

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  
FEB 24 2022  
WV Department of  
Environmental Protection

API 47-009-00319 County BROOKE District BUFFALO  
Quad BETHANY, WV & STEUBENVILLE EAST, OH Pad Name ROBERT BONE BRK PAD Field/Pool Name PANHANDLE FIELD WET  
Farm name ROBERT BONE Well Number ROBERT BONE BRK 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 4,452,134.46 Easting 533,830.47  
Landing Point of Curve Northing 4,452,450.43 Easting 534,642.59  
Bottom Hole Northing 4,457,662.94 Easting 532490.91

Elevation (ft) 1,147.8 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 11/17/2020 Date drilling commenced 7/16/2021 Date drilling ceased 9/8/2021  
Date completion activities began 10/10/2021 Date completion activities ceased 12/14/2021  
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 345 Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 628 Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 865 Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

Reviewed

Reviewed by:  
MJK 3/4/2022  
03/25/2022

API 47-009 - 00319 Farm name ROBERT BONE Well number ROBERT BONE BRK 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	126'	NEW	J-55/94#		Y
Surface	17.5	13.375	423'	NEW	J-55/54.50#	170.8	Y
Coal	SEE SURFACE						
Intermediate 1	12.25	9.625	1,688'	NEW	J-55/36#		Y, 40 BBLS
Intermediate 2	12.25	9.625					
Intermediate 3							
Production	8.75	5.5	25,827'	NEW	P-110/20#		Y, 63 BBLS
Tubing		2.875	7,014'	NEW	P-110/6.5#		N
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	502	15.60	1.20	602.4	SURFACE	8
Coal	SEE SURFACE						
Intermediate 1	CLASS A	684	15.60	1.19	813.96	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	4,796	15.60	1.29	6,186.84	SURFACE	24
Tubing							

Drillers TD (ft) 25,827' Loggers TD (ft) 25,827'  
 Deepest formation penetrated \_\_\_\_\_ Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 5,880'

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

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FEB 24 2012

WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS \_\_\_\_\_  
 WV Department of Environmental Protection

WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

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





# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	10/11/2021
Job End Date:	11/19/2021
State:	West Virginia
County:	Brooke
API Number:	47-009-00319-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	ROBERT BONE BRK 405
Latitude:	40.21894706
Longitude:	-80.60239934
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	5,756
Total Base Water Volume (gal):	31,148,708
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	88.83881	Density = 8.345
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	85.00000	0.25702	

				Water	7732-18-5	85.00000	0.25702
				Water	7732-18-5	85.00000	0.25702
HCL	SWN Well Services	Solvent			Listed Below		
Sand	SWN Well Services	Proppant			Listed Below		
Ferriplex 80	SWN Well Services	Iron Control			Listed Below		
PLEXSLICK 930	SWN Well Services	Friction Reducer			Listed Below		
FSTI-CI-02	SWN Well Services	Corrosion Inhibitor			Listed Below		
Plexaid 655	SWN Well Services	Scale Inhibitor			Listed Below		
Tolicide 4Frac	SWN Well Services	Biocide			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	10.82281
				Hydrochloric Acid	7647-01-0	15.00000	0.03438





ROBERT BONE BRK 405H

ATTACHMENT 1

PERF REPORT

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
1	10/1/2021	25,715	25,620	36
2	10/11/2021	25,586	25,409	36
3	10/12/2021	25,380	25,199	36
4	10/12/2021	25,165	24,988	36
5	10/13/2021	24,955	24,778	36
6	10/13/2021	24,745	24,568	36
7	10/14/2021	24,535	24,358	36
8	10/14/2021	24,324	24,147	36
9	10/15/2021	24,114	23,937	36
10	10/15/2021	23,904	23,727	36
11	10/16/2021	23,694	23,517	36
12	10/16/2021	23,483	23,306	36
13	10/17/2021	23,273	23,096	36
14	10/17/2021	23,063	22,886	36
15	10/17/2021	22,853	22,676	36
16	10/18/2021	22,642	22,465	36
17	10/18/2021	22,432	22,255	36
18	10/18/2021	22,222	22,045	36
19	10/19/2021	22,012	21,835	36
20	10/19/2021	21,801	21,624	36
21	10/20/2021	21,591	21,414	36
22	10/21/2021	21,381	21,204	36
23	10/21/2021	21,171	20,993	36
24	10/21/2021	20,960	20,783	36
25	10/22/2021	20,750	20,573	36
26	10/22/2021	20,540	20,361	36
27	10/23/2021	20,330	20,152	36
28	10/23/2021	20,119	19,942	36
29	10/24/2021	19,909	19,732	36
30	10/24/2021	19,699	19,522	36
31	10/24/2021	19,489	19,311	36
32	10/25/2021	19,278	19,101	36
33	10/26/2021	19,068	18,891	36
34	10/26/2021	18,858	18,681	36
35	10/26/2021	18,648	18,470	36
36	10/27/2021	18,437	18,260	36
37	10/27/2021	18,227	18,050	36
38	10/27/2021	18,017	17,840	36
39	10/28/2021	17,807	17,629	36
40	10/28/2021	17,596	17,419	36
41	10/29/2021	17,386	17,209	36
42	10/29/2021	17,176	16,999	36
43	10/29/2021	16,966	16,788	36
44	10/30/2021	16,755	16,578	36
45	10/30/2021	16,545	16,368	36
46	10/31/2021	16,335	16,158	36
47	11/1/2021	16,125	15,947	36
48	11/1/2021	15,914	15,737	36



ROBERT BONE BRK 405H

ATTACHMENT 1

PERF REPORT

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
49	11/2/2021	15,704	15,527	36
50	11/2/2021	15,494	15,317	36
51	11/3/2021	15,284	15,106	36
52	11/3/2021	15,073	14,896	36
53	11/3/2021	14,863	14,682	36
54	11/4/2021	14,653	14,476	36
55	11/4/2021	14,443	14,270	36
56	11/5/2021	14,232	14,055	36
57	11/5/2021	14,022	13,845	36
58	11/6/2021	13,810	13,635	36
59	11/6/2021	13,602	13,424	36
60	11/6/2021	13,391	13,214	36
61	11/7/2021	13,181	13,004	36
62	11/7/2021	12,971	12,794	36
63	11/8/2021	12,761	12,583	36
64	11/8/2021	12,552	12,373	36
65	11/9/2021	12,340	12,163	36
66	11/9/2021	12,130	11,953	36
67	11/10/2021	11,920	11,742	36
68	11/10/2021	11,709	11,532	36
69	11/10/2021	11,499	11,322	36
70	11/11/2021	11,289	11,112	36
71	11/11/2021	11,079	10,901	36
72	11/12/2021	10,868	10,691	36
73	11/12/2021	10,658	10,481	36
74	11/13/2021	10,448	10,271	36
75	11/13/2021	10,238	10,060	36
76	11/14/2021	10,027	9,850	36
77	11/14/2021	9,817	9,640	36
78	11/14/2021	9,607	9,430	36
79	11/15/2021	9,397	9,219	36
80	11/15/2021	9,186	9,009	36
81	11/15/2021	8,976	8,799	36
82	11/16/2021	8,766	8,589	36
83	11/16/2021	8,556	8,378	36
84	11/17/2021	8,345	8,168	36
85	11/17/2021	8,135	7,958	36
86	11/17/2021	7,925	7,748	36
87	11/18/2021	7,715	7,537	36
88	11/18/2021	7,504	7,327	36
89	11/18/2021	7,294	7,117	36

ROBERT BONE BRK 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
1	10/11/2021	59.4	7,984	8,800	3,469	188,220	8,017	0
2	10/12/2021	62.2	8,052	5,064	3,775	356,880	9,804	0
3	10/12/2021	70.7	8,114	4,665	4,226	363,360	9,385	0
4	10/13/2021	71.3	8,322	4,512	4,186	363,840	9,441	0
5	10/13/2021	83.4	8,839	4,646	4,255	363,540	9,335	0
6	10/14/2021	95.8	8,155	4,249	4,050	362,840	9,416	0
7	10/14/2021	91.8	8,737	4,375	4,216	354,810	8,944	0
8	10/15/2021	92.8	8,678	5,654	4,255	367,280	8,714	0
9	10/15/2021	86	8,841	4,566	4,233	362,560	10,314	0
10	10/15/2021	97.6	8,304	5,593	4,126	358,820	8,825	0
11	10/16/2021	90.6	8,163	4,380	4,173	359,920	10,830	0
12	10/16/2021	87.7	8,805	5,504	4,192	360,640	8,487	0
13	10/17/2021	91	8,641	4,283	4,226	362,640	9,313	0
14	10/17/2021	93.8	8,438	4,208	4,787	358,660	8,553	0
15	10/18/2021	97.3	8,281	5,267	4,412	353,260	8,575	0
16	10/18/2021	90.1	8,748	4,421	4,401	355,580	8,361	0
17	10/18/2021	93	8,537	5,520	4,395	363,560	8,521	0
18	10/19/2021	98.1	8,174	4,698	4,208	355,320	8,453	0
19	10/19/2021	91.5	8,663	5,721	4,214	357,780	8,593	0
20	10/20/2021	98.2	8,282	4,345	4,443	367,380	8,481	0
21	10/21/2021	93	8,365	5,788	4,232	359,700	8,469	0
22	10/21/2021	98.9	8,319	4,618	4,744	361,160	8,861	0
23	10/21/2021	93.8	8,404	5,402	4,092	361,060	8,509	0
24	10/22/2021	98.8	8,282	5,325	4,263	364,360	8,690	0
25	10/22/2021	94.1	8,033	5,300	4,055	360,000	8,530	0
26	10/23/2021	97.7	7,956	5,475	4,035	363,040	8,411	0
27	10/23/2021	98.6	8,197	4,370	4,112	356,980	8,250	0
28	10/23/2021	97.5	8,111	5,539	4,205	360,200	8,422	0
29	10/24/2021	98.7	8,258	5,311	4,143	357,560	8,242	0
30	10/24/2021	89.8	8,076	5,514	4,280	365,460	10,163	0
31	10/25/2021	94.9	7,542	5,389	4,271	358,960	15,735	0
32	10/26/2021	97.5	7,904	4,162	4,165	355,160	8,213	0
33	10/26/2021	98.3	8,173	5,578	4,366	358,780	7,854	0
34	10/26/2021	97.6	7,717	5,004	4,154	359,240	8,273	0
35	10/26/2021	91.2	7,993	5,788	4,202	361,240	8,206	0
36	10/27/2021	97.3	7,860	4,634	4,261	358,900	8,419	0
37	10/27/2021	91	7,467	5,110	4,350	360,320	9,309	0
38	10/28/2021	86.7	7,216	5,082	4,367	360,380	10,402	0
39	10/28/2021	92.2	7,726	5,001	4,031	356,580	8,377	0
40	10/29/2021	92.7	7,790	5,131	4,101	359,760	8,013	0
41	10/29/2021	98.3	7,636	5,106	4,560	360,590	8,243	0
42	10/29/2021	92.2	7,945	4,965	4,013	356,020	8,073	0
43	10/30/2021	99	7,572	5,300	4,352	357,040	8,486	0
44	10/30/2021	94	7,558	3,573	4,554	357,120	8,397	0
45	10/31/2021	93.3	7,708	5,741	4,313	355,320	7,922	0
46	11/1/2021	95.3	7,385	5,403	4,132	353,340	8,009	0
47	11/1/2021	93.5	7,228	4,085	4,956	357,200	8,126	0
48	11/1/2021	94	7,468	4,906	4,167	359,740	7,735	0
49	11/2/2021	93.7	7,301	4,363	4,770	358,320	8,247	0
50	11/2/2021	95.9	7,467	5,647	4,032	358,320	7,760	0
51	11/3/2021	94.5	7,296	5,365	4,760	355,000	8,141	0
52	11/3/2021	94.4	7,300	5,341	4,249	355,160	7,690	0
53	11/4/2021	95	6,892	4,013	4,558	355,560	8,040	0

ROBERT BONE BRK 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	11/4/2021	95	7,185	5,354	4,047	360,780	7,901	0
55	11/4/2021	95.1	7,192	5,508	4,112	361,520	8,129	0
56	11/5/2021	95	6,919	5,324	4,420	357,000	7,847	0
57	11/5/2021	95.5	7,363	5,297	4,001	355,680	7,500	0
58	11/6/2021	96	7,022	5,208	4,519	358,280	7,921	0
59	11/6/2021	89.2	7,647	4,719	4,091	359,580	7,679	0
60	11/7/2021	94.5	7,013	5,298	4,130	361,780	7,829	0
61	11/7/2021	94.6	7,324	5,487	4,016	356,660	7,450	0
62	11/8/2021	95.3	7,309	5,164	4,736	358,460	7,765	0
63	11/8/2021	95.1	7,026	5,485	4,197	356,140	7,651	0
64	11/9/2021	95	6,991	5,610	4,715	357,460	7,836	0
65	11/9/2021	95	6,960	5,456	4,354	356,660	7,498	0
66	11/10/2021	95	6,953	5,404	4,163	354,540	7,825	0
67	11/10/2021	99.9	7,108	4,381	4,235	262,820	6,827	0
68	11/10/2021	99.2	6,994	4,303	4,123	357,600	7,982	0
69	11/11/2021	99.2	6,674	5,331	4,412	367,180	8,348	0
70	11/11/2021	99.3	6,704	5,401	4,166	356,500	7,810	0
71	11/12/2021	99.9	6,826	5,524	4,231	361,300	8,191	0
72	11/12/2021	98.1	6,662	5,609	4,412	356,220	7,681	0
73	11/13/2021	99	6,589	5,608	4,216	358,200	7,932	0
74	11/13/2021	98.1	6,348	5,390	4,413	356,440	7,694	0
75	11/13/2021	99.6	6,280	5,445	4,123	352,000	7,755	0
76	11/14/2021	98.2	6,547	5,525	4,315	351,560	7,566	0
77	11/14/2021	99.3	6,364	5,279	4,324	354,400	7,713	0
78	11/14/2021	99.5	6,141	4,237	4,231	358,740	7,763	0
79	11/15/2021	99.8	5,990	5,398	4,356	351,800	7,604	0
80	11/15/2021	99.6	6,147	5,679	4,136	363,780	7,675	0
81	11/16/2021	99	6,419	5,412	4,361	355,980	7,631	0
82	11/16/2021	99.4	6,236	5,510	4,112	360,020	7,609	0
83	11/17/2021	99	6,079	5,217	4,224	350,820	7,624	0
84	11/17/2021	99.8	6,239	5,515	4,365	357,940	7,672	0
85	11/17/2021	100	6,072	5,234	4,213	350,280	8,196	0
86	11/18/2021	100	6,084	5,648	4,117	357,500	7,597	0
87	11/18/2021	99.6	6,057	5,268	4,256	352,380	7,665	0
88	11/18/2021	100	6,320	5,316	4,256	386,980	8,109	0
89	11/18/2021	99	6,527	5,239	4,221	357,320	7,370	0



Well Name: Robert Bone BRK 405H 47009003190000

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	345.00	345.00	
Top of Salt Water	628.00	628.00	NA	NA	
Pittsburgh Coal	865.00	865.00	867.50	867.50	
Pottsville (ss)	392.00	392.00	514.00	514.00	
Raven Cliff (ss)	764.00	764.00	935.00	935.00	
Maxton (ss)	1117.00	1117.00	1384.00	1384.00	
Big Injun (ss)	1384.00	1384.00	1573.00	1573.00	
Berea (siltstone)	1907.00	1862.00	1948.00	1901.00	
Rhinstreet (shale)	6078.00	5307.00	6385.00	5547.00	
Cashaqua (shale)	6385.00	5547.00	6461.00	5599.00	
Middlesex (shale)	6461.00	5599.00	6557.00	5659.00	
Burket (shale)	6557.00	5659.00	6582.00	5674.00	
Tully (ls)	6582.00	5674.00	6680.00	5729.00	
Mahantango (shale)	6680.00	5729.00	6901.00	5828.00	
Marcellus (shale)	6901.00	5828.00	NA	NA	GAS



LATITUDE: 40°15'00" SURFACE HOLE (2000' SCALE)

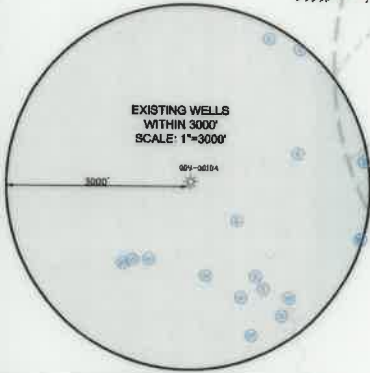
5363'

LATITUDE: 40°17'30" BOTTOM HOLE (2000' SCALE)

9681'



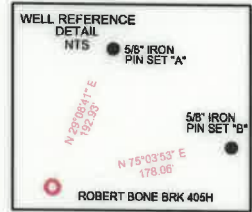
68011 Vineyard Road  
St. Clairsville, Ohio 43950  
740-695-6100



NOTES ON SURVEY

1. COORDINATE SYSTEM IS UTM NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
2. 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.
3. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
4. NO DWELLINGS OR BUILDINGS WITHIN 625 FEET OF PROPOSED CENTER OF PAD.
5. NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
6. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF THE LIMITS OF DISTURBANCE.
7. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.

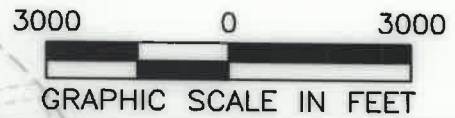
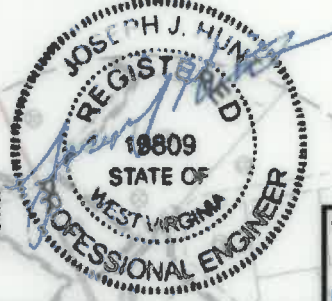
LINE	BEARING	DISTANCE
L1	N 55°14'38" E	870.88'
L2	S 78°03'41" E	2,093.92'



<b>SURFACE HOLE LOCATION (SHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4452134.46 EASTING: 533830.47
<b>LANDING POINT LOCATION (LPL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4452450.43 EASTING: 534642.59
<b>BOTTOM HOLE LOCATION (BHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4457662.94 EASTING: 532490.91
<b>SURFACE HOLE LOCATION (SHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4452134.51 EASTING: 533830.53
<b>LANDING POINT LOCATION (LPL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4452390.84 EASTING: 534663.89
<b>TURNING POINT LOCATION (TPL1):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4453979.74 EASTING: 534099.10
<b>TURNING POINT LOCATION (TPL2):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4455481.47 EASTING: 533419.95
<b>TURNING POINT LOCATION (TPL3):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4456503.25 EASTING: 532933.43
<b>TURNING POINT LOCATION (TPL4):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4457158.97 EASTING: 532649.40
<b>BOTTOM HOLE LOCATION (BHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4457662.35 EASTING: 532488.63

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.E. 19809



COMPANY: **SWN** Production Company, LLC

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS	MINIMUM DEGREE OF ACCURACY: 1/200	ROBERT BONE BRK
WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034	PROVEN SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT)	OPERATOR'S WELL #: 405H
		API WELL #: 47 009 00319
		STATE COUNTY PERMIT

WELL TYPE: OIL   WASTE DISPOSAL   PRODUCTION <input checked="" type="checkbox"/>   DEEP   GAS <input checked="" type="checkbox"/>   LIQUID INJECTION   STORAGE   SHALLOW <input checked="" type="checkbox"/>	ELEVATION: 1,147.8'
WATERSHED: UPPER OHIO SOUTH	QUADRANGLE: BETHANY, STEUBENVILLE EAST
DISTRICT: BUFFALO	ACREAGE: ±80.99
COUNTY: BROOKE	ACREAGE: ±80.99
SURFACE OWNER: ROBERT BONE	
OIL & GAS ROYALTY OWNER: ROBERT BONE	
DRILL   DRILL DEEPER   REDRILL   FRACTURE OR STIMULATE   PLUG OFF OLD FORMATION   PERFORATE NEW FORMATION	
CONVERT   PLUG & ABANDON   CLEAN OUT & REPLUG   OTHER CHANGE <input checked="" type="checkbox"/> (SPECIFY) AS-DRILLED	
TARGET FORMATION: MARCELLUS	ESTIMATED DEPTH: 5,870' TMD 25,827' TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC	DESIGNATED AGENT: BRITTANY WOODY	03/25/2022
ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201	ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201	
CITY: MORGANTOWN STATE: WV ZIP CODE: 26508	CITY: MORGANTOWN STATE: WV ZIP CODE: 26508	

<b>LEGEND:</b>	EXISTING WATER WELL	REVISIONS:	DATE: 02-16-2022
EXISTING BOTTOM HOLE	EXISTING SPRING	ROBERT BONE BRK	API NO: 47-069-00319
EXISTING / PRODUCING WELLHEAD	SURVEYED BOUNDARY	405H	DRAWN BY: R.GRIMES
LPL: EXISTING LANDING POINT LOCATION	LEASE BOUNDARY		SCALE: 1" = 3000'
PROPOSED SURFACE HOLE / BOTTOM HOLE	ASDRILLED PATH		DRAWING NO: 2017-219
LPL: PROPOSED LANDING POINT LOCATION	PROPOSED PATH		WELL LOCATION PLAT

LONGITUDE: 80°35'00" BOTTOM HOLE (2000' SCALE)  
LONGITUDE: 80°35'00" SURFACE HOLE (2000' SCALE)

8338'



11317'



WELL BORE TABLE FOR SURFACE/ROYALTY OWNERS		
TRACT	SURFACE OWNER(S) / ROYALTY OWNER(S)	TAX PARCEL
1	ROBERT O. BONE (S/R)	03-B37-081.0
TRACT	SURFACE OWNER	TAX PARCEL
2	WILLIAM E. & HAZEL E. JOHNSTON	03-B37-050.0
3	MARK A. CHRISTMAN	03-B37-045.0
4	VINCENT & PHILLIP MAZZELLA	03-B37-046.0
5	MAZZELLA WELDING & FABRICATION INC	03-B37-046.1
6	JOSEPH C. & PENNY J. MORRIS	03-B32-129.0
7	KEVIN R. & SANDRA A. COLLINS	03-B32-130.0
8	HAMMOND PUBLIC SERVICE DISTRICT	03-B32-135.0
9	BRENNARD L. JR & DONNA J. MILLER (SURVIVOR)	03-B32-132.0
10	HARRY & JUDITH ICKES	03-B32-133.0
11	SAMUEL HERVEY HUBBARD	03-B32-096.0
12	SCHIAPPA & COMPANY, INC	03-B32-009.0
13	JAY D. & KAREN SUE RECK	03-B32-068.0
14	PATRICIA SAUVAGEOT & GLORIA PREMESA	03-B32-069.0
15	WILLIAM WHEAT & CARRIE HIGGS (JTWS)	03-B32-070.0
16	WILLIAM WHEAT & CARRIE HIGGS (JTWS)	03-B32-071.0
17	MELANIE J. LUNSFORD	03-B32-072.0
18	LISH FAMILY TRUST, EDWARD C. & BEATRICE M. LISH TRUSTEES	03-B32-073.0
19	WILLIAM R., CAROLYN S., & JESSICA WALNOHA (SURVIVOR)	03-B32-007.0
20	ROBIE & GERTRUDE LOUISE MCSHANE	03-B27P-030.0
21	JOHN J. FRISCO SR(1/3) & JOSEPHINE IWANYSHN	03-B27K-190.0
22	REMOVED	REMOVED
23	REMOVED	REMOVED
24	REMOVED	REMOVED
25	GEORGE & MARIA JUNE KILLIEN	03-B27K-199.0
26	RONALD E. & SANDRA L. WILLIAMS	03-B27K-198.0
27	RONALD E. & SANDRA L. WILLIAMS	03-B27K-197.0
28	LINDA S. WILLIAMS	03-B27K-196.0
29	LINDA S. WILLIAMS	03-B27K-195.0
30	DANIEL P. LOMBARDI	03-B27K-211.0
31	ABANDON RAILWAY SOUTH OF BUFFALO CREEK	03-B27K-188.0
32	BROOKE COUNTY BOARD OF EDUCATION	03-B27K-212.0
33	STATE OF WEST VIRGINIA, DEPARTMENT OF HIGHWAYS	03-B27-004.0
34	STATE OF WEST VIRGINIA, DEPARTMENT OF HIGHWAYS	STATE ROUTE 2
35	STATE OF WEST VIRGINIA, DEPARTMENT OF HIGHWAYS	03-B27-011.0
36	CAMPBELL TRANSPORTATION COMPANY INC	03-B27-003.0
37	STATE OF WEST VIRGINIA	OHIO RIVER
38	JOHN J. FRISCO SR(1/3) & JOSEPHINE IWANYSHN (2/3)	03-B27K-189.0
39	JOHN J. FRISCO SR(1/3) & JOSEPHINE IWANYSHN (2/3)	03-B27K-200.0
ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	JOSEPH K. & GLORIA BOWMAN (SURVIVOR)	03-B37-070.0
B	JOSEPH K. & GLORIA BOWMAN (SURVIVOR)	03-B37-069.1
C	CAROLE SILVER, ETAL	03-B37-071.0
D	WILLIAM E. & HAZEL E. BERTY JOHNSTON (SURVIVOR)	03-B37-074.1
E	BENJAMIN M. MOSA & CHRISTINE L. HEISE (JTWS)	03-B37-074.0
F	BENJAMIN M. MOSA & CHRISTINE L. HEISE (JTWS)	03-B37-079.0
G	TERRENCE & SUSAN BONE	03-B37-080.0
H	BRIAN K. & GINA M. HANEY (SURVIVOR)	03-B37-077.0
I	VEMURI HOME & GARDENS LLC	03-B37-082.0
J	DEBRA CYPHERT, ETAL	03-B37-088.0
K	DEBRA CYPHERT, ETAL	03-B37-091.0
L	SCHIAPPA AND COMPANY INC	03-B37-023.0
M	SCHIAPPA AND COMPANY INC	03-B37-022.0
N	JAMIE L. OHLER	03-B37-043.0
O	VINCENT & PHILLIP MAZZELLA	03-B32-128.0
P	KEVIN D. & BRIDGET KOSUT (SURVIVOR)	03-B37-042.0
Q	REBECCA L. UHLIY	03-B32-139.0
R	DAVID L. & JULIA A. HALL (SURVIVOR)	03-B32-136.0
S	KEVIN R. & SANDRA A. COLLINS	03-B32-130.1
T	DAVID L. & JULIA A. HALL (SURVIVOR)	03-B32-138.0
U	DAVID L. & JULIA A. HALL (SURVIVOR)	03-B32-137.0
V	DAVID L. & JULIA A. HALL (SURVIVOR)	03-B32-137.1
W	PATRICIA WILLIAMS	03-B32-134.0
X	PATRICIA WILLIAMS	03-B32-198.0
Y	DAVID MCGOWAN	03-B32-190.0
Z	ROBERT G. TREADWAY JR	03-B32-188.0
AA	LILIAN MCCORD	03-B32-185.0
AB	MASLO FARMS LLC, A PENNSYLVANIA LLC	03-B32-019.0
AC	DAVID VIDERMAN ETAL	03-B32-013.0
AD	PENNY HAMILTON	03-B32-011.0
AE	SCHIAPPA AND COMPANY INC	03-B32-010.0
AF	ROBIE & GERTRUDE LOUISE MCSHANE	03-B32-030.0
AG	DAVID B. JONES	03-B32-008.0
AH	ROBIE & GERTRUDE LOUISE MCSHANE	03-B32-029.0
AI	NORMA JEAN LILLY	03-B27-017.0
AJ	REMOVED	REMOVED
AK	RANDY M. & BRENDA WILLIAMS (SURVIVOR)	03-B27K-202.0
AL	REMOVED	REMOVED
AM	RANDY M. & BRENDA WILLIAMS (SURVIVOR)	03-B27K-203.0
AN	RANDY & BRENDA WILLIAMS	03-B27K-204.0
AO	ROBERT C. III, & RONICA L. CRISS (SURVIVOR)	03-B27K-205.0
AP	ROBERT C. III, & RONICA L. CRISS (SURVIVOR)	03-B27K-206.0
AQ	RANDY M. & BRENDA WILLIAMS (SURVIVOR)	03-B27K-207.0
AR	RANDY MARK & BRENDA KAY WILLIAMS (SURVIVOR)	03-B27K-208.0
AS	RANDY & BRENDA WILLIAMS	03-B27K-209.0
AT	ALLEN LEE & DAVID PAUL FORSYTHE	03-B27K-210.0
AU	HFS LIMITED LIABILITY COMPANY	03-B27-012.0
AV	GREG PROVENZANO	03-B27-009.0
AW	CAMPBELL TRANSPORTATION COMPANY INC	03-B27-008.0
AX	SMITH REAL ESTATE LLC	03-B27-007.0
AY	SMITH REAL ESTATE LLC	03-B27-006.0
AZ	SMITH REAL ESTATE LLC	03-B27-005.0

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
BA	CAMPBELL TRANSPORTATION COMPANY INC	03-B27-010.0
BB	STATE OF WEST VIRGINIA	BUFFALO CREEK
BC	STATE ROAD COMMISSION	03-B27K-185.0
BD	STATE ROAD COMMISSION	03-B27K-184.0
BE	STATE ROAD COMMISSION	03-B27K-183.0
BF	RICHARD H. RINK	03-B27K-182.0
BG	SHAWN HUFF	03-B27K-181.0
BH	SHAWN HUFF	03-B27K-180.0
BI	SHAWN HUFF	03-B27K-179.0
BJ	U.S. GOVERNMENT	03-B27K-178.0
BK	UNITED STATES OF AMERICA	03-B27K-164.0
BL	BEVERLY K. FUCHS	03-B27K-159.0
BM	UNKNOWN	03-B27L-026.0
BN	THOMAS L. BUTTS	03-B27K-001.0
BO	THOMAS L. BUTTS	03-B27P-002.0
BP	DANIEL E. & CASSANDRA J. KEENER (SURVIVOR)	03-B27K-003.0
BQ	MERLE O. ERNEST	03-B27P-002.0
BR	LENGRE L. ROHRBAUGH	03-B27P-004.0
BS	JOSEPH PAUL STEIN	03-B27P-005.0
BT	EDWARD MACIAK	03-B27P-031.0
BU	LUCINDA F. & NIKOLAI A. LUKSHIN (SURVIVOR)	03-B27K-050.0
BV	EVA K. & GARY L. ELLIOT (SURVIVOR)	03-B27K-084.0
BW	EDWARD W. & LESA M. NICHOLSON	03-B27K-082.0
BX	GREGORY DEDITCH	03-B32-001.0
BY	RONALD A. PETRUCCIOLI (L/E ROBERT A. & MARIE ELIZABETH PETRUCCIOLI)	03-B32-002.0
BZ	RONALD A. PETRUCCIOLI (L/E ROBERT A. & MARIE ELIZABETH PETRUCCIOLI)	03-B32-003.0
CA	GLEN A. & SUSAN L. STEWART	03-B32-004.0
CB	WILLIAM R. WALNOHA	03-B32-005.0
CC	LISH FAMILY TRUST, BEATRICE M. & EDWARD C. LISH TRUSTEES	03-B32-006.0
CD	CHRISTOPHER & JAQUELINE SMORDERLY	03-B32-052.0
CE	WILLIAM M. & HAZEL ANN CARTE	03-B32-059.0
CF	WILLIA, D. & SHIRLEY A. MUSHET	03-B32-060.0
CG	JEFFREY P. JACKFERT	03-B32-067.0
CH	JAY D. & KAREN S. RECK (SURVIVOR)	03-B32G-067.1
CI	HERBERT MCGOWAN	03-B32G-067.0
CJ	VEMURI HOMAE & GARDENS LLC	03-B32G-001.0
CK	DIXIE LEE OHLER	03-B32G-002.0
CL	KAY A. ELLIOTT	03-B32G-003.0
CM	KAY A. ELLIOTT	03-B32G-004.0
CN	LARRY MICHAEL & DEBORAH RENEE REED (JTWS)	03-B32G-005.0
CO	LARRY M. & DEBORAH R. REED (SURVIVOR)	03-B32G-006.0
CP	SCHIAPPA & COMPANY INC	03-B32-009.0
CQ	MATTHEW PATRICK TOMSHACK	03-B32-088.0
CR	PAUL W. & SUSAN A. FODOR	03-B32-089.0
CS	MICHAEL DELLA SEREVICZ	03-B32-090.0
CT	JAMES E. & ANNETTE M BEST (SURVIVOR)	03-B32-201.0
CU	ALBERT & LOTTIE STEWART	03-B32H-050.0
CV	STARVAGGI INDUSTRIES	03-B33-054.0
CW	SAMUEL HERVEY HUBBARD	03-B32-097.0
CX	MARK & GEORGIA FEDAK	03-B32-099.0
CY	JAMIE L. & LESLIE OHLER (SURVIVOR)	03-B32-099.1
CZ	MARK & GEORGIA FEDAK (SURVIVOR)	03-B32-100.0
DA	MARK & GEORGIA FEDAK	03-B32-101.0
DB	MARK A. & GEORGIA M. FEDAK	03-B32-199.0
DC	MARK A. & GEORGIA M. FEDAK	03-B32-200.0
DD	MARK & GEORGIA FEDAK (SURVIVOR)	03-B32-103.0
DE	LLOYD T. & JUDITH K. VAN HORN (T.O.D. AMY LYNN VAN HORN ETAL)	03-B32-104.0
DF	LLOYD T. & JUDITH K. VAN HORN (T.O.D. AMY LYNN VAN HORN ETAL)	03-B32-105.0
DG	LLOYD T. VAN HORN	03-B32-107.0
DH	RONALD E. & SANDRA LOUISE WILLIAMS	03-B32-109.0
DI	BERNARD L. & DONNA J. MILLER	03-B32-110.0
DJ	VEMURI HOME & GARDENS LLC	03-B32-111.0
DK	VEMURI HOME & GARDEN LLC	03-B32-112.0
DL	ANDREA CUTRONE	03-B32-113.0
DM	H3 LLC	03-B32-114.0
DN	VEMURI HOME & GARDENS LLC	03-B32-115.0
DO	ROWDY T. GEORGETTI	03-B32-116.0
DP	PHYLLIS MARKER & PATRICIA MARKER-SCHNELL (SURVIVOR)	03-B32-127.0
DQ	DWARKA NATH VEMURI, DBA AMERICAN HEART ASSOCIATES	03-B37-047.0
DR	RICHARD RODGERS, CHERI SHARP, EDWARD O'DYER ETAL	03-B37-048.0
DS	WILLIAM E. & HAZEL E. JOHNSTON (SURVIVOR)	03-B37-053.1
DT	BUFFALO CREEK CAMP	03-B37-051.0
DU	MARLIN G. SR. & JOY CRAWFORD	03-B37-055.0
DV	JOHN E. & SHERRILL J. RIPLEY (SURVIVOR) (L/E WILDA RIPLEY)	03-B37-062.0
DW	JOSEPH K. & DIANA R. MENDEL (SURVIVOR)	03-B27K-186.0
DX	DIANE MENDEL	03-B27-013.0
DY	DIANA W. MENDEL	03-B27K-213.0
DZ	DANIEL P. & DARLA ANN LOMBARDI	03-B27-016.0
EA	DANIEL P. & DARLA ANN LOMBARDI	03-B27-015.0
EB	JOANN KRZYWDIK	03-B27K-214.0
EC	LINDA S. WILLIAMS	03-B27K-194.0
ED	SADIE PARKS	03-B27K-193.0
EE	DONNA A. MAZZELLA	03-B37-044.0
EF	HAMMOND PUBLIC SERVICE DISTRICT	03-B37-045.1
EG	NILA & STANLEY PATKOWSKI	03-B27K-191.0
EH	NILA & STANLEY PATKOWSKI	03-B27K-192.1
EI	RONALD E. & SANDRA L. WILLIAMS	03-B27K-192.0

03/25/2022

REVISIONS:					
COMPANY:	ROBERT BONE BRK				
OPERATOR'S WELL #:	405H				
DISTRICT:	BUFFALO	COUNTY:	BROOKE	STATE:	WV
DATE:	02-16-2022				
API NO:	47-069-00319				
DRAWN BY:	R.GRIMES				
SCALE:	N/A				
DRAWING NO:	2017-219				
WELL LOCATION PLAT					