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west virginia department of environmental protection

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Office of Oil and Gas  
601 57<sup>th</sup> Street, S.E.  
Charleston, WV 25304  
(304) 926-0450  
fax: (304) 926-0452

Austin Caperton, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Monday, October 7, 2019  
PERMIT MODIFICATION APPROVAL  
Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC  
POST OFFICE BOX 12359

SPRING, TX 773914954

Re: Permit Modification Approval for FRANZ THOMAN OHI 1  
47-069-00303-00-00

**Lateral Addition**

SWN PRODUCTION COMPANY, LLC

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin  
Chief

A handwritten signature in blue ink, appearing to read 'James A. Martin', is written over the typed name and title.

Operator's Well Number: FRANZ THOMAN OHI 1  
Farm Name: FRANZ THOMAN  
U.S. WELL NUMBER: 47-069-00303-00-00  
Horizontal 6A New Drill  
Date Modification Issued: October 07, 2019

Promoting a healthy environment.

August 15, 2019

Ms. Laura Adkins  
Office of Oil & Gas  
601 57<sup>th</sup> Street  
Charleston, WV 25304

**RE:** Modification: Franz Thoman OHI 1H

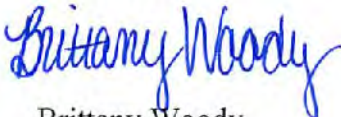
Dear Ms. Adkins

Enclosed please find the Updated 6B, Casing, WBD, Mylar, Leases, and Road Letter for the above captioned well. We are modifying this vertical permit to a horizontal. This well is situated on the Homan's property, in Richalnd District, Ohio County, West Virginia.

If you have any questions or desire additional information, please me at 304-884-1613

Thank you.

Sincerely,



Brittany Woody  
Senior Regulatory Analyst  
Southwestern Energy Production Company, LLC

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$\frac{R^+}{A} \rightarrow V^+$

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
WELL WORK PERMIT APPLICATION

1) Well Operator: SWN Production Co., LLC 494512924 069-Ohio 4-Richlar 641-Tiltonsville  
Operator ID County District Quadrangle

2) Operator's Well Number: Franz Thoman OHI 1H Well Pad Name: Franz Thoman PAD

3) Farm Name/Surface Owner: Franz Thoman Public Road Access: Cherry Hill Road CR 3

4) Elevation, current ground: 1138' Elevation, proposed post-construction: 1140'

5) Well Type (a) Gas  Oil \_\_\_\_\_ Underground Storage \_\_\_\_\_

Other \_\_\_\_\_

(b) If Gas Shallow  Deep \_\_\_\_\_

Horizontal  \_\_\_\_\_

6) Existing Pad: Yes or No No

*C. J. [Signature]* 7-30-19

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):

Target Formation- Marcellus, Up-Dip Well to the North, Target Top TVD- 5847', Target Base TVD- 5902', Anticipated Thickness- 55', Associated Pressure- 3636

8) Proposed Total Vertical Depth: 5885'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 21,526'

11) Proposed Horizontal Leg Length: 15,214.25'

12) Approximate Fresh Water Strata Depths: 325'

13) Method to Determine Fresh Water Depths: Determined to be minimum casing depth required by DEP, no nearby water wells, logs will be run on 1st well on pad.

14) Approximate Saltwater Depths: 470' salinity profile

15) Approximate Coal Seam Depths: 342'

16) Approximate Depth to Possible Void (coal mine, karst, other): None that we are aware of.

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes \_\_\_\_\_ No

(a) If Yes, provide Mine Info: Name: \_\_\_\_\_

Depth: \_\_\_\_\_

Seam: \_\_\_\_\_

Owner: \_\_\_\_\_

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18) CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	H-40	94#	100'	100'	CTS
Fresh Water	13 3/8"	New	H-40	48#	425'	425'	414 sx/CTS
Coal	See	Surface	Casing				
Intermediate	9 5/8"	New	J-55	36#	1747'	1747'	678 sx/CTS
Production	5 1/2"	New	HCP-110	20#	21,526'	21,526'	1641 745x Tail 2045x inside interm. 4
Tubing							
Liners							

*Handwritten signature and date: 7-30-19*

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	30"	0.25	2120	81	Class A	1.19/50% Excess
Fresh Water	13 3/8"	17.5"	0.380	2740	633	Class A	1.19/50% Excess
Coal	See	Surface	Casing				
Intermediate	9 5/8"	12 1/4"	0.395	3950	1768	Class A	1.19/50% Excess
Production	5 1/2"	8 3/4"	0.361	12360	9500	Class A	1.20/50% Excess
Tubing							
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

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19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill and stimulate any potential zones between and including the Benson to Marcellus. \*\*If we should encounter a void place basket above and below void area- balance cement to bottom of void and grout from basket to surface or run external casing packer/cementing stage tool above void interval and perform 2 stage cementing operation dependent upon depth of void. Run casing not less than 20' below void nor more than 75' below void. (\*If freshwater is encountered deeper than anticipated it must be protected, set casing 50' below and cts.)

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Well will be perforated within the target formation and stimulated with a slurry of water, sand, and chemical additives at a high rate. This will be performed in stages with the plug and perf method along the wellbore until the entire lateral has been stimulated within the target formation. All stage plugs are then drilled out and the well is flowed back to surface. The well is produced through surface facilities consisting of high pressure production units, horizontal separation units, water and oil storage tanks. Max press and anticipated max rate- 9000 lbs @ 100 barrels a minute.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 22.65

22) Area to be disturbed for well pad only, less access road (acres): 12.98

23) Describe centralizer placement for each casing string:

All casing strings will be ran with a centralizer at a minimum of 1 per every 3 joints of casing.

24) Describe all cement additives associated with each cement type:

See Attachment \*\*\*

25) Proposed borehole conditioning procedures:

All boreholes will be conditioned with circulation and rotation for a minimum of one bottoms up and continuing until operator is satisfied with borehole conditions.

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Page 3 of 3

\*Note: Attach additional sheets as needed.

**Southwestern Energy Company**

**Proposed Drilling Program**

Well: FRANZ THOMAN OHI 1 Re-entry Rig: TBD  
 Field: PANHANDLE FIELD \ Prospect: PANHANDLE  
 County: OHIO State: WV  
 SHL: 40.1367 Latitude -80.6599 Longitude  
 BHL: 40.1773 Latitude -80.6788 Longitude  
 KB Elev: 1,164 ft MSL KB: 26 ft AGL GL Elev: 1,138 ft MSL



*C. R. Hall*  
 7-30-19

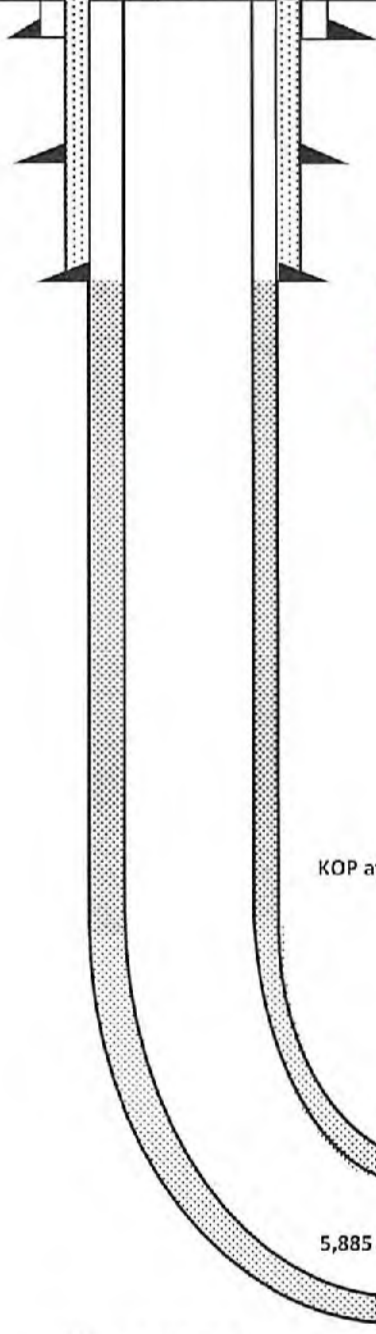
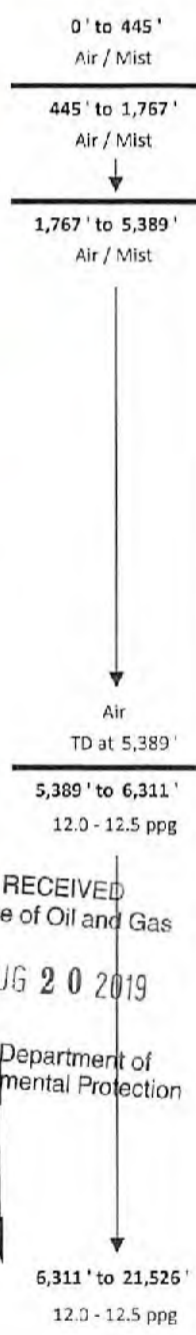
PROD TOC Lead @ 1,767 ' MD  
 PROD TOC Tail @ 5,100 ' MD

**TUBULAR DETAIL**

	Size (in)	Weight	Grade	From	To
Conductor:	20	94.0 #	H-40	0'	100'
Surf./Coal:	13.375	48.0 #	H-40	0'	425'
Intermediate:	9.625	36.0 #	J-55	0'	1,747'
Production:	5.5	20.0 #	HCP-110	0'	21,526'

**CEMENT DETAIL**

	Sacks	Class	Density
Conductor	151	A	19.3
Surface	414	A	15.6
Intermediate	678	A	15.6
Production Lead	745	A	15.6
Production Tail	3648	A	15.6

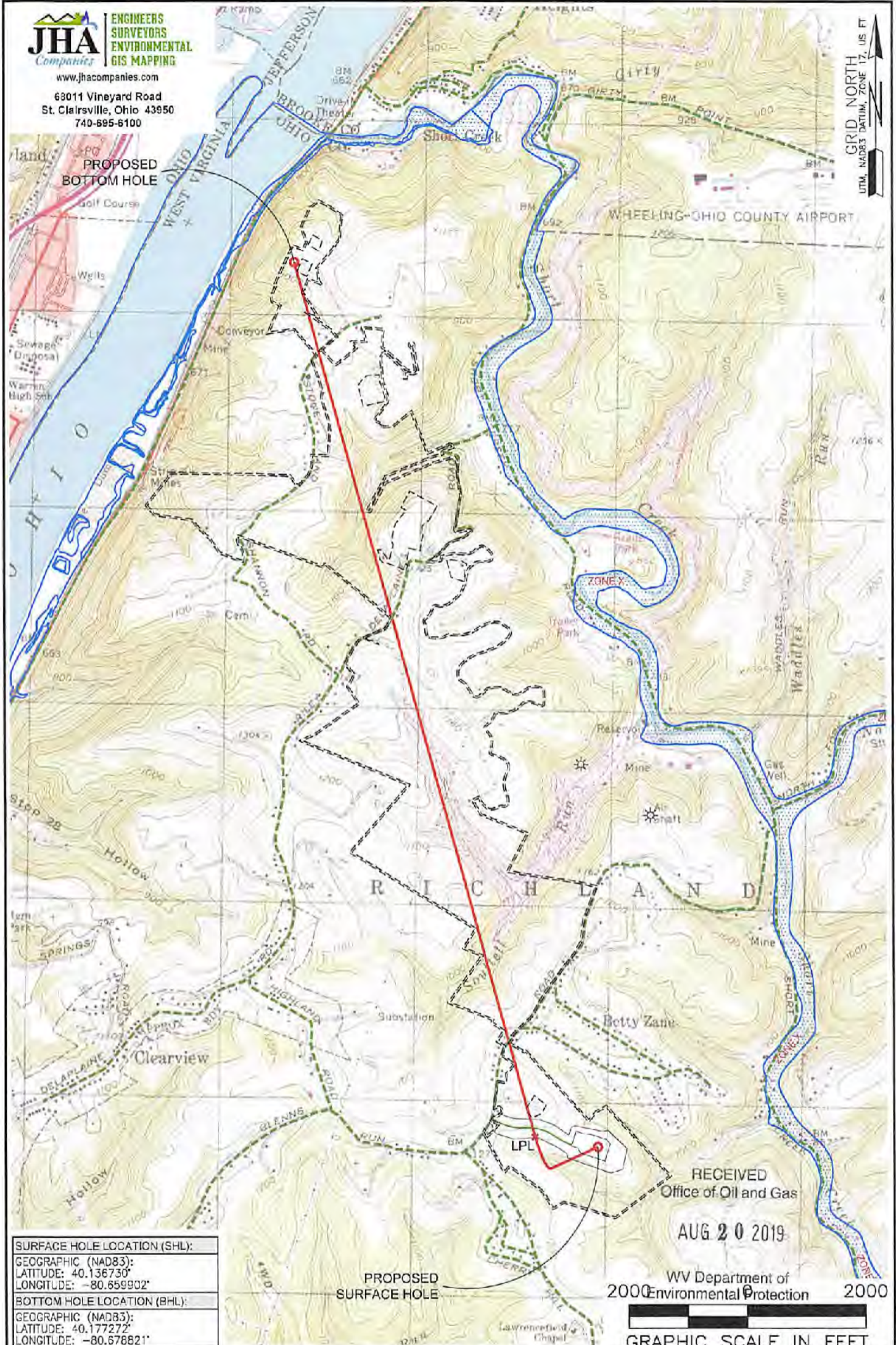


Freshwater Depth - 325' TVD  
 Coal Depth - 342' TVD  
 Saltwater Depth - 470' TVD  
 TVD - 5,885'  
 TMD - 21,526'

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EOB at 5,885' TVD  
 SHL Onondaga 5,902' TVD





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

<b>SURFACE HOLE LOCATION (SHL):</b>
GEOGRAPHIC (NAD83): LATITUDE: 40.136730° LONGITUDE: -80.659902°
<b>BOTTOM HOLE LOCATION (BHL):</b>
GEOGRAPHIC (NAD83): LATITUDE: 40.177272° LONGITUDE: -80.678821°

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GRAPHIC SCALE IN FEET

**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:**

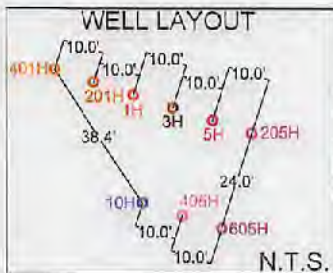
- PROPOSED SURFACE HOLE / BOTTOM HOLE
- ☼ EXISTING / PRODUCING WELLHEAD
- LPL LANDING POINT LOCATION
- 🌊 FLOOD PLAN
- NATURAL WATERWAY
- ACCESS ROAD
- PUBLIC ROAD
- ACCESS ROAD TO PREV. SITE
- LEASE BOUNDARY
- PROPOSED PATH

<b>WELL OPERATOR:</b> SWN PRODUCTION COMPANY, LLC	<b>WELL (FARM) NAME:</b> FRANZ THOMAN OHI	<b>WELL #</b> 1H	<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>SURFACE OWNER:</b> FRANZ THOMAN	<b>USGS 7 1/2 QUADRANGLE MAP NAME:</b> TILTONSVILLE, OH-WV		

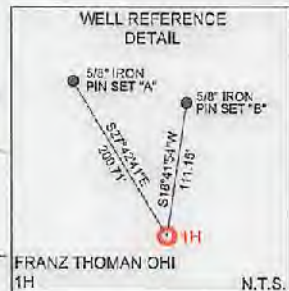




68011 Vineyard Road  
St. Clairsville, Ohio 43950  
740-696-6100



PROPOSED BOTTOM HOLE



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.

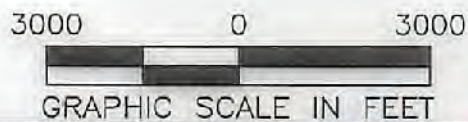
LINE	BEARING	DISTANCE
L1	S57°29'40"E	1109.72'
L2	S81°09'07"E	1376.94'



<b>SURFACE HOLE LOCATION (SHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4442988.49 EASTING: 528972.74
<b>LANDING POINT LOCATION (LPL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4443033.96 EASTING: 528648.54
<b>BOTTOM HOLE LOCATION (BHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4447482.41 EASTING: 527344.73

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



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

FRANZ THOMAN OH  
OPERATOR'S WELL #: 1H  
API WELL #: 47 STATE 069 COUNTY 00303 PERMIT

(+) 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)

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

WATERSHED: UPPER OHIO SOUTH ELEVATION: 1,137.5'-DESIGN  
DISTRICT: RICHLAND COUNTY: OHIO QUADRANGLE: TILTONSVILLE, OH-WV  
SURFACE OWNER: FRANZ THOMAN ACREAGE: ±69.418  
OIL & GAS ROYALTY OWNER: FRANZ THOMAN ACREAGE: ±69.418

DRILL  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION   
CONVERT  PLUG & ABANDON  CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY)  
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 5,885' TVD 21,526' TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: BRITTANY WOODY  
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> ○ PROPOSED SURFACE HOLE / BOTTOM HOLE * EXISTING / PRODUCING WELL-HEAD LPL LANDING POINT LOCATION ⊙ EXISTING WATER WELL ⊙ EXISTING SPRING	<b>REVISIONS:</b>	DATE: 08-07-2019 API NO: 47-069-XXXXX DRAWN BY: D. REED SCALE: 1" = 3000' DRAWING NO: 2018-781 WELL LOCATION PLAT
— NATURAL WATERWAY — SURVEYED BOUNDARY == LEASE BOUNDARY — PROPOSED PATH — PUBLIC ROAD		

LONGITUDE: 80°40'00" BOTTOM HOLE (2000' SCALE)  
LONGITUDE: 80°37'30" SURFACE HOLE (2000' SCALE)











**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE  
Chapter 22, Article 6A, Section 5(a)(5)  
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
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SEE EXHIBIT "A"

**Acknowledgement of Possible Permitting/Approval  
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:


- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

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The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: SWN Production Company, LLC  
 By:   
 Its: John D. Startz, Technical Expert Landman



**EXHIBIT "A"**

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, W-6A1, by SWN Production Company, LLC, Operator  
 Franz Thoman OHI 1H  
 Ohio County, West Virginia

#	TMP	LESSOR	LESSEE	ROYALTY	BK/Pg
1	4-R8-62	Franz Thoman, a single man	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	827/5 885/644
2	4-R8-62.5	Tunnel Ridge, LLC	SWN Production Company, L.L.C.	17.00%	916/91
3	4-R8-62.4	Tunnel Ridge, LLC	SWN Production Company, L.L.C.	17.00%	916/91
4	4-R8-62.8	Kasmir Majewski, a widow  Edward Majewski, a single man	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%  18.00%	833/97 884/71 833/92 884/71
5	4-R8-62.2	Kasmir Majewski, a widow  Edward Majewski, a single man	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%  18.00%	833/97 884/71 833/92 884/71
6	4-R8-62.7	Ray B. Wilson and Ann M. Wilson husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	832/338 884/729
7	4-R8-62.6	Tama L. Dimmick, a married woman dealing in her sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	859/585 884/505
8	4-R8K-103	Robert D. Hercules and Patsy G. Hercules, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	860/196 884/517
9	4-R8K-113	Robert D. Hercules and Patsy G. Hercules, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	860/196 884/517
10	4-R8-5	Alliance Resource GP, LLC	SWN Production Company, L.L.C.	17.00%	916/98

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 Franz Thoman OHI 1H  
 Ohio County, West Virginia

11	4-R8-3.1	Alliance Resource GP, LLC	SWN Production Company, L.L.C.	17.00%	916/98
12	4-R5-40.7	Alliance Resource GP, LLC	SWN Production Company, L.L.C.	17.00%	916/98
13	4-R5-40	Alliance Resource GP, LLC	SWN Production Company, L.L.C.	17.00%	916/98
14	4-R8-71	Alliance Resource GP, LLC	SWN Production Company, L.L.C.	17.00%	916/98
15	4-R5-40.4	Tunnel Ridge, LLC	SWN Production Company, L.L.C.	18.00%	946/107
16	4-R5-40.2	Ronald L. Richie and Sandra L. Richie, husband and wife	SWN Production Company, L.L.C.	18.00%	939/296
17	4-R5-42.2	Ronald L. Richie and Sandra L. Richie, husband and wife	SWN Production Company, L.L.C.	18.00%	939/296
18	4-R5-41	James Raper, a single man	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	843/366 885/37
19	Clearview Ave	West Virginia Department of Transportation, Division of Highways	SWN Production Company, LLC	20.00%	957/543
20	4-R5-21.10	Ralph J. Krasevec and Beverly A. Krasevec, husband and wife  Bounty Minerals, LLC	American Petroleum Partners Operating, LLC SWN Production Company, LLC SWN Production Company, L.L.C.	17.00%  18.00%	928/730 946/405 939/1
21	4-R5-21.2	Alliance Resources, GP, LLC	SWN Production Company, L.L.C.	17.00%	916/98
22	4-R5-22.1	Alliance Resource GP, LLC	SWN Production Company, L.L.C.	17.00%	916/98

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 Franz Thoman OHI 1H  
 Ohio County, West Virginia

23	4-R5-22.2	Alliance Resource GP, LLC	SWN Production Company, L.L.C.	17.00%	916/98
24	4-R5-22	Julie B. Klein, a married woman dealing in her sole and separate property	SWN Production Company, L.L.C.	16.00%	951/323
		Judith A. Patti, a/k/a Judith A. Patti, a single woman	SWN Production Company, L.L.C.	16.00%	928/516
		Sara L. Plumby-Ellis	SWN Production Company, L.L.C.	16.00%	928/542
25	4-R5-2.2	Carolyn H. Forman, f/k/a Carolyn Jane Stone Hetzel, a married woman dealing in her sole and separate property	SWN Production Company, L.L.C.	16.00%	930/443
26	4-R5-63.1	Carolyn H. Forman, f/k/a Carolyn Jane Stone Hetzel, a married woman dealing in her sole and separate property	SWN Production Company, L.L.C.	16.00%	930/443
27	4-R5-63	Carolyn H. Forman, f/k/a Carolyn Jane Stone Hetzel, a married woman dealing in her sole and separate property	SWN Production Company, L.L.C.	16.00%	930/443
28	4-R5-67	Carolyn H. Forman, f/k/a Carolyn Jane Stone Hetzel, a married woman dealing in her sole and separate property	SWN Production Company, L.L.C.	16.00%	930/443
29	4-R5-2	Carolyn H. Forman, f/k/a Carolyn Jane Stone Hetzel, a married woman dealing in her sole and separate property	SWN Production Company, L.L.C.	16.00%	930/443
30	4-R5-2.34	Carolyn H. Forman, f/k/a Carolyn Jane Stone Hetzel, a married woman dealing in her sole and separate property	SWN Production Company, L.L.C.	16.00%	930/443
31	4-R5-2.12	Carolyn H. Forman, f/k/a Carolyn Jane Stone Hetzel, a married woman dealing in her sole and separate property	SWN Production Company, L.L.C.	16.00%	930/443
32	4-R5-2.13	Carolyn H. Forman, f/k/a Carolyn Jane Stone Hetzel, a married woman dealing in her sole and separate property	SWN Production Company, L.L.C.	16.00%	930/443
33	4-R5-2.3	Carolyn H. Forman, f/k/a Carolyn Jane Stone Hetzel, a married woman dealing in her sole and separate property	SWN Production Company, L.L.C.	16.00%	930/443

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Franz Thoman OHL 1H  
Ohio County, West Virginia

34	4-R5-69	Tunnel Ridge, LLC	SWN Production Company, L.L.C.	18.00%	946/107
35	4-R2-2.1	Jeffery W. Siegwart and Cynthia A. Siegwart, husband and wife	SWN Production Company, L.L.C.	18.00%	958/397
36	4-R2-2	Jeffery W. Siegwart and Cynthia A. Siegwart, husband and wife	SWN Production Company, L.L.C.	18.00%	958/397

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Environmental Protection



August 6, 2019

Ms. Laura Adkins  
WV DEP Office of Oil & Gas  
601 57<sup>th</sup> St., SE  
Charleston, WV 25304

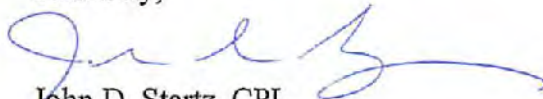
**RE:** SWN's proposed New Well: Franz Thoman OHI 1H in Ohio County, West Virginia, Drilling under Stone-Shannon Road, Ripley-Delaplain Road, and Glenns Run Road.

Dear Ms. Adkins:

SWN Production Company, LLC ("SWN") is applying for a drilling permit for the above referenced well. The State of West Virginia has raised some concern as to SWN's right to drill under Stone-Shannon Road, Ripley-Delaplain Road, and Glenns Run Road. Please be advised that SWN has leased all mineral owners under said route as it relates to the above-referenced well and unit.

Thank you.

Sincerely,



John D. Startz, CPL  
Technical Expert Landman  
SWN Production Company, LLC

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