

#### 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

Wednesday, September 7, 2022 WELL WORK PERMIT Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC POST OFFICE BOX 12359 SPRING, TX 773914954

Re: Permit approval for ROTH 8H 47-069-00348-00-00

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

Operator's Well Number: ROTH 8H

Farm Name: ROTH FARMS, LLC

U.S. WELL NUMBER: 47-069-00348-00-00

Horizontal 6A New Drill Date Issued: 9/7/2022

# PERMIT CONDITIONS

West Virginia Code § 22-6A-3(d) allows the Office of Oil and Gas to place specific conditions upon this parallel fermit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

#### CONDITIONS

- 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-Sa (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 easing. Under no circumstance should (20) feet of easing below the bottom of the void or install less than twenty
- 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.
- 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.
- 6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator chall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any
- 7. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
- During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designed immediately.
- 9. If any explosion or other accident causing loss of life or cerious personal injury occurs in or about a well or explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
- 10. During the easing and comenting process, in the event coment does not return to the surface, the oil and gas inspector shall be notified within 24 hopes.

4706900348

API	Number:	
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# PERMIT CONDITIONS

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 10 days of their occurrence: completion of construction of the well pad, commencement of drilling, execution of drilling, completion of any other pramitted well work, and completion of the well. Such notice shall be provided by canding an email to DEFOOGNotify@ev.gov.

# API NO. 44 7 0 6 9 0 0 3 4 8 OPERATOR WELL NO. Roth OHI 8H

Well Pad Name: Roth OHI

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

1) Well Operator: SWN Production C	co., LLC 494512924 069-Ohio 005-Rich 641-Tiltonsville
	Operator ID County District Quadrangle
2) Operator's Well Number: Roth OHI	8H / Well Pad Name: Roth OHI /
3) Farm Name/Surface Owner: Roth Fa	arms, LLC Public Road Access: Clearview Avenue
4) Elevation, current ground: 1004.0	Elevation, proposed post-construction: 1010'
5) Well Type (a) Gas X Other	Oil Underground Storage
(b)If Gas Shallow	x Deep
Horizontal	x
6) Existing Pad: Yes or No No	
	(s), Anticipated Thickness and Expected Pressure(s): h, Target Top TVD- 5758', Target Base TVD- 5813', Anticipated Thickness- 55', Associated Pressure- 3778
8) Proposed Total Vertical Depth: 580	2'
	Marcellus
10) Proposed Total Measured Depth:	23613'
11) Proposed Horizontal Leg Length:	17,413.79
12) Approximate Fresh Water Strata De	pths: 452'
13) Method to Determine Fresh Water I	Depths: Nearby well 47-069-00012
14) Approximate Saltwater Depths: 11	19' reported in nearby wells
15) Approximate Coal Seam Depths: 1	70'
16) Approximate Depth to Possible Voi	d (coal mine, karst, other): None that we are aware of.
17) Does Proposed well location contain directly overlying or adjacent to an activ	
(a) If Yes, provide Mine Info: Name	Valley Camp NO 1
Depth	: 170 & 811'
Seam:	Pittsburgh
Owne	r: Valley Camp Coal

WW-6B (04/15) APINO. 47-009 0 6 9 0 0 3 4 8

OPERATOR WELL NO. Roth OHI 8H
Well Pad Name: Roth OHI

18)

#### CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	<u>Grade</u>	Weight per ft. (1b/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	J-55	94#	126'	126'	CTS
Fresh Water	13 3/8"	New	H-40	48#	505'	505'	490 sx/CTS
Coal	See	Surface	Casing				
Intermediate	9 5/8"	New	J-55	36#	1606'	1606'	706 sx/CTS
Production	5 1/2"	New	P-110 HP	20#	23613'	23613'	Tail 4002sx/ 100' Inside Intermediate
Tubing							
Liners			71 == 11				

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	30"	0.25	2120	81	Class A	1.20/30% Excess
Fresh Water	13 3/8"	17.5"	0.380	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		The state of the s				- 1	
Liners							

## **PACKERS**

5TR HOUR LOWET 1-28-22



Page 09/09/2022

WW-6B	
(10/14)	

4706900348

OPERATOR WELL NO. Roth OHI 8H

Well Pad Name: Roth OHI

19) Describe proposed well work, including the drilling and plugging
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ulate 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 unites, 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): 24.35
- 22) Area to be disturbed for well pad only, less access road (acres): 10.46
- 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.



			CEMENT A	ADDITIVES		
INTERVAL	SCHLUMBERGER PRODUCT NAME	BJ PRODUCT NAME	NEXTIER PRODUCT NAME	PRODUCT USE	CHEMICAL NAME	CAS-Number
SURFACE (FRESHWATER)	><	INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
up to 3%	S001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
COAL PROTECTION		INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
up to 3%	5001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
	D020	BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
	D047	FP 28L	$\times$	LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
INTERMEDIATE	><	INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
, 20,000	CemNet	> <	$\times$	LOST CIRC MATERIAL	COATED FIBERGLASS FIBERS	PROPRIETARY
	SUGAR	SUGAR	CJ795	CMT RETARDER	SUCROSE	57-50-1
	S001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
			CJ111	ACCELERATOR	SODIUM CHLORIDE	7440-23-5
	>>	SS-11W	CJ880	SURFACTANT	NONIONIC SURFACTANT	6540-99-4
	D047	FP 28L	X	LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
	><	> <	CJX157011	SOLID ANTIFOAM AGENT	FULLERS EARTH(ATTAPULGITE)	8031-18-3
		$\supset$	CJ540	HP FLUID LOSS ADDITIVE	ALIPHATIC AMIDE POLYMER	PROPRIETARY
PRODUCTION	D255	$\supset$	X	MED TEMP FLUID LOSS ADDITIVE	POLYACRILIC POLYMER	PROPRIETARY
			CJ213	RETARDER	CHRYSTALLINE SILICA	14808-60-7
		FL-66	CJ501	LOW TEMP FLUID LOSS ADD	POWDERED POLYSACCHARIDE	PROPRIETARY
		BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
	D208	ASA-301	X	VISCOSIFIER/ANTI- SETTLING AGENT	REFINED POLYMER/ CHRYSTALLINE SILICA	PROPRIETARY
	D198	R-3		CEMENT RETARDER	LIGNIN	8068-51-6
	SUGAR	SUGAR	CJ795	CEMENT RETARDER	SUCROSE	57-50-1



#### Proposed Drilling Program Southwestern Energy Company **ROTH OHI 8** Re-entry Rig: **SDC 40** Well: Marcellus Shale Field: PANHANDLE FIELD WET Prospect: WW OHIO State: County: SHL: 40.1511 Latitude -80.6869 Longitude BHL: 40.1066 Latitude -80.6626 Longitude 1,004 ft MSL **KB Elev:** 1,030 ft MSL KB: 26 ft AGL GL Elev: NO COAL VOID EXPECTED 126 'to 525 ' Air/Mist PROD TOC Lead @ 2,045 ' MD PROD TOC Tail @ 1,616 ' MD 525 to 1.626 Air/Mist **TUBULAR DETAIL** Planned Interval Casing Size Weight **Casing String** Grade (Min) (in) (Min) From To Conductor 20 94.0# J-55 126 1,626 to 4,949 Air/Mist 505 Surface/Coal 13.375 48.0# H-40 0 1 Intermediate 9.625 36.0# J-55 0' 1,606 Production 0 ' 23,613 5.5 20.0# P-110 HP CEMENT DETAIL Sacks Class Density Conductor: 151 19.3 Surface: 490 A 15.6 Intermediate: 15.6-16.0 706 A Production: 14.5-15.0 4002 TD at 4,949 Freshwater Depth - 452 'TVD KOP at 4,949 'MD 4,949 to 6,191 Coal Void Depth - 170 'TVD 12.5-13.0 ppg Saltwater Depth - 1,119 'TVD TVD - 5,802 1 TMD - 23,613 ' TD at 23,613 'MD 5,802 'TVD 5,662 ' Target Center EOB at 6,191 'MD 6,191 ' to 23,613 ' Onondaga 5,813 'TVD SHL Onondaga 5,673 'TVD 13.5-13.8ppg Created by: CR Hall on 07/27/2022

The Graph block 1/28/22

WW-9 (4/16)

API Number 47 -	069	45
Operator's	Well No.	Roth OHI 8H

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

FLUIDS/ CUTTINGS DI	ISPOSAL & RECLAMATION PLAN
Operator Name SWN Production Co., LLC	OP Code 494512924
Watershed (HUC 10) Upper Ohio- Wheeling	Quadrangle Tiltonsville
Do you anticipate using more than 5,000 bbls of water to co Will a pit be used? Yes No V	mplete the proposed well work? Yes Vo 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 Per Reuse (at API Number At the next Off Site Disposal (Supply form V Other (Explain recovery and solid	WW-9 for disposal location)
Will closed loop system be used? If so, describe: Yes- See	Attachment 3A
Drilling medium anticipated for this well (vertical and horize	ontal)? Air, freshwater, oil based, etc. Air drill to KOP, fulld 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, remov	ved 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
	d Gas of any load of drill cuttings or associated waste rejected at any ded within 24 hours of rejection and the permittee shall also disclose
on August 1, 2005, by the Office of Oil and Gas of the West provisions of the permit are enforceable by law. Violations law or regulation can lead to enforcement action.  I certify under penalty of law that I have personal application form and all attachments thereto and that, be	My CS Impson Ave
Subscribed and sworn before me this 28 day of	RECEIVED RECEIVED
My commission expires 10/01/2024	AUG 0.5 2022
	WV Department of Environmental Protection

#### Attachment 3A

#### **CLOSED LOOP SYSTEM**

The closed loop system is designed to eliminate the use of reserve pits by providing a higher level of solids control processing and using steel pits for capture of drill cuttings. The cuttings are then processed to achieve landfill requirements before hauling to approved landfills. The liquids are processed to recycle into the active mud system or to transfer to onsite temporary storage as needed.

The closed loop system consists of several sets of a shale gas separator (often called a 'methana'), several banks of solids shakers, high speed centrifuges (1 or 2) used to process the fluid portion of the mud system to remove low gravity solids, low speed centrifuge used for barite recovery in high weight liquid drilling systems, a dewatering system (for air intervals and if freshwater mud systems are in use) used to further clean liquids by flocculation and additional mechanical separation, associated open top tanks for processing liquids and capturing solids for disposal, and transfer pumps to move fluids through the processes. There is an area adjacent to the cuttings tanks (Red Zone) where a track hole is utilized to recover the processed cuttings for loading into containers for hauloff. (See attached schematic of a generic closed loop system layout)

Below are discussions of the processes used when drilling the air interval or liquids interval.

#### AIR DRILLING INTERVALS

During air drilling operations, flow from the rig will pass down the flowline to the Shale Gas Separater (sometimes called a methane) where gas and liquids/solids are separated. Gas is sent to the flare scrubber tank and is flared at the flare stack. Solids and fluids pass across a shaker system to separate solids from liquids. Solids pass into the cuttings tanks where they are captured for drying and hauloff to an approved landfill site. Liquids fall into a shaker tank and are collected by a centrifugal pump to be processed by the high speed centrifuge to further separate liquids and solids. Solids are then dumped into the cuttings tank for drying and hauloff. Liquids are further processed to remove additional low gravity solids before being reused or transferred to onsite storage.

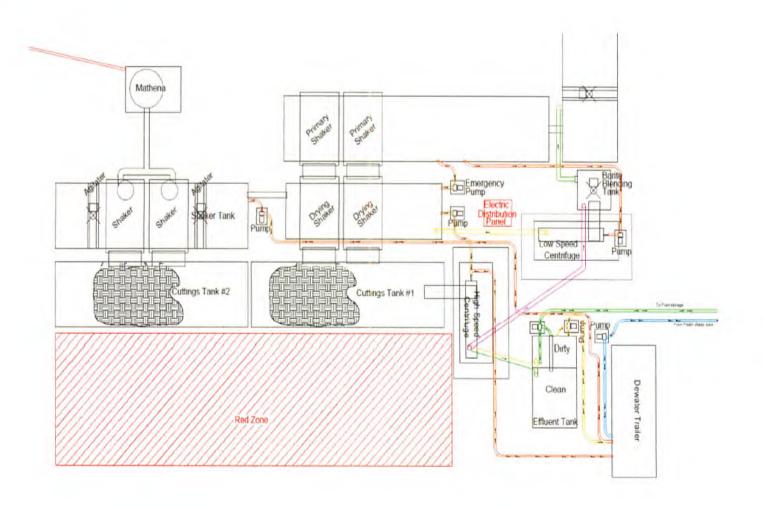
#### LIQUIDS DRILLING (FRESHWATER, BRINE, SOBM)

When drilling is converted to liquids drilling, the shale gas separator and associated shaker tank are bypassed, and the liquids system is processed over the primary and drying shaker systems. Cuttings drop into the cuttings tank for additional processing. Any recoverable associated liquids attached to the cutting are recovered out the tank and processed through the low gravity (high speed) and barite recovery centrifuges (low speed) to further remove low gravity solids and to recover barite for reuse in the mud systems.

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# Solids Control Layout





RECEIVED Office of Oil and Gas

WV Department of Environmental Protection

### **Attachment 3B**

## **Drilling Mediums**

#### <u>Surface/Coal(if present)/Freshwater Intervals:</u>

Air

Freshwater (if needed based on conditions)

#### **Intermediate/Coal (if present):**

Air

#### **Production Hole:**

Air

Synthetic Oil (Base Fluid for mud system)

**Barite** 

Calcium Chloride

Lime

Organophilic Bentonite

**Primary and Secondary Emulsifiers** 

Gilsonite

**Calcium Carbonate** 

**Friction Reducers** 

Rev. 6/11/2018 09/09/2022

Operator's Well No. Roth OHI 8H

A 7	24.35	n T	
Proposed Revegetation Treatment: Acres Disturbed		Prevegetation ph	
Limeas determined by pH test min.2 Tons/acre or to co	rrect to pH 10.46		
Fertilizer type 10-20-20			
Fertilizer amount 600/500	lbs/acre		
Mulch Hay/Straw	Tons/acre		
	Seed Mixtures		
Temporary		Perma	nent
Seed Type lbs/acre Attachment 3C	_	Seed Type	lbs/acre
Attach: Maps(s) of road, location, pit and proposed area for laporided). If water from the pit will be land applied, acreage, of the land application area.  Photocopied section of involved 7.5' topographic she	include dimensions (L:	engineered plans incluc x W x D) of the pit, and	ling this info have be dimensions (L x W)
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AUG 0 5 2022

WV Department of Environmental Protection



## **WVD Seeding Specification**



To Order Seed contact Lyndsi Eddy Flippo office 570-996-4271 cell 501-269-5451 lyndsi\_eddy@swn.com

(please allow 7 to 10 days for delivery)

NON-ORGAN	IIC PROPERTIES
	2011111

Seed Mixture: ROW Mix	SWI	N Supplied
Orchardgrass	40%	
Timothy	15%	
Annual Ryegrass	15%	
Brown Top Millet	5%	
Red Top	5%	
Medium Red Clover	5%	All legumes are
White Clover	5%	innoculated at 5x normal
Birdsfoot Trefoil	5%	rate
Rough Bluegrass	5%	
Apply @ 100lbs per acre April 16th- Oct. 14th		Apply @ 200lbs per acre Oct. 15th- April 15th PLUS bs per acre of Winter Wheat

	-	AR	70 500	BILL	THE PE	THE REAL PROPERTY.	
		- A I	/			- 1	TS
100	•		'11 E			<b>1 == 6</b> .	

10-20-20 Fertilizer	*Apply @ 500lbs per Acre	
Pelletized Lime	Apply @ 2 Tons per Acre	
	*unless otherwise dictated by soil test results	

#### Seeding Calculation Information:

1452' of 30' ROW/LOD is One Acre 871' of 50' ROW/LOD is One Acre 622' of 70' ROW/LOD is One Acre

#### Synopsis:

Every 622 linear feet in a 70' ROW/LOD, you should be using (2) 50lb bags of seed, (4) 50lb bags of fertilizer and (80) 50lb bags of Lime (2x seed in winter months + 50lb Winter Wheat/ac).

#### Special Considerations:

Landowner Special Considerations including CREP program participants require additional guidance that is not given here. Discuss these requirements with SWN supervision at the beginning of the project to allow time for special seed delivery.

#### ORGANIC PROPERTIES

Seed Mixture: SWN Production Organic	Mix	SWN Supplied
Organic Timothy	50%	
Organic Red or White Clover	50%	
OR		
Organic Perennial Ryegrass	50%	
Organic Red or White Clover	50%	
Apply @ 100lbs per acre		Apply @ 200lbs per acre
April 16th- Oct. 14th		Oct. 15th-April 15th
Organic Fertilizer @ 200lbs per Acre		Pelletized Lime @ 2 Tons per Acre

## WETLANDS (delineated as jurisdictional wetlands)

Seed Mixture: Wetland Mix	SWN Supplied
VA Wild Ryegrass	20%
Annual Ryegrass	20%
Fowl Bluegrass	20%
Cosmos 'Sensation'	10%
Redtop	5%
Golden Tickseed	5%
Maryland Senna	5%
Showy Tickseed	5%
Fox Sedge	2.5%
Soft Rush	2.5%
Woolgrass	2.5%
Swamp Verbena	2.5%
Apply @ 25lbs per acre	Apply @ 50lbs per acre
April 16th- Oct. 14th	Oct. 15th-April 15th
NO FERTILIZER OR I	IME INSIDE WETLAND LIMITS



SWN Production Company, LLC

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

July 18, 2022

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

RE: Proposed New Well: Roth OHI 8H

Dear Mr. Brewer

SWN has reviewed the area of the above mentioned well and discovered no shallow wells within 500' of the lateral. This well is situated on the Roth's property, in Tiltonsville District, Ohio County, West Virginia.

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

Thank you.

Sincerely,

Brittany Woody

Brittany Mody

Senior Regulatory Analyst

Southwestern Energy Production Company, LLC









# MARCELLUS WELL DRILLING PROCEDURES AND WELL SITE SAFETY PLAN



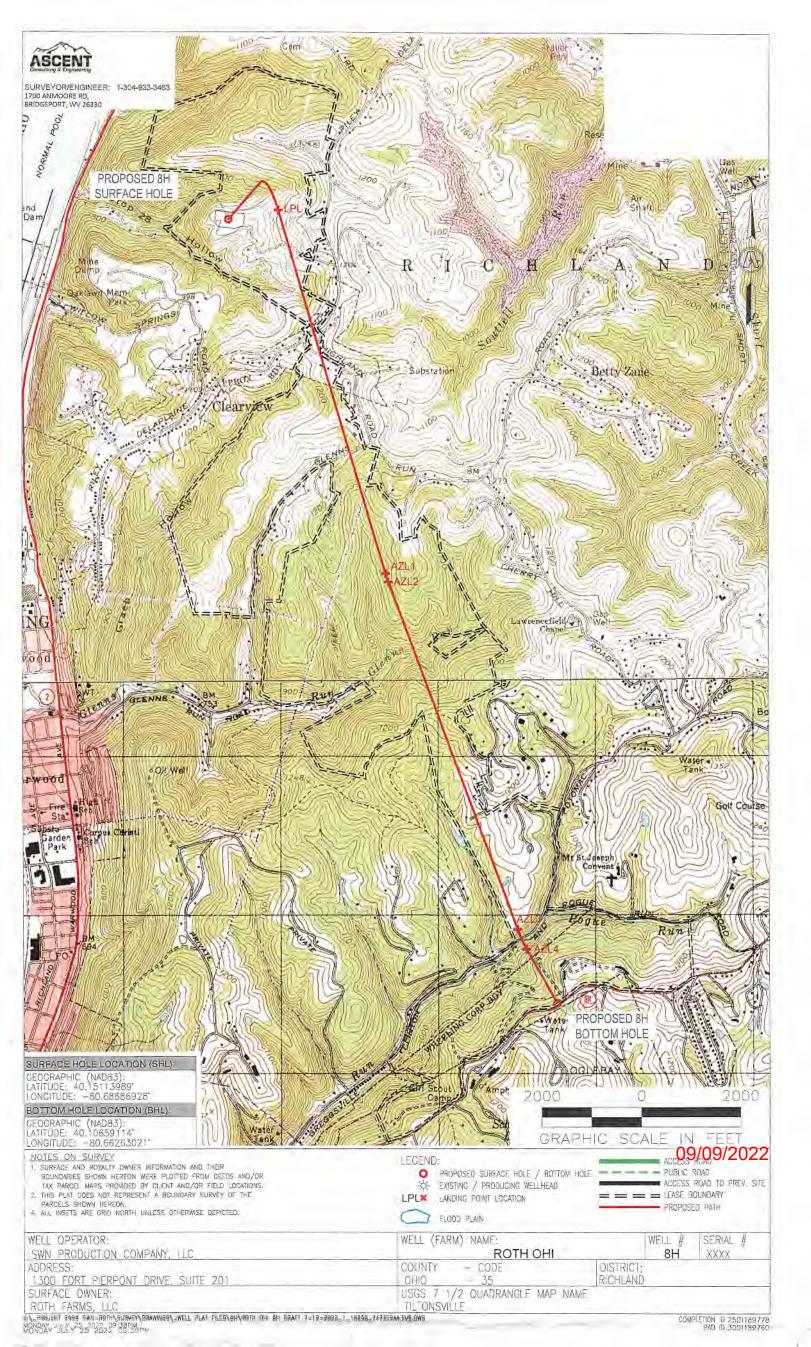
SWN Production Company, LLC 1300 Fort Pierpont Drive, Suite 201 Morgantown, West Virginia 26508

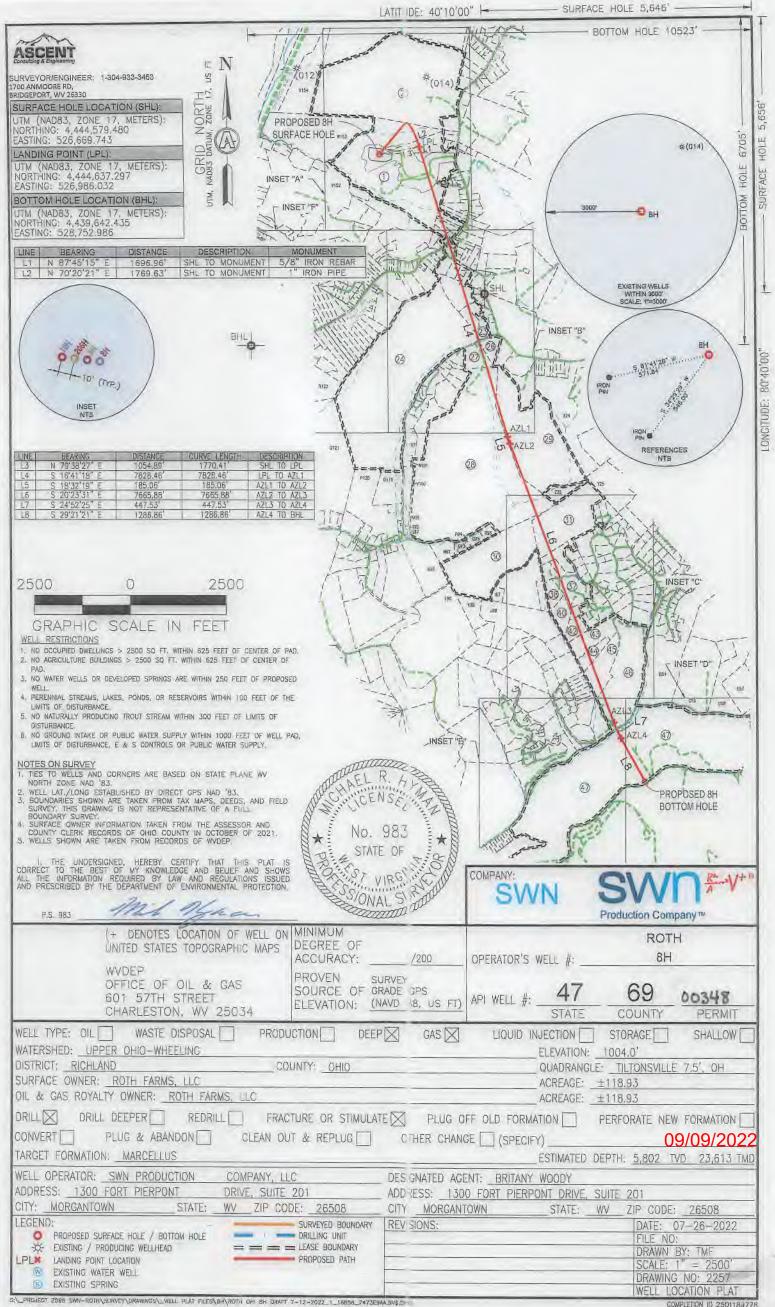
API NO. 47-XXX-XXXXX
WELL NAME: Roth OHI 8H
Tiltonsville QUAD
Richland DISTRICT
Ohio COUNTY, WEST VIRGINIA

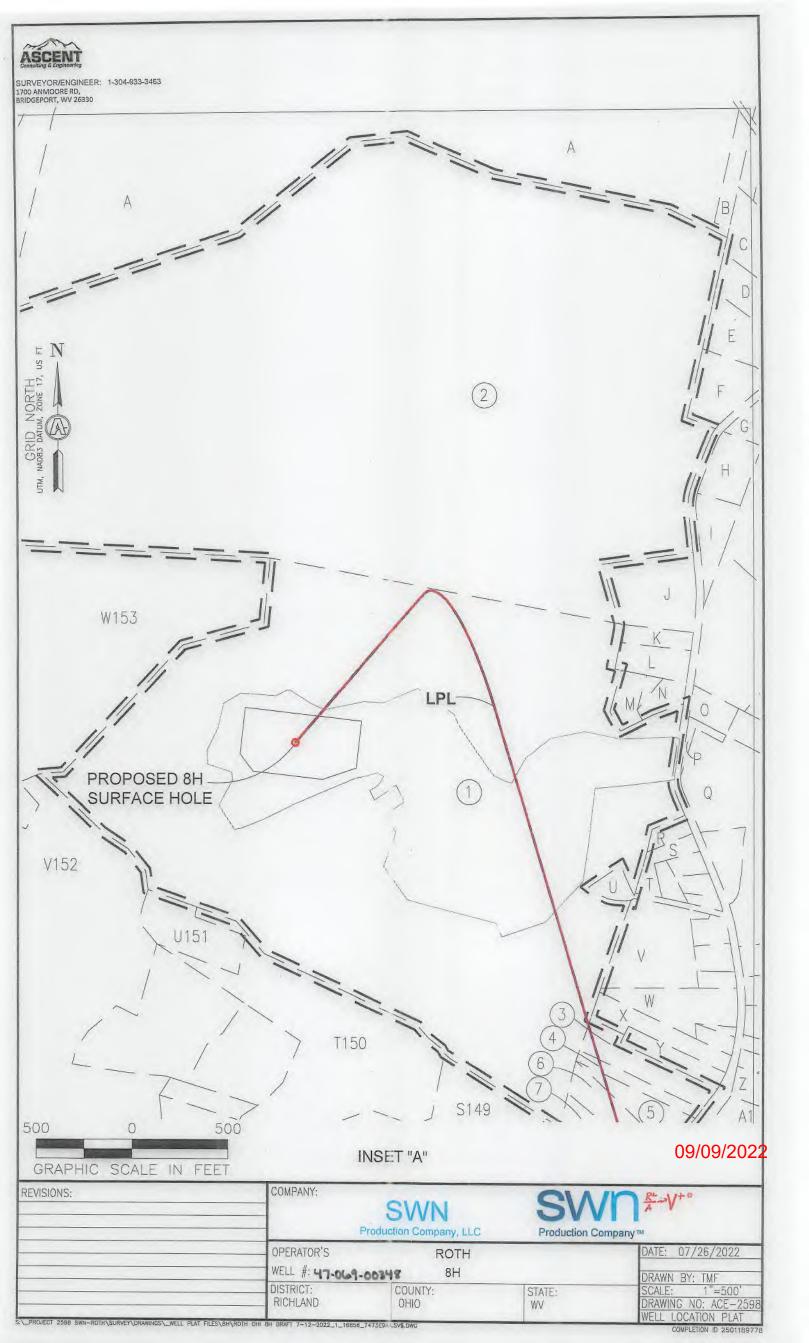
Submitted by:	
Name: Brittany Woody Suttany Woody	Date: 7/18/2022
Title: Senior Regulatory Analyst	SWN Production Co., LLC
Approved by:	
Name: tred Come	Date: 1/18/22
Title: O. I & Gas Inspector	
Approved by:	
Name:	Date:
Title:	_

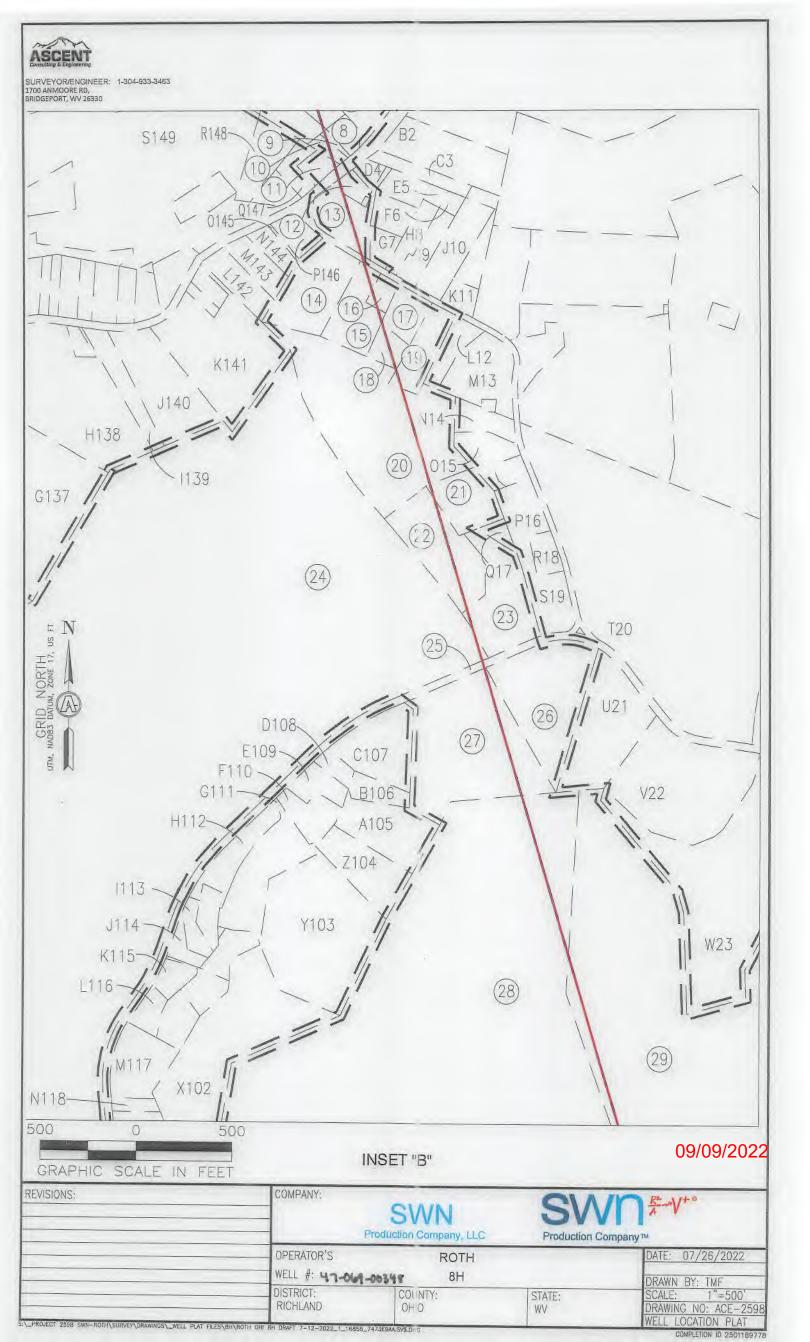
SWN PRODUCTION COMPANY, LLC - CONFIDENTIAL

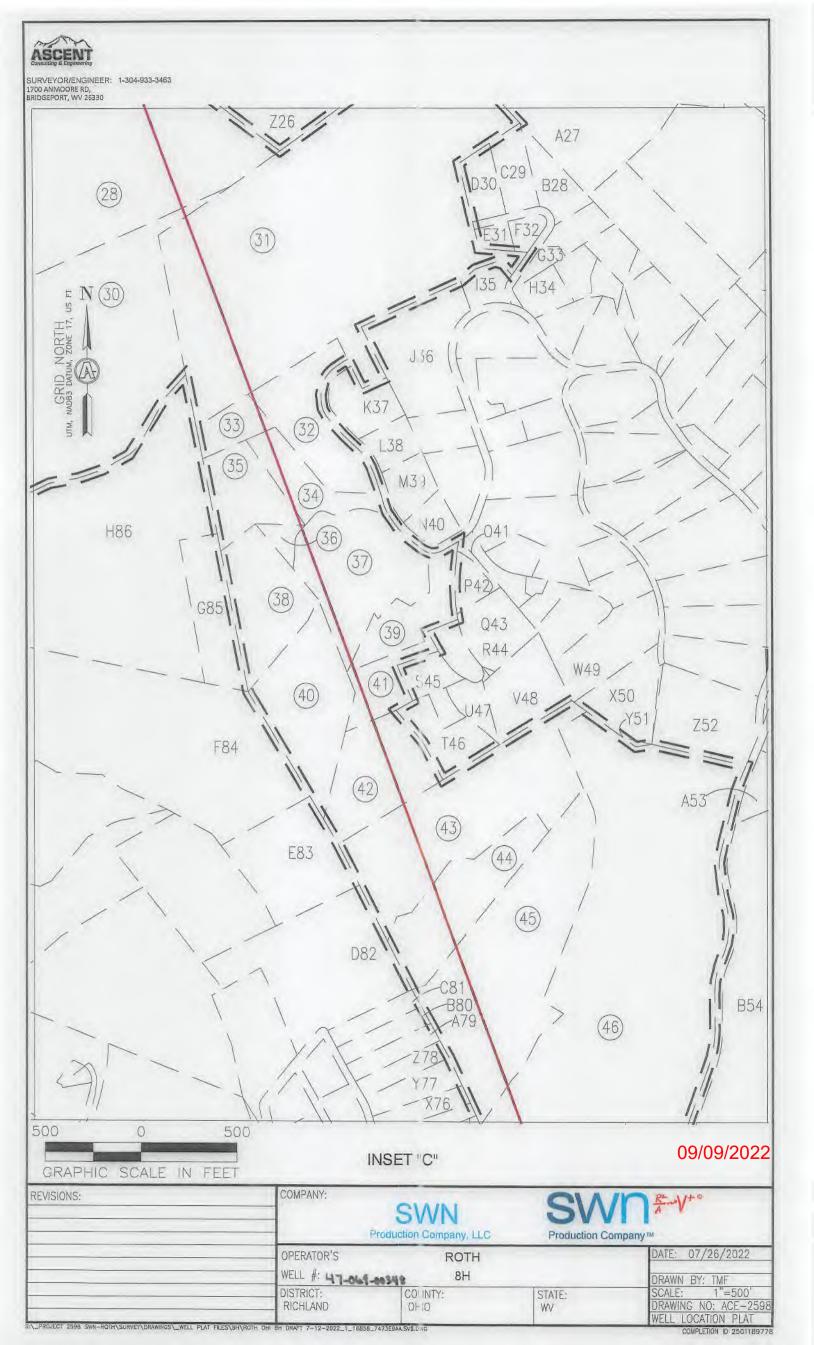


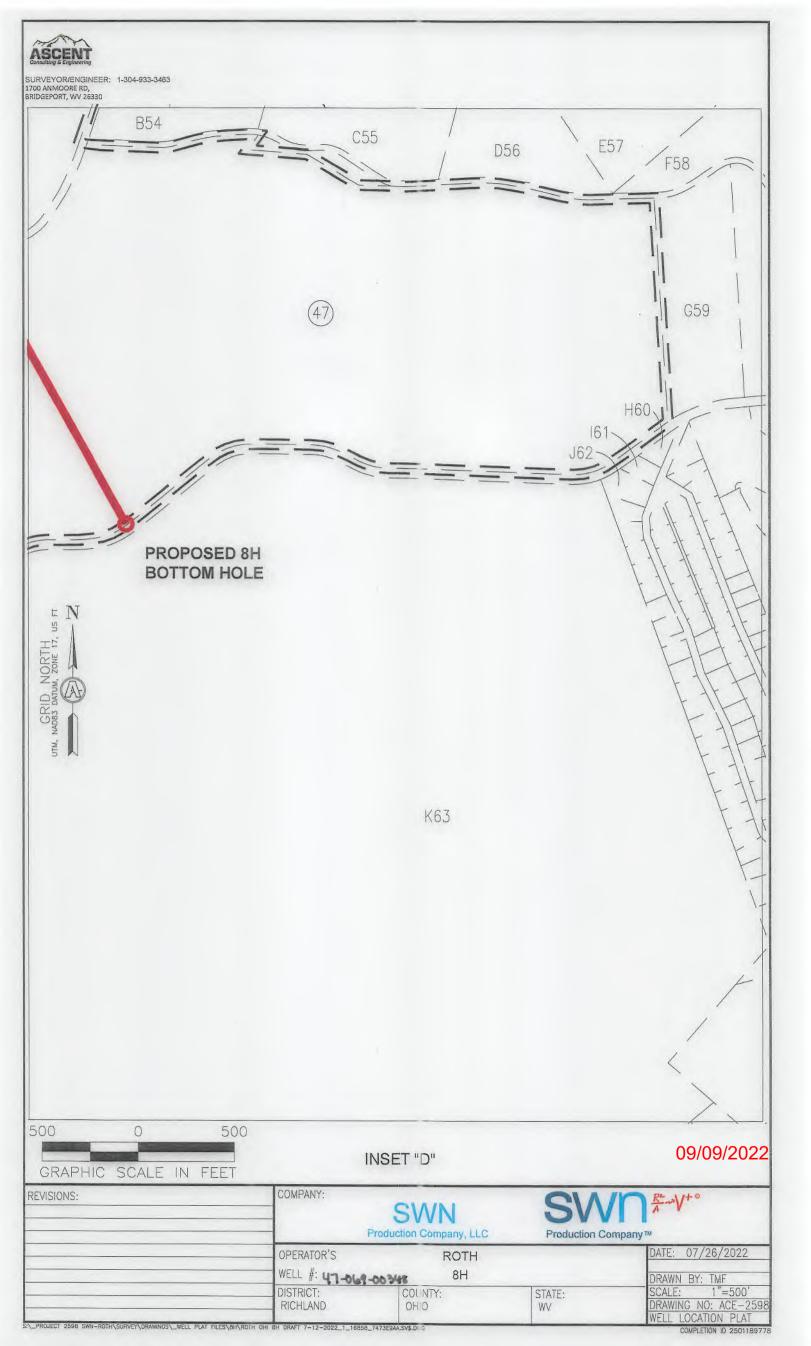




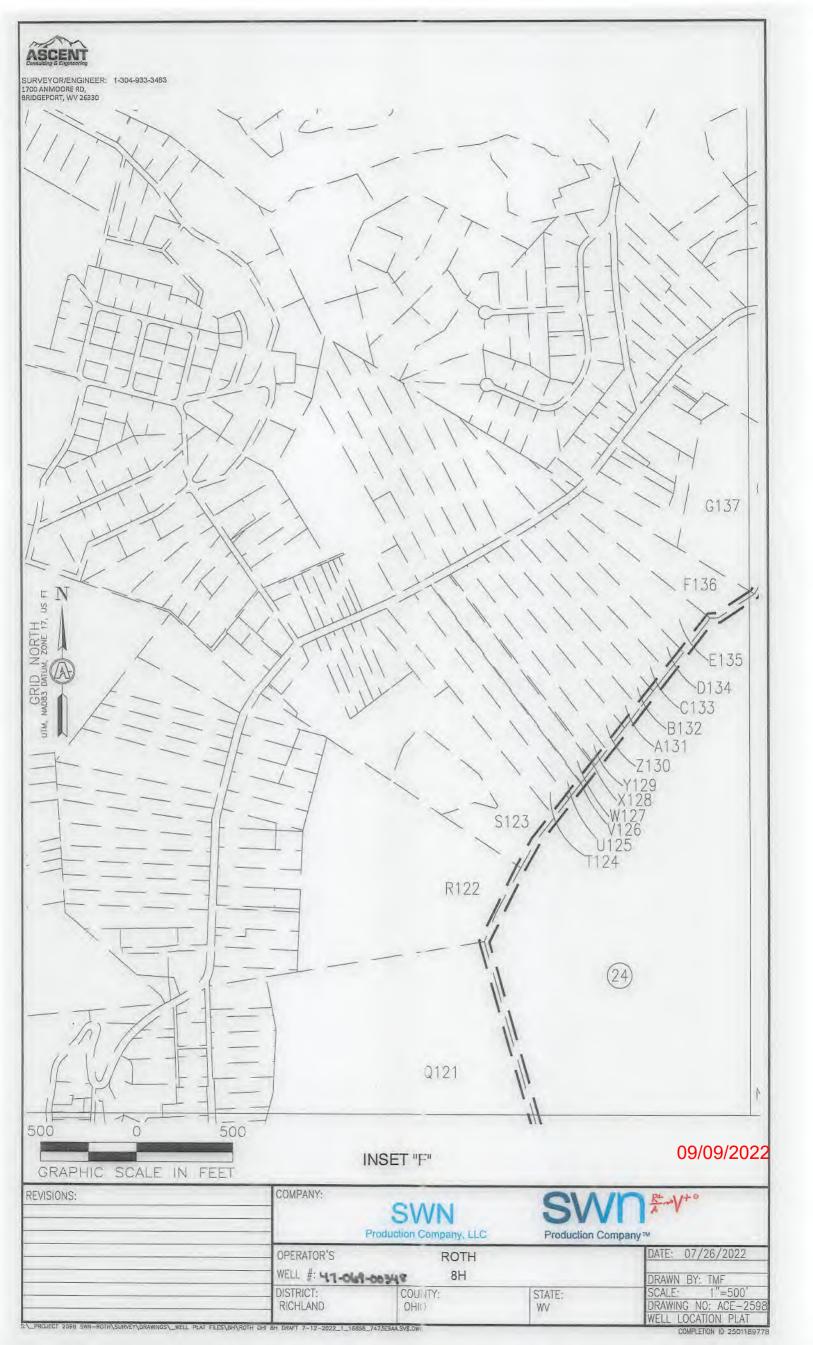














SURVEYOR/ENGINEER: 1-304-933-3463 1700 ANMOORE RD, BRIDGEPORT, WV 26330

	WELL BORE TABLE FOR SURFACE /ROYALTY OWNERS	
TRACT	SURFACE OWNER ( S )/ROYALTY OWNER ( R )	TAX PARCEL
1	ROTH FARMS, LLC ( S )/ROTH FARMS, LLC ( R )	4-R7-24
TRACT	SURFACE OWNER (S)	TAX PARCEL
2	MCCLURE WM H & MARG A	4-R4-07
3	ROGERSON BENTON LSR & K S	2-CV1-2
4	SHEARER PHILLIP G & CINDY M	2-CV1-1
5	QUINN JOHN THOMAS	2-CV4-7
6	QUINN THOMAS F & SUE ANN TAYLOR	2-CV4-7.4
7	BENNER SUZANNE J. & JAMES T BENNER	2-CV4-7.5
8	QUINN THOMAS F & SUE ANN TAYLOR	2-CV4-7.3
9	BENNER SUZANNE J & JAMES T BENNER	2-CV4-7.2
10	BENNER SUZANNE J & JAMES T BENNER	2-CV4-7.1
11	SHEARER PHILLIP G & C M	2-CV4-6
12	SNYDER KRISTIN M & KERRI M	2-CV4-11.4
13	MCKINNEY RANDALL & VIRGINIA	2-CV4-9
14	SZALAY PATRICIA L	2-CV4-17.2
15	WELLS CAROLE	2-CV4-17
16	WELLS CAROLE	2-CV4-17.4
17	CZAHOROSKI MELISSA DANIFLLE	2-CV4-17.3
18	WELLS CAROLE	2-CV4-17.5
19	WELLS CAROLE C	2-CV4-17.1
20	HESTIA LLC	4-R8-65.1
21	WEEKLY WILLIAM & CIERA	4-R8-65.3
22	GLENN VIEW LIMITED PARTNERSHIP	4-R8-65.4
23	GLENN VIEW II LIMITED PARTNERSHIP	4-R8-68
24	WARWOOD LAND CO LLC	4-R7-31
25	STATE OF WV, DEPARTMENT OF HIGHWAYS	CHERRY HILL ROA
26	MEREDITH DONALD R II AND JULIE	4-R8-69.1
27	MARY ANN HESS REALTY LLC C/O HANNIG & ASSOCIATES PLLC	4-R8-70
28	MARY ANN HESS REALTY LLC C/O HANNIG & ASSOCIATES PLLC	4-810-31
29	MARY ANN HESS REALTY LLC C/O HANNIG & ASSOCIATES PLLC	4-R8-52
30	GOLDEN CHRISTOPHER SCOTT GOLDEN BRANDACE LYNN	4-R0-52 4-R11-2.4
31	PENN HOLDING LIMITED LIABILITY COMPANY	4-R11-6.3
32	KURTZ PENN L & J S	4-R11-6.10
33	KURTZ PENN L & JEAN S	4-R11-6.14
34	TIU JEREMY J & MELISSA J	4-R11-6.19
35	TIUJEREMYJ & MELISSA J	4-R11-6.18
36	PENNINGTON EDWARD B & A	4-R11-6
37	BLOCH S STEPHENSON	4-R11-56
38	GEBHARDT ROBERT T & CANDA CE A	4-R11-5.16
39	BLOCH S STEPHENSON	4-R11P-5.7
40		-
-	BLOCH STUART STEPHENSON & KATHYI BLOCH	4-R11-6.17
41	SPOOR KERRI	4-R11P-5
42	SHATS DANIEL & LISA	4-R11P-5.4
110	BLISS CHARLIE A SR BLISS MARY ELLEN	4-R14-90.2
44	JONES WILBURS JR JEFFERSON JOYCE P	4-R14-90.3
45	JONES WILBUR S JR AND JEFFERSON JOYCE P	4-R14-90.1
45	JONES WILBUR S JR JEFFERSON JOYCE P	4-R14-90

# 09/09/2022

REVISIONS:	COMPANY:	SWN Production Company, LLC	SV Production Co	Property ™
	OPERATOR'S WELL #: 41-0	ROTH 8H		DATE: 07/26/2022
	DISTRICT: RICHLAND	COUNTY: OHIO	STATE: WV	SCALE: N/A DRAWING NO: ACE-2598 WELL LOCATION PLAT
:\_PROJECT 2598 SWN-ROTH\SURVEY\DRAWINGS\_WEL	L PLAT FILES\BH\ROTH OHI BH DRAFT 7-12-2022_1_18	6858_7473E9AA.SV\$.1/VG		COMPLETION ID 2501189778



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

RACT	ADJOINING OWNERS TABLE SURFACE OWNER (S)	TAX PARCEL
A	HEART 2 HEART VOLUNTEERS INC	4-R4-05
B	BOYD ROBERT JEFFREY & CHERYL L	4-R5-24
C	OLEJASZJOSEPH RJR	4-R5-34
D	OLEJASZ JOSEPH RJR	4-R5-35
E	KUCERA CARLI & SHARON L	4-R5-35,2
F	PAVELICH-SWIGER SHERRI J PAVELICH JEFFREY M	4-R5-35.1
G	WEIGAND PAUL & REBECCA FAMILY TRUST	4-R5-40.1
Н	SCHELL RICHARD A & N	4-R8-1.1
1	HABERFIELD WAYNE K & D.A	4-R8-1
1	MCCLURE WM H & MARGARET A	4-R7-26.1
K	LEFKAY SCOTT A & TRACY L	4-R8-2.3
L	FELDNER CHARLENE M - TOD	4-R8-2.1
M	MCCLURE WM H & MARGARET A	4-R7-26.1
N	FELDNER CHARLENE M-TOD	4-R8-2.1
0	MCKEE JAMES F JR & EILEEN B	4-R8-4.14
P	MCKEE JAMES F JR & EILEEN B	4-R8-77
Q	TUNNEL RIDGE LLC	4-R8-4.18
R	KUCERA LISA A	4-R8-4.8
S	HELDEFFER GEORGE W	4-R8-4.7
T	CAMPBELL ALLEN B	4-R8-4.9
U	CALDWELL SHANE AND SUZANNE	4-R8-78
٧	CLARK JOHN M & B C	4-R8-4.10
W	CLEGGRE&1L	2-CV1-5
X	TOMAC ROBERT CJR	2-CV1-4
Y	DANEHART CHARLES D & JO ANN	2-CV1-3
Z	CUNNINGHAM H SCOTT & SALLY A	4-R11-6.10
A1	BLOSSER SCOTT A AND LAURA R	4-R11-6.12
B2	TRACY JOHN A & MA	2-CV4-21.3
(3	TUNNELRIDGE LLC	2-CV4-21.3
D4	SNYDER FRANKLIN J (RTO); SNYDER KRISTIN & KERRI SNYDER	2-CV4-11.2
E5	TUNNEL RIDGE LLC	2-CV4-11.2 2-CV4-12.1
FG	GUZZI COREY A & BRITTANY N	2-CV4-12.1
G7	MCKENZIE SEAN Z & KRISTI L	- 15 - 15 - 1 - 1 - 1
		2-CV4-14
H8	TUNNEL RIDGE LLC	2-CV4-12
19	GUZZI COREY A & BRITTANY N	2-CV4-13
J10	STANLEY GEORGE D & SUSAN M	2-CV4-14.1
K11	MCKENZIE SEAN Z & KRISTI L	2-CV4-14
L12	KNUTH MARK A & J M	2-CV4-16.1
M13	KIMPEL TODD E & JOYCE E	2-CV4-16
N14	RCK 2 GROUP LLC ATTN KAYLEEN FITZSIMMONS	4-R8-64
D15	JOHN JOSEPH J & KAREN M	4-R8-65.2
P16	DUYMICH JENNIFER L& DAVID	4-R8-55
Q17	HESTIA LLC	4-R8-65.1
R18	KARNELL WILLIAM H & JENNIFER	4-88-66,1
S19	DUYMICH JENNIFER L& DAVID	4-R8-66
T20	TUNNELL RIDGE LLC	4-R8-67
U21	MEREDITH DONALD RII AND J K	4-RB-69.3
V22	MEREDITH RICHARD T AND S F	4-R8-69
W23	FROME STEPHEN D & REBECCA T-LE FROME S & R IRREVOCABLE TRUST	4-R8-69.2
X24	MARY ANN HESS REALTY LLC C/O HANNIG & ASSOCIATES PLLC	4-R8-53
Y25	JONES ROBERT E MD INC	4-R11-16.3
Z26	MARY ANN HESS REALTY LLC C/O HANNIG & ASSOCIATES PLLC	4-R11-11
A27	JONES ROBERT E MD INC	4-R11-16.3
B28	CUCHTA B WILLIAM III & REBECCA	4-R11-5.9
C29	CUNNINGHAM H SCOTT & SALLY A	4-R11-6.10
D30	BLOSSER SCOTT A AND LAURA R	4-R11-6.12
E31	REISINGER JAMES J & BARBARA J	4-R11-6.11
F32	WURTZBACHER JOHN J & ROXANNE B	4-R11-6.8
G33	SERENITY RD PERSONAL RESIDENCE TRUST-GEARY RICHARD CUR TTEE	4-R11-6.13
H34	GULLO GAYER	4-R11K-24.3
135	FAMILY TRUST OF JOHN R & AGNES T ARSLAIN (TRUSTEES)	4-R11K-34
]36	NEIS THOMAS	4-R11-5.2
K37	TURAK JONATHAN E & ROSELYN	4-R11K-1
138	TURAK JONATHAN E & R	4-R11K-1.1
M39	BISCHOF DEBORAH L & LEE	4-R11K-2
N40	WETZEL ROBERT & LAURA L	4-R11K-3
041	GEORGES NANCY A	A 7 . E 5 T. C
P42	WARD JEREMY D & KAUFMAN AMANDA J	4-R11-38.1
-		4-R11-38
Q43	GEORGES NANCY A	4-R11-8.6
R44	GEBHARDT YURKO JENNIFER TODD	4-R11P-5.8
\$45	SPOOR KERRI	4-R11P-5.1
T46	SHATS DANIEL & LISA	4-R11P-5.5
U47	SIMMONS KIMBERLY A	4-R11P-5.2
V48	YURKO JENNIFER G & KARLE	4-R11P-4
W49	BORDAS LINDA M	4-R11K-12
X50	BORDAS LINDA M	4-R11P-1
Y51	BORDAS LINDA M	4-R11P-1.1

ACT	ADJOINING OWNERS TABLE SURFACE OWNER (5)	TAX PARCEL
53	CARPENTER DAVID & KATHERINE R	4-R11-21.9
154	SISTERS OF STUDSEPH OF WHEELING INC	4-R11-21
:55	SISTERS OF STUOSEPH OF WHG	4-R11-20
56	PARKS SYSTEM TRUST FUND OF WHEELING	4-R11-21.3
57	WHEELING PARK COMMISSION	4-R14-91
58	WHEELING PARK COMMISSION	4-R14-20.4
159	WHEELING PARK COMMISSION	4-R14-15.2
150	HOSFELT WILLIAM J & PATRICIA HOSFELT ESTATES	10-W12D-2
51	RANSOM CHARLES M & CRYSTAL G	10-W12D-1
162	BURKE SUSAN R	10-W14D-1
(63	CITY OF WHEELING	4-R14-15
.64	ELM HILL HOLDINGS LLC	4-R14-14
A65	SCHULTZJEFFREYS	4-R14-13
165	WHEELING PARK COMMISSION	10-W17A-1
067	PELUCHETTE JOHN M & C L	4-R14J-1
68	POLACK EDWARD P	4-R14-95
269	JOSEPH ELIAS E	4-R14A-53
370	JOSEPH ELIAS E	4-R14A-53
571	SCHMITT JAMES A	4-R14-4.6
T72	SCHMITT JAMES A	4-R14-4.5
J73	MELIA JOSEPH M & J M	4-R14-6,1
/74	BAUER ROY D & GISELE M	4-R14-5
175	BAUER ROY D & GISELE	4-R14-4.4
75	BAUER ROY D & GISELE	4-R14-4
77	FUTEY JR PAUL B' AND DEBRA L	4-R14-4.3
78	SLIVCHENKO VADIM & OLENA	4-R14-2.1
79	SLIVCHENKO VADIM & OLENA	4-R14-2
80	HAND SCOTT A & CORRIEJ	4-R14-3.1
81	HAND SCOTT A & CORRIEJ	4-R14-3
82	HAND SCOTT A & CORRIEJ	4-R11-2
83	MANNINGJACOB A & ADRIANNE L	4-R11-2.8
84		
	DEFELICE LESLIE PAUL	4-R11-2.7
85 es	GOLDEN CHRISTOPHER SCOTT BRANDAGE LYNN	4-R11-2.13
86	BLOCH STUART STEPHENSON & KATHYJ BLOCH	4-R11-6.17
37	DEFEUCE LESLIE PAUL	4-R11-2.7
88	DEFELICE LESLIE PAUL	4-R11-2.7
89	DOYLE DANIELT & LUCINDA E	4-R11-2.12
90	MULL ELLEN CLARICE ET AL	4-R10-44.1
//91	NORTH FORK LANDFILL INC	4-R10-43
192	MCGLAUGHLIN DENNIS & 5	4-R7-30
193	CLEARVIEW VOL FIRE DEPT INC	2-CV6-34.1
94	STEWART CAROL	2-CV6-28
95	BOPP VICTOR VIII & DIANN	2-CV6-28.3
96	JOSEPH BRADLEY R & JANETTE L	2-CV6-27.1
97	NORTH FORK LANDFILL INC C/O SUSAN SARKIS	4-R10-39.1
98	IAFRATE DAVID A	4-R10-39
99	MCCARDLE STANLEY MJR & M	4-R10-36
00	MCCARDLE STANLEY MJR & M	4-R10-35
101	INTERSTATE DEV CORP C/O JACK FELTON CPA	4-R10-46
102	NHOLNOZNHOL	4-R10-29
03	MCLAUGHLIN HENRY J III	4-R10-29.1
04	JOHNSON STEVEN L & D T	4-R7-35.1
.05	FUGATE LOGAN DANIEL	4-R7-35
106	NONILLC	4-R7-34.1
107	NONILLG	4-R7-34
108	JOHNSON MILDRED J	4-87-33
09	JOHNSON MILDRED.	4-R7-32
10	JOHNSON MILDRED JOANN	4-R7-36
111	JOHNSON JOHN	4-R10-29
112	JOHNSON JOHN LLOYD	4-R7-39
13	KYLE CHADJ & E A	4-R10-22
14	NEWLAND DARRELL L	4-R10-22.3
115	BROST RICHARD	4-R10-24.1
16	WILSON CINDY L P & DANIEL-TOD	4-810-26
117	ERNEST RICHARD H JR & A L	4-810-27
118	BROOKS WILLIAMS C/O WESBANCO TRUST	4-R10-27.1
19	BREIDING JOSHUA D & SARAH N	4-R10-20
120	SARKIS SJ; ROHRIG RF; ROHRIG JR; ROHRIG RF TTEE	4-R10-19
121	NORTH FORK LANDFILLING	1
122	Transferred Control of the Control o	4-R10-43
122	MCGLAUGHLIN DENNIS & 5	4-87-30
77	CLEARVIEW VOL FIRE DEPT INC	2-CV5-34.1
124	STEWART CAROL  BODD VICTOR VIII & DIANN	2-CV6-28
Carl I	BOPP VICTOR V III & DIANN	2-CV5-28.3
126	JOSEPH BRADLEY R & JANETTE L	2-CV6-27.1
127	JOSEPH BRADLEY R & JANETTE L	2-CV5-27
28	JOSEPH BRADLEY R & JANETTE L	2-CV6-27.2 09/09/2
29	LAING MARGARETT	

REVISIONS:

COMPANY:

Production Company, LLC

Production Company

OPERATOR'S

ROTH

WELL #: 41 - 04 - 9 8H

DRAWN BY: TMF

DISTRICT:
RICHLAND

OPIO

SILPROJECT 2598 SWN-HOTH\SURVEY\DRAWNGS\\_WELL FLAT FILES\BH\RCITH OHI BH DRAFT 7-12-2022\_1\_1689B\_7475E9AA.SV5.TWC

COMPLETION ID 2501189778



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

	ADJOINING OWNERS TABLE	
TRACT	SURFACE OWNER (S)	TAX PARCEL
A131	CONTRAGUERRO MICHAELJ & PA	2-CV6-24
B132	STEWART GREGORY L& JOD A	2-CV6-23
C133	GALIK JACOB A	2-CV6-22
D134	DAGRAVA TIMOTHY & MEGAN	2-CV6-21
E135	HLAD DOUGLAS M & LISA ANN	2-CV6-20
F136	STEWART LOGAN G	2-CV6-19
G137	SZALAY FRANCIS E & PL	2-CV3-13.1
H138	MYERS WILBERT E III & J S	2-CV3-13
1139	KLEIN JACK WJR & BRENDA J-TOD	2-CV4-22.1
J140	MURRAY BRYAN MAND JOAN C	2-CV4-22
K141	PAVLIK NICHOLAS D AND GLORIA K	2-CV4-21.2
L142	WILLEY JILL A	2-CV4-20
M143	SCAMMELL DAVID & SUSA N	2-CV4-19
N144	BONNER ANTHONYS & AMBER R WRIGHT	2-CV4-18.1
0145	BONNER ANTHONY S & WRIGHT AMBER R	2-CV4-18.2
P146	TURNER TERRY L	2-CV4-18
Q147	KENNEN CHARLOTTE J	2-CV4-5
R148	FEDORKE AARON P & FEDORKE RACHEL SUE	2-CV4-4.1
\$149	FEDORKE AARON P & TIMOTHY J	2-CV4-3
T150	CITY OF WHEELING	4-R7-18
U151	HARTFILE GARY- TOD	4-R7-15.1
V152	CITY OF WHEELING	4-R7-18
W153	EDGE ALICE MAE - TOD	4-R7-23
X154	DONOHEW WILLIAM SCOTT & LAURA	4-R4-2.4

# 09/09/2022

REVISIONS:	COMPANY:	SWN Production Company, LLC	SV Production Co	R <sup>L</sup> →V <sup>+</sup> °
A DROIST SEE DIE DATA BURGA NAMEDIA	OPERATOR'S WELL #: 41-0	ROTH 8H		DATE: 07/26/2022  DRAWN BY: TMF
	DISTRICT: RICHLAND	COUNTY: OFIIO	STATE: WV	SCALE: N/A DRAWING NO: ACE-2598 WELL LOCATION PLAT
- CLUMBER SAM-KOLH/ZORAFA/DRAMINGS/-	WELL PLAT FILES\8H\ROTH OHI 8H DRAFT 7-12-2022_1_1	6858_7473E9AA.SV3.I WG		COMPLETION ID 2501189778

WW-6A1 (5/13) Operator's Well No. ROTH OHI 8H

#### 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:

ease Name or				
Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page

#### See Exhibit A

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

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

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

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 Co., LLC	20- 4/
By:		Gavin Nadeau, RPL
Its:		Landman

Page 1 of 3

		R Ohio Co	XHIBIT "A" toth OHI 8H unty, West Virginia		ator.	
e de la composition della comp		Attached to and made a part of the State of West Virginia Oil and	Gas Permit Form, WW-6A1, by SWN Production C	Company, LLC., Oper	lor .	
#	TMP	LESSOR	LESSEE	ROYALTY	BK/PG	% INTEREST NOT LEASED BY SWI PRODUCTION COMPANY, LLC
1)	04-00R7-0024-0000	The Trust Agreement of Joseph Roth, dated November 05, 2004	SWN Production Company, LLC	18.00%	931/199	
lote: . n 12/2 hereun	26/2017. This is subeque	aret A. Gongola, Trusteas of the Joseph Roth Trust under Agreement dated the 5th day of Novemb ni to SWN Production Company, LLC obtaining the Oil and Gas Lease dated 10/2/2017 and r	er, 2004 conveyed the property to The Roth Farm, L ecorded at 931/199. Therefore, SWN Production C	LC via Quitclaim Dee Company, LLC has th	d recorded at 931/650 e authority to operate	0.00%
2)	04-00R4-0007-0000	William H. McClure and Margaret A. McClure, husband and wife	Fossil Creek Ohio, LLC	18.00%	873/361	
			Gulfport Energy Corporation  American Petroleum Partners Operating, LLC		893/379 909/775	0.00%
- 2\	02 07771 0000 0000	Benton L. Rogerson, Sr and Karen S. Rogerson, husband and wife	SWN Production Company, LLC TH Exploration, LLC	18.00%	946/405 893/518	· · · · · · · · · · · · · · · · · · ·
3)	02-0CV1-0002-0000	Dettoil L. Rogesett, St. and Ratell S. Rogersett, historical and whe	American Petroleum Partners Operating, LLC	10.0070	958/126	0.00%
4)	02-0CV1-0001-0000	Phillip G. Shearer and Cindy M. Shearer, husband and wife	SWN Production Company, LLC SWN Production Company, LLC	15.00%	980/572 963/378	0.00%
5)	02-0CV4-0007-0000	John Thomas Quinn, a married man dealing in his sole and separate property	American Petroleum Partners Operating, LLC SWN Production Company, LLC	18.00%	943/148 980/572	0.00%
6)	02-0CV4-0007-0004	Thomas Franklin Quinn, a married man dealing with his sole and separate property	American Petroleum Partners Operating, LLC	18.00%	943/552	0.00%
7)	02-0CV4-0007-0005	Suzanne Quinn, a widow	SWN Production Company, LLC TH Exploration, LLC	18.00%	980/572 943/148	
٠,	••••		American Petroleum Partners Operating, LLC SWN Production Company, LLC		958/126 980/572	0.00%
8)	02-0CV4-0007-0003	Thomas Franklin Quinn, a married man dealing with his sole and separate property	American Petroleum Partners Operating, LLC	18.00%	943/552	0.00%
9)	02-0CV4-0007-0002	Suzanne Quinn, a widow	SWN Production Company, LLC TH Exploration, LLC	18.00%	980/572 943/148	
-,			American Petroleum Partners Operating, LLC SWN Production Company, LLC		958/126 980/572	0.00%
10)	02-0CV4-0007-0001	Suzanne Quinn, a widow	TH Exploration, LLC	18.00%	943/148	
			American Petroleum Partners Operating, LLC SWN Production Company, LLC		958/126 980/572	0.00%
11)	02-0CV4-0006-0000	Phillip G. Shearer and Cindy M. Shearer, husband and wife	SWN Production Company, LLC	15.00%	963/378	0.00%
12)	02-0CV4-0011-0004	Franklin J. Snyder and Doris H. Snyder, husband and wife, life estate; Kristin Marie Snyder and Kerri Michelle Snyder, remainder	SWN Production Company, LLC	14.00%	916/454	0.00%
13)		Virginia Lee McKinney, a/k/a Virginia L. McKinney, a widow	TH Exploration, LLC American Petroleum Partners Operating, LLC	18.00%	893/145 958/126	0.00%
			SWN Production Company, LLC		980/572	
14)	02-0CV4-0017-0002	Patricia L. Szalay and Francis E. Szalay, wife and husband	American Petroleum Partners Operating, LLC SWN Production Company, LLC	18.00%	939/477 980/572	0.00%
15)	02-0CV4-0017-0000	Gregg Wells and Carole Wells, a/k/a Carole C. Wells, f/k/a Carole C. Young, husband and wife	TH Exploration, LLC	18.00%	893/508 958/126	0.00%
			American Petroleum Partners Operating, LLC SWN Production Company, LLC		980/572	V.0070
16)	02-0CV4-0017-0004	Gregg Wells and Carole Wells, a/k/a Carole C. Wells, f/k/a Carole C. Young, husband and wife	TH Exploration, LLC American Petroleum Partners Operating, LLC	18.00%	893/508 958/126	0.00%
			SWN Production Company, LLC		980/572	
17)	02-0CV4-0017-0003	Gregg Wells and Carole Wells, a/k/a Carole C. Wells, f/k/a Carole C. Young, husband and wife	TH Exploration, LLC American Petroleum Partners Operating, LLC	18.00%	893/508 958/126	0.00%
		Travis M. Young and Michelle E. Young, husband and wife	SWN Production Company, LLC SWN Production Company, LLC	18.00%	980/572 1024/323	
18)	02-0CV4-0017-0005	Gregg Wells and Carole Wells, a/k/a Carole C. Wells, f/k/a Carole C. Young, husband and wife	TH Exploration, LLC	18.00%	893/508	0.000/
			American Petroleum Partners Operating, LLC SWN Production Company, LLC		958/126 980/572	0.00%
19)	02-0CV4-0017-0001	Gregg Wells and Carole Wells, a/k/a Carole C. Wells, f/k/a Carole C. Young, husband and wife	TH Exploration, LLC American Petroleum Partners Operating, LLC	18.00%	893/508 958/126	0.00%
			SWN Production Company, LLC	. ,	980/572	
20)	04-00R8-0065-0001	Hestia, LLC	American Petroleum Partners Operating, LLC SWN Production Company, LLC	17.00%	932/88 980/572	0.00%
21)	04-00R8-0065-0003	Hestia, LLC	American Petroleum Partners Operating, LLC SWN Production Company, LLC	17.00%	932/88 980/572	0.00%
22)	04-00R8-0065-0004	Hestia, LLC	American Petroleum Partners Operating, LLC	17.00%	932/88	0.00%
23)	04-00R8-0068-0000	Hestia, LLC	SWN Production Company, LLC  American Petroleum Partners Operating, LLC	17.00%	980/572 932/88	0.00%
24)	04 0007 0031 0000	Warwood Land Co., L.L.C.	SWN Production Company, LLC  American Petroleum Partners Operating, LLC	18.00%	980/572 934/797	
_			SWN Production Company, LLC		980/572	0.00%
25) 26)		West Virginia Department of Transportation, Division of Highways  Donald R. Meredith, II and Julie K. Meredith, husband and wife	SWN Production Company, LLC  American Petroleum Partners Operating, LLC	20.00% 18.00%	1017/169 940/647	0.00%
270	04 0009 0070 0000	Jessica B. Hogan, a single woman		18.00%	993/705 932/362	17,17776
27)	04-00/88-0070-0000	W. Neil Hogan, III, a single man	SWN Production Company, LLC SWN Production Company, LLC	18.00%	934/287	0.00%
28)	04-0R10-0031-0000	Mary Ann Hess Realty, LLC Jessica B. Hogan, a single woman	SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00%	934/279 932/362	
,		W. Neil Hogan, III, a single man Mary Ann Hess Realty, LLC	SWN Production Company, LLC	18.00%	934/287	0.00%
29)	04-00R8-0052-0000	Jessica B. Hogan, a single woman	SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00%	934/279 932/362	
		W. Neil Hogan, III, a single man Mary Ann Hess Realty, LLC	SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00%	934/287 934/279	0.00%
30)	04-0R11-0002-0004	Christopher Scott Golden and Brandace Lynn Golden, husband and wife	American Petroleum Partners Operating, LLC	18.00%	932/101	0.000
		Bounty Minerals LLC	SWN Production Company, LLC SWN Production Company, LLC	18.00%	980/572 938/783	0.00%
31) 32)		Penn Holding Limited Liability Company Penn L. Kurtz and Jean Steingass-Kurtz, husband and wife	SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00%	915/15 1000/628	0.00% 0.00%
33)	04-0R11-0006-0014	Penn L. Kurtz and Jean Steingass-Kurtz, husband and wife	SWN Production Company, LLC	18.00%	1000/628	0.00%
34)		Jeremy J. Tiu and Melissa J. Tiu, husband and wife	American Petroleum Partners Operating, LLC SWN Production Company, LLC	18.00%	947/95 980/572	0.00%
35)	04-0R11-0006-0018	Jeremy J. Tiu and Melissa J. Tiu, husband and wife	American Petroleum Partners Operating, LLC SWN Production Company, LLC	18.00%	947/95 980/572	0.00%
36)		Edward B. Pennington	SWN Production Company, LLC	18.00%	937/473	0.00%
37) 38)		Stuart S. Bloch, a/k/a S. Stephenson Bloch, and Kathy Finnerin-Bloch, husband and wife Bounty Minerals LLC	SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00%	1009/1 939/4	0.00%
39) 40)	04-R11P-0005-0007	Stuart S. Bloch, a/k/a S. Stephenson Bloch, and Kathy Finnerin-Bloch, husband and wife SWN Production Company, LLC (Company Owned Minerals)	SWN Production Company, LLC	18.00%	1009/1	0.00%
41)	04-R11P-0005-0000	Kerri Spoor	N/A SWN Production Company, LLC	N/A 16.00%	1016/313 932/426	0.00% 0.00%
42)	04-R11P-0005-0004	Teri A. Cesare-Bartnicki, a single woman	Chesapeake Appalachia, LLC SWN Production Company, LLC	14.00%	`864/398 883/84	0.00%
43)	04-0R14-0090-0002	Edward C. Armbrecht, Jr. and Calvert Jones Armbrecht, husband and wife	SWN Production Company, LLC	16.00%	924/42	<del></del>
		Richard Q. Palmer and Marguerite Sands Jones Palmer, husband and wife James Sumner Jones and Penelope Townsend Jones, husband and wife	SWN Production Company, LLC SWN Production Company, LLC	16.00% 16.00%	924/50 924/58	0.00%
44)	04-0R14-0090-0003	Wilbur S. Jones, Jr. and Joyce P. Jefferson, husband and wife  Edward C. Armbrecht, Jr. and Calvert Jones Armbrecht, husband and wife	SWN Production Company, LLC SWN Production Company, LLC	16.00% 16.00%	924/34 924/42	
,		Richard Q. Palmer and Marguerite Sands Jones Palmer, husband and wife	SWN Production Company, LLC	16.00%	924/50	0.00%
		James Sumner Jones and Penelope Townsend Jones, husband and wife Wilbur S. Jones, Jr. and Joyce P. Jefferson, husband and wife	SWN Production Company, LLC SWN Production Company, LLC	16.00% 16.00%	924/58 924/34	· · · · · · ·
45)	04-0R14-0090-0001	Wilbur S. Jones, Jr. and Joyce P. Jefferson, husband and wife	SWN Production Company, LLC	16.00%	924/58	0.00%

		Ro	HIBIT "A" th OHI 8H sty, West Virginia Jas Permit Form, WW-6A1, by SWN Production	Company, LLC., Operat	or	
#	TMP	LESSOR	LESSEE	ROYALTY	BK/PG	% INTEREST NOT LEASED BY SWN PRODUCTION COMPANY, LLC
46)	04-0R14-0090-0000	Edward C. Armbrecht, Jr. and Calvert Jones Armbrecht, husband and wife	SWN Production Company, LLC	16.00%	924/42	
		Richard Q. Palmer and Marguerite Sands Jones Palmer, husband and wife	SWN Production Company, LLC	16.00%	924/50	0.00%
		James Summer Jones and Penelope Townsend Jones, husband and wife	SWN Production Company, LLC	16.00%	924/58	
		Wilbur S. Jones, Jr. and Joyce P. Jefferson, husband and wife	SWN Production Company, LLC	16.00%	924/34	
		Wheeling Park Commission, a Public Corporation and Governmental Subdivision of the City of		10.000	070/040	0.00%
47)	04-0R14-0015-0000	Wheeling and the City of Wheeling, a Municipal Corporation	SWN Production Company, LLC	18.00%	978/248	
		END OF	EXHIBIT "A"			



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

July 20, 2022

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

**RE:** SWN's proposed New Well: Roth OHI 8H in Ohio County, West Virginia, Drilling under Reilly Delaplain Road, Roth Addition Road, Clearview Ave, Holly Hock Lane, Cherry Hill Road, State Rt 3/1, Arapahoe Basin, Greggsville, Clinton, and Potomac Road, and Oglebay Drive.

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 Reilly Delaplain Road, Roth Addition Road, Clearview Ave, Holly Hock Lane, Cherry Hill Road, State Rt 3/1, Arapahoe Basin, Greggsville, Clinton, and Potomac Road, and Oglebay Drive. Be advised that SWN has leased all mineral owners under said route as it relates to the above-referenced well and unit.

Respectfully,

**SWN Production Company, LLC** 

Gavin Nadeau, RPL

Landman

R-W+°

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

	NOT	CE CENTIFICATIO	914		
Data of Notic	ce Certification: 8/4		APINo 47.	4706	900348
Date of Notice	e certification.			Well No. Roth	
				ame: Roth OH	
**	F. 1744, 744, 244		well rad N	ame	
Notice has l			W Y 16 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		to a state of the
	ne provisions in West Virginia Code § 22-68	A, the Operator has provi	ided the requ	nred parties w	ith the Notice Forms listed
	tract of land as follows:			201720222	
State:	West Virginia	- I I W N A I I X 3	Easting:	526669.743	
County:	069-Ohio		Northing:	4444579.480	
District:	Richland	Public Road Acce		Clearview Avenue	3
Quadrangle:	Tiltonsville	Generally used far	m name:	Roth	
Watershed:	Upper Ohio- Wheeling				
Virginia Cod	of subsection (b), section sixteen of this e § 22-6A-11(b), the applicant shall tender have been completed by the applicant.				
that the Ope	West Virginia Code § 22-6A, the Operator rator has properly served the required parti		is Notice Ce	ertification	OOG OFFICE USE
LEASE CH	SOUTH THE				ONLY
□ 1. NO	TICE OF SEISMIC ACTIVITY OF SEIS	NOTICE NOT REQUIR SMIC ACTIVITY WAS		graduate the second	☐ RECEIVED/ NOT REQUIRED
■ 2. NO	TICE OF ENTRY FOR PLAT SURVEY or	□ NO PLAT SURVE	Y WAS CO	NDUCTED	☐ RECEIVED
■ 3. NO	TICE OF INTENT TO DRILL or	NOTICE NOT REQUIR	ED BECAL	SF	D PECEIVED/

NOTICE OF ENTRY FOR PLAT SURVEY

☐ WRITTEN WAIVER BY SURFACE OWNER

WAS CONDUCTED or

(PLEASE ATTACH)

## ■ 4. NOTICE OF PLANNED OPERATION

■ 5. PUBLIC NOTICE

6. NOTICE OF APPLICATION

- ☐ RECEIVED/ NOT REQUIRED
- RECEIVED
- RECEIVED
- ☐ RECEIVED

#### 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.

By:

#### Certification of Notice is hereby given:

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

Well Operator: SWN Production Co., LLC

Brittany Woody

Its: Senior Regulatory Analyst

Telephone: 304-884-1610

Address: 1300 Fort Pierpont Dr., Suite 201

Morgantown, WV 26508

Facsimile: 304-884-1690

Email: Brittany\_Woody@swn.com

JEANETTE M. GUTTLIEP
Notary Public Official Seal
State of West Virginia
My Comm. Expires Oct 1, 2024
306 Simpson Avenue Clarksburg WV 26301

Subscribed and sworn before me this \_\_\_\_\_ day of

Notary Public

My Commission Expires

0/01/2024

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 <a href="deprivacyofficer@wv.gov">deprivacyofficer@wv.gov</a>.

WW-6A (9-13) API NO. 4-709 0 6 9 0 0 3 4 8
OPERATOR WELL NO. Roth OHI 8H
Well Pad Name: Roth OHI

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

Date of Notice: Date Permit Application Filed: Provides of:    Permit For Any
PERMIT FOR ANY CONSTRUCTION OF AN IMPOUNDMENT OR PIT  Delivery method pursuant to West Virginia Code § 22-6A-10(b)  PERSONAL REGISTERED METHOD OF DELIVERY THAT REQUIRES A SERVICE MAIL 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 pertificate 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 rediment 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 proposed is a 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, personal 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 mpoundment or pit as described in section nine of this article; (5) Any surface owner or water puryor who is known to the applicant to aware 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 the
Delivery method pursuant to West Virginia Code § 22-6A-10(b)  PERSONAL REGISTERED 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 pertificate 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 rediment 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 foil 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 rescribed 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 mpoundment 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 the ecords of the sheriff required to be maintained pursuant to section eight, a
PERSONAL  REGISTERED  METHOD OF DELIVERY THAT REQUIRES A SERVICE  MAIL  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 pertificate 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 rediment 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 he surface of the tract on which the well is or is proposed well work, if the surface tract is to be used for roads or other land disturbance as elescribed in the erosion and sediment control plan submitted pursuant to subsection (e), 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 mpoundment 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 the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of th
PERSONAL REGISTERED METHOD OF DELIVERY THAT REQUIRES A SERVICE MAIL 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 rediment 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 fill 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 (e), 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 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 the ecords of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a o
SERVICE MAIL 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 rediment 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 following gerson 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 nore 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 mpoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to nave 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 the ecords of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any rovision of this article to the con
SERVICE MAIL 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 rediment 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 following gerson 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 nore 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 mpoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to nave 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 the ecords of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any rovision of this article to the con
retrificate 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 rediment 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 bill 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 mpoundment 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 the records of the sheriff required to be maintained pursuant to section eight, article one, chapter cleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not no
☑ Application Notice ☑ WSSP Notice ☑ E&S Plan Notice ☑ Well Plat Notice is hereby provided to:
SURFACE OWNER(s)   COAL OWNER OR LESSEE
Name: Roth Farm, LLC Name: Alliance Resources GP, LLC
Address: 423 Clearview Avenue Address: 2596 Battle Run Road
Wheeling, WV 26003 Triadelphia, WV 26059
Name: COAL OPERATOR
Address: Name:
Address:
SURFACE OWNER(s) (Road and/or Other Disturbance)
Name: SURFACE OWNER OF WATER WELL
Address: AND/OR WATER PURVEYOR(s)
Name: None
Name: Address:
Address:
□ OPERATOR OF ANY NATURAL GAS STORAGE FIELD
SURFACE OWNER(s) (Impoundments or Pits)  Name:
Name: Address:
Address:*Please attach additional forms if necessary

PINO. 47,000 6 9 0 0 3 4 8

OPERATOR WELL NO, Roth OHI 8H
Well Pad Name: Roth OHI

# 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 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting <a href="https://www.dep.wv.gov/oil-and-gas/pages/default.aspx">www.dep.wv.gov/oil-and-gas/pages/default.aspx</a>.

# 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 WW-6A (8-13) PI NO. 47-009 6 9 0 0 3 4 8

OPERATOR WELL NO. Roth OHI 8H

Well Pad Name: Roth OHI

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

# Water Well Testing:

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

# Water Testing Laboratories:

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

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

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

# Written Comment:

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

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

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.

WW-6A (8-13) API NO. 47-609 0 6 9 0 0 3 4 8
OPERATOR WELL NO. Roth OHI 8H
Well Pad Name: Roth OHI

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 <a href="http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx">http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx</a> 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. 47-009

OPERATOR WELL NO. Roth OHI 8H

Well Pad Name: Roth OHI

Notice is hereby given by:

Well Operator: SWN Production Co., LLC

Telephone: 304-884-1610
Email: Brittany\_Woody@swn.com

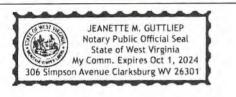
Address: 1300 Fort Pierpont Dr, Suite 201

Morgantown, WV 26508

Facsimile: 304-884-1690

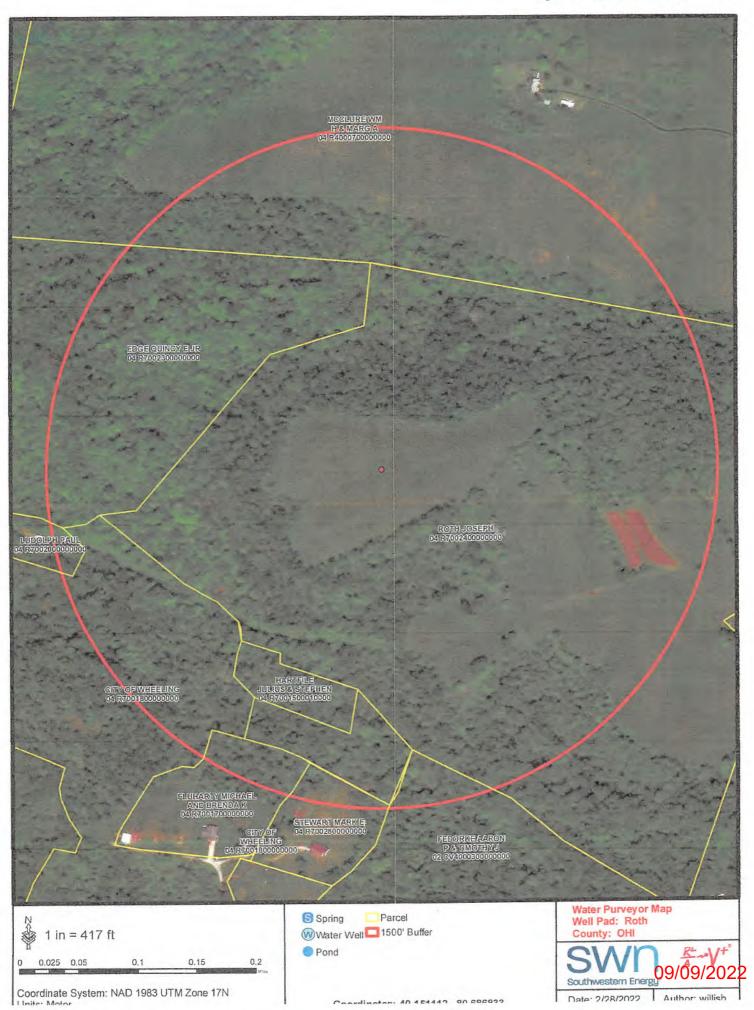
Oil and Gas Privacy Notice:

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 <a href="mailto:deprivacyofficer@wv.gov">deprivacyofficer@wv.gov</a>.



Subscribed and sworn before me this 28 day of 122 Notary Public

My Commission Expires 10101 2024



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

		equirement:	Notice shall be prov	ided at least SEVEN	(7) day	s but no more than	FORTY-FIVE (45) days prior to
Date	y e of Notice:	2/3/2022	Date of Pla	nned Entry: 2/10/2022			
Deli	ivery metho	d pursuant t	to West Virginia C	ode § 22-6A-10a			
	PERSONA	L 🔳	REGISTERED	☐ METHOD OF	DEL	IVERY THAT RE	QUIRES A
	SERVICE		MAIL			ATURE CONFIR	
on to but i bene own and Secr enal	o the surface no more that eath such tra er of minera Sediment C retary, which ble the surfa	e tract to cond in forty-five d ct that has fil als underlying ontrol Manua in statement sl ce owner to o	duct any plat survey, ays prior to such en- ed a declaration pure, such tract in the co- al and the statutes an all include contact btain copies from the	s required pursuant to try to: (1) The surface suant to section thirty- unty tax records. The d rules related to oil a information, including	this ar owner six, ar notice nd gas	ticle. Such notice s of such tract; (2) t ticle six, chapter to shall include a sta exploration and pi	shall provide notice of planned entry shall be provided at least seven days to any owner or lessee of coal seams wenty-two of this code; and (3) any attement that copies of the state Erosion roduction may be obtained from the age on the Secretary's web site, to
_		y provided to	o:		2.263		2022
		OWNER(s)			A. S. S. S. S.	OWNER OR LE	SSEE
	ne; The Roth Fa					nce Resources GP, LLC	
Address: 423 Clearview Avenue Wheeling, WV 26003				Address: 2596 Battle Run Road Triadelphia, WV 26059			
				_	арша, уу	V 20039	
Add	ress.				MINE	RAL OWNER(s)	
, Luci	1000.					Roth Farm, LLC	
Nan	ne:					123 Clearview Avenue	
Add	ress:			Wheel	ling, WV	26003	
				*pleas	se attacl	additional forms if nee	cessary
Purs a pla State Cou	at survey on e: v nty: c	t Virginia Co the tract of la Jest Virginia	ode § 22-6A-10(a), r and as follows:	Approx.	. Latiti Road A	ude & Longitude:	operator is planning entry to conduct 40.15163347, -80.67956229 Clearview Avenue
Dist	_	ichland		Watersh			Upper Ohio-Wheeling
Qua	drangle: T	iltonsville, OH Qua	d	General	ly use	d farm name:	The Roth Farm, LLC
may Cha obta	be obtained rleston, WV ined from the	I from the Sec 25304 (304) he Secretary by by given by	cretary, at the WV I -926-0450). Copies by visiting <u>www.de</u> p	Department of Environ	menta additi ages/c	l Protection headquoinal information re	il and gas exploration and production parters, located at 601 57 <sup>th</sup> Street, SE, elated to horizontal drilling may be
	phone:	304-884-1610				Morgantown, WV 26508	
Ema	F. C.	brittany_woody@	Dswn.com	Facsi	mile:	304-884-1690	
			A		1		

# 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.

4706900348

# 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.

or shall, by certified mail return owner's land for the purpose of rticle satisfies the requirements the notice requirements of this me, address, telephone number, zed representative.
renue
ende
none number, and if available, ntative. Additional information nental Protection headquarters, oil-and-gas/pages/default.aspx.
oth
Pierpont Drive, Suite 201
wn, WV 26508
675 oth@swn.com
t i i i

# 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 depprivacy officer@wv.gov.

WW-6A5 (1/12) Operator Well No. Roth OHI 8H 4 7 0 6 9 0 0 3 4 8

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

Notice Time Date of Notic	Requirement: notice shall be provided no e: 07/21/2022 Date Permit Ap	plater than the filing	date of permit	application.
Delivery met	hod pursuant to West Virginia Code § 2	22-6A-16(c)		
■ CERTI	FIED MAIL	HAND		
Control Prices of	RN RECEIPT REQUESTED	DELIVERY		
				4.36.4
return receipt the planned of required to be drilling of a l damages to th (d) The notice of notice.  Notice is her	requested or hand delivery, give the surface peration. The notice required by this subsection (b), section ten or norizontal well; and (3) A proposed surface surface affected by oil and gas operation as required by this section shall be given the surface affected to the SURFACE OWNER	ace owner whose land absection shall inclused this article to a surface use and compen- ns to the extent the day to the surface owner are	I will be used for de: (1) A copy ace owner whos sation agreemen amages are comp	cation, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information he land will be used in conjunction with the it containing an offer of compensation for pensable under article six-b of this chapter, sted in the records of the sheriff at the time
	s listed in the records of the sheriff at the t			
Name: The Roth		Name:		
Address: 423 0	eling, WV 26003	Addres	S:	
	Vest Virginia Code § 22-6A-16(c), notice in the surface owner's land for the purpose of West Virginia		il well on the tra	
County:	Ohio		Northing:	4,444,579.480
District:	Richland	Public Road		Clearview Avenue
Quadrangle:	Tiltonsville 7.5', OH	Generally us	ed farm name:	Roth OHI
Watershed:	Upper Ohio - Wheeling			
Pursuant to W to be provide horizontal we surface affect information r	ed by W. Va. Code § 22-6A-10(b) to a soll; and (3) A proposed surface use and coded by oil and gas operations to the extended at the control of the control	surface owner whose impensation agreement the damages are clined from the Secre	e land will be unt containing arompensable und tary, at the WV	code section; (2) The information required used in conjunction with the drilling of a n offer of compensation for damages to the der article six-b of this chapter. Additional Department of Environmental Protection or by visiting <a href="https://www.dep.wv.gov/oil-and-december-19">www.dep.wv.gov/oil-and-december-19</a>
Well Operato	T: SWN Production Company, LLC	Address:	P.O. Box 1300	
Telephone:	304-884-1675		Jane Lew, WV 2637	8
Email:	Justin_Booth@swn.com	Facsimile:		
Oil and Car	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

Jimmy Wriston, P. E. Secretary of Transportation Commissioner of Highways

July 20, 2022

James A. Martin, Chief Office of Oil and Gas Department of Environmental Protection 601 57<sup>th</sup> Street, SE Charleston, WV 25304

Subject: DOH Permit for the Roth Pad, Ohio County
Roth OHI 8H Well Site.

Dear Mr. Martin.

D. Alan Reed, P.E.

State Highway Engineer

This well site will be accessed from a DOH permit #06-2022-0084 which has been issued to Southwestern Energy for access to the State Road for a well site located off Ohio County Route 4 SLS MP 2.39.

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 October 1, 2018. 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 Maintenance Engineer Central Office O&G Coordinator

Cc: Brittany Woody Southwestern Energy

CH, OM, D-6

File

# Attachment VI Frac Additives

Al-303 (U.S. Well Services)	Product Use	Chemical Name	CAS Number
Al 505 (G.S. Freil Scivices)	Mixture	Ethylene glycol	107-21 1
		Cinnamaldehyde	104-55 2
		Butyl cellosolve	111-76 2
		Formic acid	64-18 6
		Polyether	Proprietary
		Acetophenone, thiourea, formaldehyde polymer	68527-49 1
P ONE (U.S. Well Services)	Breaker	Ammonium persulfate	7727-54-0
actron K-139 (Champion Technologies)	Biocide	Glutaraldehyde	111-30-8
		Quaternary Ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides	68424-85-1
		Ethanol	64-17-5
ctron K-219 (Champion Technologies)	Biocide	Methanol	67-56-1
		Quaternary Ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides	68424-85-1
rboNRT	Tracer	Ceramic Proppant	66402-68-4
6486A (Nalco Champion)	Scale Inhibitor	Amine Triphosphate	Proprietary
		Ethylene Glycol	107-21-1
6734A (Champion Technologies)	Biocide	Hydrogen Peroxide	7722-84-1
io i p i n (cital libioli ) comicio gico)	Diotide	Acetic Acid	64-19-7
		Peroxyacetic Acid	79-21-0
GIROO (GIVALIM-II G	Consider to biblion		
ono-Cl200 (SWN Well Services)	Corrosion Inhibitor	Methanol Overlanded fatty asid	67-56-1
		Oxyalkylated fatty acid	68951-67-7
		Fatty acids	61790-12-3
		Modified thiourea polymer	68527-49-1
		Water	7732-18-5
		Hydrochloric acid	7647-01-0
		Potassium acetate	127-08-2
		Formaldehyde	50-00-0
opol-FEAC (SWN Well Services)	Iron Control	Acetic Acid	64-19-7
		Citric Acid	77-92-9
		Water	7732-18-5
P-S1176-15 (Halliburton)	Friction Reducer	Polyacylate	Proprietary
LOTTAG-TO (Lightle Hour four)	riction reducer	Hydrotreated light petroleum distillate	64742-47-8
DIST DROOG LED TOUGHT HE " CO.	Palastina No. do co.		
OJET DR900 LPP (SWN Well Services)	Friction Reducer	Distillates (petroleum) hydrotreated light	64674-47-8
		Ethylene Glycol	107-21-1
		Alcohols, C12-16, Exoxylated propoxylated	68213-24-1
		Fatty Alcohols ethoxylated	Proprietary
		Water	7732-18-5
DJET DRP 1130X (SWN Well Services)	Friction Reducer	Proprietary	Proprietary
76 (Halliburton)	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8
- Camparton/	, , , secon measure	Inorganic Salt	Proprietary
TROUT TOO IS	Conta to 1 to 1		67-56-1
PTRON T-390 (Champion Technologies)	Scale Inhibitor	Methanol Nepulabanal Ethanulata	
		Nonylphenol Ethoxylate	Proprietary
I-150E (Halliburton)	Corrosion Inhibitor	No hazardous substance	N/A
(SWN Well Services)	Hydrocholic Acid	Hydrochloric Acid	7647-01-0
		Water	7732-18-5
55 MC (Halliburton)	Scale Inhibitor	Organic phosphonate	Proprietary
		Ammonium Chloride	12125-02-9
T-FLEX (U.S. Well Services)	Viscosifying Agent	Distillates, petroleum, hydrotreated light	64742-47-8
			Proprietary
slick 930	Friction Reducer	Copolymer of 2-propenamide	64742-47-8
		Hydrotreated Distillate	
		Sodium Chloride	7647-14-5
		Alcohols, C12-16, Exoxylated	68551-12-2
		Oleic Acid Diethanolamide	93-83-4
		Ammonium Chloride	12125-02-9
xslick 953	Friction Reducer	Ammonium Chloride Petroleum Distillate	64742-47-8
xslick 953	Friction Reducer		
xslick 953	Friction Reducer	Petroleum Distillate Sodium Chloride Ammonium Chloride	64742-47-8
exslick 953	Friction Reducer	Petroleum Distillate Sodium Chloride	64742-47-8 7647-14-5
	Friction Reducer	Petroleum Distillate Sodium Chloride Ammonium Chloride	64742-47-8 7647-14-5 12125-02-9
		Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide	64742-47-8 7647-14-5 12125-02-9 93-83-4
		Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8
		Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4
		Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2
xslick 957	Friction Reducer	Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5
xslick 957		Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum)	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8
xslick 957 RA-2000 (U.S. Well Services)	Friction Reducer  Anionic Friction Reducer	Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9
xslick 957  RA-2000 (U.S. Well Services)  xald 655 NM	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor	Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid)	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8
xslick 957 FRA-2000 (U.S. Well Services) xald 655 NM	Friction Reducer  Anionic Friction Reducer	Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8 69418-26-4
xslick 957 FRA-2000 (U.S. Well Services) xald 655 NM	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor	Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06-9 15827-30-8 69418-26-4 64742-47-8
exslick 957 FRA-2000 (U.S. Well Services) exald 655 NM	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor	Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Ccpolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI)	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9
exslick 957  FRA-2000 (U.S. Well Services)  exald 655 NM exslick 922	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor no data available	Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4
exslick 957  FRA-2000 (U.S. Well Services)  exald 655 NM exslick 922	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor	Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Ccpolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI)	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9
exslick 957  FRA-2000 (U.S. Well Services)  exald 655 NM exslick 922	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor no data available	Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4
exslick 957  FRA-2000 (U.S. Well Services)  exald 655 NM exslick 922	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor no data available	Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4
exslick 957  FRA-2000 (U.S. Well Services)  exald 655 NM  exslick 922  olcide PS50A	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor no data available	Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 55566-30-8
exslick 953  exslick 957  FRA-2000 (U.S. Well Services)  exald 655 NM  exslick 922  olcide PS50A	Anionic Friction Reducer  Scale Inhibitor no data available  Biocidal product	Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 55566-30-8
exslick 957  FRA-2000 (U.S. Well Services)  exald 655 NM  exslick 922  olcide PS50A	Anionic Friction Reducer  Scale Inhibitor no data available  Biocidal product	Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 55566-30-8
exslick 957  FRA-2000 (U.S. Well Services)  exald 655 NM  exslick 922  olcide PS50A	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor no data available  Biocidal product  Friction Reducer	Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol Poly (oxy-1.2-ethanediyl) alphatridecylomegahydroxy-, branched	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 55566-30-8 397256-50-7 64742-47-8 Proprietary 69011-36-5
exslick 957  FRA-2000 (U.S. Well Services)  exald 655 NM  exslick 922  olcide PS50A	Anionic Friction Reducer  Scale Inhibitor no data available  Biocidal product	Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol	64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 55566-30-8

ACCESS BOAD CROSS SECTIONS WELL PAD BASELINE PLAN WELL PAD SUBGRADE PLAN

WELL PAD PROFILE WELL PAD PROFILE
WELL PAD CROSS SECTIONS
STOCKPILE CROSS SECTIONS
CULVERT PROFILES

RECLAMATION PLAN

DETAILS GEOTECH DESIGN & DETAILS BORING LOGS OHIO COUNTY, WV **APRIL 2022** 

NAME:	NUMBER:
AMBULANCE	911
HOSPITAL EMERGENCY ROOM	(304) 243 - 3000
FIRE DEPARTMENT	911
POLICE DEPARTMENT	911
POISON CONTROL CENTER	(900) 222 - 1222

# MOBILIZATION & DEMORALIZATION (LIMITED TO SK OF BASE BID) AC 4.83 CY 22,800 CY 116,502 TGP SOIL STRIPPING, STOCKPILING, AND REDISTRIBUTION (ASSUMED 10" DEEP EARTHWORK EASTHMONE SON TORKYNY DETP (INCLIDES EXCAVATION, PIPE, STONE, BABRIC, & COLLECTION BRAINS) - ISTONE BY SWIN WILL NO COURTAINAETH SEAN SEEDINGE & BALGORING (SOLLOGS) STRINGER) 1.5 C GIBBER BURL MANTSONE FOR WILL PAD (F. (PALEMENT ONLY, STONE IS FURCHAEDE SWIN) ANADITO NO LITTOR ONLY LEPA - PALEMENT ONLY, STONE IS FURCHAEDE SWIN) NC. CHAPPET STANISATION FOR WILL PAD (F. ) 1.5 COURSE BURL MESTONE FOR AUGULIAN FOR (F. ) - PALEMENT ONLY, STONE IS PLINCHAEDE BY SWIN) NC. CHAPPET STANISATION FOR MILL BAD (F. ) NC STOLEMENT BURL MESTONE FOR AUGULIAN FOR (F. ) - PALEMENT ONLY, STONE IS PLINCHAEDE BY SWIN) NC MACHINET STREED/SATION FOR AUGULIAN FOR (F. ) - PALEMENT ONLY, STONE IS PLINCHAEDE BY SWIN) 4,13 1,525 14.50 4,425 6,045 20,950 1,005 4,750 920 1,380 7,880 BY CEMENT STABILIZATION FOR AUXILIARY PAD (12") 2" OF 12.5 MM WEARING COURSE ASPHALT 3" OF 75 MM BASE COURSE ASPHALT 3" OF 25 MM BASE COURSE ASPHALT 3" CEMENT STABILIZATION FOR ACCESS ROAD (12") 5TABILIZED CONSTRUCTION ENTRANCE - (STONE BY SWH) TO COME STATEMENT OF THE PROPERTY OF THE PROPE 3,110 3,890 18 530 840 5,475 745 150 430 520



## DRIVING DIRECTIONS

- HEAD NORTH ON FORT PIERPONT DR. 0.3 MILES
- TURN RIGHT ONTO N PIERPONT RD, 482 FEET TURN RIGHT ONTO CHEAT RD, 0.8 MILES

- TURN RIGHT ONTO CHEAT RD, 0.8 MILES
  TURN LETT TO MERGE ONTO 198 W TOWARD 1-79,0.5 MILES
  MERGE CONTO 1-8 W, 0.1 MILES
  TAKE THE BEY ONTO 1-79 IN TOWARD WASHINGTON, 45,3 MILES
  TAKE THE EXIT ONTO 1-70 WA-79 IN TOWARD WASHINGTON, 24.7 MILES
  TAKE EXIT TO COUNTY HIGHWAY 41-0ALLAS PIKE, 0.2 MILES
  CONTINUE ON DALLAS PIKE, 1,3 MILES
  TURN MIGHT ONTO US/40 EAST, 0.5 MILES
  TURN HET CONTO DIXONS PUN PROAD, 7,3 MILES

- TURN LEFT ONTO COUNTY HIGHWAY 33/ DEMENT CEMETARY, 1,2 MILES
- TURN RIGHT ONTO WY 88 NORTH, 0,8 MILES
  TURN LEFT CATO GREGGSVILLE, CLINTON, AND POTOMAC ROAD, 1,8 MILES
  TURN RIGHT ONTO TABLE ROCK LANE, 1,5 MILES
  TURN LEFT CATO CHERRY HILL ROAD/GLENS RUN ROAD, 0,5 MILES
- TURN RIGHT ONTO HIGHLAND ROAD, 0.6 MILES TURN RIGHT ONTO CLEARVIEW AVE, 0.5 MILES

# TILTONSVILLE QUADRANGLE REFERENCE MAP

PROJECT COORDINATOR:
JOHN DUBOWSKI,
CONSTRUCTION SUPERINTENDENT
SOUTHWESTERN PRODUCTION COMPANY, LLC
1330 FORT PIERPONT DRIVE, SUITE 201. MORGANTOWN WV 26508 PHONE: (304) 884 - 1671 EMAIL: JOHN DUBDWSKI@SWN.COM

ENGINEER: MICHAEL NESTOR, PE ASCENT CONSULTING & ENGINEERING 2361 DAVISSON BUN BOAD PHONE: (304) 933 - 3463 EMAIL: MIKE@ASCENTCONSULTINGENGINEERS,COM

## PROJECT MANAGER:

ENG SHORT, ASCENT CONSULTING & ENGINEERING 2361 DAYISSON RUN ROAD CLARKSBURG, WV 26301 PHONE: (304) 933 - 3463 EMAIL: ERIC@ASCENTCONSULTINGENGINEERS.COM

ENVIRONMENTAL: WETLANDS OR SURFACE WATER INFORMATION WAS DELINEATED BY ENVIRONMENTAL SOLUTIONS & INNOVATIONS, INC DATED OCTOBER 2021

TOPOGRAPHIC INFORMATION: FICRIZONTAL POSITIONS SHOWN ON THIS PLAN ARE NADES WEST VIRGINIA STATE PLANES, NORTH ZONE. IN U.S. SURVEY FEET.

## LOCATION COORDINATES

ACCESS ROAD ENTRANCE: LATITUDE: 40,151269 N LATITUDE: 40°09'4.57" N

LONGITUDE LONGITUDE: EASTING: EASTING:

LONGITUDE

80,679720 W (DECIMAL DEGREES) (DEGREES'MINUTES' SECONDS' 80°40'46.99" W 1638731,6812 527278.58

80 888833° W

80°41°12.60° 1 1636759,0887 526677,77

(DECIMAL DEGREES) (DEGREES' MINUTES' SECONDS' (WV SP-83, FEET) (UTM ZONE 17, METERS)

### LIMITS OF DISTURBANCE BY PROPERTY:

WELL PAD CENTER: LATITUDE: 40,151112° N LATITUDE: 40,09704,00° N NORTHING: 603598,6478 NORTHING: 4444578,53

PROPERTY OWNER

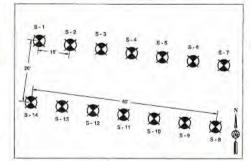
ACRES DISTURBED

# **TOTAL DISTURBED AREA: 34.81 ACRES**

PAD DISTURBED AREA:

EARTH WORK SUMMARY

116,500 CY TOPSOIL: ASSUMED 10" (AVG, DEPTH) 22,800 CY



WELL HEAD LAYOUT



MISS LITILITY OF WEST VIRGIMA 1-800-245-4848 WEST VIRGINIA STATE LAW (SECTION XIV: CHAPTER 24-C) REQUIRES THAT YOU CALL TWO BUSINESS DAYS REFORE YOU DIG IN



LOCATION WAP NOT TO SCALE

DATE DESCRIPTION

Southwestern Energy"





2361 DAVISSON RUN ROAD CLARKSBURG, WY 26301 WWW.ASCENTCONSULTINGENGINEERS.COM

(304) 933 - 3463

2598 KWA 4/7/2022 **EMS** AS SHOWN MRN

CONSTRUCTION PLANS FOR SWN PRODUCTION COMPANY, LLC ROTH PAD OHIO COUNTY, WV

COVER SHEET

DE ANI-STATUS APPROVED FOR PERMITS

