

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

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Office of Oil and Gas  
JAN 29 2021  
WV Department of  
Environmental Protection

API 47-069-00311 County OHIO District RICHLAND  
Quad TILTONSVILLE, OH-WV Pad Name FRANZ THOMAN-OHI-PAD1 Field/Pool Name PANHANDLE FIELD WET  
Farm name FRANZ THOMAN Well Number FRANZ THOMAN OHI 5H  
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 4,442,986.73 Easting 528,978.58  
Landing Point of Curve Northing 4,443,180.49 Easting 529,086.24  
Bottom Hole Northing 4,448,175.62 Easting 527,617.96

Elevation (ft) 1137.3' 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 10/8/2019 Date drilling commenced 1/26/2020 Date drilling ceased 2/11/2020  
Date completion activities began 9/15/2020 Date completion activities ceased 11/13/2020  
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 326' Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 473' Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 344' Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

Reviewed by:  
*Benny Stiller*  
09/10/2021

API 47-069 - 00311 Farm name FRANZ THOMAN Well number FRANZ THOMAN OHI 5H

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	415	NEW	J-55/54.50#	310' / 315'	Y
Coal	SEE SURFACE						
Intermediate 1	12.25	9.625	1,745	NEW	J-55/36#		Y; 37 BBLS
Intermediate 2							
Intermediate 3							
Production	8.75/8.50	5.5	23,565	NEW	P-110/20#		Y
Tubing		2.875	6,372	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	474	15.60	1.19	564.06	SURFACE	8
Coal	SEE SURFACE						
Intermediate 1	CLASS A	674	15.60	1.19	802.06	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	4,495	15.60	1.18	5,304.1	SURFACE	24
Tubing							

Drillers TD (ft) 23,565'      Loggers TD (ft) 23,565'

Deepest formation penetrated MARCELLUS      Plug back to (ft) N/A

Plug back procedure N/A

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Kick off depth (ft) 4,945'

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

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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 \_\_\_\_\_

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FRANZ THOMAN OHI 5H  
ATTACHMENT 1  
PERF REPORT

STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
1	8/20/2020	23,519	23,427	36
2	9/15/2020	23,393	23,215	36
3	9/16/2020	23,181	23,003	36
4	9/17/2020	22,969	22,791	36
5	9/17/2020	22,753	22,579	36
6	9/17/2020	22,546	22,367	36
7	9/18/2020	22,334	22,156	36
8	9/18/2020	22,122	21,944	36
9	9/19/2020	21,910	21,732	36
10	9/19/2020	21,699	21,520	36
11	9/19/2020	21,487	21,308	36
12	9/20/2020	21,275	21,097	36
13	9/20/2020	21,063	20,885	36
14	9/21/2020	20,847	20,673	36
15	9/22/2020	20,640	20,461	36
16	9/22/2020	20,428	20,249	36
17	9/23/2020	20,216	20,038	36
18	9/23/2020	20,004	19,826	36
19	9/23/2020	19,792	19,614	36
20	9/24/2020	19,581	19,402	36
21	9/24/2020	19,369	19,190	36
22	9/24/2020	19,157	18,979	36
23	9/25/2020	18,945	18,767	36
24	9/25/2020	18,733	18,555	36
25	9/25/2020	18,524	18,343	36
26	9/26/2020	18,310	18,131	36
27	9/26/2020	18,098	17,920	36
28	9/26/2020	17,886	17,708	36
29	9/27/2020	17,674	17,496	36
30	9/27/2020	17,463	17,284	36
31	9/28/2020	17,251	17,072	36
32	9/28/2020	17,039	16,861	36
33	9/28/2020	16,827	16,649	36
34	9/28/2020	16,615	16,437	36
35	9/29/2020	16,404	16,225	36
36	9/29/2020	16,190	16,013	36
37	9/29/2020	15,980	15,802	36
38	9/30/2020	15,768	15,590	36
39	9/30/2020	15,556	15,378	36
40	10/1/2020	15,345	15,166	36
41	10/1/2020	15,133	14,954	36
42	10/1/2020	14,921	14,743	36
43	10/2/2020	14,709	14,531	36



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STAGE NUM	Perf Date	Perf Bottom MD	Perf Top MD2	# SHOTS PER STG
44	10/2/2020	14,497	14,319	36
45	10/2/2020	14,286	14,107	36
46	10/3/2020	14,074	13,895	36
47	10/3/2020	13,862	13,687	36
48	10/4/2020	13,650	13,472	36
49	10/4/2020	13,438	13,260	36
50	10/5/2020	13,227	13,048	36
51	10/5/2020	13,015	12,836	36
52	10/6/2020	12,808	12,625	36
53	10/6/2020	12,591	12,413	36
54	10/7/2020	12,379	12,201	36
55	10/7/2020	12,168	11,993	36
56	10/7/2020	11,956	11,777	36
57	10/8/2020	11,740	11,566	36
58	10/8/2020	11,532	11,354	36
59	10/8/2020	11,320	11,139	36
60	10/9/2020	11,109	10,930	36
61	10/9/2020	10,897	10,718	36
62	10/9/2020	10,685	10,507	36
63	10/9/2020	10,473	10,295	36
64	10/10/2020	10,261	10,083	36
65	10/10/2020	10,050	9,875	36
66	10/11/2020	9,838	9,659	36
67	10/11/2020	9,626	9,448	36
68	10/11/2020	9,414	9,236	36
69	10/11/2020	9,202	9,022	36
70	10/12/2020	8,991	8,812	36
71	10/12/2020	8,779	8,600	36
72	10/12/2020	8,567	8,387	72
73	10/13/2020	8,355	8,177	36
74	10/13/2020	8,143	7,965	36
75	10/13/2020	7,930	7,753	36
76	10/14/2020	7,720	7,541	36
77	10/14/2020	7,512	7,330	36
78	10/14/2020	7,296	7,118	36
79	10/14/2020	7,084	6,906	36
80	10/14/2020	6,873	6,694	36
81	10/15/2020	6,661	6,482	36
82	10/15/2020	6,449	6,271	36

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ATTACHMENT 2

STIM REPORT

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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	9/15/2020	76.8	7,707	7,756	3,652	175,260	73,673	0
2	9/16/2020	84.8	7,553	4,659	4,553	352,060	11,851	0
3	9/16/2020	88.2	7,910	3,288	4,244	360,340	8,744	0
4	9/17/2020	89.6	7,837	4,824	4,546	351,280	8,774	0
5	9/17/2020	90.5	7,719	4,625	5,077	345,360	8,417	0
6	9/17/2020	91.1	8,037	4,244	4,384	353,700	8,780	0
7	9/18/2020	91	7,871	5,707	4,320	353,820	8,673	0
8	9/18/2020	88.7	8,021	4,879	4,261	351,560	7,972	0
9	9/19/2020	89.6	7,881	5,981	4,321	345,340	8,431	0
10	9/19/2020	85.3	7,877	6,050	4,510	352,700	8,268	0
11	9/19/2020	91.7	8,119	5,345	4,141	360,150	11,304	0
12	9/20/2020	87.8	7,937	5,452	4,376	358,020	10,324	0
13	9/21/2020	96.2	8,341	5,501	4,377	359,140	8,046	0
14	9/22/2020	84.2	7,977	5,402	4,516	361,720	8,586	0
15	9/22/2020	90.5	8,166	5,856	4,470	359,840	8,031	0
16	9/23/2020	90.4	8,000	5,681	4,625	358,100	8,061	0
17	9/23/2020	86.8	7,885	5,602	4,573	356,400	7,926	0
18	9/23/2020	88	8,091	5,329	4,307	341,900	7,870	0
19	9/24/2020	90.1	8,105	5,548	4,086	354,500	7,725	0
20	9/24/2020	92.2	7,982	5,540	4,306	354,360	8,359	0
21	9/24/2020	89.1	8,022	5,741	4,386	359,080	7,906	0
22	9/24/2020	88.4	8,099	5,939	4,230	357,900	8,244	0
23	9/25/2020	88.5	7,909	5,945	4,220	356,700	8,171	0
24	9/25/2020	89	8,096	5,844	4,448	355,980	7,588	0
25	9/26/2020	86.5	7,861	5,206	4,512	356,540	7,931	0
26	9/26/2020	89.5	7,985	5,994	4,522	360,060	8,160	0
27	9/26/2020	89.5	8,104	5,789	4,229	357,000	7,825	0
28	9/27/2020	89.9	7,929	6,152	4,330	356,640	8,036	0
29	9/27/2020	93.2	7,802	5,334	4,565	362,180	8,239	0
30	9/27/2020	90.2	7,999	5,713	4,561	351,780	8,045	0
31	9/28/2020	91.1	7,953	5,802	4,458	357,100	7,918	0
32	9/28/2020	90.1	7,905	5,645	4,771	357,740	7,826	0
33	9/28/2020	89.7	7,898	5,044	4,274	359,600	8,002	0
34	9/29/2020	90.7	8,065	6,055	4,265	350,920	7,874	0
35	9/29/2020	94	7,790	5,723	4,840	361,920	8,166	0
36	9/29/2020	94.5	7,705	5,506	4,730	359,660	7,840	0
37	9/29/2020	87.7	8,072	4,877	4,460	360,360	7,989	0
38	9/30/2020	97.7	7,745	5,325	4,472	356,700	7,522	0
39	10/1/2020	92.9	7,851	5,110	4,456	356,020	9,531	0
40	10/1/2020	99.4	7,762	4,489	4,356	348,580	7,805	0
41	10/1/2020	79.8	7,994	4,535	4,092	351,960	7,542	0
42	10/2/2020	98.4	7,807	5,594	4,214	349,660	8,021	0
43	10/2/2020	99	7,810	5,623	4,655	353,860	7,900	0
44	10/2/2020	94.7	7,477	5,636	4,172	357,620	7,957	0
45	10/3/2020	98	7,689	5,740	4,454	359,260	7,885	0
46	10/3/2020	98.3	7,535	5,444	4,611	361,800	7,869	0
47	10/3/2020	95	7,640	5,550	3,979	338,520	7,793	0
48	10/4/2020	99.5	7,659	5,563	4,519	364,320	7,872	0
49	10/4/2020	89.5	7,190	4,436	4,143	362,460	10,221	0
50	10/5/2020	99.9	7,471	5,250	4,464	355,740	7,984	0
51	10/5/2020	97.9	7,265	5,157	4,254	353,820	9,394	0
52	10/6/2020	99.6	7,205	5,711	4,451	355,520	9,565	0
53	10/7/2020	99.2	7,336	5,375	4,505	370,680	7,867	0



**FRANZ THOMAN OHI 5H  
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	10/7/2020	95.6	7,365	5,281	4,778	358,580	8,112	0
55	10/7/2020	96.1	7,166	5,255	4,419	328,120	7,456	0
56	10/8/2020	99.2	7,581	5,025	4,259	361,880	8,255	0
57	10/8/2020	94.5	7,463	5,141	4,425	359,500	7,770	0
58	10/8/2020	94.1	7,411	5,114	4,205	358,150	7,830	0
59	10/9/2020	91.6	7,730	5,211	4,112	360,460	7,986	0
60	10/9/2020	95.3	7,412	4,478	4,465	358,920	7,872	0
61	10/9/2020	98.5	7,513	5,301	4,102	361,100	7,661	0
62	10/9/2020	101.8	7,561	5,170	4,265	291,000	5,522	0
63	10/10/2020	97.9	7,350	5,622	4,472	369,520	7,773	0
64	10/10/2020	96.9	7,335	5,538	4,454	351,440	7,759	0
65	10/10/2020	100.5	7,130	5,460	4,074	356,200	7,875	0
66	10/11/2020	100.3	7,038	4,998	4,334	356,040	7,768	0
67	10/11/2020	99	7,239	5,490	4,648	362,020	7,915	0
68	10/11/2020	100.1	7,008	5,255	4,207	358,500	8,046	0
69	10/12/2020	98	6,992	5,205	4,220	359,960	7,875	0
70	10/12/2020	99.8	6,958	5,303	4,473	356,560	7,863	0
71	10/12/2020	99.1	7,040	5,898	4,321	353,360	7,924	0
72	10/13/2020	94	6,563	5,509	4,814	354,220	11,092	0
73	10/13/2020	99.8	7,136	5,665	4,650	351,170	7,923	0
74	10/13/2020	99.3	6,843	5,359	4,422	354,320	7,652	0
75	10/13/2020	96.2	6,708	5,559	4,442	374,100	7,991	0
76	10/14/2020	100.8	6,693	5,508	4,435	357,360	8,070	0
77	10/14/2020	99.7	6,601	4,518	4,267	354,060	7,733	0
78	10/14/2020	95	6,507	3,565	4,586	358,080	7,951	0
79	10/14/2020	100	6,491	4,512	4,951	359,280	7,902	0
80	10/14/2020	97.1	6,291	4,547	4,670	359,840	7,756	0
81	10/15/2020	98	6,420	5,291	4,612	346,960	7,434	0
82	10/15/2020	98.8	6,268	5,015	4,601	357,480	8,119	0

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Well Name: Franz Thoman OHI 5H 47069003110000

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	326.00	326.00	
Top of Salt Water	473.00	473.00	NA	NA	
Pittsburgh Coal	344.00	344.00	349.00	349.00	
Pottsville (ss)	463.00	463.00	824.00	824.00	
Raven Cliff (ss)	824.00	824.00	1111.00	1111.00	
Maxton (ss)	1111.00	1111.00	1430.00	1419.00	
Big Injun (ss)	1430.00	1419.00	5396.00	5327.00	
Rhinestreet (shale)	5396.00	5327.00	5689.00	5577.00	
Cashaqua (shale)	5689.00	5577.00	5760.00	5629.00	
Middlesex (shale)	5760.00	5629.00	5859.00	5695.00	
Burket (shale)	5859.00	5695.00	5886.00	5711.00	
Tully (ls)	5886.00	5711.00	5970.00	5761.00	
Mahantango (shale)	5970.00	5761.00	6153.00	5847.00	
Marcellus (shale)	6153.00	5847.00	NA	NA	GAS

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# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	9/15/2020
Job End Date:	10/15/2020
State:	West Virginia
County:	Ohio
API Number:	47-069-00311-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	FRANZ THOMAN OHI 5
Latitude:	40.13671364
Longitude:	-80.65983320
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	5,784
Total Base Water Volume (gal):	30,913,146
Total Base Non Water Volume:	0

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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					
			Water	7732-18-5	100.00000	89.66734	Density = 8.345
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	85.00000	0.19680	

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SWN FRW-11LC	SWN Well Services	Friction Reducer			Listed Below				
Plexaid 655WG	SWN Well Services	Scale Inhibitor			Listed Below				
HCL	SWN Well Services	Solvent			Listed Below				
Sand	SWN Well Services	Proppant			Listed Below				
Tolicide PS 50A	SWN Well Services	Biocide			Listed Below				
Econo-CI200	SWN Well Services	Corrosion Inhibitor			Listed Below				
Ecopol-FEAC	SWN Well Services	Iron Control			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	10.07011		
			Hydrochloric Acid	7647-01-0		15.00000	0.02270		
			Petroleum Distillates, Hydrotreated	64742-47-8		25.00000	0.01892		
			Tetrakis	55566-30-8		55.00000	0.01482		
			Glycerin	56-81-5		50.00000	0.00378		

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	Ammonium Chloride	12125-02-9	2.00000	0.00151
	Oleic Acid	93-83-4	1.50000	0.00114
	Diethanolamide			
	Alcohols, C12-1, ethoxylated	68551-12-2	1.50000	0.00114
	Diethylenetriamine penta	15827-60-8	10.00000	0.00076
	Acetic Acid	64-19-7	37.50000	0.00030
	Acrylic acid terpolymer	397256-50-7	1.00000	0.00027
	Methanol	67-56-1	80.00000	0.00019
	Citric Acid	77-92-9	22.50000	0.00018
	Oxyalkylated fatty acid	68951-67-7	9.67400	0.00002
	Fatty acids	61790-12-3	5.02700	0.00001
	Modified thiourea polymer	68527-49-1	4.74600	0.00001
	Potassium acetate	127-08-2	0.02200	0.00000
	Formaldehyde	50-00-0	0.00400	0.00000

\* 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)

09/10/2021



LATITUDE: 40°10'00" SURFACE HOLE (2000' SCALE)

9735'

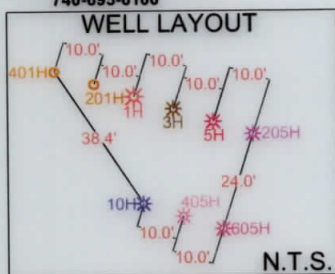
LATITUDE: 40°12'30" BOTTOM HOLE (2000' SCALE)

2540'

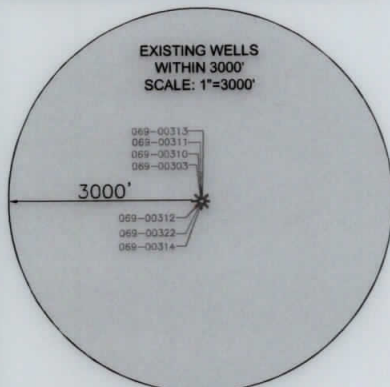


www.jhacompanies.com

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



LINE	BEARING	DISTANCE
L1	S57°45'12"E	1129.07'
L2	S81°01'32"E	1396.70'



<b>SURFACE HOLE LOCATION (SHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4442986.73 EASTING: 528978.58
<b>LANDING POINT LOCATION (LPL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4443180.49 EASTING: 529086.24
<b>BOTTOM HOLE LOCATION (BHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4448175.62 EASTING: 527617.96
<b>SURFACE HOLE LOCATION (SHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4442986.73 EASTING: 528978.58
<b>LANDING POINT LOCATION (LPL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4443137.54 EASTING: 529103.71
<b>BOTTOM HOLE LOCATION (BHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4448175.42 EASTING: 527616.71

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. 2041



(+) 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

FRANZ THOMAN OHI  
OPERATOR'S WELL #: 5H  
API WELL #: **47** **069** **00311**  
STATE COUNTY PERMIT

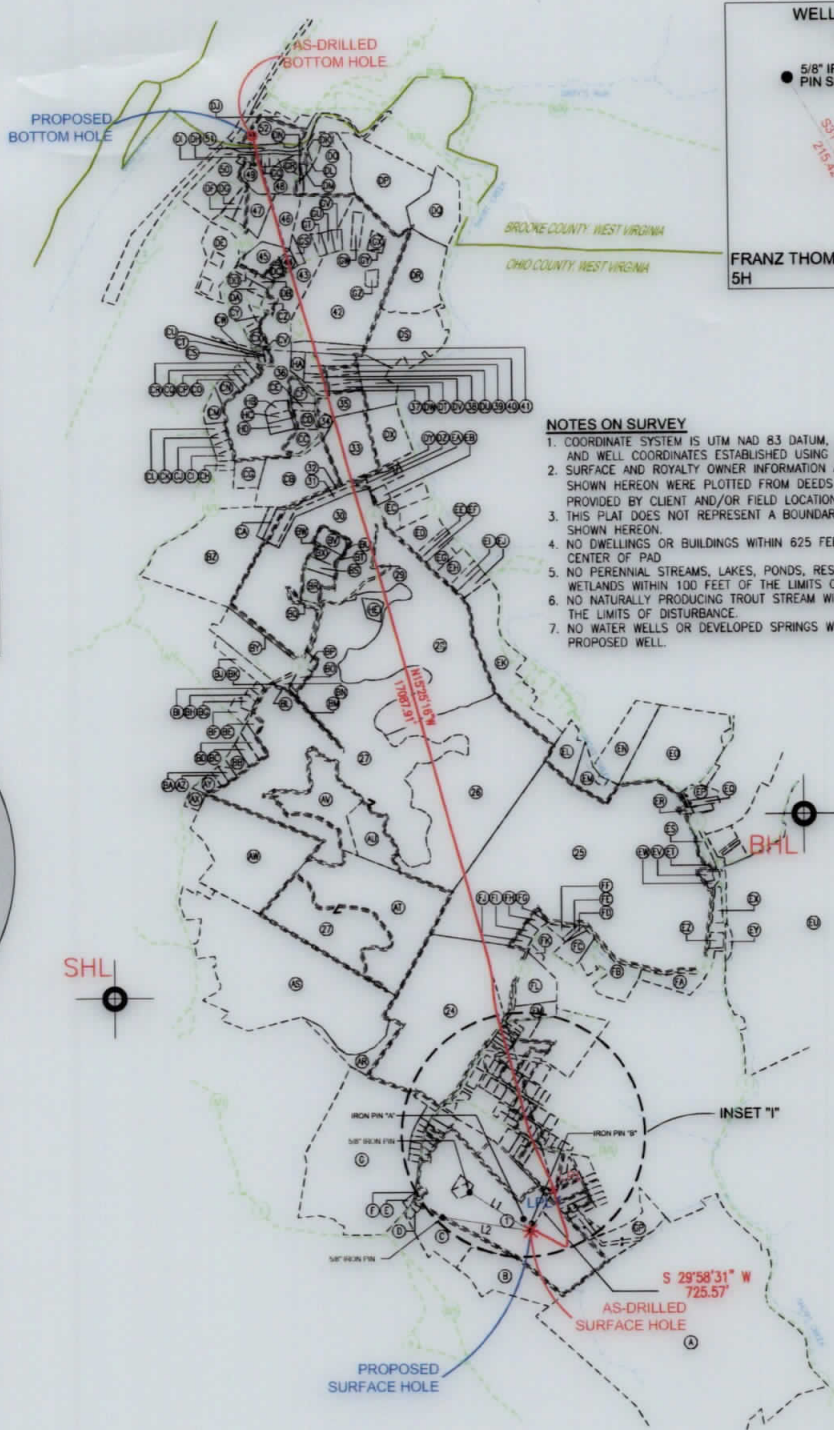
WELL TYPE: OIL  WASTE DISPOSAL  PRODUCTION  DEEP  GAS  LIQUID INJECTION  STORAGE  SHALLOW

WATERSHED: UPPER OHIO SOUTH  
DISTRICT: RICHLAND COUNTY: OHIO  
SURFACE OWNER: FRANZ THOMAN  
OIL & GAS ROYALTY OWNER: FRANZ THOMAN  
ELEVATION: 1,137.3'  
QUADRANGLE: TILTONSVILLE, OH-WV  
ACREAGE: ±69.418  
ACREAGE: ±69.418

DRILL  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE  CONVERT  PLUG & ABANDON  CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY) AS-DRILLED  
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 5,877' TVD 23,565' TMD

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

LEGEND:	REVISIONS:	DATE:
○ EXISTING BOTTOM HOLE		06-03-2020
★ EXISTING / PRODUCING WELLHEAD		API NO: 47-069-00311
LPL★ EXISTING LANDING POINT LOCATION		DRAWN BY: R. GRIMES
○ PROPOSED SURFACE HOLE / BOTTOM HOLE		SCALE: 1" = 3000'
LPL★ PROPOSED LANDING POINT LOCATION		DRAWING NO: 2018-781
		WELL LOCATION PLAT



NOTES ON SURVEY

- COORDINATE SYSTEM IS UTM NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- 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.
- NO DWELLINGS OR BUILDINGS WITHIN 625 FEET OF PROPOSED CENTER OF PAD.
- NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF THE LIMITS OF DISTURBANCE.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.



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

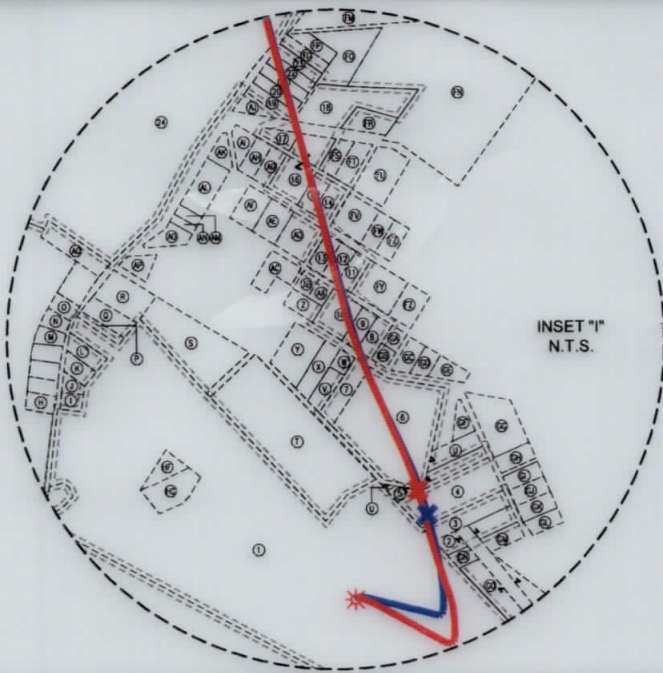
LONGITUDE: 80°40'00" BOTTOM HOLE (2000' SCALE)

LONGITUDE: 80°37'30" SURFACE HOLE (2000' SCALE)

10938'

9065'





WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	FRANZ THOMAN (S)/(R)	04-R8-62.0
TRACT	SURFACE OWNER	TAX PARCEL
2	FRANK J. & DARA R. TAROVISKY	04-R8Q-28.0
3	JOLLY W., JR. & KAREN M. WHEELER	04-R8Q-14.0
4	DALE E. & BEVERLY J. KURNER	04-R8Q-12.0
5	AMY D. DAGUE	04-R8Q-11.0
6	JOHN T. WRIGHT	04-R8P-11.0
7	JACK E. & CONNIE B. KING	04-R8P-10.0
8	ROBERT L. RITNER	04-R8K-80.0
9	MATTHEW C. MOORE & JANICE D. CLATTERBUCK	04-R8K-79.0
10	DANDACE M. GOINES	04-R8K-78.0
11	JENNIFER M. ASSARO	04-R8K-35.0
12	CECIL H. & ANGELINE P. TOUT	04-R8K-36.0
13	GARY L. & BEVERLY K. GOCKSTETTER	04-R8K-37.0
14	THOMAS P. & VERONICA L. GIBSON	04-R8K-24.0
15	THOMAS P. & VERONICA L. GIBSON	04-R8K-23.0
16	CLYDE W. & VERONICA L. GIBSON	04-R8K-22.0
17	JAMES A. SCHEUER, JR.	04-R8K-20.0
18	ADAM B. & STACEY L. CAMPBELL	04-R8K-07.0
19	REGINA A. CRISP	04-R8K-05.0
20	REGINA A. CRISP	04-R8K-04.1
21	WILLIAM A. VENSOSKE, JR.	04-R8K-03.0
22	FRANCES M. RAYMAND	04-R8K-02.0
23	DAVID A. HENDERSON	04-R8K-01.0
24	THE KATHLEEN S. CRAFT FOUNDATION & THE JOSEPH W. CRAFT, III FOUNDATION	04-R8-05.0
25	THE KATHLEEN S. CRAFT FOUNDATION & THE JOSEPH W. CRAFT, III FOUNDATION	04-R8-06.0
26	THE KATHLEEN S. CRAFT FOUNDATION & THE JOSEPH W. CRAFT, III FOUNDATION	04-R5-43.0
27	TUNNEL RIDGE, LLC	04-R5-40.7
28	THE KATHLEEN S. CRAFT FOUNDATION & THE JOSEPH W. CRAFT, III FOUNDATION	04-R5-42.1
29	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS	CLEARVIEW AVE
30	RALPH J. & BEVERLY KRASEVEC	04-R5-21.10
31	TUNNEL RIDGE, LLC	04-R5-21.13
32	TUNNEL RIDGE, LLC	04-R5-21.2
33	HAROLD & LINDA COAST	04-R5-02.26
34	TODD A. & VICKIE W. BAUER	04-R5-02.41
35	PAUL J. & RENEE A. MARCHESE	04-R5-02.40
36	JAMES M., JR. & TINA M. FRAGALE	04-R5-02.0
37	BRADLEY G. & CHEYENNE M. MAYLE	04-R5-02.59
38	STEPHEN A., JR. & LINDSEY D. KING	04-R5-02.53
39	ROBBIE J. & REBECCA J. MUNDY	04-R5-02.46
40	DANIEL D. & KAREN L. JAMISON	04-R5-02.52
41	THOMAS H. & MARGARET A. STENGER	04-R5-62.0
42	THOMAS H. & MARGARET A. STENGER	04-R2-06.0
43	THOMAS H. & MARGARET A. STENGER	04-R2-06.1
44	CHARLES R. & JENNIFER S. BYRUM	04-R2-06.24
45	KEITH A. & DRUSILLA D. WEAR	04-R2-06.4
46	KEITH & BETH A. FEDORKE	04-R2-06.2
47	JUDY L. POKAS	04-R2-06.3
48	GLENN & PAULINE MIDCAP	04-R2-07.0
49	JOHN ELMER INMAN	04-R2-04.0
50	STATE OF WEST VIRGINIA, DEPARTMENT OF HIGHWAYS	04-R4-9999-9999
51	WEST VIRGINIA DIVISION OF NATURAL RESOURCES	SHORT CREEK
52	ERICA HONE, SINGLE, VAUGHN C. HONE, JR., DIVORCED, JOHN P. MCCONAUGHEY, SINGLE	03-B45D-09.0

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	SANDCREST FOUNDATION, INC	04-R11-15.0
B	TUNNEL RIDGE, LLC	04-R8-62.5
C	TUNNEL RIDGE, LLC	04-R8-62.4
D	TUNNEL RIDGE, LLC	04-R8P-14.0
E	SHIRLEY M. WEAVER	04-R8P-02.0
F	TUNNEL RIDGE, LLC	04-R8P-16.0
G	THE KATHLEEN S. CRAFT FOUNDATION & THE JOSEPH W. CRAFT, III FOUNDATION	04-R8-51.0
H	JOHN M. MCGEE	04-R8P-17.0
I	DONALD P. GAYDA	04-R8P-18.0
J	CHARLES R. BOND	04-R8K-110.0
K	TYLER S. SCHWERTFEGER	04-R8K-111.0
L	TYLER S. SCHWERTFEGER	04-R8K-112.0
M	ELMER K. REED	04-R8K-106.0
N	ELMER REED	04-R8K-105.0
O	BERNARD H. & KIMBERLY J. BOZENSKE	04-R8K-104.0
P	RAY B. & ANN M. WILSON	04-R8-62.7
Q	ERIC DURELL & CHERYL LYNN RICHARDSON	04-R8-62.6
R	DAVID R. & KAREN MULDREW	04-R8K-101.0
S	DELORA L. TAYLOR	04-R8K-100.0
T	SUSAN J. SOBOTA	04-R8-62.3
U	JACQUELINE MICHELLE SUTTON	04-R8Q-10.0
V	JACK W. PARSONS & CONNIE B. KING	04-R8K-99.1
W	LEON W. FALCON	04-R8K-99.0
X	SUSAN J. & JOSEPH G. SOBOTA	04-R8K-98.0
Y	SUSAN J. SOBOTA	04-R8K-96.0
Z	SCOTT A. & TRACY L. LEFKAY	04-R8K-76.0
AA	MARK A. HOUSER	04-R8K-75.0
AB	MARK A. HOUSER	04-R8K-72.0
AC	NORMAN J. & RUTH L. BROSKI	04-R8K-69.0
AD	BONNIE J. TREIBER	04-R8K-38.0
AE	JOHN J. TREIBER, JR.	04-R8K-46.0
AF	ANTHONY L. & SANDRA L. ASSARO	04-R8K-50.0
AG	JAMES A. SCHEUER, JR.	04-R8K-20.0
AH	JAMES A. SCHEUER, JR.	04-R8K-19.0
AI	ALFREDO AGUIRRE	04-R8K-18.0
AJ	CARL E., JR. & SHARON D. PAUL	04-R8K-06.0
AK	RICHARD J. WEILER	04-R8K-54.0
AL	RICHARD J. WEILER	04-R8K-55.0
AM	TIMOTHY G. HEATH	04-R8K-59.0
AN	TIMOTHY G. HEATH	04-R8K-60.0
AO	SHAWN C. DENARD	04-R8K-62.0
AP	DAVID R. & KAREN MULDREW	04-R8K-86.0
AQ	ROBERT D. & PATSY G. HERCULES	04-R8K-113.0
AR	THE KATHLEEN S. CRAFT FOUNDATION & THE JOSEPH W. CRAFT, III FOUNDATION	04-R8-04.13
AS	PAUL BAKER	04-R8-04.18
AT	THE KATHLEEN S. CRAFT FOUNDATION & THE JOSEPH W. CRAFT, III FOUNDATION	04-R8-3.1
AU	THE KATHLEEN S. CRAFT FOUNDATION & THE JOSEPH W. CRAFT, III FOUNDATION	04-R8-71.0
AV	THE KATHLEEN S. CRAFT FOUNDATION & THE JOSEPH W. CRAFT, III FOUNDATION	04-R5-40.0
AW	TUNNEL RIDGE, LLC	04-R8-03.2
AX	RICHARD A. & NANCY SCHELL	04-R8-01.1
AY	PAUL & REBECCA WEIGAND FAMILY TRUST	04-R5-40.1

09/10/2021

REVISIONS:	COMPANY: <b>SWN</b> Production Company, LLC		DATE: 06-03-2020	
	OPERATOR'S: FRANZ THOMAN OHI		API NO: 47-069-00311	
	WELL #: 5H		DRAWN BY: R. GRIMES	
	DISTRICT: RICHLAND	COUNTY: OHIO	STATE: WV	SCALE: N/A
				DRAWING NO: 2018-781
				WELL LOCATION PLAT



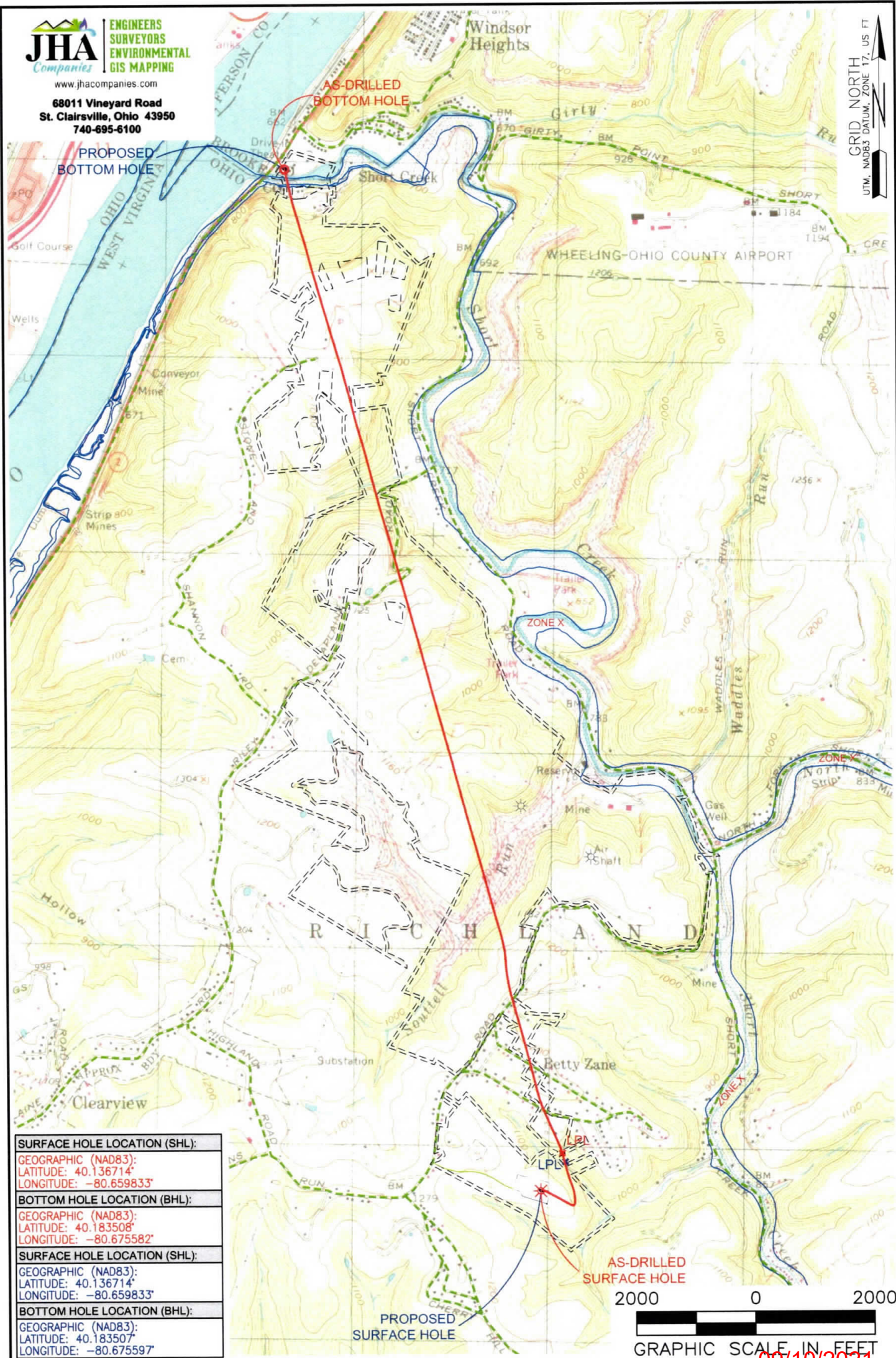
ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
AZ	RICHARD A. & JOAN E. KLEMM	04-R5-36.1
BA	MARK R. ANTLEY & ELLIE ANTLEY	04-R5-36.2
BB	JOSEPH L. MONTEMURRO	04-R5-37.0
BC	ANTHONY J. BRANCH, JR. & TEXANNA BRANCH	04-R5-38.0
BD	TIMOTHY R. BAKER	04-R5-39.0
BE	CLARENCE F. HOWELL & DIANA MAE HOWELL	04-R5-40.3
BF	CHRISTOPHER & JENNIFER MEANS	04-R5-30.7
BG	CARL J. KUCERA	04-R5-30.3
BH	BETTY JO BOWMAN	04-R5-29.0
BI	MARGARET ANN SCHENERLEIN & KIM M. WILDS	04-R5-28.0
BJ	MARGARET A. SCHENERLEIN & SUNDAE L. FASSIG	04-R5-27.0
BK	TUNNEL RIDGE, LLC	04-R5-40.5
BL	RONALD L. & SANDRA L. RICHIE	04-R5-40.6
BM	TUNNEL RIDGE, LLC	04-R5-40.4
BN	RONALD L. & SANDRA L. RICHIE	04-R5-40.2
BO	RONALD L. & SANDRA L. RICHIE	04-R5-42.2
BP	JAMES RAPER	04-R5-41.0
BQ	RALPH JAY KRASEVEC	04-R5-21.11
BR	RALPH J. & BEVERLY A. KRASEVEC	04-R5-21.1
BS	TUNNEL RIDGE, LLC	04-R5-21.2
BT	RALPH JAY KRASEVEC	04-R5-21.0
BU	RALPH J. & BEVERLY A. KRASEVEC	04-R5-21.9
BV	TIMOTHY TRACY	04-R5-21.4
BW	TIMOTHY S. & TAMMY R. TRACY	04-R5-21.8
BX	TIMOTHY S. TRACY	04-R5-21.6
BY	RALPH J. & BEVERLY A. KRASEVEC	04-R5-21.3
BZ	JULIE B. KLEIN, JUDITH A. PATTI & SARA L. PLUMBY-ELLIS	04-R5-22.0
CA	THE KATHLEEN S. CRAFT FOUNDATION & THE JOSEPH W. CRAFT, III FOUNDATION	04-R5-22.1
CB	JULIE B. KLEIN, JUDITH A. PATTI & SARA L. PLUMBY-ELLIS	04-R5-22.0
CC	GEORGE M. ROMAN	04-R5-2.43
CD	DOUGLAS W. & KRISTINE L. MIDCAP	04-R5-2.58
CE	RYAN O. BLAKE & MARLA M. BLAKE	04-R5-2.42
CF	BARKER KEYSTONE TRUST AGREEMENT	04-R5-2.55
CG	LAWRENCE P. & BARBARA J. NEIDERT	04-R5-67.0
CH	LARRY P. NEIDERT & BARBARA J. NEIDERT	04-R5-02.1
CI	THOMAS H. & MARGARET A. STENGER	04-R5-05.0
CJ	JAMES A. & G.A. RUDOL	04-R5-02.8
CK	DAVID L. CANTRELL & REBECCA L. CANTRELL	04-R5-04.0
CL	JOSEPH M. & JOHANNA STIGLICH	04-R5-02.11
CM	FRANK D. WILKINSON & KATHRYN E. WILKINSON	04-R5-03.0
CN	GEORGE S. & LISA M. ANGALICH	04-R5-02.34
CO	JAMES, JR. & TINA M. FRAGALE	04-R5-02.27
CP	DAVID S. & DIANE J. HUNLEY	04-R5-02.37
CQ	THOMAS & DEBRA FAULSTICK	04-R5-02.36
CR	THOMAS & DEBRA FAULSTICK	04-R5-02.35
CS	BETTY F. DOPKO	04-R5-01.0
CT	REBECCA A. JACK	04-R5-01.2
CU	REBECCA A. JACK	04-R5-01.1
CV	REBECCA A. JACK	04-R5-71.0
CW	DAVID & D. KENDZERSKI	04-R5-02.7
CX	CHARLES A. & MICHELLE R. FISHER	04-R5-74.0
CY	DEBBIE SCHRADER	04-R2-06.19
CZ	CARL JACOBSON	04-R2-06.18
DA	JOSE & DANIELLE FUENTES	04-R2-06.10
DB	BETTY A. BAKER	04-R2-06.9
DC	STEVEN L. & SARAH M. OCHAP	04-R2-06.15
DD	ROBERT & AMY RICHARD	04-R2-06.12
DE	JEFFREY W. & CYNTHIA A. SIEGWART	04-R2-02.0
DF	DENNIS H. & KELLY YOUNG BAKER	04-R2-02.4
DG	DENNIS H. & KELLY YOUNG BAKER	04-R2-02.5
DH	GLEN O. CRUPE	04-R2-04.1
DI	STATE OF WEST VIRGINIA, DEPARTMENT OF HIGHWAYS	STATE ROUTE 2
DJ	ERICA HONE, VAUGHN C. HONE, JR., DIVORCED, JOHN P. MCCONAGHEY, SINGLE	03-B45D-10.0
DK	PHILLIP N. WAGNER & DENNIS D. WAGNER	04-R2-11.0
DL	ROBERT L. & DELMA LOU HUFFMAN	04-R2-10.0
DM	CHARLES GEORGE ADAMS	04-R2-09.0
DN	MARY E. MIDCAP	04-R2-14.1
DO	MARY E. MIDCAP	04-R2-14.0
DP	PAMELA & RYAN CHILES	04-R2-16.0
DQ	SYLVIA A. HAWRANICK	04-R2-18.0
DR	GUY D. & LORI R. DONZELLA	04-R2-19.0
DS	CHARLES H. FRYE, DORIS ALTMAYER & ROBIN THOMAS	04-R5-06.0
DT	JAMES M. & NANCY L. FRYE	04-R5-02.10
DU	PAUL R. & OLIVE L. MCGEE	04-R5-02.44
DV	VICKIE L. SMITH	04-R5-02.45
DW	STEVE M. & RHONDA L. SARRAS	04-R5-02.49
DX	HAROLD L. & LINDA L. COAST	04-R5-02.9
DY	KIMBERLY TAGGART	04-R5-20.3
DZ	JOSEPH ROTH	04-R5-72.0
EA	VELMA LOUISE TAGGART	04-R5-20.0
EB	DENNIS J. & SHEINA L. HOSKINS	04-R5-20.6
EC	BRIAN W. AND MELINDA K. SOWIZRAL	04-R5-20.1
ED	ROBERT N. & CHARLOTTE L. CONNER	04-R5-17.0
EE	DALE A. & JENNIFER A. VILLANI	04-R5-16.0

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
EF	THERESE M. FLICK	04-R5-15.0
EG	HELEN TAYLOR	04-R5-12.1
EH	JULIE A. KOEHLER	04-R5-45.13
EI	JULIE A. KOEHLER	04-R5-45.4
EJ	ROBERTA M. & GEORGE B. KORNER	04-R5-45.12
EK	JOHN W. METZ	04-R5-45.11
EL	ALLIANCE RESOURCE GROUP, LLC	04-R5-45.6
EM	THE KATHLEEN S. CRAFT FOUNDATION & THE JOSEPH W. CRAFT, III FOUNDATION	04-R5-52.0
EN	THE KATHLEEN S. CRAFT FOUNDATION & THE JOSEPH W. CRAFT, III FOUNDATION	04-R5-53.0
EO	ANDREW JOHN EVICK	04-R5-54.0
EP	SUSAN L. CAIN	04-R8-08.3
EQ	TUNNEL RIDGE, LLC	04-R8-08.2
ER	TUNNEL RIDGE, LLC	04-R8-08.9
ES	OHIO COUNTY COMMISSION	04-R8-08.16
ET	JUDITH K. TYLER	04-R8-08.8
EU	AMERICAN DISPOSAL SERVICES OF WEST VIRGINIA, INC	04-R8-15.0
EV	LOUIS R. HERCULES, SIDNEY HERCULES, YVONNE LOUGH, CONNIE SMITH, LOIS E. HERCULES, DERRICK WAYNE HERCULES, CHARLES W. HERCULES, BRENDA HERCULES, GERTRUDE ETHRIDGE & SONYA CARROLL	04-R8-07.0
EW	DEBRA S. SHEPHERD	04-R8-15.2
EX	WV DOT, DIVISION OF HIGHWAYS	4-R8-0
EY	CHARLES M. & M.M. MILLER	04-R8-15.3
EZ	SUZANNE V. STANLEY	04-R8-23.0
FA	TUNNEL RIDGE, LLC	04-R8-76.0
FB	DONALD R. & MINNIE JEAN TAYLOR, KIMBERLY J. KOCHY & TAMI L. TYSK	04-R8-28.0
FC	JAMES G. & TAMI L. TYSK	04-R8-28.5
FD	BARRY L. AND PENNY S. MCCONNELL	04-R8-28.12
FE	BARRY L. AND PENNY S. MCCONNELL	04-R8-28.4
FF	BARRY L. PENNY S. MCCONNELL	04-R8-29.1
FG	RICHARD, JR. & LINDA L. CARROLL	04-R8-06.1
FH	RICHARD, JR. & LINDA L. CARROLL	04-R8-33.0
FI	JOHN PAUL & PAMELA JEAN BARBALEY	04-R8-33.2
FJ	WILLIAM F. WENDEL	04-R8-33.1
FK	MARGUERITE A. COLEMAN	04-R8-30.1
FL	JOHN A. & PATRICIA A. HARGEROAD	04-R8-31.0
FM	CARRIE MARILYN & RICHARD MATTHEW JOHNSON	04-R8-32.0
FN	ADAM B. & STACEY L. CAMPBELL	04-R8F-03.0
FO	ADAM B. & STACEY L. CAMPBELL	04-R8F-03.1
FP	HARRY JAMES MAYLES	04-R8F-02.0
FQ	HARRY JAMES MAYLES	04-R8F-01.0
FR	ADAM B. & STACEY L. CAMPBELL	04-R8K-07.1
FS	THOMAS P. & VERONICA L. GIBSON	04-R8K-23.0
FT	THOMAS P. & VERONICA L. GIBSON	04-R8K-24.0
FU	SAMUEL B. & MELISSA M. MIKES	04-R8K-25.1
FV	SAMUEL B. & MELISSA M. MIKES	04-R8K-25.0
FW	STANLEY E. & BONNIE L. PEKULA	04-R8K-27.0
FX	SHAWN L. SNODGRASS	04-R8L-07.0
FY	HENRY & PATRICIA LOUISE WISVARI	04-R8K-34.0
FZ	SCOTT A. & JESSICA L. DEPRIEST	04-R8K-30.0
GA	SYLVESTER L. GRANT & EDWARD P. PRATHER	04-R8K-81.0
GB	SYLVESTER L. GRANT & EDWARD P. PRATHER	04-R8K-84.0
GC	LINDA FAYE & THEODORE ZANE SHOWALTER	04-R8K-85.0
GD	GARRETT L. & SHELLY L. COX	04-R8L-36.0
GE	ELLA JANE CUSTER & DONNA JUNKINS	04-R8L-37.0
GF	CHASE E. & F.V. VARNER (C/O: JACQUELINE SUTTON)	04-R8Q-09.0
GG	BETTY ZANE COMMUNITY ASSOCIATION	04-R8Q-34.0
GH	STEVEN M. GORBY	04-R8Q-31.0
GI	ROGER L. MOORE	04-R8Q-30.1
GJ	JOLLY W. WHEELER, JR. & KAREN M. WHEELER	04-R8Q-29.0
GK	FRANK JOSEPH TAROVISKY & SARA RENEE TAROVISKY	04-R8Q-28.0
GL	PAULA J. & EDWARD C. TOMASIK	04-R8Q-27.0
GM	PAULA J. & EDWARD C. TOMASIK	04-R8Q-16.0
GN	PAULA J. & EDWARD C. TOMASIK	04-R8Q-03.0
GO	RUSSELL E. TARAMANA & ROSEANN L. TARAMANA	04-R8Q-02.0
GP	RALPH J. HUFFMAN & KENDRA L. HUFFMAN	04-R8Q-60.0
GQ	MICHAEL R. & L.J. DONZELLA	04-R2-05.0
GR	JOHN ELMER INMAN	04-R2-03.0
GS	GRACE A. DAVIS & STACY N. RENFORTH	04-R2-06.22
GT	BARBARA & ROBERT RUSH	04-R2-06.20
GU	SCOTT & CHRISTINA DENTZ	04-R2-06.21
GV	MATTHEW T. BURKE	04-R2-06.13
GW	CHAD MARTIN	04-R2-06.16
GX	WILLIAM SCOTT DONOHEW & LAURA JEAN DONOHEW	04-R2-06.8
GY	WILLIAM SCOTT DONOHEW & LAURA JEAN DONOHEW	04-R2-06.11
GZ	TODD & PATRICIA STENGER	04-R2-06.23
HA	CURT M. & TAMMI L. SECRIST	04-R5-02.50
HB	SCOTT A. & MELISSA A. MEALY	04-R5-02.63
HC	SCOTT A. & MELISSA A. MEALY	04-R5-02.61
HD	PAUL R. & CHRISTINA E. DAVIS	04-R5-02.62
HE	RALPH J. KRASEVEC, JR.	04-R5-42.0
HF	KASIMIR MAJEWSKI & EDWARD A. MAJEWSKI	04-R8-62.2
HG	KASIMIR MAJEWSKI & EDWARD A. MAJEWSKI	04-R8-62.8

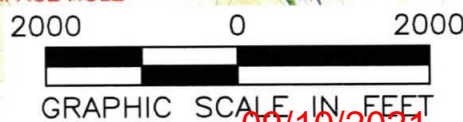
09/10/2021

REVISIONS:	COMPANY: <b>SWN</b> Production Company, LLC		DATE: 06-03-2020	
	OPERATOR'S: <b>FRANZ THOMAN OHI</b>		API NO: 47-069-00311	
	WELL #: <b>5H</b>		DRAWN BY: R. GRIMES	
	DISTRICT: <b>RICHLAND</b>	COUNTY: <b>OHIO</b>	STATE: <b>WV</b>	SCALE: <b>N/A</b>
				DRAWING NO: 2018-781
				WELL LOCATION PLAT





<b>SURFACE HOLE LOCATION (SHL):</b>
GEOGRAPHIC (NAD83): LATITUDE: 40.136714° LONGITUDE: -80.659833°
<b>BOTTOM HOLE LOCATION (BHL):</b>
GEOGRAPHIC (NAD83): LATITUDE: 40.183508° LONGITUDE: -80.675582°
<b>SURFACE HOLE LOCATION (SHL):</b>
GEOGRAPHIC (NAD83): LATITUDE: 40.136714° LONGITUDE: -80.659833°
<b>BOTTOM HOLE LOCATION (BHL):</b>
GEOGRAPHIC (NAD83): LATITUDE: 40.183507° LONGITUDE: -80.675597°



**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.

RECEIVED  
 Office of Oil and Gas  
 JAN 29 2021

**LEGEND:**

EXISTING BOTTOM HOLE	ACCESS ROAD
EXISTING / PRODUCING WELLHEAD	PUBLIC ROAD
EXISTING LANDING POINT LOCATION	FLOOD PLAIN
PROPOSED SURFACE HOLE / BOTTOM HOLE	LEASE BOUNDARY
PROPOSED LANDING POINT LOCATION	AS-DRILLED PATH

<b>WELL OPERATOR:</b> SWN PRODUCTION COMPANY, LLC	<b>WV Department of Environmental Protection</b>	<b>WELL (FARM) NAME:</b> FRANZ THOMAN OHI	<b>WELL #</b> 5H	<b>SERIAL #</b> XXXX
<b>ADDRESS:</b> 1300 FORT PIERPONT DRIVE, SUITE 201, MORGANTOWN, WV 26508	<b>COUNTY:</b> OHIO	<b>CODE:</b> 069	<b>DISTRICT:</b> RICHLAND	<b>API #</b> 47-069-00311
<b>SURFACE OWNER:</b> FRANZ THOMAN	<b>USGS 7 1/2 QUADRANGLE MAP NAME:</b> TILTONVILLE, OH-WV			