



west virginia department of environmental protection

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

Harold D. Ward, Cabinet Secretary
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 3H
47-051-02509-00-00

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 3H
Farm Name: Frank J & Lori A Longwell
U.S. WELL NUMBER: 47-051-02509-00-00
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

WW-6B
(04/15)

4705102509
API NO. 47-051
OPERATOR WELL NO. Serafin Ortiz MSH 3H
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 3H Well Pad Name: Serafin Ortiz

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

4) Elevation, current ground: 1278' Elevation, proposed post-construction: 1278'

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- 6245', Target Base TVD- 6302', Anticipated Thickness- 57', Associated Pressure- 4096

8) Proposed Total Vertical Depth: 6290'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 22892'

11) Proposed Horizontal Leg Length: 17143.11'

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

(a) If Yes, provide Mine Info: Name: _____
Depth: _____
Seam: _____
Owner: _____

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Strader Gower
10/31/2023

WW-6B
(04/15)

4705102509

API NO. 47-051 -
OPERATOR WELL NO. Serafin Ortiz MSH 3H
Well Pad Name: Serafin Ortiz

18)

CASING AND TUBING PROGRAM

TYPE	<u>Size (in)</u>	<u>New or Used</u>	<u>Grade</u>	<u>Weight per ft. (lb/ft)</u>	<u>FOOTAGE: For Drilling (ft)</u>	<u>INTERVALS: Left in Well (ft)</u>	<u>CEMENT: Fill-up (Cu. Ft.)/CTS</u>
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#	22,892'	22,892' /	Tail 4225sx/ 100' inside Intermediate
Tubing							
Liners							

TYPE	<u>Size (in)</u>	<u>Wellbore Diameter (in)</u>	<u>Wall Thickness (in)</u>	<u>Burst Pressure (psi)</u>	<u>Anticipated Max. Internal Pressure (psi)</u>	<u>Cement Type</u>	<u>Cement Yield (cu. ft./k)</u>
Conductor	20"	30"	0.25	2120	81	Class A	1.20/30% Excess
Fresh Water	13 3/8"	17.5"	0.380	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							

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PACKERS

Kind:				
Sizes:				
Depths Set:				

Stacy Gouss
2/20/2023

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 ***

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.

*Note: Attach additional sheets as needed.

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WW-9
(4/16)

API Number 47 - 051 - _____

Operator's Well No. Serafin Ortiz MSH 3H

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 U6-U8438, 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.

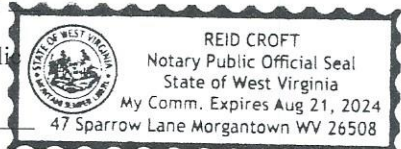
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations 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*
Company Official (Typed Name) Brittany Woody
Company Official Title Staff Regulatory Specialist

Subscribed and sworn before me this 5th day of July, 2023
Reid Croft Notary Public

My commission expires 8/21/2024



01/12/2024

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: _____

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Office of Oil and Gas

DEC 05 2023

WV 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 3H
Moundsville QUAD
Union DISTRICT
MARSHALL COUNTY, WEST VIRGINIA

Submitted by:

Name: Brittany Woody

Brittany Woody

Date: 6/19/2023

Title: Staff Regulatory Specialist

SWN Production Co., LLC

Approved by:

Name: STRADER GOWER

Date: 7/20/2023

Title: Oil & Gas Inspector

Approved by:

Name: _____

Date: _____

Title: _____

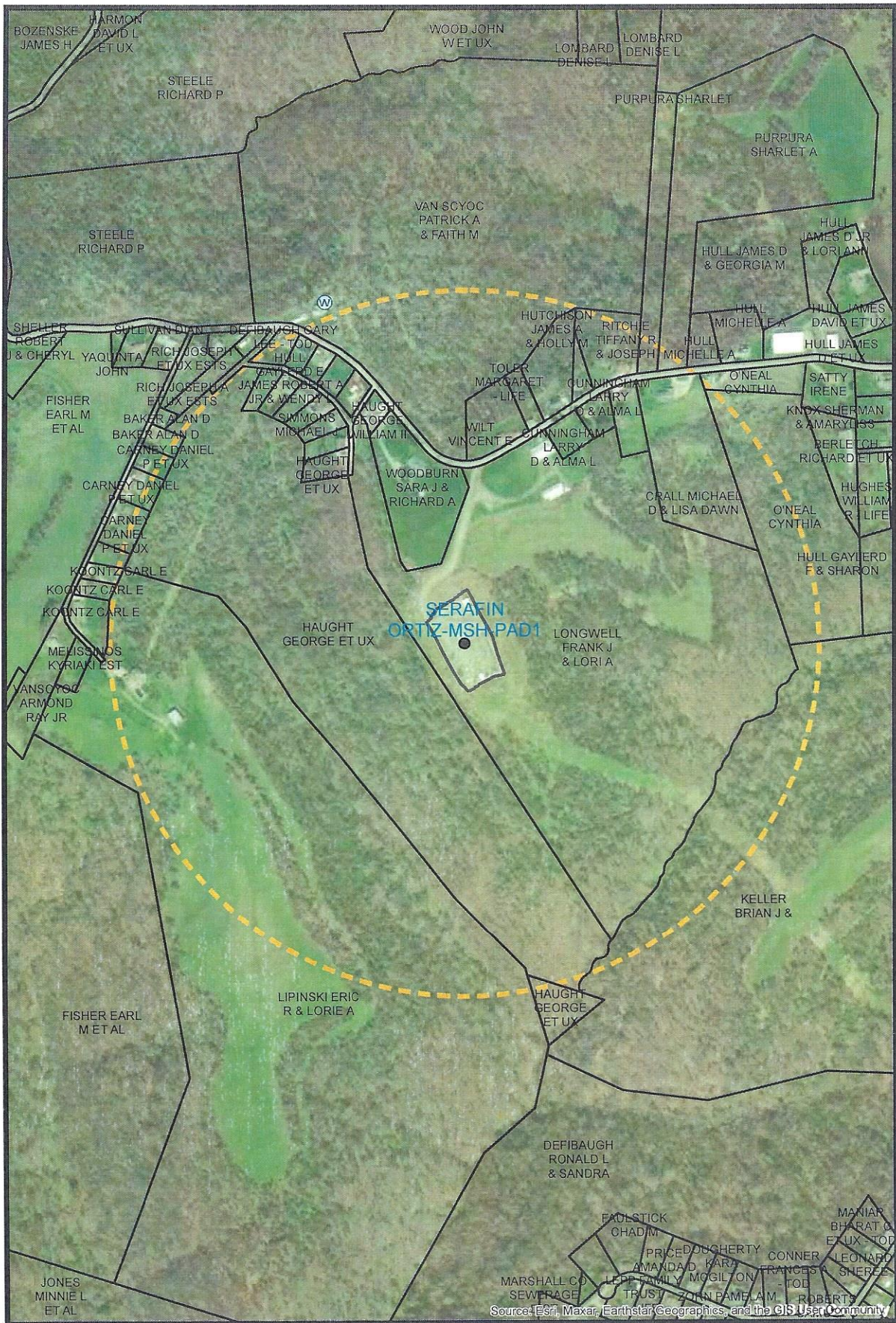
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SWN PRODUCTION COMPANY, LLC – CONFIDENTIAL

01/12/2024



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:		County:	
		Serafin Ortiz		Wetzel	
Map by: youngst	Date: 6/15/2023	<p>Water Sources</p> <ul style="list-style-type: none"> ● Spring W Water Well ● Pond 	1 inch = 464 feet		
Nad 83 UTM Z one 17					

01/12/2024

Document Path: C:\E:\P\W\Team Data\GIS\Division GIS\Utility\Water Pad\Map\Seratin Ortiz MS MSH Pad1.mxd

LATITUDE: 40°00'00"

SURFACE HOLE 11,353'

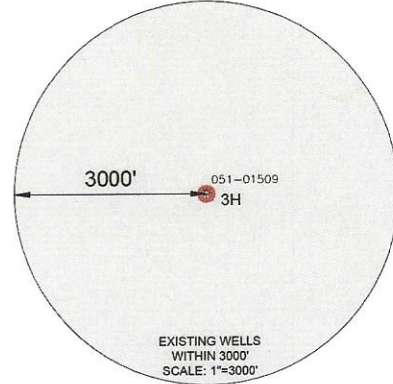
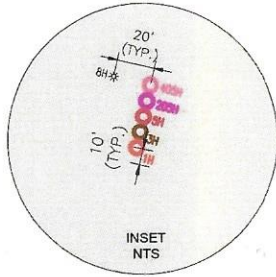
LATITUDE: 40°02'30"

BOTTOM HOLE 6,440'

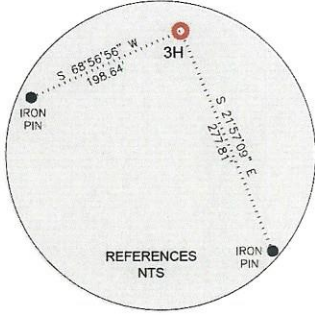


SURVEYOR/ENGINEER: 1-304-933-3463
1700 ANMOORE RD,
BRIDGEPORT, WV 26330

SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,426,766.505 EASTING: 524,996.982
LANDING POINT (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,426,744.965 EASTING: 524,775.106
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,431,302.454 EASTING: 522,922.244



LONGITUDE: 80°42'30"
LONGITUDE: 80°40'00"
SURFACE HOLE 3,386'
BOTTOM HOLE 3,655'



LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 28°30'07" W	329.12'	SHL TO MONUMENT	IRON ROD
L2	N 00°14'32" W	673.16'	SHL TO MONUMENT	IRON ROD
L3	S 84°27'18" W	731.36'	SHL TO LPL	SHL TO LPL
L4	N 22°07'28" W	16,140.83'	LPL TO BHL	LPL 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

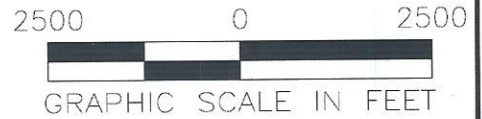
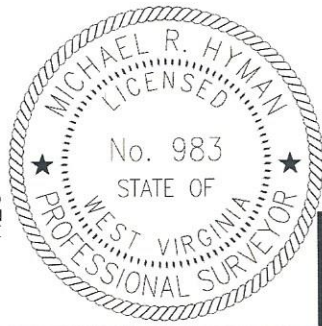
1. TIES TO WELLS AND CORNERS ARE BASED ON UTM, NAD83 DATUM, ZONE 17, US FT.
2. WELL LAT./LONG ESTABLISHED BY DIRECT GPS NAD '83.
3. BOUNDARIES SHOWN ARE TAKEN FROM TAX MAPS, DEEDS, AND FIELD SURVEY. THIS DRAWING IS NOT REPRESENTATIVE OF A FULL BOUNDARY SURVEY.
4. SURFACE OWNER INFORMATION TAKEN FROM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

Michael R. Hyman

10-31-2023

P.S. 983



COMPANY:



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25034

MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT)

SERAFIN ORTIZ MSH
OPERATOR'S WELL #: 3H
API WELL #: 47 51 2509 H6A
STATE COUNTY PERMIT

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

WATERSHED: UPPER OHIO-WHEELING ELEVATION: 1278.62

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)

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,290 TMD 27,892 TMD

01/12/2024

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

LEGEND: PROPOSED SURFACE HOLE / BOTTOM HOLE EXISTING / PRODUCING WELLHEAD EXISTING WATER WELL EXISTING SPRING SURVEYED BOUNDARY DRILLING UNIT LEASE BOUNDARY PROPOSED PATH	REVISIONS: DATE: 10/31/2023 FILE NO: DRAWN BY: TMF SCALE: 1" = 2000' DRAWING NO: ACE-3048 WELL LOCATION PLAT 1



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

PROPOSED 3H
 BOTTOM HOLE

OHIO RIVER

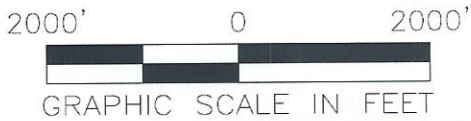
INSET "C"

INSET "B"

INSET "A"

PROPOSED 3H
 SURFACE HOLE

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



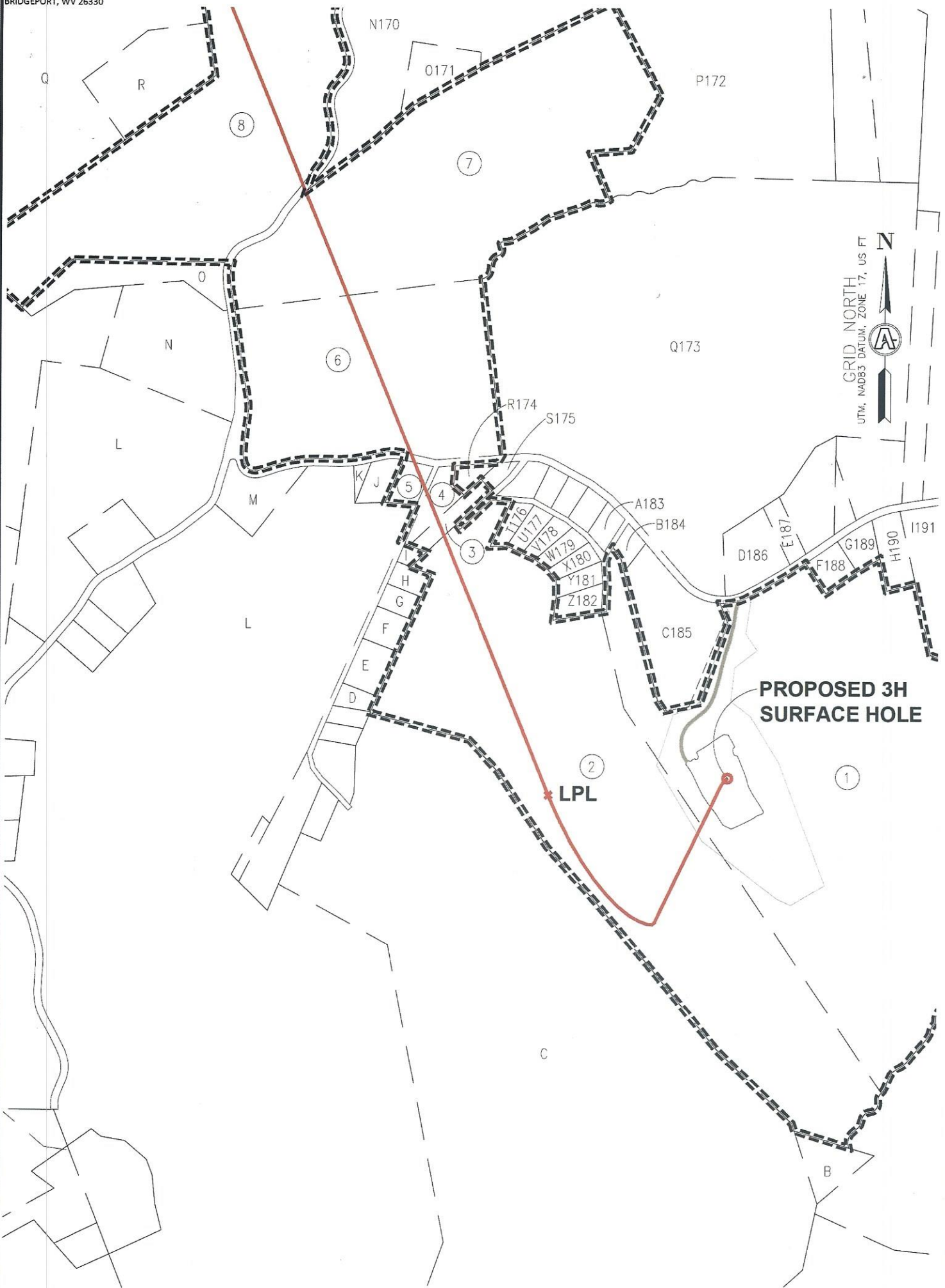
INSET "A"

01/12/2024

REVISIONS: 4705102509	COMPANY:			
	OPERATOR'S		SERAFIN ORTIZ MSH	
	WELL #:		3H	
	DISTRICT: UNION	COUNTY: MARSHALL	STATE: WV	DATE: 10/31/2023
				DRAWN BY: TMF
				SCALE: 1"=2000'
				DRAWING NO: ACE-3048
				WELL LOCATION PLAT 2



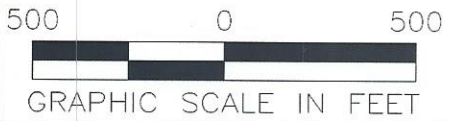
SURVEYOR/ENGINEER: 1-304-933-3463
 1700 ANMOORE RD,
 BRIDGEPORT, WV 26330



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

PROPOSED 3H SURFACE HOLE

LPL



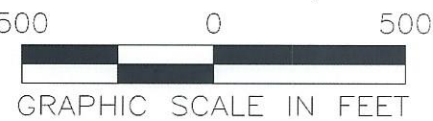
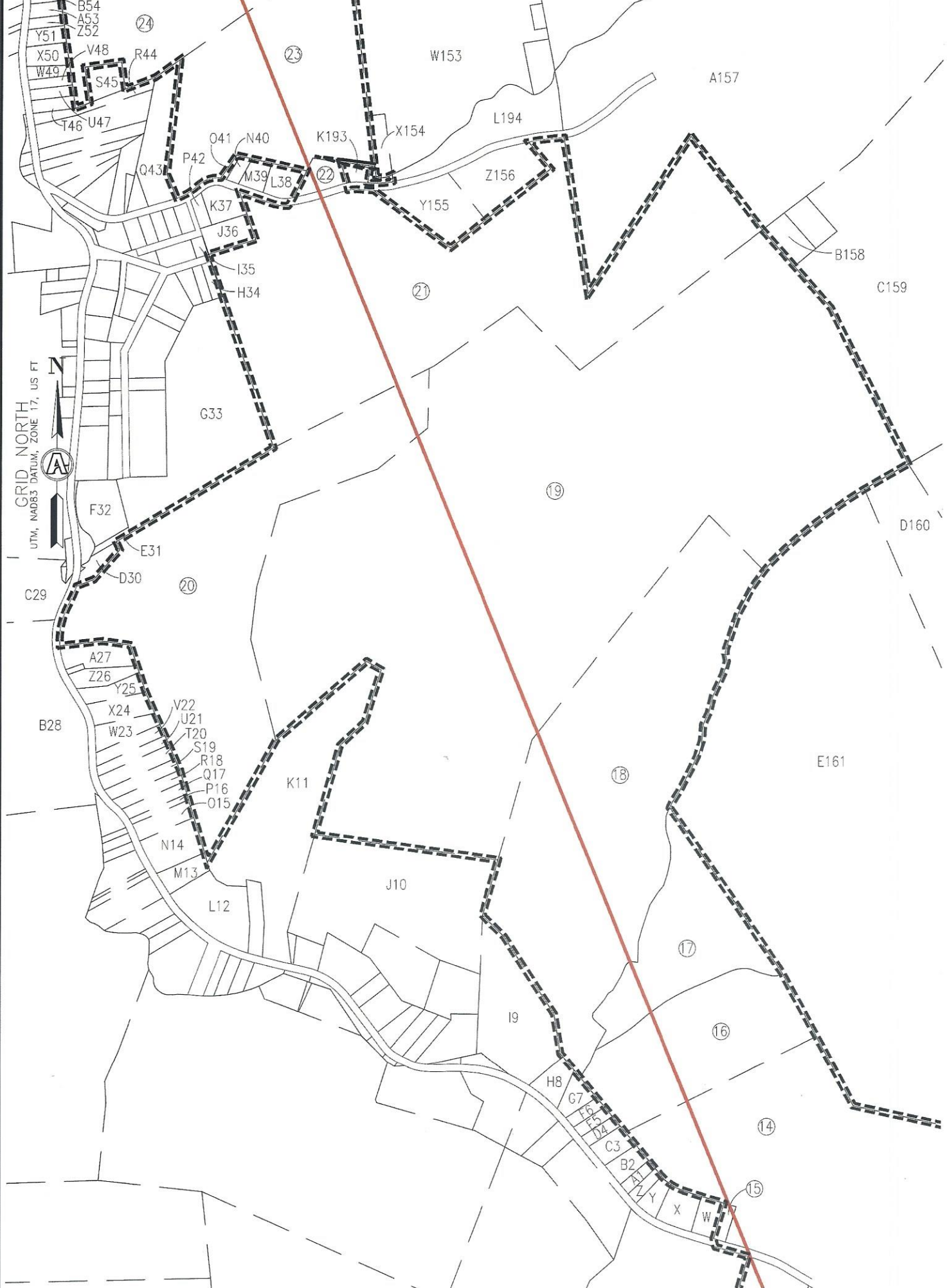
INSET "A"

01/12/2024

REVISIONS: 4705102509 	COMPANY: <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> SWN Production Company, LLC </div> <div style="text-align: center;"> SWN Production Company™ </div> </div>
OPERATOR'S SERAFIN ORTIZ MSH	DATE: 10/31/2023
WELL #: 3H	DRAWN BY: TMF
DISTRICT: UNION	COUNTY: MARSHALL
STATE: WV	SCALE: 1"=500' DRAWING NO: ACE-3048 WELL LOCATION PLAT 3



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



INSET "B"

01/12/2024

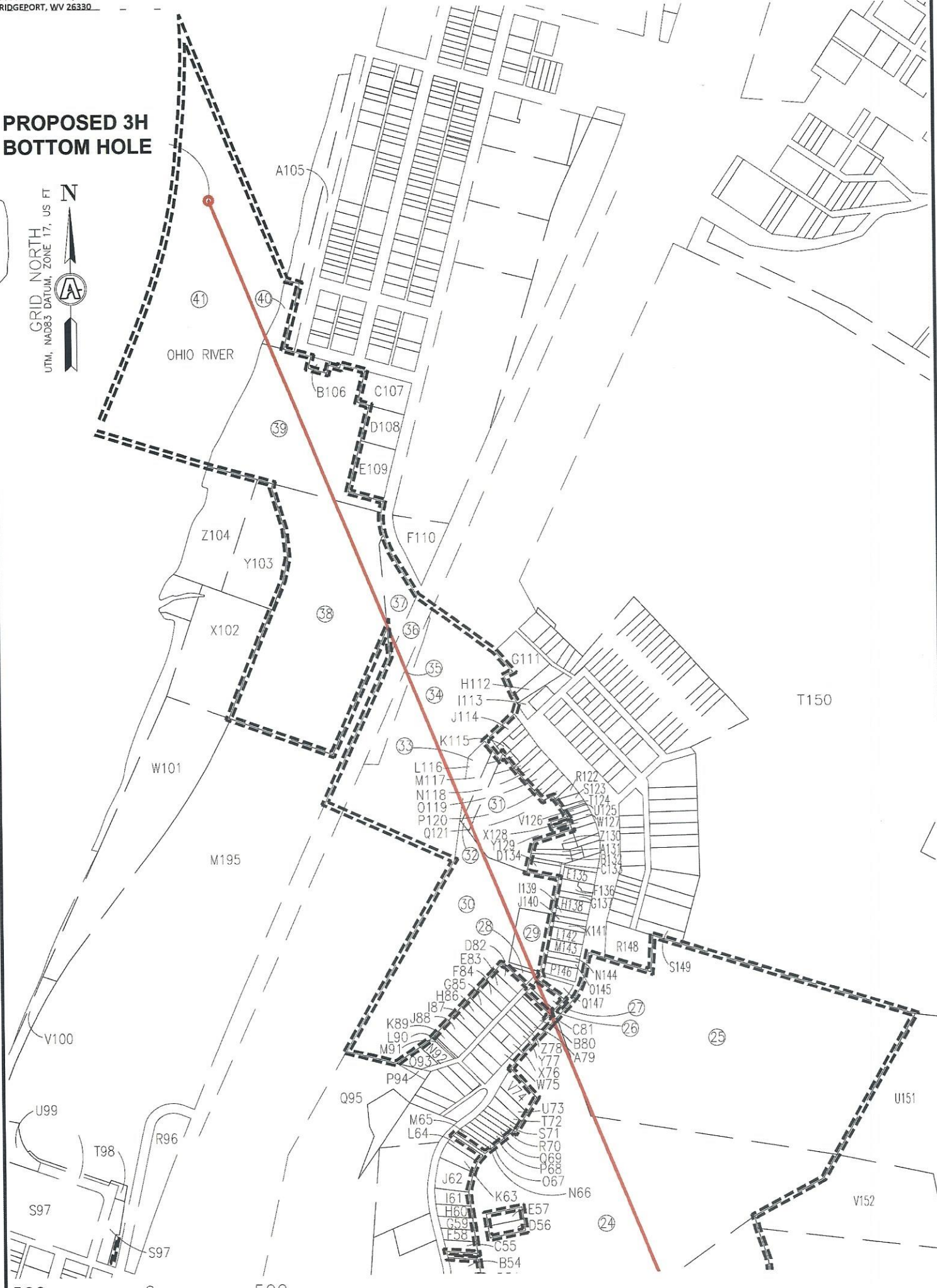
REVISIONS: 4705102509	COMPANY:			
	OPERATOR'S		SERAFIN ORTIZ MSH	
	WELL #:		3H	
	DISTRICT:	COUNTY:	STATE:	DATE: 10/31/2023
	UNION	MARSHALL	WV	DRAWN BY: TMF
				SCALE: 1"=500'
				DRAWING NO: ACE-3048
				WELL LOCATION PLAT 4



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

**PROPOSED 3H
 BOTTOM HOLE**

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



INSET "C"

01/12/2024

REVISIONS: 4705102509

COMPANY:

SWN
 Production Company, LLC

SWN *Rev+0*
 Production Company™

OPERATOR'S SERAFIN ORTIZ MSH

DATE: 10/31/2023

WELL #: 3H

DRAWN BY: TMF

DISTRICT:
 UNION

COUNTY:
 MARSHALL

STATE:
 WV

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	HAUGHT GEORGE ET UX	13-6-51.1
3	RICH JOSEPH A ET UX ESTS	13-6B-23
4	RICH JOSEPH ET UX ESTS	13-6B-22
5	COOK BRIAN	13-6-53.10
6	STEELE RICHARD P	13-6-13
7	STEELE RICHARD P	13-6-14
8	BOZENSKE JAMES H	13-6-10.1
9	DOYLE TERRY D - TOD	13-5-40
10	STENDA JAY JOHN & KIMBERLY ANN	13-5-41
11	OHIO COUNTY COAL RESOURCES INC	13-5-33
12	CONSOLIDATION COAL COMPANY MURRAY ENERGY C/O LAND DEPT	13-5-42
13	OHIO COUNTY COAL RESOURCES INC	13-5-43
14	OHIO COUNTY COAL RESOURCES INC	13-5-8
15	OHIO COUNTY COAL RESOURCES INC	13-5A-35
16	OHIO COUNTY COAL RESOURCES INC	13-5-7
17	OHIO COUNTY COAL RESOURCES INC	13-5-6
18	OHIO COUNTY COAL RESOURCES INC	13-5-5
19	OHIO COUNTY COAL RESOURCES INC	13-5-2
20	OHIO COUNTY COAL RESOURCES INC	13-5-1
21	OHIO COUNTY COAL RESOURCES INC	13-1-46
22	OHIO COUNTY COAL RESOURCES INC	13-1D-2
23	OHIO COUNTY COAL RESOURCES INC	13-1-43
24	OHIO COUNTY COAL RESOURCES INC	1-5-1
25	MORRIS CLARA BEUCKE EST	1-3-20
26	TERRY CHARLES H ET UX - RIGHT TO OCCUPY	1-4-77
27	CDC PROPERTIES LLC	1-4-76
28	DI LORETTA ROBERT M & CAROLA	1-4-107.3
29	OHIO COUNTY COAL RESOURCES INC	1-4-107
30	RENSHAW ALFRED J JR & GLORIA J - TOD	1-4-98
31	DINGER BLANCHE S	1-4-108
32	SMALL LAND HOLDINGS CO OF WV LLC	1-4-104
33	SMALL LAND HOLDINGS CO OF WV LLC	1-4-105
34	W VA DEPT OF HIGHWAYS	U.S. 250
35	OHIO COUNTY COAL RESOURCES INC	1-4A-5
36	CSX TRANSPORTATION INC	RAILROAD
37	MANUFACTURERS LIGHT & HEAT CO	1-2-155.2
38	IMI FABI LLC	1-2-158
39	ZEMEX FABI BENWOOD LLC	1-2-155
40	BELLAIRE HARBOR SERVICE LLC	1-2-159
41	STATE OF WEST VIRGINIA	OHIO RIVER

01/12/2024

REVISIONS: 4705102509	COMPANY:			
	OPERATOR'S		SERAFIN ORTIZ MSH	
	WELL #:		3H	
	DISTRICT:	COUNTY:	STATE:	DATE: 10/31/2023
	UNION	MARSHALL	WV	DRAWN BY: TMF
				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	KELLER BRIAN J & COOK DAVID J & ALICE M - TOD	13-6-50
B	HAUGHT GEORGE ET UX	13-6-50.1
C	LIPINSKI ERIC R & LORIE A	13-6-51
D	MERINAR & KOONTZ CO	13-6B-28
E	CARNEY DANIEL P ET UX	13-6B-27
F	CARNEY DANIEL P ET UX	13-6B-26
G	CARNEY DANIEL P ET UX	13-6B-25
H	BAKER JAMES F	13-6B-24
I	BAKER JAMES F	13-6B-23.1
J	YAQUINTA JOHN	13-6-53.4
K	YAQUINTA JOHN	13-6-53.8
L	FISHER EARL M ET AL	13-6-53
M	SHELLER ROBERT J & CHERYL HOLMES	13-6-53.1
N	FISHER DANIEL	13-6-12
O	KLIMA KATHLEEN M	13-6-11
P	MINOR THOMAS C - TOD	13-6-69
Q	ARBOGAST CLIFFORD C	13-6-10
R	STEELE JORDAN T & BRITTANY J	13-6-10.2
S	PORTER CHARLES E JR ET UX	13-6-9.1
T	OHIO COUNTY COAL RESOURCES INC	13-5-46.3
U	OHIO COUNTY COAL RESOURCES INC	13-5-46.8
V	OHIO COUNTY COAL RESOURCES INC	13-5-44
W	CONSOLIDATION COAL COMPANY MURRAY ENERGY C/O LAND DEPT	13-5A-34
X	OHIO COUNTY COAL RESOURCES INC	13-5A-33
Y	OHIO COUNTY COAL RESOURCES INC	13-5A-32
Z	OHIO COUNTY COAL RESOURCES INC	13-5A-31
A1	BOMMER JOSEPH	13-5A-30
B2	TONE TERYL LYNN	13-5A-29
C3	OHIO COUNTY COAL RESOURCES INC	13-5A-28
D4	CONSOLIDATION COAL COMPANY MURRAY ENERGY C/O LAND DEPT	13-5A-27
E5	OHIO COUNTY COAL RESOURCES INC	13-5A-26
F6	OHIO COUNTY COAL RESOURCES INC	13-5A-25
G7	OHIO COUNTY COAL RESOURCES INC	13-5A-24
H8	OHIO COUNTY COAL RESOURCES INC	13-5A-23
I9	OHIO COUNTY COAL RESOURCES INC	13-5A-22
J10	OKEL IRENE J - TOD	13-5-4
K11	OKEL IRENE J - TOD	13-5-3
L12	OKEL IRENE J - TOD	13-5A-12
M13	HUMPHREY DALE	13-5A-11
N14	HUMPHREY DALE E JR	13-5A-10
O15	DEBENI JANET	13-5A-9
P16	DEBENI JANET	13-5A-8
Q17	DE BENI JANET K	13-5A-7
R18	BROWN KIMBERLY J	13-5A-6
S19	KNOLLINGER DAVID K	13-5A-5
T20	SHANER THEODORE B	13-5A-4
U21	OHIO COUNTY COAL RESOURCES INC	13-5A-3
V22	OHIO COUNTY COAL RESOURCES INC	13-5A-2
W23	OHIO COUNTY COAL RESOURCES INC	13-5A-1
X24	OHIO COUNTY COAL RESOURCES INC	13-1D-59
Y25	OHIO COUNTY COAL RESOURCES INC	13-1D-58
Z26	OHIO COUNTY COAL RESOURCES INC	13-1D-57
A27	OHIO COUNTY COAL RESOURCES INC	13-1D-56
B28	HAWK SCHMID LLC	13-5-49
C29	FALLOVA ANTHONY MICHAEL ET UX	13-1-45.1
D30	PARKER PETER	13-1D-34
E31	J & E ENTERPRISES LLC	13-1D-54
F32	DORSCH THOMAS W & NORMA J	13-1D-52

*HIGHLIGHTED PARCELS MAY BE IMPACTED DURING DRILLING.

TRACT	SURFACE OWNER	TAX PARCEL
G33	OHIO COUNTY COAL RESOURCES INC	13-1D-51
H34	SALISBURY DAVID W & CHRISTINA	13-1D-45
I35	MORRIS MARY V EST	13-1D-43
J36	UNKNOWN	13-1D-44
K37	MOORE DONALD R ET UX	13-1D-7
L38	CLUTTER MELISSA S	13-1D-3
M39	HINDMAN NANCY - LIFE	13-1D-4
N40	NORMAN MARGARET EST	13-1D-5
O41	NORMAN MARGARET EST	13-1D-6
P42	MOORE DONALD R ET UX	13-1D-8
Q43	OHIO COUNTY COAL RESOURCES INC	13-1-44
R44	VESSELS CARLA M	1-5-31
S45	AMOS DOROTHE M & GEORGE R	1-5-2
T46	VESSELS CARLA M	1-5-30
U47	AMOS DOROTHE M & GEORGE R	1-5-29
V48	VESSELS CARLA M	1-5-28
W49	VESSELS CARLA M	1-5-27
X50	OHIO COUNTY COAL RESOURCES INC	1-5-26
Y51	MATHENY WILLIAM E & PRISCILLA	1-5-25
Z52	VESSELS CARLA M	1-5-24.1
A53	VESSELS CARLA M	1-5-24
B54	VESSELS CARLA M	1-5-23
C55	MCCALLISTER DEBORAH S	1-5-22
D56	KUCA EDWARD MJR & GERALDINE	1-5-3
E57	KUCA EDWARD MJR & GERALDINE	1-5-4
F58	MCCALLISTER DEBORAH S	1-5-21
G59	HISSAM LOUIS B ET UX	1-5-20
H60	PARSONS PAUL H & HELEN R ET AL	1-5-19
I61	MORRIS BRIAN N ET UX	1-5-18
J62	MORRIS BRIAN N & VIRGINIA E	1-5-17
K63	MORRIS BRIAN N & VIRGINIA E	1-5-16
L64	KUCA EDWARD MJR & GERALDINE	1-5-15
M65	BENWOOD CITY OF	1-5-14
N66	BENWOOD CITY OF	1-5-13
O67	BENWOOD CITY OF	1-5-12
P68	BENWOOD CITY OF	1-5-11
Q69	BENWOOD CITY OF	1-5-10
R70	BENWOOD CITY OF	1-5-9
S71	BENWOOD CITY OF	1-5-8
T72	BENWOOD CITY OF	1-5-7
U73	BENWOOD CITY OF	1-5-6
V74	BENWOOD CITY OF	1-5-5
W75	WAYT RODNEY J JR	1-4-85
X76	PORTER ADELHEIDE C	1-4-83
Y77	YANKOVICH PHYLLIS H	1-4-82
Z78	HORBATAK MICHELLE LYNN	1-4-81
A79	AMOS ANTHONY JAY	1-4-80
B80	BROFCHECK KATHRYN L	1-4-79
C81	DEANGELO ELGHALIA	1-4-78
D82	DI LORETTA ROBERT M & CAROLA	1-4-107.2
E83	MCKOWN DENISE S & WILLIAM III	1-4-107.1
F84	MCELWAIN LORI A	1-4-97
G85	BUTTS RONALD M & TINA M	1-4-96
H86	BAUM BRITNEY	1-4-95
I87	BIDKA CATHY R ET AL	1-4-94
J88	MINOR CHRISTOPHER ET UX	1-4-107.4
K89	MINOR CHRISTOPHER & CYNTHIA	1-4-93
L90	CONJESKI NORMA JEAN EST	1-4-107.8
M91	KUCA LOUIS R & STELLA L	1-4-107.7

*HIGHLIGHTED PARCELS MAY BE IMPACTED DURING DRILLING.

01/12/2024

REVISIONS: 4705102509	COMPANY:		
	OPERATOR'S	SERAFIN ORTIZ MSH	
	WELL #:	3H	
	DISTRICT:	COUNTY:	STATE:
	UNION	MARSHALL	WV
		DATE:	10/31/2023
		DRAWN BY:	TMF
		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
N92	KUCA LOUIS R & STELLA L	1-4-107.5
O93	KUCA LOUIS R & STELLA L	1-4-107.6
P94	KUCA LOUIS R & STELLA L	1-6-5.5
Q95	FIRST CHURCH OF GOD	1-6-5
R96	OHIO COUNTY COAL RESOURCES INC	1-4A-3
S97	BENWOOD CITY OF	1-4A-2
T98	BENWOOD CITY OF	1-4A-7
U99	BENWOOD CITY OF	1-4A-1.1
V100	OHIO COUNTY COAL RESOURCES INC	1-4A-10.1
W101	OHIO COUNTY COAL RESOURCES INC	1-4A-10
X102	IMI FABI LLC	1-4A-9
Y103	IMI FABI LLC	1-2-161
Z104	IMI FABI LLC	1-2-155.6
A105	BELLAIRE HARBOR SERVICE LLC	1-2-164
B106	ZEMEX FABI BENWOOD LLC	1-2-155.1
C107	247 HIMROD STREET LLC	1-2-155.4
D108	WALGREEN CO	1-2-155.5
E109	ARC DBPPROP001 LLC	1-2-155.3
F110	FERNS MICHAEL D SR & LINDA K	1-2-156
G111	BENWOOD CITY OF	1-3-61
H112	AUTH LARRY GEORGE	1-3-62
I113	AUTH LARRY GEORGE	1-3-63
J114	NORMAN PAUL E	1-4-45
K115	BENWOOD CITY OF	1-4-46.1
L116	BENWOOD CITY OF	1-4-48
M117	BENWOOD CITY OF	1-4-49
N118	CDC PROPERTIES LLC	1-4-50
O119	PIERCE CLAUDE MARIE & TIM E	1-4-51
P120	ANKROM STEVEN & TIFFANY	1-4-52
Q121	DINGER BLANCHE S	1-4-53
R122	DINGER BLANCHE S	1-4-54.3
S123	DINGER JAMES J	1-4-54
T124	DINGER JAMES J	1-4-54.2
U125	DINGER JAMES J	1-4-54.1
V126	LUCAS SHIRLEY M	1-4-55
W127	LUCAS SHIRLEY M	1-4-56
X128	HERSEY JERRY R MD - 2004	1-4-108.1
Y129	CDC PROPERTIES LLC	1-4-57
Z130	BILLIE JOHN J JR	1-4-103.1
A131	CDC PROPERTIES LLC	1-4-102
B132	REUTHER MICHAEL F ET UX	1-4-61
C133	REUTHER MICHAEL F ET UX	1-4-100
D134	LEACH THOMAS RAY	1-4-99
E135	LEACH THOMAS RAY	1-4-63
F136	GREEN SHARON L	1-4-64.1
G137	NETTLES CASSAUNDRAE	1-4-65
H138	NETTLES CASSAUNDRAE	1-4-66
I139	NETTLES CASSAUNDRAE	1-4-67
J140	ROAR RICHARD	1-4-68
K141	ROAR RICHARD	1-4-69
L142	SKVARKA AMANDA L & ROBERT A	1-4-70
M143	LUFFT JOHN MICHAEL	1-4-71
N144	PREBEG FRANK JAY	1-4-72
O145	DOTSON MICHAEL S	1-4-73
P146	BAIER CYNTHIA L	1-4-74
Q147	MELE CURTIS M & DANA M	1-4-75
R148	MORRIS CLARA BEUCKE EST	1-3-19
S149	SCHLOSSER BRANDY A & WILLIAM C	1-3-65.1
T150	MARKOWICZ JOHN F JR ET AL	13-1-1.3

*HIGHLIGHTED PARCELS MAY BE IMPACTED DURING DRILLING.

TRACT	SURFACE OWNER	TAX PARCEL
U151	OHIO COUNTY COAL RESOURCES INC	13-1-1.1
V152	OHIO COUNTY COAL RESOURCES INC	13-1-42.1
W153	OHIO COUNTY COAL RESOURCES INC	13-1-42
X154	CONSOLIDATION COAL COMPANY MURRAY ENERGY C/O LAND DEPT	13-1D-1
Y155	OHIO COUNTY COAL RESOURCES INC	13-1-46.1
Z156	OHIO COUNTY COAL RESOURCES INC	13-1-46.2
A157	OHIO COUNTY COAL RESOURCES INC	13-1-2
B158	OHIO COUNTY COAL RESOURCES INC	13-1-47
C159	OHIO COUNTY COAL RESOURCES INC	13-1-49
D160	OHIO COUNTY COAL RESOURCES INC	13-5-9.2
E161	OHIO COUNTY COAL RESOURCES INC	13-5-9.1
F162	OHIO COUNTY COAL RESOURCES INC	13-5-32.1
G163	OHIO COUNTY COAL RESOURCES INC	13-5-32.2
H164	OHIO COUNTY COAL RESOURCES INC	13-5-33.1
I165	OHIO COUNTY COAL RESOURCES INC	13-5-34
J166	HERCULES GRANT II	13-5-39.1
K167	OLIVER BRIAN M & JOELLE L FLANAGAN	13-5-40.1
L168	CLARK ROY V III & DONNA J	13-5-39.2
M169	STEVEY JORDAN M	13-5-39
N170	HARMON DAVID L ET UX	13-5-38
O171	FOSTER THOMAS M ET AL	13-5-38.1
P172	WOOD JOHN W ET UX	13-6-16
Q173	VAN SCYOC PATRICK A & FAITH M	13-6-17
R174	SNYDER ANDREW C JR REVOCABLE LIVING TRUST	13-6B-22.1
S175	LEDBETTER WILLIAM R ET UX	13-6B-21
T176	HAUGHT GEORGE & MARY	13-6B-19
U177	JAMES ROBERT A JR & WENDY L	13-6B-18
V178	JONES DAKOTA M & ELISHA GLENDENING	13-6B-15
W179	SIMMONS MICHAEL J	13-6B-14
X180	MCDADE ROBERT D	13-6B-11
Y181	HAUGHT GEORGE ET UX	13-6B-10
Z182	HAUGHT GEORGE ET UX	13-6B-9
A183	HAUGHT GEORGE ET UX	13-6B-12
B184	HAUGHT GEORGE WILLIAM II & SHEILA A	13-6-49.3
C185	WOODBURN SARA J & RICHARD A	13-6-49.2
D186	WILT VINCENT E	13-6-18
E187	TOLER MARGARET - LIFE	13-6-19
F188	NIXON MADISON M	13-6-49.1
G189	NIXON MADISON M	13-6-48
H190	VANDYNE ZACHARY D	13-6-47
I191	CRALL MICHAEL D & LISA DAWN	13-6-46
J192	O'NEAL CYNTHIA	13-6-45
K193	OHIO COUNTY COAL RESOURCES INC	13-1D-60
L194	OHIO COUNTY COAL RESOURCES INC	13-1-87
M195	OHIO COUNTY COAL RESOURCES INC	1-4A-1

*HIGHLIGHTED PARCELS MAY BE IMPACTED DURING DRILLING.

01/12/2024

REVISIONS: 4705102509	COMPANY:		
	OPERATOR'S	SERAFIN ORTIZ MSH	
	WELL #:	3H	
	DISTRICT:	COUNTY:	STATE:
	UNION	MARSHALL	WV
			DATE: 10/31/2023
			DRAWN BY: TMF
			SCALE: N/A
			DRAWING NO: ACE-3048
			WELL LOCATION PLAT 8

**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 3H

Marshall 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%
2	13-6-51.1	732654/000	George Haught and Mary Haught, husband and wife	SWN Production Company, LLC	17.00%	33/110	0.00%
3	13-6B-23	728776/002	Judy Penick, a married woman	Chesapeake Appalachia, L.L.C.	18.00%	756/443	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		728776/001	Alyn Robin Burkhardt, a married woman	Chesapeake Appalachia, L.L.C.	18.00%	720/289	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		728776/003	Eleanor Cross, divorced and not remarried	Chesapeake Appalachia, L.L.C.	18.00%	720/337	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		728776/004	Charles E. Borchart, Jr., a married man	Chesapeake Appalachia, L.L.C.	18.00%	720/341	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		728776/005	Jeffrey A. Borchart, a single man	Chesapeake Appalachia, L.L.C.	18.00%	721/415	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
4	13-6B-22	727772/000	Joseph Rich and Patricia R. Rich, husband and wife	Chesapeake Appalachia, L.L.C.	18.00%	710/382	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
5	13-6-53.10	732616/000	Kathleen Wheeler, single	Chesapeake Appalachia, L.L.C.	18.00%	754/542	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	

EXHIBIT "A"

Serafin Ortiz MSH 3H
 Marshall 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

6	13-6-13	726112/000	Richard Paul Steele and Barbara A. Steele, husband and wife	Chesapeake Appalachia, L.L.C.	12.50%	692/79	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
7	13-6-14	726112/000	Richard Paul Steele and Barbara A. Steele, husband and wife	Chesapeake Appalachia, L.L.C.	12.50%	692/79	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
8	13-6-10.1	726794/000	James H. Bozenske and Michelle T. Bozenske, husband and wife	Chesapeake Appalachia, L.L.C.	18.00%	697/67	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
9	13-5-40	733248/001	Janet Porter and Charles Porter, her husband	Chesapeake Appalachia, L.L.C.	18.00%	775/527	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		733248/002	Rosetta June Bischof and Gerald E. Bischof, her husband	Chesapeake Appalachia, L.L.C.	18.00%	775/533	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
10	13-5-41	727756/000	Vera I. Stenda (Life Tenant), Jay John Stenda, single (Remainderman), Kimberly Ann Stenda, single	Chesapeake Appalachia, L.L.C.	12.50%	707/465	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
11	13-5-33	784404-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/153	0.00%
12	13-5-42	784404-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/153	0.00%
13	13-5-43	784402-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%
14	13-5-8	784402-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%
15	13-5A-35	N/A	SWN Production Company, LLC	Fee	N/A	1128/370	0.00%
16	13-5-7	784402-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%
17	13-5-6	784404-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/153	0.00%
18	13-5-5	784402-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%

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EXHIBIT "A"
 Serafin Ortiz MSH 3H
 Marshall 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

19	13-5-2	784402-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%
20	13-5-1	784402-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%
21	13-1-46	784402-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%
22	13-1D-2	N/A	SWN Production Company, LLC	Fee	N/A	1128/370	0.00%
23	13-1-43	784404-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/153	0.00%
24	1-5-1	784402-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%
25	1-3-20	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
26	1-4-77	Pending	Amy Jo Terry, a single woman	SWN Production Company, LLC	18.00%	1165/600	0.00%
27	1-4-76	784610-000	CDC Properties, LLC	SWN Production Company, LLC	18.00%	1154/21	0.00%
28	1-4-107.3	784561/000	Robert M. DiLoretta and Carol A. DiLoretta, husband and wife	SWN Production Company, LLC	18.00%	1145/570	0.00%
29	1-4-107	784404-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/153	0.00%
30	1-4-98	784591-000	Gloria Renshaw and Alfred Renshaw, Jr., wife and husband	SWN Production Company, LLC	18.00%	1143/595	0.00%
31	1-4-108	Pending	Blanche S. Dinger, single	SWN Production Company, LLC	18.00%	1156/526	0.00%
32	1-4-104	Pending	Small Land Holdings Company of WV, LLC	SWN Production Company, LLC	18.00%	1158/135	0.00%
33	1-4-105	Pending	Small Land Holdings Company of WV, LLC	SWN Production Company, LLC	18.00%	1158/135	0.00%
34	U.S. 250	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
35	1-4A-5	784402-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%
36	Railroad	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
37	1-2-155.2	N/A	SWN Production Company, LLC	Fee	N/A	1174/318	0.00%
38	1-2-158	785013/000	IMI FABI, LLC, by Corrado Fabi, President	SWN Production Company, LLC	18.00%	1147/507	0.00%

EXHIBIT "A"

Serafin Ortiz MSH 3H

Marshall 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

39	1-2-155	785013/000	IMI FABI, LLC, by Corrado Fabi, President	SWN Production Company, LLC	18.00%	1147/507	0.00%
40	1-2-159	784347/000	Bellaire Harbor Service, LLC	SWN Production Company, LLC	18.00%	1145/600	0.00%
41	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%
C	13-6-51	732654/000	George Haught and Mary Haught, husband and wife	Chesapeake Appalachia, L.L.C.	17.00%	756/443	0.00%
J	13-6-53.4	727513-000	John Yaquinta, a single man	SWN Production Company, LLC	12.50%	33/110	0.00%
Q	13-6-10	726794/000	James H. Bozenske and Michelle T. Bozenske, husband and wife	Chesapeake Appalachia, L.L.C.	18.00%	697/67	0.00%
V	13-5-44	784404-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/153	0.00%
W	13-5A-34	784402-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	0.00%
L38	13-1D-3	784969/000	Melissa S. Glutter, married	SWN Production Company, LLC	18.00%	1143/583	0.00%
B80	1-4-79	784570/000	Kathryn L. Brofcheck	SWN Production Company, LLC	18.00%	1143/730	0.00%
C81	1-4-78	Pending	Elghalia DeAngelo	SWN Production Company, LLC	18.00%	1167/334	0.00%
D82	1-4-107.2	784561/000	Robert M. DiLoretta and Carol A. DiLoretta, husband and wife	SWN Production Company, LLC	18.00%	1145/570	0.00%
O145	1-4-73	N/A	Royalty Owner (subject to unitization filing dated November 10, 2023)	N/A	N/A	N/A	100.00%
P146	1-4-74	784706/000	Cynthia L. Bate, widow	SWN Production Company, LLC	18.00%	1148/109	0.00%
Q147	1-4-75	751419/000	Curtis M. Mele and Dana M. Mele, husband and wife	TH Exploration, LLC	19.00%	945/446	0.00%
			TH Exploration, LLC	American Petroleum Partners Operating, LLC		43/497	
			High Road Resources, LLC (f/k/a American Petroleum Partners Operating, LLC)	SWN Production Company, LLC		48/263	

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EXHIBIT "A"

Serafin Ortiz MSH 3H

Marshall 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

H164	13-5-33-1	784404-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/153	0.00%
M170	13-5-38	727789/000	David L. Harmon and Linda J. Harmon, his wife Chesapeake Appalachia, L.L.C.	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.75%	710/410 33/110	0.00%
M195	1-4A-1	784402-000	CNX Gas Company LLC, a Virginia limited liability company	SWN Production Company, LLC	18.00%	1156/144	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.

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November 15, 2023

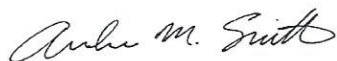
Mr. Charles Brewer
WV DEP Office of Oil & Gas
601 57th St., SE
Charleston, WV 25304

RE: SWN's proposed New Well: Serafin Ortiz MSH 3H in Marshall County, West Virginia, Drilling under 3rd Street, Blanche Ave, Roosevelt Ave, Veterans Lane, Browns Run Lane, Boggs Run Road, Benwood Hill Road, Oak Hill Road, and US 250 (State Route 2).

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 3rd Street, Blanche Ave, Roosevelt Ave, Veterans Lane, Browns Run Lane, Boggs Run Road, Benwood Hill Road, Oak Hill Road, and US 250 (State Route 2). 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 A Unit (Docket No. 335-354). 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

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

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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 3H

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

Business Conducted: Natural gas production.

Location –

State: West Virginia County: Marshall
District: Union Quadrangle: Moundsville
UTM Coordinate NAD83 Northing: 4,426,767
UTM coordinate NAD83 Easting: 524,997
Watershed: Upper Ohio Wheeling

Coordinate Conversion:

To convert the coordinates above into longitude and latitude, visit: 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 57th 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.

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 57th 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

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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 MSI1 3H
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:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>524,966.982</u>
County:	<u>051-Marshall</u>		Northing:	<u>4,426,766.505</u>
District:	<u>Union</u>	Public Road Access:	<u>Grand View Road</u>	
Quadrangle:	<u>Moundsville</u>	Generally used farm name:	<u>Serafin Ortiz</u>	
Watershed:	<u>Upper Ohio South</u>			

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.

<p>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:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><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</p> <p style="padding-left: 100px;"><input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> 5. PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION</p>	<p>OOG OFFICE USE ONLY</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p>
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Required Attachments:

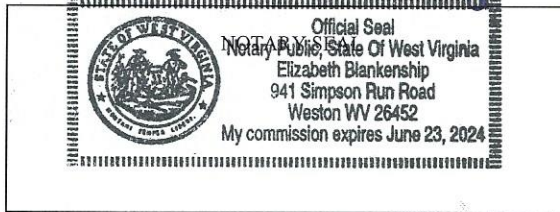
The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication 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.

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:	<u>SWN Production Co., LLC</u>	Address:	<u>1300 Fort Pierpont Dr., Suite 201</u>
By:	<u>Brittany Woody</u>		<u>Morgantown, WV 26508</u>
Its:	<u>Staff Regulatory Specialist</u>	Facsimile:	<u>304-884-1690</u>
Telephone:	<u>304-884-1610</u>	Email:	<u>Brittany_Woody@swn.com</u>

Brittany Woody



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 depprivacyofficer@wv.gov.

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**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

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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 or 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 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting 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

01/12/2024

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 57th St. SE
Charleston, WV 25304
(304) 926-0450

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.**

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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.

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WW-6A
(8-13)

API NO. 47- 051 - _____
OPERATOR WELL NO. Serafin Ortiz MSH 3H
Well Pad Name: Serafin Ortiz

Notice is hereby given by:

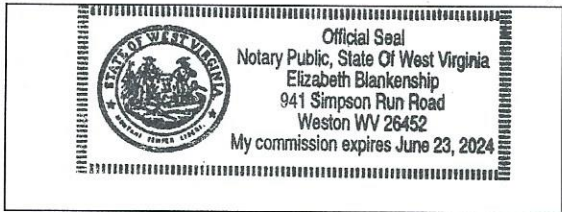
Well Operator: SWN Production Co., LLC
Telephone: 304-884-1610
Email: Brittany_Woody@swn.com



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 depprivacyofficer@wv.gov.



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

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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

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WV Department of
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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 57th 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.

Notice is hereby given by:

Well Operator: SWN PRODUCTION COMPANY, LLC

Telephone: 304-884-1610

Email: brittany_woody@swn.com

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

Facsimile: 304-884-1690

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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.

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:** 1/12/24

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: 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(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>524,996.982</u>
County:	<u>Marshall</u>		Northing: <u>4,426,766.505</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 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is hereby given by:

Well Operator: SWN Production Company, LLC
Address: 1300 Fort Pierpont Dr., Suite 201
Morgantown, WV 26508
Telephone: 304-884-1675
Email: Justin_Booth@swn.com
Facsimile: _____

Authorized Representative: Justin Booth
Address: 1300 Fort Pierpont Dr., Suite 201
Morgantown, WV 26508
Telephone: 304-884-1675
Email: Justin_Booth@swn.com
Facsimile: _____

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JUL 13 2023

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.

**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:** 12/9

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

- CERTIFIED MAIL HAND
- RETURN RECEIPT REQUESTED 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: <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(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: <u>West Virginia</u>	UTM NAD 83	Easting: <u>524,996.982</u>
County: <u>Marshall</u>		Northing: <u>4,426,766.505</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(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 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

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

Environmental Protection

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.



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Gregory L. Bailey, P.E.
Interim
State Highway Engineer

Jimmy 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 57th Street, SE
Charleston, WV 25304

Subject: DOH Permit for the Serafin Ortiz Pad, Marshall County
Serafin Ortiz MSH 3H 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,

Gary K. Clayton, P.E.
Regional Operations Engineer
Central Office O&G Coordinator

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WV Department of
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Cc: 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
		Water	7732-18-5
Plexslic 930	Friction Reducer	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
Plexaid 655NM	Scale Inhibitor	ORGANIC PHOSPHONIC ACIDS SALTS	15827-60-8
		Water	7732-18-5
Plexslic V996	Friction Reducer	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
Plexaid 655WG	Scale Inhibitor	ORGANIC PHOSPHONIC ACIDS SALTS	15827-60-8
		Water	7732-18-5
		Glycerin	67-56-1
Clearal 270	Biocide	Glutaraldehyde	111-30-8
		Didecyltrimethylammonium Chloride	7173-51-5
		Quaternary Ammonium compounds, Benzyl-C12-C16-alkyldimethyl, Chlorides	68424-85-1
		Ethanol	64-17-5
		Water	7732-18-5
StimSTREAM SC 398 CW	Scale Inhibitor	Ethylene glycol	107-21-1
		CHEMSTREAM-Polymer-10001	CHEMSTREAM-Polymer-10001
		CHEMSTREAM-Polymer-10002	CHEMSTREAM-Polymer-10002
		Water	7732-18-5
StimSTREAM FR 9800	Friction Reducer	Chemstream-Alkane-00001	Chemstream-Alkane-00001
		Chemstream-Polymer-00001	Chemstream-Polymer-00001
		Ethoxylated alcohols (C12-16)	68551-12-2
		Water	7732-18-5
StimSTREAM FR 2800	Friction Reducer	Distillates (petroleum), hydrotreated light	64742-47-8
		Alcohols, C11-14-iso, C13-rich, ethoxylated	78330-21-9
		Water	7732-18-5
StimSTREAM FR 9725	Friction Reducer	Distillates (petroleum), hydrotreated light	64742-47-8
		Ammonium Chloride	12125-02-9
		Water	7732-18-5
StimSTREAM SC 398 C	Scale Inhibitor	CHEMSTREAM-Polymer-10001	CHEMSTREAM-Polymer-10001
		CHEMSTREAM-Polymer-10002	CHEMSTREAM-Polymer-10002
		Water	7732-18-5

As of 7/5/2023

01/12/2024

OPERATOR: SWN Production Co., LLC

WELL NO: Serafin Ortiz MSH 3H

PAD NAME: Serafin Ortiz

REVIEWED BY: _____

SIGNATURE: Bethany Woody

WELL RESTRICTIONS CHECKLIST

HORIZONTAL 6A WELL

** Pad Built 12/7/11*

Well Restrictions

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

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Environmental Protection