



west virginia department of environmental protection

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

Harold D. Ward, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Monday, January 8, 2024  
WELL WORK PERMIT  
Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC  
POST OFFICE BOX 12359

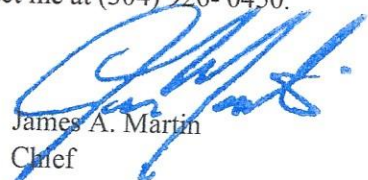
SPRING, TX 773914954

Re: Permit approval for Serafin Ortiz MSH 405H  
47-051-02511-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0450.

  
James A. Martin  
Chief

Operator's Well Number: Serafin Ortiz MSH 405H  
Farm Name: Frank J & Lori A Longwell  
U.S. WELL NUMBER: 47-051-02511-00-00  
Horizontal 6A New Drill  
Date Issued: 1/8/2024

Promoting a healthy environment.

01/12/2024

# PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

## CONDITIONS

---

1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
7. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Also, 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
9. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
10. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.
11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

01/12/2024

4705102511

WW-6B  
(04/15)

API NO. 47-051 -  
OPERATOR WELL NO. Serafin Ortiz MSH 405H  
Well Pad Name: Serafin Ortiz

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 051-Marshall 13-Union 486-Moundsville  
Operator ID County District Quadrangle

2) Operator's Well Number: Serafin Ortiz MSH 405H Well Pad Name: Serafin Ortiz

3) Farm Name/Surface Owner: Frank & Lori Longwell Public Road Access: Grand View Road

4) Elevation, current ground: 1279' Elevation, proposed post-construction: 1279'

5) Well Type (a) Gas  Oil  Underground Storage   
Other

(b) If Gas Shallow  Deep   
Horizontal

6) Existing Pad: Yes or No Yes

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- 6258', Target Base TVD- 6314', Anticipated Thickness- 56', Associated Pressure- 4104

8) Proposed Total Vertical Depth: 6303'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 28233'

11) Proposed Horizontal Leg Length: 22,232.08'

12) Approximate Fresh Water Strata Depths: 414'

13) Method to Determine Fresh Water Depths: Salinity Profile

14) Approximate Saltwater Depths: 1168' Salinity Profile

15) Approximate Coal Seam Depths: 763'

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

RECEIVED  
Office of Oil and Gas

DEC 05 2023

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

WV Department of  
Environmental Protection

*Strader Gower*  
10/31/2023

WW-6B  
(04/15)

4705102511

API NO. 47-051

OPERATOR WELL NO. Serafin Ortiz MSH 405H

Well Pad Name: Serafin Ortiz

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	J-55	94#	136'	136' /	CTS
Fresh Water	13 3/8"	New	J-55	54.4#	793'	793' /	913 sx/CTS
Coal	See	Surface	Casing				
Intermediate	9 5/8"	New	J-55	36#	2087'	2087' /	802 sx/CTS
Production	5 1/2"	New	P-110 HP	20#	28233'	28233' /	Tail 5314sx/ 100' inside Intermediate
Tubing							
Liners							

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	1.20/30% Excess
Fresh Water	13 3/8"	17.5"	0.390	2730	633	Class A	1.20/30% Excess
Coal	See	Surface	Casing				
Intermediate	9 5/8"	12 1/4"	0.395	3950	1768	Class A	1.19/40% Excess
Production	5 1/2"	8 3/4"-8 1/2"	0.361	14360	10500	Class A	1.19/5% Excess
Tubing							
Liners							

RECEIVED  
Office of Oil and Gas

DEC 05 2023

**PACKERS**

WV Department of  
Environmental Protection

Kind:				
Sizes:				
Depths Set:				

*Serafin Ortiz*  
7/25/2023

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. In some instances, additional toe prep may be performed by pumping additional water in the toe of the well prior to perforating and pumping Stage 1 to ensure that the toe guns/toe sleeves are fully open prior to pumping stage 1. 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- 12,500 psi @ 100 barrels a minute.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 8.2

22) Area to be disturbed for well pad only, less access road (acres): 3.87

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 \*\*\*

RECEIVED  
Office of Oil and Gas

DEC 05 2023

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.

WV Department of  
Environmental Protection

\*Note: Attach additional sheets as needed.

API Number 47 - 051 - \_\_\_\_\_  
Operator's Well No. Serafin Ortiz MSH 405H

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name SWN Production Co., LLC OP Code 494512924

Watershed (HUC 10) Upper Ohio South Quadrangle Moundsville

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes  No

Will a pit be used? Yes  No

If so, please describe anticipated pit waste: \_\_\_\_\_

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? \_\_\_\_\_

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection ( UIC Permit Number Various Approved Facilities )
- Reuse (at API Number At the next anticipated well )
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain recovery and solidification on site )

Will closed loop system be used? If so, describe: Yes- See Attachment 3A

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air drill to KOP, fluid drill with SOBM from KOP to TD

-If oil based, what type? Synthetic, petroleum, etc. Synthetic Oil Base

Additives to be used in drilling medium? Attachment 3B

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. landfill

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) \_\_\_\_\_

-Landfill or offsite name/permit number? Meadowfill SWF- 1032, Short Creek SWF-1034, Carbon Limestone MSWL018781, Wetzel County 1021

Apex Sanitary Landfill 06-08438, Brooke Co SWF-1013, FMS 353100

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature *Brittany Woody* Office of Oil and Gas  
DEC 08 2013  
WV Department of Environmental Protection

Company Official (Typed Name) Brittany Woody

Company Official Title Staff Regulatory Specialist

Subscribed and sworn before me this 22 day of June, 2023

*Elizabeth Blankenship* Notary Public

My commission expires 6/23/24



Form WW-9

Operator's Well No. Serafin Ortiz MSH 405H

SWN Production Co., LLC

Proposed Revegetation Treatment: Acres Disturbed 8.2 Prevegetation pH \_\_\_\_\_

Lime as determined by pH test min. 2 Tons/acre or to correct to pH 3.87

Fertilizer type 10-20-20

Fertilizer amount 600/500 lbs/acre

Mulch Hay/Straw Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type lbs/acre

Seed Type lbs/acre

Attachment 3C

**Attach:**

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), and area in acreage, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Comments: \_\_\_\_\_

RECEIVED  
Office of Oil and Gas

DEC 05 2023

WW Department of  
Environmental Protection

Title: Oil & Gas Inspector

Date: 7/20/2023

Field Reviewed?  Yes  No

# MARCELLUS WELL DRILLING PROCEDURES AND WELL SITE SAFETY PLAN



SWN Production Company, LLC  
1300 Fort Pierpont Drive, Suite 201  
Morgantown, West Virginia 26508

**API NO. 47-XXX-XXXXX**  
**WELL NAME: Serafin Ortiz MSH 405H**  
**Moundsville QUAD**  
**Union DISTRICT**  
**MARSHALL COUNTY, WEST VIRGINIA**

Submitted by:

Name: Brittany Woody

Date: 6/19/2023

*Brittany Woody*

Title: Staff Regulatory Specialist

SWN Production Co., LLC

Approved by:

Name: *St. Gene*

Date: 7/20/2023

Title: *Oil & Gas Inspector*

Approved by:

Name: \_\_\_\_\_

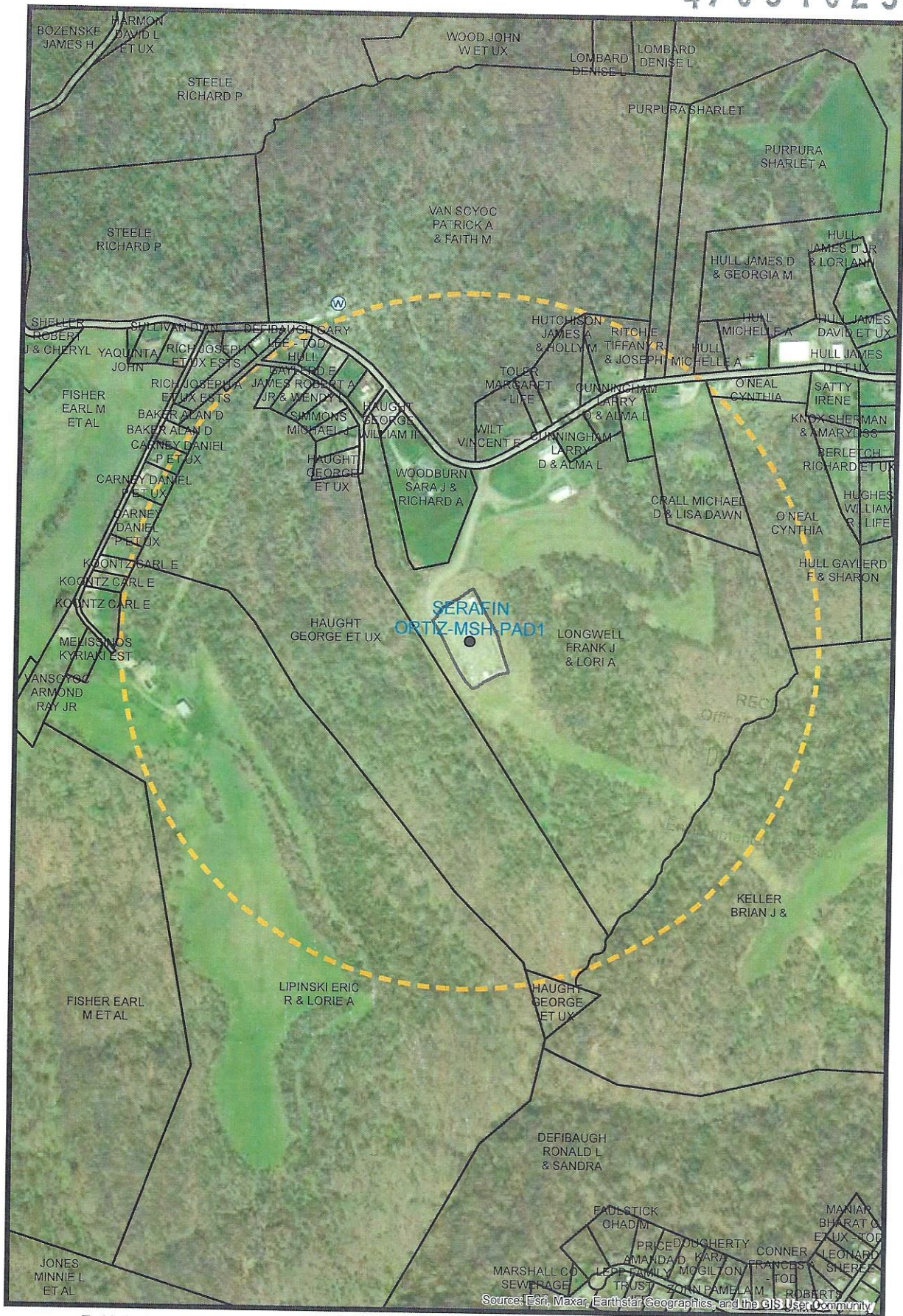
Date: \_\_\_\_\_

Title: \_\_\_\_\_

RECEIVED  
Office of Oil and Gas  
DEC 05 2023  
WV Department of  
Environmental Protection

SWN PRODUCTION COMPANY, LLC – CONFIDENTIAL





Source: Esri, Maxar, Earthstar, Geographics, and the GIS User Community

The intent of this map is for general reference only. Information on this map was created using the best available data at the time but is not guaranteed accurate.

<h2 style="text-align: center;">Structure Proximity Map</h2>		Well Pad: Serafin Ortiz		County: Wetzel					
		<table border="1"> <tr> <td>Map by: youngst</td> <td>Date: 6/15/2023</td> </tr> <tr> <td>Nad 83 UTM Z one 17</td> <td></td> </tr> </table>		Map by: youngst	Date: 6/15/2023	Nad 83 UTM Z one 17		<ul style="list-style-type: none"> <li><span style="color: blue;">●</span> Water Sources</li> <li><span style="color: blue;">●</span> Spring</li> <li><span style="color: blue;">●</span> Water Well</li> <li><span style="color: blue;">●</span> Pond</li> </ul>	
Map by: youngst	Date: 6/15/2023								
Nad 83 UTM Z one 17									

07/12/2024

LATITUDE: 40°00'00"

SURFACE HOLE 11,369'

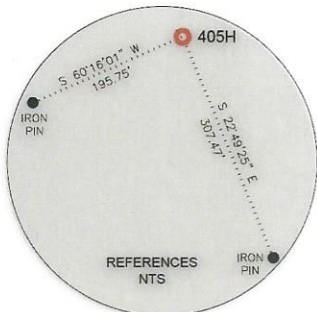
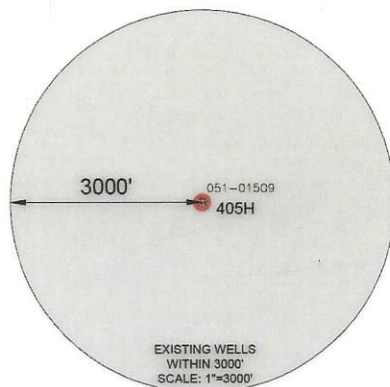
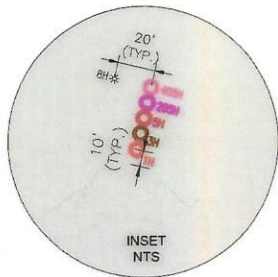
LATITUDE: 40°05'00"

BOTTOM HOLE 6,078'



SURVEYOR/ENGINEER: 1-304-933-3463  
1700 ANMOORE RD,  
BRIDGEPORT, WV 26330

<b>SURFACE HOLE LOCATION (SHL):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,426,774.348 EASTING: 524,992.285
<b>LANDING POINT (LPL):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,426,945.792 EASTING: 525,418.019
<b>BOTTOM HOLE LOCATION (BHL):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,432,976.568 EASTING: 523,027.239



LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 28°15'36" W	299.16'	SHL TO MONUMENT	IRON ROD
L2	N 01°06'42" E	647.55'	SHL TO MONUMENT	IRON ROD

LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L3	N 68°03'55" E	1,505.76'	2,187.98'	SHL TO LPL
L4	N 21°50'37" W	19,069.86'	19,069.86'	LPL TO AZL1
L5	S 20°46'08" E	107.70'	107.70'	AZL1 TO AZL2
L6	N 19°41'18" W	2,107.81'	2,107.81'	AZL2 TO BHL

WELL RESTRICTIONS

1. NO OCCUPIED DWELLINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
2. NO AGRICULTURE BUILDINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
3. NO WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 250 FEET OF PROPOSED WELL.
4. PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
5. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
6. NO GROUND INTAKE OR PUBLIC WATER SUPPLY WITHIN 1000 FEET OF WELL PAD, LIMITS OF DISTURBANCE, E & S CONTROLS OR PUBLIC WATER SUPPLY.

NOTES ON SURVEY

1. TIES TO WELLS AND CORNERS ARE BASED ON UTM, NAD83 DATUM, ZONE 17, US FT.
2. WELL LAT./LONG ESTABLISHED BY DIRECT GPS NAD '83.
3. BOUNDARIES SHOWN ARE TAKEN FROM TAX MAPS, DEEDS, AND FIELD SURVEY. THIS DRAWING IS NOT REPRESENTATIVE OF A FULL BOUNDARY SURVEY.
4. SURFACE OWNER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF OHIO COUNTY IN OCTOBER OF 2021.
5. WELLS SHOWN ARE TAKEN FROM RECORDS OF WVDEP.

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. 983 *Michael R. Hyman* 10-31-2023



COMPANY: **SWN** **SWN** *R-V+0*  
Production Company, LLC Production Company™

	(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS	MINIMUM DEGREE OF ACCURACY: 1/200	SERAFIN ORTIZ MSH		
	WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034	PROVEN SURVEY GRADE GPS SOURCE OF ELEVATION: (NAVD 88, US FT)	OPERATOR'S WELL #: 405H	API WELL #: 47	51 02511 H6A
			STATE	COUNTY	PERMIT

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

WATERSHED: UPPER OHIO-WHEELING ELEVATION: 1278.69

DISTRICT: UNION COUNTY: MARSHALL QUADRANGLE: MOUNDSVILLE 7.5', WV

SURFACE OWNER: FRANK J. & LORI A. LONGWELL ACREAGE: ±44.949

OIL & GAS ROYALTY OWNER: SERAFIN T. ORTIZ, AS TRUSTEE OF THE SERAFIN T. ORTIZ TRUST AGREEMENT DATED JULY 31, 1996 ACREAGE: ±44.949

DRILL  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION

CONVERT  PLUG & ABANDON  CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY) **01/12/2024**

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,303 TVD 28,233 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>		<b>REVISIONS:</b>	DATE: 10-31-2023
			FILE NO:
			DRAWN BY: TMF
			SCALE: 1" = 2000'
			DRAWING NO: ACE-3048
			WELL LOCATION PLAT 1

LONGITUDE: 80°40'00" SURFACE HOLE 3,360'  
LONGITUDE: 80°42'30" BOTTOM HOLE 13,340'



SURVEYOR/ENGINEER:  
1-304-933-3463  
1700 ANMOORE RD,  
BRIDGEPORT, WV 26330

PROPOSED  
405H  
BOTTOM  
HOLE

OHIO RIVER

AZL2  
AZL1

INSET "C"

INSET "B"

INSET "A"

PROPOSED 405H  
SURFACE HOLE

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



2000' 0 2000'



GRAPHIC SCALE IN FEET

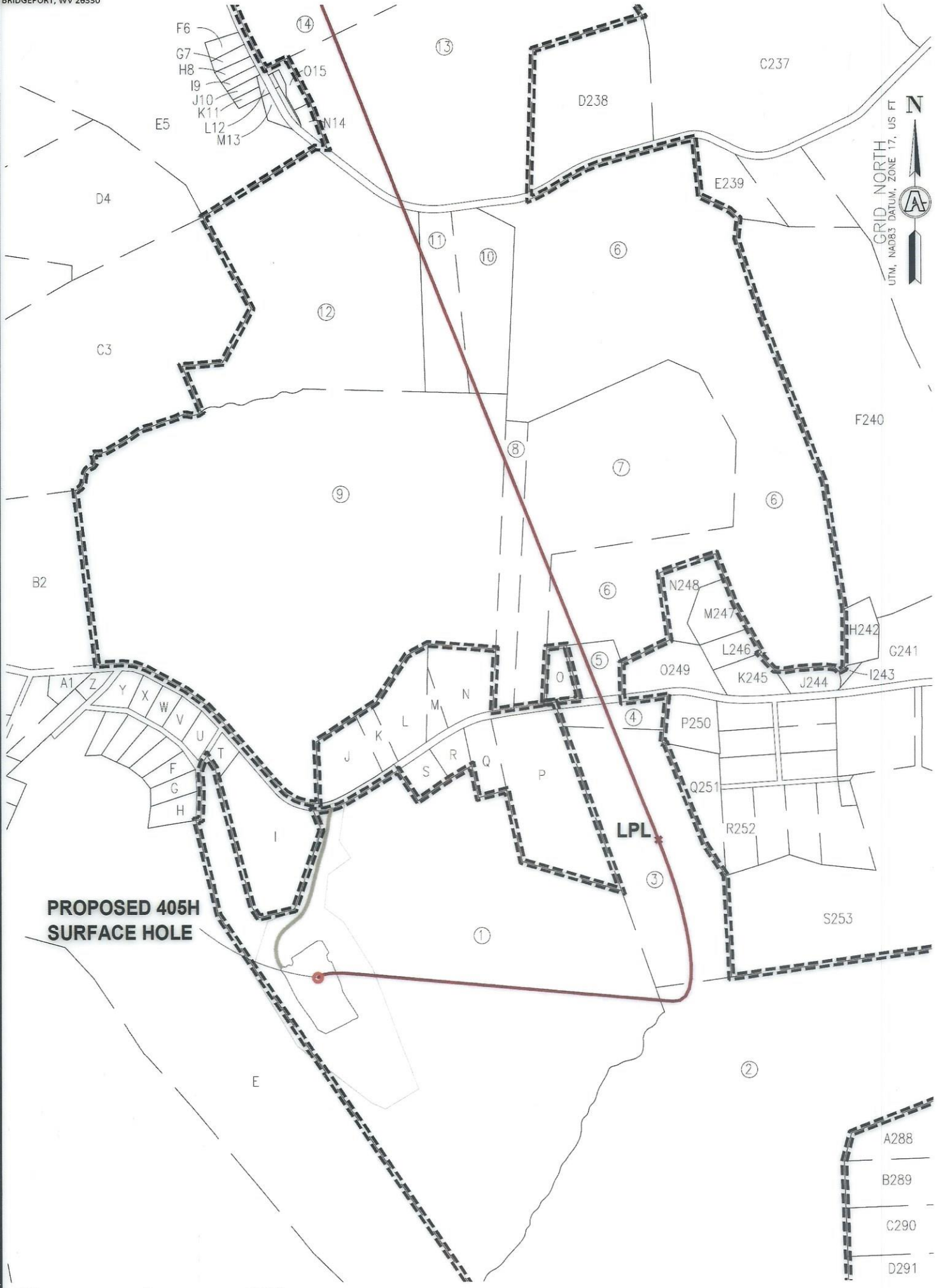
01/12/2024

REVISIONS:	4705102511

COMPANY:			
OPERATOR'S		SERAFIN ORTIZ MSH	
WELL #:		405H	
DISTRICT:	UNION	COUNTY:	MARSHALL
STATE:		WV	
DATE:		10-31-2023	
DRAWN BY:		TMF	
SCALE:		1"=2000'	
DRAWING NO:		ACE-3048	
WELL LOCATION		PLAT 2	



SURVEYOR/ENGINEER: 1-304-933-3463  
 1700 ANMOORE RD,  
 BRIDGEPORT, WV 26330



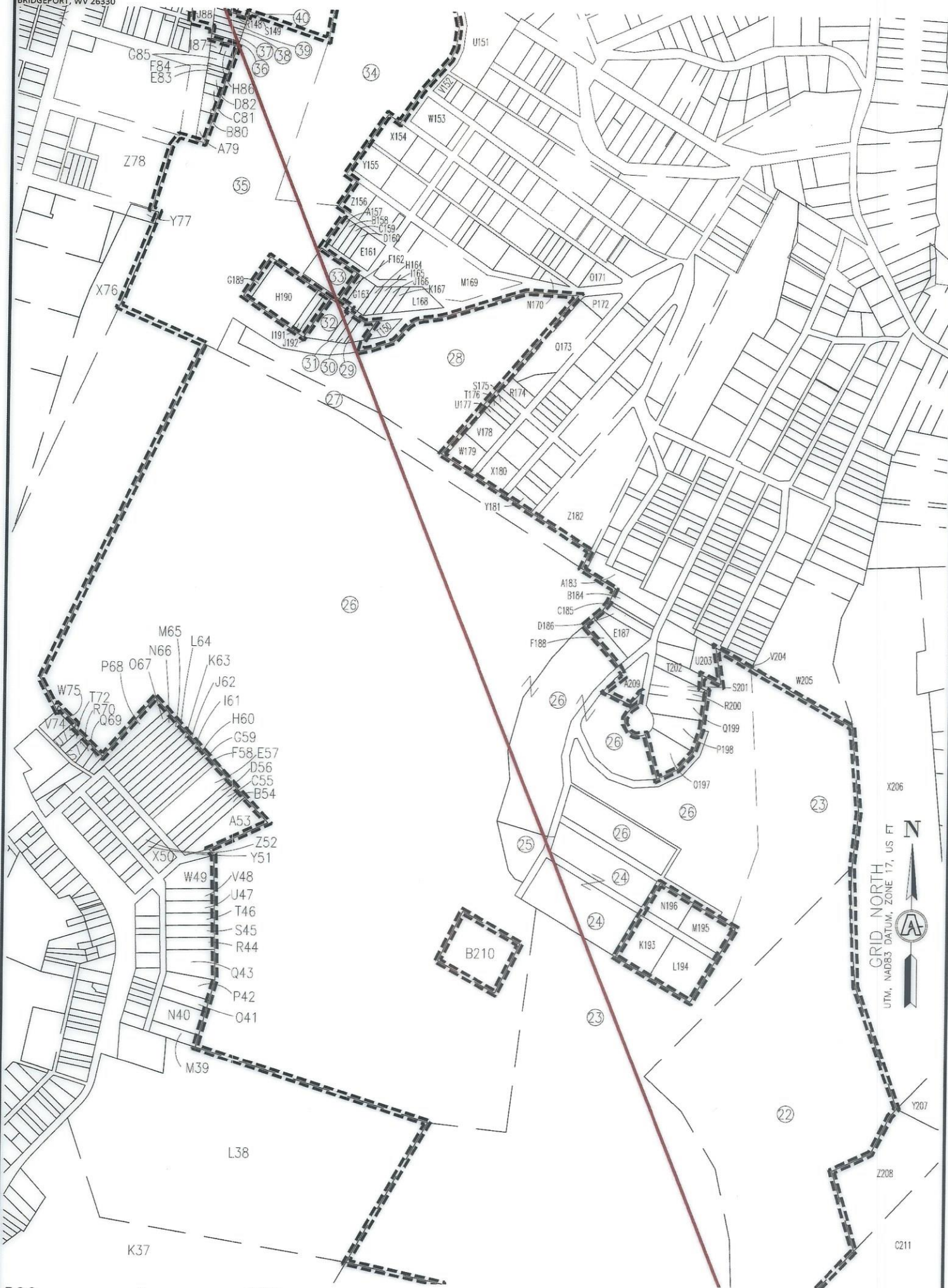
INSET "A"

01/12/2024

REVISIONS: <b>47 051 02511</b>	COMPANY:			
	OPERATOR'S		SERAFIN ORTIZ MSH	
	WELL #:		405H	
	DISTRICT:	COUNTY:	STATE:	DATE: 10-31-2023
	UNION	MARSHALL	WV	DRAWN BY: TMF
				SCALE: 1"=500'
				DRAWING NO: ACE-3048
				WELL LOCATION PLAT 3



SURVEYOR/ENGINEER: 1-304-933-3463  
 1700 ANMOORE RD,  
 BRIDGEPORT, WV 26330



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



INSET "B"

01/12/2024

REVISIONS: 47 051 0 2511	COMPANY:		
	OPERATOR'S	SERAFIN ORTIZ MSH	
	WELL #:	405H	
	DISTRICT:	COUNTY:	STATE:
	UNION	MARSHALL	WV
			DATE: 10-31-2023
			DRAWN BY: TMF
			SCALE: 1"=500'
			DRAWING NO: ACE-3048
			WELL LOCATION PLAT 4

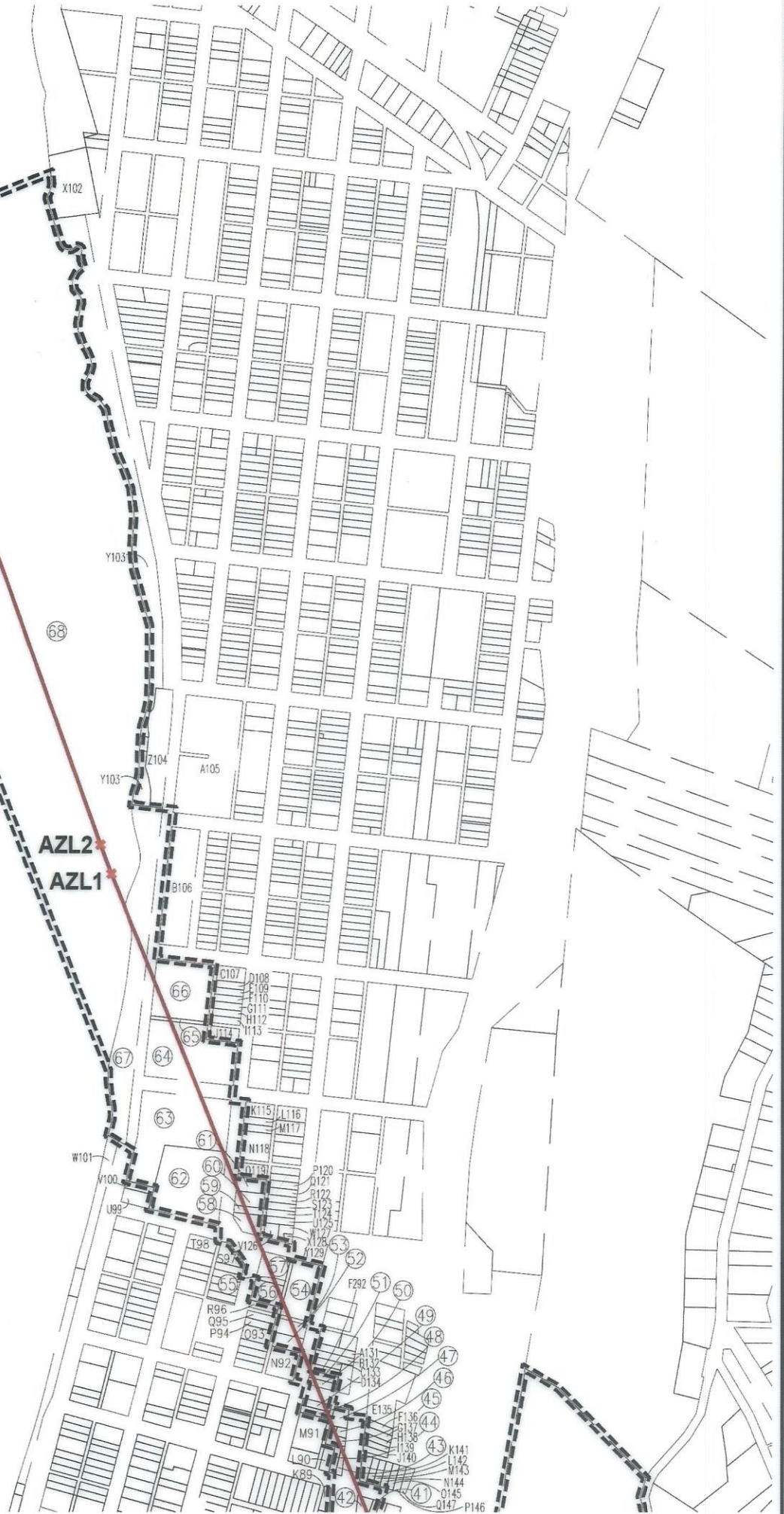


SURVEYOR/ENGINEER: 1-304-933-3463  
 1700 ANMOORE RD,  
 BRIDGEPORT, WV 26330

**PROPOSED 405H  
 BOTTOM HOLE**



OHIO RIVER



INSET "C"

01/12/2024

REVISIONS: 4705102511	COMPANY:		
	OPERATOR'S	SERAFIN ORTIZ MSH	
	WELL #:	405H	
	DISTRICT:	COUNTY:	STATE:
	UNION	MARSHALL	WV
			DATE: 10-31-2023
			DRAWN BY: TMF
			SCALE: 1"=500'
			DRAWING NO: ACE-3048
			WELL LOCATION PLAT 5



SURVEYOR/ENGINEER: 1-304-933-3463  
 1700 ANMOORE RD,  
 BRIDGEPORT, WV 26330

WELL BORE TRACTS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	LONGWELL FRANK J & LORI A (S) / SERAFIN T. ORTIZ AS TRUSTEE OF THE SERAFIN T. ORTIZ TRUST AGREEMENT DATED JULY 31, 1996 (R)	13-6-49
TRACT	SURFACE OWNER (S)	TAX PARCEL
2	KELLER BRIAN J & COOK DAVID J & ALICE M - TOD	13-6-50
3	O'NEAL CYNTHIA	13-6-45
4	O'NEAL CYNTHIA	13-6-44
5	HULL MICHELLE A & THOMAS P MCFARLAND	13-6-23.9
6	HULL JAMES D & GEORGIA M	13-6-23.18
7	SCHERICH LEIGH ANN & SETH ANTHONY RENZELLA	13-6-23.14
8	SCHERICH LEIGH ANN & SETH ANTHONY RENZELLA	13-6-23.17
9	VAN SCYOC PATRICK A & FAITH M	13-6-17
10	LOMBARD DENISE L	13-6-24
11	LOMBARD DENISE L	13-6-16.1
12	WOOD JOHN W ET UX	13-6-16
13	KUBANCIK STANLEY M ET UX	13-5-25
14	KUBANCIK STANLEY M ET UX	13-5-28
15	OHIO COUNTY COAL RESOURCES INC	13-5-29
16	OHIO COUNTY COAL RESOURCES INC	13-5-30
17	OHIO COUNTY COAL RESOURCES INC	13-5-31
18	OHIO COUNTY COAL RESOURCES INC	13-5-32.1
19	OHIO COUNTY COAL RESOURCES INC	13-5-10
20	OHIO COUNTY COAL RESOURCES INC	13-1-50
21	OHIO COUNTY COAL RESOURCES INC	13-1-49
22	OHIO COUNTY COAL RESOURCES INC	13-1-2
23	OHIO COUNTY COAL RESOURCES INC	13-1-1.1
24	MARKOWICZ JOHN JR ET UX	13-1-1.2
25	SCOTT IRENE R	13-1C-48
26	MARKOWICZ JOHN F JR ET AL	13-1-1.3
27	MARKOWICZ JOHN F JR ET AL	13-1A-1
28	LICHWA MARJORIE V	13-1A-2
29	KITCHEN BERNICE	13-1A-4
30	SIEBIEDA MARION R & MARY ANN - TOD	13-1A-5
31	UNKNOWN	13-1A-6
32	SIEBIEDA MARION R & MARY ANN - TOD	13-1A-7
33	SIEBIEDA MARION R & MARY ANN - TOD	13-1A-12
34	MOZART PARK ASSOCIATION	10-W88-360
35	W VA DEPT OF HIGHWAYS	U.S. 250
36	MILLER ALICIA & BICKMEIER JEREMY	10-W88-285
37	SKRZYPEK STEVEN MICHAEL	10-W88-284
38	SKRZYPEK STEVEN MICHAEL	10-W88-283
39	EWART CHRISTA	10-W88-282
40	EWART JOHN P & A D	10-W88-281
41	KLAMUT NANCY J	10-W88-278
42	SOFKA MICHAEL S & J J	10-W88-277
43	DUDEK CASIMER (LIFE ESTATE); DUDEK DAVID	10-W88-225
44	DUDEK CASIMER (LIFE ESTATE); DUDEK DAVID	10-W88-226
45	VUCELICK SAMUEL G JR & SUMER D	10-W88-232
46	VUCELICK SAMUEL G JR & SUMER D	10-W88-233.1
47	TYBURSKI MARY L (LE); TYBURSKI ROBERT S JR	10-W88-233
48	TOM S LLC	10-W88-231.1
49	CAMPBELL SAMANTHA M	10-W88-231
50	BLAKE JAMES L & CAROL LAWHORNE	10-W88-259
51	SEXTON KENNETH A SEXTON WILLIAM B	10-W88-258
52	STEVE LOHRI CONTRACTING LLC	10-W88-240
53	STEVE LOHRI CONTRACTING LLC	10-W88-241
54	KHELAWAN VISHAL	10-W88-242
55	KHELAWAN VISHAL	10-W88-242.1
56	BONACCI RENTALS LLC	10-W88-148
57	KHELAWAN VISHAL	10-W88-146
58	CUNNINGHAM KENNETH & ROBB PAULA	10-W84-142
59	VESSELS CARLA	10-W84-141
60	HEIL JAMES B	10-W84-140
61	HOSTUTLER PAMELA - TOD	10-W84-139
62	WHEELING POWER CO WHEELING ELECTRIC CO	10-W84-50
63	WHEELING POWER CO WHEELING ELECTRIC CO	10-W84-44
64	MCCANN DISTRIBUTING INC	10-W84-43
65	SWISHER INTERNATIONAL INC	10-W84-348
66	SWISHER INTERNATIONAL INC	10-W84-42
67	BELLAIRE HARBOR SERVICE LLC	10-W84-346
68	STATE OF WEST VIRGINIA	OHIO RIVER

01/12/2024

REVISIONS: 47 051 02511

COMPANY:

**SWN**  
Production Company, LLC

**SWN** <sup>R-V+</sup><sub>A</sub>  
Production Company™

OPERATOR'S SERAFIN ORTIZ MSH

DATE: 10-31-2023

WELL #: 405H

DRAWN BY: TMF

DISTRICT:  
UNION

COUNTY:  
MARSHALL

STATE:  
WV

SCALE: N/A  
DRAWING NO: ACE-3048  
WELL LOCATION PLAT 6



SURVEYOR/ENGINEER: 1-304-933-3463  
1700 ANMOORE RD,  
BRIDGEPORT, WV 26330

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	DEFIBAUGH RONALD L	13-11-27.8
B	DEFIBAUGH RONALD L & SANDRA	13-11-27.1
C	HAUGHT GEORGE ET UX	13-6-50.1
D	LIPINSKI ERIC R & LORIE A	13-6-51
E	HAUGHT GEORGE ET UX	13-6-51.1
F	MCDADE ROBERT D	13-6B-11
G	HAUGHT GEORGE ET UX	13-6B-10
H	HAUGHT GEORGE ET UX	13-6B-9
I	WOODBURN SARA J & RICHARD A	13-6-49.2
J	WILT VINCENT E	13-6-18
K	TOLER MARGARET - LIFE	13-6-19
L	HUTCHISON JAMES A & HOLLY M	13-6-20
M	DEFIBAUGH RONALD L	13-6-21
N	RITCHIE TIFFANY R & JOSEPH M NELSON	13-6-22
O	HULL MICHELLE A	13-6-23.19
P	CRALL MICHAEL D & LISA DAWN	13-6-46
Q	VANDYNE ZACHARY D	13-6-47
R	NIXON MADISON M	13-6-48
S	NIXON MADISON M	13-6-49.1
T	HAUGHT GEORGE WILLIAM II & SHEILA A	13-6-49.3
U	HAUGHT GEORGE W ET UX	13-6B-12
V	HAUGHT GEORGE W ET UX	13-6B-13
W	CAMPBELL WILLIAM IV & HAYLEE MOORE	13-6B-16
X	HULL GAYLER E	13-6B-17
Y	JONES ALEXA M	13-6B-20
Z	LEDBETTER WILLIAM R ET UX	13-6B-21
A1	SNYDER ANDREW C JR REVOCABLE LIVING TRUST	13-6B-22.1
B2	STEELE RICHARD P	13-6-13
C3	STEELE RICHARD P	13-6-14
D4	HARMON DAVID L ET UX	13-5-38
E5	OHIO COUNTY COAL RESOURCES INC	13-5-35
F6	OHIO COUNTY COAL RESOURCE INC	13-5B-9
G7	OHIO COUNTY COAL RESOURCE INC	13-5B-10
H8	OHIO COUNTY COAL RESOURCE INC	13-5B-11
I9	OHIO COUNTY COAL RESOURCE INC	13-5B-12
J10	OHIO COUNTY COAL RESOURCE INC	13-5B-13
K11	OHIO COUNTY COAL RESOURCE INC	13-5B-14
L12	W VA DEPT OF HIGHWAYS	13-5B-13.1
M13	W VA DEPT OF HIGHWAYS	13-5-35.1
N14	OHIO COUNTY COAL RESOURCES INC	13-5-26
O15	OHIO COUNTY COAL RESOURCES INC	13-5-27
P16	OHIO COUNTY COAL RESOURCES INC	13-5-29.1
Q17	OHIO COUNTY COAL RESOURCES INC	13-5-34.1
R18	OHIO COUNTY COAL RESOURCES INC	13-5-34
S19	OHIO COUNTY COAL RESOURCES INC	13-5-34.3
T20	OHIO COUNTY COAL RESOURCES INC	13-5-34.2
U21	OHIO COUNTY COAL RESOURCES INC	13-5-33.1
V22	OHIO COUNTY COAL RESOURCES INC	13-5-32
W23	OHIO COUNTY COAL RESOURCES INC	13-5-32.2
X24	OHIO COUNTY COAL RESOURCES INC	13-5-8
Y25	OHIO COUNTY COAL RESOURCES INC	13-5-9.1
Z26	OHIO COUNTY COAL RESOURCES INC	13-5-9
A27	OHIO COUNTY COAL RESOURCES INC	13-5-9.2
B28	OHIO COUNTY COAL RESOURCES INC	13-5-2
C29	OHIO COUNTY COAL RESOURCES INC	13-1-47
D30	OHIO COUNTY COAL RESOURCES INC	13-1-48
E31	OHIO COUNTY COAL RESOURCES INC	13-1-46

\*HIGHLIGHTED PARCELS MAY BE IMPACTED DURING DRILLING.

TRACT	SURFACE OWNER	TAX PARCEL
F32	OHIO COUNTY COAL RESOURCES INC	13-1-87
G33	TOMASSO RAYMOND R & PEGGY A REVOCABLE TRUST AGREEMENT	13-1-40
H34	OHIO COUNTY COAL RESOURCES INC	13-1-42
I35	TOMASSO RAYMOND R & PEGGY A REVOCABLE TRUST AGREEMENT	13-1-41
J36	OHIO COUNTY COAL RESOURCES INC	13-1-42.1
K37	OHIO COUNTY COAL RESOURCES INC	1-5-1
L38	MORRIS CLARA BEUCKE EST	1-3-20
M39	OHIO COUNTY COAL RESOURCES INC	13-1D-2
N40	OHIO COUNTY COAL RESOURCES INC	13-1D-60
O41	CONSOLIDATION COAL COMPANY MURRAY ENERGY C/O LAND DEPT	13-1D-1
P42	SCHLOSSER CHARLES I & NANCY A	1-3-66
Q43	BLAKELY JOSEPH	1-3-67
R44	BLAKELY JOSEPH	1-3-17
S45	BLAKELY JOSEPH	1-3-16
T46	GUTHRIE ANDREW L & HERCULES NATASHA C	1-3-15
U47	JAMES TIMOTHY M	1-3-14
V48	DAVIS BAILEY JR & TORRIE DEBENI	1-3-13
W49	BRAYEC DAVID M	1-3-12
X50	CANESTRARO CHARLOTTE J & JOSEPH R	1-3-44
Y51	WEST VIRGINIA STATE OF	1-3-45
Z52	ROSE ROBERT M & SHARON L RICHARDSON	1-3-46
A53	NICE DAVID C & ELEANOR R	1-3-10
B54	NICE DAVID C	1-3-9
C55	NICE DAVID C	1-3-8
D56	NICE DAVID C	1-3-7
E57	DEGARMO LINSEY E ET UX	1-3-6
F58	DEGARMO LINSEY E ET UX	1-3-5
G59	BIRKHIMER JERRY A & SUNNY R	1-3-4
H60	BIRKHIMER JERRY A & SUNNY R	1-3-3
I61	BIRKHIMER JERRY A & SUNNY R	1-3-2
J62	BIRKHIMER JERRY A & SUNNY R	1-3-1.6
K63	BIRKHIMER JERRY A & SUNNY R	1-3-1.5
L64	BIRKHIMER JERRY A & SUNNY R	1-3-1.4
M65	BIRKHIMER JERRY A & SUNNY R	1-3-1.3
N66	BIRKHIMER JERRY A & SUNNY R	1-3-1.2
O67	WILLIAMS PATRICIA J	1-3-1.1
P68	WILLIAMS PATRICIA J	1-3-1
Q69	CALDWELL ALEXANDER	1-3-56
R70	CALDWELL ALEXANDER	1-3-57
S71	CALDWELL ALEXANDER	1-3-57.1
T72	RICHMOND BRENDA L	1-3-58
U73	POGGI JAMES & CRYSTAL	1-3-59
V74	POGGI JAMES & CRYSTAL L	1-3-60
W75	ZACCHEUS PROPERTIES LLC - 2009	1-3-59.1
X76	BAM LLC	1-2-160
Y77	BENWOOD CITY OF	1-2-163
Z78	BAM LIMITED LIABILITY COMPANY	10-W88-178
A79	STACHURA STANLEY R & JANET S	10-W88-293
B80	WETZEL JENNIFER	10-W88-294
C81	WETZEL JENNIFER	10-W88-292
D82	SOFKA JUDITH J & MACHEL CHRISTINE	10-W88-291
E83	SING NANCY E	10-W88-290
F84	SING NANCY E	10-W88-289
G85	KRUPINSKI ANTHONY JR & KRUPINSKI ELEANOR JEAN	10-W88-287
H86	SPANGENBERG JOSEPH M III SPANGENBERG REGINA	10-W88-286
I87	MUNSON MICHAEL C & DANEHART JOANN	10-W88-286.1
J88	MATUSIK JOSEPH	10-W88-223
K89	HASTINGS MARY ANN	10-W88-224
L90	CARRAWAY TENA	10-W88-227
M91	TARAZI GEORGE K	10-W88-230
N92	PRASCIK CATHERINE ANN	10-W88-239
O93	SCHULTE FRANCES L - TOD	10-W88-152
P94	SCHULTE JOSEPH FRANCIS ESTATE	10-W88-151

\*HIGHLIGHTED PARCELS MAY BE IMPACTED DURING DRILLING.

01/12/2024

REVISIONS:

47 051 02511

COMPANY:

**SWN**  
Production Company, LLC

**SWN**  
Production Company™

OPERATOR'S

SERAFIN ORTIZ MSH

DATE: 10-31-2023

WELL #:

405H

DRAWN BY: Tmf

DISTRICT:  
UNION

COUNTY:  
MARSHALL

STATE:  
WV

SCALE: N/A

DRAWING NO: ACE-3048

WELL LOCATION PLAT 7





SURVEYOR/ENGINEER:  
1-304-933-3463  
1700 ANMOORE RD,  
BRIDGEPORT, WV 26330

TRACT	SURFACE OWNER	TAX PARCEL
Q95	WILEY LINDA	10-W88-150
R96	WILEY LINDA	10-W88-149
S97	COOLEY DONALD & COOLEY SEAN R	10-W88-141
T98	WHEELING POWER CO WHEELING ELECTRIC CO	10-W88-61
U99	WHEELING POWER CO WHEELING ELECTRIC CO	10-W84-3
V100	WHEELING POWER CO WHEELING ELECTRIC CO	10-W84-4
W101	BELLAIRE HARBOR SERVICE LLC	10-W84-2
X102	CONCRETE REALTY LLC	10-W78-2.1
Y103	BELLAIRE HARBOR SERVICE LLC	10-W78-497
Z104	IOLA CLUB INC	10-W84-1.2
A105	SWISHER INTERNATIONAL INC	10-W84-25
B106	SWISHER INTERNATIONAL INC	10-W84-8
C107	ROCK DAVID L & C L	10-W84-65
D108	FULLER MATTHEW L & CHRISTINA L	10-W84-64
E109	FULLER MATTHEW L & CHRISTINA L	10-W84-63
F110	FULLER MATTHEW & CHRISTINA L	10-W84-62
G111	FULLER MATTHEW L	10-W84-61
H112	FULLER MATTHEW L	10-W84-60
I113	VUCELIK CAROLYN	10-W84-59
J114	HALL LESTER D	10-W84-58
K115	OVMG INC TRUSTEE FOR AUC	10-W84-132
L116	WHEELING POWER CO WHEELING ELECTRIC CO	10-W84-133
M117	WHEELING POWER CO WHEELING ELECTRIC CO	10-W84-134
N118	FRANTOM EDWARD B	10-W84-136
O119	TOLAND PAULA J & CATHY D BREESE	10-W84-138
P120	CARROLL MONICA	10-W84-147
Q121	COOKHEAT PROPERTIES LLC	10-W84-146
R122	QUILLIN GARY	10-W84-145
S123	QUILLIN GARY	10-W84-144
T124	QUILLIN GARY	10-W84-143
U125	RENFORTH RICKY R (SELLER) NICKERSON RON & LESLIE-BUYERS	10-W88-142
V126	RENFORTH RICKY R (SELLER) NICKERSON RON & LESLIE-BUYERS	10-W88-142.1
W127	ELLIS DUANE & DEBORAH	10-W88-143
X128	CITY OF WHEELING	10-W88-144
Y129	WEST RENTALS INC	10-W88-244
Z130	TOM S LLC	10-W88-250
A131	BRUCE JR LAWRENCE P	10-W88-253
B132	GIBBONS JUSTIN	10-W88-254
C133	GIBBONS JUSTIN D	10-W88-256
D134	REINHARDT WADE	10-W88-255
E135	WEST RENTALS INC	10-W88-266
F136	JAGACZEWSKI RICHARD ALAN ET AL	10-W88-268
G137	STEWART SUMMER	10-W88-269
H138	BOGGS LEWIS C & DONA M	10-W88-270
I139	CONNER JUDY M	10-W88-271
J140	SHRADER ROSE	10-W88-272
K141	REINHARDT WADE	10-W88-273
L142	RCC PROPERTIES LLC	10-W88-274
M143	WARD MELANIE R & EBERHART MARY D	10-W88-275
N144	CONTRAGUERRO RENTAL PROP LLC	10-W88-276
O145	MCGHEE BENJAMIN P	10-W88-298
P146	EWART VINCENT P	10-W88-297
Q147	PARSONS MARY S	10-W88-296
R148	WESOLOWSKI VALENTINE	10-W88-279
S149	CHLON WALTER S	10-W88-280
T150	BUTLER HARLEY L & S J	10-W85-22
U151	UNKNOWN OWNER	10-W89-29
V152	UNKNOWN OWNER	10-W89-28
W153	RICHMOND CAROL	10-W89-9
X154	GORDON-SIEGWART TRUST; TEES CHARLES G & JACALYN S NEUHARDT	10-W88-361
Y155	GORDON-SIEGWART TRUST; TEES CHARLES G & JACALYN S NEUHARDT	10-W88-368
Z156	SIEBIDA MICHAEL J SR & LISA A	10-W88-369
A157	STATE OF WVA	13-1A-25.1

\*HIGHLIGHTED PARCELS MAY BE IMPACTED DURING DRILLING.

TRACT	SURFACE OWNER	TAX PARCEL
B158	SIEBIDA MARION R & MARY ANN - TOD	13-1A-25
C159	SIEBIDA MARION R & MARY ANN - TOD	13-1A-24
D160	SIEBIDA MARION R & MARY ANN - TOD	13-1A-23
E161	SIEBIDA MARION R & MARY ANN - TOD	13-1A-22
F162	SIEBIDA MARION R & MARY ANN - TOD	13-1A-13
G163	SIEBIDA MARION R & MARY ANN - TOD	13-1A-14
H164	LICHWA VIVIAN G	13-1A-15
I165	SIEBIDA MARION R & MARY ANN - TOD	13-1A-16
J166	SIEBIDA MARION R & MARY ANN - TOD	13-1A-17
K167	SIEBIDA MARION R & MARY ANN - TOD	13-1A-18
L168	SIEBIDA MARION R & MARY ANN - TOD	13-1A-19
M169	UPDEGRAFF JENNIFER R	13-1A-28
N170	MCMILLIAN G W	13-1A-31
O171	CRONIN ORAL ALLEN ET UX	13-1A-37
P172	WILSON LUCAS C	13-1A-40
Q173	WILSON LUCAS C	13-1A-44
R174	KITCHEN BERNICE	13-1A-46
S175	LICHWA MARJORIE V	13-1A-47
T176	LICHWA MARJORIE V	13-1A-48
U177	LICHWA MARJORIE V	13-1A-48.2
V178	WHITELATCH CYNTHIA G	13-1A-48.1
W179	KOTCH JOANN M	13-1A-48.3
X180	LICHWA MARJORIE V	13-1A-49.1
Y181	O'DONNELL ERIC M & NICHOLAS W	13-1A-67
Z182	DAVIS DONALD E	13-1A-68
A183	FALES CHRISTOPHER J & JOLYN Y	13-1A-71
B184	HUGUS DARLENE J	13-1C-38
C185	HUGUS DARLENE J	13-1C-39
D186	ANDERSON AMANDA	13-1C-40
E187	STUBBS MEREDITH & PAUL	13-1C-41
F188	STUBBS MEREDITH & PAUL	13-1C-42
G189	JACKSON NORMAN JR	13-1A-11
H190	HAWKEY RICHARD L ET UX	13-1A-10
I191	UNKNOWN OWNER	13-1A-9
J192	UNKNOWN OWNER	13-1A-8
K193	MOZART MIDGET LEAGUE INC	13-1C-5
L194	MOZART MIDGET LEAGUE INC	13-1C-6
M195	MOZART MIDGET LEAGUE INC	13-1C-14
N196	MOZART MIDGET LEAGUE INC	13-1C-13
O197	TOLPA MICHAEL H ET UX	13-1C-31.1
P198	ROTRIGA KEVIN L & DEBORAH L	13-1C-32
Q199	WHITMIRE KEVIN & HEATHER	13-1C-33
R200	HICKS RHONDA M & DONNA LEGGETTE	13-1C-34
S201	BRITTON ROBERT D JR	13-1C-34.1
T202	YOUNG CARRIE	13-1C-36
U203	MCDOWELL DONNA JEAN ET VIR	13-1C-37.2
V204	DOUGHERTY LAINIE S & VUNDERINK JEFFREY L	13-1A-121.1
W205	OHIO COUNTY COAL RESOURCES INC	13-1A-149
X206	OHIO COUNTY COAL RESOURCES INC	13-1-3
Y207	OHIO COUNTY COAL RESOURCES INC	13-1-6
Z208	OHIO COUNTY COAL RESOURCES INC	13-1-38
A209	BRITTON ROBERT JR	13-1C-28
B210	MESSHAM ROWAN L & DEBORAH S	13-1-1
C211	OHIO COUNTY COAL RESOURCES INC	13-1-39
D212	OHIO COUNTY COAL RESOURCES INC	13-1-66.1
E213	OHIO COUNTY COAL RESOURCES INC	13-1-49.2
F214	OHIO COUNTY COAL RESOURCES INC	13-1-49.4
G215	OHIO COUNTY COAL RESOURCES INC	13-1-49.3
H216	OHIO COUNTY COAL RESOURCES INC	13-1-65.1
I217	OHIO COUNTY COAL RESOURCES INC	13-1-65.3
J218	OHIO COUNTY COAL RESOURCES INC	13-1-62
K219	OHIO COUNTY COAL RESOURCES INC	13-1-61.1

\*HIGHLIGHTED PARCELS MAY BE IMPACTED DURING DRILLING.

01/12/2024

REVISIONS: 4705102511	COMPANY: SWN Production Company, LLC	DATE: 10-31-2023
	OPERATOR'S: SERAFIN ORTIZ MSH	DRAWN BY: TMF
	WELL #: 405H	SCALE: N/A
	DISTRICT: UNION	DRAWING NO: ACE-3048
	COUNTY: MARSHALL	WELL LOCATION PLAT 8
	STATE: WV	



SURVEYOR/ENGINEER: 1-304-933-3463  
 1700 ANMOORE RD,  
 BRIDGEPORT, WV 26330

TRACT	SURFACE OWNER	TAX PARCEL
L220	OHIO COUNTY COAL RESOURCES INC	13-1-60
M221	OHIO COUNTY COAL RESOURCES INC	13-1-59
N222	OHIO COUNTY COAL RESOURCES INC	13-1-71.2
O223	OHIO COUNTY COAL RESOURCES INC	13-1-54.1
P224	OHIO COUNTY COAL RESOURCES INC	13-1-53
Q225	OHIO COUNTY COAL RESOURCES INC	13-1-49.1
R226	OHIO COUNTY COAL RESOURCES INC	13-1-52
S227	OHIO COUNTY COAL RESOURCES INC	13-1-51
T228	OHIO COUNTY COAL RESOURCES INC	13-1-51.1
U229	OHIO COUNTY COAL RESOURCES INC	13-1-51.3
V230	OHIO COUNTY COAL RESOURCES INC	13-5-10.3
W231	OHIO COUNTY COAL RESOURCES INC	13-5-10.2
X232	OHIO COUNTY COAL RESOURCES INC	13-5-10.1
Y233	OHIO COUNTY COAL RESOURCES INC	13-5-11
Z234	CONSOLIDATION COAL COMPANY MURRAY ENERGY C/O LAND DEPT	13-5-12.2
A235	CONSOLIDATION COAL COMPANY MURRAY ENERGY C/O LAND DEPT	13-5-13.1
B236	OHIO COUNTY COAL RESOURCES INC	13-5-14
C237	KUBANCIK RITA C - LIFE	13-5-23
D238	HULL GAYLERD	13-5-24
E239	HULL GAYLERD E	13-6-26
F240	HULL GAYLERD F & SHARON L	13-6-23.20
G241	HULL GAYLERD F & SHARON L	13-6-23.13
H242	HULL GEORGE JEFFREY	13-6-23.10
I243	HULL GEORGE J	13-6-23.15
J244	HULL JAMES D & JAMES D JR	13-6-23
K245	HULL JAMES D & GEORGIA M	13-6-23.16
L246	HULL JAMES DAVID ET UX	13-6-23.1
M247	HULL JAMES DAVID JR ET UX	13-6-23.5
N248	HULL JAMES D JR & LORI ANN	13-6-23.12
O249	HULL JAMES D ET UX	13-6-23.3
P250	SATTY IRENE	13-6-43
Q251	BERLETCH RICHARD ET UX	13-6-45.1
R252	HUGHES ROBERT ALLEN	13-6C-9
S253	HULL GAYLERD F & SHARON	13-6-23.11
T254	CALDWELL CHRISTIAN A	13-7-1.1
U255	KELLER BRIAN J & JANET	13-6-50.5
V256	HECKMAN FLORA BELLE	13-7C-18
W257	VANNEST ALEX M & HOWARD ALLIE R	13-7C-17
X258	COX MARY FRANCES EST	13-7C-10
Y259	HARBISON WALTER L ET UX	13-7C-8
Z260	RENZELLA PATRICIA R	13-7C-7
A261	DEL RE MARVIN E ET UX	13-7C-6
B262	NEMCOSKY ROBERT L ET UX	13-7C-5
C263	PEACE NATHANIEL O & ELAINE M	13-7C-4
D264	PEACE NATHANIEL O & ELAINE M	13-7C-3
E265	NOVICK RYAN J & ALEXANDRA P	13-7C-2
F266	ELSON LINDA S & SAMUEL F	13-7C-1
G267	SEACHRIST MARGARET TURNER	13-7-44
H268	SEACHRIST MARGARET TURNER	13-7-45
I269	YOUNG MICHAEL D ET UX	13-7-51
J270	YOUNG MICHAEL D ET UX	13-7-50
K271	ALLEN RICHARD C ET UX	13-7-52
L272	VARGO CINDY L ET AL	13-10-3
M273	MARSHALL LAND LLC	13-10-2
N274	MOOSMAN MATTHEW G	13-10A-14
O275	WARD DEREK J	13-10A-13
P276	HUNTER WILLIAM D & MARLENE	13-10A-12
Q277	HILL PATRICIA J	13-10A-11
R278	HILL PATRICIA J	13-10A-10
S279	HILL PATRICIA J	13-10A-9
T280	KANE VERONICA A	13-10A-8
U281	HULL GAYLERD E	13-10A-7
V282	BRANNAN BRICIE GREER	13-10A-6
W283	MCCLURE DEVAN & LINDSEY CAIN	13-10A-5

\*HIGHLIGHTED PARCELS MAY BE IMPACTED DURING DRILLING.

TRACT	SURFACE OWNER	TAX PARCEL
X284	FECAT WALTER J JR ET UX	13-10A-4
Y285	BRAUTIGAN RANDY & KAYLA	13-6-50.7
Z286	KELLER WILLIAM J - TOD	13-6-50.2
A287	BURKE ANDREA M & JAMES D	13-6-50.6
B288	COOK DAVID J & ALICE - TOD	13-6-50.8
C289	COOK STEVEN M & SHANNON R	13-6-50.3
D290	COOK SUZANNE	13-6-50.4
E291	HARBISON WALTER L ET UX	13-7C-9
F292	PLATT WILLIAM H	10-W88-257

\*HIGHLIGHTED PARCELS MAY BE IMPACTED DURING DRILLING.

01/12/2024

REVISIONS: 4765102511 COMPANY: SWN Production Company, LLC	OPERATOR'S: SERAFIN ORTIZ MSH WELL #: 405H DISTRICT: UNION COUNTY: MARSHALL STATE: WV	DATE: 10-31-2023 DRAWN BY: TMF SCALE: N/A DRAWING NO: ACE-3048 WELL LOCATION PLAT 9
---	---	---

**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
See Exhibit "A"				

RECEIVED  
Office of Oil and Gas  
DEC 05 2023  
WV Department of  
Environmental Protection

\*Horizontal well unit utilization - Subject to unitization filing with the West Virginia Oil and Gas Conservation Commission.

\*Potentially Impacted Parcels - Parcels that may be impacted during drilling.

**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

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: *Archie M. Smith*  
 Its: Rotational Landman

EXHIBIT "A"

Serafin Ortiz MSH 405H

Marshall County and Ohio County, West Virginia

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC., Operator

Tract #	Tax Parcel	Lease Number	Lessor	Lessee	Royalty	Book/Page	% Interest Not Leased by SWN
1	13-6-49	725464/000	Serafin T. Ortiz and Martha G. Ortiz, husband and wife	Chesapeake Appalachia, L.L.C.	14.00%	683/84	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
2	13-6-50	725465/001	David J. Cook, married, dealing in his sole and separate interest	Chesapeake Appalachia, L.L.C.	14.00%	684/547	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		725465/002	Ruth Ann Keller, married, dealing in her sole and separate interest	Chesapeake Appalachia, L.L.C.	14.00%	683/433	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
3	13-6-45	725258/002	Alyn Robin Burkhardt, married	Chesapeake Appalachia, L.L.C.	12.50%	678/202	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		725258/003	Judy Penick, married	Chesapeake Appalachia, L.L.C.	12.50%	678/205	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		725258/004	Charles E. Borchart, Jr., married	Chesapeake Appalachia, L.L.C.	12.50%	678/208	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		725258/005	Jeffrey A. Borchart, single	Chesapeake Appalachia, L.L.C.	12.50%	678/211	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		725258/001	Eleanor Cross, single	Chesapeake Appalachia, L.L.C.	12.50%	678/520	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	

4705102511

RECEIVED  
Office of Oil and Gas  
DEC 05 2023  
West Virginia Department of  
Environmental Protection

01/12/2024

EXHIBIT "A"

Serafin Ortiz MSH 405H

Marshall County and Ohio County, West Virginia

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC., Operator

4	13-6-44	732017/001	Shirley A. Davis, unmarried	Chesapeake Appalachia, L.L.C.	18.00%	749/567	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		732017/002	Rudolph Conti, Jr., single	Chesapeake Appalachia, L.L.C.	18.00%	754/293	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	33.33%
5	13-6-23.9	728306/000	Michelle A. Hull, single	Chesapeake Appalachia L.L.C.	18.00%	718/476	0.00%
6	13-6-23.18	724963/000	Lula E. Hull, a widow	Chesapeake Appalachia, L.L.C.		33/110	
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	12.50%	678/30	0.00%
7	13-6-23.14	724963/000	Lula E. Hull, a widow	Chesapeake Appalachia, L.L.C.	12.50%	678/30	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
8	13-6-23.17	724963/000	Lula E. Hull, a widow	Chesapeake Appalachia L.L.C.	12.50%	678/30	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
9	13-6-17	725364/000	Patrick A. Van Sycoc and Faith M. Van Sycoc, husband and wife	Chesapeake Appalachia, LLC	12.50%	681/443	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
10	13-6-24	783797/000	Denise L. Lombard, single	Chesapeake Appalachia, L.L.C.	18.00%	1137/488	0.00%
11	13-6-16.1	783797/000	Denise L. Lombard, single	Chesapeake Appalachia, L.L.C.	18.00%	1137/488	0.00%
12	13-6-16	726095/000	John W. Wood and Peggy A. Wood, married, as Joint Tenants with Rights of Survivorship	Chesapeake Appalachia, LLC	14.00%	692/482	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	

**EXHIBIT "A"**  
**Serafin Ortiz MSH 405H**  
 Marshall County and Ohio County, West Virginia  
 Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC., Operator

13	13-5-25	728793/000	Stanley M. Kubancik and Tabitha Lynn Kubancik, husband and wife	Chesapeake Appalachia, L.L.C.	18.00%	720/365	0.00%
				SWN Production Company, LLC		33/110	
14	13-5-28	728793/000	Stanley M. Kubancik and Tabitha Lynn Kubancik, husband and wife	Chesapeake Appalachia, L.L.C.	18.00%	720/365	0.00%
				SWN Production Company, LLC		33/110	
15	13-5-29	784402/000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%
16	13-5-30	784402/000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%
17	13-5-31	784402/000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%
18	13-5-32.1	784402/000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%
19	13-5-10	784404/000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/153	0.00%
20	13-1-50	784402/000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%
21	13-1-49	751396/001	Bounty Minerals, LLC	TH Exploration, LLC	20.00%	965/305	0.00%
				American Petroleum Partners Operating, LLC		43/497	
				SWN Production Company, LLC		1093/34	
		784047/000	Susan Reese, single	SWN Production Company, LLC	18.00%	1134/437	0.00%
		784045/000	Pat Lacock, single	SWN Production Company, LLC	18.00%	1134/645	0.00%
		783468/002	A. R. Walker, widower	SWN Production Company, LLC	18.00%	1129/378	0.00%
		N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	14.00%
22	13-1-2	784402/000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%
23	13-1-1.1	784402/000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%

**EXHIBIT "A"**  
**Serafin Ortiz MSH 405H**  
 Marshall County and Ohio County, West Virginia  
 Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC., Operator

24	13-1-1.2	751434/000	John F. Markowicz, Jr. and Martina Markowicz, husband and wife	TH Exploration, LLC	TH Exploration, LLC	18.00%	952/415	0.00%
				TH Exploration, LLC	SWN Production Company, LLC		488/263	
25	13-1C-48	783240/001	Marilyn J. Snyder a/k/a Marilyn M. Snyder and William S. Snyder, wife and husband	SWN Production Company, LLC	SWN Production Company, LLC	18.00%	1123/176	0.00%
26	13-1-1.3	751435/001	John Markowicz, and Martina Markowicz, husband and wife	TH Exploration, LLC	TH Exploration, LLC	18.00%	926/193	0.00%
				TH Exploration, LLC	SWN Production Company, LLC		48/263	
27	13-1A-1	751435/002	Marilyn J. Snyder, a/k/a Marilyn M. Snyder, and William S. Snyder, wife and husband	SWN Production Company, LLC	SWN Production Company, LLC	18.00%	1123/174	0.00%
		751435/001	John Markowicz, and Martina Markowicz, husband and wife	TH Exploration, LLC	TH Exploration, LLC	18.00%	926/193	0.00%
		783240/001	Marilyn J. Snyder a/k/a Marilyn M. Snyder and William S. Snyder, wife and husband	SWN Production Company, LLC	SWN Production Company, LLC	18.00%	1123/176	0.00%
28	13-1A-2	784617/000	Donnie T. Lichwa, individually, and as Trustee of the Marjorie Lichwa Testamentary Trust FBO Lonnie W. Lichwa, and Lonnie W. Lichwa	SWN Production Company, LLC	SWN Production Company, LLC	18.00%	1140/577	0.00%
29	13-1A-4	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
30	13-1A-5	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
31	13-1A-6	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
32	13-1A-7	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
33	13-1A-12	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
34	10-W88-360	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
35	U.S. 250	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
36	10-W88-285	Pending	LAS Construction & Facility	SWN Production Company, LLC	SWN Production Company, LLC	18.00%	1053/572	0.00%
37	10-W88-284	Pending	Steven Michael Skrzypek, a married man dealing in his sole and separate property	SWN Production Company, LLC	SWN Production Company, LLC	18.00%	1053/577	0.00%
38	10-W88-283	Pending	Steven Michael Skrzypek, a married man dealing in his sole and separate property	SWN Production Company, LLC	SWN Production Company, LLC	18.00%	1053/577	0.00%
39	10-W88-282	Pending	Christa D. Ewart Newby, a married woman dealing in her sole and separate property	SWN Production Company, LLC	SWN Production Company, LLC	18.00%	1050/73	0.00%

EXHIBIT "A"  
 Serafin Ortiz MSH 405H  
 Marshall County and Ohio County, West Virginia  
 Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC., Operator

40	10-W88-281	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
41	10-W88-278	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
42	10-W88-277	Pending	Judith J. Sofka, individually, and Judith J. Sofka and Michael S. Sofka, wife and husband, as joint tenants with rights of	SWN Production Company, LLC	17.00%	1043/684	0.00%
43	10-W88-225	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
44	10-W88-226	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
45	10-W88-232	Pending	Sumer D. Vucelick & Samuel G. Vucelick, wife and husband	SWN Production Company, LLC	18.00%	1050/89	0.00%
46	10-W88-233.1	Pending	Sumer D. Vucelick & Samuel G. Vucelick, wife and husband	SWN Production Company, LLC	18.00%	1050/89	0.00%
47	10-W88-233	Pending	Robert S. Tyburski Jr., a single man	SWN Production Company, LLC	18.00%	1053/561	0.00%
48	10-W88-231.1	Pending	Tom 5 LLC	SWN Production Company, LLC	17.00%	1052/485	0.00%
49	10-W88-231	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
50	10-W88-259	Pending	James Blake & Carol Lawhorne	SWN Production Company, LLC	18.00%	1048/443	0.00%
51	10-W88-258	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
52	10-W88-240	Pending	Earl P. Huffner, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	1053/68	0.00%
53	10-W88-241	Pending	Earl P. Huffner, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	1053/68	0.00%
54	10-W88-242	Pending	West Rentals, INC	SWN Production Company, LLC	18.00%	1048/686	0.00%
55	10-W88-242.1	Pending	West Rentals, INC	SWN Production Company, LLC	18.00%	1048/686	0.00%
56	10-W88-148	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
57	10-W88-146	Pending	West Rentals, INC	SWN Production Company, LLC	18.00%	1048/686	0.00%
58	10-W84-142	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
59	10-W84-141	Pending	Carla Vessels, single	SWN Production Company, LLC	18.00%	1048/504	0.00%



EXHIBIT "A"

Serafin Ortiz MSH 405H

Marshall County and Ohio County, West Virginia

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC., Operator

60	10-W84-140	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
61	10-W84-139	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
62	10-W84-50	Pending	Wheeling Power Company	SWN Production Company, LLC	18.00%	1052/627	0.00%
63	10-W84-44	Pending	Wheeling Power Company	SWN Production Company, LLC	18.00%	1052/627	0.00%
64	10-W84-43	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
65	10-W84-348	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
66	10-W84-42	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
67	10-W84-346	Pending	Bellaire Harbor Service, LLC	SWN Production Company, LLC	17.00%	1042/492	0.00%
68	Ohio River	Pending	State of West Virginia, Department of Commerce, Division of Natural Resources	SWN Production Company, LLC	20.00%	1051/59 (Ohio) 1170/693 (Marshall)	0.00%
0	13-6-23-19	724963/000	Lula E. Hull, widow	Chesapeake Appalachia, LLC	18.00%	678/30	0.00%
Z26	13-5-9	784404/000	GNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	33/110	0.00%
G85	10-W88-287	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
H86	10-W88-286	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
I87	10-W88-285.1	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
J88	10-W88-223	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
L90	10-W88-227	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
M91	10-W88-230	Pending	City of Wheeling	SWN Production Company, LLC	18.00%	1053/305	0.00%
N92	10-W88-239	Pending	Catherine A. Prasack, single	SWN Production Company, LLC	17.00%	1043/702	0.00%
Q95	10-W88-150	Pending	Linda C. Wiley, single	SWN Production Company, LLC	17.00%	1043/653	0.00%

**EXHIBIT "A"**  
**Serafin Ortiz MSH 405H**  
**Marshall County and Ohio County, West Virginia**  
**Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC., Operator**

R96	10-W88-149	Pending	Linda C. Wiley, single	SWN Production Company, LLC	1043/653	17.00%	1043/653	0.00%
N118	10-W88-136	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
O119	10-W88-138	Pending	Darla J. Reinhardt, n/k/a Darla J. Taylor, widow	SWN Production Company, LLC	1043/678	17.00%	1043/678	0.00%
U125	10-W88-142	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
V126	10-W88-142.1	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
Z130	10-W88-250	Pending	Tom S LLC	SWN Production Company, LLC	1052/485	17.00%	1052/485	0.00%
A131	10-W88-253	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
B132	10-W88-254	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
C133	10-W88-256	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
D134	10-W88-255	Pending	Wade R. Reinhardt, single	SWN Production Company, LLC	1043/659	17.00%	1043/659	0.00%
K141	10-W88-273	Pending	Wade R. Reinhardt, single	SWN Production Company, LLC	1043/659	17.00%	1043/659	0.00%
L142	10-W88-274	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
M143	10-W88-275	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
R148	10-W88-279	Pending	Valentine Wesolewski, a single man	SWN Production Company, LLC	1050/377	17.00%	1050/377	0.00%
S149	10-W88-280	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
T150	10-W85-22	Pending	Debra Jean Beaver, a married woman, dealing in her sole and separate property	SWN Production Company, LLC	1052/331	18.00%	1052/331	0.00%
A157	13-1A-25.1	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
F162	13-1A-13	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
G163	13-1A-14	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%
H190	13-1A-10	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	N/A	100.00%

EXHIBIT "A"

Serafin Ortiz MSH 405H

Marshall County and Ohio County, West Virginia

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC., Operator

I191	13-1A-9	Pending	Wheeling Power Company	SWN Production Company, LLC	18.00%	1052/627	0.00%
J192	13-1A-8	Pending	Wheeling Power Company	SWN Production Company, LLC	18.00%	1052/627	0.00%
T228	13-1-51.1	784402/000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%
F292	10-W88-257	Pending	William H. Platt & Tracy Platt, his wife	SWN Production Company, LLC	18.00%	1052/480	0.00%

\*potentially impacted parcels - parcels that may be impacted during drilling.

\*Horizontal well unit utilization - Subject to unitization filing with the West Virginia Oil and Gas Conservation Commission.

RECEIVED  
Office of Oil and Gas  
DEC 05 2023  
WV Department of  
Environmental Protection

4705102511

01/12/2024



4705102511

**SWN Production Company, LLC**  
1300 Fort Pierpont Dr, Ste 201  
Morgantown, WV 26508  
Tel: 304 884 1610  
Fax: 304 471 2497  
www.swn.com

November 15, 2023

Mr. Charles Brewer  
WV DEP Office of Oil & Gas  
601 57<sup>th</sup> St., SE  
Charleston, WV 25304

**RE:** SWN's proposed New Well: Serafin Ortiz MSH 405H in Marshall & Ohio Counties, West Virginia, Drilling under Benwood Hill Road, Boggs Run Road, Marshall County Road, Virginia Park Road, Hall Street, US 250 (State Route 2), Wetzel Street, McColloch Street, Lane G West Side, 45<sup>th</sup> Street, 44<sup>th</sup> Street, 43<sup>rd</sup> Street, 42<sup>nd</sup> Street, Wood Street, Lane F, Jacob Street, and Water Street.

Dear Mr. Brewer:

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 Benwood Hill Road, Boggs Run Road, Marshall County Road, Virginia Park Road, Hall Street, US 250 (State Route 2), Wetzel Street, McColloch Street, Lane G West Side, 45<sup>th</sup> Street, 44<sup>th</sup> Street, 43<sup>rd</sup> Street, 42<sup>nd</sup> Street, Wood Street, Lane F, Jacob Street, and Water Street. Please be advised that SWN has attempted to lease all mineral owners under said route as it relates to the above-referenced well and unit. In several instances, SWN successfully obtained leases of the acreage underlying the road. Any remaining unleased roadway acreage has been included in SWN's pending forced-pooling (unitization) application which was filed with the WV OGCC on November 10, 2023 for the Serafin Ortiz North C Unit (Docket No. 335-356). We expect that all roadway acreage will be effectively under SWN's operational control following the issuance of an Order by the OGCC after the planned December 14 hearing.

Thank you.

Sincerely,

Andrew M. Smith, RL  
Rotational Landman  
SWN Production Company, LLC

RECEIVED  
Office of Oil and Gas  
DEC 05 2023  
WV Department of  
Environmental Protection

The Right People doing the Right Things,  
wisely investing the cash flow from our  
underlying Assets, will create Value+®

01/12/2024

WW-PN  
(11-18-2015)

**Horizontal Natural Gas Well Work Permit  
Application Notice By Publication**

**Notice is hereby given:**

Pursuant to West Virginia Code 22-6A-10(e) prior to filing an application for a permit for a horizontal well the applicant shall publish in the county in which the well is located or is proposed to be located a Class II legal advertisement.

**Paper:** Moundsville Daily Echo

**Public Notice Date:** July 6, 2023 & July 13, 2023

The following applicant intends to apply for a horizontal natural well work permit which disturbs three acres or more of surface excluding pipelines, gathering lines and roads or utilizes more than two hundred ten thousand gallons of water in any thirty day period.

**Applicant:** SWN Production Company, LLC **Well Number:** Serafin Ortiz MSH 405H

**Address:** 1300 Fort Pierpont Dr., Suite 201  
Morgantown, WV 26508

**Business Conducted:** Natural gas production.

**Location –**

State:	<u>West Virginia</u>	County:	<u>Marshall</u>
District:	<u>Union</u>	Quadrangle:	<u>Moundsville and Gas</u>
UTM Coordinate NAD83 Northing:	<u>4,426,774</u>		
UTM coordinate NAD83 Easting:	<u>524,992</u>		
Watershed:	<u>Upper Ohio Wheeling</u>		

RECEIVED  
DEC 05 2023  
WV Department of  
Environmental Protection

**Coordinate Conversion:**

To convert the coordinates above into longitude and latitude, visit: [http://tagis.dep.wv.gov/convert/llutm\\_conus.php](http://tagis.dep.wv.gov/convert/llutm_conus.php)

**Electronic notification:**

To receive an email when applications have been received or issued by the Office of Oil and Gas, visit <http://www.dep.wv.gov/insidedep/Pages/DEPMailingLists.aspx> to sign up.

**Reviewing Applications:**

Copies of the proposed permit application may be reviewed at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE Charleston, WV 25304 (304-926-0450). Full copies or scans of the proposed permit application will cost \$15, whether mailed or obtained at DEP headquarters. Copies may be requested by calling the office or by sending an email to [DEP.comments@wv.gov](mailto:DEP.comments@wv.gov).

**Submitting Comments:**

Comments may be submitted online at <https://apps.dep.wv.gov/oog/comments/comments.cfm>, or by letter to Permit Review, Office of Oil and Gas, 601 57<sup>th</sup> Street, SE Charleston, WV 25304. Please reference the county, well number, and operator when using this option.

Regardless of format for comment submissions, they must be received no later than thirty days after the permit application is received by the Office of Oil and Gas.

For information related to horizontal drilling visit: [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx)

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE CERTIFICATION

Date of Notice Certification: 12/4

API No. 47- 051 -  
Operator's Well No. Serafin Ortiz MSH 405H  
Well Pad Name: Serafin Ortiz

Notice has been given:

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State: West Virginia  
County: 051-Marshall  
District: Union  
Quadrangle: Moundsville  
Watershed: Upper Ohio South

UTM NAD 83 Easting: 524,992.285  
Northing: 4,426,774.348  
Public Road Access: Grand View Road  
Generally used farm name: Serafin Ortiz

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following: *PLEASE CHECK ALL THAT APPLY		<b>OOG OFFICE USE ONLY</b> <input type="checkbox"/> RECEIVED/ NOT REQUIRED <input type="checkbox"/> RECEIVED <input type="checkbox"/> RECEIVED/ NOT REQUIRED <input type="checkbox"/> RECEIVED <input type="checkbox"/> RECEIVED <input type="checkbox"/> RECEIVED
<input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED <input checked="" type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED <input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or <input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH) <input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION <input checked="" type="checkbox"/> 5. PUBLIC NOTICE <input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION		

Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

RECEIVED  
Office of Oil and Gas  
DEC 05 2023

4705102511

**Certification of Notice is hereby given:**

THEREFORE, I Brittany Woody, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator: SWN Production Co., LLC

Address: 1300 Fort Pierpont Dr., Suite 201

By: Brittany Woody

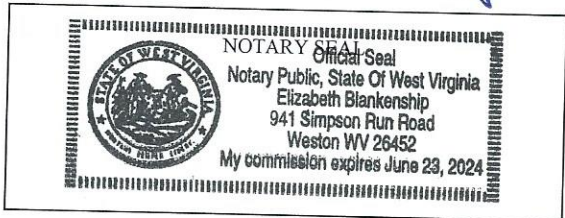
Morgantown, WV 26508

Its: Staff Regulatory Specialist

Facsimile: 304-884-1690

Telephone: 304-884-1610 *Brittany Woody*

Email: Brittany\_Woody@swn.com



Subscribed and sworn before me this 22 day of June 2023.

*Elizabeth Blankenship* Notary Public

My Commission Expires 6/23/2024

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [deprivacyofficer@wv.gov](mailto:deprivacyofficer@wv.gov).

RECEIVED  
Office of Oil and Gas

DEC 05 2023

WV Department of  
Environmental Protection

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE OF APPLICATION

Notice Time Requirement: notice shall be provided no later than the filing date of permit application.

Date of Notice: 12/4 Date Permit Application Filed: 12/4

Notice of:

- PERMIT FOR ANY WELL WORK
- CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

Delivery method pursuant to West Virginia Code § 22-6A-10(b)

- PERSONAL SERVICE
- REGISTERED MAIL
- METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Application Notice  WSSP Notice  E&S Plan Notice  Well Plat Notice is hereby provided to:

SURFACE OWNER(s)  
Name: Frank & Lori Longwell  
Address: 1696 Marshall Street  
Benwood, WV 26031  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER(s) (Road and/or Other Disturbance)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER(s) (Impoundments or Pits)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

COAL OWNER OR LESSEE  
Name: Marshall Land, LLC  
Address: PO Box 261  
Julian, WV 25529

COAL OPERATOR  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)  
Name: See Attachment 13A  
Address: \_\_\_\_\_

OPERATOR OF ANY NATURAL GAS STORAGE FIELD  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

\*Please attach additional forms if necessary

RECEIVED  
Office of Oil and Gas  
DEC 05 2022  
WV Department of  
Environmental Protection



**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

**This Notice Shall Include:**

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Well Location Restrictions**

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

**Water Well Testing:**

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

**Water Testing Laboratories:**

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

**Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:**

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

**Written Comment:**

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

Chief, Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> St. SE  
Charleston, WV 25304  
(304) 926-0450

Office of Oil and Gas  
RECEIVED  
DEC 05 2023  
WV Department of Environmental Protection

Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. **NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**

**Time Limits and Methods for Filing Comments.**

The law requires these materials to be served on or before the date the operator files its Application. You have **THIRTY (30) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

**Comment Requirements**

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site <http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

**Permit Denial or Condition**

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

WW-6A  
(8-13)

4705102511  
API NO. 47- 051 -  
OPERATOR WELL NO. Serafin Ortiz MSH 405H  
Well Pad Name: Serafin Ortiz

**Notice is hereby given by:**

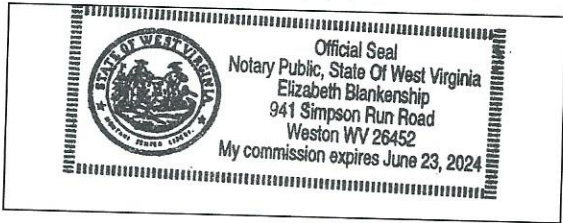
Well Operator: SWN Production Co., LLC  
Telephone: 304-884-1610  
Email: Brittany\_Woody@swn.com

*Brittany Woody*

Address: 1300 Fort Pierpont Dr., Suite 201  
Morgantown, WV 26508  
Facsimile: 304-884-1690

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [deprivacyofficer@wv.gov](mailto:deprivacyofficer@wv.gov).



Subscribed and sworn before me this 22 day of June 2023.  
Elizabeth Blankenship Notary Public  
My Commission Expires 6/23/2024

RECEIVED  
Office of Oil and Gas  
DEC 05 2023  
WV Department of  
Environmental Protection

01/12/2024

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**NOTICE OF ENTRY FOR PLAT SURVEY**

**Notice Time Requirement:** Notice shall be provided at least **SEVEN (7)** days but no more than **FORTY-FIVE (45)** days prior to entry

**Date of Notice:** 6/15/2023      **Date of Planned Entry:** 6/22/2023

**Delivery method pursuant to West Virginia Code § 22-6A-10a**

- PERSONAL SERVICE     
 REGISTERED MAIL     
 METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned entry on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven days but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.

**Notice is hereby provided to:**

SURFACE OWNER(S)

Name: Frank & Lori Longwell  
Address: 1696 Marshall Street  
Benwood, WV 26031  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

COAL OWNER OR LESSEE

Name: Marshall Land, LLC  
Address: PO Box 261  
Julian, WV 25529

MINERAL OWNER(S)

Name: Serafin T. Ortiz, Trustee of The Serafin T. Ortiz Trust  
Address: 170 Celestial Way  
Juno Beach, FL 33408

\*please attach additional forms if necessary

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

State: <u>WV</u>	Approx. Latitude & Longitude: <u>39.990571° -80.707151°</u>
County: <u>Marshall</u>	Public Road Access: <u>Grand View Road</u>
District: <u>Union</u>	Watershed: <u>Upper Ohio South</u>
Quadrangle: <u>Moundsville</u>	Generally used farm name: <u>Serafin Ortiz MSH</u>

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Notice is hereby given by:**

Well Operator: <u>SWN PRODUCTION COMPANY, LLC</u>	Address: <u>1300 Fort Pierpont Dr., Suite 201</u>
Telephone: <u>304-884-1610</u>	<u>Morgantown, WV 26508</u>
Email: <u>brittany_woody@swn.com</u>	Facsimile: <u>304-884-1690</u>

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

01/12/2024

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**NOTICE OF INTENT TO DRILL**

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

**Notice Time Requirement:** Notice shall be provided at least **TEN (10)** days prior to filing a permit application.  
**Date of Notice:** 07/05/2023      **Date Permit Application Filed:** 7/14/23

**Delivery method pursuant to West Virginia Code § 22-6A-16(b)**

- HAND DELIVERY       CERTIFIED MAIL RETURN RECEIPT REQUESTED

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided*, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however*, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

**Notice is hereby provided to the SURFACE OWNER(s):**

Name: <u>Frank and Lori Longwell</u>	Name: _____
Address: <u>1696 Marshall Street</u>	Address: _____
<u>Benwood, WV 26031</u>	_____

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: <u>West Virginia</u>	UTM NAD 83 Easting: <u>524,992.285</u>
County: <u>Marshall</u>	Northing: <u>4,426,774.348</u>
District: <u>Union</u>	Public Road Access: _____
Quadrangle: <u>Moundsville 7.5, WV</u>	Generally used farm name: <u>Serafin Ortiz</u>
Watershed: <u>Upper Ohio-Wheeling</u>	_____

**This Notice Shall Include:**

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Notice is hereby given by:**

Well Operator: <u>SWN Production Company, LLC</u>	Authorized Representative: <u>Justin Booth</u>
Address: <u>1300 Fort Pierpont Dr., Suite 201</u>	Address: <u>1300 Fort Pierpont Dr., Suite 201</u>
<u>Morgantown, WV 26508</u>	<u>Morgantown, WV 26508</u>
Telephone: <u>304-884-1675</u>	Telephone: <u>304-884-1675</u>
Email: <u>Justin_Booth@swn.com</u>	Email: <u>Justin_Booth@swn.com</u>
Facsimile: _____	Facsimile: _____

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

**STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE OF PLANNED OPERATION**

**Notice Time Requirement:** notice shall be provided no later than the filing date of permit application.

**Date of Notice:** 07/05/2023 **Date Permit Application Filed:** 12/14

**Delivery method pursuant to West Virginia Code § 22-6A-16(c)**

- CERTIFIED MAIL RETURN RECEIPT REQUESTED
- HAND DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

**Notice is hereby provided to the SURFACE OWNER(s)**  
(at the address listed in the records of the sheriff at the time of notice):

Name: Frank and Lori Longwell  
Address: 1696 Marshall Street  
Benwood, WV 26031

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State:	West Virginia	UTM NAD 83	Easting:	524,992.285
County:	Marshall		Northing:	4,426,774.348
District:	Union	Public Road Access:		
Quadrangle:	Moundsville 7.5, WV	Generally used farm name:	Serafin Ortiz	
Watershed:	Upper Ohio-Wheeling			

**This Notice Shall Include:**

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by W. Va. Code § 22-6A-10(b) to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

Well Operator: SWN Production Company, LLC  
Telephone: 304-884-1675  
Email: Justin\_Booth@swn.com

Address: 1300 Fort Pierpont Dr., Suite 201  
Morgantown, WV 26508  
Facsimile: \_\_\_\_\_

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).



## WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

## Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110  
Charleston, West Virginia 25305-0430 • (304) 558-3505Gregory L. Bailey, P.E.  
Interim  
State Highway EngineerJimmy Wriston, P. E.  
Secretary of Transportation  
Commissioner of Highways

July 31, 2023

James A. Martin, Chief  
Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304Subject: DOH Permit for the Serafin Ortiz Pad, Marshall County  
Serafin Ortiz MSH 405H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2011-0669 which has been issued to Southwestern Energy for access to the State Road for a well site located off Marshall County Route 2/4 SLS MP 2.16.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated March 6, 2023. This letter is valid for permitting purposes for one year from the date of this letter.

Very Truly Yours,

Handwritten signature of Gary K. Clayton in blue ink.

Gary K. Clayton, P.E.  
Regional Operations Engineer  
Central Office O&G CoordinatorCc: Brittany Woody  
Southwestern Energy  
CH, OM, D-6  
File



## Attachment VI Frac Additives

Product Name	Product Use	Chemical Name	CAS Number
HCL	Solvent	Hydrochloric Acid	7647-01-0
		Water	7732-18-5
FSTI-CI-02	Corrosion Inhibitor	2-Butoxyethanol	111-76-2
		Ethylene glycol	107-21-1
		N,N-Dimethylformamide	68-12-2
		benzyl chloridequaternized	72480-70-7
		Cinnamaldehyde	104-55-2
		Isopropyl alcohol	67-63-0
		Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)- .omega.-hydroxy-	9016-45-9
		1-Decanol	112-30-1
		1-Octanol	111-87-5
		Triethyl phosphate	78-40-0
Ferriplex 80	Iron Control	Sodium Erythorbate	6381-77-7
Tolicide 4Frac	Biocide	Tetrakis(Hydroxymethyl) Phosphonium Sulfate	55566-30-8
		Quaternary ammonium compounds	68424-85-1
		Ethanol	64-17-5
Plexslick 930	Friction Reducer	Water	7732-18-5
		Hydrotreated Petroleum Distillate	64742-47-8
		Water	7732-18-5
		copolymer of 2-propenamide	69418-26-4
		Oleic Acid Diethanolamide	93-83-4
		Alcohol Ethoxylate Surfactants	68551-12-2
		Ammonium Chloride	12125-02-9
		Sodium Chloride	7647-14-5
		ORGANIC PHOSPHONIC ACIDS SALTS	15827-60-8
		Water	7732-18-5
Plexaid 655NM	Scale Inhibitor	Hydrotreated Petroleum Distillate	64742-47-8
		Water	7732-18-5
		copolymer of 2-propenamide	69418-26-4
		Alcohol Ethoxylate Surfactants	68551-12-2
		Sodium Chloride	7647-14-5
Plexslick V996	Friction Reducer	ORGANIC PHOSPHONIC ACIDS SALTS	15827-60-8
		Water	7732-18-5
		Hydrotreated Petroleum Distillate	64742-47-8
		Water	7732-18-5
Plexaid 655WG	Scale Inhibitor	copolymer of 2-propenamide	69418-26-4
		Alcohol Ethoxylate Surfactants	68551-12-2
		Sodium Chloride	7647-14-5
		ORGANIC PHOSPHONIC ACIDS SALTS	15827-60-8
		Water	7732-18-5
Clearal 270	Biocide	Glycerin	7732-18-5
		Glutaraldehyde	67-56-1
		Didecyldimethylammonium Chloride	111-30-8
		Quaternary Ammonium compounds, Benzyl-C12-C16-alkyldimethyl, Chlorides	7173-51-5
		Ethanol	68424-85-1
StimSTREAM SC 398 CW	Scale Inhibitor	Water	64-17-5
		Ethylene glycol	7732-18-5
		CHEMSTREAM-Polymer-10001	107-21-1
		CHEMSTREAM-Polymer-10002	CHEMSTREAM-Polymer-10001
StimSTREAM FR 9800	Friction Reducer	Water	CHEMSTREAM-Polymer-10002
		Chemstream-Alkane-00001	7732-18-5
		Chemstream-Polymer-00001	Chemstream-Alkane-00001
		Ethoxylated alcohols (C12-16)	Chemstream-Polymer-00001
StimSTREAM FR 2800	Friction Reducer	Water	68551-12-2
		Distillates (petroleum), hydrotreated light	7732-18-5
		Alcohols, C11-14-iso, C13-rich, ethoxylated	64742-47-8
StimSTREAM FR 9725	Friction Reducer	Water	78330-21-9
		Distillates (petroleum), hydrotreated light	7732-18-5
		Ammonium Chloride	64742-47-8
StimSTREAM SC 398 C	Scale Inhibitor	Water	12125-02-9
		CHEMSTREAM-Polymer-10001	7732-18-5
		CHEMSTREAM-Polymer-10002	CHEMSTREAM-Polymer-10001
As of 7/5/2023		Water	CHEMSTREAM-Polymer-10002
			7732-18-5

OPERATOR: SWN Production Co., LLC

WELL NO: Serafin Ortiz MSH 405H

PAD NAME: Serafin Ortiz

REVIEWED BY: \_\_\_\_\_

SIGNATURE: *Brittany Nbody*

### WELL RESTRICTIONS CHECKLIST

#### HORIZONTAL 6A WELL

#### Well Restrictions

*\* Pad Built 12/7/11*

At Least 100 Feet from Pad and LOD (including any E&S Control Feature) to any Perennial Stream, Lake, Pond, Reservoir or Wetland; OR

DEP Waiver and Permit Conditions

At Least 300 Feet from Pad and LOD (including any E&S Control Feature) to any Naturally Producing Trout Stream; OR

DEP Waiver and Permit Conditions

At Least 1000 Feet from Pad and LOD (including any E&S Control Feature) to any Groundwater Intake or Public Water Supply; OR

DEP Waiver and Permit Conditions

At Least 250 Feet from an Existing Water Well or Developed Spring to Well Being Drilled; OR

Surface Owner Waiver and Recorded with County Clerk, OR

DEP Variance and Permit Conditions

At Least 625 Feet from an Occupied Dwelling Structure to Center of the Pad; OR

Surface Owner Waiver and Recorded with County Clerk, OR

DEP Variance and Permit Conditions

At Least 625 Feet from Agricultural Buildings Larger than 2500 Square Feet to the Center of the Pad; OR

Surface Owner Waiver and Recorded with County Clerk, OR

DEP Variance and Permit Conditions