SAMUEL E & JUDITH F IRREVOCABLE TRUST	3-B43-60
D2	AYERS ALBERT GLENN & REBECCA ANN (SURV)	3-B43-61
E2	PUSKARICH TRACY T	3-B43-59
F2	FONNER MARY LOU	3-B43-58
G2	PRESLIE ROWAN LLC	3-B43-33
H2	PRESLIE ROWAN LLC	3-B43-49.3

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
I2	DONINI SAMUEL J & MELANIE A (JTWS)	3-B43-49.6
J2	DONINI SAMUEL J & MELANIE (JTWS)	3-B43-49.4
K2	DONINI SAMUEL & MELANIE	3-B43-57
L2	PRESLIE ROWAN LLC	3-B43-28
M2	ST OF WV DEPT OF COMM DIV OF NAT RE WILDLIFE RES SEC	3-B44-14
N2	COUNSELMAN CLIFFORD E	3-B49-2
O2	CASTLEMANS RUN METHODIST CHURCH	3-B48-33
P2	STATE ROAD COMMISSION	3-B48-30
Q2	WOOD RICHARD A & MELONIE	3-B48-29
R2	STATE ROAD COMMISSION	3-B48-42
S2	WEST VIRGINIA BUREAU OF COMMERCE - DIVISION OF NATURAL RESOURCES	3-B49-1
T2	W VA DEPT OF NATURAL RESOURCES	3-B49-7
U2	WALDEN DANIEL E & MARY VIRGINIA	3-B48-37
V2	JONES PERRY JEFFERSON & BRANDY SUE (SURV)	3-B49-8
W2	STATE ROAD COMMISSION OF WEST VIRGINIA	3-B49-13
X2	STATE ROAD OF WEST VIRGINIA	3-B49-14
Y2	STATE ROAD OF WEST VIRGINIA	3-B54-1
Z2	RANCH SPORTSMANS CLUB INC	3-B49-12
A3	UNDERWOOD JAMES	3-B54-2
B3	FORSHEY PAUL	3-B54-19
C3	FORSHEY PAUL	3-B54-18
D3	COVEY CHRISTOPHER J	3-B54-17
E3	FORSHEY PAUL	3-B54-16
F3	FORSHEY PAUL	3-B54-15
G3	FREEMAN JOHN S & NENITA	3-L3-2.2
H3	TUSTIN DANIEL P SR & VICKIE S	3-L3-2.3
I3	TUSTIN DANIEL P SR & VICKIE S	3-L3-3.1
J3	TUSTIN DANIEL P SR & VICKI L	3-L3-3
K3	TUSTIN SR DANIEL P & VICKI L	3-L3-3.2
L3	WOOD EDGAR D	3-L6-2
M3	PARRISH EDGAR D & C S	3-L6-2.1
N3	RYAN TIMOTHY ALAN	3-L6-4
O3	KNICELY AMANDA	3-L6-5
P3	ATKINSON GREGORY D; ET AL C/O JENNIFER TUCKER	3-L6-10.3

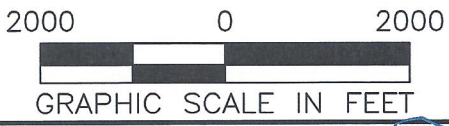
06/14/2024

REVISIONS:	COMPANY:	 	
	OPERATOR'S	ROY RIGGLE OHI	DATE: 01-10-2024
	WELL #:	201H	DRAWN BY: N. MANO
	DISTRICT:	LIBERTY	SCALE: N/A
	COUNTY:	OHIO	DRAWING NO:
	STATE:	WV	WELL LOCATION PLAT 3

JACKSON SURVEYING  
 INC.  
 2413 EAST PIKE ST. # 112  
 Clarksburg, WV 26301  
 304-623-5851



<b>SURFACE HOLE LOCATION (SHL):</b> GEOGRAPHIC (NAD83): LATITUDE: 40.151569° LONGITUDE: -80.523985°
<b>BOTTOM HOLE LOCATION (BHL):</b> GEOGRAPHIC (NAD83): LATITUDE: 40.187787° LONGITUDE: -80.548461°



**NOTES ON SURVEY**

1. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
2. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
4. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

<b>LEGEND:</b>	PROPOSED SURFACE HOLE / BOTTOM HOLE	ACCESS ROAD
EXISTING / PRODUCING WELLHEAD	PUBLIC ROAD	ACCESS ROAD
LPL LANDING POINT LOCATION	LEASE BOUNDARY	PROPOSED PATH
FLOOD PLAIN	ASDRILLED PATH	

<b>WELL OPERATOR:</b> SWN PRODUCTION COMPANY, LLC	<b>WELL (FARM) NAME:</b> ROY RIGGLE OHI	<b>WELL #</b> 201H	<b>SERIAL #</b>
<b>ADDRESS:</b> 1300 FORT PIERPONT, WV 26508	<b>COUNTY - CODE</b> OHIO - 069	<b>DISTRICT; LIBERTY</b>	
<b>SURFACE OWNER:</b> ROY & DEBRA R. RIGGLE	<b>USGS 7 1/2 QUADRANGLE MAP NAME</b> BETHANY, WV-PA	<b>API #</b> 47-069-00364	

06/14/2024