

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

RECEIVED  
Office of Oil and Gas

JUN 21 2022

WV Department of  
Environmental Protection

API 47-051-02382 County MARSHALL District SAND HILL  
Quad MOUNDSVILLE Pad Name BETTY SCHAFFER MSH PAD Field/Pool Name PANHANDLE FIELD WET  
Farm name ROY A. SCHAFFER JR. & EDWARD J. SCHAFFER Well Number BETTY SCHAFFER MSH 1H  
Operator (as registered with the OOG) SWN PRODUCTION COMPANY, LLC  
Address PO BOX 12359 City SPRING State TX Zip 77391-2359

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4,426,819.415 Easting 531,112.576  
Landing Point of Curve Northing 4,426,680.149 Easting 530,864.523  
Bottom Hole Northing 4,431,178.454 Easting 528,544.780

Elevation (ft) 848.5' 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)  
SOBM

Date permit issued 5/13/2021 Date drilling commenced 2/08/2022 Date drilling ceased 02/25/2022  
Date completion activities began 3/19/2022 Date completion activities ceased 4/19/2022  
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 280' Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 802' Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 352' Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

Reviewed

Reviewed by:

*[Signature]* 8/23/22

09/09/2022

API 47-051 - 02382 Farm name ROY A. SCHAFFER JR. & EDWARD J. SCHAFFER Well number BETTY SCHAFFER

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (* Provide details below)
Conductor	24	20	136'	NEW	J-55/94#		Y
Surface	17.5	13.375	375'	NEW	J-55/54.5#	246.7/205.1	Y; 26 BBLS
Coal	SEE SURFACE CSG						
Intermediate 1	12.25	9.625	1,714'	NEW	J-55/36#		Y; 48 BBLS
Intermediate 2							
Intermediate 3							
Production	8.75	5.5	23,322'	NEW	P-110/20#		Y; 57 BBLS
Tubing		2.875	6,547'		P-110/6.50#		
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>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	CLASS A	GROUT TO SURFACE				SURFACE	24
Surface	CLASS A	445	15.6	1.20	534	SURFACE	8
Coal	SEE SURFACE CSG						
Intermediate 1	CLASS A	652	15.6	1.19	775.9	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	3,677	15.0	1.29	4,743.3	SURFACE	24
Tubing							

Drillers TD (ft) 23,322' Loggers TD (ft) 23,322'  
 Deepest formation penetrated MARCELLUS Plug back to (ft) 23,229'  
 Plug back procedure N/A

Kick off depth (ft) 5,240' MD

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

Well cored  Yes  No Conventional Sidewall Were cuttings collected  Yes  No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING \_\_\_\_\_

SURFACE: 6 CENTRALIZERS - EVERY THIRD JOINT OF CASING  
 INTERMEDIATE: 24 CENTRALIZERS - EVERY THIRD JOINT OF CASING  
 PRODUCTION: 465 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 OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

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

API 47- 051 - 02382 Farm name ROY A. SCHAFFER JR. & EDWARD J. SCHAFFER Well number BETTY SCHAFFER M

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	SEE	ATTACHMENT	1		

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 (bbbls)	Amount of Nitrogen/other (units)
		SEE	ATTACHMENT	2				

Please insert additional pages as applicable.

API 47- 051 - 02382 Farm name ROY A. SCHAFFER JR. & EDWARD J. SCHAFFER Well number BETTY SCHAFFER M.

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>MARCELLUS</u>	<u>5,970'</u> TVD	<u>6,413'</u> MD

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 2853 psi Bottom Hole            psi DURATION OF TEST 24 hrs

OPEN FLOW Gas 1,912 mcfpd Oil 259 bpd NGL            bpd Water 869 bpd GAS MEASURED BY  Estimated  Orifice  Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	<u>0</u>		<u>0</u>		
	<u>SEE</u>	<u>ATTACHMENT</u>	<u>3</u>		

Please insert additional pages as applicable.

Drilling Contractor SWN DRILLING COMPANY  
Address PO BOX 12359 City SPRING State TX Zip 77391-2359

Logging Company BAKER HUGHES  
Address 9110 GROGANS MILL RD City THE WOODLANDS State TX Zip 77380

Cementing Company SCHLUMBERGER WELL SERVICES  
Address 110 SCHLUMBERGER DRIVE City SUGAR LAND State TX Zip 77478

Stimulating Company SWN WELL SERVICES  
Address PO BOX 12359 City SPRING State TX Zip 77391-2359

Please insert additional pages as applicable.

Completed by CAROL A. PRUITT Telephone 832-796-3007  
Signature *Carol A. Pruitt* Title SR. REGULATORY ANALYST Date 6/15/2022

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

09/09/2022

**BETTY SCHAFER MSH 1H****ATTACHMENT 1****PERF REPORT**

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
1	3/13/2022	23,230	23,134	36
2	3/20/2022	23,100	22,923	36
3	3/20/2022	22,890	22,712	36
4	3/21/2022	22,679	22,502	36
5	3/21/2022	22,469	22,292	36
6	3/22/2022	22,259	22,082	36
7	3/22/2022	22,048	21,871	36
8	3/22/2022	21,838	21,661	36
9	3/23/2022	21,628	21,451	36
10	3/23/2022	21,418	21,240	36
11	3/24/2022	21,207	21,030	36
12	3/24/2022	20,997	20,820	36
13	3/24/2022	20,787	20,609	36
14	3/25/2022	20,576	20,399	36
15	3/25/2022	20,366	20,189	36
16	3/25/2022	20,156	19,978	36
17	3/26/2022	19,945	19,768	36
18	3/26/2022	19,735	19,558	36
19	3/26/2022	19,525	19,348	36
20	3/27/2022	19,314	19,137	36
21	3/27/2022	19,104	18,927	36
22	3/27/2022	18,894	18,717	36
23	3/27/2022	18,684	18,506	36
24	3/29/2022	18,473	18,296	36
25	3/29/2022	18,263	18,086	36
26	3/29/2022	18,053	17,875	36
27	3/29/2022	17,842	17,665	36
28	3/30/2022	17,632	17,455	36
29	3/30/2022	17,422	17,244	36
30	3/30/2022	17,211	17,034	36
31	3/30/2022	17,001	16,824	36
32	3/31/2022	16,791	16,614	36
33	3/31/2022	16,581	16,372	72
34	3/31/2022	16,343	16,193	36
35	4/1/2022	16,160	15,983	36
36	4/1/2022	15,950	15,772	36
37	4/1/2022	15,739	15,531	72
38	4/1/2022	15,513	15,352	36
39	4/2/2022	15,319	15,141	36
40	4/2/2022	15,108	14,931	36
41	4/2/2022	14,898	14,721	36
42	4/2/2022	14,688	14,510	36
43	4/3/2022	14,477	14,300	36



**BETTY SCHAFFER MSH 1H  
ATTACHMENT 1  
PERF REPORT**

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
44	4/3/2022	14,267	14,090	36
45	4/3/2022	14,057	13,880	36
46	4/3/2022	13,847	13,669	36
47	4/4/2022	13,636	13,459	36
48	4/4/2022	13,426	13,249	36
49	4/4/2022	13,216	13,038	36
50	4/4/2022	13,005	12,828	36
51	4/5/2022	12,795	12,618	36
52	4/5/2022	12,585	12,407	36
53	4/5/2022	12,374	12,197	36
54	4/6/2022	12,164	11,987	36
55	4/6/2022	11,954	11,777	36
56	4/6/2022	11,743	11,566	36
57	4/6/2022	11,533	11,356	36
58	4/7/2022	11,323	11,146	36
59	4/7/2022	11,113	10,935	36
60	4/7/2022	10,902	10,725	36
61	4/7/2022	10,692	10,515	36
62	4/8/2022	10,482	10,304	36
63	4/8/2022	10,271	10,094	36
64	4/8/2022	10,061	9,884	36
65	4/8/2022	9,851	9,673	36
66	4/8/2022	9,640	9,463	36
67	4/9/2022	9,430	9,253	36
68	4/9/2022	9,220	9,043	36
69	4/9/2022	9,009	8,832	36
70	4/9/2022	8,799	8,622	36
71	4/9/2022	8,589	8,412	36
72	4/10/2022	8,379	8,201	36
73	4/10/2022	8,168	7,991	36
74	4/10/2022	7,958	7,781	36
75	4/11/2022	7,748	7,570	36
76	4/11/2022	7,537	7,360	36
77	4/11/2022	7,327	7,150	36
78	4/11/2022	7,117	6,939	36
79	4/11/2022	6,906	6,729	36
80	4/11/2022	6,696	6,519	36

BETTY SCHAFER MSH 1H

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
1	3/20/2022	75	9,322	8,125	3,756	204,730	9,840	0
2	3/20/2022	93.8	9,258	6,250	4,585	351,820	9,928	0
3	3/21/2022	98.4	9,472	5,563	4,985	352,860	9,266	0
4	3/21/2022	87.8	8,742	4,258	3,784	354,840	8,987	0
5	3/22/2022	98.9	9,747	5,898	5,468	350,710	9,091	0
6	3/22/2022	95.6	9,769	6,252	5,298	378,700	9,228	0
7	3/22/2022	88.9	9,226	6,275	4,320	346,880	8,497	0
8	3/23/2022	90	9,516	6,528	4,916	352,540	8,479	0
9	3/23/2022	92	9,478	6,805	5,276	370,720	8,553	0
10	3/23/2022	94.3	9,534	6,584	5,022	352,640	8,889	0
11	3/24/2022	94.2	9,186	6,525	5,426	377,700	8,653	0
12	3/24/2022	95.6	9,232	6,510	4,869	375,940	8,797	0
13	3/24/2022	94.1	9,927	7,320	4,770	353,480	8,496	0
14	3/25/2022	93.9	9,442	5,994	5,133	355,610	8,475	0
15	3/25/2022	97.6	9,476	5,809	5,025	378,230	10,172	0
16	3/25/2022	74	8,388	6,806	4,430	199,070	9,403	0
17	3/26/2022	95.8	9,709	5,166	5,118	370,410	8,303	0
18	3/26/2022	94.8	9,594	5,008	4,851	380,280	8,672	0
19	3/26/2022	92.3	9,613	6,485	3,668	351,840	9,058	0
20	3/27/2022	65.6	9,299	6,678	5,425	351,340	10,080	0
21	3/27/2022	95.6	9,398	5,873	5,104	368,820	8,349	0
22	3/27/2022	92.9	23,143	5,056	5,147	369,250	8,410	0
23	3/28/2022	57.3	6,430	5,415	4,723	175,010	6,630	0
24	3/29/2022	84.4	8,760	5,579	5,217	379,980	8,622	0
25	3/29/2022	97.1	9,363	5,381	5,325	382,030	8,513	0
26	3/29/2022	93.8	9,342	6,625	4,623	382,630	8,172	0
27	3/30/2022	76	8,772	5,115	4,205	352,300	7,979	0
28	3/30/2022	91.1	8,614	6,101	5,121	379,070	7,846	0
29	3/30/2022	88.4	8,875	5,201	4,981	376,340	8,052	0
30	3/30/2022	90.9	8,693	7,746	4,739	352,920	7,780	0
31	3/31/2022	94.1	8,927	6,878	4,357	358,260	7,837	0
32	3/31/2022	90.7	8,758	5,233	4,921	377,170	8,079	0
33	3/31/2022	85	8,893	5,914	3,955	380,200	11,745	0
34	3/31/2022	91.5	8,938	5,792	4,532	350,860	7,949	0
35	4/1/2022	84.7	8,725	6,229	4,685	352,920	7,860	0
36	4/1/2022	88.6	8,617	5,541	5,083	373,238	7,821	0
37	4/1/2022	54.8	6,151	5,288	4,434	365,200	15,309	0
38	4/1/2022	88.7	8,655	5,944	4,876	350,190	7,704	0
39	4/2/2022	98.4	8,589	5,731	3,919	355,860	7,856	0
40	4/2/2022	89.4	8,356	4,695	5,021	376,380	7,932	0
41	4/2/2022	96.8	8,391	5,237	4,528	352,900	7,790	0
42	4/2/2022	96.8	8,582	5,827	4,544	358,980	7,880	0
43	4/3/2022	97.8	8,671	4,866	4,483	355,010	7,975	0
44	4/3/2022	98.8	8,610	4,755	4,654	349,728	7,771	0
45	4/3/2022	94.2	8,243	5,132	4,482	351,910	7,907	0
46	4/4/2022	99.4	8,765	7,036	4,813	373,636	7,887	0
47	4/4/2022	95.9	8,238	4,524	4,875	351,730	7,620	0
48	4/4/2022	90.5	7,724	4,672	4,854	356,840	7,611	0
49	4/4/2022	92.2	8,460	5,917	4,651	355,050	7,760	0
50	4/4/2022	88.1	7,575	5,229	4,550	377,380	8,787	0
51	4/5/2022	99.4	8,274	5,805	4,654	358,760	7,688	0
52	4/5/2022	98.9	8,205	5,018	4,521	382,270	8,022	0
53	4/6/2022	98.8	8,339	5,855	4,385	366,860	9,907	0

BETTY SCHAFER MSH 1H

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	4/6/2022	95	8,329	6,179	4,652	354,300	7,603	0
55	4/6/2022	99.9	8,009	5,505	4,520	354,760	7,535	0
56	4/6/2022	99	7,984	5,643	4,326	371,520	7,483	0
57	4/7/2022	97	7,964	4,387	4,650	368,660	7,542	0
58	4/7/2022	99.9	7,990	4,462	4,780	358,980	7,632	0
59	4/7/2022	99.9	7,841	4,468	4,852	351,240	7,576	0
60	4/7/2022	99.5	7,922	4,817	4,309	371,630	7,532	0
61	4/7/2022	99.9	7,826	5,516	4,403	373,550	7,799	0
62	4/8/2022	99.9	7,742	5,958	4,520	376,140	8,056	0
63	4/8/2022	99.8	7,864	6,515	4,751	359,740	7,595	0
64	4/8/2022	99.7	8,042	6,760	4,852	352,880	7,620	0
65	4/8/2022	97.2	7,760	5,000	4,520	379,610	8,097	0
66	4/8/2022	99.9	7,434	5,668	4,814	376,800	7,558	0
67	4/9/2022	99.9	7,633	5,607	4,855	379,930	7,566	0
68	4/9/2022	99.7	7,571	6,446	4,325	354,150	7,293	0
69	4/9/2022	99.9	7,461	5,200	4,421	347,330	7,409	0
70	4/9/2022	99.9	7,468	6,314	4,670	371,640	7,528	0
71	4/9/2022	99.9	7,366	5,699	4,550	374,550	7,433	0
72	4/10/2022	99.9	7,098	5,958	4,200	379,100	7,847	0
73	4/10/2022	99.9	7,008	5,708	4,320	351,140	7,255	0
74	4/10/2022	96.2	7,354	4,259	4,380	377,940	8,038	0
75	4/11/2022	99.9	6,988	5,010	4,325	372,450	7,371	0
76	4/11/2022	99.9	6,825	5,127	4,462	374,900	7,235	0
77	4/11/2022	99.9	6,845	5,332	4,352	354,020	7,184	0
78	4/11/2022	99.9	6,571	5,525	4,625	341,970	7,348	0
79	4/11/2022	99.9	6,742	5,069	4,412	352,140	7,371	0
80	4/11/2022	99.9	6,776	5,723	4,620	326,680	7,876	0



## Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/20/2022
Job End Date:	4/11/2022
State:	West Virginia
County:	Marshall
API Number:	47-051-02382-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	BETTY SCHAFFER MSH 1
Latitude:	39.99089611
Longitude:	-80.63577647
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	5,914
Total Base Water Volume (gal):	27,680,558
Total Base Non Water Volume:	0



### 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					
			Water	7732-18-5	100.00000	88.74730	Density = 8.345
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	85.00000	0.20613	

			Water	7732-18-5	85.00000	0.20613	
			Water	7732-18-5	85.00000	0.20613	
PLEXSLICK 930	SWN Well Services	Friction Reducer					
				Listed Below			
Tolicide 4Frac	SWN Well Services	Biocide					
				Listed Below			
HCL	SWN Well Services	Solvent					
				Listed Below			
FSTI-CI-02	SWN Well Services	Corrosion Inhibitor					
				Listed Below			
Ferriplex 80	SWN Well Services	Iron Control					
				Listed Below			
Plexaid 655WG	SWN Well Services	Scale Inhibitor					
				Listed Below			
Sand	SWN Well Services	Proppant					
				Listed Below			
Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients.							
			Crystalline Silica, quartz	14808-60-7	100.00000	10.97565	
			Hydrochloric Acid	7647-01-0	15.00000	0.02676	

			Tetrakis(Hydroxymethyl) Phosphonium Sulfate	55566-30-8	45.00000	0.00230	
			Sodium Erythorbate	6381-77-7	100.00000	0.00096	
			Quaternary ammonium compounds	68424-85-1	7.50000	0.00038	
			Ethanol	64-17-5	2.50000	0.00013	
			Ethylene glycol	107-21-1	40.00000	0.00011	
			Cinnamaldehyde	104-55-2	10.00000	0.00003	
			Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-	9016-45-9	10.00000	0.00003	
			N,N-Dimethylformamide	68-12-2	10.00000	0.00003	
			1-Octanol	111-87-5	5.00000	0.00001	
			1-Decanol	112-30-1	5.00000	0.00001	
			2-Butoxyethanol	111-76-2	5.00000	0.00001	
			Isopropyl alcohol	67-63-0	5.00000	0.00001	
			benzyl chloridequaternized	72480-70-7	5.00000	0.00001	
			Triethyl phosphate	78-40-0	5.00000	0.00001	

\* 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%

\*\*\* If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

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)

Latitude: 40°00'00" SURFACE HOLE 2959'  
 Latitude: 40°02'30" BOTTOM HOLE 11325'

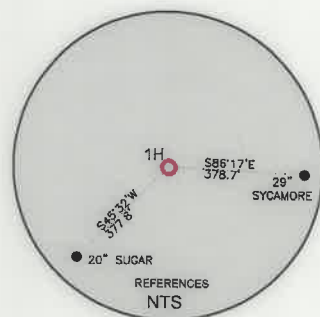
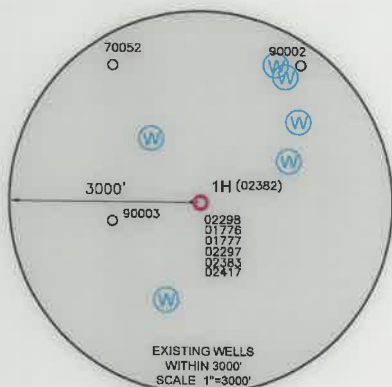
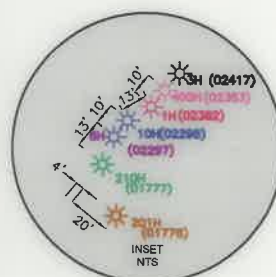
**JACKSON SURVEYING INC.**

2413 EAST PIKE ST. # 112  
 Clarksburg, WV 26302  
 304-623-5851

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

<b>SURFACE HOLE LOCATION (SHL):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,426,819.020 EASTING: 531,112.185
<b>LANDING POINT LOCATION (LPL):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,426,670.140 EASTING: 530,869.487
<b>AZIMUTH POINT LOCATION-1 (AZL1):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,429,886.682 EASTING: 529,449.662
<b>AZIMUTH POINT LOCATION-2 (AZL2)</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,430,042.280 EASTING: 529,360.880
<b>BOTTOM HOLE LOCATION (BHL):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,431,177.921 EASTING: 528,547.867
<b>SURFACE HOLE LOCATION (SHL):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,426,819.415 EASTING: 531,112.576
<b>LANDING POINT LOCATION (LPL):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,426,680.149 EASTING: 530,864.523
<b>AZIMUTH POINT LOCATION-1 (AZL1):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,429,880.860 EASTING: 529,450.705
<b>AZIMUTH POINT LOCATION-2 (AZL2)</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,430,048.902 EASTING: 529,351.270
<b>BOTTOM HOLE LOCATION (BHL):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,431,178.454 EASTING: 528,544.780

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 75°34'03" W	810.49'	SHL TO LANDMARK	FD. 5/8" REBAR
L2	S 57°34'49" E	1708.91'	SHL TO LANDMARK	FD. 5/8" REBAR
LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L3	S 60°41'18" W	933.31'	2037.11'	SHL TO LPL
L4	N 30°36'50" W	640.61'	640.93'	AZL1 TO AZL2



**WELL RESTRICTIONS**

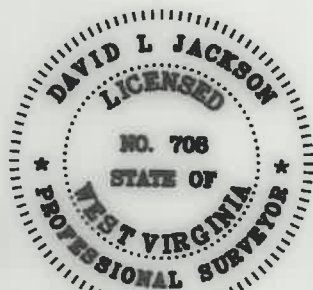
- NO OCCUPIED DWELLINGS > 2500 SQ. FT. WITHIN 625 FEET OF CENTER OF PAD.
- NO AGRICULTURE BUILDINGS > 2500 SQ. FT. WITHIN 625 FEET OF CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 FEET OF THE LIMITS 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*



(+) 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)

COMPANY: **SWN** Production Company, LLC Production Company™

BETTY SCHAFER MSH  
 OPERATOR'S WELL #: 1H  
 API WELL #: 47 051 02382  
 STATE COUNTY PERMIT

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

WATERSHED: WHEELING CREEK (HUC-10) ELEVATION: 848.5'

DISTRICT: SAND HILL COUNTY: MARSHALL QUADRANGLE: MOUNDSVILLE, WV

SURFACE OWNER: ROY A. SCHAFER JR. & EDWARD J. SCHAFER ACREAGE: ±205.06

OIL & GAS ROYALTY OWNER: ROY A. SCHAFER JR. & EDWARD J. SCHAFER ACREAGE: ±205.06

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: 5,999 09/09/2022

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC ADDRESS: 1300 FORT PIERPONT ROAD, SUITE 200 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

DESIGNATED AGENT: BRITTANY WOODY ADDRESS: 1300 FORT PIERPONT ROAD, SUITE 200 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

<b>LEGEND:</b>	○ PROPOSED SURFACE HOLE / BOTTOM HOLE	— SURVEYED BOUNDARY
☆ EXISTING / PRODUCING WELLHEAD	— DRILLING UNIT	— LEASE BOUNDARY
LPL* LANDING POINT LOCATION	— ASDRILLED PATH	— PROPOSED PATH
⊙ EXISTING WATER WELL		
⊕ EXISTING SPRING		

<b>REVISIONS:</b>	DATE: 06-13-2022
	DRAWN BY: N. MANO
	SCALE: 1" = 2000'
	DRAWING NO:
	WELL LOCATION PLAT

Longitude: 80°37'30"

BOTTOM HOLE 4126'  
 SURFACE HOLE 3287'



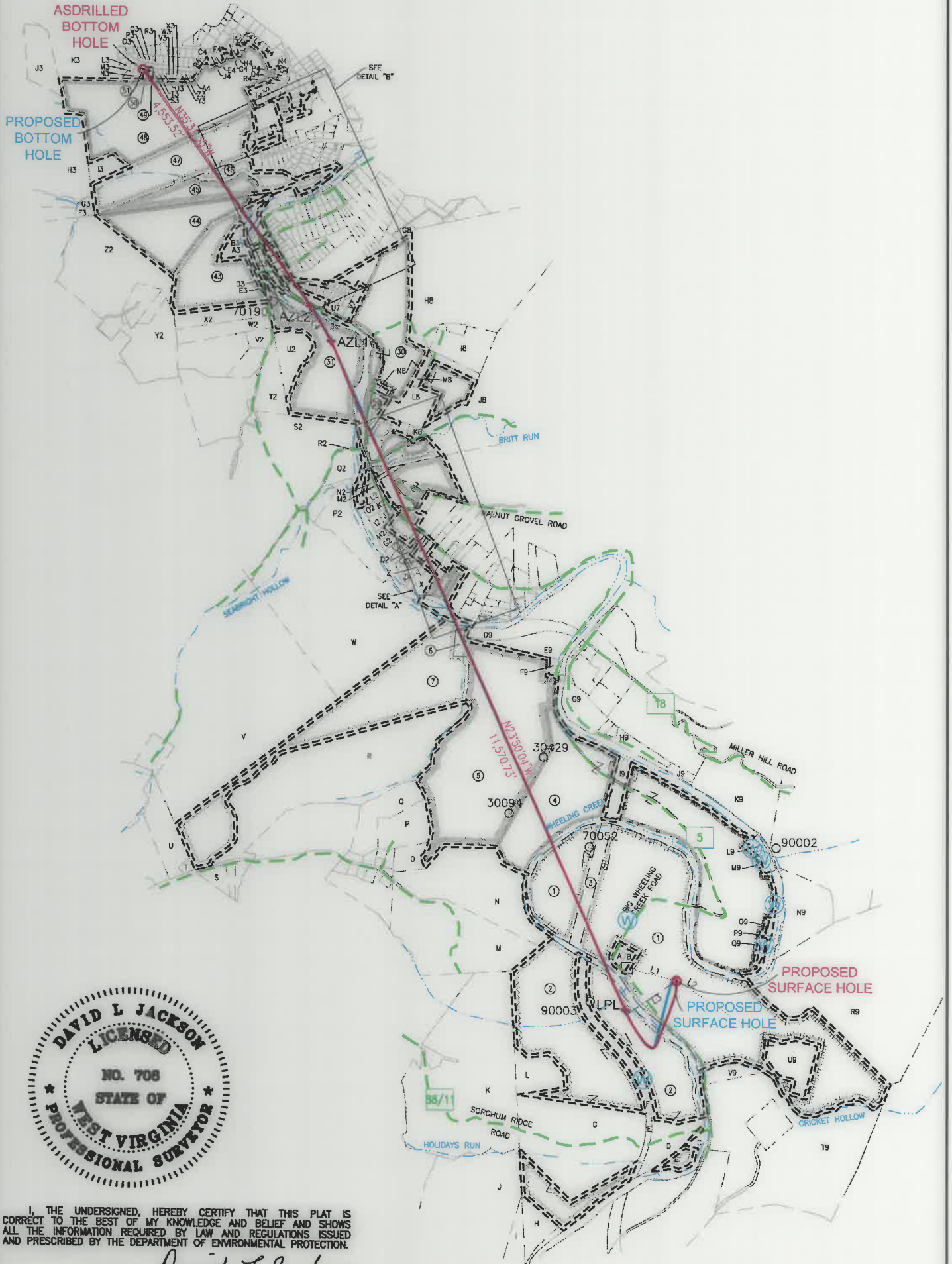
**JACKSON SURVEYING  
INC.**

2413 EAST PIKE ST. # 112  
Clarksburg, WV 26302  
304-623-5851

2000 0 2000



GRAPHIC SCALE IN FEET



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*

REVISIONS:	COMPANY:	<b>SWN</b> Production Company, LLC		<b>SWN</b> Production Company™	
		OPERATOR'S	BETTY SCHAFER MSH	API #	DATE: 06-13-2022
		WELL #:	1H	47-051-02382	DRAWN BY: N. MANO
		DISTRICT:	SAND HILL	COUNTY:	MARSHALL
		STATE:	WV	SCALE:	1" = 2000'
				DRAWING NO:	WELL LOCATION PLAT 2

09/09/2022  
*R.A. V. + S.*



**JACKSON SURVEYING**

INC.

2413 EAST PIKE ST. # 112

Clarksburg, WV 26302

304-623-5851

DETAIL "B"



DETAIL "A"



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*

REVISIONS:	COMPANY:			DATE: 06-13-2022
	OPERATOR'S	BETTY SCHAFER MSH	API #	47-051-02382
	WELL #:	1H	STATE:	WV
	DISTRICT:	SAND HILL	COUNTY:	MARSHALL
				DRAWN BY: N. MANO SCALE: N/A DRAWING NO: WELL LOCATION PLAT 3



09/09/2022

**JACKSON SURVEYING  
INC.**

2413 EAST PIKE ST. # 112  
Clarksburg, WV 26302  
304-623-5851

WELL BORE TRACTS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	SCHAFER ROY A JR & SCHAFER EDWARD J (S/R)	12-0009-22
TRACT	SURFACE OWNER (S)	TAX PARCEL
2	HOGG THOMAS S & DONN W ET AL (S)	13-0008-03
3	SCHAFER ROY A JR & SCHAFER EDWARD J (S)	12-0009-24
4	GRAY JOHN ALVIN (S)	13-0003-14
5	HART JOHN J AND HART RENEE A (S)	13-0003-11
6	CONSOLIDATION COAL COMPANY;MURRAY ENERGY C/O LAND DEPT	13-0003-07
7	BONACCI BRIAN F. (S)	13-0003-5.1
8	MARTIN BRIAN ET UX (S)	12-001B-21
9	BENNINGTON LINDA LEA (S)	12-001B-21.4
10	CARPENTER MELISSA A & RANDAL L (S)	12-001B-21.3
11	BENNINGTON JAMES R JR ET UX (S)	12-001B-21.5
12	BENNINGTON LINDA LEA (S)	12-001B-18.1
13	CUSTER MARISSA (S)	12-001B-17
14	CUSTER KIMBERLY A (S)	12-001B-16
15	BECKWITH WILLIAM (S)	12-001B-13
16	BECKWITH WILLIAM (S)	12-001B-12
17	NORMAN ARCH JASON & KIM S (S)	12-001B-11.1
18	SELL MARIA A (S)	12-001B-07
19	URACO JOHN J AND URACO LYNN A (S)	12-0001-42.3
20	EARNEST CARL D (S)	12-0001-42.2
21	HICKEY ERIC M (S)	12-0001-43.1
22	MARPLE JEFFREY J & BARBARA J (S)	12-0001-32.1
23	SCHAFER EDWARD J & BRENDA M (S)	12-0001-44
24	SCHAFER EDWARD J & BRENDA M (S)	12-0001-7.1
25	HIGGINS CONSTANCE L - LIFE (S)	12-0001-7.3
26	ELLIOTT JOAN E - LIFE (S)	12-0001-7
27	SIMMS JOYCE A GEER ET AL (S)	12-0001-7.4
28	ELLIOTT JOAN E - LIFE (S)	12-0001-8
29	SLIGER KAREN SCHENK & TERRY B (S)	12-0001-6
30	SLIGER KAREN SCHENK (S)	12-0001-5
31	COVENANT COMMUNITY CHURCH TRS (S)	13-0002-22
32	STACEY CROSSING LIMITED PARTNERSHIP (S)	16-0002-1
33	STACEY VILLAGE LTD PARTNERSHIP (S)	16-0002-1.1
34	SCHERRER EDWARD A (S)	16-0001-76
35	TIMBERLAKE CHARLES W & LINDA K (S)	16-0001-68
36	MALTESE CECILIA & FRANCIS R JR (S)	16-0001-43
37	LA BROSSE DAVID R ET UX (S)	16-0001-43.2
38	VAPNER NANCY M (S)	16-0001-43.1
39	NEIDHARDT ROBERT H SR ET UX (S)	16-0001-41.2
40	KNOTTS TERRY A (S)	16-0001-41.1
41	RENTSCHLER FREDERICK W JR & PARKER LYNETTE M. (S)	16-0001-2
42	RENTSCHLER FREDERICK W JR & PARKER LYNETTE M. (S)	16-0001-1
43	NORRIS BRANDON C & TABITHA L (S)	13-0002-21.1
44	LONG RICHARD E ET UX (S)	13-0002-20
45	SCHANE THOMAS L & SANDREA M (S)	13-0002-19
46	PERONI CONSTRUCTION INC (S)	13-0002-17
47	PERONI CONSTRUCTION INC (S)	10-W95-112
48	CJ RYAN NC (S)	10-W95-109
49	HUGHES VICTORIA R (S)	10-W95-155
50	DUKE MICHAEL S (S)	10-W95-154
51	TROSCHE JUDITH S (S)	10-W95-153

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	SCHAFER ROY A JR & SCHAFER EDWARD J	12-0009-23
B	SCHAFER ROY A JR & SCHAFER EDWARD J	12-0009-22.1
C	CONSOLIDATION COAL COMPANY;MURRAY ENERGY C/O LAND DEPT	12-0010-1.3
D	CONSOLIDATION COAL COMPANY;MURRAY ENERGY C/O LAND DEPT	13-0008-3.2
E	CONSOLIDATION COAL COMPANY;MURRAY ENERGY C/O LAND DEPT	13-0008-4.1
F	HOGG THOMAS S. & DONN W. ET AL	13-0008-4
G	CONSOLIDATION COAL COMPANY;MURRAY ENERGY C/O LAND DEPT	13-0008-3.1
H	MASTER MINERAL HOLDINGS I LP	13-0009-1
I	MASTER MINERAL HOLDINGS I LP	13-0009-2
J	CUNNINGHAM GEORGE A	13-0009-3
K	KINNEER VERNON A JR & JAMIE	13-0008-6
L	KINNEER VERNON A JR ET AL	13-0008-5
M	BLACK BONNIE J FAMILY TRUST	13-0008-2
N	HART JOHN J & RENEE A	13-0008-2.1
O	BLACK TERRY J	13-0003-12.7
P	LILLEY DEANNA BLACK & MICHAEL	13-0003-12.11
Q	BLACK DONNA M	13-0003-12.12
R	BONACCI FRANK A	13-0003-5.5
S	NARRISH KEVIN	13-0008-30
T	SAMPSON EDITH VIRGINIA EST	13-0007-19
U	ALEXANDER LORRAINE	13-0007-18
V	COULLING LOUISE S ET AL	13-0003-3
W	COULLING LOUISE S ET AL	13-0003-5
X	VILLANOVA WILLIAM & BETTY	12-001B-20
Y	VILLANOVA WILLIAM & BETTY	12-001B-19
Z	MILLER RODNEY J ET UX	12-001B-15.1
A2	MILLER HAROLD H	12-001B-15
B2	URACO MARK A & MARY D	12-001B-14
C2	MCCLURE KIMBERLY K	12-001B-10
D2	SMITH LARRY D - TOD	12-001B-11
E2	MANESS TERENCE H	12-001B-9
F2	YOUNG KIMBERLY K	12-001B-8.2
G2	MCCLURE EARL R & CHERYL L	12-001B-8
H2	SMITH MARGARET ANN - LIFE	12-001B-8.1
I2	HUFF MEGAN E & RYAN D	12-001B-5
J2	RUBLE DAVID A SR & ARLENE S	12-001B-6
K2	CARR JOSEPH K & JOLENE M	12-001B-4
L2	SCHAFER EDWARD J ET UX	12-001B-3
M2	HAND WILLIAM L & CARNEY-HAND CHARMAINE J	12-001B-2
N2	HAND WILLIAM L & CARNEY-HAND CHARMAINE J	12-001B-1
O2	MOSA BRADLEY J & LEDBETTER BEVERLY	12-001B-4.1
P2	BRUHN HEIDI S	12-0003-5.2
Q2	WHITE HORSE FARM LLC	13-0003-6
R2	COULLING LOUISE S ET AL	13-0003-5.3
S2	WHITE HORSE FARM LLC	13-0003-2
T2	GARVIN JOHN A	13-0002-23
U2	GARVIN JOHN A	13-0002-22.1
V2	KLUG PEGGY A	13-0002-27.1
W2	GIBSON WILLIAM A	13-0002-28.1
X2	GIBSON WILLIAM E	13-0002-28
Y2	LONG RICHARD E ET UX	13-0002-34
Z2	LONG TODD ELI	13-0002-35
A3	GARVIN JOHN PAUL & DAUGHERTY BRETT MICHAEL	13-0002-21
B3	NEIDHARDT ROBERT H SR ET UX	16-0001-40
C3	MALTESE FRANCIS R JR ET UX	16-0001-42
D3	CHAPLIN JAMES R	16-0002-3
E3	COVENANT COMMUNITY CHURCH TRUS	16-0002-2
F3	SEIDLER E DALE JR	13-0002-14
G3	SEIDLER TIMOTHY J, TRUSTEE OF THE PATRICIA L SEIDLER IRREVOCABLE TRUST DATED JANUARY 29, 2021	13-0002-14.7
H3	RAHBAR AHMAD CREDIT SHELTER TRUST	13-0002-102
I3	RENFORTH GEORGE III	13-0002-16.2
J3	POTTS PATRICK J	1-ORB2-31.9
K3	CARROLL PATRICK J & JEAN A	10-0W94-1.1
L3	FARRELL STEPHEN V & CHRISTINE	10-0W95-150
M3	LEFTWICH NEIL & MCFARLAND JUDY	10-0W95-151
N3	RALBOVSKY VICKI L; NICHESON BRIAN D	10-0W95-152
O3	PEYTON CHERYL L	10-0W95-179
P3	SAGUN JEREMY D & HARKNESS TIFFANY L	10-0W95-178
Q3	TEREK CHRISTINA S	10-0W95-177
R3	NEWMeyer PAUL C & SUSAN L	10-0W95-176
S3	REMIAS WILLIAM P JR & MARY F	10-0W95-156
T3	ROBINSON MACIE	10-0W95-157
U3	EBARB JANICE L	10-0W95-158
V3	PALMER JAMES J & STACIE B	10-0W95-159
W3	SIEBER MICHAEL G & MARY C; C/O SIEBER MARY C	10-0W95-160
X3	TICICH JOSEPH B & JOHNSTON W L	10-0W95-161
Y3	GUERRIERO JAMES C & ROSEMARY E	10-0W95-162
Z3	LEE ROBIN M	10-0W95-163

REVISIONS:	COMPANY:	 		09/09/2022
	OPERATOR'S	BETTY SCHAFER MSH	API #	DATE: 06-13-2022
	WELL #:	1H	47-051-02382	DRAWN BY: N. MANO
	DISTRICT:	SAND HILL	COUNTY:	SCALE: N/A
			STATE:	DRAWING NO:
			WV	WELL LOCATION PLAT 4





**JACKSON SURVEYING  
INC.**

2413 EAST PIKE ST. # 112  
Clarksburg, WV 26302  
304-623-5851

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A4	ICE CHARLES AND ARLA D	10-0W95-164
B4	SMITH BRANDON T	10-0W95-168
C4	PELUCETTE PAUL M & HORAN MEGHAN E	10-0W95-194
D4	TRUAX LEE D & CLUNE TARA S	10-0W95-109.1
E4	ZAMBITO ALFONSO J	10-0W95-109.7
F4	SMITH DAVID L & DIANE K	10-0W95-109.8
G4	C J RYAN INC	10-0W95-109.6
H4	MATYSKIELA ERIC & KRISTINA	10-0W95-109.11
I4	NEVERLY RAYMOND J & MELANIE B	10-0W95-109.4
J4	GALARDI RICHARD A & DIANE T	10-0W95-109.3
K4	CONTRAGUERRO R C & J A	10-0W95-109.10
L4	CONTRAGUERRO ROBERT C SR & JODI A	10-0W95-109.13
M4	GUMP RENTALS LLC	10-0W95-220
N4	GUMP RENTALS LLC	10-0W95-219
O4	BUTTS RONALD M & TINA M	10-0W95-218
P4	BUTTS RONALD M & TINA M	10-0W95-217
Q4	SHELEK DONALD W & CHRISTY L	10-0W95-216
R4	DUNLEVY RICHARD B & JENNIFER L	10-0W95-215
S4	WILSON CHERYL B	10-0W95-214
T4	WILSON CHERYL B	10-0W95-221
U4	BONACCI BRIAN F	10-0W95-213
V4	DIETRICH THOMAS V & JUDITH L	10-0W95-212
W4	RYAN C J INC	10-0W95-211
X4	WHEELER CHARLES D AND DENISE M	10-0W95-112.4
Y4	PERONI CONSTRUCTION INC	10-0W95-111.1
Z4	PERONI CONSTRUCTION INC	10-0W95-111
A5	PERONI LOUIS D & ELLEE M	10-0W95-112.3
B5	BENTZ CHAD EDWARD & AMBER LYNN	10-0W95-112.1
C5	PEKLINSKY CAROLENE B	10-0W96-42
D5	DEI TODD D & STACIE L	10-0W95-209
E5	MUSSER NATHAN M & AMBER L	10-0W96-31
F5	CARDINAL HEALTH 110 LLC	10-0W96-39.1
G5	WOJCIK STEPHEN E III & CRISTI	10-0W96-41
H5	ROBRECHT RICHARD M & SUSAN L	10-0W95-112.7
I5	PERONI CONSTRUCTION INC	10-0W96-39.2
J5	ROBRECHT RICHARD M & SUSAN L	10-0W95-112.8
K5	VANAMAN ROBERT M & VICKI L	10-0W95-112.6
L5	DOUGHERTY CHERYL L	10-0W95-112.5
M5	WHIPKEY ARCHIE W & RUTH A	13-02CC-43
N5	SHAPAKA PHILIP M & SHIRLEY B	13-02CC-42
O5	KARRAS JOHN M REVOCABLE TR	13-02CC-45
P5	KARRAS JOHN M REVOCABLE TR	13-02CC-44
Q5	GILLESPIE DANIEL L & STEPHANIE H	10-0W96-39.7
R5	VANDERGRIFT CHRISTOPHER & ERICKA L	16-02CC-39
S5	BENNETT NEIL & LISA	16-02CC-38
T5	MEGALE WILLIAM B	16-02CC-37
U5	LAW CRYSTAL A & IVAN T	16-02CC-36
V5	TUEL JAMES E & LINDA	16-02CC-35
W5	NARRISH ROBERT A	16-02CC-34
X5	EVANS LUTHER & LYNN M	16-02CC-33
Y5	MURTY GOLLAPUDI S ET UX	16-02CC-32
Z5	GOODNIGHT LARRY S & LISA A	16-02CC-31
A6	WAGNER JOSEPH M & REBECCA L	16-02CC-30
B5	RADOSEVICH DEBORAH A	16-02CC-29
C6	DOBKIN JOSEPH T	13-02CC-23
D6	BIENIEK JACQUELINE S	13-02CC-22
E6	STEPHENSON RICHARD E. & LORI R.	13-02CC-21
F6	DOYLE JOHN J & TAMMY R	13-02CC-20
G6	DORAN ROBERT F ET UX	16-02CC-10
H6	HARSH SANDRA	16-02CC-9
I6	T J G PROPERTIES LLC	16-02CC-4
J6	T J G PROPERTIES LLC	13-0002-16
K6	MERRITT REBECCA A & ROBERT A MILLER JR	16-0001-27
L6	WHEELING MAR-WIN CHURCH OF NAZARENE TRUSTEES	16-0001-26
M6	HONE MARK A ET UX	16-0001-25
N6	GIBBONS MELISSA A	16-0001-24
O6	CATLETT HAROLD J TOD	16-0001-22
P6	BUNGARD SHAYNE D	16-0001-20
Q6	DIEFENBAUGH GREGORY & JESSICA	16-0001-18
R6	NAUMAN ROBERT W & BECKY JANE	16-0001-17
S6	MURAD THOMAS A ET UX	16-0001-15
T6	SCHAFFER JAMES H	16-0001-14
U6	ROBINSON ELIZABETH A	16-0001-12
V6	TENNANT CALEB & AMANDA	16-0001-7
W6	HOLDREN AARON PAUL ET AL	13-0002-18
X6	JOSEPH AMY L	16-0001-3
Y6	VESPA PASQUALE & CAROL ET AL	16-0001-4
Z6	GIESLER ROBERT B & LAURA M	16-0001-8
A7	WEHRHEIM MARILYNN M	16-0001-5
B7	DEWITT NEGRI TAMMY IRENE	16-0001-41

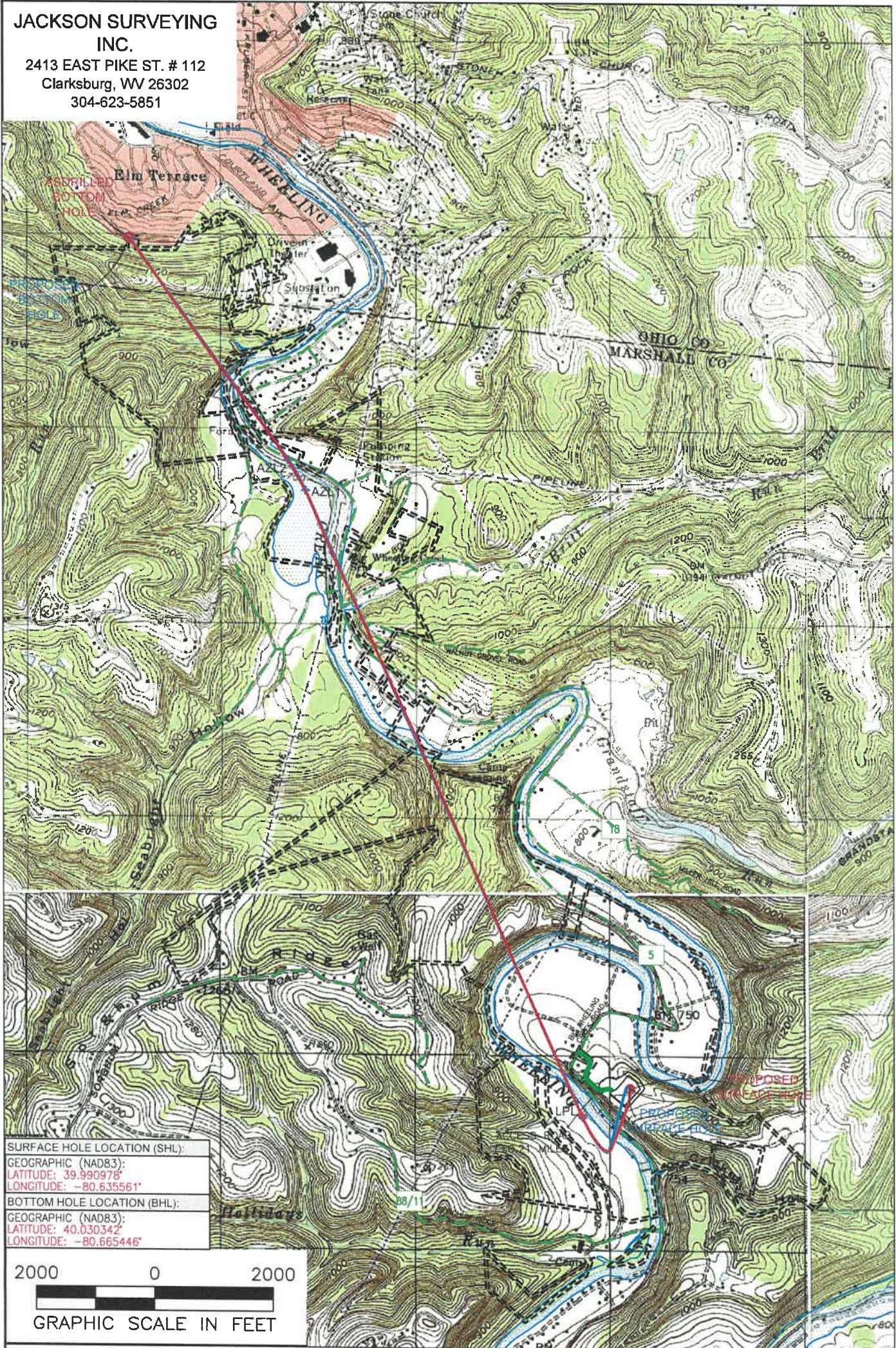
ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
C7	CRISWELL WILLIAM ROBERT	16-0001-44
D7	CRISWELL WILLIAM ROBERT	16-0001-45
E7	TAYLOR DAVID B ET UX	16-0001-46
F7	CLARK REGINALD A & CYNTHIA A TOD	16-0001-47
G7	CLARK REGINALD A & CYNTHIA A TOD	16-0001-69
H7	MERINAR DOROTHY L TOD	16-0001-69.1
I7	MERINAR DOROTHY MARIE TOD	16-0001-77
J7	MERINAR DOROTHY L TOD	16-0001-86
K7	STACEY VILLAGE LTD PARTNERSHIP	16-0002-26
L7	STACEY VILLAGE LTD PARTNERSHIP	16-0002-14
M7	STACEY VILLAGE LTD PARTNERSHIP	16-0002-13
N7	STACEY VILLAGE LTD PARTNERSHIP	16-0002-12
O7	STACEY VILLAGE LTD PARTNERSHIP	16-0002-11
P7	STACEY VILLAGE LTD PARTNERSHIP	16-0002-10
Q7	STACEY VILLAGE LTD PARTNERSHIP	16-0002-9
R7	STACEY VILLAGE LTD PARTNERSHIP	16-0002-8
S7	STACEY VILLAGE LTD PARTNERSHIP	16-0002-15
T7	STACEY VILLAGE LTD PARTNERSHIP	16-0002-16
U7	STACEY CROSSING LIMITED	16-0002-6
V7	MCCORMICK MARY RITA	16-0002-7
W7	STACEY VILLAGE LTD PARTNERSHIP	16-0002-21
X7	STACEY VILLAGE LTD PARTNERSHIP	16-0002-22
Y7	STACEY VILLAGE LTD PARTNERSHIP	16-0002-23
Z7	STACEY VILLAGE LTD PARTNERSHIP	16-0002-24
A8	STACEY VILLAGE LTD PARTNERSHIP	16-0002-25
B8	CALDWELL WILLIAM B & CRYSTAL K	16-0001-60
C8	LESNETT WALTER & KAIYA	16-0001-61
D8	ELIAS BENJAMIN A	16-0001-62
E8	FARHATT MARY JAYNE	16-0001-63
F8	UNKNOWN	12-001A-24
G8	ROMAGNOLI JUDY E	12-001A-23
H8	HAMILTON MARY SCHENK & GARY P	12-0001-5.1
I8	HAMILTON MARY SCHENK & GARY P	12-0001-5.4
J8	COFFIELD MICHAEL L & TYLENE R	12-0001-10
K8	RUNKLE RICHARD T & MICHELL L	12-0001-7.2
L8	SLIGAR KAREN SCHENK & TERRY B	12-0001-5.2
M8	REARDON SHELLEY S	12-0001-5.6
N8	SLIGAR KAREN SCHENK & TERRY B	12-0001-5.3
O8	MERCER DARICK B & RENEE A	12-0001-32
P8	HENRY LORI MYLES	12-0001-41
Q8	HENRY LORI MYLES	12-0001-42.1
R8	KIMPEL TIM W ET UX	12-0001-42
S8	URACO JOHN J ET UX	12-0001-43
T8	THOMAS ANTHONY R & JESSICA	12-0001-41.2
U8	EARNEST ALLEN DOUGLAS & PAMELA J	12-0001-40
V8	KINS HEIDI JO	12-001B-18
W8	SELL MARIA A	12-001B-21.2
X8	HAYNES LORIS M ET AL	12-001B-24
Y8	MCCULLEY JOSEPH DANIEL ET UX	12-0001-39.1
Z8	SLIGAR NOEL W & CHRISTA M	12-0001-39.2
A9	DAWSON THOMAS A ET AL	12-001B-21.1
B9	MCADAMS ROBERT E & JODY L	12-001B-27.1
C9	MATTUCCI MARK A	12-001B-28
D9	MAAS BRIAN J & AMY C - TRUST	13-0003-8
E9	MAAS BRIAN J & AMY C - TRUST	13-0003-10
F9	MAAS BRIAN J & AMY C - TRUST	13-0003-9
G9	LANGMYER SCOTT R & MELANEE F	12-0009-3
H9	LANGMYER RAYMOND J	12-0009-4
I9	GRAY JOHN ALVIN	13-0003-13
J9	SMITH BEVERLY JILL ANITA	12-0009-5.5
K9	STEADMAN FRANKLIN L	12-0009-5.1
L9	PROVANCE FRANK J ET AL	13-0003-14.5
M9	SHEPHERD TIMOTHY & DEBORAH L	13-0003-14.4
N9	GRAY JOHN ALVIN	12-0009-21
O9	JESTERS COURT 13 INC	13-0003-14.3
P9	JESTERS COURT 13 INC	13-0003-14.2
Q9	JESTERS COURT 13 INC	13-0003-14.1
R9	FISHER CHARLES B & CARLA S	12-0009-20
S9	MERINAR CALVIN C - LIFE	12-0009-19
T9	FISH PATRICIA A & FREDERICK W	12-0010-1.2
U9	CONSOLIDATION COAL COMPANY;MURRAY ENERGY C/O LAND DEPT	12-0009-22.2
V9	ROMAN JEWELL L	12-0010-01

REVISIONS:	COMPANY:	 		09/09/2022
	OPERATOR'S	BETTY SCHAFFER MSH	API #	DATE: 06-13-2022
	WELL #:	1H	47-051-02382	DRAWN BY: N. MANO
	DISTRICT:	SAND HILL	COUNTY:	SCALE: N/A
			STATE:	DRAWING NO:
			WV	WELL LOCATION PLAT 5



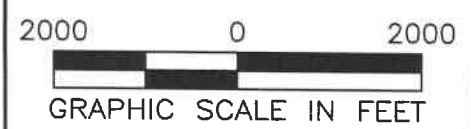
**JACKSON SURVEYING  
INC.**

2413 EAST PIKE ST. # 112  
Clarksburg, WV 26302  
304-623-5851



**SURFACE HOLE LOCATION (SHL):**  
GEOGRAPHIC (NAD83):  
LATITUDE: 39.990978°  
LONGITUDE: -80.635561°

**BOTTOM HOLE LOCATION (BHL):**  
GEOGRAPHIC (NAD83):  
LATITUDE: 40.030342°  
LONGITUDE: -80.665446°



**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.

**LEGEND:**

	PROPOSED SURFACE HOLE / BOTTOM HOLE		ACCESS ROAD
	EXISTING / PRODUCING WELLHEAD		PUBLIC ROAD
	LPL* LANDING POINT LOCATION		ACCESS ROAD TO PREV. SITE
	FLOOD PLAN		LEASE BOUNDARY
			PROPOSED PATH
			ASDRILLED PATH

<b>WELL OPERATOR:</b> SWN PRODUCTION COMPANY, LLC	<b>WELL (FARM) NAME:</b> BETTY SCHAFER MSH	<b>WELL #</b> 1H	<b>SERIAL #</b>
<b>ADDRESS:</b> 1300 FORT PIERPONT ROAD, SUITE 200 MORGANTOWN, WV 26508	<b>COUNTY - CODE</b> MARSHALL - 051	<b>DISTRICT;</b> SAND HILL	
<b>SURFACE OWNER:</b> ROY A. SCHAFER JR. & EDWARD J. SCHAFER	<b>USGS 7 1/2 QUADRANGLE MAP NAME</b> MOUNDSVILLE, WV	<b>API #</b> 47-051-02382	

09/09/2022