

Rec'd
6/21/22

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

API 47-051-02383 County MARSHALL District SAND HILL
Quad MOUNDSVILLE Pad Name BETTY SCHAFFER MSH PAD Field/Pool Name BETTY SCHAFFER MSH 405H
Farm name ROY A. SCHAFFER, JR. & EDWARD J. SCHAFFER Well Number BETTY SCHAFFER MSH 405H
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 4,426,821.790 Easting 531,114.535
Landing Point of Curve Northing 4,426,773.491 Easting 531,917.922
Bottom Hole Northing 4,430,496.030 Easting 530,256.707

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 12/01/2021 Date drilling ceased 1/23/2022
Date completion activities began 3/20/2022 Date completion activities ceased 4/23/2022
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:
 8/23/22
09/09/2022

API 47-051 - 02383 Farm name ROY A. SCHAFFER, JR. & EDWARD J. SCHAFFER Well number BETTY SCHAFFER MSH 405H

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	24	20	136'	NEW	J-55/94#		Y
Surface	17.5	13.375	377'	NEW	J-55/54.5#		Y; 38 BBLS
Coal	SEE SURFACE CSG						
Intermediate 1	12.25	9.625	1,810'	NEW	J-55/36#		Y; 46 BBLS
Intermediate 2							
Intermediate 3							
Production	8.75	5.5	20,756'	NEW	P-110 HP/20#		N
Tubing		2.875	7,299'		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 ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	CLASS A	GROUT TO SURFACE				SURFACE	24
Surface	CLASS A	462	15.6	1.20	554.4	SURFACE	8
Coal	SEE SURFACE CSG						
Intermediate 1	CLASS A	726	15.6	1.19	863.94	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	3,677	15.0	1.29	4,743.33	SURFACE	24
Tubing							

Drillers TD (ft) 20,756' Loggers TD (ft) 20,756'
 Deepest formation penetrated MARCELLUS Plug back to (ft) 20,666'
 Plug back procedure N/A

Kick off depth (ft) 5,835'

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: 7 CENTRALIZERS - EVERY THIRD JOINT OF CASING
 INTERMEDIATE: 24 CENTRALIZERS - EVERY THIRD JOINT OF CASING
 PRODUCTION: 181 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 - 02383 Farm name ROY A. SCHAFFER, JR. & EDWARD J. SCHAFFER Well number BETTY SCHAFFER MSH 405H

PRODUCING FORMATION(S)	DEPTHS	
MARCELLUS	5,996'	7,198'
	TVD	MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 2,959 psi Bottom Hole _____ psi DURATION OF TEST 24 hrs

OPEN FLOW Gas 6,106 mcfpd Oil 720 bpd NGL _____ bpd Water 1,779 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 ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		
	SEE	ATTACHMENT	3		

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 MILLD 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 RX 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

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

09/09/2022

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/20/2022
Job End Date:	4/9/2022
State:	West Virginia
County:	Marshall
API Number:	47-051-02383-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	BETTY SCHAFER MSH 405
Latitude:	39.99099900
Longitude:	-80.63553746
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	5,964
Total Base Water Volume (gal):	21,052,184
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	88.30697	Density = 8.345
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	85.00000	0.22003	

			Water	7732-18-5	85.00000	0.22003	
			Water	7732-18-5	85.00000	0.22003	
Sand	SWN Well Services	Proppant					
				Listed Below			
FSTI-CI-02	SWN Well Services	Corrosion Inhibitor					
				Listed Below			
Ferriplex 80	SWN Well Services	Iron Control					
				Listed Below			
PLEXSLICK 930	SWN Well Services	Friction Reducer					
				Listed Below			
Tolicide 4Frac	SWN Well Services	Biocide					
				Listed Below			
Plexaid 655WG	SWN Well Services	Scale Inhibitor					
				Listed Below			
HCL	SWN Well Services	Solvent					
				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	11.39965	
			Hydrochloric Acid	7647-01-0	15.00000	0.02925	

		Tetrakis(Hydroxymethyl) Phosphonium Sulfate	55566-30-8	45.00000	0.00230
		Sodium Erythorbate	6381-77-7	100.00000	0.00105
		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	0.00012
		N,N-Dimethylformamide	68-12-2	10.00000	0.00003
		Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-	9016-45-9	10.00000	0.00003
		Cinnamaldehyde	104-55-2	10.00000	0.00003
		benzyl chloridequaternized	72480-70-7	5.00000	0.00001
		1-Octanol	111-87-5	5.00000	0.00001
		Isopropyl alcohol	67-63-0	5.00000	0.00001
		Triethyl phosphate	78-40-0	5.00000	0.00001
		1-Decanol	112-30-1	5.00000	0.00001
		2-Butoxyethanol	111-76-2	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)

BETTY SCHAFFER MSH 405H

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/other
1	3/20/2022	90.7	9,287	6,511	3,905	201,430	6,338	0
2	3/20/2022	88.6	9,067	5,055	4,173	349,020	9,321	0
3	3/21/2022	95.6	8,781	6,195	5,546	356,180	10,419	0
4	3/21/2022	88.4	8,739	4,759	4,724	353,240	8,677	0
5	3/22/2022	91.8	8,701	6,255	5,022	351,460	8,517	0
6	3/22/2022	99.6	9,417	7,018	4,732	374,120	8,720	0
7	3/22/2022	89.7	9,013	6,321	4,676	353,320	8,286	0
8	3/23/2022	98.7	9,586	6,525	3,865	371,790	8,386	0
9	3/23/2022	95.5	9,312	5,120	4,718	380,460	8,633	0
10	3/24/2022	95.1	9,397	6,123	4,203	343,650	8,613	0
11	3/24/2022	95.5	9,419	6,325	4,503	370,040	8,514	0
12	3/24/2022	95.2	9,456	5,124	4,614	372,520	8,468	0
13	3/24/2022	90.4	9,528	6,732	4,253	348,920	8,125	0
14	3/25/2022	97.6	8,757	5,120	4,658	376,480	8,422	0
15	3/25/2022	98	8,690	6,209	4,711	379,800	8,696	0
16	3/25/2022	93.2	9,492	6,334	4,155	351,200	8,506	0
17	3/26/2022	94.5	9,529	5,687	4,088	373,420	8,319	0
18	3/26/2022	95	9,164	6,297	4,856	354,400	8,423	0
19	3/27/2022	99.2	9,023	7,519	3,800	374,010	8,624	0
20	3/27/2022	99.1	9,187	8,565	5,045	376,450	8,336	0
21	3/27/2022	87.9	9,000	4,725	5,365	354,502	10,622	0
22	3/28/2022	94.6	9,019	5,299	3,950	362,550	8,526	0
23	3/28/2022	95.1	8,842	4,730	4,321	351,390	7,677	0
24	3/29/2022	95.8	8,392	5,428	5,075	378,780	8,390	0
25	3/29/2022	94.5	8,783	4,607	4,965	356,700	7,872	0
26	3/30/2022	92.3	9,202	5,765	4,102	350,800	7,801	0
27	3/30/2022	97.9	8,700	5,090	4,485	380,060	8,059	0
28	3/30/2022	96.4	8,709	5,524	4,525	377,740	7,787	0
29	3/30/2022	91.2	8,684	6,855	4,056	347,760	7,509	0
30	3/31/2022	96.8	8,644	6,285	4,678	360,070	7,821	0
31	3/31/2022	93.9	8,371	5,482	4,585	380,540	7,893	0
32	3/31/2022	95.7	8,886	5,845	4,255	363,270	7,681	0
33	3/31/2022	97.8	8,658	5,453	4,714	355,560	7,662	0
34	4/1/2022	92.6	8,531	5,395	4,521	367,050	7,884	0
35	4/1/2022	95.1	8,564	5,845	4,351	374,408	7,699	0
36	4/1/2022	95.8	8,460	5,656	4,460	370,870	7,746	0
37	4/1/2022	97.4	8,459	5,511	4,460	353,060	7,847	0
38	4/2/2022	99.8	8,295	6,855	4,282	348,670	7,566	0
39	4/2/2022	95.9	8,634	5,978	4,621	373,700	7,809	0
40	4/2/2022	96.5	8,397	5,332	4,464	377,680	7,482	0
41	4/2/2022	97.9	7,964	5,911	4,550	357,640	7,502	0
42	4/2/2022	98.9	7,854	6,070	4,430	357,100	7,509	0
43	4/3/2022	97.8	7,810	5,672	4,321	350,500	7,217	0
44	4/3/2022	99.4	7,902	5,781	4,200	356,060	7,627	0
45	4/3/2022	98.9	7,987	6,224	4,350	379,100	7,456	0
46	4/4/2022	98	7,828	6,175	4,588	373,580	7,651	0
47	4/4/2022	90.3	7,367	4,696	4,521	359,910	7,453	0
48	4/4/2022	92.2	7,977	4,827	4,130	354,380	7,684	0
49	4/5/2022	99.9	7,840	5,991	4,514	356,310	7,569	0
50	4/5/2022	98.5	7,821	5,714	4,120	351,460	8,178	0
51	4/5/2022	98.8	7,879	6,186	4,728	372,430	7,649	0
52	4/6/2022	99.5	7,714	4,735	4,621	371,280	7,823	0
53	4/6/2022	94	7,648	5,484	4,562	345,160	7,111	0

BETTY SCHAFER MSH 405H

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	99.9	7,590	4,627	4,521	357,080	7,381	0
55	4/6/2022	97.5	7,724	4,935	4,500	374,820	7,648	0
56	4/7/2022	99.9	7,744	5,517	4,452	377,110	7,445	0
57	4/7/2022	99.9	7,531	5,155	4,454	348,530	7,295	0
58	4/7/2022	97.3	8,936	6,316	4,510	349,720	7,443	0
59	4/8/2022	99.9	19,337	5,994	4,210	350,928	7,395	0
60	4/8/2022	99.7	7,673	6,252	4,212	353,950	7,299	0
61	4/9/2022	99.7	7,354	5,613	4,125	355,240	7,350	0
62	4/9/2022	99.7	7,298	6,059	4,516	353,590	7,366	0
63	4/9/2022	99.9	7,440	5,582	4,408	375,850	7,550	0

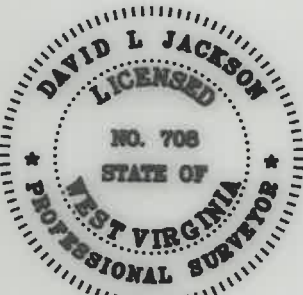
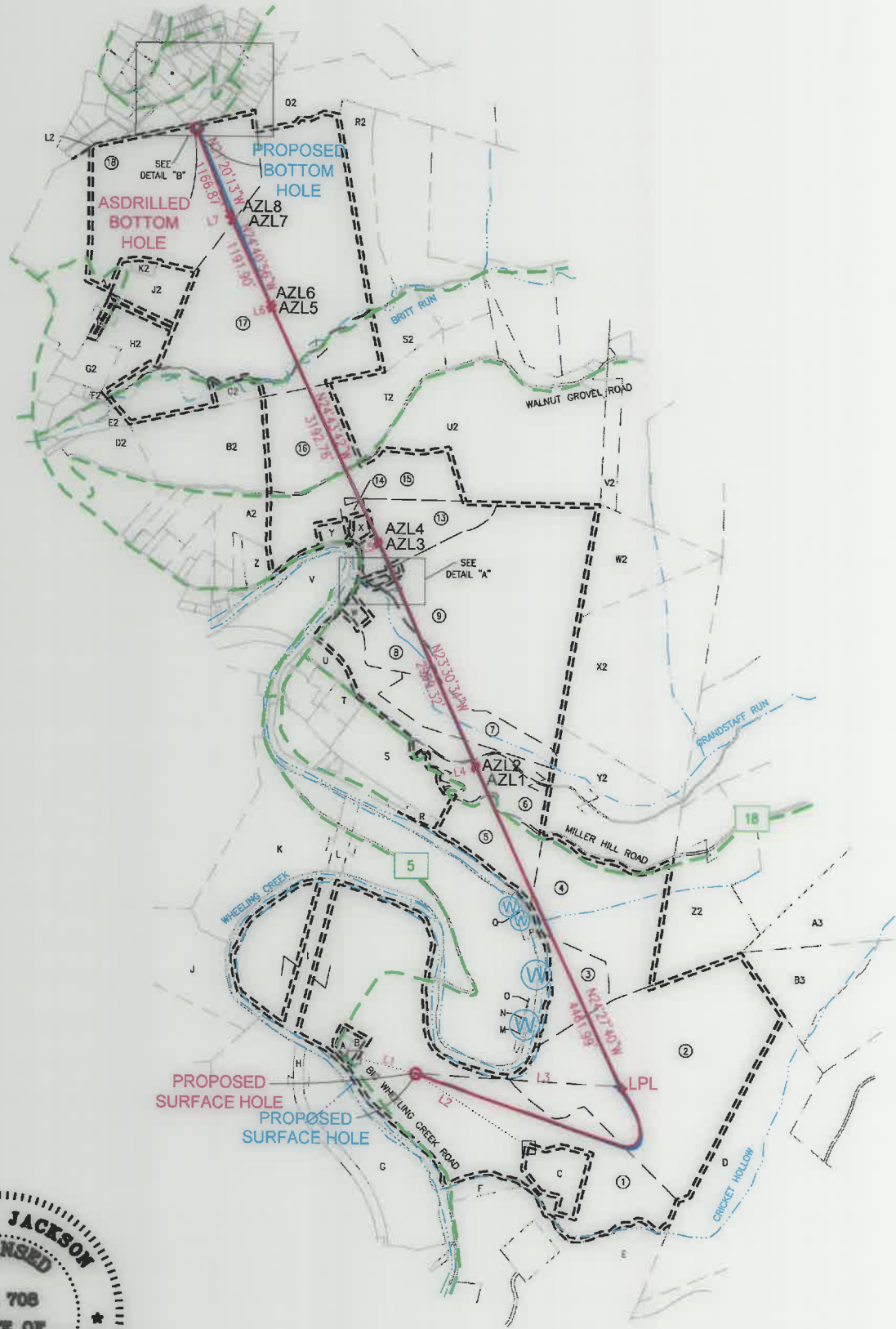
BETTY SCHAFFER MSH 405H
ATTACHMENT 1
PERF REPORT

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
1	3/13/2022	20,667	20,574	36
2	3/20/2022	20,540	20,361	36
3	3/20/2022	20,327	20,148	36
4	3/21/2022	20,115	19,936	36
5	3/22/2022	19,902	19,723	36
6	3/22/2022	19,690	19,511	36
7	3/22/2022	19,477	19,298	36
8	3/23/2022	19,265	19,086	36
9	3/23/2022	19,052	18,873	36
10	3/23/2022	18,840	18,661	36
11	3/24/2022	18,627	18,448	36
12	3/24/2022	18,415	18,236	36
13	3/24/2022	18,202	18,023	36
14	3/25/2022	17,990	17,811	36
15	3/25/2022	17,777	17,598	36
16	3/25/2022	17,565	17,385	36
17	3/26/2022	17,352	17,173	42
18	3/26/2022	17,139	16,960	36
19	3/27/2022	16,927	16,748	36
20	3/27/2022	16,714	16,535	36
21	3/26/2022	16,502	16,323	36
22	3/28/2022	16,289	16,110	36
23	3/28/2022	16,077	15,898	36
24	3/29/2022	15,864	15,685	36
25	3/29/2022	15,652	15,473	36
26	3/30/2022	15,439	15,260	36
27	3/30/2022	15,227	15,048	36
28	3/30/2022	15,014	14,835	36
29	3/30/2022	14,802	14,623	36
30	3/30/2022	14,589	14,410	36
31	3/31/2022	14,377	14,197	36
32	3/31/2022	14,164	13,985	36
33	3/31/2022	13,952	13,772	36
34	4/1/2022	13,739	13,560	36
35	4/1/2022	13,526	13,347	36
36	4/1/2022	13,314	13,135	36
37	4/1/2022	13,101	12,922	36
38	4/2/2022	12,889	12,710	36
39	4/2/2022	12,676	12,497	36
40	4/2/2022	12,464	12,285	36
41	4/2/2022	12,251	12,072	36
42	4/2/2022	12,039	11,860	36
43	4/3/2022	11,826	11,647	36

BETTY SCHAFFER MSH 405H
ATTACHMENT 1
PERF REPORT

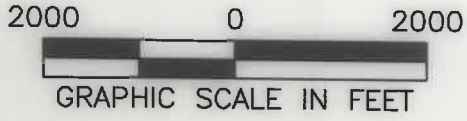
STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
44	4/3/2022	11,614	11,435	36
45	4/3/2022	11,401	11,222	36
46	4/3/2022	11,189	11,009	36
47	4/4/2022	10,976	10,797	36
48	4/4/2022	10,764	10,584	36
49	4/4/2022	10,551	10,372	36
50	4/5/2022	10,338	10,159	36
51	4/5/2022	10,126	9,947	36
52	4/5/2022	9,913	9,734	36
53	4/6/2022	9,701	9,522	36
54	4/6/2022	9,488	9,309	36
55	4/6/2022	9,276	9,097	36
56	4/7/2022	9,063	8,884	36
57	4/7/2022	8,851	8,672	36
58	4/7/2022	8,638	8,459	36
59	4/7/2022	8,426	8,247	36
60	4/8/2022	8,213	8,034	36
61	4/8/2022	8,001	7,821	36
62	4/9/2022	7,788	7,609	36
63	4/9/2022	7,576	7,396	36

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



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*



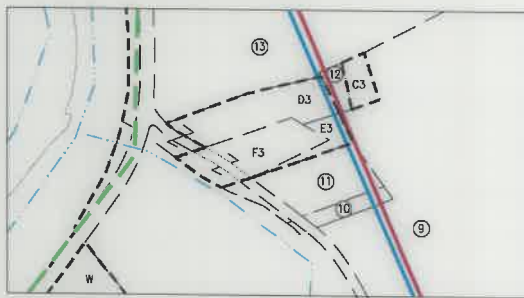
REVISIONS:	COMPANY:	09/09/2022	
	SWN Production Company, LLC	SWN Production Company™	
	OPERATOR'S	BETTY SCHAFFER MSH	API #
	WELL #:	405H	47-051-02383
	DISTRICT:	COUNTY:	STATE:
	SAND HILL	MARSHALL	WV
			DATE: 06-13-2022
			DRAWN BY: N. MAND
			SCALE: 1" = 2000'
			DRAWING NO:
			WELL LOCATION PLAT 2

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



09/09/2022

REVISIONS:	COMPANY:		
	OPERATOR'S	BETTY SCHAFFER MSH	API #
	WELL #:	405H	47-051-02383
	DISTRICT:	COUNTY:	STATE:
	SAND HILL	MARSHALL	WV
			DATE: 06-13-2022
			DRAWN BY: N. MANO
			SCALE: N/A
			DRAWING NO:
			WELL LOCATION PLAT 3

**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	SCHAFFER ROY A JR & SCHAFFER EDWARD J (S/R)	12-0009-22
TRACT	SURFACE OWNER (S)	TAX PARCEL
2	FISHER CHARLES B & CARLA S (S)	12-0009-20
3	GRAY JOHN ALVIN (S)	12-0009-21
4	PIKEWOOD ENERGY CORP (S)	12-0009-10
5	STEADMAN FRANKLIN L ET UX (S)	12-0009-5.1
6	DYE ALBERT M - LIFE (S)	12-0009-6
7	WHEELING CREEK WATERSHED COMM (S)	12-0009-6.1
8	HADSELL SANDRA L (S)	12-0001-20
9	FOLMAR EDITH A, AS TRUSTEE OF THE EDITH A FOLMAR TRUST AGREEMENT DATED THE 23RD DAY OF MAY 2019 (S)	12-0001-19
10	DUFF JAMES E & CAPP BROOKE L (S)	12-0001-22.1
11	DUFF JAMES E & CAPP BROOKE L(S)	12-0001-22
12	FRAZIER GREGORY SCOTT (S)	12-0001-27.1
13	ADASE GEORGE & LAURIE (S)	12-0001-28
14	GRAY JOHN A ET UX (S)	12-0001-28.2
15	ADASE GEORGE & LAURIE (S)	12-0001-29
16	KUNTZ JOHN H (S)	12-0001-31
17	COFFIELD MICHAEL L & TYLENE R (S)	12-0001-10
18	HAMILTON MARY SCHENK & GARY P (S)	12-0001-5.1

REVISIONS:	COMPANY:		09/09/2022				
							
	OPERATOR'S	BETTY SCHAFFER MSH	API #	DATE: 06-13-2022			
	WELL #:	405H	47-051-02383	DRAWN BY: N. MANO			
DISTRICT:	SAND HILL	COUNTY:	MARSHALL	STATE:	WV	SCALE:	N/A
			DRAWING NO:				
			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
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	12-0009-22.2
D	MERINAR CALVIN C - LIFE	12-0009-19
E	FISH PATRICIA A & FREDERICK W	12-0010-1.2
F	ROMAN JEWELL L	12-0010-01
G	HOGG THOMAS D & DONN W ET AL	13-0008-3
H	HOGG THOMAS D & DONN W ET AL	13-0008-4
I	SCHAFER ROY A JR & SCHAFER EDWARD J	12-0009-24
J	HART JOHN J & RENEE A	13-0008-2.1
K	GRAY JOHN ALVIN	13-0003-14
L	GRAY JOHN ALVIN	13-0003-13
M	JESTERS COURT 13 INC	13-0003-14.1
N	JESTERS COURT 13 INC	13-0003-14.2
O	JESTERS COURT 13 INC	13-0003-14.3
P	SHEPHERD TIMOTHY & DEBORAH L	13-0003-14.4
Q	PROVANCE FRANK J ET AL	13-0003-14.5
R	SMITH BEVERLY JILL ANITA	12-0009-5.5
S	MANNERS DANIEL J ET UX	12-0009-5
T	TEACOACH JAY M ET UX	12-0009-5.3
U	DYE WILLIAM R	12-0009-1
V	MAAS BRIAN J & AMY C - TRUST	13-0003-10
W	MERINAR JUSTIN K	12-0001-21
X	ALLEN MARK G & CHERYL L	12-0001-28.1
Y	SAVAGE CHARLES JACKSON	12-0001-29.1
Z	WHARTON PETER R ET AL	12-0001-34
A2	ESTEP DOUGLAS J & LINDA R	12-0001-33.1
B2	MERCER DARICK B & RENEE A	12-0001-32
C2	CONSOLIDATION COAL COMPANY; MURRAY ENERGY C/O LAND DEPT	12-0001-10.2
D2	MARPLE JEFFREY J & BARBARA J	12-0001-32.1
E2	HIGGINS CONSTANCE L - LIFE	12-0001-7.3
F2	RUNKLE SHERRY L	12-0001-7.2
G2	SLIGAR KAREN SCHENK & TERRY B	12-0001-5.2
H2	SLIGAR KAREN SCHENK	12-0001-5
I2	REARDON SHELLY S	12-0001-5.6
J2	HAMILTON MARY SCHENK & GARY P	12-0001-5.4
K2	WETMORE BROOKE L & BRIAN B	12-0001-5.5
L2	ENGINEERED FOUNDATION SOLUTIONS, PLLS (S)	12-001A-94
M2	SNYDER JOHN J ET UX	12-001A-85
N2	SNYDER JOHN J ET UX	12-001A-84
O2	ZDONCZYK ROBIN G	12-001A-83.1
P2	SNYDER LONNIE A	12-001A-83
Q2	HARTMAN WALTER L ET UX	12-0001-10.1
R2	BARTOLOVICH STEPHEN M	12-0001-47
S3	BARTOLOVICH STEPHEN M	12-0001-11
T2	LEASURE ANNA	12-0001-30
U2	SHELLHASE MARK A ET UX	12-0001-18
V2	GIZA CHESTER A ET UX	12-0001-15
W2	WHEELING POWER COMPANY	12-0009-8.1
X2	EDGE WILLIAM F JR & BARBARA ANN ET AL	12-0009-8
Y2	ISALY ROBERT A SR EST	12-0009-9
Z2	GRAY JOHN ALVIN	12-0009-11
A3	MERINAR JAMES MARTIN ET UX	12-0009-15.1
B3	MERINAR CALVIN C - LIFE	12-0009-15
C3	COX JOSHUA N	12-0001-27.2
D3	PALMER ADAM R	12-0001-26
E3	FRAZIER GREGORY SCOTT	12-0001-23
F3	FRAZIER GREGORY SCOTT	12-0001-24

REVISIONS:

COMPANY:

SWN

Production Company, LLC

SWN ^{R⁺ V⁺}

Production Company™

09/09/2022

OPERATOR'S BETTY SCHAFER MSH

WELL #: 405H

DISTRICT:
SAND HILL

COUNTY:
MARSHALL

API #
47-051-02383

STATE:
WV

DATE: 06-13-2022

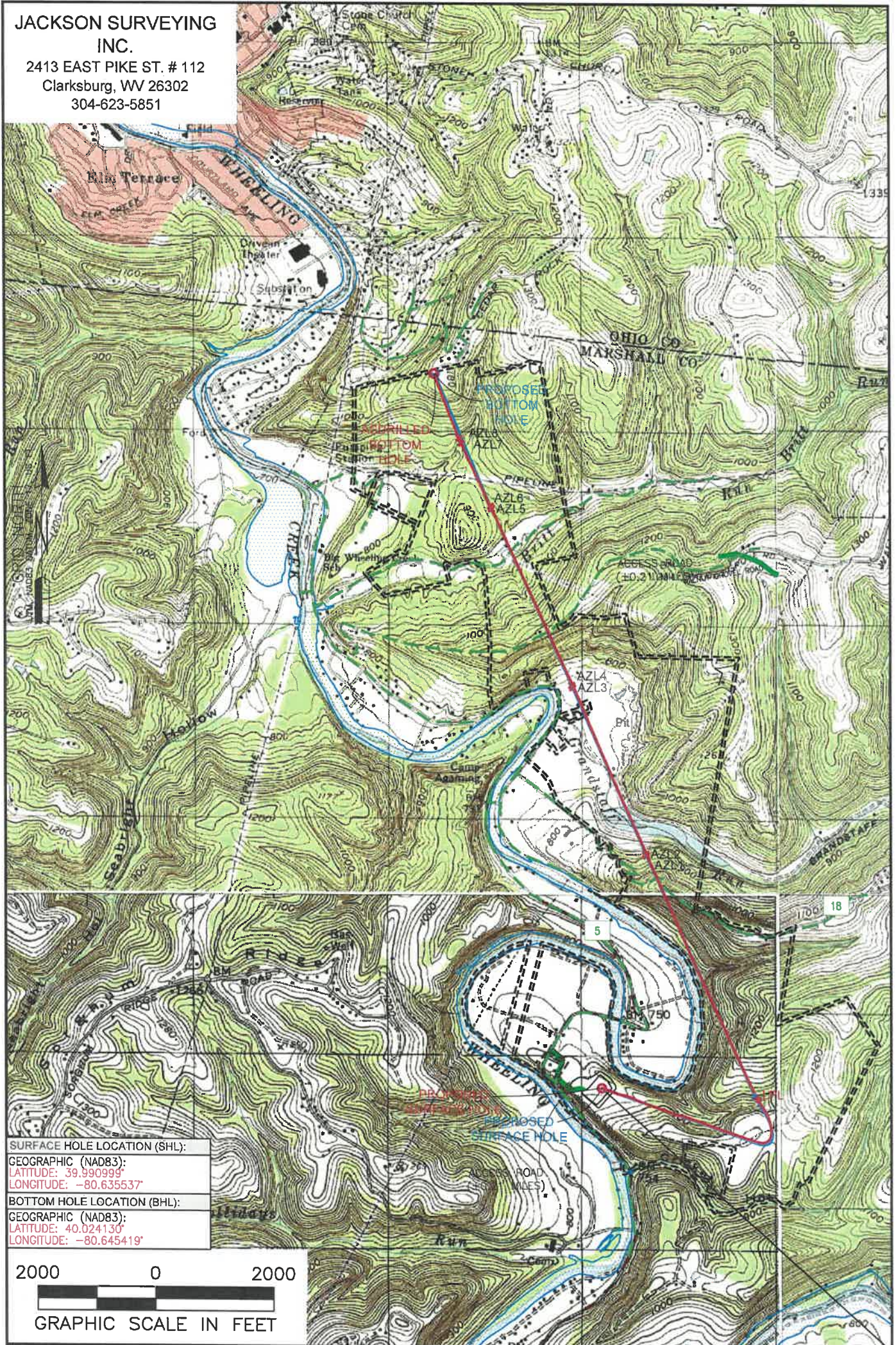
DRAWN BY: N. MANO

SCALE: N/A

DRAWING NO:
WELL LOCATION PLAT 5

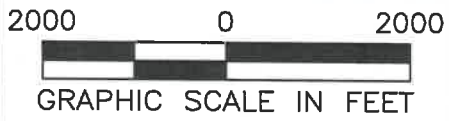
**JACKSON SURVEYING
INC.**

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



SURFACE HOLE LOCATION (SHL):
GEOGRAPHIC (NAD83):
LATITUDE: 39.990999°
LONGITUDE: -80.635537°

BOTTOM HOLE LOCATION (BHL):
GEOGRAPHIC (NAD83):
LATITUDE: 40.024130°
LONGITUDE: -80.645419°



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.
3. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

LEGEND:

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

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC	WELL (FARM) NAME: BETTY SCHAFER MSH	WELL # 405H	SERIAL #
ADDRESS: 1300 FORT PIERPONT ROAD, SUITE 200 MORGANTOWN, WV 26508	COUNTY - CODE MARSHALL - 051	DISTRICT; SAND HILL	
SURFACE OWNER: ROY A. SCHAFER JR. & EDWARD J. SCHAFER	USGS 7 1/2 QUADRANGLE MAP NAME MOUNDSVILLE, WV	API # 47-051-02383	

06/09/2022