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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)

Friday, September 27, 2024  
WELL WORK PERMIT  
Horizontal 6A / New Drill

EQT CHAP LLC  
400 WOODCLIFF DR.

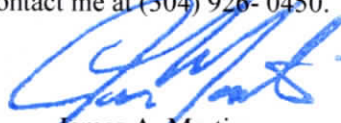
CANONSBURG, PA 15317

Re: Permit approval for Longworth 103H  
47-051-02520-00-00

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

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

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



James A. Martin  
Chief

Operator's Well Number: Longworth 103H  
Farm Name: Graham H Longworth Jr.  
U.S. WELL NUMBER: 47-051-02520-00-00  
Horizontal 6A New Drill  
Date Issued: 9/27/2024

# PERMIT CONDITIONS

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

## CONDITIONS

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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.

09/27/2024

4705102520

WW-6B  
(04/15)

API NO. 47- \_\_\_\_\_ - \_\_\_\_\_

OPERATOR WELL NO. 103H

Well Pad Name: Longworth

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

1) Well Operator: EQT CHAP LLC      494525804      Marshall      Clay      Glen Easton  
Operator ID      County      District      Quadrangle

2) Operator's Well Number: 103H      Well Pad Name: Longworth

3) Farm Name/Surface Owner: Graham H. Longworth, Jr.      Public Road Access: Roberts Ridge Road/WV-21

4) Elevation, current ground: 1,270' (built)      Elevation, proposed post-construction: 1,270' (built)

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):  
Marcellus, 6,518', 51', 0.64 psi/ft gradient

8) Proposed Total Vertical Depth: 6,518'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 12,346'

11) Proposed Horizontal Leg Length: 4,850'

12) Approximate Fresh Water Strata Depths: 112', 618'

13) Method to Determine Fresh Water Depths: Offset Wells - 51-00307, 51-00553

14) Approximate Saltwater Depths: 1,589', 2,011', 2,152', 2,115'

15) Approximate Coal Seam Depths: 583', 853'-858'

16) Approximate Depth to Possible Void (coal mine, karst, other): N/A

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

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(a) If Yes, provide Mine Info:    Name: Ireland Mine  
Depth: 866'-871'  
Seam: Pittsburgh  
Owner: Marshall County Coal Resources, Inc.

*Strader Gower*  
08/19/2024

WW-6B  
(04/15)

API NO. 4705102520

OPERATOR WELL NO. 103H

Well Pad Name: Longworth

18)

**CASING AND TUBING PROGRAM**

<b>TYPE</b>	<b>Size (in)</b>	<b>New or Used</b>	<b>Grade</b>	<b>Weight per ft. (lb/ft)</b>	<b>FOOTAGE: For Drilling (ft)</b>	<b>INTERVALS: Left in Well (ft)</b>	<b>CEMENT: Fill-up (Cu. Ft.)/CTS</b>
Conductor	26	New	A252	85.6	53	53	45 ft <sup>3</sup> / CTS
Fresh Water	13 3/8	New	J-55	54.5	1240	1250	1100 ft <sup>3</sup> / CTS
Coal							
Intermediate	9 5/8	New	J-55	36	2233	2239	850 ft <sup>3</sup> / CTS
Production	5 1/2	New	P-110	20	12346	12346	500' above intermediate casing
Tubing							
Liners							

<b>TYPE</b>	<b>Size (in)</b>	<b>Wellbore Diameter (in)</b>	<b>Wall Thickness (in)</b>	<b>Burst Pressure (psi)</b>	<b>Anticipated Max. Internal Pressure (psi)</b>	<b>Cement Type</b>	<b>Cement Yield (cu. ft./k)</b>
Conductor	26	30	0.312	1000	18	Class A/L	1.04 - 1.20
Fresh Water	13 3/8	17 1/2	0.380	2730	2184	Class A/L	1.04 - 1.20
Coal							
Intermediate	9 5/8	12 3/8	0.352	3520	2816	Class A/L	1.04 - 1.20
Production	5 1/2	8 1/2	0.361	14360	11488	Class A/H/L	1.04 - 2.10
Tubing							
Liners							

**PACKERS**

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Kind:				AUG 23 2024
Sizes:				Environment
Depths Set:				

*Strader Gower*  
08/19/2024

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

Drill and complete a new horizontal well in the Marcellus Formation. Drill the vertical, kick off and drill curve. Drill the lateral in the Marcellus. Cement casing.

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

Hydraulic fracturing is completed in accordance with state regulations using water recycled from previously fractured wells and obtained from freshwater sources. This water is mixed with sand and a small percentage (less than 0.1%) of chemicals (including 15% Hydrochloric acid, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater" completion. Maximum anticipated internal casing pressure is expected to be approximately 10,000 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 350,000 gallons of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh. Average approximately 200,000-600,000 pounds of proppant per stage.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 38.9 (built)

22) Area to be disturbed for well pad only, less access road (acres): 19.3 (built)

23) Describe centralizer placement for each casing string:

- Surface: Bow spring centralizers – One centralizer at the shoe and one spaced every 500’.
- Intermediate: Bow spring centralizers– One centralizer at the shoe and one spaced every 500’.
- Production: One solid body centralizer spaced every other joint from production casing shoe to landing point. One solid body centralizer spaced every joint from landing point to planned top of cement.

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

Conductor: No additives  
Surface: Calcium Chloride. Used to speed the setting of cement slurries  
Intermediate: Calcium Chloride. Used to speed the setting of cement slurries.  
Production: Calcium Carbonate, Fluid Loss, Extender, Dispersent, Viscosifier, Defoamer, POZ, Bonding Agent, Retarder, Anti-Settling/Suspension Agent

25) Proposed borehole conditioning procedures:

Surface: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.  
Intermediate: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.  
Production: Perform a cleanup cycle by pumping 3-8 bottoms up or until the shakers are clean. Check volume of cuttings coming across the shakers every 15 minutes.

\*Note: Attach additional sheets as needed.

4705102520

EQT CHAP LLC  
Hydraulic Fracturing Monitoring Plan  
Pad ID: Longworth  
County: Marshall

August 15, 2024

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## Purpose

The purpose of this pad-specific Hydraulic Fracturing Monitoring Plan is to identify and notify conventional well operators near EQT hydraulic fracturing in Marshall County, WV prior to hydraulic fracturing at the following EQT wells on the Longworth well pad: 101H and 103H.

Due to the requirements under 35CSR8 5.11, the permittee is required to review the area surrounding the proposed well pad so as to identify and evaluate potential conduits for unintended fracture propagation.

A report is required to be submitted along with a well work permit application.

The plan is being implemented as an additional safety measure to be utilized in conjunction with existing best management practices and emergency action plans for the site. These additional measures include coordination with well operators of the timing and location of the hydraulic fracturing, establishment of measures well operators should implement, and assurance that the OOG is notified of the timeline, as well as any issues that may arise during fracturing.

### 1. Communications with Well Operators

EQT, using available data (WV Geological Survey, WVDEP website, and IHS data service), has identified all known wells and well operators within 500 feet of this pad and the lateral sections that are known or could reasonably be expected to be within range of the fracture propagation. A map showing these wells along with a list of the wells and operators is included in **Attachment A**.

EQT will notify these operators of the hydraulic fracturing schedule for these wells and coordinate with them throughout the fracturing process.

EQT will recommend to these operators at a minimum to:

1. Inspect their surface equipment prior to fracturing to establish integrity and establish pre-frac well conditions
2. Observe wells closely during and after fracturing and monitor for abnormal increases in water, gas or pressure
3. Inspect or install master valves or other necessary equipment for wellhead integrity capable of a pressure recommended by EQT
4. Notify the OOG and EQT if any changes in water, gas production, pressure, or other anomalies are identified

### 2. Reporting

EQT will provide information relating to the hydraulic fracturing schedule, communication with other operators, and ongoing monitoring of the work upon request of OOG or immediately in the event of any noted abnormalities.

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**EQT**  
EQT Corporation  
625 Liberty Avenue  
Pittsburgh, PA 15222

**Longworth 101H and 103H**

**Vertical Offsets and Foreign Laterals within 500 Feet**

Created By: McClayQ on 8/8/2024

**Well Lateral by Formation**

- Genesee
- Marcellus
- Utica
- States
- Counties
- Longworth\_Offset\_Wells
- Longworth\_Offset\_Laterals

440 220 0 440  
Feet  
1:10,614

Disclaimer:  
This map is confidential and is to be used only for the express informational purposes for which it was created. Unauthorized use, copying, or dissemination is strictly prohibited. EQT does not warrant the accuracy of the location of any items shown on this map, including, but not limited to, any structures, well or pipeline facilities, property boundaries, topography, roadways, or waterways. The items shown on the map may not have been placed on the map using survey lines or GPS coordinates. The specific location of any of the map items should be determined by a field survey performed by a licensed survey or upon consultation with EQT.

1:1,161,728

OH WV PA

09/27/2024



4705102520

<u>API_UWI_Un</u>	<u>API_UWI_12</u>	<u>ENVOperato</u>	<u>ENVWellSta</u>	<u>ENVWellTyp</u>
4705101453	47-051-01453-00	AB RESOURCES PA, LLC	PERMIT EXPIRED	OTHER

Lateral

<u>API_UWI_Un</u>	<u>API_UWI_12</u>	<u>ENVOperato</u>	<u>ENVWellSta</u>	<u>ENVWellTyp</u>
4705101453	47-051-01453-00	AB RESOURCES PA, LLC	PERMIT EXPIRED	OTHER

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<u>InitialOpe</u>	<u>Latitude</u>	<u>Longitude</u>	<u>ElevationG</u>	<u>ElevationK</u>	<u>MD_FT</u>	<u>TVD_FT</u>
AB RESOURCES	39.847322	-80.726916	1295	1318	0	0

<u>InitialOpe</u>	<u>Latitude</u>	<u>Longitude</u>	<u>ElevationG</u>	<u>ElevationK</u>	<u>MD_FT</u>	<u>TVD_FT</u>
AB RESOURCES	39.847322	-80.726916	1295	1318	0	0

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<u>WellName</u>	<u>WellSymbol</u>
LONGWORTH 1H	OTHER-PERMIT EXPIRED

<u>WellName</u>	<u>WellSymbol</u>
LONGWORTH 1H	OTHER-PERMIT EXPIRED

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EQT CHAP LLC  
400 Woodcliff Drive | Canonsburg, PA 15317

4705102520

August 15, 2024

Mr. Taylor Brewer  
West Virginia Department of Environmental Protection  
Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304

Re: Class L Cement Variance Request  
Longworth 103H Well  
Clay District, Marshall County

Dear Mr. Brewer,

EQT CHAP LLC (EQT) has been notified by our cement providers that they will no longer be providing Class A cement. As a result of this, EQT is requesting the option to utilize Class L cement, if necessary, in place of Class A cement for its cement jobs.

The variance request from Legislative Rule 35CSR8, Section 9.2.h.8, related to the use of Class L Cement, was approved by the Office of Oil and Gas on September 13, 2022. A copy of the variance is included with this request.

If you have any questions, please do not hesitate to contact me at 724-746-9073.

Sincerely,

A handwritten signature in blue ink, appearing to read 'J. Zavatchan'.

John Zavatchan  
Permitting Specialist

Enc.

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West Virginia Department of  
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west virginia department of environmental protection

Office of Oil and Gas  
601 57th Street, SE  
Charleston, WV 25304  
Phone (304) 926-0450

Harold D. Ward, Cabinet Secretary  
dep.wv.gov

**BEFORE THE OFFICE OF OIL AND GAS  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
STATE OF WEST VIRGINIA**

**IN THE MATTER OF A VARIANCE FROM )  
LEGISLATIVE RULE 35CSR4 )  
SECTION 11.5 AND LEGISLATIVE RULE )  
35CSR8 SECTION 9.2.h.8., )  
RELATING TO THE CEMENTING )  
OF OIL AND GAS WELLS )**

**ORDER NO. 2022-14**

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WV Department of  
Environmental Protection

**REPORT OF THE OFFICE**

In response to industry requests, the West Virginia Department of Environmental Protection, Office of Oil and Gas has reviewed the proposed use of American Petroleum Institute (API) Class L cement to be used in place of API Class A cement for well construction.

**FINDINGS OF FACT**

1. On July 14, 2022, Northeast Natural Energy (NNE) submitted a variance request from Legislative Rule 35CSR8 Section 9.2.h.8., for the use of API Class L cement in place of API Class A cement, relating to the construction of horizontal wells.
2. Laboratory analysis submitted by NNE on July 14, 2022, indicates API Class L cement is comparable to API Class A cement and thereby satisfies the requirements of the West Virginia Code.
3. Contemporaneously, the Chief of the Office of Oil and Gas also chose to consider a variance to Legislative Rule 35CSR4 Section 11.5., for the use of API Class L cement in place of API Class A cement, relating to the construction of vertical wells.

Printed by a nearby e-writer

**09/27/2024**

4. On August 18, 2022, the Office of Oil and Gas provided public notice of acceptance of public comments on the variance consideration. During the 20-day public comment period, no comments were received.

### CONCLUSIONS OF LAW

Pursuant to Article 6 and Article 6A, Chapter 22 of the Code of West Virginia, the Office of Oil and Gas has jurisdiction over the subject matter, and the persons interested therein, and jurisdiction to promulgate the hereinafter prescribed Order.

Pursuant to Legislative Rule 35CSR4, Section 18 and Legislative Rule 35CSR8, Section 14, the Chief of the Office of Oil and Gas may grant a variance from any requirement of these rules.


### ORDER

It is ordered that the Class L cement product approved and monogrammed by API is approved for use in place of API Class A cement for well construction subject to the provisions of Legislative Rule 35CSR4 and Legislative Rule 35CSR8.

Dated this, the 13th day of September, 2022.

IN THE NAME OF THE STATE OF WEST VIRGINIA

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

  
\_\_\_\_\_  
James Martin, Chief  
Office of Oil and Gas

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EQT CHAP LLC

400 Woodcliff Drive | Canonsburg, PA 15317

P: 724-746-9073 | [www.eqt.com](http://www.eqt.com)

4705102520

August 15, 2024

Mr. Taylor Brewer  
West Virginia Department of Environmental Protection  
Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304

Re: Casing on Longworth 103H

Dear Mr. Brewer,

The 13-3/8" surface casing will be set at 1,240' KB, 382' below the deepest workable coal seam and 622' below the deepest fresh water. EQT is requesting a variance from 35CSR9.2.d.1 to mitigate red rock issues on these wells. Specifically, EQT is requesting to set casing to elevation. By setting this casing the additional footage requested we would put the red rock behind casing and avoid possible significant operational delays and further well complications.

By setting casing as requested we would be able to successfully case off any freshwater zones as well as put any possible red rock issues behind casing as well. Based on offset data, the shallowest saltwater zone on this pad came in at 1,589' TVD so by setting 13 3/8" casing at 1,250' we case off all freshwater while also still setting casing 339' before the nearest saltwater depth.

It is for these reasons mentioned above that it is requested to set 13 3/8" surface to elevation. This will allow EQT to successfully drill the well in the most efficient manner possible while also ensuring a competent wellbore for drilling, casing, and cementing the intermediate section.

The 9-5/8" intermediate casing string is proposed to be set at 2,239' KB. Based on the drilling of previous wells at this site, this will adequately cover any potential water production from sands.

If you have any questions, please do not hesitate to contact me at 724-746-9073.

Sincerely,

John Zavatchan  
Permitting Specialist

Enc.

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**WEST VIRGINIA GEOLOGICAL PROGNOSIS**

Longworth  
S-001479

**Drilling Objectives:** Marcellus  
**County:** Marshall  
**Quad:** Glen Easton  
**Elevation:** 1282 KB 1269 GL  
**Recommended Azimuth:** 330 Degrees

**ESTIMATED FORMATION TOPS**

Formation tops as determined from pilots 4705101599 and 4705101166

Formation	Top (TVD)	Base (TVD)	Lithology	Comments	Top RR	Base RR
Fresh Water Zone	1	618		FW @ 112,618, ...	1737	
Waynesburg Coal	583	583	Coal		1865	
Pittsburgh Coal	853	858	Coal	In unminded out section of the Pittsburgh	2557	
Big Lime	1873	2101	Limestone	SW @ 1589,2011,2152,2115	3090	3090
Big Injun	2101	2183	Sandstone			Base of Red Rock
Int. csg pt	2233					
Gantz	2820	2881	Sandstone	Not near storage		
Gordon	2881	2961	Silty Sand			
50F	2961	3010	Silty Sand			
Bayard	3089	3454	Silty Sand	Base of Offset Well Perforations at 1449' TVD		
Alexander	5256	5693	Silty Sand			
Elks	5693	6192	Gray Shales and Silts			
Sonyea	6192	6286	Gray shale			
Middlesex	6286	6312	Shale			
Genesee	6312	6359	Gray shale interbedded			
Geneseo	6359	6385	Black Shale			
Tully	6385	6416	Limestone			
Hamilton	6416	6487	Gray shale with some			
Marcellus	6487	6537	Black Shale			
Purcell	6508	6510	Limestone			
<b>-Lateral Zone</b>	<b>6518</b>			Start Lateral at 6518'		
Cherry Valley	6530	6532	Limestone			
Onondaga	6537		Limestone			

Target Thickness 51 feet

**RECOMMENDED CASING POINTS**

**Fresh Water/Coal** CSG OD 13 3/8  
**Intermediate 1:** CSG OD 9 5/8  
**Production:** CSG OD 5 1/2

CSG DEPTH: 1240  
 CSG DEPTH: 2233  
 CSG DEPTH: @ TD

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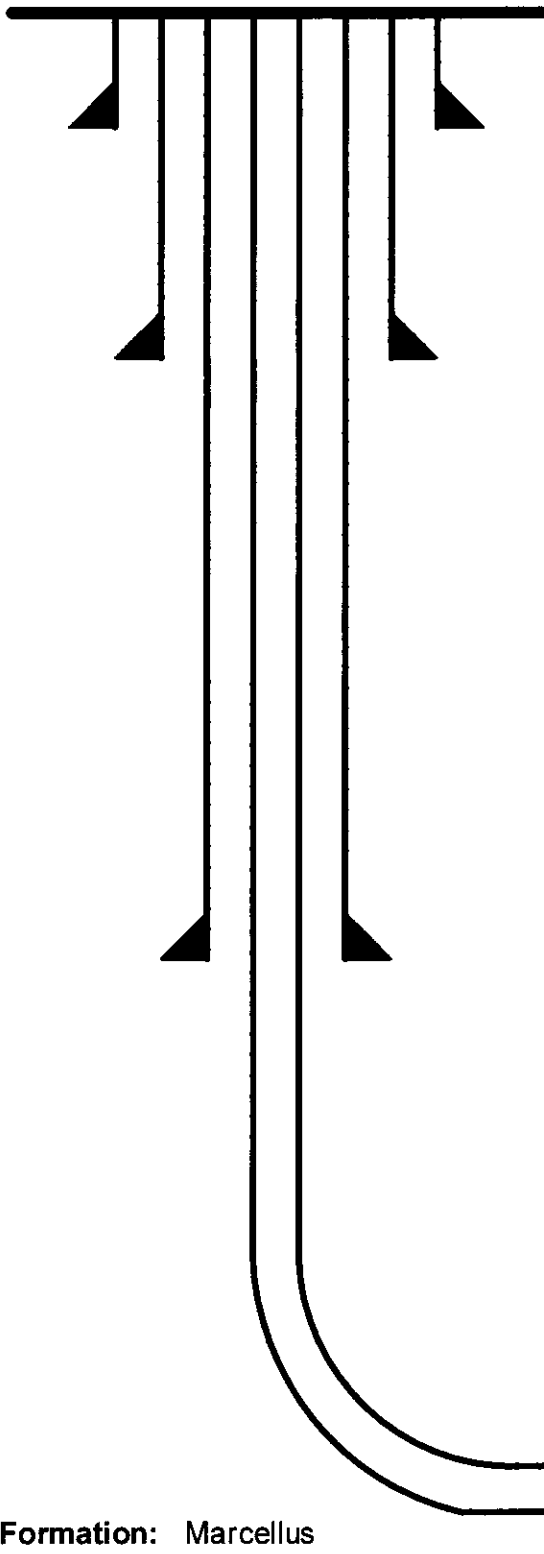


**EQT CHAP LLC**

**Wellbore Diagram**

Well: Longworth 103H  
Pad: Longworth  
Elevation: 1269' GL 1282' KB

County: Marshall  
State: West Virginia  
**4705102520**



**Conductor @ 53'**

26", 85.6#, A252, cement to surface w/ Class A/L

**Surface @ 1,240'**

13-3/8", 54.5#, J-55, cement to surface w/ Class A/L

**Intermediate @ 2,233'**

9-5/8", 36#, J-55, cement to surface w/ Class A/L

**Production @ 12,346' MD / 6,518' TVD**

5-1/2", 20#, P-110, cement to 500' inside 9-5/8" w/ Class A/H/L

**Formation: Marcellus**

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*Strader Power*  
08/19/2024

**08/27/2024 SCALE**

4705102520

WW-9  
(4/16)

API Number 47 - \_\_\_\_\_ - \_\_\_\_\_  
Operator's Well No. Longworth 101H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name EQT CHAP LLC OP Code 494525804

Watershed (HUC 10) Middle Grave Creek - Grave Creek Quadrangle Glen Easton

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

Will a pit be used? Yes  No

If so, please describe anticipated pit waste: N/A

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? N/A

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection ( UIC Permit Number 0014, 8462, 4037 )
- Reuse (at API Number Various )
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain \_\_\_\_\_)

Will closed loop system be used? If so, describe: Yes, The closed loop system will remove drill cuttings from the drilling fluid. The drill cuttings are then prepared for transportation to an off-site disposal facility.

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. See Attached

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

Additives to be used in drilling medium? See Attached

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

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

-Landfill or offsite name/permit number? See Attached List

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Environmental Protection

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 [Signature]  
Company Official (Typed Name) John Zavatchan  
Company Official Title Permitting Specialist

Subscribed and sworn before me this 22nd day of August, 20 24  
[Signature] Notary Public

My commission expires Oct. 25, 2027

Commonwealth of Pennsylvania - Notary Seal  
Olivia Wilson, Notary Public  
Allegheny County  
My commission expires October 25, 2027  
Commission number 1359968  
Member, Pennsylvania Association of Notaries

4705102520

WW-9 Attachment

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc.

- Air is used to drill the top-hole sections of the wellbore (surface, intermediate, and pilot). Water based mud or synthetic based mud may be necessary depending on hole conditions to stabilize and drill the intermediate section. The pilot hole, curve, and lateral sections will be drilled with either air, water based mud, or synthetic mud.

Additives to be used in drilling medium?

- Air - biodegradable oil lubricant, detergent, defoaming, water.
- Water based mud – Barite, viscosifer, alkalinity control, lime, filtration control, deflocculates, biodegradable oil lubricant, defoaming, walnut shell, salt, x-cide, carbonates.
- Synthetic mud – synthetic base oil, emulsifier, salt, lime, viscosifer, alkalinity control, filtration control, deflocculates, biodegradable oil lubricant, defoaming, carbonates.

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EQT CHAP LLC

Proposed Revegetation Treatment: Acres Disturbed No additional disturbance Prevegetation pH \_\_\_\_\_

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type Granular 10-20-20

Fertilizer amount 500 lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
KY-31	40	Orchard Grass	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		

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: Strader Gower

Comments: Pre-seed/mulch all disturbed areas as soon as reasonably possible, per regulation. Upgrade E&S as necessary per WV DEP E&S Manual.

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Office of Oil and Gas

AUG 23 2024

WV Department of  
Environmental Protection

Title: Oil & Gas Inspector

Date: 08/19/2024

Field Reviewed? (  ) Yes (  ) No



**SITE SAFETY AND ENVIRONMENTAL PLAN**  
**LONGWORTH A WELL SITE**  
**CLAY DISTRICT MARSHALL COUNTY WV**

Longworth 1H	47-051-02078	Longworth 10H	47-051-02130
Longworth 2H	47-051-02079	Longworth 11H	47-051-02131
Longworth 3H	47-051-01903	Longworth 12H	47-051-02132
Longworth 4H	47-051-01904	Longworth 13H	47-051-02080
Longworth 5H	47-051-01914	Longworth 14H	47-051-02081
Longworth 6H	47-051-01916	Longworth 15H	47-051-02082
Longworth 7H	47-051-01917	Longworth 16H	47-051-02083
Longworth 8H	47-051-02128	Longworth 101H	New Well
Longworth 9H	47-051-02129	Longworth 103H	New Well

Prepared By: Donny Prater, CSP, Health and Safety Sciences, LLC

Approved By: Scott M. Held, Senior Safety Coordinator

Created Date: 17-Dec-20

---

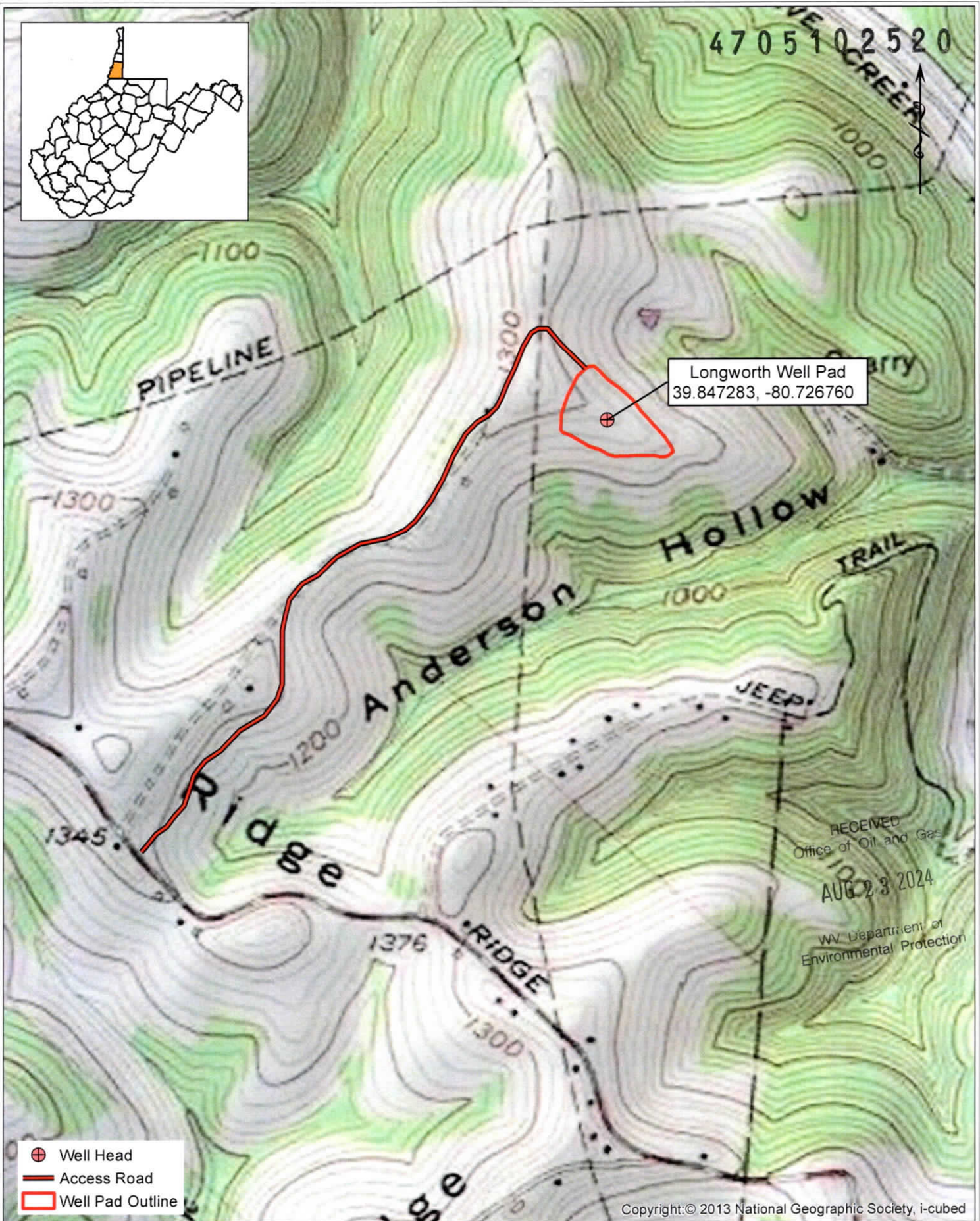
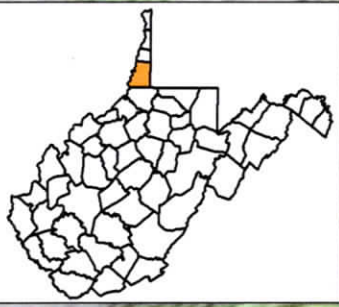
John Zavatchan  
Permitting Specialist  
EQT CHAP LLC




*Strader Gower*

---

Strader Gower  
Oil and Gas Inspector  
WVDEP Office of Oil and Gas

09/27/2024



-  Well Head
-  Access Road
-  Well Pad Outline

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1 inch = 800 feet

USGS Location Map  
Longworth  
Marshall County - West Virginia

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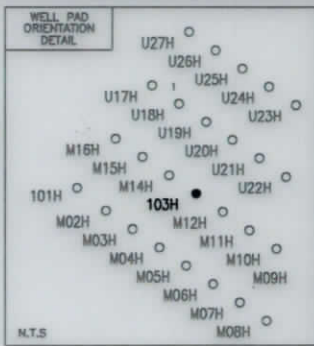
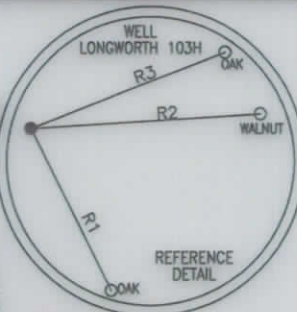
09/27/2024

8/7/2024

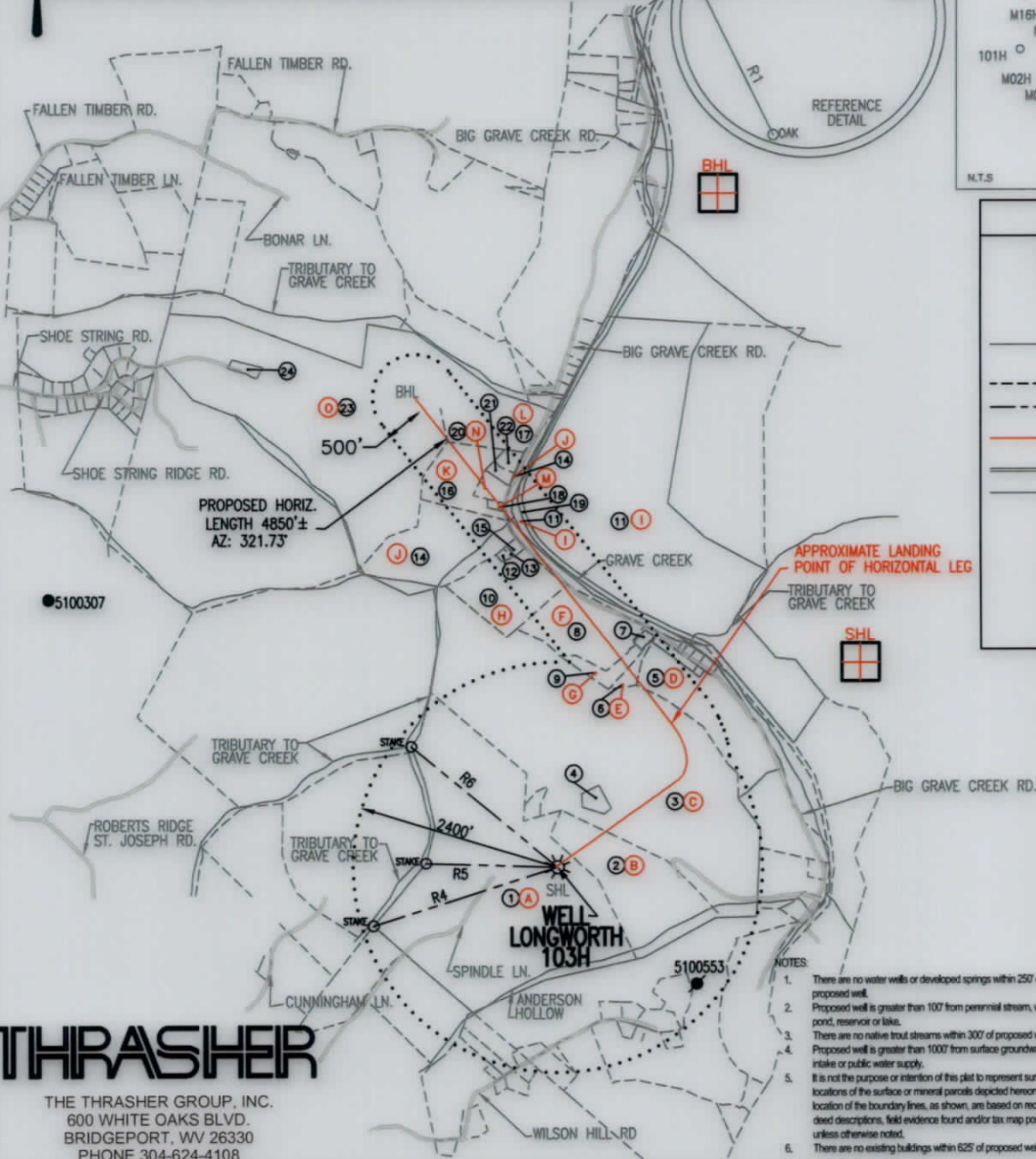
LINE	BEARING	DISTANCE
R1	S 32°23'43" E	263.21'
R2	S 86°29'01" E	315.18'
R3	N 79°32'33" E	278.88'
R4	S 72°31'39" W	2265.46'
R5	N 88°16'12" W	1542.14'
R6	N 50°22'48" W	2221.95'

BHL is located on topo map 4,602 feet south of Latitude: 39° 52' 30"  
 SHL is located on topo map 10,076 feet south of Latitude: 39° 52' 30"

**SEE PAGE 2 FOR SURFACE OWNERS AND LESSORS**



BHL is located on topo map 6,973 feet west of Longitude: 80° 42' 30"  
 SHL is located on topo map 5,238 feet west of Longitude: 80° 42' 30"



**LEGEND**

- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- MINERAL TRACT BOUNDARY
- PARCEL LINES
- WELL REFERENCE
- PROPOSED HORIZONTAL WELL
- ROAD
- STREAM CENTER LINE
- LESSORS
- SURFACE OWNERS

**GAS WELLS**

- EXISTING WELLS
- PLUGGED WELLS

**SURFACE HOLE LOCATION (SHL)**

UTM 17-NAD83(M)  
 N:4410657.504  
 E:523372.246

NAD83, WV NORTH  
 N:493123.110  
 E:1624061.210

**APPROX. LANDING POINT**

UTM 17-NAD83(M)  
 N:4411378.729  
 E:523772.238

NAD83, WV NORTH  
 N:494811.570  
 E:1625402.370

**BOTTOM HOLE LOCATION (BHL)**

UTM 17-NAD83(M)  
 N:4412523.767  
 E:522838.074

NAD83, WV NORTH  
 N:498620.310  
 E:1622399.710

- NOTES:**
- There are no water wells or developed springs within 250' of proposed well.
  - Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
  - There are no native trout streams within 300' of proposed well.
  - Proposed well is greater than 1000' from surface groundwater intake or public water supply.
  - It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.
  - There are no existing buildings within 625' of proposed well.

**THRASHER**  
 THE THRASHER GROUP, INC.  
 600 WHITE OAKS BLVD.  
 BRIDGEPORT, WV 26330  
 PHONE 304-624-4108

FILE #: LONGWORTH 103H  
 DRAWING #: LONGWORTH 103H  
 SCALE: 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY: 1/2500  
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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 THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: *Joseph H. Lowther*  
 R.P.E.: \_\_\_\_\_ L.L.S.: P.S. No. 2346



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP  
 OFFICE OF OIL & GAS  
 601 57TH STREET  
 CHARLESTON, WV 25304

DATE: AUGUST 21, 2024  
 OPERATOR'S WELL #: LONGWORTH 103H  
 API WELL #: 47 51 02520  
 STATE COUNTY PERMIT

Well Type:  Oil  Waste Disposal  Production  Deep  Gas  Liquid Injection  Storage  Shallow

WATERSHED: MIDDLE GRAVE CREEK-GRAVE CREEK ELEVATION: 1270.00'

COUNTY/DISTRICT: MARSHALL / CLAY QUADRANGLE: GLEN EASTON, WV 7.5'

SURFACE OWNER: GRAHAM H. LONGWORTH JR. ACREAGE: 123.586±

OIL & GAS ROYALTY OWNER: GRAHAM H. LONGWORTH JR. ACREAGE: 298.747±

DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION   
 PERFORATE NEW FORMATION  PLUG & ABANDON  CLEAN OUT & REPLUG  OTHER CHANGE

(SPECIFY): \_\_\_\_\_

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,518'± TMD: 15,073'±

WELL OPERATOR EQT CHAP LLC DESIGNATED AGENT JOSEPH C. MALLOW

Address 400 WOODCLIFF DRIVE Address 427 MIDSTATE DRIVE  
 City CANONSBURG State PA Zip Code 15317 City CLARKSBURG State WV Zip Code 26301

09/27/2024

# LONGWORTH

## 103H

### PAGE 2 OF 2

	LESSOR	DIST-TM/PAR
A	GRAHAM H. LONGWORTH JR. ET AL	4-11/1
B	GRAHAM H. LONGWORTH JR. ET AL	4-11/2
	LISA NICEWARNER	
	JULIA RODGERS	
	KEITH FRIESE	
	MARK FRIESE	
	ANTHONY FRIESE	
	JAMES FRIESE	
	HENRY FRIESE	
C	GRAHAM H. LONGWORTH JR. ET AL	4-12/16
	SHERI L. EVRAETS FAMILY TRUST	
	LISA NICEWARNER	
	JULIA RODGERS	
	KEITH FRIESE	
	MARK FRIESE	
	ANTHONY FRIESE	
	JAMES FRIESE	
D	JAMES W. MORRISON, ET UX.	4-12/14
	MICHAEL A. JOBES ET UX	4-12/13
F	MICHAEL JOBES ET UX	4-12/12
G	MICHAEL JOBES ET UX	4-12/12.2
H	DIocese OF WHEELING - CHARLESTON	4-12/10.2
	SUSAN MARKEY ZIDAR, ET VIR.	
	LAUREN M. TEKELY IRREVOCABLE TRUST	
	MARY ANN BAKER	
	RALPH ULMAN AND MARY K. ULMAN TRUST	
	SISTERS OF ST FRANCIS PROV OF GOD	
	ROBERT S. WUERTHELE	
	MARK K. WUERTHELE	
	JEFFERY A. WUERTHELE	
	MICHAEL D. WUERTHELE, ET UX.	
I	DIocese OF WHEELING - CHARLESTON	4-10/1
	SUSAN MARKLEY ZIDAR, ET VIR	
	LAUREN M. TEKELY IRREVOCABLE TRUST	
	MARY ANN BAKER	
	RALPH ULMAN AND MARY K. ULMAN TRUST	
	SISTERS OF ST FRANCIS PROV OF GOD	
	ROBERT S. WUERTHELE	
	MARK K. WUERTHELE	
JEFFERY A. WUERTHELE		
MICHAEL D. WUERTHELE		

	LESSOR	DIST-TM/PAR
J	DIocese OF WHEELING - CHARLESTON	4-12/10
	SUSAN MARKLEY ZIDAR, ET VIR	
	LAUREN M. TEKELY IRREVOCABLE TRUST	
	MARY ANN BAKER	
	RALPH ULMAN AND MARY K. ULMAN TRUST	
	SISTERS OF ST FRANCIS PROV OF GOD	
	ROBERT S. WUERTHELE	
	MARK K. WUERTHELE	
	JEFFERY A. WUERTHELE	
	MICHAEL D. WUERTHELE	
K	DIocese OF WHEELING - CHARLESTON	4-12/10.3
	SUSAN MARKLEY ZIDAR, ET VIR	
	LAUREN M. TEKELY IRREVOCABLE TRUST	
	MARY ANN BAKER	
	RALPH ULMAN AND MARY K. ULMAN TRUST	
	SISTERS OF ST FRANCIS PROV OF GOD	
	ROBERT S. WUERTHELE	
	MARK K. WUERTHELE	
	JEFFERY A. WUERTHELE	
	MICHAEL D. WUERTHELE	
L	ROBERT D. RICHMOND, ET UX.	4-12/5
M	DIocese OF WHEELING - CHARLESTON	4-12/10.4
	SUSAN MARKLEY ZIDAR, ET VIR	
	LAUREN M. TEKELY IRREVOCABLE TRUST	
	MARY ANN BAKER	
	RALPH ULMAN AND MARY K. ULMAN TRUST	
	SISTERS OF ST FRANCIS PROV OF GOD	
	ROBERT S. WUERTHELE	
	MARK K. WUERTHELE	
	JEFFERY A. WUERTHELE	
	MICHAEL D. WUERTHELE	
N	DIocese OF WHEELING - CHARLESTON	4-12/9
	SUSAN MARKLEY ZIDAR, ET VIR	
	LAUREN M. TEKELY IRREVOCABLE TRUST	
	MARY ANN BAKER	
	RALPH ULMAN AND MARY K. ULMAN TRUST	
	SISTERS OF ST FRANCIS PROV OF GOD	
	ROBERT S. WUERTHELE	
	MARK K. WUERTHELE	
	JEFFERY A. WUERTHELE	
	MICHAEL D. WUERTHELE	
O	JMK IREV TRST	4-12/3
	PURPLEBURGH VENTURES LLC	
	MARCELLUS TX MINERAL PRTRNS LTD	

	SURFACE OWNER	DIST-TM/PAR
1	GRAHAM H. LONGWORTH JR.	4-11/1
2	GRAHAM H. LONGWORTH JR.	4-11/2
3	DANIEL C. LONGWORTH	4-12/16
4	DANIEL C. SR. AND JEANNETTE L. LONGWORTH	4-12/16.1
5	JAMES W. MORRISON, ET UX.	4-12/14
6	KEVIN HAUGHT	4-12/13
7	KEVIN HAUGHT	4-12/12.1
8	KEVIN HAUGHT	4-12/12
9	KEVIN HAUGHT	4-12/12.2
10	THOMAS L. AND CLARA J. HAUGHT-LIFE	4-12/10.2
11	CITY OF MOUNDSVILLE	4-10/1
12	THOMAS L. AND CLARA J. HAUGHT	4-12/6
13	THOMAS L. AND CLARA J. HAUGHT	4-12/11
14	THOMAS HAUGHT ET AL	4-12/10
15	THOMAS L. & CLARA J. HAUGHT	4-12/10.1
16	CLIFFORD A. & JOY M. WHITE	4-12/10.3
17	ROBERT D & VIRGINIA RICHMOND	4-12/5
18	CLIFFORD A. & JOY M. WHITE	4-12/10.4
19	CONSOLIDATION COAL COMPANY/MURRAY ENERGY C/O LAND DEPT	4-12/25
20	THOMAS L. & CLARA J. HAUGHT	4-12/9
21	THOMAS L. & CLARA J. HAUGHT	4-12/8
22	THOMAS L. & CLARA J. HAUGHT	4-12/7
23	MERLE CHAPLIN ET UX	4-12/3
24	MERLE R. & JEAN E. CHAPLIN	4-12/3.1

**SURFACE HOLE LOCATION (SHL)**  
**LEM 17-NA0300**  
**N:447857.864**  
**E:823372.246**

NA03. WV NORTH  
 N:493123.110  
 E:1624061.210

**APPR. LAMBE POINT**

**LEM 17-NA0300**  
**N:4411376.728**  
**E:823772.238**

NA03. WV NORTH  
 N:494811.570  
 E:1625402.370

**BOTTOM HOLE LOCATION (BHL)**

**LEM 17-NA0300**  
**N:4412823.787**  
**E:822838.074**

NA03. WV NORTH  
 N:498620.310  
 E:1622399.710

09/27/2024

# THRASHER

THE THRASHER GROUP, INC.  
 600 WHITE OAKS BLVD.  
 BRIDGEPORT, WV 26330  
 PHONE 304-624-4108

AUGUST 21, 2024

47-051-02520



**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 Attached				

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**AUG 23 2024**  
  
WV Department of  
Environmental Protection

**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: EQT CHAP LLC  
 By: John Zavatchan  
 Its: Permitting Specialist

Parcel ID	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
A 04-11-1.0	Graham H. Longworth Jr., et al. Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 790/129 AB 47/1
B 04-11-2.0	Graham H. Longworth Jr., et al. Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 790/129 AB 47/1
04-11-2.0	Lisa Nicewarner TriEnergy Holdings, LLC Chevron U.S.A. Inc.	TriEnergy Holdings, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 751/260 AB 28/348 AB 47/1
04-11-2.0	Julia Rodgers TriEnergy Holdings, LLC Chevron U.S.A. Inc.	TriEnergy Holdings, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 751/262 AB 28/348 AB 47/1
04-11-2.0	Keith Friese TriEnergy Holdings, LLC Chevron U.S.A. Inc.	TriEnergy Holdings, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 751/264 AB 28/348 AB 47/1
04-11-2.0	Mark Friese TriEnergy Holdings, LLC Chevron U.S.A. Inc.	TriEnergy Holdings, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 751/250 AB 28/348 AB 47/1
04-11-2.0	Anthony Friese TriEnergy Holdings, LLC Chevron U.S.A. Inc.	TriEnergy Holdings, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 753/580 AB 28/348 AB 47/1

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B

04-11-2.0 James Friese  
TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.

TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.  
EQT Aurora LLC

"at least 1/8th per  
WV Code 22-6-8"

DB 751/254  
AB 28/348  
AB 47/1

04-11-2.0 Henry Friese  
TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.

TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.  
EQT Aurora LLC

"at least 1/8th per  
WV Code 22-6-8"

DB 752/382  
AB 28/348  
AB 47/1

04-11-2.0 Steven Friese  
TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.

TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.  
EQT Aurora LLC

"at least 1/8th per  
WV Code 22-6-8"

DB 751/252  
AB 28/348  
AB 47/1

C

04-12-16.0 Graham H. Longworth Jr., et al.  
Chevron U.S.A. Inc.

Chevron U.S.A. Inc.  
EQT Aurora LLC

"at least 1/8th per  
WV Code 22-6-8"

DB 790/129  
AB 47/1

04-12-16.0 Sheri L. Evraets Family Trust  
TriEnergy Holdings, LLC  
NPAR, LLC  
Chevron U.S.A. Inc.

TriEnergy Holdings, LLC  
NPAR, LLC  
Chevron U.S.A. Inc.  
EQT Aurora LLC

"at least 1/8th per  
WV Code 22-6-8"

DB 730/407  
AB 25/449  
DB 756/332  
AB 47/1

04-12-16.0 Lisa Nicewarner  
TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.

TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.  
EQT Aurora LLC

"at least 1/8th per  
WV Code 22-6-8"

DB 751/260  
AB 28/348  
AB 47/1

04-12-16.0 Julia Rodgers  
TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.

TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.  
EQT Aurora LLC

"at least 1/8th per  
WV Code 22-6-8"

DB 751/262  
AB 28/348  
AB 47/1

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A

04-12-16.0 Keith Friese  
TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.

TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.  
EQT Aurora LLC

"at least 1/8th per  
WV Code 22-6-8"

DB 751/264  
AB 28/348  
AB 47/1

04-12-16.0 Mark Friese  
TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.

TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.  
EQT Aurora LLC

"at least 1/8th per  
WV Code 22-6-8"

DB 751/250  
AB 28/348  
AB 47/1

04-12-16.0 Anthony Friese  
TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.

TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.  
EQT Aurora LLC

"at least 1/8th per  
WV Code 22-6-8"

DB 753/580  
AB 28/348  
AB 47/1

04-12-16.0 James Friese  
TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.

TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.  
EQT Aurora LLC

"at least 1/8th per  
WV Code 22-6-8"

DB 751/254  
AB 28/348  
AB 47/1

04-12-16.0 Henry Friese  
TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.

TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.  
EQT Aurora LLC

"at least 1/8th per  
WV Code 22-6-8"

DB 752/382  
AB 28/348  
AB 47/1

04-12-16.0 Steven Friese  
TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.

TriEnergy Holdings, LLC  
Chevron U.S.A. Inc.  
EQT Aurora LLC

"at least 1/8th per  
WV Code 22-6-8"

DB 751/252  
AB 28/348  
AB 47/1

D

04-12-14.0 James W. Morrison, et ux.  
  
AB Resources LLC  
Chief Exploration & Development LLC  
Radler 2000 Limited Partnership  
AB Resources LLC  
Chevron U.S.A. Inc.

AB Resources LLC  
Chief Exploration & Development LLC  
Radler 2000 Limited Partnership  
  
Chevron U.S.A. Inc.  
Chevron U.S.A. Inc.  
EQT Aurora LLC

"at least 1/8th per  
WV Code 22-6-8"

DB 686/99  
  
AB 24/466  
  
AB 25/1  
DB 756/397  
AB 47/1

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**E**      **04-12-13.0**      Michael A. Jobes, et ux.  
 TriEnergy Holdings, LLC  
  
 NPAR, LLC  
 Chief Exploration & Development LLC  
 Radler 2000 Limited Partnership  
 NPAR, LLC  
 Chevron U.S.A. Inc.

TriEnergy Holdings, LLC  
 NPAR, LLC  
 Chief Exploration & Development LLC  
 Radler 2000 Limited Partnership

Chevron U.S.A. Inc.  
 Chevron U.S.A. Inc.  
 EQT Aurora LLC

"at least 1/8th per  
 WV Code 22-6-8"

DB 704/24  
 AB 24/180  
  
 AB 24/466  
  
 AB 25/105  
 DB 756/332  
 AB 47/1

**F**      **04-12-12.0**      Michael A. Jobes, et ux.  
 TriEnergy Holdings, LLC  
 NPAR, LLC  
 Chief Exploration & Development LLC  
 Radler 2000 Limited Partnership  
 NPAR, LLC  
 Chevron U.S.A. Inc.

TriEnergy Holdings, LLC  
 NPAR, LLC  
 Radler 2000 Limited Partnership

Chevron U.S.A. Inc.  
 Chevron U.S.A. Inc.  
 EQT Aurora LLC

"at least 1/8th per  
 WV Code 22-6-8"

DB 704/18  
 AB 24/180  
 AB 24/466  
  
 AB 25/105  
 DB 756/332  
 AB 47/1

**G**      **04-12-12.2**      Michael A. Jobes, et ux.  
 TriEnergy Holdings, LLC  
  
 NPAR, LLC  
 Chief Exploration & Development LLC  
 Radler 2000 Limited Partnership  
 NPAR, LLC  
 Chevron U.S.A. Inc.

TriEnergy Holdings, LLC  
 NPAR, LLC  
 Chief Exploration & Development LLC  
 Radler 2000 Limited Partnership

Chevron U.S.A. Inc.  
 Chevron U.S.A. Inc.  
 EQT Aurora LLC

"at least 1/8th per  
 WV Code 22-6-8"

DB 704/22  
 AB 24/180  
  
 AB 24/466  
  
 AB 25/105  
 DB 756/332  
 AB 47/1

**H**      **04-12-10.2**      Roman Catholic Diocese of Wheeling-Charleston  
 TriEnergy Holdings, LLC  
 NPAR, LLC  
 Chevron U.S.A. Inc.

TriEnergy Holdings, LLC  
 NPAR, LLC  
 Chevron U.S.A. Inc.  
 EQT Aurora LLC

TH Exploration, LLC  
 Chevron U.S.A. Inc.  
 EQT Aurora LLC

"at least 1/8th per  
 WV Code 22-6-8"

DB 738/509  
 AB 26/123  
 AB 26/201  
 AB 47/1

"at least 1/8th per  
 WV Code 22-6-8"

DB 877/222  
 AB 36/168  
 AB 47/1

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04-12-10.2	Lauren M. Tekely 11/01/2007 Irrevocable Trust Dated 11/01/2007 TH Exploration, LLC Chevron U.S.A. Inc.	TH Exploration, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 876/177 AB 36/168 AB 47/1
04-12-10.2	Mary Ann Baker Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 808/518 AB 47/1
04-12-10.2	Ralph Ulman and Mary K. Ulman Trust Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 808/550 AB 47/1
04-12-10.2	Sisters of St. Francis of the Providence of God Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 886/595 DB 1100/493
04-12-10.2	Robert S. Wuerthele Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 853/63 AB 47/1
04-12-10.2	Mark K. Wuerthele Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 853/79 AB 47/1
04-12-10.2	Jeffrey A. Wuerthele Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 853/127 AB 47/1
04-12-10.2	Michael D. Wuerthele, et ux. Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 1040/424 DB 1100/493
I 04-10-1.0	Roman Catholic Diocese of Wheeling-Charleston TriEnergy Holdings, LLC NPAR, LLC Chevron U.S.A. Inc.	TriEnergy Holdings, LLC NPAR, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 738/509 AB 26/123 AB 26/201 AB 47/1

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04-10-1.0	Susan Markey Zidar, et vir. TH Exploration, LLC Chevron U.S.A. Inc.	TH Exploration, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 877/222 AB 36/168 AB 47/1
04-10-1.0	Lauren M. Tekely 11/01/2007 Irrevocable Trust Dated 11/01/2007 TH Exploration, LLC Chevron U.S.A. Inc.	TH Exploration, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 876/177 AB 36/168 AB 47/1
04-10-1.0	Mary Ann Baker Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 808/518 AB 47/1
04-10-1.0	Ralph Ulman and Mary K. Ulman Trust Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 808/550 AB 47/1
04-10-1.0	Sisters of St. Francis of the Providence of God Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 886/595 DB 1100/493
04-10-1.0	Robert S. Wuerthele Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 853/63 AB 47/1
04-10-1.0	Mark K. Wuerthele Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 853/79 AB 47/1
04-10-1.0	Jeffrey A. Wuerthele Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 853/127 AB 47/1
04-10-1.0	Michael D. Wuerthele, et ux. Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 1040/424 DB 1100/493

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04-12-10.3	Roman Catholic Diocese of Wheeling-Charleston TriEnergy Holdings, LLC NPAR, LLC Chevron U.S.A. Inc.	TriEnergy Holdings, LLC NPAR, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 738/509 AB 26/123 AB 26/201 AB 47/1
04-12-10.3	Susan Markey Zidar, et vir. TH Exploration, LLC Chevron U.S.A. Inc.	TH Exploration, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 877/222 AB 36/168 AB 47/1
04-12-10.3	Lauren M. Tekely 11/01/2007 Irrevocable Trust Dated 11/01/2007 TH Exploration, LLC Chevron U.S.A. Inc.	TH Exploration, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 876/177 AB 36/168 AB 47/1
04-12-10.3	Mary Ann Baker Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 808/518 AB 47/1
04-12-10.3	Ralph Ulman and Mary K. Ulman Trust Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 808/550 AB 47/1
04-12-10.3	Sisters of St. Francis of the Providence of God Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 886/595 DB 1100/493
04-12-10.3	Robert S. Wuerthele Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 853/63 AB 47/1
04-12-10.3	Mark K. Wuerthele Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 853/79 AB 47/1

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K	04-12-10.3	Jeffrey A. Wuerthele Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 853/127 AB 47/1
	04-12-10.3	Michael D. Wuerthele, et ux. Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 1040/424 DB 1100/493
L	04-12-5.0	Robert D. Richmond, et ux. Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	WV Code 22-6-8"	DB 882/269 AB 47/1
M	04-12-10.4	Roman Catholic Diocese of Wheeling-Charleston TriEnergy Holdings, LLC NPAR, LLC Chevron U.S.A. Inc.	TriEnergy Holdings, LLC NPAR, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 738/509 AB 26/123 AB 26/201 AB 47/1
	04-12-10.4	Susan Markey Zidar, et vir. TH Exploration, LLC Chevron U.S.A. Inc.	TH Exploration, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 877/222 AB 36/168 AB 47/1
	04-12-10.4	Lauren M. Tekely 11/01/2007 Irrevocable Trust Dated 11/01/2007 TH Exploration, LLC Chevron U.S.A. Inc.	TH Exploration, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 876/177 AB 36/168 AB 47/1
	04-12-10.4	Mary Ann Baker Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 808/518 AB 47/1
	04-12-10.4	Ralph Ulman and Mary K. Ulman Trust Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 808/550 AB 47/1
	04-12-10.4	Sisters of St. Francis of the Providence of God	Chevron U.S.A. Inc.	"at least 1/8th per WV Code 22-6-8"	DB 886/595

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		Chevron U.S.A. Inc.	EQT Aurora LLC		DB 1100/493
M	04-12-10.4	Robert S. Wuerthele Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 853/63 AB 47/1
	04-12-10.4	Mark K. Wuerthele Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 853/79 AB 47/1
	04-12-10.4	Jeffrey A. Wuerthele Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 853/127 AB 47/1
	04-12-10.4	Michael D. Wuerthele, et ux. Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 1040/424 DB 1100/493
N	04-12-9.0	Roman Catholic Diocese of Wheeling-Charleston TriEnergy Holdings, LLC NPAR, LLC Chevron U.S.A. Inc.	TriEnergy Holdings, LLC NPAR, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 738/509 AB 26/123 AB 26/201 AB 47/1
	04-12-9.0	Susan Markey Zidar, et vir. TH Exploration, LLC Chevron U.S.A. Inc.	TH Exploration, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 877/222 AB 36/168 AB 47/1
	04-12-9.0	Lauren M. Tekely 11/01/2007 Irrevocable Trust Dated 11/01/2007 TH Exploration, LLC Chevron U.S.A. Inc.	TH Exploration, LLC Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 876/177 AB 36/168 AB 47/1
	04-12-9.0	Mary Ann Baker Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 808/518 AB 47/1

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04-12-9.0	Ralph Ulman and Mary K. Ulman Trust Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 808/550 AB 47/1
04-12-9.0	Sisters of St. Francis of the Providence of God Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 886/595 DB 1100/493
04-12-9.0	Robert S. Wuerthele Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 853/63 AB 47/1
04-12-9.0	Mark K. Wuerthele Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 853/79 AB 47/1
04-12-9.0	Jeffrey A. Wuerthele Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 853/127 AB 47/1
04-12-9.0	Michael D. Wuerthele, et ux. Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 1040/424 DB 1100/493

O

4-12-3.0	JMK Irrevocable Trust Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 797/336 AB 47/1
4-12-3.0	Purpleburgh Ventures, LLC Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 1034/464 DB 1100/493
4-12-3.0	Marcellus TX Mineral Partners, Ltd. Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	"at least 1/8th per WV Code 22-6-8"	DB 794/561 AB 47/1

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August 15, 2024

Mr. Taylor Brewer  
West Virginia Department of Environmental Protection  
Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304

Re: Longworth 103H

Dear Mr. Brewer,

This letter and supporting documentation serve as EQT CHAP LLC's addendum to the WW-6A1 form associated with this well. The lease included on this addendum is a lease in which EQT "claims the right to extract, produce or market the oil or gas", but does not propose to encounter the lease with the proposed wellbore. EQT would like to report this lease as part of our Well Work Permit Application, as it is located within 50' of our proposed permitted wellbore.

If EQT does encounter this lease, an application for a permit modification will be filed with the West Virginia DEP, Office of Oil and Gas.

If you have any questions, please do not hesitate to contact me at 724-746-9073.

Sincerely,

John Zavatchan  
Permitting Specialist

Enc.

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MERLE L. CHAPLIN ET UX  
4-12/4

TRIBUTARY TO GRAVE CREEK

RALPH E. WOOD  
4-12/21

46'

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CODY M. JARRETT  
4-12/19

**LEGEND**

- - - - - BOUNDARY PARCEL LINES
- PROPOSED LATERAL LOCATION
- 50' OFFSET BUFFER LINE
- · - · - · - STREAM CENTER LINE

**THRASHER**  
THE THRASHER GROUP, INC.

600 WHITE OAKS BLVD.  
BRIDGEPORT, WV 26330  
PHONE 304-624-4108

**EQT CHAP LLC**

LONGWORTH 101H WELL BORE  
LATERAL LOCATION NEAR  
RALPH E. WOOD TPN# 4-21-21

CLAY DISTRICT, MARSHALL COUNTY WV

8-21-24

SCALE  
1"=150'

REVISED

1

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09/27/2024

CAD FILE: R:\050\050-11341.01-EQT Longworth As-Drilled Plats\Survey\2024 WORK\LONGWORTH PLATS 101H-103H.dwg PLOT DATE/TIME: 8/21/2024 - 1:25pm

Parcel ID	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
J 04-12-10.0	Roman Catholic Diocese of Wheeling-Charleston TriEnergy Holdings, LLC NPAR, LLC Chevron U.S.A. Inc.	TriEnergy Holdings, LLC NPAR, LLC Chevron U.S.A. Inc. EQT Aurora LLC	*at least 1/8th per WV Code 22-6-8"	DB 738/509 AB 26/123 AB 26/201 AB 47/1
04-12-10.0	Susan Markey Zidar, et vir. TH Exploration, LLC Chevron U.S.A. Inc.	TH Exploration, LLC Chevron U.S.A. Inc. EQT Aurora LLC	*at least 1/8th per WV Code 22-6-8"	DB 877/222 AB 36/168 AB 47/1
04-12-10.0	Lauren M. Tekely 11/01/2007 Irrevocable Trust Dated 11/01/2007 TH Exploration, LLC Chevron U.S.A. Inc.	TH Exploration, LLC Chevron U.S.A. Inc. EQT Aurora LLC	*at least 1/8th per WV Code 22-6-8"	DB 876/177 AB 36/168 AB 47/1
04-12-10.0	Mary Ann Baker Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	*at least 1/8th per WV Code 22-6-8"	DB 808/518 AB 47/1
04-12-10.0	Ralph Ulman and Mary K. Ulman Trust Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	*at least 1/8th per WV Code 22-6-8"	DB 808/550 AB 47/1
04-12-10.0	Sisters of St. Francis of the Providence of God Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	*at least 1/8th per WV Code 22-6-8"	DB 886/595 DB 1100/493
04-12-10.0	Robert S. Wuerthele Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	*at least 1/8th per WV Code 22-6-8"	DB 853/63 AB 47/1
04-12-10.0	Mark K. Wuerthele Chevron U.S.A. Inc.	Chevron U.S.A. Inc. EQT Aurora LLC	*at least 1/8th per WV Code 22-6-8"	DB 853/79 AB 47/1

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04-12-10.0 Jeffrey A. Wuerthele  
Chevron U.S.A. Inc.

Chevron U.S.A. Inc.  
EQT Aurora LLC

\*at least 1/8th per  
WV Code 22-6-8\*

DB 853/127  
AB 47/1

04-12-10.0 Michael D. Wuerthele, et ux.  
Chevron U.S.A. Inc.

Chevron U.S.A. Inc.  
EQT Aurora LLC

\*at least 1/8th per  
WV Code 22-6-8\*

DB 1040/424  
DB 1100/493

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EQT CHAP LLC  
400 Woodcliff Drive | Canonsburg, PA 15317

August 16, 2024

Mr. Taylor Brewer  
West Virginia Department of Environmental Protection  
Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304

Re: Longworth 103H Gas Well  
Clay District, Marshall County, WV

Dear Mr. Brewer,

EQT CHAP LLC is applying for a new well work permit for the well referenced above. Upon information and belief, the Operator's lease and/ or other real property rights permit it to conduct drilling operations for the subject well in the location shown on the plat, including under any public roads that the well lateral crosses.

Sincerely,

A handwritten signature in blue ink, appearing to read 'J. Zavatchan'.

John Zavatchan  
Permitting Specialist

09/27/2024



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

Date of Notice Certification: 8/22/24

API No. 47- \_\_\_\_\_ - \_\_\_\_\_  
Operator's Well No. \_\_\_\_\_  
Well Pad Name: Longworth

**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>523,368.44</u>
County:	<u>Marshall</u>		Northing:	<u>4,410,860.03</u>
District:	<u>Clay</u>	Public Road Access:	<u>Roberts Ridge Road/WV-21</u>	
Quadrangle:	<u>Glen Easton</u>	Generally used farm name:	<u>Longworth</u>	
Watershed:	<u>Middle Grave Creek-Grave Creek</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  <input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED  <input type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input checked="" type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED  <input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or  <input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)  <input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION  <input checked="" type="checkbox"/> 5. PUBLIC NOTICE  <input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION		<b>OOG OFFICE USE ONLY</b>  <input type="checkbox"/> RECEIVED/ NOT REQUIRED  <input type="checkbox"/> RECEIVED  <input checked="" type="checkbox"/> RECEIVED/ NOT REQUIRED  <input checked="" type="checkbox"/> RECEIVED  <input checked="" type="checkbox"/> RECEIVED  <input checked="" type="checkbox"/> RECEIVED
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**Required Attachments:**

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

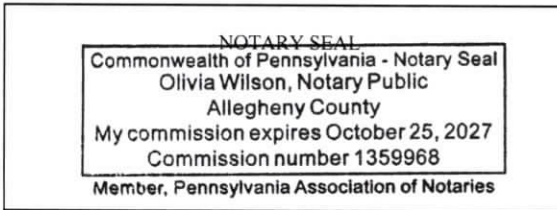
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**Certification of Notice is hereby given:**

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

Well Operator:	<u>EQT CHAP LLC</u>	Address:	<u>400 Woodcliff Drive</u>
By:	<u>John Zavatchan</u>		<u>Canonsburg, PA 15317</u>
Its:	<u>Permitting Specialist</u>	Facsimile:	<u>412-395-2974</u>
Telephone:	<u>724-746-9073</u>	Email:	<u>jzavatchan@eqt.com</u>



Subscribed and sworn before me this 22<sup>nd</sup> day of August, 2024  
Olivia Wilson Notary Public  
 My Commission Expires Oct. 25, 2027

**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:** 8/22/24 **Date Permit Application Filed:** 8/22/24

**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: See Attached List  
Address: \_\_\_\_\_

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

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

Name: See Attached List  
Address: \_\_\_\_\_

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

SURFACE OWNER(s) (Impoundments or Pits)

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

COAL OWNER OR LESSEE

Name: See Attached List  
Address: \_\_\_\_\_

COAL OPERATOR

Name: See Attached List  
Address: \_\_\_\_\_

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

Name: See Attached List  
Address: \_\_\_\_\_

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

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

\*Please attach additional forms if necessary

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WV Department of  
Environmental Protection

WW-6A  
(8-13)

AUG 23 2024

WV Department of  
Environmental Protection**Notice is hereby given:**

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

**This Notice Shall Include:**

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

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

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

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and 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

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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

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Environmental Protection

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

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

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

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

**Comment Requirements**

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

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

**Permit Denial or Condition**

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

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

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

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

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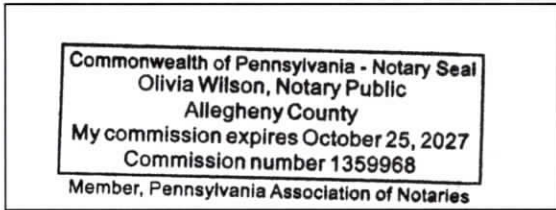
4705102520  
API NO. 47- \_\_\_\_\_  
OPERATOR WELL NO \_\_\_\_\_  
Well Pad Name: Longworth

Notice is hereby given by: [Signature]  
Well Operator: EQT CHAP LLC  
Telephone: 412-584-3132  
Email: jzavatchan@eqt.com

Address: 400 Woodcliff Drive  
Canonsburg, PA 15317  
Facsimile: 412-395-2974

**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).



Subscribed and sworn before me this 22<sup>nd</sup> day of August, 2024.  
[Signature] Notary Public  
My Commission Expires Oct. 25, 2027

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**Longworth Ownership Information**

Surface Owners:

Well Pad:

**Graham H. Longworth Jr.** ✓  
2527 Fork Ridge Road  
Moundsville, WV 26041

Other Disturbance:

**Michael W. Derrow** ✓  
6247 Roberts Ridge Road  
Moundsville, WV 26041

**Douglas G. Derrow** ✓  
387 Sunset Lane  
Glen Dale, WV 26041

**Madalyn Grace Derrow** ✓  
211 Washington Avenue Apt 2  
Moundsville, WV 26041

**Charles D. Derrow** ✓  
46 Center Avenue  
Wheeling WV 26003

**Haden Derrow** ✓  
1 Francine Court  
Moundsville, WV 26041

**Cody Derrow** ✓  
6039 Roberts Ridge Road  
Moundsville, WV 26041

**Mary Holmes, life estate (Holmes-CWC-Legacy LLC, remainderman)** ✓  
197 Spindle Lane  
Moundsville, WV 26041

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Coal Owners:

**CONSOL Mining Company LLC** ✓

Attn: Casey Saunders  
275 Technology Drive  
Canonsburg, PA 15317

Coal Operator:

**Marshall County Coal Resources, Inc.** ✓

46226 National Road West  
Saint Clairsville, Ohio 43950

Water Supply Owners within 1,500'

**Graham H. Longworth, Jr.** ✓

2527 Fork Ridge Rd.  
Moundsville, WV 26041

**Daniel C. Longworth** ✓

PO Box 1111  
Moundsville, WV 26041

**Mary Holmes, life estate (Holmes-CWC-Legacy LLC, remainderman)** ✓

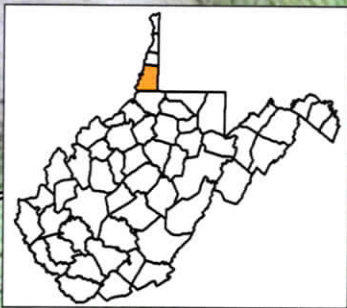
197 Spindle Lane  
Moundsville, WV 26041

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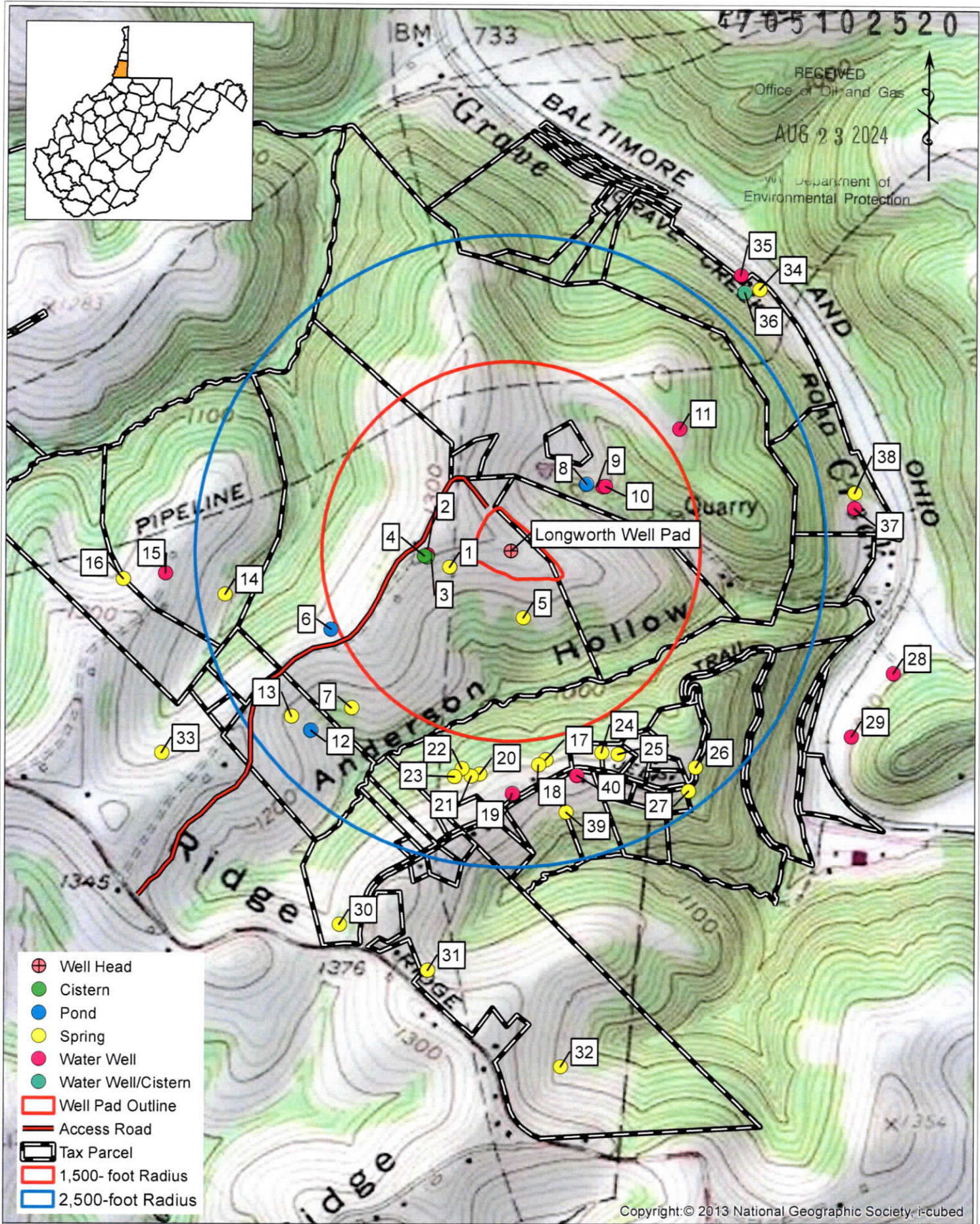
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West Virginia Department of Environmental Protection



- Well Head
- Cistern
- Pond
- Spring
- Water Well
- Water Well/Cistern
- Well Pad Outline
- Access Road
- Tax Parcel
- 1,500- foot Radius
- 2,500-foot Radius

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1 inch = 1,000 feet

Water Source Survey  
Longworth  
Marshall County - West Virginia



09/27/2024

8/7/2024

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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:** 08/07/2024 **Date Permit Application Filed:** 8/22/24

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

- HAND DELIVERY
- CERTIFIED MAIL RETURN RECEIPT REQUESTED

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

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

Name: See attached list  
Address: \_\_\_\_\_  
\_\_\_\_\_

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

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**Notice is hereby given:**

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

State:	<u>West Virginia</u>	UTM NAD 83 Easting:	<u>523,372.25</u>
County:	<u>Marshall</u>	UTM NAD 83 Northing:	<u>4,410,857.50</u>
District:	<u>Clay</u>	Public Road Access:	<u>Roberts Ridge Road/WV-21</u>
Quadrangle:	<u>Glen Easton</u>	Generally used farm name:	<u>Longworth</u>
Watershed:	<u>Middle Grave Creek - Grave Creek</u>		

WV Department of Environmental Protection

**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: EQT CHAP LLC  
Address: 400 Woodcliff Drive  
Canonsburg, PA 15317  
Telephone: 412-584-3132  
Email: JZavatchan@eqt.com  
Facsimile: 412-395-2974

Authorized Representative: John Zavatchan  
Address: 400 Woodcliff Drive  
Canonsburg, PA 15317  
Telephone: 412-584-3132  
Email: JZavatchan@eqt.com  
Facsimile: 412-395-2974

**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).

09/27/2024

**Longworth Ownership Information**

Surface Owners:

Well Pad:

**Graham H. Longworth Jr.** ✓  
2527 Fork Ridge Road  
Moundsville, WV 26041

Other Disturbance:

**Michael W. Derrow** ✓  
6247 Roberts Ridge Road  
Moundsville, WV 26041

**Douglas G. Derrow** ✓  
387 Sunset Lane  
Glen Dale, WV 26041

**Madalyn Grace Derrow** ✓  
211 Washington Avenue Apt 2  
Moundsville, WV 26041

**Charles D. Derrow** ✓  
46 Center Avenue  
Wheeling WV 26003

**Haden Derrow** ✓  
1 Francine Court  
Moundsville, WV 26041

**Cody Derrow** ✓  
6039 Roberts Ridge Road  
Moundsville, WV 26041

**Mary Holmes, life estate (Holmes-CWC-Legacy LLC, remainderman)** ✓  
197 Spindle Lane  
Moundsville, WV 26041

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**AUG 23 2024**

WV Department of  
Environmental Protection

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

**4705102520**

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

**Date of Notice:** 8/22/24      **Date Permit Application Filed:** 8/22/24

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

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> <b>CERTIFIED MAIL</b><br>RETURN RECEIPT REQUESTED | <input type="checkbox"/> <b>HAND DELIVERY</b> |
|---|---|

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: See Attached List  
Address: \_\_\_\_\_  
\_\_\_\_\_

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

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**Notice is hereby given:**

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

State: <u>West Virginia</u>	UTM NAD 83	Easting: <u>523,372.25</u>
County: <u>Marshall</u>		Northing: <u>4,410,857.50</u>
District: <u>Clay</u>	Public Road Access: _____	<u>Roberts Ridge Road/WV-21</u>
Quadrangle: <u>Glen Easton</u>	Generally used farm name: _____	<u>Longworth</u>
Watershed: <u>Middle Grave Creek - Grave Creek</u>		

**This Notice Shall Include:**

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by **W. Va. Code § 22-6A-10(b)** to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 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).

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Address: 400 Woodcliff Drive  
Canonsburg, PA 15317  
Facsimile: 412-395-2974

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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).

**09/27/2024**

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46 Center Avenue  
Wheeling WV 26003

**Haden Derrow**  
1 Francine Court  
Moundsville, WV 26041

**Cody Derrow**  
6039 Roberts Ridge Road  
Moundsville, WV 26041

**Mary Holmes, life estate (Holmes-CWC-Legacy LLC, remainderman)**  
197 Spindle Lane  
Moundsville, WV 26041

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
**Division of Highways**

Office of the District Engineer/Manager  
District Four

Post Office Box 4220 · Clarksburg, West Virginia 26302 · (304) 842-1500

Alanna J. Keller, P.E.  
Deputy Secretary of Transportation  
Deputy Commissioner of Highways

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

August 7, 2024

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

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WV Department of  
Environmental Protection

**Subject: DOH Permit for the Longworth Well Pad, Marshall County  
Longworth 103H Well Site**

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2016-0411 which has been transferred to EQT CHAP LLC for access to the State Road for a well site located off Marshall County Route 21 SLS MP 15.04.

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,

Lacy D. Pratt  
Central Office O&G Coordinator

Cc: John Zavatchan  
EQT Production Company  
OM, D-6  
File

09/27/2024

4705102520

**Anticipated Frac Additives  
Chemical Names and CAS Numbers**

<u>Material</u>	<u>Ingredient</u>	<u>CAS Number</u>
Sand (Proppant)	Silica Substrate	14808-60-7
Water	Water	7732-18-5
Hydrochloric Acid (HCl)	Hydrogen Chloride	7647-01-0
Friction Reducer	Copolymer of 2-propenamide	Proprietary
	Petroleum Distillate	64742-47-8
	Oleic Acid Diethanolamide	93-83-4
	Alcohols, C12-16, ethoxylated	68551-12-2
	Ammonium chloride ((NH4)Cl)	12125-02-9
Biocide	<b>Glutaraldehyde</b>	<b>111-30-8</b>
	Alkyl dimethyl benzyl ammonium chloride	68391-01-5
	Didecyl dimethyl ammonium chloride	7173-51-5
	Non-hazardous substances	Proprietary
	<b>Bis(HexaMethylene Triamine Penta(Methylene Phosphonic Acid)(BHMT)</b>	<b>34690-00-1</b>
Scale Control	Non-hazardous substances	Proprietary
Acid Chelating Agent	<b>Ferriplex 66</b>	
	Citric Acid	77-92-9
	Acetic Acid	64-19-7
Corrosion Inhibitor	<b>PLEXHIB 166</b>	
	Methanol	67-56-1
	Alcohols, C14-15, ethoxylated	68951-67-7

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Environmental Protection

09/27/2024



OPERATOR: EQT CHAP LLC

WELL NO: 103H

PAD NAME: Longworth

REVIEWED BY: John Zavatchan

SIGNATURE: 

### WELL RESTRICTIONS CHECKLIST

#### HORIZONTAL 6A WELL

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#### Well Restrictions

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

09/27/2024