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west virginia department of environmental protection

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

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

Monday, October 20, 2025  
WELL WORK PERMIT  
Horizontal 6A / New Drill

EXPAND OPERATING LLC  
6100 N WESTERN AVE.

OKLAHOMA CITY, OK 73118

Re: Permit approval for Serafin Ortiz MSH 606H  
47-051-02563-00-00

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.

A handwritten signature in black ink, appearing to read "Jason Harmon".

H. Jason Harmon  
Acting Chief

Operator's Well Number: Serafin Ortiz MSH 606H  
Farm Name: Frank J & Lori A Longwell  
U.S. WELL NUMBER: 47-051-02563-00-00  
Horizontal 6A New Drill  
Date Issued: 10/20/2025

## PERMIT CONDITIONS

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

### CONDITIONS

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

10/24/2025

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

1) Well Operator: Expand Operating LLC 494533012 051- Marshall 13-Union 486-Moundsville  
Operator ID County District Quadrangle

2) Operator's Well Number: Serafin Ortiz MSH 606H Well Pad Name: Serafin Ortiz MSH

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

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

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

(b) If Gas Shallow ☒ Deep ☐  
Horizontal ☒

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  
Target Formation- Marcellus, Down-Dip well to the South, Target Top TVD- 6227', Target Base TVD- 6283', Anticipated Thickness- 56', Associated Pressure- 4076

8) Proposed Total Vertical Depth: 6366'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 15,832'

11) Proposed Horizontal Leg Length: 8507.89'

12) Approximate Fresh Water Strata Depths: 390'

13) Method to Determine Fresh Water Depths: Clean sand below deepest water well

14) Approximate Saltwater Depths: 1242'- Salinity Profile

15) Approximate Coal Seam Depths: 765'

16) Approximate Depth to Possible Void (coal mine, karst, other): Possible Void 765'.

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

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

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*Stacy C. Strader*  
STRADER lower  
7/17/2025



WW-6B  
(04/15)

4705102563  
API NO. 47- 051 -  
OPERATOR WELL NO. Serafin Ortiz MSH 606H  
Well Pad Name: Serafin Ortiz MSH

18)

**CASING AND TUBING PROGRAM**

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	J-55	94#	136'	136'	CTS
Fresh Water	13 3/8"	New	J-55	54.4#	795'	795'	916 sx/CTS
Coal	See	Surface	Casing				
Intermediate	9 5/8"	New	J-55	36#	2112'	2112'	812 sx/CTS
Production	5 1/2"	New	P-110 HP	20#	15832'	15832'	Tail 2774sx/ 100' Inside Intermediate
Tubing							
Liners							

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	30"	0.25	2120	81	Class A	1.20/30% Excess
Fresh Water	13 3/8"	17.5"	0.330	1730	633	Class A	1.20/30% Excess
Coal	See	Surface	Casing				
Intermediate	9 5/8"	12 1/4"	0.352	3520	1768	Class A	1.19/40% Excess
Production	5 1/2"	8 3/4"-8 1/2"	0.361	14360	10500	Class A	1.19/10-15% Excess
Tubing							
Liners							

**PACKERS**

Kind:				
Sizes:				
Depths Set:				

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*S. L. Curran*  
*STRAIGHT LOWER*  
*7/17/2025*

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

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

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

Well will be perforated within the target formation and stimulated with a slurry of water, sand, and chemical additives at a high rate. This will be performed in stages with the plug and perf method along the wellbore until the entire lateral has been stimulated within the target formation. All stage plugs are then drilled out and the well is flowed back to surface. In some instances, additional toe prep may be performed by pumping additional water in the toe of the well prior to perforating and pumping Stage 1 to ensure that the toe guns/toe sleeves are fully open prior to pumping stage 1. The well is produced through surface facilities consisting of high pressure production units, horizontal separation units, water and oil storage tanks. Max press and anticipated max rate- 12,500 psi @ 100 barrels a minute.

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

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

23) Describe centralizer placement for each casing string:

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

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

See Attachment \*\*\*

25) Proposed borehole conditioning procedures:

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

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\*Note: Attach additional sheets as needed.

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*Steve Gower*  
STRADER GOWER  
7/17/2025

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CEMENT ADDITIVES						
INTERVAL	SCHLUMBERGER PRODUCT NAME	BJ PRODUCT NAME	NEXTIER PRODUCT NAME	PRODUCT USE	CHEMICAL NAME	CAS-Number
SURFACE (FRESHWATER) <small>up to 3%</small>	<del>XXXXXX</del>	INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
	S001	A-7P	0110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
COAL PROTECTION <small>up to 3%</small>	<del>XXXXXX</del>	INTEGRA SEAL	0600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
	S001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
INTERMEDIATE	D020	BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
	0047	FP 28L	<del>XXXXXX</del>	LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
	<del>XXXXXX</del>	INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
	CemNet	<del>XXXXXX</del>	<del>XXXXXX</del>	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
PRODUCTION	<del>XXXXXX</del>	<del>XXXXXX</del>	CJ111	ACCELERATOR	SODIUM CHLORIDE	7440-23-5
	<del>XXXXXX</del>	55-IIW	0880	SURFACTANT	NONIONIC SURFACTANT	6540-99-4
	DO47	FP 28L	<del>XXXXXX</del>	LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
	<del>XXXXXX</del>	<del>XXXXXX</del>	OX157011	SOLID ANTIFOAM AGENT	FULLERS EARTH(ATTAPULGITE)	8031-18-3
	<del>XXXXXX</del>	<del>XXXXXX</del>	CJ540	HP FLUID LOSS ADDITIVE	ALIPHATICAMIDE POLYMER	PROPRIETARY
	0255	<del>XXXXXX</del>	<del>XXXXXX</del>	MED TEMP FLUID LOSS ADDITIVE	POLYACRILIC POLYMER	PROPRIETARY
	<del>XXXXXX</del>	<del>XXXXXX</del>	CJ213	RETARDER	CHRYSTALLINE SILICA	14808-60-7
	<del>XXXXXX</del>	FL-66	0501	LOW TEMP FLUID LOSS ADD	POWDERED POLYSACCHARIDE	PROPRIETARY
	<del>XXXXXX</del>	BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
	D208	ASA-301	<del>XXXXXX</del>	VISCOFIER/ANTI- SETTLING AGENT	REFINED POLYMER/ CHRYSTALLINE SILICA	PROPRIETARY
	D198	R-3	<del>XXXXXX</del>	CEMENT RETARDER	LIGNIN	8068-51-6
	SUGAR	SUGAR	CJ795	CEMENT RETARDER	SUCROSE	57-50-1
	D065	<del>XXXXXX</del>	<del>XXXXXX</del>	DISPERSANT	SODIUM POLYNAPHTHALENE SULFONATE	8068-51-6
	D800	<del>XXXXXX</del>	<del>XXXXXX</del>	CEMENT RETARDER (Mid-Temperature)	SODIUM LIGNOSULFONATE	8061-51-6

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Expand Energy				Proposed Drilling Program	
Well:	SERAFIN ORTIZ MSH 606H			Drilling Rig:	EDC 41
Field:	PANHANDLE FIELD WET			Formation:	Marcellus Shale
County:	MARSHALL			State:	WV
SHL (NAD83):	40.101549 Latitude	-80.542425 Longitude			
BHL (NAD83):	40.122256 Latitude	-80.563357 Longitude			
KB Elev:	1,305 ft MSL	KB Height: 26 ft AGL	GL Elev:	1,279 ft MSL	

PROD TOC @ 2,112' MD

TUBULAR DETAIL					
Casing String	Casing Size (in)	Weight (Min)	Grade (Min)	Planned Interval	
				From	To
Conductor	20	94.0 #	J-55	0'	136'
Surface/Coal	13.375	54.4 #	J-55	0'	795'
Intermediate	9.625	36.0 #	J-55	0'	2,112'
Production	5.5	20.0 #	P-110 HP	0'	15,832'

CEMENT DETAIL

	Sacks	Class	Density
Conductor	173	A	19.3
Surface	916	A	15.6
Intermediate	812	A	15.6
Production	2774	A	14.5-15.0

136' to 815'

↓

Air/Mist

---

815' to 2,132'

↓

Air/Mist

---

2,132' to 6,233'

↓

Air/Mist

---

TD at 6,233'

---

6,233' to 7,320'

↓

12.0-12.5 ppg

---

7,320' to 15,832'

↓

12.5-13.5 ppg

Freshwater Depth - 390' TVD

Coal Void Depth - 765' TVD

Saltwater Depth - 1,242' TVD

TVD - 6,366'

TMD - 15,832'

6,272' TVD Target Center

TD at 15,832' MD

6,366' TVD

Onondaga 6,377' TVD

LP at 7,320' MD

SHL Onondaga 6,283' TVD

Created by: Sebastian Ziaja on 05/27/2025

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*Stacy Amos*  
*STRADLE GOWAR*  
*11/17/2025*

10/24/2025



4705102563



**Brittany Woody**  
Staff Regulatory Specialist

**June 9, 2025**

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

**RE:** Proposed New Well: Serafin Ortiz MSH 606H

Dear Mr. Brewer:

Expand 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 Ortiz's property, in Union District, Marshall County, West Virginia.

If you have any questions or desire additional information, please me at 304-209-5688.

Thank you.

Sincerely,

A handwritten signature in blue ink that reads "Brittany Woody".

Brittany Woody  
Staff Regulatory Specialist  
Expand Energy

**Expand Energy Corporation**

1300 Fort Pierpont Dr., Suite 201 / Morgantown, WV 26508  
O: 304-209-5688 / m: 304-997-2598 / [Brittany.Woody@expandenergy.com](mailto:Brittany.Woody@expandenergy.com)

**10/24/2025**

4705102563

WW-9  
(4/16)API Number 47 - 051 -  
Operator's Well No. Serafin Ortiz MSH 606HSTATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

## FLUIDS/ CUTTINGS DISPOSAL &amp; RECLAMATION PLAN

Operator Name Expand Operating LLC OP Code 494533012Watershed (HUC 10) Upper Ohio- Wheeling Quadrangle MoundsvilleDo you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes ☒ No ☐Will a pit be used? Yes ☐ No ☒

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

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

Proposed Disposal Method For Treated Pit Wastes:

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

Will closed loop system be used? If so, describe: Yes- See Attachment 3ADrilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air drill to KOP, fluid drill with SOBM from KOP to TD-If oil based, what type? Synthetic, petroleum, etc. Synthetic Oil BaseAdditives to be used in drilling medium? Attachment 3BDrill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. landfill

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

-Landfill or offsite name/permit number? Meadowfill SWF- 1032, Short Creek SWF-1034, Carbon Limestone MSWL018781, Wetzel County 1021**Apex Sanitary Landfill 06-08438, Brooke Co SWF-1013, FMS 353100**

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

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

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

Company Official Signature Brittany WoodyCompany Official (Typed Name) Brittany WoodyCompany Official Title Staff Regulatory SpecialistSubscribed and sworn before me this 23 day of June, 20 25

Elizabeth Blankenship Notary Public

My commission expires 6/23/2029RECEIVED  
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Operator's Well No. Serafin Ortiz MSH 606HExpand Operating LLCProposed Revegetation Treatment: Acres Disturbed 8.2 Prevegetation pH \_\_\_\_\_Lime as determined by pH test min.2 Tons/acre or to correct to pH 3.87Fertilizer type 10-20-20Fertilizer amount 600/500 lbs/acreMulch Hay/Straw Tons/acreSeed Mixtures**Temporary****Permanent**

Seed Type lbs/acre

Seed Type lbs/acre

**Attachment 3C**

## Attach:

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: STRADGER GOWER *[Signature]*

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

Title: Oil & Gas Inspector Date: 7/17/2025Field Reviewed? ( ☒ ) Yes ( ☐ ) NoRECEIVED  
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## 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 a Shale Gas Separator, 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 highly weighted 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 haul off to an approved landfill site. (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 Separator 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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3.10.2025  
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## **Drilling Mediums**

### **Surface/Coal (if present)/Freshwater Intervals**

Air

Freshwater (if needed based on conditions)

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

Air

Freshwater (if needed based on conditions)

Brine (if needed, base fluid for mud systems)

### **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





## WVD Seeding Specification

To Order Seed contact John Dubowski office 304-209-5741 cell 346-773-6078 john.dubowski@expandenergy.com (please allow 7 to 10 days for delivery)

### NON-ORGANIC PROPERTIES

Seed Mixture: ROW Mix	SWN Supplied	
Orchardgrass	40%	
Timothy	15%	
Annual Ryegrass	15%	
Brown Top Millet	5%	
Red Top	5%	
Medium Red Clover	5%	All legumes are innoculated at 5x normal rate
White Clover	5%	
Birdsfoot Trefoil	5%	
Rough Bluegrass	5%	
Apply @ 100lbs per acre April 16th- Oct. 14th		Apply @ 200lbs per acre Oct. 15th- April 15th PLUS 50lbs per acre of Winter Wheat

### SOIL AMENDMENTS

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 Expand supervision at the beginning of the project to allow time for special seed delivery.

### ORGANIC PROPERTIES

Seed Mixture: Expand Production Organic Mix	Expand 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 April 16th- Oct. 14th	Apply @ 200lbs per acre Oct. 15th- April 15th
Organic Fertilizer @ 200lbs per Acre	Pelletized Lime @ 2 Tons per Acre

### WETLANDS (delineated as jurisdictional wetlands)

Seed Mixture: Wetland Mix	Expand 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 April 16th- Oct. 14th	Apply @ 50lbs per acre Oct. 15th- April 15th
NO FERTILIZER OR LIME INSIDE WETLAND LIMITS	

4705102563

# MARCELLUS WELL DRILLING PROCEDURES

AND

4705102563

## WELL SITE SAFETY PLAN



Expand Energy  
1300 Fort Pierpont Drive, Suite 201  
Morgantown, West Virginia 26508

**API NO. 47-XXX-XXXXX**  
**WELL NAME: Serafin Ortiz MSH 606H**  
**Moundsville QUAD**  
**Union DISTRICT**  
**MARSHALL COUNTY, WEST VIRGINIA**

Submitted by:

Name: Brittany Woody

Date: 6/9/2025

*Brittany Woody*

Title: Staff Regulatory Specialist

Expand Energy

Approved by:

Name: STRADER GOWER

Date: 7-17-2025

Title: Oil & Gas Inspector

Approved by:

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

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

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

Expand Energy – CONFIDENTIAL

RECEIVED  
Office Of Oil and Gas

SEP 16 2025

WV Department of  
Environmental Protection

*[Signature]*

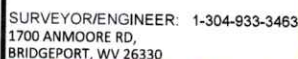
RECEIVED  
Office Of Oil and Gas

SEP 16 2025

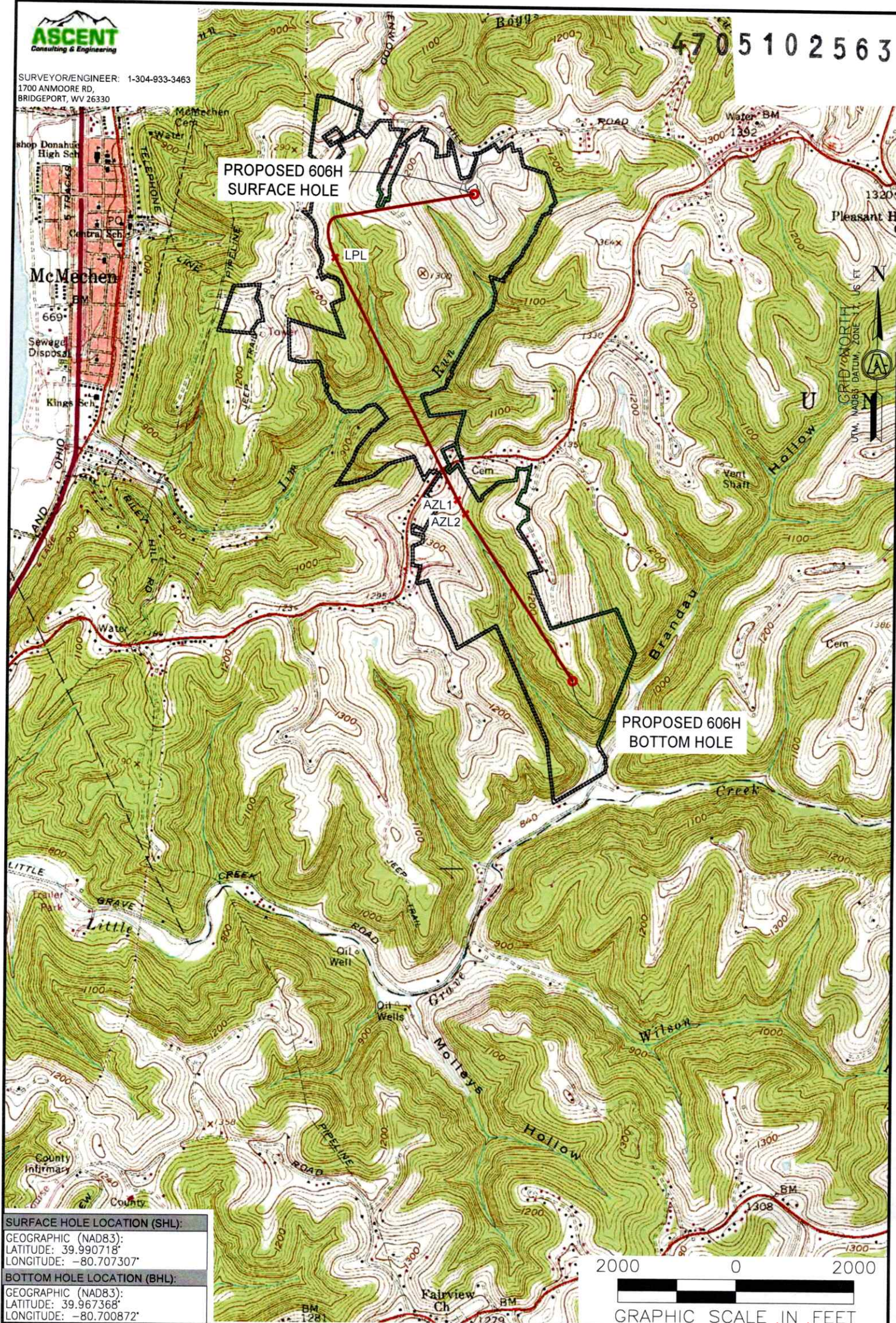
WV Department of  
Environmental Protection

10/24/2025





4705102563



SURFACE HOLE LOCATION (SHL):

GEOGRAPHIC (NAD83):

LATITUDE: 39.990718°

LONGITUDE: -80.707307°

BOTTOM HOLE LOCATION (BHL):

GEOGRAPHIC (NAD83):

LATITUDE: 39.967368°

LONGITUDE: -80.700872\*

NOTES ON SURVEY

1. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
2. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
4. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

WELL OPERATOR:  
EXPAND OPERATING, LLC

ADDRESS:  
1300 FORT PIERPONT DRIVE, SUITE 201

SURFACE OWNER:  
FRANK J. & LORI A. LONGWELL

LEGEND:

-  PROPOSED SURFACE HOLE / BOTTOM HOLE  
 EXISTING / PRODUCING WELLHEAD

 FLOOD PLAIN

10/24/2023

ACCESS ROAD  
PUBLIC ROAD  
ACCESS ROAD TO PREV. SITE  
LEASE BOUNDARY  
PROPOSED PATH

10/24/2025

WELL OPERATOR:  
EXPAND OPERATING, LLC

ADDRESS:  
1300 FORT PIERPONT DRIVE, SUITE 201

SURFACE OWNER:  
FRANK J. & LORI A. LONGWELL

WELL (FARM) NAME: SERAFIN ORTIZ MSH

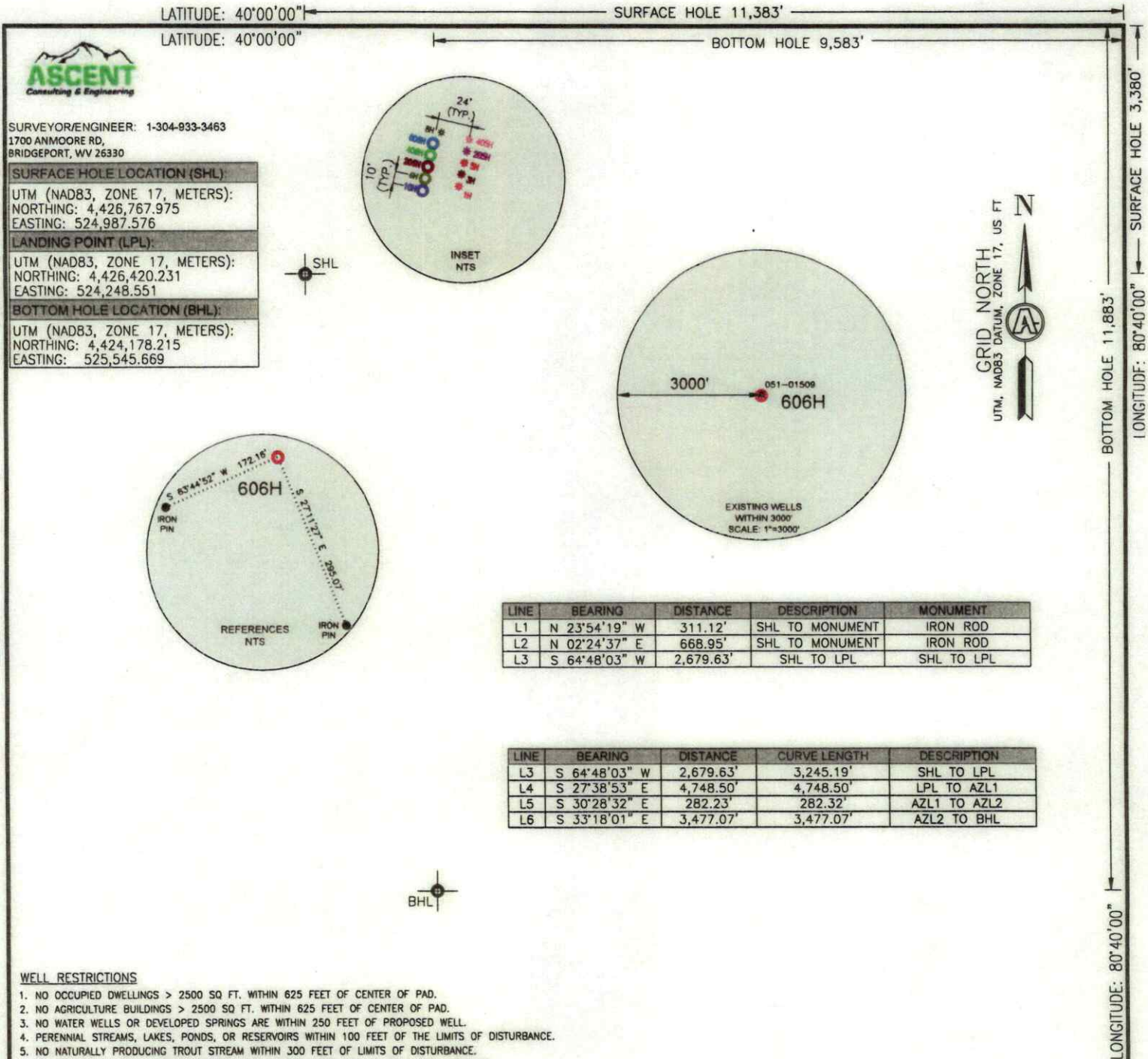
WELL #	SERIAL #
606H	XXXX

COUNTY	-	CODE
MARSHALL	-	51

	606H	XXXX
DISTRICT; UNION		

USGS 7 1/2 QUADRANGLE MAP NAME  
MOUNDSVILLE, WV





WELL RESTRICTIONS

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

NOTES ON SURVEY

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

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

P.S. 983

06-12-2025



COMPANY:

expand



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

WVDEP  
OFFICE OF OIL & GAS  
601 57TH STREET  
CHARLESTON, WV 25034

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

SERAFIN ORTIZ MSH  
OPERATOR'S WELL #: 606H  
API WELL #: 47 51 02563  
STATE COUNTY PERMIT

WELL TYPE: OIL ☐ WASTE DISPOSAL ☐ PRODUCTION ☒ DEEP ☐ GAS ☒ LIQUID INJECTION ☐ STORAGE ☐ SHALLOW ☒  
WATERSHED: UPPER OHIO-WHEELING ELEVATION: 1,279'  
DISTRICT: UNION COUNTY: MARSHALL QUADRANGLE: MOUNDSVILLE 7.5', WV  
SURFACE OWNER: FRANK J. & LORI A. LONGWELL ACREAGE: ±44.949  
OIL & GAS ROYALTY OWNER: SERAFIN T. ORTIZ, AS TRUSTEE OF THE SERAFIN T. ORTIZ TRUST AGREEMENT DATED JULY 31, 1996 ACREAGE: ±44.949  
DRILL ☒ DRILL DEEPER ☐ REDRILL ☐ FRACTURE OR STIMULATE ☒ PLUG OFF OLD FORMATION ☐ PERFORATE NEW FORMATION ☒  
CONVERT ☐ PLUG & ABANDON ☐ CLEAN OUT & REPLUG ☐ OTHER CHANGE ☐ (SPECIFY)  
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,366 TVD 15,832 TMD

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

LEGEND:  
● PROPOSED SURFACE HOLE / BOTTOM HOLE  
\* EXISTING / PRODUCING WELLHEAD  
⊙ EXISTING WATER WELL  
⊙ EXISTING SPRING  
— SURVEYED BOUNDARY  
— DRILLING UNIT  
— LEASE BOUNDARY  
— PROPOSED PATH

REVISIONS:  
DATE: 06-12-2025  
FILE NO:  
DRAWN BY: TMF  
SCALE: 1" = 2000'  
DRAWING NO: 3048  
WELL LOCATION PLAT 1



WELL LOCATION PLAT 2

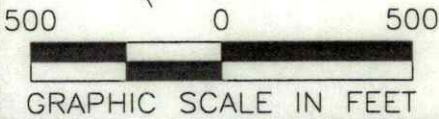
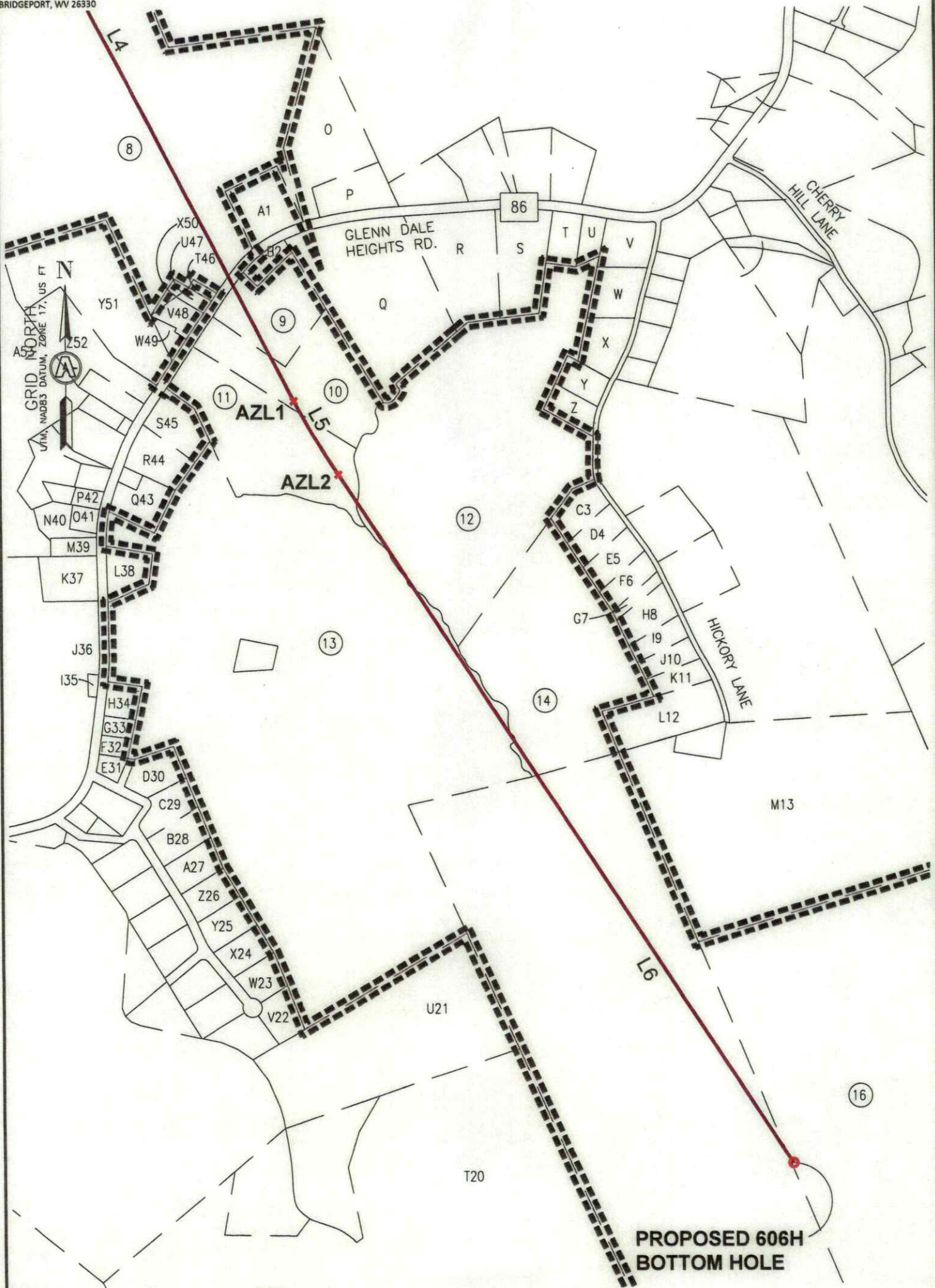








SURVEYOR/ENGINEER: 1-304-933-3463  
1700 ANMOORE RD,  
BRIDGEPORT, WV 26330



INSET "B"

10/24/2025

REVISIONS:		COMPANY:					
		OPERATOR'S				DATE: 06-12-2025	
		WELL #:				DRAWN BY: TMF	
		DISTRICT:		COUNTY:		SCALE: 1"=500'	
		UNION		MARSHALL		DRAWING NO: 3048	
				STATE:		WELL LOCATION PLAT 3	
				WV			





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

WELL BORE TRACTS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	LONGWELL FRANK J & LORI A(S) / SERAFIN T. ORTIZ, AS TRUSTEE OF THE SERAFIN T. ORTIZ TRUST AGREEMENT DATED JULY 31, 1996 (R)	13-6-49
TRACT	SURFACE OWNER (S)	TAX PARCEL
2	HAUGHT GEORGE ET UX	13-6-51.1
3	LIPINSKI ERIC R & LORIE A	13-6-51
4	VANSCYOC ARMOND RAY JR	13-6B-32
5	VANSCYOC ARMOND RAY JR	13-6-53.2
6	FISHER EARL M ET AL	13-6-53
7	JONES MICHAEL BRENT	13-6-55
8	OTTE MARK D ET UX	13-11-22
9	DRUSCHEL LOIS I	13-11-51
10	KING KEVIN L & CHRISTINE M	13-11-50
11	CLUTTER GERALD C ET UX	13-11-53
12	RICHMOND THOMAS O & BRENDA J	13-11-47
13	LOGSDON BOBBI S & LEVI	13-11-46
14	COCHRAN JAMES P SR EST	13-11-44.3
15	CATO MICHAEL S ET UX	13-12-39

10/24/2025

REVISIONS:	COMPANY:			
	OPERATOR'S			DATE: 06-12-2025
	WELL #:			DRAWN BY: TMF
	DISTRICT:	COUNTY:	STATE:	SCALE: N/A
	UNION	MARSHALL	WV	DRAWING NO: 3048
				WELL LOCATION PLAT 7





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

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	SWN PRODUCTION COMPANY LLC	13-6-49.2
B	VAN SCYOC PATRICK A & FAITH M	13-6-17
C	WILT VINCENT E	13-6-18
D	TOLER MARGARET - LIFE	13-6-19
E	HUTCHISON JAMES A & HOLLY M	13-6-20
F	NIXON MADISON M	13-6-49.1
G	NIXON MADISON M	13-6-48
H	VANDYNE ZACHARY D	13-6-47
I	CRALL MICHAEL D & LISA DAWN	13-6-46
J	O'NEAL CYNTHIA	13-6-45
K	COOK DAVID J & ALICE M - TOD	13-6-50
L	HAUGHT GEORGE ET UX	13-6-50.1
M	DEFIBAUGH RONALD L & SANDRA	13-11-27.1
N	STEPHENS JAMES J & JAMES DANIEL	13-11-25
O	TERRY PATRICIA EST	13-11-22.7
P	TERRY PATRICIA EST	13-11-23
Q	VARGO RICHARD H	13-11-50.2
R	DEWITT EDWARD C & CHRISTINE M VARNER	13-11-49
S	REDD MAVERENE L - LIFE	13-11-48
T	CALDWELL ALBERT L ET UX	13-11-47.1
U	CALDWELL ALBERT L ET UX	13-11-47.2
V	RICHMOND TIMOTHY A & TERESA L	13-11-39
W	STEPHENS JOSEPH B	13-11-40
X	STEPHENS JOSEPH B	13-11-41
Y	RICHMOND GLEN O	13-11-47.3
Z	RICHMOND THOMAS O & BRENDA J	13-11-47.4
A1	HAWK WILLIAM J & KATHLEEN 99% JENNIFER L GEMENSKY 1%	13-11-22.2
B2	HAWK KATHLEEN B & WILLIAM J	13-11-50.1
C3	RICHMOND THOMAS O & BRENDA J	13-11B-1
D4	HUFFMAN MARK E ET UX	13-11B-2
E5	EATON DANIEL	13-11B-3
F6	RIDING GEORGE D ET UX - TOD	13-11B-4
G7	RIDING GEORGE D ET UX - TOD	13-11B-5
H8	BERNHARD JACQUELINE & DANIEL SOLECKI	13-11B-6
I9	COCHRAN JAMES P SR EST	13-11B-7
J10	COCHRAN JAMES P SR EST	13-11B-8
K11	COCHRAN JAMES P SR EST	13-11B-9
L12	KINKES RICHARD L & M TERESA	13-11-45
M13	BAKER ELDON W	13-12-40.1
N14	LONGWELL FRANK & LORI	13-10-1
O15	DOBBS JULIE A	13-13-1
P16	DOLGOVSKIJ MICHELE	13-13-3
Q17	CATO MICHAEL & SHELLY	13-13-1.1
R18	SCHULTZ TIMOTHY E & CHARLA A	13-13-2
S19	BLAZER MICHAEL C ET UX	13-12-41
T20	FECAT GABRIEL A & ASHLEY V	13-12-36
U21	RENZELLA NICHOLAS S JR & BARBARA A	13-12-38
V22	BARBOUR DEIDRE L	13-11D-8
W23	MCCASLAND CAYCE & CHARLES J JR	13-11D-7
X24	SHIMP LINDA SUE - TRUSTEE	13-11D-6
Y25	JOLTES ROBERT A & VIVIAN A	13-11D-5
Z26	HARTLE JAMES W	13-11D-4
A27	KURELAC PATRICIA J	13-11D-3
B28	SHIMP MALCOLM & BEVERLY - TOD SHIMP VINCENT L & LINDA S	13-11D-2
C29	SHIMP MALCOLM M ET UX - TOD	13-11D-1
D30	RICHTER DALE - TOD	13-11-60.3
E31	MCKOWN JOSEPH P	13-11-59
F32	MAYFIELD CHARLES J EST ET AL	13-11-58
*HIGHLIGHTED PARCELS MAY BE IMPACTED DURING DRILLING.		

10/24/2025

REVISIONS:	COMPANY:		
	OPERATOR'S	SERAFIN ORTIZ MSH	DATE: 06-12-2025
	WELL #:	606H	DRAWN BY: TMF
	DISTRICT:	COUNTY:	STATE:
	UNION	MARSHALL	WV
			SCALE: N/A
			DRAWING NO: 3048
			WELL LOCATION PLAT 7





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

TRACT	SURFACE OWNER	TAX PARCEL
G33	MAYFIELD CHARLES J EST ET AL	13-11-60.1
H34	HOWARD BRADLEY K & MARY	13-11-60.2
I35	SHOOK JERRY L	13-11-61.2
J36	LOGSDON BOBBI S	13-11-61.1
K37	ZINN MALLORY ANNE	13-11-57
L38	SHOOK JERRY L & ANN B	13-11-46.2
M39	PACK TYLER M	13-11-16
N40	KISNER CHERYL	13-11-15.7
O41	KISNER CHERYL	13-11-17
P42	SCHULTZ CHARLES HENRY EST	13-11-18
Q43	LEWIS SCOTTIE L & HEATHER A	13-11-56
R44	CLUTTER RONALD A	13-11-55
S45	CLUTTER RONALD A	13-11-54
T46	LIGHTNER JASON	13-11-22.6
U47	LIGHTNER JASON	13-11-22.4
V48	LIGHTNER JASON	13-11-22.3
W49	LIGHTNER JASON	13-11-22.1
X50	LIGHTNER JASON	13-11-22.5
Y51	KINKES RICHARD L	13-11-21
Z52	KINKES RICK & TERESA	13-11-20
A53	LOGSDON BOBBI S	13-11-15.5
B54	MARSHALL LAND LLC	13-11-9
C55	HELMS JAMES E - LIFE	13-11-14
D56	UNKNOWN	13-11-12
E57	HERCULES RICHARD W	13-11-11
F58	KELLY MARY MARGARET POWELL	13-11-11.1
G59	FISHER MARTIN HRS	13-11-10
H60	CHAVANAK PAUL FRED ET UX	13-6-55.7
I61	HENDERSON JOSEPH E	13-6-54
J62	CHAVANAK ROBERT A & RANDI J ET AL	13-6-55.6
K63	CHAVANAK SAMUEL C	13-6-56.2
L64	LOY STEPHEN G	13-6-56
M65	LOY MARTA JAN	13-6-55.4
N66	GLOBAL SIGNAL ACQUISITIONS IV LLC	13-6-55.8
O67	STEVEY LARRY J ET UX	13-6-54.2
P68	QUIGLEY DAVID L & KELLY J	13-6-53.14
Q69	STEVEY LARRY J ET UX	13-6-54.1
R70	GEORGE PAUL M & MEGAN	13-6-54.3
S71	POLING WENDY LEE	13-6-53.9
T72	RODAK MICHAEL J & LADEAN A	13-6-53.5
U73	LOY MARTA J	13-6-53.6
V74	THOMAS TERRENCE M & BRENDA	13-6-53.11
W75	MARTIN EDWARD B	13-6-73.4
X76	ARMOUR DAVID A	13-6-76
Y77	BOZENSKE JEFFREY T & JESSICA L	13-6-53.7
Z78	MINOR CHARLES D & LISA M	13-6-69.3
A79	RICE MARK G ET UX	13-6-53.12
B80	BARRY DAVID E & CHRISTY A	13-6-53.3
C81	HOLMES CHERYL ANN	13-6-53.13
D82	COFFIELD JEFFERY & CRYSTAL	13-6-53.15
E83	MINOR THOMAS C - TOD	13-6-69
F84	FISHER DANIEL	13-6-12
G85	HOLMES CHERYL ANN	13-6-53.1
H86	STEELE BRIAN	13-6-13
I87	YAQUINTA JOHN	13-6-53.8
J88	YAQUINTA JOHN	13-6-53.4
K89	COOK BRIAN CO COOK BRIAN & KARISA	13-6-53.10
L90	RICH JOSEPH ET UX ESTS	13-6B-22
M91	SNYDER ANDREW C JR REVOCABLE LIVING TRUST	13-6B-22.1
*HIGHLIGHTED PARCELS MAY BE IMPACTED DURING DRILLING.		

10/24/2025

REVISIONS:

COMPANY:



OPERATOR'S

SERAFIN ORTIZ MSH

DATE: 06-12-2025

WELL #:

606H

DRAWN BY: TMF

DISTRICT:  
UNION

COUNTY:  
MARSHALL

STATE:  
WV

SCALE: N/A  
DRAWING NO: 3048  
WELL LOCATION PLAT 7





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

TRACT	SURFACE OWNER	TAX PARCEL
N92	RICH JOSEPH A ET UX ESTS	13-6B-23
O93	LEDBETTER WILLIAM R ET UX	13-6B-21
P94	JONES ALEXA M	13-6B-20
Q95	HAUGHT GEORGE & MARY	13-6B-19
R96	JAMES ROBERT A JR & WENDY L	13-6B-18
S97	JONES DAKOTA M & ELISHA GLENDENING	13-6B-15
T98	SIMMONS MICHAEL J	13-6B-14
U99	MCDADE ROBERT D	13-6B-11
V100	HAUGHT GEORGE ET UX	13-6B-10
W101	HAUGHT GEORGE ET UX	13-6B-9
X102	HAUGHT GEORGE WILLIAM II & SHEILA A	13-6-49.3
Y103	MELISSINOS KYRIAKI EST	13-6B-33
Z104	KOONTZ CARL E	13-6B-31
A105	KOONTZ CARL E	13-6B-30
B106	KOONTZ CARL E	13-6B-29
C107	MERINAR & KOONTZ CO	13-6B-28
D108	CARNEY DANIEL P ET UX	13-6B-27
E109	CARNEY DANIEL P ET UX	13-6B-26
F110	CARNEY DANIEL P ET UX	13-6B-25
G111	BAKER JAMES F	13-6B-24
H112	BAKER JAMES F	13-6B-23.1
*HIGHLIGHTED PARCELS MAY BE IMPACTED DURING DRILLING.		

10/24/2025

REVISIONS:	COMPANY:				
	OPERATOR'S			SERAFIN ORTIZ MSH	
	WELL #:			606H	
	DISTRICT:		COUNTY:	STATE:	DATE: 06-12-2025
	UNION		MARSHALL	WV	DRAWN BY: TMF
					SCALE: N/A
					DRAWING NO: 3048
					WELL LOCATION PLAT 7



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

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

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

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

\*Co-tenancy utilization - At least 75% of the royalty owners have consented to the lawful use or development of the oil or natural gas mineral property on the tract. The interests of the remaining co-tenants will be secured pursuant to the Co-tenancy Modernization and Majority Protection Act.

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

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

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

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

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

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

Well Operator: EXPAND OPERATING, LLC

By: \_\_\_\_\_

Its: SR. STAFF LANDMAN

EXHIBIT "A"						
Serafin Ortiz MSH 606H Marshall County, West Virginia						
Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by Expand Operating LLC, Operator						
#	TMP	LESSOR	LESSEE	ROYALTY	BK/PG	% INTEREST NOT LEASED BY SWN PRODUCTION COMPANY, LLC
1	13-6-49	Serafin T. Ortiz and Martha G. Ortiz, husband and wife	Cheapeake Appalachia, L.L.C. SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	683/84 33/110 *See letter	0.00%
2	13-6-51.1	George Haight and Mary Haight, husband and wife	Cheapeake Appalachia, L.L.C. SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	756/443 33/110 *See letter	0.00%
3	13-6-51	Eleanor Cross, single	Cheapeake Appalachia, L.L.C. SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	678/66 33/110 *See letter	0.00%
		Judy Penick, a married woman doing business in her sole and separate property	Cheapeake Appalachia, L.L.C. SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	678/75 33/110 *See letter	
		Alyn Robin Burkhardt, a married woman doing business in her sole and separate property	Cheapeake Appalachia, L.L.C. SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	678/72 33/110 *See letter	
		Charles E. Borchart, a married man doing business in his sole and separate property	Cheapeake Appalachia, L.L.C. SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	678/69 33/110 *See letter	
		Jeffrey A. Borchart	Cheapeake Appalachia, L.L.C. SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	678/517 33/110 *See letter	
4	13-6B-32	Alyn Robin Burkhardt	Cheapeake Appalachia, L.L.C. SWN Production Company, LLC Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	720/289 33/110 40/246 47/1 53/349 *See letter	0.00%
		Charles A. Borchart, Jr.	Cheapeake Appalachia, L.L.C. SWN Production Company, LLC Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	720/341 33/110 40/246 47/1 53/349 *See letter	
		Eleanor Cross	Cheapeake Appalachia, L.L.C. SWN Production Company, LLC Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	720/337 33/110 40/246 47/1 53/349 *See letter	
		Jeffrey A. Borchart	Cheapeake Appalachia, L.L.C. SWN Production Company, LLC Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	721/415 33/110 40/246 47/1 53/349 *See letter	
		Judy Penick	Cheapeake Appalachia, L.L.C. SWN Production Company, LLC Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	720/293 33/110 40/246 47/1 53/349 *See letter	
5	13-6-53.2	Armond Ray Vancycos, Jr., married	Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	920/546 47/1 53/349 *See letter	0.00%
6	13-6-53	Bounty Minerals II Acquisitions, LLC, a/k/a Bounty Minerals, LLC	Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	942/533 47/1 53/349 *See letter	0.00%
		Charles Fisher	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1177/437 *See letter	
		Cheryl Ann Holmes, f/k/a Cheryl Ann Sheller	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1177/434 *See letter	
		Connie Fisher, a single woman	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1177/439 *See letter	
		Daniel Fisher, a single man	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1177/441 *See letter	
		Earl Fisher, a married man dealing in his sole and separate property	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1177/444 *See letter	
		Karla R. Holmes	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1177/446 *See letter	
		Steven Fisher	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1177/432 *See letter	
7	13-6-55	Paul Fred Chavanak and Charla Chavanak, husband and wife	EQT Production Company SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1185/283 53/349 *See letter	0.00%
		John Robert Chavanak and Deborah A. Chavanak, husband and wife	EQT Production Company SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1185/384 53/349 *See letter	
		Michael B. Jones and Lora A. Jones, husband and wife	EQT Production Company SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1185/372 53/349 *See letter	
		Melissa Stanfield and Wade A. Stanfield, wife and husband	EQT Production Company SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1185/375 53/349 *See letter	
8	13-11-22	Mark Douglas Ott, a/k/a Mark D. Ott and Kelly J. Ott, his wife	EQT Production Company SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1211/671 1238/566 *See letter	0.00%
9	13-11-51	Thomas O. Dickey, III, a married man dealing in his sole and separate property	Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	928/238 47/1 53/349 *See letter	0.00%
		David A. Dickey, a single man	Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	928/241 47/1 53/349 *See letter	
		Sue Ellen Bailes, a widow	Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	928/244 47/1 53/349 *See letter	
10	13-11-50	Kevin L. King and Christine M. King, husband and wife	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1207/160 *See letter	0.00%
11	13-11-53	William M. Vargo, a married man, dealing in his sole and separate property	Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	920/634 47/1 53/349 *See letter	0.00%
		Richard H. Vargo, a widower	Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	920/637 47/1 53/349 *See letter	
		Valerie Kinsley, a single woman	Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	976/209 47/1 53/349 *See letter	
		Shelly Vargo, a single woman	Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	976/206 47/1 53/349 *See letter	
		David Wayne Vargo, a/k/a David W. Vargo, a single man	Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	976/212 47/1 53/349 *See letter	
		Troy Michael Vargo, a/k/a Troy M. Vargo, a single man	Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	920/552 47/1 53/349 *See letter	
12	13-11-47	Glen O. Richmond and Clara A. Richmond, f/k/a Clara A. Kozint Richmond, husband and wife	Cheapeake Appalachia, L.L.C. SWN Production Company, LLC Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	682/98 33/110 40/246 47/1 53/349 *See letter	0.00%
13	13-11-46	Julie Becker, f/k/a Julie Fahey, a married woman dealing in her sole and separate property	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1184/475 *See letter	0.00%
		Donna K. Fahey, a widow	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1182/160 *See letter	
		John M. Fahey, a married man dealing in his sole and separate property	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1183/681 *See letter	
		Martin E. Fahey, a married man dealing in his sole and separate property	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1184/412 *See letter	
		Thomas M. Fahey, a married man dealing in his sole and separate property	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1184/404 *See letter	
		HD LLC, by Barbara E. Hoelt, Manager	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1200/418 *See letter	0.00%
14	13-11-44.3	James P. Cochran, widower	Cheapeake Appalachia, L.L.C. SWN Production Company, LLC Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	685/162 33/110 40/246 47/1 53/349 *See letter	

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EXHIBIT "A"							
Serafin Ortiz MSH 606H							
Marshall County, West Virginia							
Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by Expand Operating LLC, Operator							
#	TMP	LESSOR	LESSEE	ROYALTY	BK/PG	% INTEREST NOT LEASED BY SWN PRODUCTION COMPANY, LLC	
15	13-12-39	Michael S. Cato and Shelly L. Cato, his wife	Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1054/407 47/1 53/349 *See letter	0.00%	
		Charles Hungerford, divorced and unmarried	TH Exploration, LLC Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	907/179 40/152 47/1 53/349 *See letter		
		Manette L. Steele, divorced and unmarried	TH Exploration, LLC Chevron U.S.A. Inc. EQT Aurora LLC SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	907/177 40/152 47/1 53/349 *See letter		
		Maureen A. Coleman, married, dealing in her sole and separate property	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1156/348 *See letter		
		Marilyn L. Kloth, married, dealing in her sole and separate property	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1156/354 *See letter		
		LL&B Investment Holdings, LLC	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1190/330 *See letter		
		Resource Minerals Headwater L LP	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1190/312 *See letter		
		Maria M. Stein, married, dealing in her sole and separate property	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1156/342 *See letter		
		Marla J. Wellm, married, dealing in her sole and separate property	SWN Production Company, LLC Expand Operating, LLC	At least 1/8th per WV Code 22-6-8	1156/257 *See letter		
*Co-tenancy utilization - At least 75% of the royalty owners have consented to the lawful use or development of the oil or natural gas mineral property on the tract. The interests of the remaining co-tenants will be secured pursuant to the Co-Tenancy Modernization and Majority Protection Act.							
*Potentially Impacted Parcels - Parcels that may be impacted during drilling.							
*Horizontal well unit utilization - Subject to unitization filing with the West Virginia Oil and Gas Commission							
END OF EXHIBIT "A"							

10/24/2025

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June 9, 2025

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

**RE:** SWN's proposed New Well: Serafin Ortiz MSH 606H in Marshall County, West Virginia, Drilling under Glenn Dale Heights Road, Hickory Lane, and Wood Hill Road.

Dear Mr. Brewer:

Expand Operating LLC (Expand Energy) is applying for a drilling permit for the above referenced well. The State of West Virginia has raised some concern as to Expand's right to drill under Glenn Dale Heights Road, Hickory Lane, and Wood Hill Road Please be advised that Expand has leased all mineral owners under said route as it relates to the above-referenced well and unit.

Respectfully,

**Expand Operating LLC**

A handwritten signature in blue ink, appearing to read "Gavin Nadeau".

Gavin Nadeau, RPL  
Staff Landman

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Environmental Protection

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SWN Production Company, LLC  
P O Box 12359  
Spring, Texas 77391-2359  
www.swn.com

June 13, 2025

Mr. Charles Brewer  
Assistant Chief  
Office of Oil and Gas  
WVDEP  
601 57th St SE,  
Charleston, WV 25304

Dear Mr. Brewer:

Effective as of October 1, 2024, Expand Operating LLC ("EXEO") and SWN Production Company, LLC ("SWNPC"), both being subsidiaries of Expand Energy Corporation, entered into a Management Services Agreement whereby SWNPC authorized EXEO to perform and act as its agent for the purpose of performing certain management services (the "Agreement"). Such Agreement was provided to your office prior to this letter. By entering into the Agreement, it was the intent of SWNPC (i) to grant EXEO the right to extract, produce and market SWNPC's oil and gas, among other rights, and (ii) that the Agreement satisfy the requirements of West Virginia Code §22-6-8(c).

Best regards,

David Wildes  
Managing Counsel – Southwest Appalachia  
SWN Production Company, LLC

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

Date of Notice Certification: 9/15

API No. 47- 051 -

Operator's Well No. Serafin Ortiz MSH 606H

Well Pad Name: Serafin Ortiz MSH

**Notice has been given:**

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

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>524987.576</u>
County:	<u>051- Marshall</u>		Northing:	<u>4426767.975</u>
District:	<u>Union</u>	Public Road Access:		<u>Grand View Road</u>
Quadrangle:	<u>Moundsville</u>	Generally used farm name:		<u>Serafin Ortiz MSH</u>
Watershed:	<u>Upper Ohio- Wheeling</u>			

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

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:

\*PLEASE CHECK ALL THAT APPLY

- ☐ 1. NOTICE OF SEISMIC ACTIVITY or ☒ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED
- ☒ 2. NOTICE OF ENTRY FOR PLAT SURVEY or ☐ NO PLAT SURVEY WAS CONDUCTED
- ☒ 3. NOTICE OF INTENT TO DRILL or ☐ NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or
- ☐ WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)
- ☒ 4. NOTICE OF PLANNED OPERATION
- ☒ 5. PUBLIC NOTICE
- ☒ 6. NOTICE OF APPLICATION

**OOG OFFICE USE ONLY**

- ☐ RECEIVED/ NOT REQUIRED
- ☒ RECEIVED
- ☒ 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.

10/24/2025



**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: Expand Operating LLC

By: Brittany Woody

Its: Staff Regulatory Specialist

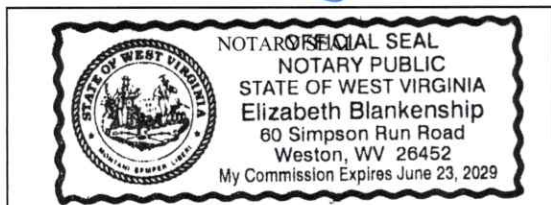
Telephone: 304-884-1610

Address: 1300 Fort Pierpont Dr., Suite 201

Morgantown, WV 26508

Facsimile: 304-884-1690

Email: Brittany.Woody@expandenergy.com



Subscribed and sworn before me this 23 day of June 2025  
Elizabeth Blankenship Notary Public  
My Commission Expires 6/23/2029

**Oil and Gas Privacy Notice:**

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

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

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

**Date of Notice:** 9/15 **Date Permit Application Filed:** 9/15  
**Notice of:**

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

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

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

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

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

☒ SURFACE OWNER(s)

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

☐ SURFACE OWNER(s) (Road and/or Other Disturbance)

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

☐ SURFACE OWNER(s) (Impoundments or Pits)

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

☒ COAL OWNER OR LESSEE

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

☐ COAL OPERATOR

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

☒ SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)

Name: See Attachment 13A  
Address: \_\_\_\_\_

☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD

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

\*Please attach additional forms if necessary

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**Notice is hereby given:**

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

**This Notice Shall Include:**

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

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

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

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

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

**Well Location Restrictions**

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



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

**Water Well Testing:**

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

**Water Testing Laboratories:**

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

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

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

**Written Comment:**

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

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

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.**

10/24/2025

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

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

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

### **Comment Requirements**

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

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

### **Permit Denial or Condition**

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

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

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

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



**Notice is hereby given by:**

Well Operator: Expand Operating LLC

Telephone: 304-884-1610

Email: [Brittany.Woody@expandenergy.com](mailto:Brittany.Woody@expandenergy.com)

*Brittany Woody*

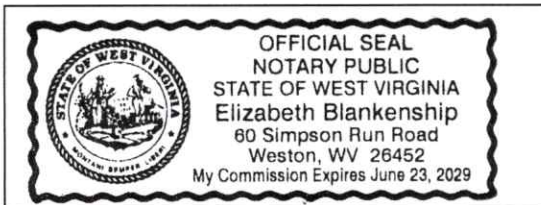
Address: 1300 Fort Pierpont Dr., Suite 201

Morgantown, WV 26508

Facsimile: 304-884-1690

**Oil and Gas Privacy Notice:**

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



Subscribed and sworn before me this 23 day of June 2025.

*Elizabeth Blankenship* Notary Public

My Commission Expires

6/23/2029

RECEIVED  
Office Of Oil and Gas  
SEP 16 2025  
WV Department of  
Environmental Protection

4705102563

**Serafin Ortiz MSH Pad - Water Purveyors w/in 1500'**

**Sources**

**Landowner**

Faith M & Patrick A Van Scyoc

**Address**

1952 Benwood Hill Road, Benwood WV 26031 1 well

10/24/2025







4705102563

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

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

**Date of Notice:** 5/23/25      **Date of Planned Entry:** 5/29/25

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

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

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

**Notice is hereby provided to:**

☒ SURFACE OWNER(s)

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

☒ COAL OWNER OR LESSEE

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

RECEIVED  
Office Of Oil and Gas

SEP 16 2025

☒ MINERAL OWNER(s)

Name: Frank J. & Lori A. Longwell  
Address: 1696 Marshall Street  
Benwood WV 26031

WV Department of  
Environmental Protection

\*please attach additional forms if necessary

**Notice is hereby given:**

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

State: WV  
County: Marshall  
District: Union  
Quadrangle: Moundsville

Approx. Latitude & Longitude: 39.990571° -80.707151°  
Public Road Access: Grand View Road  
Watershed: Upper Ohio South  
Generally used farm name: Serafin Ortiz MSH

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

**Notice is hereby given by:**

Well Operator: Expand Operating LLC  
Telephone: 304-884-1610  
Email: brittany.woody@expandenergy.com

Address: 1300 Fort Pierpont Dr., Suite 201  
Morgantown, WV 26508  
Facsimile: 304-209-5688

**Oil and Gas Privacy Notice:**

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

10/24/2025



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

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

**Date of Notice:** 5/23/25      **Date of Planned Entry:** 5/29/25

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

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

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

**Notice is hereby provided to:**

☐ SURFACE OWNER(s)

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

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

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

☐ COAL OWNER OR LESSEE

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

☒ MINERAL OWNER(s)

Name: George & Mary Haught  
Address: 11 Rothmore Dr  
Benwood WV 26031

\*please attach additional forms if necessary

**Notice is hereby given:**

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

State: WV  
County: Marshall  
District: Union  
Quadrangle: Moundsville

Approx. Latitude & Longitude: 39.990571° -80.707151°  
Public Road Access: Grand View Road  
Watershed: Upper Ohio South  
Generally used farm name: Serafin Ortiz MSH

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

**Notice is hereby given by:**

Well Operator: Expand Operating LLC  
Telephone: 304-884-1610  
Email: brittany.woody@expandenergy.com

Address: 1300 Fort Pierpont Dr., Suite 201  
Morgantown, WV 26508  
Facsimile: 304-209-5688

**Oil and Gas Privacy Notice:**

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

10/24/2025

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

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

**Notice Time Requirement:** Notice shall be provided at least **TEN (10)** days prior to filing a permit application.

**Date of Notice:** 07/02/2025

**Date Permit Application Filed:** 9/15

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

☐ HAND

DELIVERY

☒ CERTIFIED MAIL

RETURN RECEIPT REQUESTED

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

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

Name: Frank & Lori Longwell

Address: 1696 Marshall Street

Benwood, WV 26031

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

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

**Notice is hereby given:**

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

State: West Virginia

County: Marshall

District: Union

Quadrangle: Moundsville, WV

Watershed: Upper Ohio-Wheeling

UTM NAD 83 Easting: 524,987.576

Northing: 4,426,767.975

Public Road Access: Benwood Hill Road

Generally used farm name: SERAFIN ORTIZ MSH

**This Notice Shall Include:**

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

**Notice is hereby given by:**

Well Operator: Expand Energy Company, LLC

Address: 1300 Fort Pierpont Dr., Suite 201

Morgantown, WV 26508

Telephone: (304) 209-5685

Email: steve.pauley@expandenergy.com

Facsimile: \_\_\_\_\_

Authorized Representative: Steven Pauley

Address: 1300 Fort Pierpont Dr., Suite 201

Morgantown, WV 26508

Telephone: (304) 209-5685

Email: steve.pauley@expandenergy.com

Facsimile: \_\_\_\_\_

**Oil and Gas Privacy Notice:**

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

10/24/2025



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

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

**Date of Notice:** 07/02/2025 **Date Permit Application Filed:** 9/15

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

☒ CERTIFIED MAIL ☐ HAND  
RETURN RECEIPT REQUESTED DELIVERY

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

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

(at the address listed in the records of the sheriff at the time of notice):

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

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

**Notice is hereby given:**

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

State:	West Virginia	UTM NAD 83	Easting:	524,987.576
County:	Marshall		Northing:	4,426,767.975
District:	Union	Public Road Access:	Benwood Hill Road	
Quadrangle:	Moundsville, WV	Generally used farm name:	SERAFIN ORTIZ MSH	
Watershed:	Upper Ohio-Wheeling			

**This Notice Shall Include:**

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

Well Operator: Expand Energy Company, LLC  
Telephone: (304) 209-5685  
Email: steve.pauley@expandenergy.com

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

**Oil and Gas Privacy Notice:**

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

10/24/2025



4705102563

**WEST VIRGINIA  
DEPARTMENT OF TRANSPORTATION**

1900 Kanawha Boulevard East • Building Five • Room 109  
Charleston, West Virginia 25305-0440 • (304) 558-0444

Michael J. DeMers  
Deputy Secretary of Transportation

Stephen T. Rumbaugh, P.E.  
Secretary of Transportation  
Commissioner of Highways

May 20, 2025

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 Serafin Ortiz Well Pad, Marshall County**  
Serafin Ortiz MSH 6H Well Site      Serafin Ortiz MSH 10H Well Site  
Serafin Ortiz MSH 206H Well Site      Serafin Ortiz MSH 406H Well Site  
Serafin Ortiz MSH 606H Well Site

Dear Mr. Martin,

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

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

Very Truly Yours,

RECEIVED  
Office Of Oil and Gas  
SEP 16 2025  
WV Department of  
Environmental Protection

Lacy D. Pratt  
Central Office O&G Coordinator

Cc: Brittany Woody  
Expand Operating, LLC  
OM, D-6  
File

10/24/2025



## Attachment VI Frac Additives

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

As of 7/5/2023

10/24/2025

OPERATOR: Expand Operating LLC

WELL NO: Serafin Ortiz MSH 606H

PAD NAME: Serafin Ortiz MSH

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

SIGNATURE: \_\_\_\_\_

*Bethany Whady*

## WELL RESTRICTIONS CHECKLIST

### HORIZONTAL 6A WELL

RECEIVED  
Office Of Oil and Gas

SEP 16 2025

#### Well Restrictions

**\*\* Pad Built 12/7/11**

WV Department of  
Environmental Protection

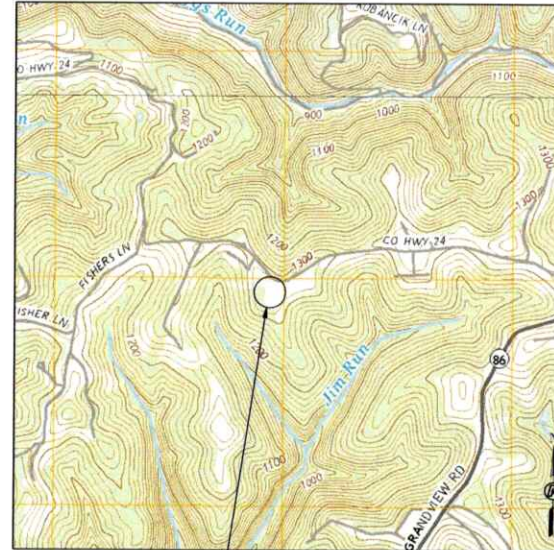
- ☐ At Least 100 Feet from Pad and LOD (including any E&S Control Feature) to any Perennial Stream, Lake, Pond, Reservoir or Wetland; OR
- ☐ DEP Waiver and Permit Conditions
- ☐ At Least 300 Feet from Pad and LOD (including any E&S Control Feature) to any Naturally Producing Trout Stream; OR
- ☐ DEP Waiver and Permit Conditions
- ☐ At Least 1000 Feet from Pad and LOD (including any E&S Control Feature) to any Groundwater Intake or Public Water Supply; OR
- ☐ DEP Waiver and Permit Conditions
- ☒ At Least 250 Feet from an Existing Water Well or Developed Spring to Well Being Drilled; OR
- ☐ Surface Owner Waiver and Recorded with County Clerk, OR
- ☐ DEP Variance and Permit Conditions
- ☐ At Least 625 Feet from an Occupied Dwelling Structure to Center of the Pad; OR
- ☐ Surface Owner Waiver and Recorded with County Clerk, OR
- ☐ DEP Variance and Permit Conditions
- ☐ At Least 625 Feet from Agricultural Buildings Larger than 2500 Square Feet to the Center of the Pad; OR
- ☐ Surface Owner Waiver and Recorded with County Clerk, OR
- ☐ DEP Variance and Permit Conditions

10/24/2025



SHEET INDEX	
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# EXPAND OPERATING, LLC AS-BUILT PLANS FOR SERAFIN ORTIZ MSH PAD MARSHALL COUNTY, WV JUNE 2025



PROJECT LOCATION  
MOUNDSVILLE QUADRANGLE REFERENCE MAP

**PROJECT COORDINATOR:**  
JOHN DUBOWSKI  
CONSTRUCTION SUPERINTENDENT  
SOUTHWESTERN PRODUCTION COMPANY, LLC  
1300 FORT PIERPONT DRIVE, SUITE 201,  
MORGANTOWN, WV 26508  
PHONE: (304) 884 - 1671  
EMAIL: JOHN\_DUBOWSKI@SWN.COM

**ENGINEER:**  
MICHAEL NESTOR, PE  
ASCENT CONSULTING & ENGINEERING  
1700 ANMOORE ROAD  
BRIDGEPORT, WV 26330  
PHONE: (304) 933 - 3463  
EMAIL: MNESTOR@ASCENTWV.COM

**PROJECT MANAGER:**  
ERIC SHORT  
ASCENT CONSULTING & ENGINEERING  
1700 ANMOORE ROAD  
BRIDGEPORT, WV 26330  
PHONE: (304) 933 - 3463  
EMAIL: ESHORT@ASCENTWV.COM

**ENVIRONMENTAL:**  
WETLANDS OR SURFACE WATER  
INFORMATION DELINEATED BY  
ASCENT CONSULTING & ENGINEERING  
DATED AUGUST 2021

**TOPOGRAPHIC INFORMATION:**  
HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE  
NAD83 WEST VIRGINIA STATE PLANES, NORTH  
ZONE, IN U.S. SURVEY FEET.

911 EMERGENCY ADDRESS:  
SERAFIN ORTIZ WELL PAD  
2085 BENWOOD HILL RD.  
BENWOOD, WV 26031

LOCAL EMERGENCY SERVICES	
NAME:	NUMBER:
AMBULANCE	911
HOSPITAL EMERGENCY ROOM	(304) 243 - 3280
FIRE DEPARTMENT	911
POLICE DEPARTMENT	911
POISON CONTROL CENTER	(800) 222 - 1222

## LOCATION COORDINATES

**ACCESS ROAD ENTRANCE:**  
LATITUDE: 39.992688 N LONGITUDE: 80.707047 W (DECIMAL DEGREES)  
LATITUDE: 39°59'33.58" N LONGITUDE: 80°42'25.37" W (DEGREES-MINUTES-SECONDS)  
NORTHING: 545961.5542 EASTING: 1630317.4244 (WV SP-83, FEET)

**WELL PAD CENTER:**  
LATITUDE: 39.960599 N LONGITUDE: 80.707214 W (DECIMAL DEGREES)  
LATITUDE: 39°59'26.16" N LONGITUDE: 80°42'25.90" W (DEGREES-MINUTES-SECONDS)  
NORTHING: 545201.2500 EASTING: 1630260.3504 (WV SP-83, FEET)  
NORTHING: 395226.16 EASTING: 804226.69 (UTM ZONE 17, METERS)

**PRODUCTION PAD CENTER:**  
LATITUDE: 39.992209 N LONGITUDE: 80.707914 W (DECIMAL DEGREES)  
LATITUDE: 39°59'31.95" N LONGITUDE: 80°42'31.51" W (DEGREES-MINUTES-SECONDS)  
NORTHING: 545790.5848 EASTING: 1630072.0446 (WV SP-83, FEET)  
NORTHING: 395931.70 EASTING: 804229.21 (UTM ZONE 17, METERS)

## LIMITS OF DISTURBANCE BY PROPERTY:

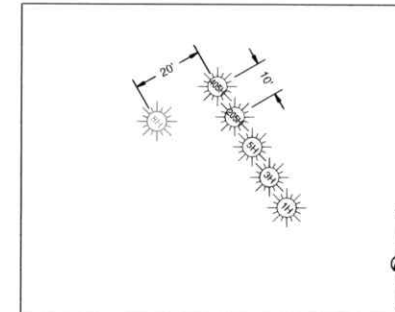
PROPERTY#	PROPERTY OWNER	ACRES DISTURBED
13-6-49.2	SWN PRODUCTION COMPANY, LLC	3.55 AC
13-6-49	LONGWELL FRANK J & LORIA	6.24 AC
13-6-51	HAUGHT GEORGE ET UX	2.16 AC
WVDOH RW	BENWOOD HILL ROAD C.R. 24	0.04 AC

**TOTAL DISTURBED AREA: 11.99 ACRES**  
SERAFIN-ORTIZ MSH WELL PAD: 8.12 ACRES  
SERAFIN-ORTIZ PRODUCTION PAD: 3.87 ACRES

## EARTH WORK SUMMARY

### PRODUCTION PAD & ACCESS ROAD EARTHWORK

TOTAL CUT: 10,400 CY  
TOTAL FILL: 5,560 CY  
9" TOPSOIL: 4,840 CY  
NET (CUT): 0 CY



WELLHEAD LAYOUT  
NOT TO SCALE

**WEST VIRGINIA 811**  
CALL BEFORE  
YOU DIG!  
IT'S THE LAW!

MISS UTILITY OF WEST VIRGINIA  
1-800-245-4848  
WEST VIRGINIA STATE LAW  
(SECTION XIV, CHAPTER 24-C)  
REQUIRES THAT YOU CALL TWO  
BUSINESS DAYS BEFORE YOU DIG IN  
THE STATE OF WEST VIRGINIA.  
IT'S THE LAW!!!



LOCATION MAP NOT TO SCALE

**expand**

SEAL:



PREPARED BY:

**ASCENT**  
Consulting & Engineering

1700 ANMOORE ROAD  
BRIDGEPORT, WV 26330  
WWW.ASCENTCONSULTINGENGINEERS.COM  
(304) 933 - 3463

PROJECT NUMBER:	3048	DRAWN:	EMS
DATE:	6/13/2025	DESIGN:	EMS
SCALE:	AS SHOWN	CHECKED:	MRN

AS-BUILT PLANS FOR  
EXPAND OPERATING, LLC  
SERAFIN ORTIZ WELL PAD  
UNION DISTRICT  
MARSHALL COUNTY, WV

TITLE:	COVER SHEET
PLAN STATUS:	SHEET No. 1

RECEIVED  
Office of Oil and Gas  
SEP 16 2025  
WV Department of  
Environmental Protection

## DRIVING DIRECTIONS

- BEGIN AT BETHLEHEM STAGING YARD ON E. BETHLEHEM BLVD. (LAT: 40.039375, LONG: -80.679643)
- TURN LEFT ON E. BETHLEHEM BLVD. TOWARD ROLLING RIDGE DR., 0.7 MILES.
- TURN LEFT ONTO WV-88 SOUTH / RIDGECREST RD, 4.2 MILES
- TURN RIGHT ONTO WV-88 SOUTH, 0.7 MILES
- TURN RIGHT ONTO WV-24 BENWOOD HILL RD. / BENWOOD-SHERRARD HILL RD, 0.9 MILES
- ENTER SERAFIN ORTIZ SITE ON THE LEFT